



BESMAW PLANNING PROPOSAL

Landscape Master Plan, Public Domain and Open Space Strategy



We acknowledge Country, the Cultural Landscape that we are working upon, We acknowledge the custodianship of its people and the privilege and responsibility to Connect with Country.

We acknowledge and pay our respects to the Traditional Owners and their ongoing connection to culture, lands and waters and their valuable contribution to the community. We recognise and acknowledge the surrounding clans to the North, South, East and West whilst honouring and celebrating their Elders past, present and emerging.

We are part of the system of Country, our actions must always be Country positive. Being connected to Country transcends language and culture - a connected system of action, emotion, and experience, as a Custodian of Country.

Importantly, including First Nations knowledge of lands and culture at the onset of a project leads to design responses that are derived from knowledge of landscape variables and bio-cultural knowledge, creating meaning in placemaking conceptualisation and function.



Issue	Title	Date	Prepared	Checked
1	Draft Issue	26/10/2023	CW / SC / MC	SH
2	Draft Issue	06/11/2023	CW / SC / MC	SH
3	Issue for Review	01/12/2023	CW / SC / MC	SH
4	Final Draft Issue	08/12/2023	CW / SC / MC	SH
5	Final Issue	12/12/2023	CW / SC / MC	SH

CO N TENTS

	EXECUTIVE SUMMARY	5
1.0	INTRODUCTION	9
1.1	CONTEXT	10
1.2	OPEN SPACE CONTEXT	11
1.3	RECREATION AND TOURISM	12
1.4	BIODIVERSITY	13
1.5	LANDSCAPE OPPORTUNITIES	14
2.0	LANDSCAPE PRINCIPLES	17
2.1	LANDSCAPE VISION	19
2.2	LANDSCAPE DESIGN PRINCIPLES	20
2.3	CONNECTION TO COUNTRY	22
3.0	LANDSCAPE MASTER PLAN	25
3.1	LANDSCAPE FRAMEWORK	26
3.2	LANDSCAPE MASTER PLAN	28
3.3	ECOLOGICAL CORRIDORS	30
3.4	BUSHFIRE MANAGEMENT	46
3.5	WATER MANAGEMENT	48
4.0	PUBLIC DOMAIN STRATEGY	51
4.1	PUBLIC DOMAIN	52
4.2	ACTIVE TRANSPORT NETWORK	53
4.3	STREET TYPOLOGIES	54
4.4	PUBLIC DOMAIN TYPICAL PLANS AND SECTIONS	56
4.5	THROUGH SITE LINKS AND RETAIL PLAZA	65
4.6	URBAN PLANTING AND MATERIAL PALETTE	72
5.0	OPEN SPACE STRATEGY	75
5.1	OPEN SPACE STRATEGY	76
5.2	OPEN SPACE NEEDS AND DEMANDS	77
5.3	OPEN SPACE PLAN	78
5.4	TOWN CENTRE	80
5.5	BATE BAY	88
5.6	BOAT HARBOUR	94
5.7	QUIBRAY BAY	100
5.8	STAGING	106
5.9	OPEN SPACE SHADOW ANALYSIS	107



EXECUTIVE SUMMARY

The vision for the Besmaw Planning Proposal has been developed through an inclusive process, marked by engagement, analysis, collaboration, and innovation.

The development of the ecological and cultural strategies for the site has underpinned the framework for the design and planning of the site.

The design process for development of the site and the urban design response is driven by the landscape structure which ensures an emphasis on ecology, green networks and cultural specificity.

The objectives for the Landscape Master Plan, Public Domain and Open Space Strategy is embedded into the future outcome for the Besmaw Planning Proposal. The design process will:

- Ensure an ongoing Connection to Country for the Gweagal people through the establishment of the cultural and ecological framework which grounds the site into the peninsula.
- Regenerate ecology in the site which utilises the diversity of vegetation types which exists on the Kurnell peninsula. These ecological corridors will create habitat for a range of flora and fauna. The ecologies will be managed and curated with through ongoing Indigenous landscape management practices.
- Create a vital network of high-quality public open space that connects centres, public transport, and residential areas, with the spaces visible and connected
- Establish a green infrastructure network with variety of open spaces that are sustainable, offering a range of amenities while supporting the local ecosystem's growth and renewal
- Provide a publicly accessible network of open spaces across the site, establishing connections to coast, beach, bushland, urban spaces and adjacent open space.
- Provide open space amenity for residents who will live in the new neighbourhoods ensuring they are provisioned with quality open space in their day to day lives.
- Create destinations for visitors to the peninsula to reconnect the site to the public framework of Kurnell and Sutherland Shire.
- Include social infrastructure for the residents and visitors to the site including recreation, sports, and culture.

Purpose of the Report

This Landscape Master Plan, Public Domain and Open Space Strategy forms part of a suite of the Besmaw Planning Proposal reports that supports the amendment to Chapter 5 of State Environmental Planning Policy Plan 2021 (SEPP), Sutherland Shire Local Environmental Plan 2015 (SLEP 2015) and site specific development control plan (DCP). It is to be read in conjunction with the Master Plan Urban Design Report.

Outlined below are the intentions and applications of the report.

The Landscape Master Plan, Public Domain and Open Space Strategy:

- Addresses the needs and demands for public open space and recreation facilities for the proposed developments new population as well as demand for facilities from neighbouring communities
- Identifies the provision and hierarchy of public open space, publicly accessible open space and private open space
- Establishes a public open space and landscape vision, guide and coordinate the design and implementation to achieve the Kurnell Peninsula Master Plan Vision
- Guides the proposed design of a cohesive and high quality public open space that is sympathetic to the site's location and coastal environment
- Demonstrates the forms and functions of the proposed public open spaces that ensure provision of recreational facilities and amenities
- Improve the identity of each character precinct and residential neighbourhood
- Investigate heritage interpretation and conservation opportunities within the public open space design
- Identify how public spaces and green spaces play a role in increasing pedestrian priority and encouraging active transport movement

Structure of the Report

The report is structured into:

- **Chapter 1 Introduction:** Understanding of the site, through both its physical and strategic context.
- **Chapter 2 Landscape Principles:** Stating the vision and principles for the overall landscape, public domain and open space network.
 - + Whole of site landscape principles
 - + Connecting to Country strategy and cultural trail
- **Chapter 3 Landscape Master Plan :** Outlining the guiding design for the overall site landscape and the enframing Ecological Corridors. The chapter includes:
 - + Overall site landscape framework
 - + Distribution of uses, destinations and social infrastructure
 - + Ecological corridors
- **Chapter 4 Public Domain Strategy:** Defining the objectives for key urban spaces. This chapter includes:
 - + Streets and laneways
 - + Through site links
 - + Retail plaza and its through links
- **Chapter 5 Open Space Strategy:** Defining the outcomes for the key open spaces and recreation areas which are to be owned and managed by Sutherland Shire Council. This chapter includes:
 - + Open space objectives and criteria
 - + District parks
 - + Local parks

Defining Key Elements

Landscape:

Refers to the overall design, planning, and management of outdoor spaces. This includes natural and constructed elements, emphasizing aesthetics, functionality, and environmental sustainability.

Open Space:

Encompasses areas of open spaces with a recreation and activity focus, as provided by the network of local and district parks. The open spaces contribute significantly to the overall quality of life for the residents and visitors to the precinct. They are diverse spaces with landscaped treatments including natural habitats, recreational opportunities, and community engagement areas.

Public Domain:

Represents the spaces within urban areas, including streets, footpaths, plazas, and through site links. These spaces are collectively owned, fostering community interaction, cultural events, and social cohesion.

Private Domain and Communal Open Space:

The landscape areas included in the residential areas private yards, frontages and communal landscape areas also contributes to the landscape values of the precinct. The intent, description and controls for these areas is covered in the DCP.

OBJECTIVES FOR THE LANDSCAPE

The landscape 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 overall landscape is an adaptive environment, evolving with the community and environmental conditions accordingly.

Diverse and Interconnected Uses: Open spaces form a diverse and interconnected network, 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.

Proximity and Accessibility: Local parks will serve as accessible amenities for daily use, strategically located within each of the four precincts. These parks are within walking distance thus encourages regular community engagement and promotes a healthy lifestyle.

District Parks as Cultural Hubs: The three district parks 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.

Ecological Emphasis: Surrounding green corridors, provide a habitat for local wildlife, native plant species, and offering educational opportunities to engage the community with the environment.

Pedestrian-Centric Design: The open space network is pedestrian-friendly, 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.

Cultural Engagement with Indigenous Country: The natural environment actively engages with and acknowledges local Indigenous culture. 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.

Regeneration

- Promote rehabilitation efforts to allow free movement of fauna throughout the peninsula, aligned to the aspirations of the Kurnell 2020 Corridor Delineation strategy.
- Create north south ecological links in the site.
- Design a diversity of ecological responses to drive the character, and outcomes of sub precincts within in the Master Plan.
- Strengthen the east-west biodiversity corridor within the Coastal Use Area, preserve coastal vegetation along the southern interface and Boat Harbour.
- Regenerate riparian corridors and coastal vegetation, promoting the return of threatened species, education, and land management.



LANDSCAPE MASTER PLAN OUTLINE

The Landscape Master Plan, Public Domain and Open Space Strategy includes enframing ecological corridors as well as open space associated with the four neighbourhood precincts, each with a distinct character established by landscape and urban form.

Ecological Corridors

The extensive and interconnected corridors are the focus of ecology networks, Indigenous cultural trail and the green infrastructure framework.

The corridors connect east west and north south through the site.

Town Centre

The vibrant destination of education and enterprise overlaps people, built form and nature.

The Town Centre will be a place designed for the enjoyment and utility of pedestrians and a place that facilitates access for people between work, home, school and tourist destinations. The open space network includes;

- District level park which connects the Town Centre to the Cultural Trail;
- Retail plaza, through site links, and waterfront plaza;
- Town centre park with active retail edge;
- Local parks with a residential neighbourhood focus; and
- Through site links in residential neighbourhood.

Bate Bay

This residential community is centrally located, connected to the beachfront and is enframed by landscape corridors.

The open space provisions includes;

- A central District Park focused on active recreation.
- Local Park with a residential neighbourhood focus; and
- Through site links.

Boat Harbour

Boat Harbour is connected to the natural environment with close proximity to the coast and sheltered harbour and adjacent Tabbigai precinct and Kamay Botany Bay National Park.

Tourism, residential and recreation uses are key to the local character for this precinct.

The open space provisions include;

- District level park which combines recreation, education and display gardens for visitors;
- A Local Park with a residential neighbourhood focus; and
- Adjacency links to Boat Harbour, Tabbigai and Kamay Botany Bay National Park.

Quibray Bay

The residential neighbourhood integrates to the natural surroundings, nestled between the wetlands and the estuarine landscapes of Quibray Bay. The community is served by a community centre and a small pocket of local retail and cafe.

The open space provisions include;

- A local park with a residential neighborhood focus overlooking the wetlands adjacent; and
- Adjacent links to Quibray Bay with a boardwalk for local residents and visitors. The walkway is connected across Captain Cook Drive via a land bridge which extends the Cultural Trail from the Town Centre.







1.0 INTRODUCTION

01

1.1 CONTEXT

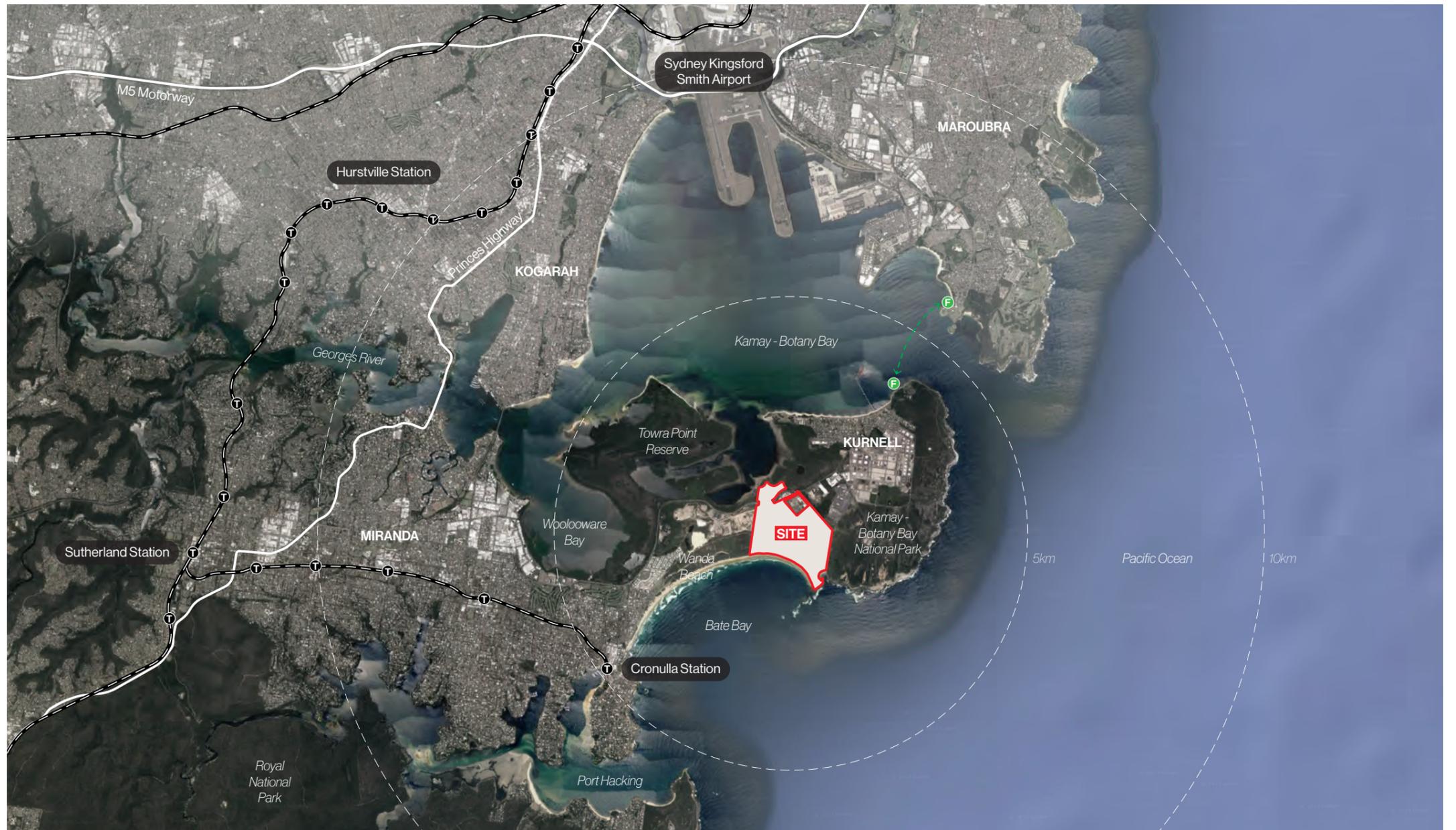
Regional Context

The subject site is part of Kurnell Peninsula, situated at the eastern most extent of Sutherland Shire, forming Botany Bay's south coast.

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

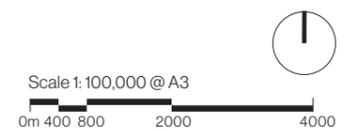
The Kurnell Peninsula is a significant ecological asset. The peninsula is comprised of key wetland habitats, and hosts extensive shallow seagrass beds which dominate its northern shores.

Kurnell benefits from its high quality landscape and ecological character, capture of key metropolitan and environmental views, and connectivity to the existing urban centres of Sutherland Shire.



LEGEND

- Subject Site
- Train Line
- Main Road
- Proposed Ferry



1.2 OPEN SPACE CONTEXT

Context

The Site is in close proximity to a variety of open spaces and natural areas used for recreation. There are an abundance of ecological green spaces along the peninsula which forms a connected coastal walking trail. A number of parks in surrounding area leads to Cronulla including Wanda Reserve and Don Lucas Reserve.

The proposed Marang Parklands is undergoing an approvals process by Sutherland Shire Council. It will provide significant open space with a VPA in place for additional parklands, offering up to 50ha of recreational open space, including natural parklands, playgrounds, and bushland. The Parklands will constitute a regional park within 5km of the site servicing the wider peninsula.

Towra Point Nature Reserve and Kamay Botany Bay National Park are within proximity of the site and provide amenity for walking trails and appreciating nature. They do not feature active and recreational spaces and therefore do not contribute formally to the Council's open space requirements.

It is expected that the development of the site will require a range of open space provisions to cater for the residential population and the visitors to the precinct.

SSC Open Space Strategy and Implementation Plan 2021

As part of Sutherland Shire Council's Open Space Strategy and Implementation Plan it is expected that residential development on-site is to be accompanied with access to a regional park, district park, and local parks within specified distances.

- 90% of all houses should be within 800 metres of quality open space and preferably 400 metres for high density areas.
- Regional park should be located within 5km of most homes.
- District park should be located within 2km of most homes.
- Local park within 800m from most homes and preferably within 400m in high density areas.



LEGEND

- | | | |
|--------------|---|---|
| Subject Site | Open Space owned or managed by Sutherland Shire Council | Green Grid Opportunities (South District) |
| Open Space | NSW National Parks Land | Train Line |
| Lots | Approved Open Space | |
| Water | | |

Scale 1:50,000 @ A3
0m 200 400 1000 2000

1.3 RECREATION AND TOURISM

The site will be able to contribute to the diversity of recreation and visitation opportunities on the Kurnell Peninsula. The potential is to connect to the nearby regional amenity and add a new cultural and ecological network connectivity to this.

Kurnell is identified as a key Strategic Site under the South District Plan, as a potential employment hub and tourism destination.

The Coastal Destination Zone (SSC LSPS 2020) describes a cluster of existing and proposed tourism opportunities located throughout Sydney's south-east coast, including the Kurnell Peninsula.

Located at the peninsula's centre, the site has the opportunity to play a key role in the development of the Coastal Destination Zone, linking the urban centre of Cronulla east to the beach-side town of Kurnell, while also being a destination in its own right.

The desire for greater tourism opportunities within Sutherland Shire is described in the Sutherland Shire Council LSPS 2020, which identifies Kurnell as a key asset, due to its abundant ecological features and strong connections to Sydney's past.

Situated along both the peninsula's primary thoroughfare and at the centre of its network of walking tracks, there is opportunity to engage with Sutherland's wider tourism industry.

Tourism services and experiences will reflect the site's unique cultural and historic context, ecologically significant landscape, and coastal proximity.

The use of the site as a tourism destination will also ensure that Sutherland Shire Council's desire for Kurnell to remain an employment will be achieved.



1. Marang Parklands currently undergoing construction



2. Approved concept design for Kurnell Visitors Centre



3. Bronze sculptures installed in 2020



LEGEND

- Subject Site
- Open Space
- Lots
- Water
- Kamay Botany Bay MP 2020
- * Commemorative Sculptures (KBBMP)
- o Future Visitors Centre (KBBMP)
- * Tourism Destination
- Town Centre
- Recent / Proposed Developments
- Coastal Destination Zone
- Train Line
- Proposed Ferry

Scale 1: 50,000 @ A3
0m 200 400 1000 2000

1.4 BIODIVERSITY

The Kurnell Peninsula is host to a significant and varied ecosystem, home to a variety of critical native ecological communities.

The diversity of vegetation communities on the peninsula provides a rich palette to be able to bring into the site and utilise in the different niches created through landform, wind, solar and water regimes.

In proximity to the site, Kamay Botany Bay National Park and Tabbigai features rich ecological communities of Banksia Scrub, Bloodwood Forest, Coastal Freshwater Wetland, Littoral Forest and Sandplain Heath.

The existing native ecological communities in proximity to the site, generally comprise of retained or regenerating riparian or coastal vegetation with marine communities along the coastal reserves.

Small areas of mangroves and wetland communities are retained or restored to the north east and north west, in association with Weeny Bay and Towra Point nature Reserve.

As identified in the Biodiversity Assessment Report by Cumberland Ecology (CE) and mapped in The Native Vegetation of the Sydney Metropolitan Area - Version 3.1 (OEH, 2016), four Vegetation Community types occur within project boundary:

- Coastal Fore-dune Wattle Scrub (PCT 772)
 - Coastal Swamp Paperbark - Swamp Oak Scrub (PCT 1236)
 - Coastal Freshwater Wetland (PCT 781)
 - Estuarine Saltmarsh (PCT 1808)
- Terrestrial Vegetation Community (CE)
- Estuarine Reedland (Degraded)
 - Exotic Grassland with Scatter Tuckeroo (PCT 1808)



LEGEND Data Source: OEH (2016). The Native Vegetation of the Sydney Metropolitan Area. Office of Environment and Heritage NSW.

Subject Site	Riparian Lands Watercourse	Weeds and Exotics	Coastal Sand Swamp Scrub	Regional East - West coastal walk	Freshwater Wetland
Open Space	Groundwater Vulnerability	Coastal Sand Swamp	Littoral Rainforests	Regional East - West Quibray Bay walk	
Lots	Sydney Fore-dune Scrub	Estuarine Mangrove Forest	Coastal Sandplain Heath	Estuarine Saltmarsh	
Water	Coastal Sand Scrub	Exotic Grassland	Coastal Dune Dry Sclerophyll Forests	Estuarine Reedland (Degraded)	

1.5 LANDSCAPE OPPORTUNITIES

Ecological Opportunities

The landscape led approach to design and planning of the project has driven the objective of establishing ecological corridors through the site. The development will facilitate reconnection of ecological networks through north-south and east-west landscape corridors.

Objectives for the site include:

- Promote rehabilitation efforts to allow free movement of fauna throughout the peninsula, aligned to the aspirations of the Kurnell 2020 Corridor Delineation strategy.
- Strengthen the east-west biodiversity corridor within the Coastal Use Area along the southern interface of the site, featuring public open space and ecological spaces.
- Continue ecological 'Green Web' by introducing a green network that connects Kamay Botany Bay across the site, through to Endeavour Heights Reserve, and beyond to Bate Bay and Boat Harbour.
- Remediate significant ecological areas concentrating on extant bushland within Lot 8.
- Connecting to aquifers on site due to WG type soils present throughout Lot 2 North and the outer boundaries of the site, which are more permeable and suitable for water collection to recharge aquifer.
- Restore the environmental zone with native planting and stormwater management, integrating a WSUD approach which would assist in enhancing the ecological values of the site.

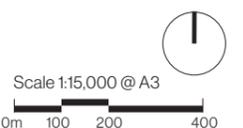
Character Opportunities

- Complement existing characters and uses of surrounding parklands to facilitate a smooth transition between the ecological and recreational corridors.
- Highlight Aboriginal midden sites as significant cultural areas with accompanying buffer zones.
- Re-establish relationship to Country and delineate clear relationships to the Aboriginal past.



LEGEND

- | | | | | |
|--------------|---|---|------------------------------|-------------|
| Subject Site | Midden site | Strengthen biodiversity corridor | Extend landform through site | View Vistas |
| Open Space | Cultural / Educational area | Connection to Kurnell 2020 biodiversity corridors | Contours 10m | |
| Lots | Connecting with Country bay to bay Link | | | |
| Water | | | | |



Environmental and Cultural Assets

The site includes Coastal Wetlands which are to be retained and protected. They contribute to the ecological assets of the peninsula and can be integrated into the site landscape and ecological corridors.

- Coastal Wetland Areas identified within the site require a Wetland Proximity Area where development is restricted.
- A 'Coastal Use Area' extends 200m from the mid-tidal zone into the site, whereby development proposals must not adversely impact usage or character.
- The identified midden at northern part of the site is key cultural heritage area, also to be retained and protected. It will also be integrated into the site landscape corridors.



LEGEND

Subject Site	Current Bushfire Prone Land Buffer	Coastal Wetland Area SEPP (Resilience and Hazards) 2021	Contours 2m
Open Space	Coastal Use Area SEPP (Resilience and Hazards) 2021	Wetland Proximity Area SEPP (Resilience and Hazards) 2021	Midden Extent
Lots			
Water			

