







## 1.0 INTRODUCTION

01







# 1.1 INTRODUCTION

This Urban Design Report has been prepared on behalf of Besmaw to support a Planning Proposal for amendments to the Sutherland Shire LEP 2015, for the site at 251, 260R, 278 and 280-282 Captain Cook Drive.

## 1.1.1 Overview of the Besmaw Planning Proposal

The site is to be transitioned from the State Environmental Planning Policy (Precincts—Central River City) 2021 to the Sutherland Shire LEP 2015. Site specific provisions have been outlined in this proposal, and are included in detail in the Besmaw Planning Proposal report by Urbis.

## 1.1.2 Purpose of the report

**The Master Plan has a comprehensive framework designed to cater to the diverse needs of the existing and future community. It encompasses a multifaceted approach, aiming to address various essential requirements for the site's development.**

The report seeks to demonstrate how the planning proposal and associated reference scheme integrate key opportunities and constraints affecting the subject site, contributing to the justification of the proposed LEP amendments, including:

- The strategic ambitions of state and local planning efforts;
- The broad aims of state design guidelines;
- The site's location in the Sutherland Shire and the Kurnell Peninsula context; and
- The physical site characteristics.

The proposal is also supported by a Development Control Plan (DCP). This gives effect to the Master Plan and to the Landscape Master Plan, Public Domain and Open Space Strategy, and provides clear guidance on a number of items including:

- Site layout (incl. roads, site access and public open spaces);
- Access to and protection of open spaces (including overshadowing);
- Building setbacks as appropriate;
- Public domain connects both on site and to surrounding land;
- Streetscape controls;
- Landscaping; and
- Car parking.

## 1.1.3 Structure of the report

The report is structured to demonstrate:

- An understanding of the site, through both its physical and strategic context, with a focus on demonstrating:
  - + Community infrastructure and tourism needs in the vicinity of the site and as outlined by various state government and Sutherland Shire Policies;
  - + Housing and aged care needs in the Sutherland Shire; and
  - + Why the subject site presents a unique opportunity to provide these uses to realise state and local government strategies for the area.
- The implementation of design principles endorsed through the State Design Review process;
- A reference scheme, that informs the planning proposal; and
- Justification for height and density through demonstration that the reference scheme complies with the Apartment Design Guidelines (ADG).

An analysis of the context including specialist technical consultant studies provides a baseline that, with the Project Proposition, Vision Principles and Objectives, sets the Project Framework.

This becomes the evidence base for the design process and the organisation of the many technical streams into themes which are used throughout the design process to present the design work and gather feedback.

## 1.1.4 Master Plan Structure

The Master Planning process has been designed around four thematic elements:

- Precinct character & design;
  - + Character;
  - + Connections;
  - + Heights; and
  - + Housing mix.
- Retail, Community Facilities and Services;
- Open Space / Ecology; and
- Public Domain.

The underlying framework identifies the size and placement of the key public open spaces and ecological area. These spaces act as the defining elements of the urban precincts, interlinked through a robust network of streets, public transport, and pathways for pedestrians and cyclists. This network serves as the essential character for the Master Plan, fostering an active and cohesive community fabric.



# 1.2 THE DESIGN PROCESS

The design narrative for the project has evolved alongside our engagement process - to help understand the value of Country and ensure that the master plan outcomes are robust and considered.

**The design process has put Country and Landscape at the forefront, to ensure that our proposed Master Plan holds significant meaning and expression to the site.**

Engagement throughout the design process has resulted in First Nations narratives that reflect the Country the project takes place on. Unlike traditional consultation or engagement, the collaborative design between Bemsaw, GroupGSA, Urbis, Yerrabingin and members of the local First Nations community ensured First Nations peoples are active co-designers of the project, fostering the collective voice of the community.

This approach has allowed us to prioritise and think differently about Country, to establish a pathway and re-check and align with Aboriginal values as a way of connecting throughout the project life-cycle. It has also enabled us to refine our design and ensure the best outcomes for the project and the community it will serve.

Significant design development has been undertaken in the public realm to explore the relationship between Country and the biodiversity outcomes for the site. Aboriginal peoples' continued connection with Country is source of valuable wisdom and knowledge that has been used to guide the way we plan and design the places where we live, work, and play.

**The Design Excellence Process**

The project has undergone four State Design Review Panel Sessions. The outcomes of Session Three and Four have been integrated and acknowledged in this master plan.

The Sessions endorsed the Connecting with Country Process and the Landscape Led Master Plan Strategy for the site.

**Master Plan, ideation was explored through the lens of design thinking and using collaborative events such as a Walk on Country, Design Jam, and Community Feedback Session.**

**Connecting with Country**

The Connecting with Country engagement process has been led by Yerrabingin and followed their Wanggani Dhayar design process. The Wanggani Dhayar process is fluid, with reiteration and organic formation of the design throughout.

Although not all discussion could occur one site, the cultural landscape and context of Gweagal Country was maintained at the front of mind during community engagement. The empathetic design approach ensured that First Nations cultures remain at the core and foundation of the project.

A number of engagement sessions were facilitated and attended that influenced the design outcomes. These included;

## 1.1.5 Walk on Country

Beginning with a Walk on Country, Yerrabingin invited the project team, client, and First Nations community members to walk the site together.

On 6th March, 2023, the Walk on Country enabled community members to physically experience and connect with the site, whilst also providing an opportunity to ask questions and discuss initial ideas, stories, and concerns.

The significance of the shells and shellwork to the local area, people and culture were later embedded into the narrative of the master plan.



Middens located near Boat Harbour



Walk on Country facilitated by Yerrabingin



Design Jam facilitated by Yerrabingin



1.1.6 Design Jam

Yerrabingin facilitated a Design Jam, following the Walk on Country to start mapping and drawing out key themes.

The Design Jam brings together divergent styles of thinking by creating focus groups with a mix of local First Nations community members, the project team and the client.

The Master Plan presents a range of opportunities to embed and showcase First Nations cultures throughout the precincts. The Design Jam looked to explore these opportunities further, using the following question and themes to guide the session: **‘How might we create a place to share the value of Country with all the community?’**

Regeneration

Understanding the evolving nature of ecological systems on site. Consider how proposed design interventions interacts with and in turn supports the future success of these systems.

Resilience

Exploring how we can nurture cultural and spiritual connection to Country through a de-colonial, interpretive, and educational lens. An acknowledgement of history, bringing First Nations community back to Country with a focus on rehabilitating both environmental and social relationships.

Reignition

Providing place and space for First Nations peoples and the wider community to reactivate Country. Opportunity to support, foster, and develop socio-cultural exchange through micro-businesses, social enterprise, education, cultural land management, and productive landscapes.

In addition to the design themes, a number of land uses and key elements of the master plan were identified at the design jam that have been embedded into the final master plan.

The North South Cultural Link

The proposed design incorporates gathering places and places to connect. These meeting places allow discussion and learning, an informal place to allow for quietness and reflection, and to reveal qualities of the built and natural environment.

Connecting walks to the north and south for holistic and interconnected journeys. Reigniting travel on the coastal edge and providing safe spaces for community gathering, sharing and connecting.

Living with Nature/Eco Housing Village

The concept of a highly embedded neighbourhood that is surrounded by nature. This concept has evolved and is now part of the Bate Bay, Boat Harbour and Quibray Bay Precincts. The concept has also informed the urban design approach to character and community for these precincts.

Water Management

From a whole of site strategy perspective, this has been adopted. Infrastructure strategies proposed aims to support a high quality of water filtration and cleaning, and to assist in flood management. The Master Plan provides the framework for an integrated and localised system of Water Management throughout the built environment.

Consideration of non human kin

A facilitating landscape for non-human kin; encouraging pollinators, habitat and connection to the broader context of the site. Creating an interpretive and educational lens for knowledge sharing and micro-businesses.

A green bridge or biodiversity link is proposed across Captain Cook Drive to connect Lot 2 North to Lot 2 South.

1.1.7 Community Feedback Session

A community feedback session was held on 25th September, 2023, to close the feedback loop with stakeholders. This provided a cultural logic check, to ensure that Country was appropriately represented in the design. The feedback from the community was positive, and presented at SDRP 4.

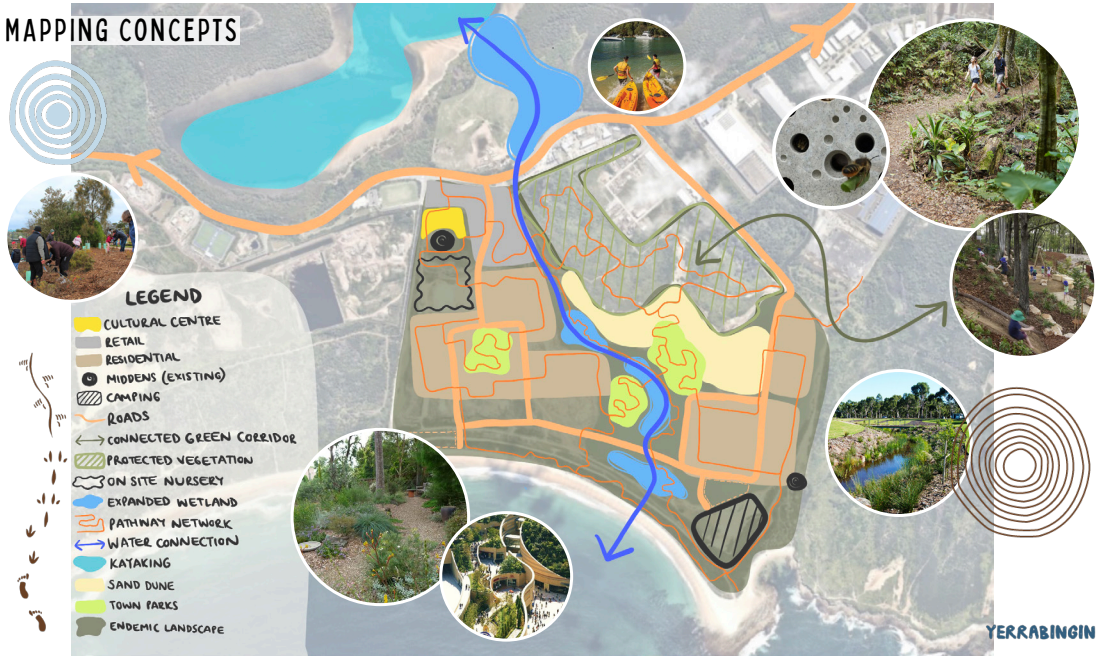
Key insights, recommendations, and areas of opportunity were recommended for the site.

Referring to the logic and assumption testing portion of the Wanggani Dhayar methodology, the Community Feedback Session looked to explore the design developments in order to identify areas of further opportunity or concern.

This feedback loop of ideation and prototype testing is intended to be flexible and ensure that appropriate cultural knowledges and experiences are incorporated into the design. This process is community driven and allows for the determination of best practice and Country-centered solutions for the Master Plan.



Community Feedback Session on 25th September



Mapping Concepts; outcome of the Design Jam | Map by Yerrabingin



Connecting with Country Design Principle | Presented at SDRP # 4



# 1.3 THE SITE

## The subject site is located on the Kurnell Peninsula.

The site is situated within an environmental context of high ecological value, with the potential to link between Towra Point Nature Reserve and Kamay Botany Bay National Park which constitute large tracts of remnant native wetland/heathland.

This ecological grid extends into the site itself which includes pockets of endangered native wetland alongside a sparse heath which extends along Bate Bay.

### Access and Connectivity

Kurnell is accessed via Captain Cook Drive, a major local east-west distributor road which links Kurnell village to Cronulla, intersecting Taren Point Road and Princes Highway further west.

Captain Cook Drive provides access to the site into two sections and is its primarily access road, with entry points to the site located on either side.

Connectivity with the wider region is limited to a single bus route, 987, connecting Kurnell to Cronulla via Captain Cook Drive. A transfer at Cronulla Train Station on the T4 Southern Line, which is its final stop, connects to the City and wider area.

A ferry wharf route proposed by NSW Government will link Kurnell to La Pouse, allowing access to Sydney's eastern suburbs and increase connectivity and facilitate tourism on Sutherland Shire's road network.

Walking paths connect Cronulla to Kurnell peninsula via a coastal walk that follows the coastline from the cliff tops along the beaches towards Cronulla, passing along the Bate Bay coastline and Boat Harbour of the site.

### Land Uses

Situated at the furthest eastern extent of Sutherland Shire, Kurnell has a noteworthy quantum of undeveloped land, national park and open space.

The township of Kurnell village and the recently developed Greenhills Beach community represent the two main areas of residential land use currently on the peninsula.

In between these two communities, a number of sites have been reserved for primarily industrial usage including Sydney Desalination Plant, Ampol Kurnell Terminal, other light industry uses, and small-scale manufacture throughout a number of small commercial parks.

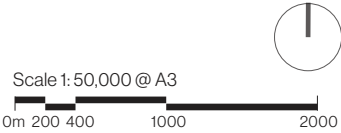
The adjacent Breen land-holdings to the site's west, inclusive of Greenhills community and Shearwater Landing, have been committed to a process of rehabilitation forging a pathway that seeks to reform previously industrial land into ecological or recreational land, with the potential for further residential development.

As of today rehabilitation has resulted in the Marang Parklands complex expected to reach completion by mid 2026.



#### LEGEND

- Subject Site
- Train Line
- Proposed Ferry





The site consists of three lots across 210 hectares, bisected by Captain Cook Drive.

The subject site is one of the largest land-holdings on the Kurnell Peninsula.

The site consists of four separate lots referred to as Lot 2 North, Lot 2 South, Lot 8 and Lot 9, which form two wider sub-precincts bisected by Captain Cook Drive which runs east-west along the length of the Kurnell Peninsula.

Lot 2 North is currently utilised for equestrian grazing and activity as a horse-riding school and stable. It is surrounded by coastal heath on three of its interfaces, and includes portions of extant ecological community of coastal saltmarsh.

Lot 2 South constitutes the largest single lot at 160ha in size, and currently operates as a sand quarry which is nearing end-of-life. It features a relatively consistent topography with the dredge pond currently undergoing a process of rehabilitation with natural materials. A mobile sand dune features dense bushland home to a variety of ecological communities and is largely undeveloped.

Lot 8 in the site's north-east is entirely undeveloped and consists largely of invasive bitou bush with some remnant endemic communities, in addition to the wetland.

Lot 9 is less than 82m², sited along the north eastern boundary of Lot 8.

| Lot no. | Plan no.  | Area (sqm)            |
|---------|-----------|-----------------------|
| Lot 2   | DP1030269 | ~160,000m²            |
| Lot 8   | DP586986  | ~340,000m²            |
| Lot 2   | DP559922  | ~1,600,000m²          |
| Lot 9   | DP586986  | ~82m²                 |
| Total   |           | ~2,100,000sqm / 210ha |











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## 2.0 DESIGN PRINCIPLES

# 02





Quibray Bay

Marang Parklands

Greenhills Skate Park

Lindum Road

Captain Cook Drive

High Street

Main Street

Wanda Reserve

Bate Bay

Tabbigai

Boat Harbour



# 2.1 VISION AND DESIGN PRINCIPLES

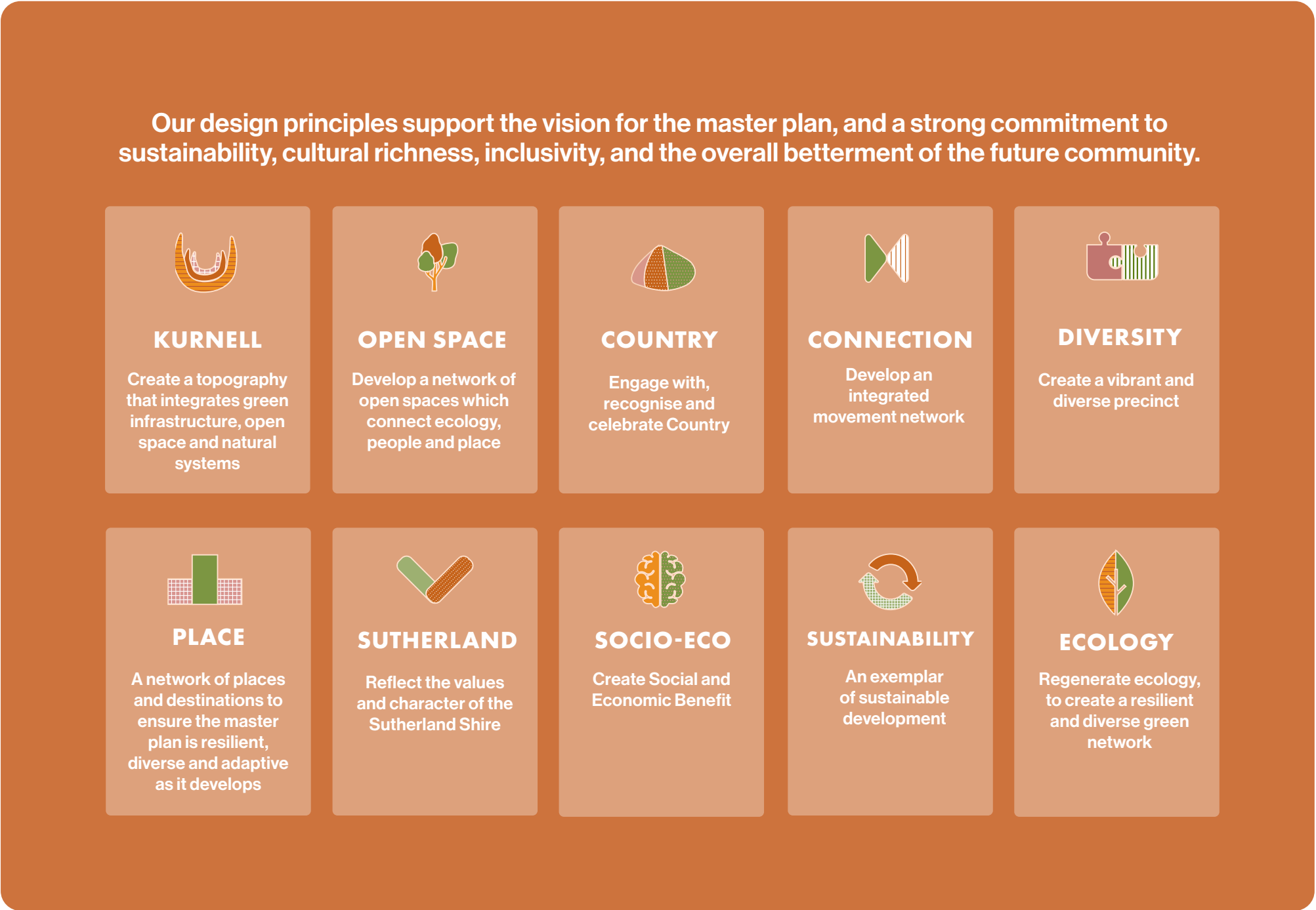
Our vision is to create a place that celebrates the site’s rich cultural heritage, that regenerates the natural environment to provide a connected ecological system and delivers a vibrant and sustainable “home” to those who live, work and play there.

The vision provides an overarching framework to support the development of the master plan, that will guide its renewal over the next 20 years.

### Design Principles

The principles represent a bespoke, balanced and evidence based approach that integrates best practice urban design into a process that is unique to the development of the Master Plan.

Developed by the design team as a response to the project vision, the ten design principles are underpinned by strategies to support the deliver of the public domain, urban, and built form rehabilitation of the site.







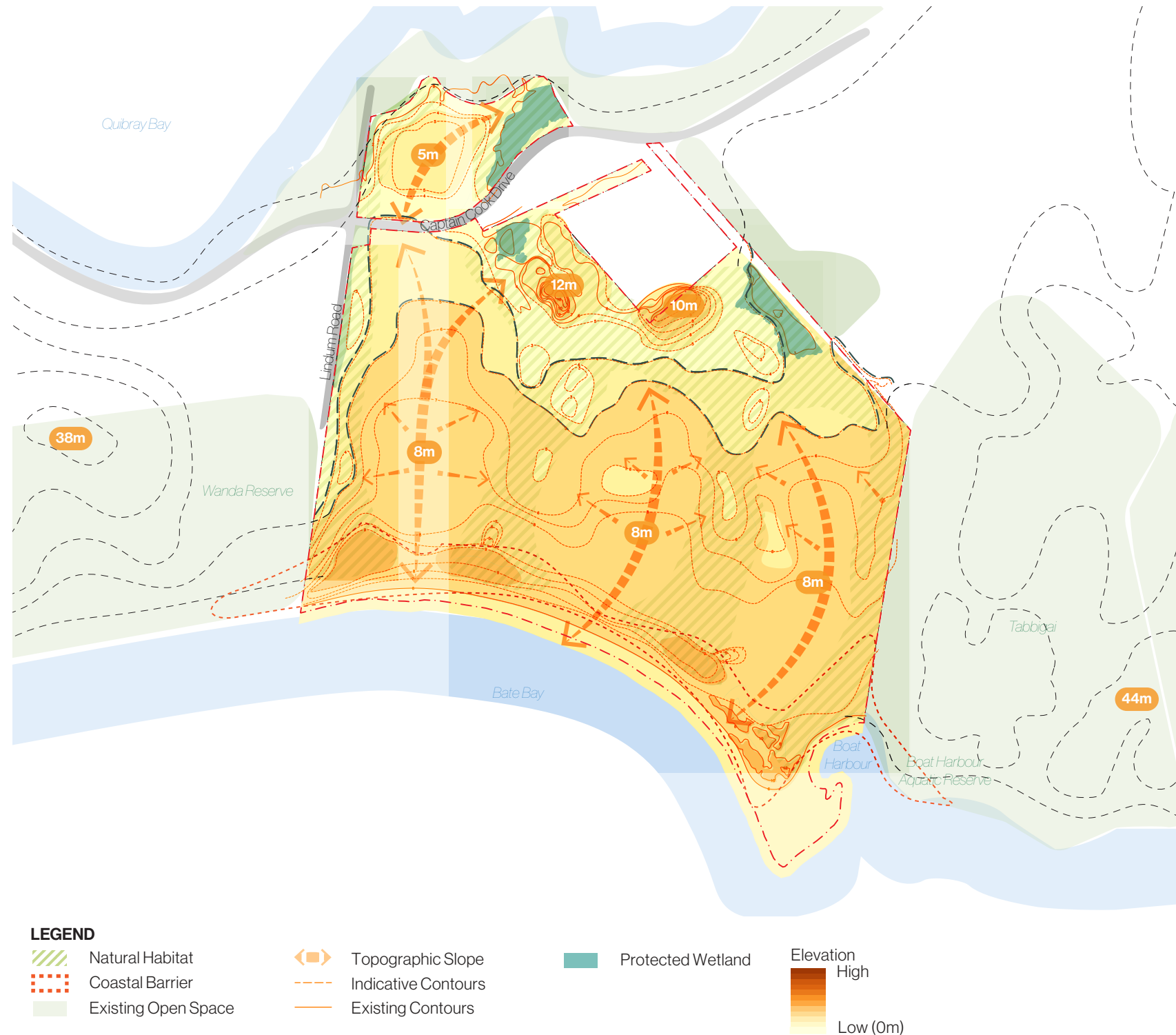
## KURNELL

Create a topography that integrates green infrastructure, open space and natural systems

A rehabilitated site topography has been designed to integrate surrounding natural systems. This is reinforced with a series of transitional plateaus, that establish precincts between ecological corridors.

The topography has been designed to facilitate a systems based approach to environmental management, while also supporting a sensitive height strategy that is consistent with the surrounding context. Key strategies to support this intent include;

- Consider transitional plateaus, that can define sub precincts and support a strong place narrative.
- Prioritising ecological connections between the plateaus to facilitate movement for fauna in carefully considered biodiversity corridors.
- A green web that will seamlessly extent through open spaces, local parks, and waterways. This will enhance biodiversity and foster a sense of continuity within the environment.
- The promotion of climate resilient design using the frontal dunes. These will take into account climate change and adapts to potential extreme weather events, such as rising ocean levels or droughts.
- Dunes play a crucial role in water management by promoting freshwater retention on-site and preventing runoff into the ocean.
- Dunes also serve as a natural defence against floods, adapting to dynamic coastal processes and anticipated climate change impacts.
- The topographic plateaus shape the four precincts, forming valleys that capture runoff in ecological corridors, effectively mitigating flooding risks in urban areas.



Leverage existing topography for dune experience  
Hepburn Springs



Create valley landform for urban wetlands for water collection and reuse  
Little Bay Cove | McGregor Coxall



Establish high points to provide panoramic views  
Bilgola Home





## OPEN SPACE

Develop a network of open spaces which connect ecology, people and place

The open space network is a dynamic and culturally rich environment that fosters community well-being, ecological sustainability, and engagement with the surrounding Indigenous culture and environment.

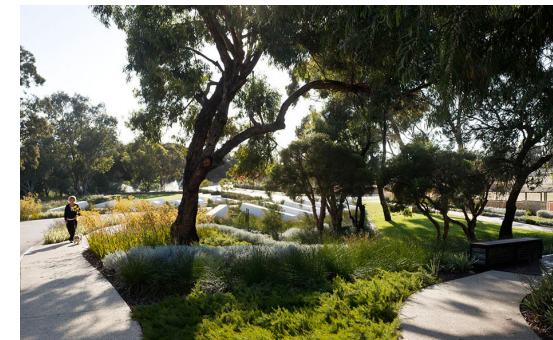
The open space network is an adaptive environment, evolving with the community and ecological conditions accordingly. It will be supported by;

- A natural environment that actively encourages engagement with Country. Elements such as Indigenous artwork, interpretive signs and dedicated spaces explaining the history and significance of the land, and involvement with Indigenous communities in the design and maintenance of the open spaces promotes cultural understanding and respect.
- A diverse and interconnected network of open space, seamlessly blending recreational activities with ecological conservation efforts and their adjacent precincts. This network caters to the needs and interests of the proximal community while promoting environmental sustainability.
- A series of local parks, strategically located within each of the four precincts. These parks are within a maximum 400 metre walking distance to all residents and encourage regular community engagement and a healthy lifestyle.
- Three district parks, that not only serve as recreation and sports facilities but are also designed as cultural hubs. This can include spaces for art exhibitions, community events, and cultural festivals, fostering a sense of community and belonging.
- Surrounding green corridors, provide a habitat for local wildlife, native plant species, and offering educational opportunities to engage the community with the environment, promoting an emphasis on ecology.
- A pedestrian centric open space network; with well-maintained walking tracks, the cultural trail, and cycle paths. This will encourage active transportation, reduce the carbon footprint, and enhance the overall quality of life for residents.



### LEGEND

|  |                     |  |                       |
|--|---------------------|--|-----------------------|
|  | Subject Site        |  | Ecological Open Space |
|  | Existing Open Space |  | District Park         |
|  |                     |  | Local Park            |



Ecological diversity in open space and parklands  
Lakeway Redevelopment | Hassell



Mosaic of open space and habitats  
First Creek Wetland | T.C.L



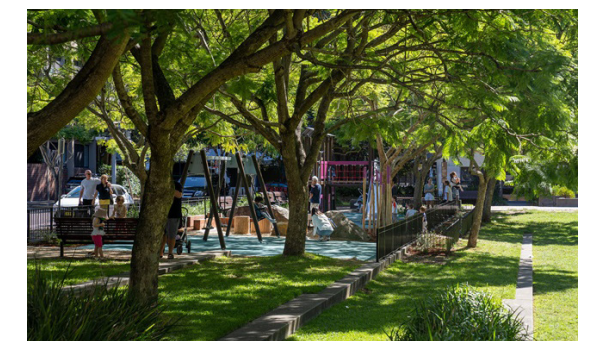
District parks provide amenity for residents and visitors  
Harold Park | JMD



Pedestrian and shared paths through open space  
Johnstons Creek | Phillips Marler



District parks provide amenity for residents and visitors  
Lizard Log, Western Sydney Parklands | McGregor Coxall



Local parks provide spaces for daily use  
Tote Park, Victoria Park | Hassell





## COUNTRY

Engage with,  
recognise and  
celebrate Country

### The Master Plan presents a range of opportunities to meaningfully explore and embed connections to Country.

A range of opportunities to meaningfully explore and embed connections to Country will drive the overarching vision of the site.

Guided by the co-design process with community, and in consideration of the Elements of Country, the Master Plan has a culturally mindful and regenerative approach, focusing on user experience and the environment. It will:

- Celebrate and showcase ecological links between the all precincts, the Master Plan sets a world class precedent for regenerative design with Australia.
- Focus on user experience for human and non-human kin, the design celebrates the significance of the eco-bridge, capturing community desires and environmental outcomes.
- Draw on the cultural and ecological significance of the site, focusing on the endemic landscape and middens. Encompassing the variety of ways locals and visitors can interact and engage with Country meaningfully.
- Demonstrate shared custodianship with accessible, meandering pathways throughout the site with First Nations led tours, sharing stories, and emphasis on the significance of existing cultural sites including middens.
- Focus on the social, cultural, and environmental reignition of the site, the Master Plan will enrich user experience and activation.
- Incorporate traditional land care practices within the ongoing management of the site (including controlled burning).
- Implement accessible pathways within the site and connect to broader networks such as Kamay Botany Bay National Park Trails and Wanda Reserve.
- Opportunity for First Nations social enterprise such as a City Farm.



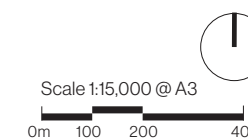
#### LEGEND

- Subject Site
- Midden Site
- Natural Habitat

- Cultural Destination
- Cultural Trail
- Underground Public Parking

- Protected Wetland
- Eco Bridge
- Recreational Open Space

- Nursery



**Storytelling opportunities led by First Nations community members**



**Meeting Place for cultural and knowledge exchanges**



**First Nations Employment and Enterprise Opportunities**



**Cultural Practices embedded within activations on site**



**Plant and Habitat Regeneration is fundamental to site**



**Art and Wayfinding interlinking across site**





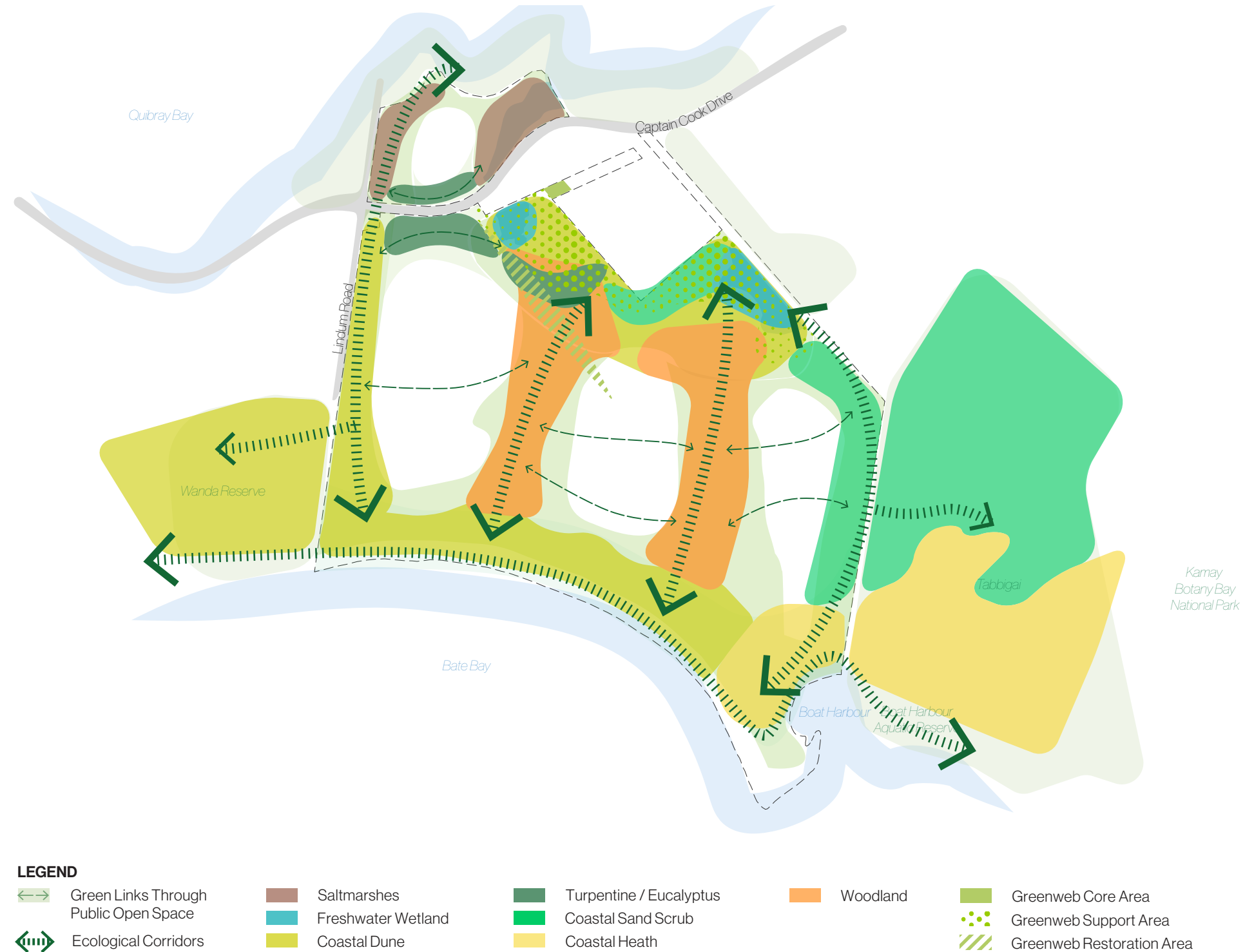
## ECOLOGY

Regenerate ecology,  
to create a resilient  
and diverse green  
network

The Master Plan will reconnect ecological communities, regenerating native and Indigenous ecology from surrounding nature reserve and national parks. It will provide habitat and promote awareness of local flora and fauna.

A diversity of ecological responses will drive the site's character and guide the outcomes of sub-precincts within in the master plan;

- The ecological approach to the site is a world class opportunity to integrate education and cultural land management.
- The proposed landscape rehabilitation will serve as biodiversity corridors that provide connectivity between stretches of habitat, allowing movement of flora and fauna. They will not only provide habitat for local wildlife and native plant species, but will also offer educational opportunities to engage with the natural environment.
- Promote rehabilitation efforts that encourage free movement of flora and fauna throughout the peninsula, aligned to the aspirations of the Kurnell 2020 Corridor Delineation strategy.
- Create north south ecological links throughout the site.
- Strengthen the east-west biodiversity corridor within the Coastal Use Area, preserving coastal vegetation and the waterfront of Bate Bay and Boat Harbour.
- Regenerate riparian corridors and coastal vegetation, promoting the return of threatened species through education and land management.
- Design a diversity of ecological responses to drive the character and outcomes of sub precincts within in the Master Plan.
- Develop a comprehensive integrated green infrastructure system approach to natural resource protection, stormwater management, and site design







## CONNECTION

Develop an  
integrated  
movement network

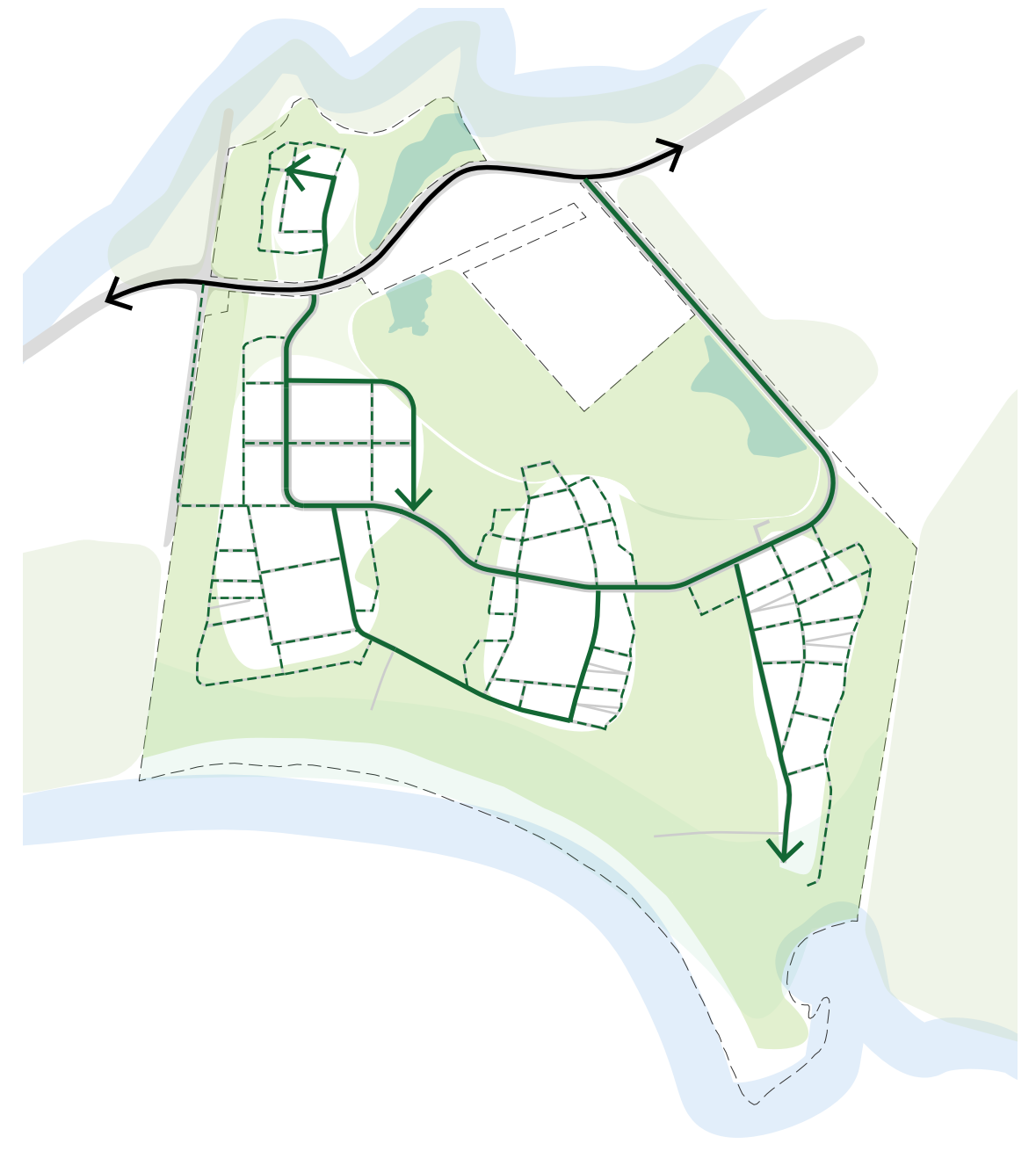
A holistic movement network has been carefully designed to promote accessibility through the site, focusing on the connections between neighborhoods and key destinations.

**The integrated movement network will ensure that safe, legible and inviting modes of transport and activity are promoted throughout the master plan;**

- Streets have been designed to be safe and inviting for all users. Active transport has been prioritised by providing pedestrian and bicycle-friendly infrastructure ensuring that streets are well-maintained, light, and free from hazards promoting health and fostering a sense of community.
- Legible pedestrian desire lines have been identified based on community needs and preferences. The Master Plan connects to existing walking tracks, strengthening east-west connections, and integrating the site within its natural surroundings. This approach ensures that residents and visitors can navigate the site intuitively and comfortably.
- The existing bus route has been extended through the site, ensuring the convenient location of bus stops within walking distance of residential areas and key destinations. This public transportation integration reduces reliance on personal vehicles and encourages sustainable commuting.
- The Master Plan incorporates a diverse mix of residential, commercial, and recreational spaces within close proximity. This mixed-use approach minimises long trips, promotes walkable, vibrant precincts, and encourages cycling and the use of public transport for daily activities.
- The land bridge will provide a crucial connection allowing continuity from the start of the Cultural Trail in Quibray Bay, across Captain Cook Drive, and along pedestrian trails towards Boat Harbour. Green parks, landscaping and paths on the bridge will offer a safe place for native flora and fauna, and human kin alike to cross over Captain Cook Drive. The bridge will capture views over Quibray Bay towards the City, and southwards across the three southern precincts and beaches beyond.



— Pedestrian Friendly Streets    ..... Great Southern Walk  
..... Pedestrian Footpath  
— Pedestrian Through Links



— Existing Cycle Link    — Primary Cycle Link  
- - - Secondary Cycle Link



Streets play a crucial role in defining and enhancing the unique identities of each of the precincts, creating a place-based character consecutively. A number of street typologies are proposed in the Master Plan;

- The Main Street serves as a vital loop road, functioning as a primary connector for all forms of transport. It ensures the safe and efficient flow of all modes of travel, creating a seamless network for everyone.
- The Collector Road is essential for accommodating larger traffic movements, providing access to the school for bus drop-offs, connecting to vital services in the Town Centre, and serving as the gateway to the Arrival Precinct parking area.
- The High Street functions as the vibrant heart of the urban community. It has been carefully designed to promote vibrancy, activity, and amenity through a finely woven network of safe and accessible streets. This street offers a walkable experience with a variety of destinations such as restaurants, shops, services, and transit stops.
- The Residential Boulevard is a walkable street for safe pedestrian activity, supporting the multi-modal movement of local residents.
- The Residential Streets prioritise pedestrians and create a neighbourhood environment with low vehicular speed and minimal traffic volume. This design places people at the centre, ensuring a safe and peaceful experience of the place.
- The Perimeter Roads provide firefighter access, acting as fire control lines within Asset Protection Zones.
- The Laneways are dedicated to pedestrians and cyclists, enhancing the walkability by connecting various places and amenities within precincts.
- The Waterfront Dune Car Parks are built into the landscape, designed to allow public access to the beach and sensitively integrate into the site.



|                                                                                                                   |                                                                                                                |                                                                                                           |                                                                                                                                             |
|-------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
|  Main Street (30m)             |  Collector Street (22.4m) |  Perimeter Road (8m) |  On Street Parking with Landscape Blisters             |
|  High Street (16.6m)           |  Residential Street (18m) |  Access Road         |  Underground Public Parking (Waterfront Dune Car Park) |
|  Residential Boulevard (24.5m) |  Laneway (14m)            |                                                                                                           |                                                                                                                                             |



Main Street



High Street



Residential Boulevard





## DIVERSITY

Create a vibrant and diverse precinct

The four neighbourhoods offer a diversity of housing types and lot sizes, which will meet a broad range of demographics, fulfilling future residential targets and aspirations. This diversity will also promote a variety of building forms and architectural responses.

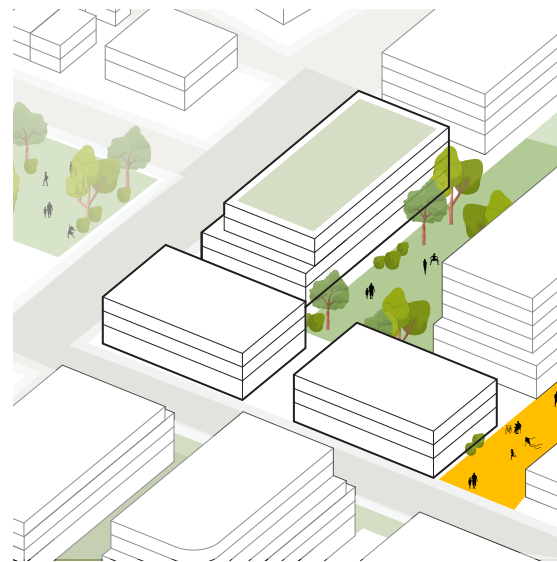
Within this master plan, the diverse range of typologies offer;

- Affordable housing options that commit to ensuring the availability housing that meets the needs of people on very low to moderate incomes, fostering a more economically diverse and inclusive community.
- Diversity in age-friendly housing from family-oriented townhouses, to Independent Living Units (ILUs) tailored specifically to seniors. Embracing a multi-generational community that cherishes the wisdom of age and the vibrancy of youth is key to the formation a successful community.
- Medium-density housing to respond to the urgent demand for diverse, affordable housing choices within sustainable, walkable neighbourhoods, forging a balanced and harmonious living environment.
- Medium to high-rise apartment living options that demonstrate inclusivity. This diversity serves as a gateway allowing a broader range of individuals to experience the vibrant community by the iconic Sydney coastline whilst addressing the crucial challenge of infill density and responsible land use.

### 2.1.1 2 - 4 Storey 'Missing Middle' Apartment Buildings:

These 2 to 4 story dwellings prioritise community and ecological interaction, featuring generous shared garden spaces. The synergy of social and natural elements come together in an affordable urban living environment.

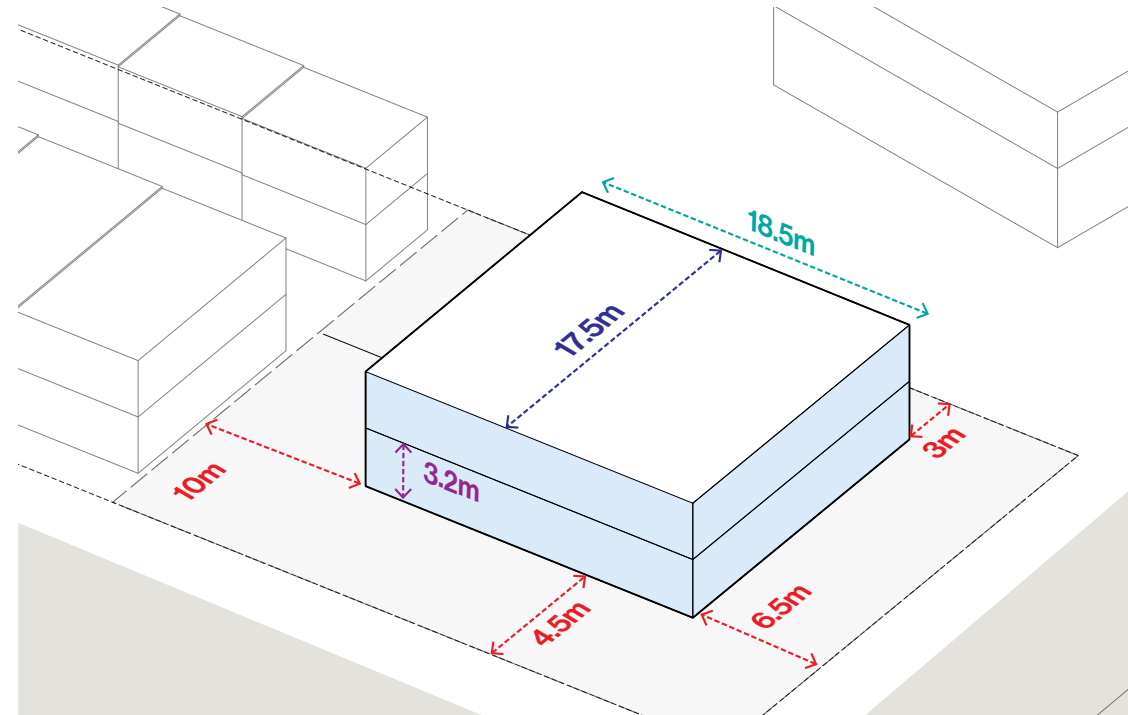
The Apartment Design Guide (ADG) and Low-Rise Housing Diversity Design Guide were used as appropriate design guidelines.



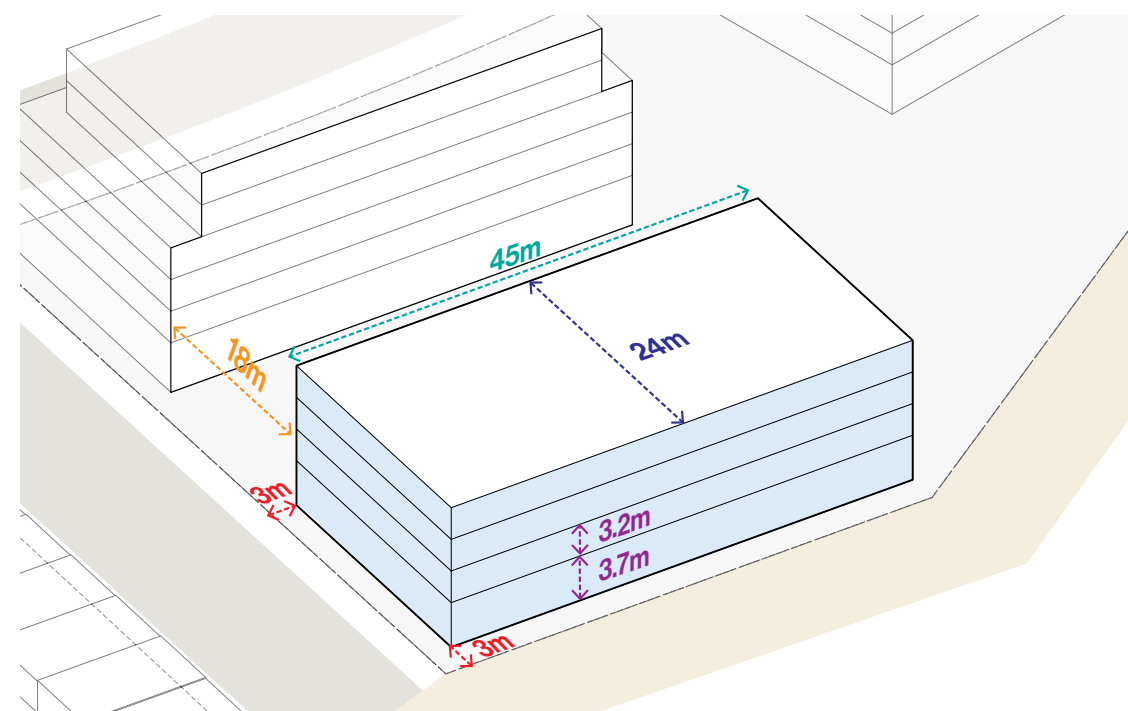
Low rise - Medium Destiny Typology



Low rise - Medium Destiny | Cast Studio



2 Storey Medium Density Dwelling



4 Storey Medium Density Dwelling

### 2-3 Storey Medium Density Building

#### Controls

- 3.2m floor to floor heights apply
- These dwellings are strata title subdivisions with a common entry and hallway.
- This typology is best suited to corner lots or lots with rear lane access.
- A lot width of 25 metres is required to achieve setback requirements and sufficient space for car parking.
- This typology must only be on corner lots.
- A single Medium Density Building must not have a lot area greater than 1000m<sup>2</sup>.
- Must not be situated adjacent to development that exceeds 6-8 storeys in height.
- Maximum 40% site coverage.
- The following setbacks apply:
  - + 3m Secondary road setback to reflect the intimacy of the character and form of the precincts;
  - + 4.5m front setback clearly defining the street edge, transitioning from public to private space to allow for visual privacy for residents from the street;
  - + 3m side setback contributing to the provision of landscaping trees and landscape elements; and
  - + 10m rear setback allowing for visual privacy and provide a clear boundary between buildings.

### 4 Storey Medium Density Residential Flat Building

#### Controls

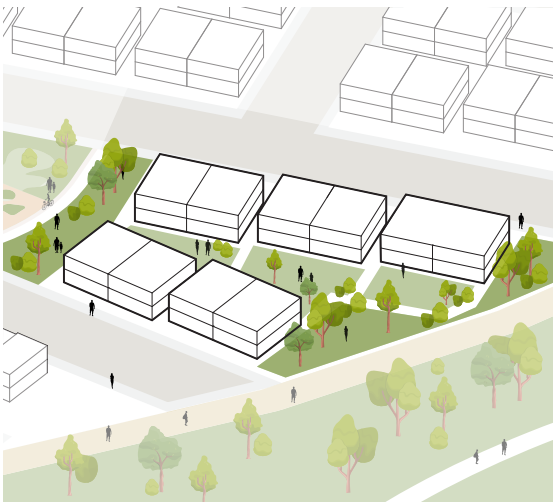
- 3.2m floor to floor heights apply to upper levels with 3.7m ground floor residential floor-to-floor height.
- 3m street frontage setback applies defining the street edge whilst retaining visual privacy for residents.
- Minimum 12m separation between buildings (ADG Building separation).
- Building depth of 24m, maximum length 45m.
- Medium Density Residential Flat Buildings must be on lots containing at least one other Residential Flat Building.
- Occur on residential streets, adjacent to Townhouses or lower density Residential Flat Building of a maximum height of 8 storeys as a transition from higher density.
- Maximum 55% site coverage.



2.1.2 Duplex Townhouses:

The Duplex Townhouses promote two-story living featuring spacious courtyards and large double garages. With separate entrances, maximum privacy is prioritised, with room to accommodate extra recreational space, and an architectural flair that sets them apart.

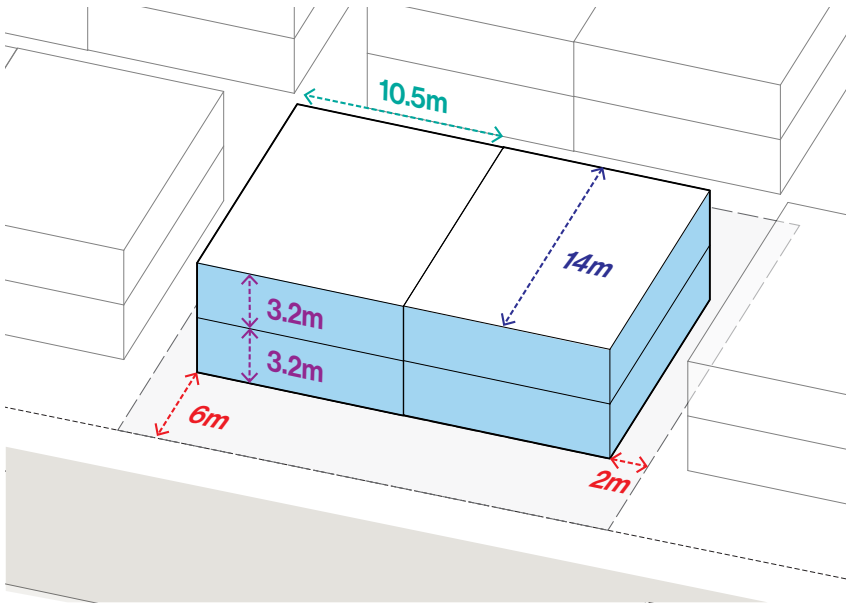
These thoughtfully designed townhouses cater to diverse family sizes, interests, and aesthetic preferences, offering a range of options for residents to choose from. The front setback allows for cars to be parked and allows for access to the garage.



Duplex Typology



Marina Quays Boulevard | GroupGSA



2 Storey Duplex

Controls

- 3.2m floor to floor heights apply
- The following setbacks apply:
  - + A 6-meter front setback gives ample space for residents to easily drive into their garages, providing convenient parking options and room for additional possessions such as kayaks or surfboards;
  - + A 2 meter side setback is maintained to preserve intimacy between adjacent lots. This distance allows for the inclusion of landscaping and pathways; and
  - + A 5 meter rear setback is implemented, ensuring residents have ample garden space. This design element not only promotes greenery and outdoor enjoyment but also contributes to wellbeing and sustainability targets.
- Duplexes must have residential flat building lots or duplex townhouse lots positioned adjacent to the rear boundary.
- Natural, light textures and materials and variation in form creating a character unique to the site.
- Maximum site coverage of 50%.
- Maximum lot depth 30m.
- Minimum lot width 10.5m.

2.1.3 Townhouses with Fonzi Flats:

The townhouses with optional Fonzie Flats are typologies aimed at families seeking adaptable living spaces. These attached row houses come with the flexibility to create additional units along vibrant, pedestrian friendly laneways.

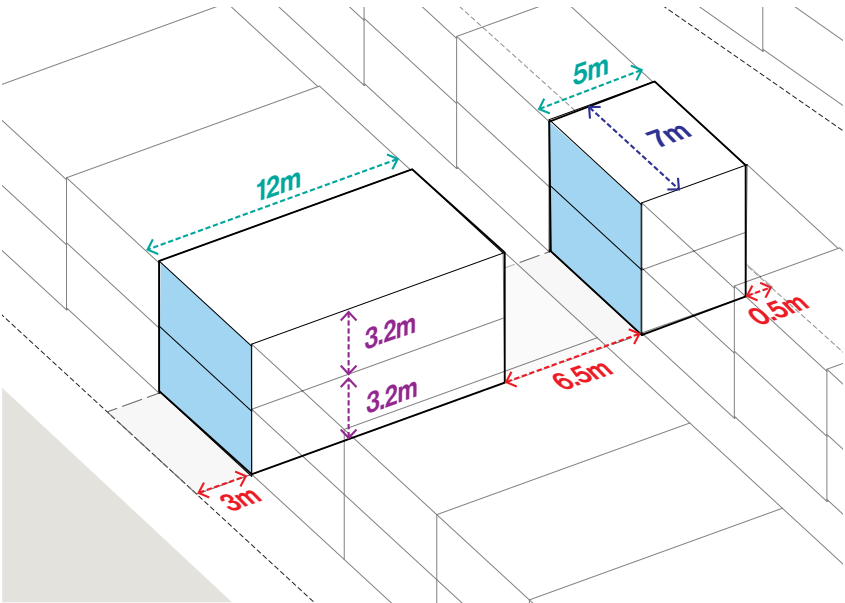
Whether accommodating extra family members, exploring rental opportunities, or simply expanding living spaces, these units offer an affordable solution for modern urban living.



Townhouses with Fonzi Flats



Parkville Townhouses | Fieldwork Architects



2 Storey Townhouses with Fonzi Flats

Controls

- 3.2m floor to floor heights apply.
- The following setbacks apply:
  - + 3 meter front setback is designed to create a walkable and active street edge, fostering a vibrant atmosphere. This contributes to a fine-grain terrace typology, enhancing the overall urban fabric and pedestrian experience of precincts; and
  - + A minimal 0.5 meter setback to garages promotes convenience for residents accessing their garages via their vehicles.
- Townhouses with Fonzi flats must only be on lots with a frontage to a laneway.
- Natural, light textures and materials and variation in form creating a character unique to the site.
- Maximum site coverage of 55%.
- Maximum lot depth 40m.
- Minimum lot width 7m.

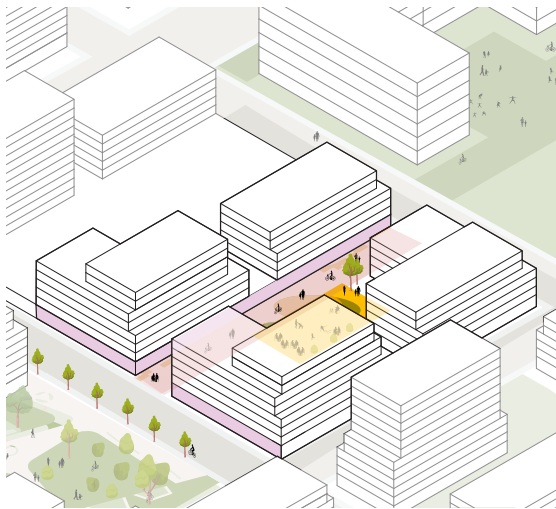


### 2.1.4 Town Centre Mixed-Use

The town centre precinct will feature mixed-use retail and residential use. Apartment dwellings will be developed above a shopping centre with supporting retail, anchored by active residential laneways and a Town Center Plaza.

Future development along the street will shape an urban and vibrant town center, characterised by dynamic public realm elements. 6 storey street walls infuse an urban vibrancy, complemented by a 3 meter setback from the High Street.

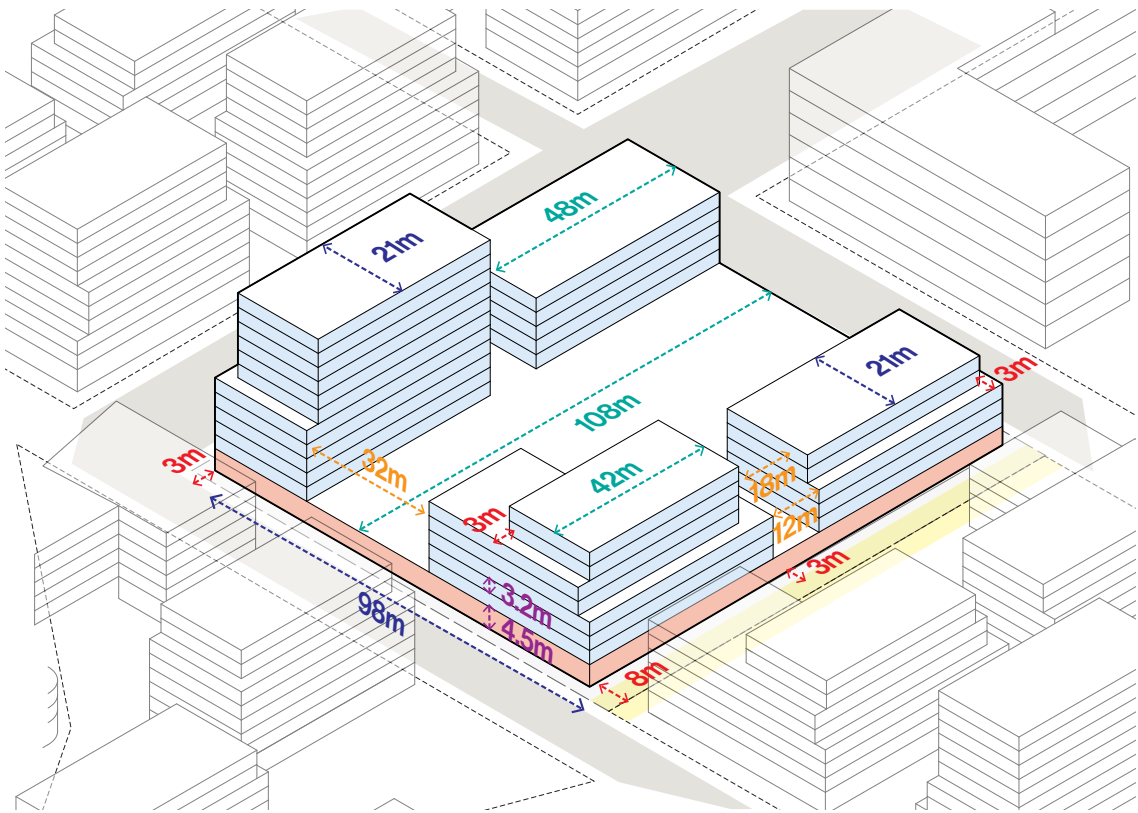
This setback allows for expansive awnings, landscaping and tree canopies, and outdoor alfresco dining spaces contributing to the urban amenity. They create an inviting atmosphere that attracts pedestrian activity and support street trading and alfresco dining.



Typical Town Centre Lot



Eden Street Arncliffe | GroupGSA



#### Typical Town Centre Lot

The active frontages foster are unaffected by the bustling streetscape that encourages east-west pedestrian traffic towards the arrival precinct and the District Park.

The 6 to 12-storey towers have open and inviting facades, adorned with bold commercial signage, adding a strong sense of identity. Towers are setback 3m to limit overshadowing to the public realm while the street walls create a density that supports the urban character of the streetscape.

Distinctive landmark buildings, reaching a height of 12 storeys create strategic points of reference along the Main Street. These buildings in particular serve as visual markers, guiding and defining the Town Center Precinct's identity.

#### Controls

- 3.2m floor to floor heights apply to all upper levels.
- 4.5m ground floor retail floor-to-floor height.
- A 1.5m setback to 12m through-site link to provide intimacy in the public realm and laneway.
- 6 storey upper level setbacks and change in materiality of tower above provide a tapering and transition in height, reducing the perceived bulk from ground level.
- Minimum 12m separation between buildings (ADG Building separation).
- 1 storey full site podium, 6 storey street wall depth of 24m, maximum street wall length 50m.
- Tower depth 21m, maximum tower length 45m.
- 10-12 storey buildings are the tallest buildings across the precinct. These taller buildings provide a transition in scale and are markers of high activity areas.
- Retail podiums covering the whole lot must only occur on the High Street.
- Lots must not exceed 12,500m² in area.
- Retail facades must be along main roads or adjacent to public space, and extend around building corners to interface with buildings in surrounding lots.
- Awnings along active frontages must be provided.
- Facades must be friendly, active and open with a connection to the street.
- Minimal private access points for tower residents along key streets.
- No garage entries or services to be along retail, high activity facades.
- Podiums to provide communal open space for residents.
- Taller towers to be located on main streets.

### 2.1.5 Indigenous Seniors Dwellings

The Indigenous Seniors community provides elders with the opportunity to reside on their ancestral land, fostering a strong sense of connection to their cultural heritage.

The housing will offer secure and affordable housing to local elders and Indigenous seniors. Connected to the landscape, the dwellings will be two storeys, immersed within the landscape and offer privacy to residents.



Indigenous Seniors Dwellings



Opal Seaside | GroupGSA

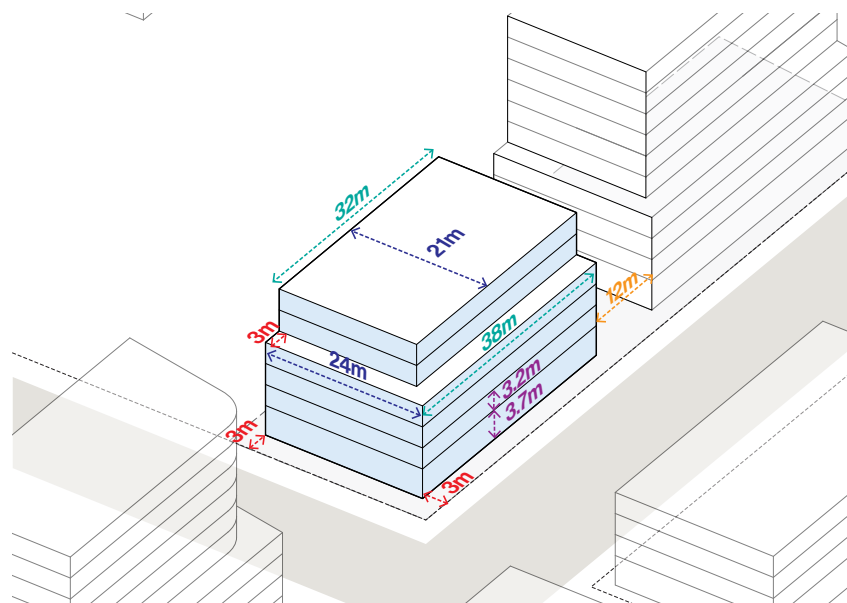


6 to 10-storey apartment buildings feature stunning ocean and park views. Situated amidst generous parklands, serviced by amenity and community facilities, these family oriented residences offer a harmonious blend of urban convenience and natural beauty, ensuring a tranquil yet vibrant lifestyle.

A 3D perspective diagram of a building layout. The central building is blue and has dimensions of 42m (length), 21m (width), and 3.2m (height). It is surrounded by other buildings shown in white. A yellow path runs along the side of the central building. Dimensions for the path and surrounding areas are given in red and orange: 3m, 3.7m, 3m, 6m, 12m, and 18m. The diagram illustrates the spatial arrangement and dimensions of the buildings and the path.

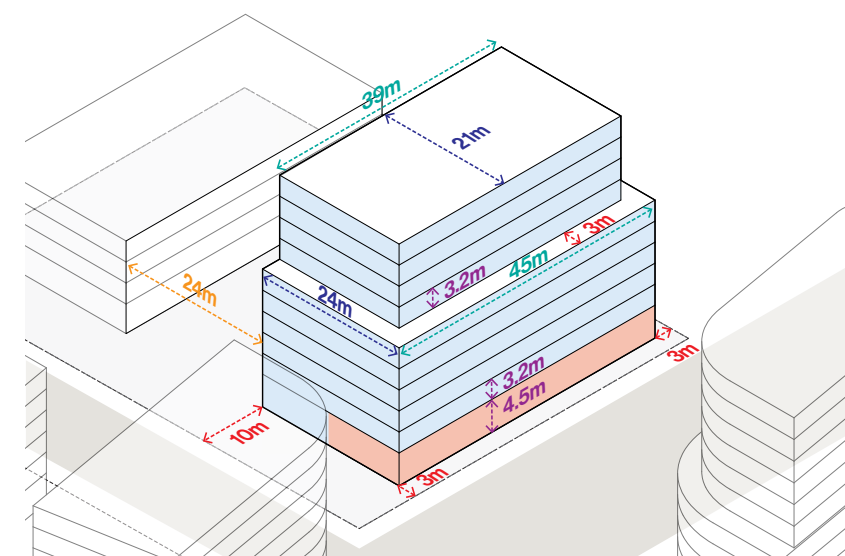
A fine grain terrace style typology will be reflected in the 2 storey maisonette interface at ground level creating an intimate street edge, adding to the sense of identity and street based activity within residential areas.

- 3.2m floor to floor heights apply to all upper levels.
- 3.7m ground floor residential floor-to-floor height.
- A 3m setback to 6m through-site link.
- 2 storey buildings and streetwalls form podium base to define the street edge and mitigate wind.
- Minimum 12m separation between buildings (ADG Building separation).
- Building depth of 24m, maximum length 45m tower;
- Maisonettes must be on a through-site link or adjacent to townhouses.
- Create a diversity in height using a stepped, varying form from building to building.
- Lots must not exceed 12,000m<sup>2</sup> in area.



4 storey streetwalls define street edges with a 3m setback giving relief to these residential areas with ample room for landscaping and a substantial tree canopy.

- 3.2m floor to floor heights apply to all upper levels.
- 3.7m ground floor residential floor-to-floor height.
- A 3m setback to 6m through-site link.
- 4 storey building streetwalls form podium base in higher density areas, framing the public realm including streetscapes and open space, providing a human scale.
- Minimum 12m separation between buildings (ADG Building separation).
- Building depth of 24m, maximum length 45m tower;
- Create a diversity in height using a stepped, varying form from building to building.
- Lots must not exceed 12,000m<sup>2</sup> in area.



Residential flat buildings with ground floor retail provide the community with key services and amenity including small scale shops, ancillary medical clinics, and cafes and restaurants. The ground floor setback allows for awnings to cover and shade outdoor alfresco dining spaces, and for landscaping and tree canopies.

- 3.2m floor to floor heights apply to all upper levels.
- 4.5m ground floor retail floor-to-floor height.
- A 1.5m setback to 12m through-site link.
- 6 storey upper level setbacks and change in materiality of towers above taper and transition in height, reducing perceived bulk from ground level.
- Minimum 12m separation between buildings (ADG Building separation).
- Podium depth of 24m, maximum podium length 50m.
- Tower depth 21m, maximum tower length 45m.
- Retail facades must be along main roads or adjacent to public space and extend around building corners to interface with buildings in other lots.
- Awnings along active frontages must be provided.
- Facades must be friendly, active and open with a connection to the street.
- Minimal private access points for tower residents
- No garage entries or services to be along these facades.





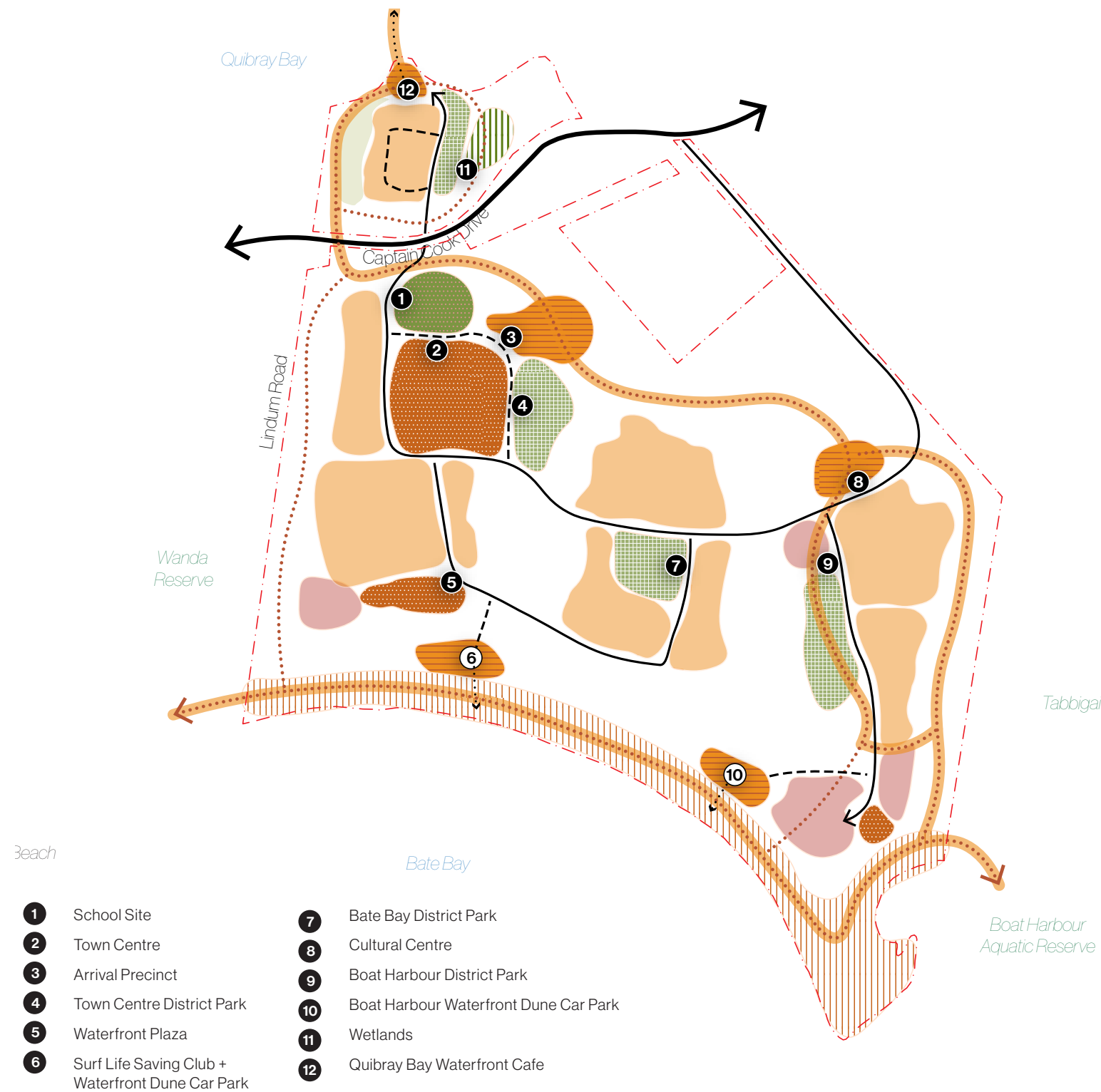
## PLACE

A network of places and destinations to ensure the master plan is resilient, diverse and adaptive as it develops

### At the heart of the Master Plan lies the commitment to enriching community life.

This has been approached through embedding the following network of places and destinations:

- The Cultural Trail invites people to embark on a journey of cultural exploration across the site. This trail serves as a dynamic tapestry of traditions, providing a space for everyone to engage and appreciate the diverse cultural practices that enrich Kurnell's collective identity.
- The foundational principle to the Master Plan is "People First." The creation of a public domain that is inviting, inclusive, and accessible to all has been prioritised. Through this approach, social infrastructure serves as a unifying force that fosters connections and supports the wellbeing of all community members.
- The needs of our community are diverse and ever evolving. The approach to social infrastructure is designed to be flexible and multipurpose, capable of adapting to the varying demands of the dynamic community. Sustainability and quality are paramount in our commitment, ensuring that all facilities stand the test of time.
- The timely delivery of both enabling and supporting infrastructure is crucial to the successful delivery of the community. From efficient transportation systems to vital social amenities and open spaces, meeting these needs promptly underscores an unwavering commitment to the community's well-being and growth.
- Every precinct within the Master Plan is unique, with its own character, identity, and experiential qualities. These distinctions have been carefully considered, tailoring social infrastructure to complement and enhance the distinctive features of each precinct, creating a harmonious and enriching environment for everyone.



Swirling Cloud Bulletin Pavilion | SUP Atelier



Western Sydney Parkland



Lizaed Log | McGregor Coxall





## SUTHERLAND

Reflect the values  
and character of the  
Sutherland Shire

The Master Plan is home to many people from different walks of life, each with a connection to the place that is distinctive and reflects the values and character of the Sutherland Shire.

The master plan will comprise the social and physical layers that represent the unique qualities of the Sutherland Shire. It will;

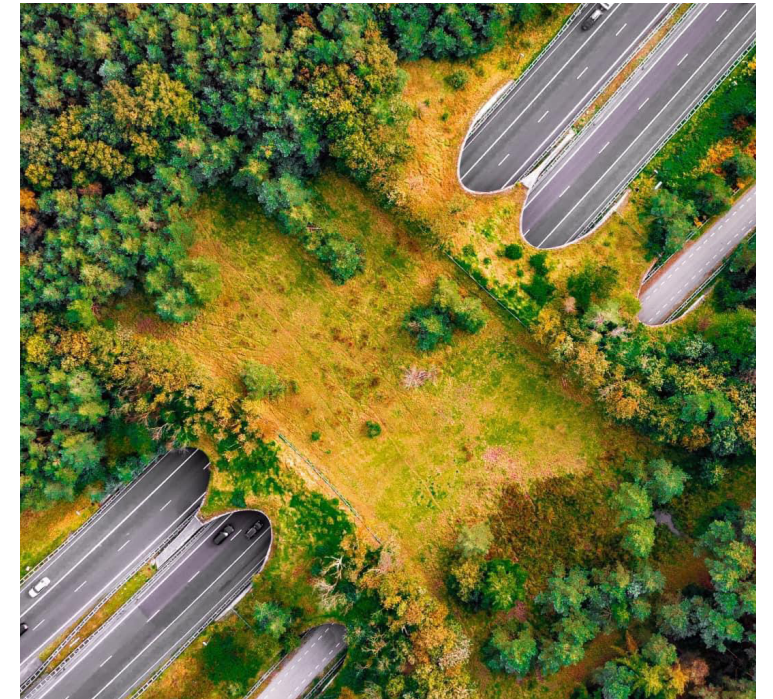
- Establish a distinctive identity that defines the Sutherland Shire, encompassing its history, traditions, and unique characteristics to form a collective narrative that captures the essence of the Shire.
- Prioritise the protection and enhancement of the Shire's natural environment. Develop sustainable practices and controls that safeguard local ecosystems, green spaces, and biodiversity.
- Encourage an active lifestyle and a deep appreciation for the outdoors by integrating green spaces, recreational areas, and pathways into the urban fabric. Promote the use of natural assets, such as parks, waterfront areas, and scenic landscapes, as focal points for community activities, fostering both physical wellbeing and a sense of place.
- Develop initiatives that celebrate and preserve the cultural richness within the Sutherland Shire. Support community events, festivals, and programs that encourage inclusivity and understanding among residents to strengthen the cultural tapestry that defines the Shire.
- Respect the deep rooted Aboriginal culture and history. Implement measures to protect sacred sites, incorporate Indigenous art and storytelling into public spaces, and collaborate with Indigenous representatives throughout all planning and development processes.
- Foster a robust sense of community by supporting social initiatives, neighborhood gatherings, and community led projects. Prioritise social infrastructure, such as community centers and gathering spaces that facilitate interactions and strengthen the bonds that form the foundation of the Shire's tight knit community.



**Capture the Sutherland Shires identity**



**Values and encourages the natural environment**



**Promotes a connection to the outdoors and natural assets**



**Retains and strengthens its culture and diversity**



**Respects its Aboriginal culture and history**



**Maintains its strong sense of community**



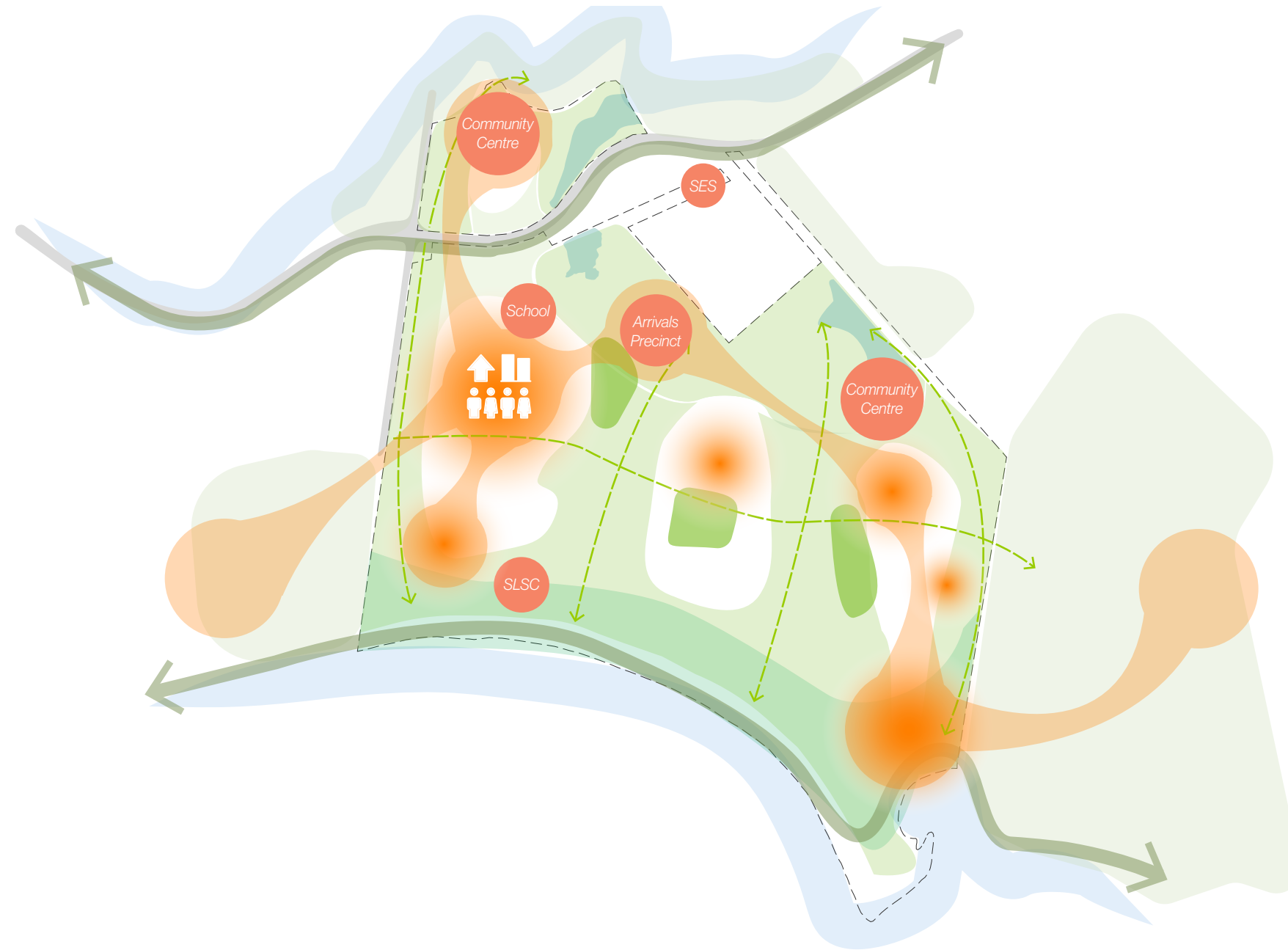


## SOCIO-ECO

Create Social and  
Economic Benefit

The co-location of various social services in the site such as education, health, sporting, cultural and shared community facilities which will increase social cohesion and wellbeing.

- The inclusion of residential accommodation on the site will increase housing supply, affordability and diversity in the Shire and locality. The Shire will be home to an additional 26,435 people between 2021-41, requiring 12,285 new dwellings. The Besmaw Planning Proposal provides opportunity to attain these targets with a projected population of 7,304 people.
- The Master Plan will contribute towards employment opportunities within the healthcare and social assistance and education and training industries. The PP has the potential to generate a total of 1,575 jobs on site (full and part-time jobs). This provides increased employment opportunities for local residents to live and work in the Shire. Providing jobs closer to home meets the GSC 30-minute city direction, where residents live within 30 minutes of their jobs, education and health facilities, services and great places.
- Residents over 60 are forecast to increase by over 9,000 by 2036. The PP, with its provision of aged care, seniors housing, apartments of different sizes and configurations coupled with retail, commercial, medical and social infrastructure, can provide locations of high amenity, services and a sense of community important to ensure these residents can age in place.
- Tourism and visitor accommodation within the Master Plan are commercial uses that will benefit from the site's location, with its surrounding natural beauty increasing the appropriateness for the development of high-quality eco-tourism accommodation.
- It is recognised that the Shire is under supplied with tourist and visitor accommodation and that increased supply would increase local employment opportunities. The Master Plan will deliver both direct and flow-on benefits to the local economy through increased market exposure for the LGA as a tourism destination.
- Tourist accommodation would also increase the demand and viability of retail and commercial space, such as cafés, restaurants and conference centres.
- The provision of retail services on the Kurnell Peninsula is limited. The Planning Proposal would increase the range, quality and supply of retail and other non-retail services within the peninsula.



### LEGEND

District Park

Green Grid  
 Green Links

Employment Density  
 Community Destination  
 Tourism Destination



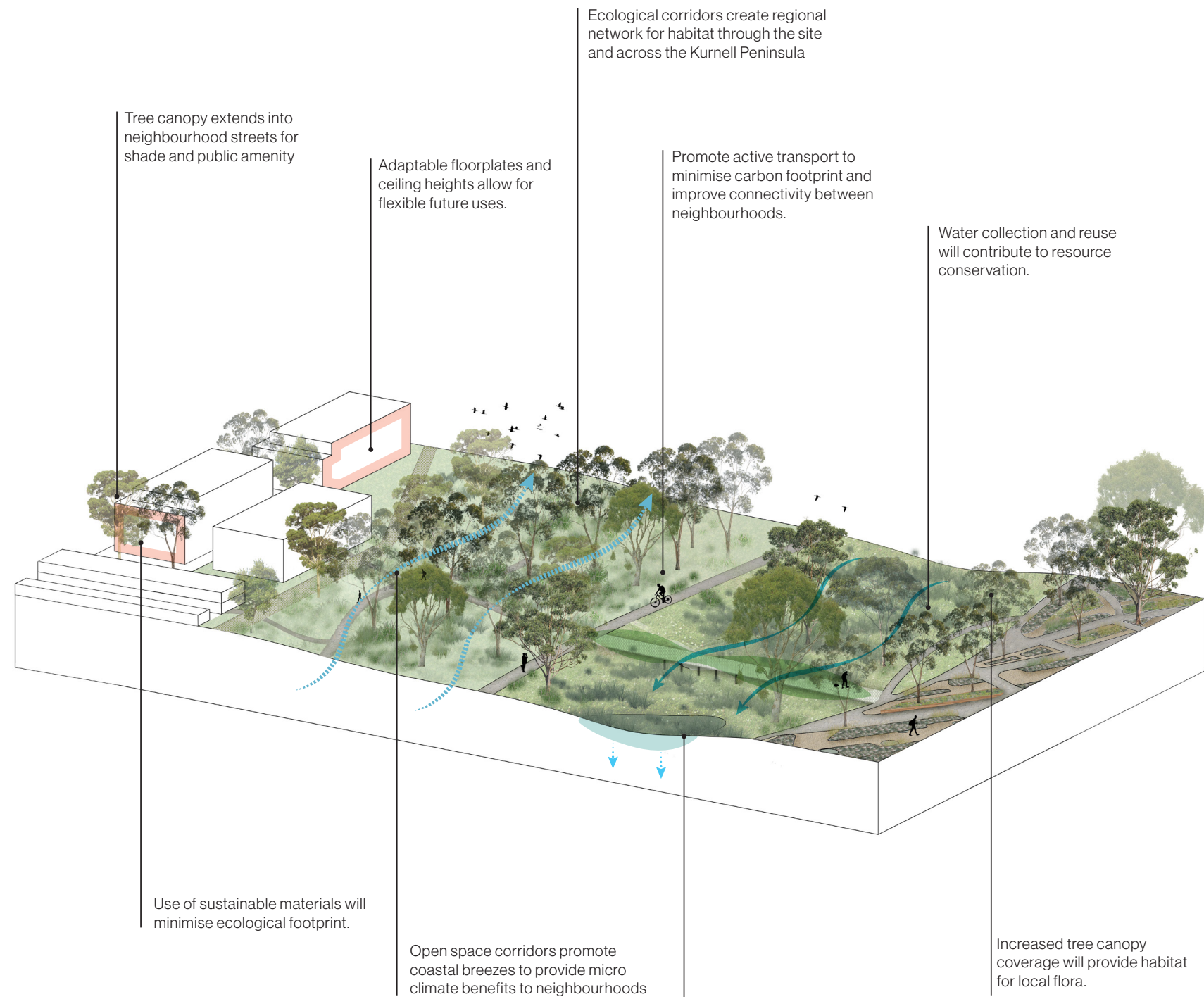


## SUSTAINABILITY

An exemplar  
of sustainable  
development

The approach to sustainability encompasses a site wide strategy for enriching the environment and enhancing resilience.

- Implementing a measured ESD target will serve as a foundation for sustainable practices. Setting specific, quantifiable goals related to energy efficiency, water conservation, waste reduction, and overall environmental impact.
- Designing infrastructure with flexibility for future compliance and targets will be an iterative process incorporating technologies that can evolve with advancements in sustainable practices. Considering future resilience involves ongoing planning and adaptation to account for changing climate conditions.
- Promoting active transport, car sharing, and public transport will minimise the carbon footprint of the Master Plan. This reduces greenhouse gas emissions, congestion, and reduces the quantity of car parking.
- Support the creation of a green infrastructure that includes tree canopy coverage, preserving natural habitats, managing storm water responsibly, and supporting local biodiversity.
- The Master Plan has been designed with the future in mind including accommodating changes in land use through adaptable floor plates and ceiling heights.
- Adopting renewable energy sources for electricity needs ensures a low-carbon energy supply.
- 100% electric usage eliminates reliance on fossil fuels, significantly reducing carbon emissions. Implementing systems for real time monitoring and reporting of emissions educates, tracks progress, and identifies areas for improvement.
- Implementing systems for recycling sewer and rainwater. Efficient potable water use and hot water heating systems contribute to resource conservation.
- Choosing sustainable materials in construction and operation including reuse and recycling of materials, and minimal ecological footprint.
- Implementing operational efficiency measures, such as energy management systems and addressing waste at every stage of the Master Plan.
- Promoting the use of locally sourced products reduces transport emissions and supports the local economy.



Prioritise native flora in public open spaces.  
Royal Botanic Gardens | I.C.L.



Provide habitat for native flora throughout green corridor.  
Future Nature Garden | Nigel Dunnett et. al



Urban wetlands for water collection and re-use  
Little Bay Cove | McGregor Coxall