



Figure 1. View to North Head. Source: sydneyimages.com.au

North Head Sanctuary Master Plan

February 2024

Acknowledgement of Country

The Harbour Trust acknowledges the Traditional Custodians and Owners of the lands, waters and sky of Sydney Harbour, including the places under our stewardship. We respectfully acknowledge the Traditional Owners of Sydney Harbour, including those belonging to the Borogegal, Birrabirragal, Cammeraygal, Gadigal, Gayamagal, Wallumedegal and Wangal clans.

We acknowledge this Country, the custodianship of its people, and the ongoing connection to culture, lands and waters. We pay our respects to all surrounding clans of the region and honour their Elders past, present and emerging.

The project team recognises we are working within a cultural landscape and understand designing with Country is a privilege that comes with responsibility. We are guided by the inspiration of Country and the knowledge it contains.

The project team acknowledges the Traditional Owners and knowledge holders to this place. We understand that the relationship between the Harbour Trust and Traditional Owners is a shared journey at its beginning—a journey requiring the long-term development of an enduring understanding of Country that is based on deeply held knowledge of place.

Terminology and dual naming. The term Car-rang-gel is used as the dual First Nations name for North Head. However the term is not registered with the Geographic Naming Board of NSW. The Harbour Trust has opted to not use the term within this master plan as naming is regarded as requiring further research and consultation with the First Nations community.



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This master plan report was prepared by Cox Architecture, Hector Abrahams Architects, Yerrabingin, Turf Design, JMT Consulting, Blackash Bushfire Consulting, Arcadis and Brickfields on behalf of Sydney Harbour Federation Trust.

First Nations cultural guidance in development of the master plan has been provided by the Gujaga Foundation representing Traditional Owners.

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Foreword

The Sydney Harbour Federation Trust (the Harbour Trust) was established in 2001. The sites managed by the Harbour Trust are Cockatoo Island / Wareamah, North Head Sanctuary in Manly, Headland Park in Mosman, Sub Base Platypus in North Sydney, Woolwich Dock, the former Marine Biological Station at Watsons Bay, and Macquarie Lightstation in Vaucluse.

These sites are unique places, each possessing extraordinary natural beauty, and rich heritage values. Layers of First Nations, convict, colonial and military heritage, together with diverse and endangered ecological habitats, characterise the sites.

While originally intended to be a transitional body, the Harbour Trust has evolved into a permanent agency, responsible for supporting a range of activities. This includes management of sites, adaptive re-use of the assets and initiatives to activate public domain. Conservation, protection, and interpretation of these nationally-significant places are our primary objectives.

The Harbour Trust annually welcomes around two million visitors to our sites with a mix of recreational activities, events, cultural partnerships, and commercial enterprise. We provide public access to 145 ha of land on or near Sydney Harbour.

This document is one of three master plans created and consulted on with the community in 2023, the others being Middle Head / Gubbuh Gubbuh and Cockatoo Island / Wareamah.

This document focuses on a key part of the headland in Manly, that we share with NSW National Parks and Wildlife Service (NPWS). It is a detailed examination of the site's cultural and natural heritage values, its constraints and opportunities, and presents our long term vision of place.

We exhibited the North Head Sanctuary Draft Master Plan from September to October in 2023. A key outcome of consultation was strong community support for the draft master plan.

Many individuals, community groups and organisations have contributed to the conversation about North Head Sanctuary. The Harbour Trust thanks those who provided their generous time and valuable input to get us to this important milestone – the publication of the North Head Sanctuary Master Plan.

This document concludes the master planning process. Within the context and controls of the statutory framework, this master plan will guide future design decisions and actions for North Head Sanctuary.

Master planning for this significant site marks considerable change for the Harbour Trust. It sees enhanced engagement with community, state and local government and NPWS. Engagement with First Nations Traditional Owners, Elders and knowledge holders forms a key part of master planning. This engagement with the First Nations community strengthens what we aim to build into a deep and enduring relationship with stakeholders that enriches our stewardship of the lands.

**Janet Carding, Executive Director,
Sydney Harbour Federation Trust**

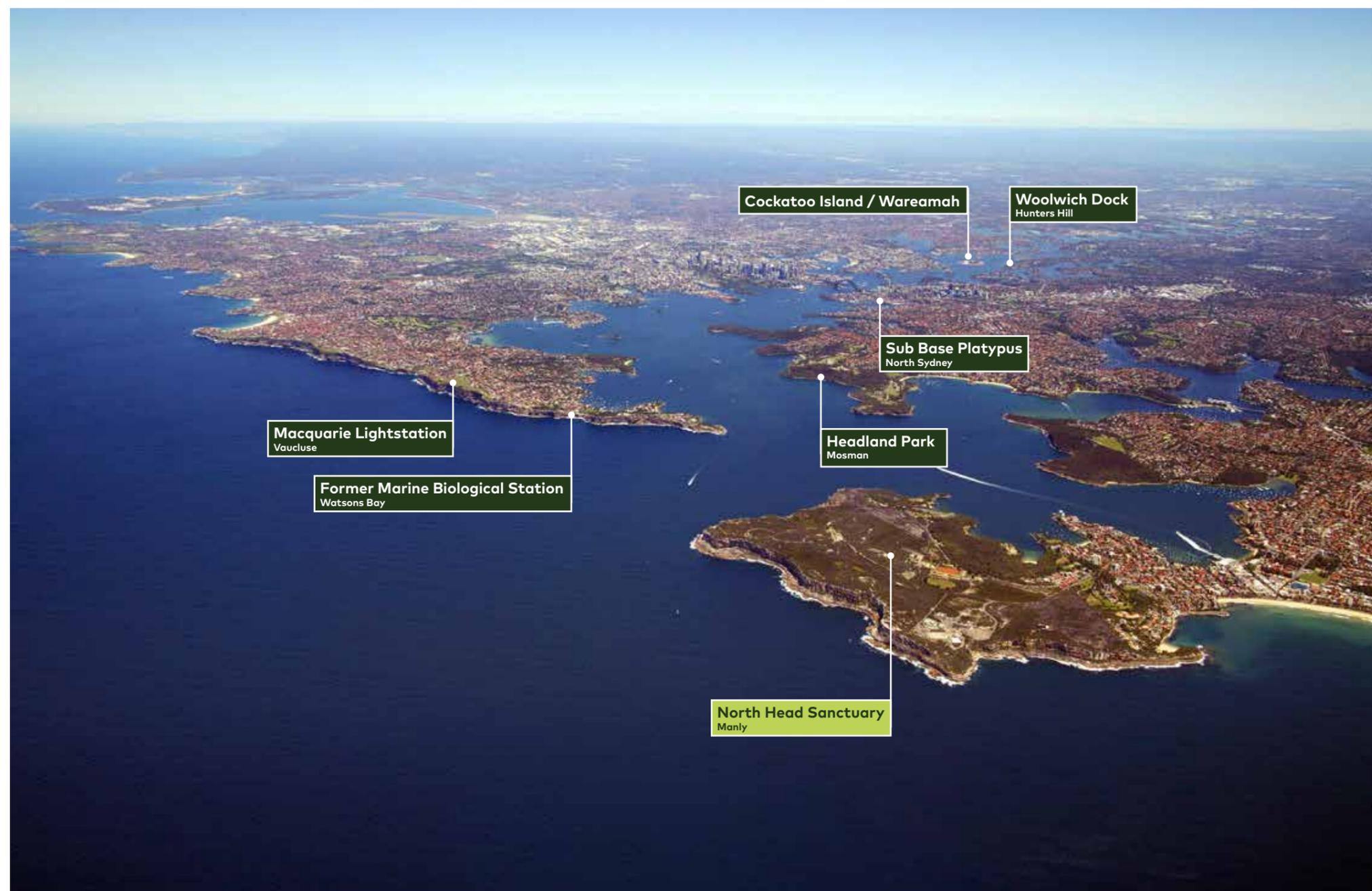


Figure 3. Aerial showing Harbour Trust lands

Executive summary

North Head

Located 10 km from the central business district of Australia's largest city, North Head is an ecological sanctuary within a growing metropolis.

It is one of Sydney's great landmarks with a relatively intact and delicate ecosystem. Formed before the last Ice Age when erosional forces separated the headland from the Hornsby Plateau, North Head is a tied island, linked to the mainland by Manly's sandspit.

Its remoteness contributes to the survival of its natural form. More than 50 nationally or locally significant flora, including 10 rare plant species, are recorded on site. This includes the largest of Sydney's few remaining communities of Eastern Suburbs banksia scrub, listed as a critically endangered.

North Head is a refuge for echidnas, reptiles, frogs and more than 100 species of birds. It is home to an endangered population of long-nosed bandicoots, once common throughout Sydney. Significantly, several fauna species, including the eastern pygmy possum, brown antechinus and bush rat, once locally extinct, were reintroduced and are now thriving.

North Head is a place of significance to First Nations peoples. Initial investigation suggests the area was a place of gathering and ritual, with land management of the ecosystem practiced for thousands of years. It was a site of some of the first encounters between Europeans and First Nations peoples from 1788.

In 1833, North Head was proclaimed a quarantine station before being used for defensive fortification, training and barracks in the Second World War. Following the war, the barracks and fort became the School of Artillery, which remained at North Head until the 1990s.

North Head's public areas are managed by the Harbour Trust, a corporate Commonwealth entity within the Department of Climate Change, Energy, the Environment and Water (DCCEEW) and the NSW National Parks and Wildlife Service (NPWS).

North Head's natural beauty, significant cultural heritage values and ecological sensitivity presents many challenges as both agencies look to regenerate the area.

Master plan purpose

This North Head Sanctuary Master Plan provides the guiding principles for future renewal of the lands and built assets of North Head. The master plan aligns with the Harbour Trust's North Head Management Plan and is informed by elements of considerable cultural, natural and First Nations significance.

The master plan outlines North Head's full potential, rather than what current funding permits. This allows future decisions on projects and staging to be made strategically.

In general, a master plan is a process that begins with analysis to establish the key renewal constraints and opportunities. From this analysis, design response strategies aim to achieve a coordinated and integrated approach to renewal, based on key proposals and guiding principles. In short, the North Head Sanctuary Master Plan envisions a future place.

Values of place

The long-term vision of place is defined by core values, key elements and key objectives. These inform appropriate actions or proposals.

The evident core values of place, which are considered nationally significant, are:

- **natural values:** ecological and environmental
- **First Nations values:** tangible and intangible
- **military heritage values**
- **community values:** an iconic place of solace, recreation, memory and sanctuary.

Key factors

The master plan is informed by:

- 2021 concept plan and community feedback to that plan
- a whole-of-headland approach
- a desire to limit actions that present an ecological or heritage threat
- engagement with key stakeholders and community
- research and detailed investigation into:
 - First Nations traditional ownership, knowledge holding and cultural practice
 - heritage
 - infrastructure and utilities
 - ecology and environment
 - traffic and access
 - tourism and activation.

Ecological protection and biodiversity enhancement

Ecological protection and biodiversity enhancement are primary objectives of the master plan. Significant potential is identified for areas or zones that are suitable for remediation and biodiversity enhancement.

These objectives are supported by proposals for further research and considerable public-facing interpretation so that visitors understand the critical ongoing protection and biodiversity work at the Sanctuary.

Community engagement

In conjunction with technical and feasibility studies, the master plan is informed by community feedback collected through workshops and meetings with community stakeholders, advisory groups and experts in ecology, environmental science and military heritage.

The engagement identified a need for the master plan to:

- reduce capacity and access of car movement
- create a walking place, including links to North Fort Precinct and to Burragula Lookout and Yiningma Lookout
- strengthen ecological protection zones
- strengthen capacity for environmental education programs
- examine a First Nations cultural and educational landmark
- examine adaptive re-use of existing heritage buildings
- use the formal Gate House as an additional entry threshold
- consider activating North Fort Road with appropriate functional uses
- Examine access and interpretation to tunnels, military remnants and the cemetery
- consider enhancing food and beverage offerings.

The Harbour Trust exhibited the draft master plan in late 2023. The consultation outcomes report, published in early 2024, outlines that more than 70% of submissions were either supportive or very supportive of the draft master plan.

The community views the four core values of place as highly important, with natural values being the most important for 96% of submitters, followed by community values and use (93%), First Nations values (81%) and military heritage values (69%). Generally, community response indicated high levels of support for the proposed actions of the draft plan.

Executive summary

North Head Sanctuary Master Plan



Figure 4. Master plan overview of connected precincts

Vision of place and key actions

The master plan outlines the vision of place for North Head Sanctuary. It will be a place of:

- natural sanctuary, sustainability and environmental care
- enriched public access and amenity
- enshrined memory, immersive learning and interpretation excellence
- built form and public domain excellence
- life and vibrancy – a people place on one of Sydney's finest headlands.

The proposed key actions illustrated within the master plan on a precinct basis aim to:

- improve biodiversity through long-term protection and rehabilitation of the ecologically sensitive zones.
- remove redundant site infrastructure to reveal and enhance the historic, environmental and recreational values of the whole headland
- create a primary pedestrian spine, looped walking routes and a simple network of managed vehicle movement to connect and protect the site, creating a singular memorable place.

Barracks Precinct

While many of the heritage buildings are in use, changes to the Barracks Precinct focus on greater amenity, adaptive re-use and activation of the Main Barracks Building (Building 1) and the Parade Ground. Key actions are better vehicle access and a defined pedestrian arrival point to experience North Head.

Central Precinct

Central Precinct will be an engaging and activated public place that centres itself in Country. The precinct will celebrate the First Nations cultural significance of place and ecological values of North Head. An environmental centre is proposed that will utilise existing assets through adaptive re-use, supporting ongoing ecological protection work and educating future generations.

North Fort Precinct

North Fort is home to one of Australia's most intact defensive fortifications directly associated with the defence of nation during the Second World War. Most of this intact heritage asset is underground and inaccessible. Key actions for North Fort Precinct are to enhance public domain, enhance access to the tunnel system, rehabilitate the land and in collaboration with the Australian War Memorial, enhance interpretation.

A site that evolves with a long-term view

Regeneration of a significant and sensitive site demands a long-term view. The master plan's actions will collectively support and enhance the core values of place. Many will evolve as they are implemented.

Staged implementation is critical to site regeneration and must be considered as North Head Sanctuary evolves. The Harbour Trust will develop a staging and implementation plan that, in accordance with statutory obligations, may include referral of some actions under the Environmental Protection and Biodiversity Conservation Act 1999 (EPBC Act).

North Head Sanctuary Master plan

This document, the North Head Sanctuary Master Plan was formally adopted by the Members of the Harbour Trust in February 2024.

1. Introduction

The North Head Sanctuary Master Plan focuses on a key part of the headland in Manly that is managed by Sydney Harbour Federation Trust and NSW National Parks and Wildlife Services (NPWS). It presents a long-term vision of place that will guide future design decisions and actions for North Head Sanctuary.

The master plan is informed by detailed studies and an extensive master planning process that included consultation with individuals, community groups and organisations in 2023.

1.1 Key objectives

The master plan's key objectives are considered within the general planning context that guide design intent and response.

They are illustrated in terms of a broad plan of the headland. Within this context, the master plan considers the headland as a singular entity and visitor experience.

The visitor experience will be reinforced by pedestrian access from Manly to Burragula Lookout and Yiningma Lookout through North Head Sanctuary and activities concentrated along the shared walkway. There are opportunities to encourage east-west connection across North Head Sanctuary through existing walking trails. No new walking trails are proposed.

The master plan's objectives and actions act as a suite of activities that will work together. These were formulated to align short and long-term planning with the overall vision of the site.

North Head Sanctuary will be a place for people that will:

- allow people to experience a unique and beautiful natural environment, on the edge of the city
- celebrate First Nations culture on Country, supporting continuing cultural connections and practices
- reveal twentieth century military heritage and improve understanding of the defence of Australia in the Second World War and its aftermath
- create an accessible and warm welcome for all and a destination for activities and special events.

Shared walkway for pedestrians and bicycles – Key visitor axis to enhance the access and journey from and to the Burragula Lookout and Yiningma Lookout

Utilise existing trails to reinforce the east-west connection

Activated spaces along the shared walkway

Welcome entry point and sense of arrival at Barracks Precinct Gate House and North Fort Precinct

Entry gate to North Head Sanctuary and Burragula Lookout and Yiningma Lookout

Wallum sand heaths (PCT 664)

Sydney coastal heaths (PCT 1822, 1823)



Figure 5. Overview of the master plan's key objectives

1.1 Key objectives

A unique and beautiful natural environment

Protection and enhanced care of fragile ecological zones and environment within and around the site.

The objective of ecological protection is paramount. The long-term vision sees ongoing protection and enhancement of nationally significant ecological values, supported by a new permanent place of environmental education in the Central Precinct and land rehabilitation across the sanctuary.

The significant vegetation on the site and its proximity to the national park gives it a remarkable character and unique identity. Ecological elements of varying degrees of significance range from connecting green infrastructure such as wildlife corridors to stands of native, urban native, forest, heath and sedgeland vegetation. The master plan outlines opportunities to carefully increase biodiversity on approximately 4,000 sqm of degraded land around the site.

Areas deemed to be threatened and of high conservation value will be rehabilitated, reinforced and protected through future master planning.

Landscape enhancement in and adjacent to the site will be phased to benefit existing users and to integrate the site into the adjacent headland for broader use by the community. Design should:

- protect and enhance existing ecological communities and opportunities to increase vegetation cover and biodiversity with the use of native/endemic species
- plan for the long-term opportunity to protect the land around the headland
- support North Head Sanctuary's unique natural environment by creating ways for people to interact with the environment
- provide appropriate open space and community infrastructure while considering heritage and connections with Country
- address and adopt sensitive bushfire management practices.

First Nations culture on Country

A nationally significant First Nations place

An ongoing First Nations Traditional Owner presence at the heart of the sanctuary and highest points of the headland will be supported by a new facility in the Central Precinct to accommodate cultural practice and long-term First Nations education programs.

The focus on First Nations culture will feature:

- immersive storytelling, through carefully curated signage, interpretive displays and interactive elements
- an entry that caters to varied experiences, sharing the rich cultural and natural heritage of North Head
- a celebration of the culture of Traditional Owners and knowledge holders to place
- traditionally held knowledge and caring for Country principles in the regeneration of the natural environment.

Military heritage and the Second World War defence

Restore and activate heritage assets, and support and enhance military heritage values of place.

Barracks Precinct and North Fort Precinct incorporate tunnels, fortifications and gun emplacements, significant remnant evidence of defence of Australia. The restoration, adaptive re-use and activation of these heritage assets will enhance the above-ground and underground visitor experience with access and interpretation including:

- the use of the Parade Ground for community events
- a military loop at North Fort Precinct, including a memorial walk and connections to the gun emplacements and tunnel
- interpreted military heritage that tells the story of defending Australia and the Royal Artillery Association.

A consolidated and connected walking place

Vehicle movements will be consolidated to create a walking and cycling place.

The site entries to the Barracks Precinct and North Fort Precinct will be reconfigured and vehicle movements limited. An activated shared walkway will move pedestrians and cyclists from the Barracks Precinct to North Fort Precinct and Burragula Lookout and Yiningma Lookout.

Design must:

- reinforce the key pedestrian axis from the Gate House to North Fort Precinct by enhancing the access and journey to the Burragula Lookout and Yiningma Lookout
- consider the creation and designation of loop walk experiences along the shared walkway to strengthen access to other areas such as the Hanging Swamp, Third Quarantine Cemetery, Burragula Lookout and Yiningma Lookout
- consider a string of complementary destinations, connected to the existing walking tracks
- activate the shared walkway with appropriate functional uses that celebrate the values of the site and utilise existing assets such as the Restoration Workshop and Makers Place, First Nations Cultural Space, Ecology and Environmental Centre, Defence of Nation Interpretation Space, Plotting Room, observation posts and gun emplacements
- pedestrianise and embellish the shared walkway with rest stops along the way
- take an integrated approach across Harbour Trust and NPWS land tenures to create clear connections across North Head Sanctuary
- implement best practice social and environmental sustainability and create a comfortable, pedestrian-friendly, public domain and street network
- improve signage and wayfinding at the entry points and across North Head Sanctuary.

Separating the pedestrian pathways from vehicular access and prioritising pedestrian access will create a safe and legible entry experience into the Barracks Precinct and North Fort Precinct. This will be achieved by:

- increasing permeability, legibility and walkability and focusing on shared spaces for movement that prioritise pedestrians
- encouraging and planning for future sustainable and accessible transport modes, such as a shuttle system through the main shared walkway for pedestrians and bicycles
- enhancing the entry thresholds of the Barracks Precinct Gate House and North Fort Precinct by creating a sense of place, welcome and orientation
- consolidating parking and access to the perimeter of the site
- reconfiguring the existing road network that contains a two-way road on Scenic Drive west of the site and a second access from Bluefish Road to the existing car park.

1.2 Understanding and connecting with Country

North Head – the spirit of Country

A community heritage recording project by Darwala-Lia Archaeological Services and NPWS in 2001 found North Head to be an important place for Aboriginal people.

Historically Aboriginal people and Europeans have taken a similar approach to its use (as a place of isolation and healing) the use of North Head as a place of isolation or special purpose away from public access is directly connected to the island and landmark values inherent in the landscape. The reports suggest the headland is used as a place of burial, healing and medicine.

The Darwala-Lia study identified sites and artefacts, mainly on the resource-rich western side, considered 'evidence of the labours of support crews [wives, children trainees] to the koradgee'; North Head was the domain of the clever people.

Today this unique cultural island can be experienced as a tangible landscape full of intangible wisdom and as a healing place bestowing physical and mental wellbeing. It can be a place that celebrates both ancient and contemporary stories of place. As custodians, First Nations Traditional Owners may share and celebrate their culture.

North Head must be managed in a way that respects both natural and cultural values. This means embedding connecting with Country frameworks and narratives throughout the site, recognising that Country is both a lived experience and a heritage.

Master planning also recognises that Country is experienced high into the atmosphere, deep into the planet crust and far into the oceans. It is experienced through the senses and seared into memory, keeping everything in balance and connected as kin. Country holds everything including human and non-human, land and products of land, knowledge, stories, dance and song.

Connecting with Country frameworks means working with knowledge holders to protect and respect cultural heritage to continue to incorporate oral histories as the master plan is implemented.

'Like the vast majority of my community, I have an ancient and unbroken connection to Sydney Harbour, which is located in the northern part of my traditional Country. Our old people fished, hunted and camped throughout this area until government intervention forced them to live at the La Perouse Aboriginal Mission in 1883. Despite North Head and the surrounding areas changing significantly in the last 200 years, our responsibility as Traditional Owners to care for this part of our Country remains. We will pass this cultural responsibility on to our children and grandchildren, as we have since time began.'

Michael Ingrey, Dharawal man belonging to the La Perouse Aboriginal community.

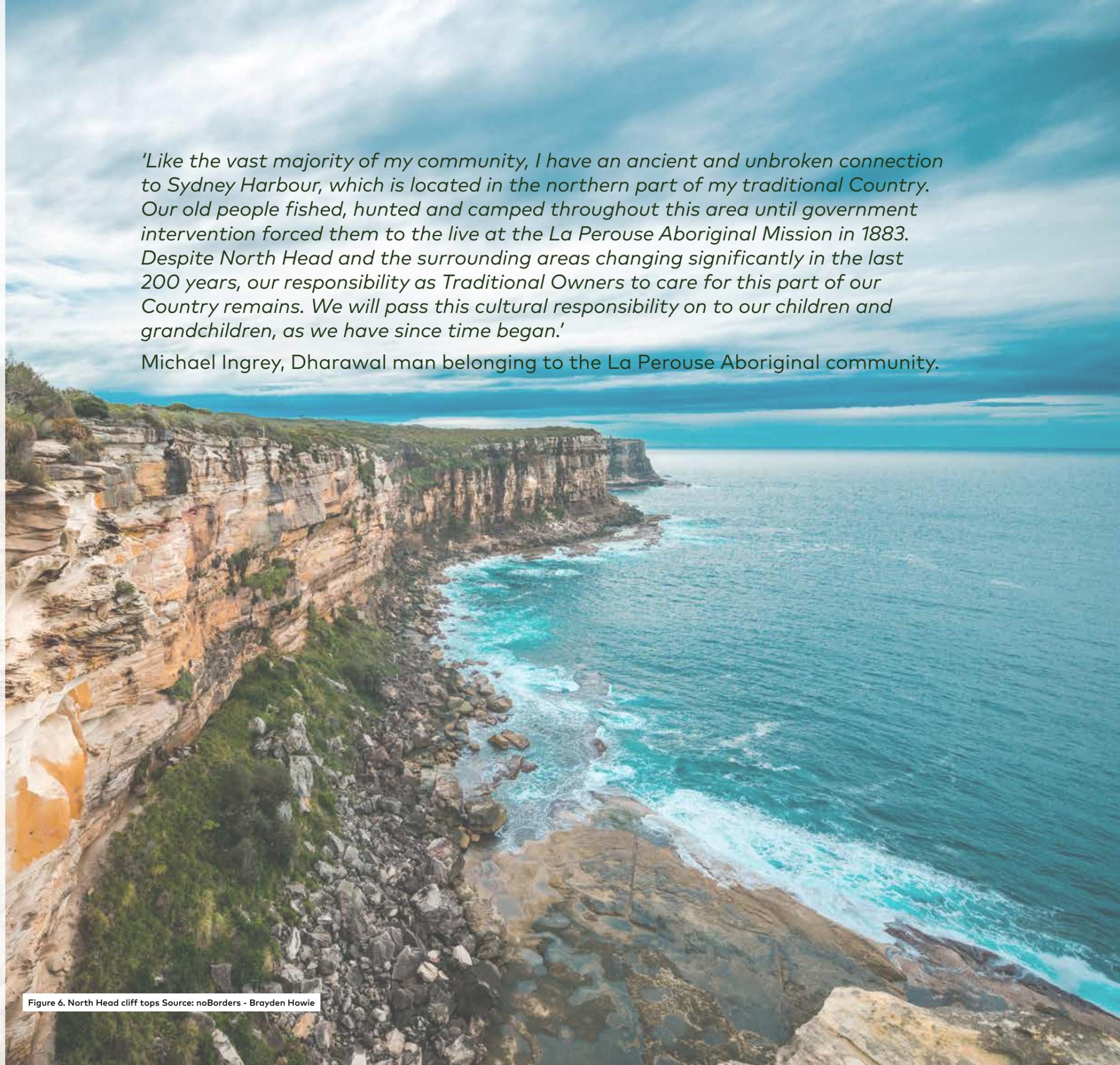


Figure 6. North Head cliff tops Source: noBorders - Brayden Howie

1.3 First Nations master plan principles and future design actions

Master planning, vision of place and future design actions

A tangible landscape full of intangible wisdom.

North Head is a healing landscape

Key initiatives for acknowledging the culture, environment, history and renewal of North Head include:

- taking the time and space required for detailed investigation and gathering of knowledge from First Nations Traditional Owners and knowledge holders to allow for truth telling
- developing environmental and cultural education focused on First Nations land management and lessons from thousands of years of custodianship
- protecting and enhancing the native landscape.

The three future design actions below focus on these aspects utilising attributes unique to the precincts. They can provide visitors with moments of contemplation, foster a connection with nature and promoted the regeneration of both individuals and the natural environment. North Head Sanctuary in turn becomes a catalyst for personal growth, ecological awareness and a deep appreciation for the interconnectedness of all living beings.

Reclamation

Reclamation focuses on reclaiming and restoring the natural environment of North Head. It acknowledges the military history of the site and aims to heal and regenerate the land by reintroducing native vegetation and ecological systems.

- Ecological restoration: Embrace the opportunity to restore and reclaim the natural environment by reintroducing native vegetation
- Cultural interpretation: Provide interpretive elements and signage that educate visitors about the historical significance of the land and its First Nations heritage
- Community engagement: Involve the local community and stakeholders in the reclamation process and provide opportunities for community participation in planting days, workshops and educational programs focused on ecological restoration and cultural revitalisation

- Adaptive re-use: Explore opportunities for adaptive re-use of existing structures or remnants of the military history of North Head by re-purposing old buildings or structures as community spaces, cultural centres or interpretive facilities.

Recognition and redistribution

The master plan aims to recognise and acknowledge the contributions and experiences of all individuals and communities who have shaped the site's history. It promotes the equitable redistribution of resources, opportunities and narratives to create a more inclusive and representative parkland that reflects the diversity of the local community.

- Inclusive storytelling: Incorporate diverse narratives and perspectives into the North Head's design and interpretation including the historical significance of different communities, First Nations peoples and various cultural groups
- Shared reflection: Create spaces that encourage reflection and dialogue, where individuals can engage with the layers of history and shared experiences
- Healing spaces: Design elements that promote healing and wellbeing, drawing inspiration from the nature the land and each other.

Reflection and regeneration

Creating spaces for reflection, contemplation and healing acknowledges the complex history of North Head, including its military past, and provides opportunities for visitors to engage with and learn from this history. This can foster a sense of connection with Country and promote healing and regeneration through the integration of First Nations perspectives, storytelling and cultural practices.

- Contemplative retreats: Design secluded areas that provide tranquil retreats for visitors to pause, reflect and reconnect with themselves and the surrounding natural environment
- Ecological regeneration: Integrate sustainable and regenerative design practices that restore and enhance the ecological integrity of North Head
- Regenerative infrastructure: Implement sustainable infrastructure solutions that minimise North Head's ecological footprint and demonstrate innovative approaches that contribute to North Head's long-term ecological and cultural health.



Figure 7. Engaged communities. Source: Yerrabingin



Figure 8. Adaptive re-use of built spaces. Source: Yerrabingin



Figure 9. Seating and healing spaces. Source: Yerrabingin



Figure 10. Recognition through art. Source: Yerrabingin



Figure 11. For our Country Memorial. Source: For Our Country, Edition Office and Daniel Boyd, Photographer: Ben Hosking

1.4 Harbour Trust strategic direction and purpose of the master plan

Harbour Trust objectives and outcomes

The Harbour Trust is responsible for the management of sites of nationally and internationally significant cultural, natural, industrial and heritage value located around Sydney Harbour. These places reveal Australia's rich stories and their ongoing connection to First Nations history and provide examples of Australia's first defence fortifications, as well as the nation's colonial and industrial past. Many carry Commonwealth, National and World Heritage listings. They also provide critical links between the marine harbour habitat and the remnant bushland of Sydney.

The *Sydney Harbour Federation Trust Act 2001* specifies a series of objectives, and with recent amendments, these objectives are no longer time-limited but ongoing in perpetuity.

The Harbour Trust's aims to enhance appreciation and understanding of the natural and cultural values of Sydney and the nation for all visitors, through the remediation, conservation and adaptive re-use of, access to and sharing stories of Harbour Trust sites.

To achieve this, the Harbour Trust actively researches and makes accessible knowledge of a multi-layered history and stories, including their importance to First Nations peoples. Through remediation and use, both the sites and their buildings are enlivened through the creation of communities that encourage a sense of place and belonging.

The Harbour Trust also develops relationships and collaborations with community organisations, partners, funders and supporters. Fostering such long-term relationships requires the Harbour Trust to be responsive, transparent and consistent in its discussions with stakeholders.

Master planning for North Head Sanctuary seeks to:

- establish and enshrine the values of place
- plan for long-term ecological protection and environmental education programming
- provide a framework for sustainable adaptive re-use of buildings and site activation
- outline a long-term vision that conceptualises and illustrates whole-of-headland design principles
- provide a high-level analysis of key proposed actions

- inform the Harbour Trust as to capital cost with a detailed order of costing forecast that includes infrastructure needs and upgrades as outlined in North Head Sanctuary Utilities Advice Report (2023) by Arcadis
- create a connected walking place by consolidating car access, movement and capacity
- create a long-term plan for site regeneration and activation with broad stakeholder and community support
- educate people about the natural environment and First Nations and military history.

Harbour Trust operational mission

To better link its high-level objectives and outcomes to tangible every day work, the Harbour Trust developed an operational mission in 2021–22, with significant input from staff. Its eight key tenets are:

1. Be trusted to manage these iconic sites, and to be relied upon and do what we say
2. Be authentic and knowledgeable about our sites' cultural, natural and heritage values
3. Enliven our sites by their remediation, use of the buildings, and by building a community around them
4. Share stories to enhance, amplify and make accessible the values of our sites and encourage a sense of place and belonging
5. Partner and collaborate to deliver mutually beneficial outcomes with community, that foster long-term relationships
6. Raise revenue through our sites, and with our partners, funders and supporters to sustain our activities
7. Strive to be an employer of choice, with enabling systems and processes
8. For First Nations peoples, develop and create a universal place of welcome, supported by deep, long term trusting relationships and exchange of knowledge

The North Head Sanctuary Master Plan aligns with this mission and will support its implementation.

Purpose of the master plan

Government Architect NSW (GANSW) provides general guidance as to the purpose of master planning:

Master planning is a method for defining clear strategies for the physical, economic and social transformation of places. Planning for change in the physical, social and economic fabric of places requires an integrated process achieved through the efforts of many – clients, professionals and local communities. Master planning is a fluid and iterative process, with many people contributing to the initial investigations, the proposals as they develop and to their delivery. People – residents, visitors and ultimate users of the spaces and buildings – are at the heart of any master plan.

A successful master plan must:

- raise aspirations and provide a vehicle for consensus amongst stakeholders

- take into account likely implementation staging
- fully integrate with the land-use planning system
- enable new uses and opportunities that fulfil the potential of a site without diminishing core site attributes or values
- result from a participatory process, providing stakeholders with the means of expressing their priorities for regeneration
- guide and determine all key future regeneration decisions including stage investment.

A successful master plan will embody a community's collective vision and values to create sustainable places for living, working and recreation.

Source: GANSW Advisory note V2. 2018

Role of the master plan within the statutory framework

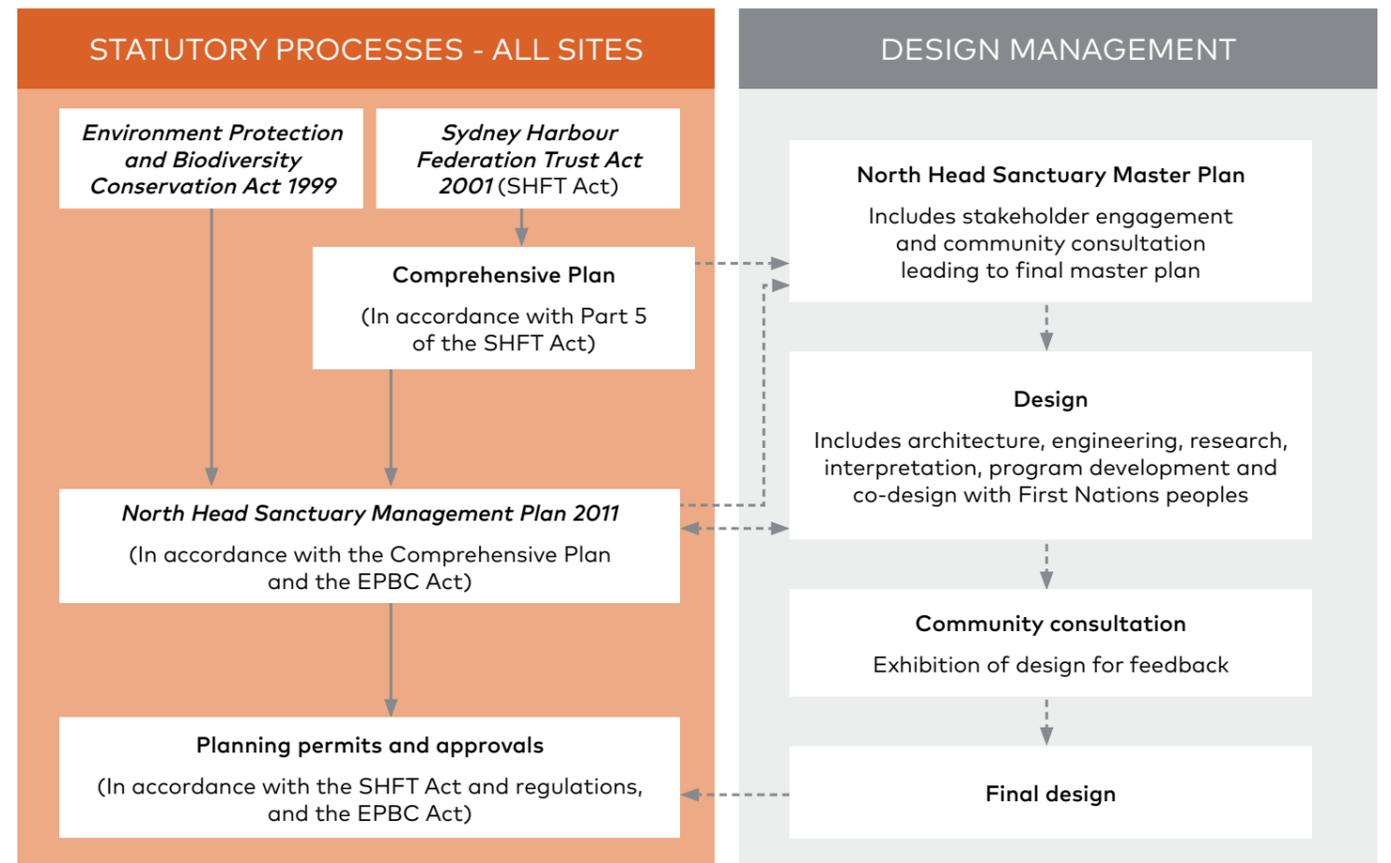


Figure 12. Role of the master plan within the statutory framework

1.5 Statutory framework

The following section outlines the planning framework that will guide the future use of North Head Sanctuary.

Sydney Harbour Federation Trust Act 2001

The objects of the Harbour Trust are set by the *Sydney Harbour Federation Trust Act 2001* (Harbour Trust Act), which are to:

- ensure that management of Trust land contributes to enhancing the amenity of the Sydney Harbour region
- protect, conserve and interpret the environmental and heritage values of Trust land
- maximise public access to Trust land
- establish and manage suitable Trust land as a park on behalf of the Commonwealth as the national government
- cooperate with other Commonwealth bodies that have a connection with any harbour land in managing that land
- cooperate with NSW agencies, affected councils and the community in furthering the above objects.

The Harbour Trust Act defines land that is vested in the Harbour Trust as 'Trust land' and surrounding land (such as the adjoining NPWS Sydney Harbour National Park) as 'Harbour land'.

Environment Protection and Biodiversity Conservation Act 1999

Harbour Trust land at North Head is listed under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) as a National Heritage place and a Commonwealth Heritage place (see Section 1.6 for further details).

At the strategic level, Part 15 of the EPBC Act requires management plans to be made for places on the National and Commonwealth Heritage lists (see discussion further in this section).

At the implementation level, all 'actions' on Harbour Trust land must be considered in accordance with the EPBC Act. For actions on Commonwealth land, or by a Commonwealth agency, sections 26 and 28 of the EPBC Act respectively require approval for actions that have, or are likely to have, a significant impact on the environment or a place's heritage values.

Harbour Trust Comprehensive Plan

The Comprehensive Plan was made under the Harbour Trust Act and was approved by the Minister in 2003. The Comprehensive Plan is a broad strategic plan that sets out a vision for all Harbour Trust sites and includes a process for preparing more detailed management plans for specific places, such as North Head Sanctuary.

Section 8 of the Comprehensive Plan sets out the Harbour Trust's vision for North Head Sanctuary. It provides for the creation of a sanctuary at North Head in which the natural and physical resources as well as the cultural and social aspects are managed in a sustainable way by all landholders. The plan proposes the adaptive re-use of buildings and facilities with new uses that complement the sanctuary and respect its heritage, balanced with enabling public access to experience the headland's remarkable natural and cultural heritage.

Section 3 of the Comprehensive Plan sets out overarching objectives and policies for all of the Harbour Trust sites.

North Head Sanctuary Management Plan 2011

Harbour Trust management plans are site-specific plans that refine and detail the site objectives and outcomes established in the Comprehensive Plan. They identify desired outcomes, suitable land uses, and how a site's environmental and heritage values should be protected and interpreted.

The statutory management plan for North Head Sanctuary was adopted by the Harbour Trust on 3 September 2010. The management plan was also made to satisfy the requirements of the EPBC Act for the management of a National and Commonwealth Heritage place.

The management plan may need to be amended to address any substantial changes proposed by the master plan. Any such amendment would be subject to community consultation.

Related Harbour Trust policies and guidelines

The Harbour Trust has a number of general policies and guidelines that guide works and activity at North Head. Relevant policies and guidelines include the Harbour Trust's Reconciliation Action Plan, Corporate Plan, Events and Activations Strategy, Stakeholder Engagement Strategy, Heritage Strategy, Recreation Strategy, and the Draft Phytophthora Root-Rot Management Strategy and Best Practice Procedures for Bush Regeneration Activities; as well as the Threat Abatement Plan for disease in natural ecosystems caused by *Phytophthora cinnamomi* prepared by the Australian Department of Environment, 2014.

This master plan has been prepared with regard for these policies.

North Head Sanctuary Master Plan

Whilst not a statutory document, the North Head Sanctuary Master Plan will inform the future direction of the place. The implementation of works and activities will be subject to the assessment process described below.

Assessment of actions

The Harbour Trust assesses and approves actions on its lands in accordance with the Harbour Trust Act and Regulations, the EPBC Act, Comprehensive Plan and North Head Sanctuary Management Plan 2011.

The Harbour Trust will consult with the community about significant proposals. In the rare circumstance where a proposed action has the potential to pose a significant impact on the environment or heritage values, then it would also be referred to the Minister for the Environment for further assessment and approval under the EPBC Act.

Plans and policies made under state legislation

The Harbour Trust Act specifically excludes any land owned by the Harbour Trust from the operations of state planning law. This includes state environmental planning policies (SEPPs) and regional environmental plans (REPs) prepared by the NSW Government and local environmental plans (LEPs) prepared by councils.

Notwithstanding this, the Harbour Trust has regard for plans and policies made in accordance with state legislation in order to ensure consistency and best practice. Plans considered by the Harbour Trust include district plans; SEPPs related to Sydney Harbour and coastal management; Manly LEP 2013; plans made under the *Rural Fires Act 1997*; and supporting policies and plans related to protection of the environment.

NPWS Sydney Harbour National Park Plan of Management 2012

North Head adjoins Sydney Harbour National Park. NPWS has prepared a Plan of Management for the entire national park, including its land at North Head. It outlines the overall strategy for the park, which is the protection and where necessary restoration of the park's natural vegetation, and the maintenance, interpretation and adaptive re-use of important historic places.

Recovery plans

Recovery plans made under the Threatened Species Conservation Act 1995 that cover species and communities found at North Head include those for the Eastern Suburbs banksia scrub endangered ecological community; and for the North Head long-nosed bandicoot population. The Harbour Trust will continue to cooperate with surrounding land managers in the implementation of these recovery plans.

1.6 Statutory heritage significance

National and Commonwealth Heritage lists

The National and Commonwealth Heritage lists were established under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The National Heritage list protects places of exceptional natural and cultural significance to Australia regardless of ownership or control by the Australian government. The Australian Government Heritage List protects significant Indigenous, historic or natural heritage owned by the Commonwealth or land leased by the Commonwealth.

- The whole of North Head is inscribed on the National Heritage list excluding the North Head Wastewater Treatment Plant.
- 'North Head Artillery Barracks' is inscribed on the Commonwealth Heritage list.

Details for both listings can be found on the National and Commonwealth Heritage databases.

Local heritage significance

Schedule 5 of Manly LEP 2013 lists the following places of local significance:

- I175 – North Head
- I176 – Obelisk North Head
- I177 – Quarantine Station Stone Cairn
- I178 – Quarantine Station Stone Walls
- I179 – Quarantine Station and Reserve (State)
- I180 – Park Hill Reserve Stone Gateway
- I181 – North Head Fortifications
- I182 – Stone Walls
- I183 – North Head Scenic Drive (Roadway)
- I184 – The School of Artillery, group of institutional buildings
- I185 – Australian Institute of Police Management (former Seaman's Isolation Hospital complex)
- I186 – Third Quarantine Station Cemetery

Details for each listing can be found on the Heritage Management System's State Heritage Inventory.

NSW State Heritage Register

There are no state listings for or within North Head Sanctuary. The former Quarantine Station to the west of the sanctuary is a State Heritage item, as is St Patricks Estate to the north. Details for these listings can be found on the Heritage Management System's State Heritage Inventory.

Aboriginal heritage

The *National Parks and Wildlife Act 1974* lists a number of identified Aboriginal objects and places across North Head.

Conservation Management Plan

The Harbour Trust has commissioned conservation management plans (CMPs) to guide the preservation and management of North Head Sanctuary, particularly the former School of Artillery and North Fort Precinct. The following CMPs offer detailed insights into the historical and cultural significance of the site's buildings, landscapes and other features.

- Dawbin Architects, November (2008), *North Head Former School of Artillery, Volumes 1&2*. The document has a focus on inventories, precinct division, conservation policies and adaptive re-use recommendations to maintaining the site's heritage while allowing for its continued use and appreciation.
- Robertson & Hindmarsh Pty Ltd January 2010, *North Fort Precinct, North Head*. The document focuses on the area east of the stone walls. The CMP included detailed conservation polices and covered the stone walls and the Avenue of Honour.

D A W B I N ARCHITECTS PTY LTD

NORTH HEAD FORMER SCHOOL OF ARTILLERY Conservation Management Plan VOLUME 1 : THE CORE BUILDINGS



Prepared by

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Final Draft 6 June 2008

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NORTH HEAD FORMER SCHOOL OF ARTILLERY Conservation Management Plan VOLUME 2 : THE OUTER AREAS



Prepared by

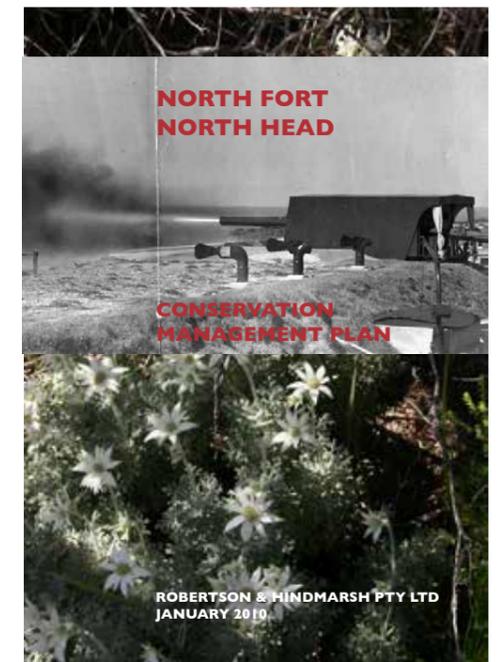
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November 2009

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2. Overview

Part two is an overview of the master plan. It outlines the cultural heritage values of place and the proposed visitor experience that informs master planning intent. This section aims to describe the long-term vision of place for North Head Sanctuary.



Figure 13. North Head in the context of other headlands

2.1 Cultural heritage values of place

This section articulates the site's inherent cultural heritage values of place and development of the vision of place. These two aspects of master planning are key to the long-term future place, how it is managed over time and how most decisions are considered when actions are proposed on the lands. The master plan considers that understanding of the site's cultural heritage values (both tangible and intangible) and the natural heritage values of place as critical to decisions in regards to all actions on the headland. Further, the long-term vision of place must support, protect and act to conserve the cultural and natural heritage values of place.

First Nations values

The First Nations significance of place applies to the whole of North Head. It does not end where the cliffs meet the ocean, nor does it cease at the urban edge continuing across Manly and beyond. The presence of military structures, Q Station, former hospital and wastewater treatment plant may change and interrupt the landscape but they cannot diminish the enduring importance of North Head to First Nations peoples.

Ecological values

North Head is an ecological island connected to the mainland by a narrow spit of sand. Today it is a window into a greater landscape that once typified Sydney's foreshore. It is home to endangered flora and fauna species and ecological communities such as the Eastern Suburbs banksia scrub, little penguin and long-nosed bandicoot. This fragile ecological sanctuary is also home to the precious Hanging Swamp found along its eastern cliffs. The ecological values of the place are disrupted by the built environment including the Barracks and North Fort precincts, Q Station, former hospital, wastewater treatment plant and various infrastructure.

Military values

The military places of North Head relate to preparedness for active defence and training for defence when it was used as a barrack and fort during the Second World War and then the School of Artillery by the Royal Australian Artillery until 1990s. The military values are enforced along the eastern side of North Head. To some extent the values also stretch to the cliff edge and the ocean where those stationed here during the Second World War were keeping watch.

The strongest presence of military values at the Barracks Precinct and North Fort Precinct are connected by roads elongating the military value along the ridgeline. The military themes can be broken down into four further themes: defence of Australia, School of Artillery, social significance and commemoration. Like those applied to North Head these values are layered and interwoven.

Combined values

The values of North Head Sanctuary are best understood in the context of North Head rather than considered in isolation. First Nations, ecological and military values pervade all areas of the headland. The location relevant to the values often overlap or bleed into one another. There are particular areas in North Head where there is a concentration of a value, such as the former hospital, the Q Station and the Barracks and North Fort precincts.

The First Nations and ecological values pertain to the whole of North Head, including the waters and sky, but there are holes in the ecological sanctuary of the place where there is a concentration of built environment.

Artist impression and conceptual colour mapping of North Head and the inherent values of place

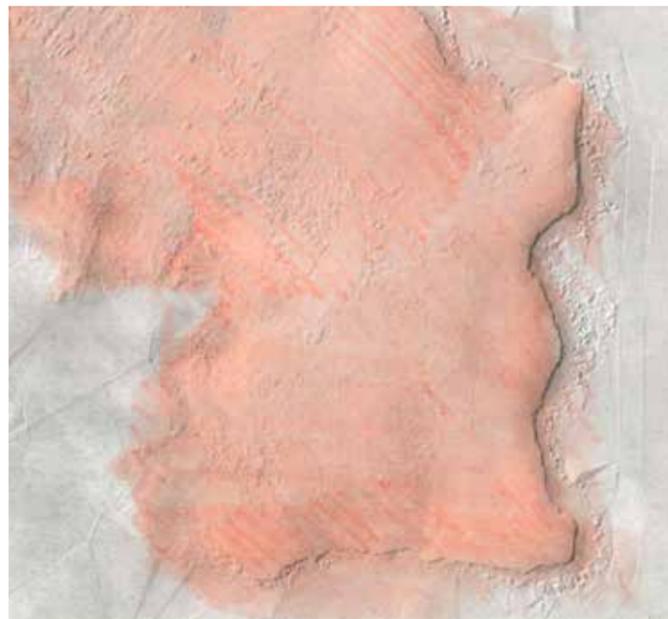


Figure 14. First Nations values of North Head Sanctuary by HAA

Orange First Nations



Figure 15. Ecological values of North Head Sanctuary by HAA

Green Ecological



Figure 16. Military values of North Head Sanctuary by HAA

Yellow Military



Figure 17. Combined values of North Head Sanctuary by HAA

Yellow Military, Pink Q Station, Green Ecological, Red Former hospital, Orange First Nations, Blue Ecological (Ocean)

2.2 Visitor experience

The master plan aims to create a welcoming and accessible route through the heart of the headland to its tip, which encourages exploration of the cultural landscape and wildlife sanctuary. Through exploration, visitors will have more opportunities to enrich and deepen their understanding of the values of North Head.

These experiences are grounded in a strong sense of the unique attributes of the headland from a cultural, historical and environmental perspective. Each experience will enhance people's experiences and create opportunities for the activities already underway across the site.

Each experience will have a light touch and will adapt or re-use spaces and infrastructure. They are envisaged as collaborations and partnerships, and will be developed with partners and stakeholders.

The locations will vary from the geometric formality of the Parade Ground through the bushland and the headland's high points, to the stellar lookouts of the southern end of North Head, to the meandering and less defined areas of North Fort.

1. Welcome, arrival and orientation
2. Parade Ground, Main Barracks Building and Sergeants' Mess activation
3. Restoration Workshop and Makers Place
4. First Nations cultural practice and connecting with Country
5. Environmental education, interpretation and research
6. Exploration of defence of Australia in the Second World War
7. Enhanced food and beverage
8. Looped walks that explore values and enrich understanding

These key spaces have been envisaged as stops on the journey through the headland and open up the opportunity for loop walks and detours so that visitors can deepen their understanding, following their interests. Indicative experiences are captured on the following pages.

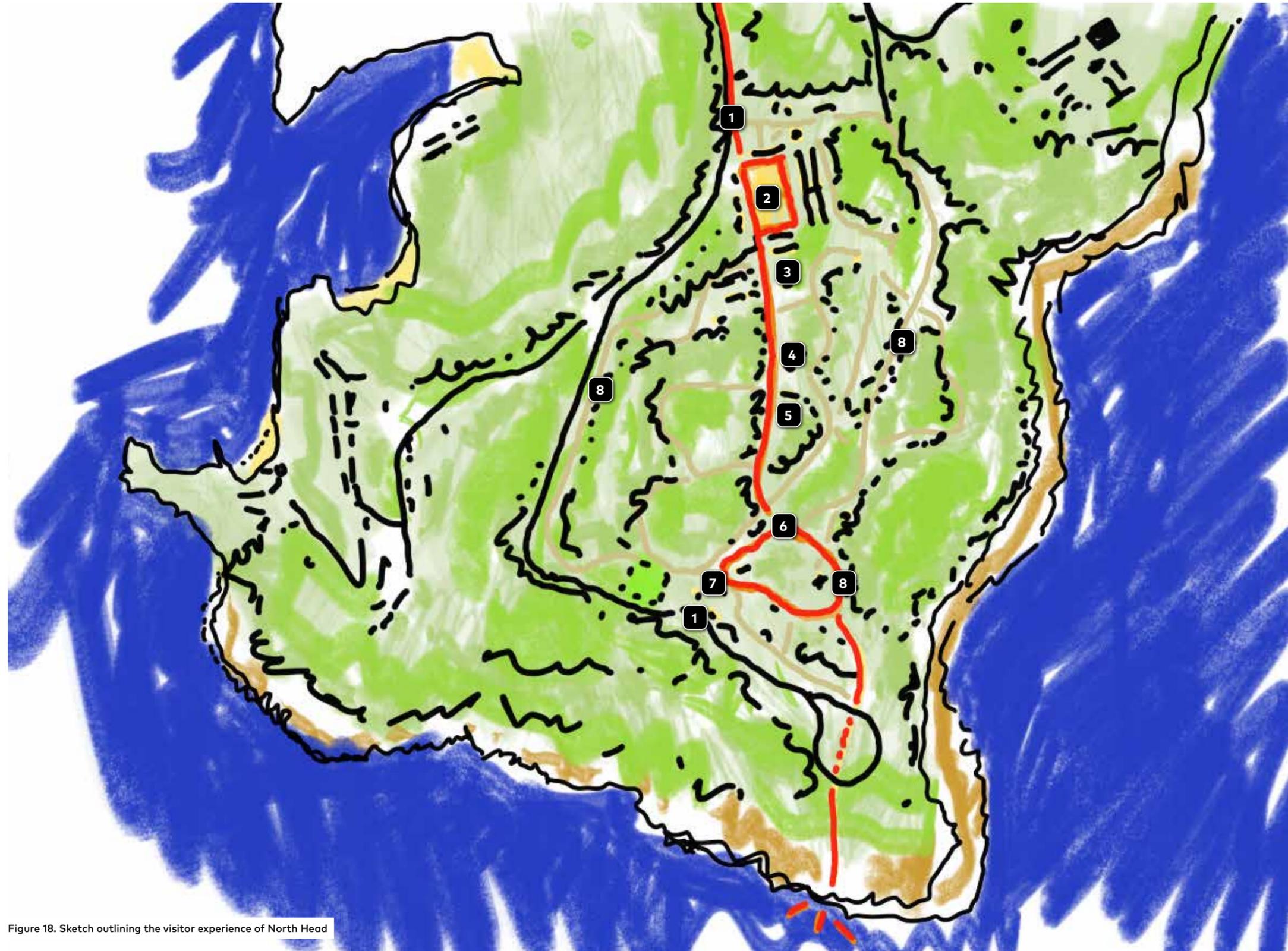


Figure 18. Sketch outlining the visitor experience of North Head

2.2 Visitor experience



Welcome, arrival and orientation

Signalled on approach with new signage and wayfinding that takes a whole of headland approach, the Barracks Precinct will become the 'front door' to the experience of the headland through transformation of the vehicle and pedestrian access.

The proposed separation will encourage visitors to walk through the Gate House via a pedestrianised shared walkway through the site. A vehicle drop-off and shuttle bus system will enable all to move through the site.

A secondary arrival point from the south will be located at North Fort Precinct where vehicle movement will be slowed down with a shared zone allowing pedestrian priority to enhance safety.



Revitalised precinct and Parade Ground

The master plan aims to activate the precinct and tenancy of the Main Barracks Building (Building 1), underpinned by sensitive adaptive re-use and public domain improvements - see Section 3.1 for more detail. The Parade Ground will be softened at its edges to promote it as a public area for passive and regular recreation and activation.

In recognition of the fragile environmental values of North Head, the Events and Activation Strategy 2023-2028 limits events to the Barracks Precinct, for specific periods of the year and with operational hours finishing at 9pm to reduce noise and light disturbance to nocturnal animals. As a supporting document to the master plan, the Events and Activation Strategy contains management controls that will remain in place.

Priorities for activations and events are to secure partnerships and acquire events with a focus on First Nations, cultural, heritage and environmental experiences.



Restoration Workshop and Makers Place

A series of connected courtyard spaces, shelters, sheds and public spaces will create a mix of creative, volunteer and veteran uses.

The Restoration Workshop and Makers Place will be a mixture of hard landscaped space for passive recreation that can also be used for small events related to the workshop spaces, while also providing for non-public space for safe working. The relocation of sheds from other parts of the headland to this area will be explored for adaptive re-use.

The existing vegetation and buildings will be retained and protected with new footpaths constructed to improve pedestrian connections to the precinct.



First Nations cultural practice and connecting with Country

The space at the heart of the headland at an elevated part of the site will be a future space to be developed in collaboration with Traditional Owners.

The space may include an elevated viewing structure for Country emerging from the bush to see sky, land and water - a space for the First Nations interpretation of values of story, language and place. It will be predominantly designed for day time use on Country, with the potential for a sheltered space and amenities at the centre of the site.

This area will include public-facing elements and be a place for gathering, learning and cultural practice on Country.

2.2 Visitor experience



Environmental education, interpretation and research

Adjacent to the First Nations cultural practice space the existing buildings/sheds will be adaptively re-used for an enhanced nursery supporting the sanctuary, research and ecological work on site. This suite of buildings will include public-facing spaces for education purposes and to tell the story of North Head's important geology and ecology, including the Eastern Suburbs banksia scrub ecological community, threatened animal species and successful reintroduction, together with the water courses and Hanging Swamp.

The centre will include safe and well maintained outdoor spaces that bring the outside in, providing amenities, a hub for volunteering and a starting point to explore the boardwalks to different habitats.



Exploration of defence of the nation in the Second World War

In the 1930s, a system of defences was introduced along the East Coast to protect Australia's largest city and base for the military from attack, with North Fort at its centre.

In 1942, the nation was attacked by Japanese submarines which bombed the Eastern Suburbs and entered the harbour. North Fort is home to the memorial to that attack and retains the most complete set of tunnels and gun emplacements.

The memorial walk will be enhanced and linked to the fort as a loop walk, and immersive tours of the tunnels, Plotting Room, observation posts and guns with soundscapes and activations will become a must-see destination. For those who prefer to remain on the surface or have mobility issues, a new structure set in the landscape, like the dug in emplacements, will tell the story of the attack, and its impact, including why the defensive guns were never fired in anger. This new space will also provide enclosure for wet weather for associated events and ceremonial use.



Enhanced food and beverage

At the northern end of the pedestrian spine, the Gate House is positioned for public-facing uses, including a potential for cafe style food and beverage. The northern terrace could serve as outdoor space for the cafe.

At the southern North Fort entry the existing lawn area will be upgraded with pedestrian priority and additional areas for enhanced food and beverage. This functional use could be expanded to the adjacent heritage buildings.



Looped walks that explore values and enrich understanding

The existing roadway will be reworked to become a north-south pedestrian and cycling route to connect and access the variety of experiences from the archway to the lookouts at the southern tip. There will be a shuttle bus for users, particularly those with mobility needs, potentially developed in partnership with the various land managers on the headland. The route will contain generous footpaths with planting and seating and small gathering spaces.

To support the primary spaces and major pedestrian connections, a series of existing walking tracks will be reconfigured as looped trails with new wayfinding signage to link the experiences, encourage exploration and increase permeability and connectivity.

3. Master plan

Part three illustrates and describes the master plan. It sets out the key actions proposed and the design response to the component parts of the master plan.

The master plan examines the site in three precincts. The Barracks, Central and North Fort precincts. The term Central precinct is used and is considered a working title at master plan stage. In subsequent stages a First Nations title and name is to be developed with Traditional Owners.

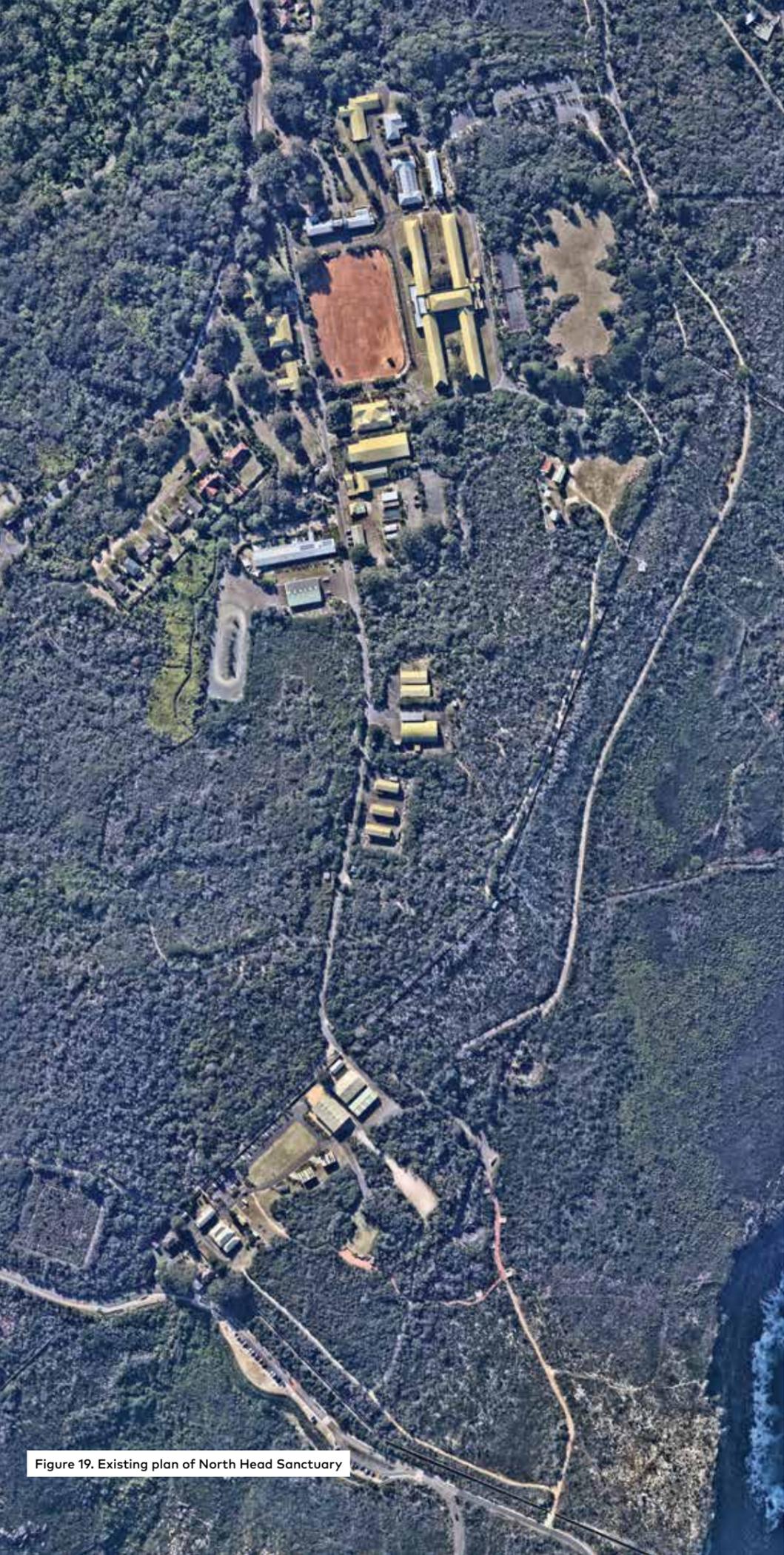


Figure 19. Existing plan of North Head Sanctuary



Figure 20. Proposed plan of North Head Sanctuary

3.1 Barracks Precinct

The master plan recognises the tenants already working at, living in and activating the Barracks Precinct. Changes to the precinct will focus on providing greater amenity, opportunities for activation through adaptive re-use and a defined access point and arrival experience to North Head as a whole.

The master plan balances the cultural landscape of grassed areas and formal plantings with endemic ecological values by supporting volunteers' work in revegetation and preservation works while also acknowledging the military history of the site.

Through the reinvigoration and remediation of the Barracks precinct landscape, foot tracks and built forms, the Precinct can simultaneously be activated while retaining its character and allowing visitors to experience the former School of Artillery as the soldiers experienced and used it.

Proposals within the master plan at Barracks Precinct are outlined below.

1. Reconfigure main site entry. Establish a clear welcome and sense of arrival.

- in design phase examine and test the reconfigured main site entry to the Barracks Precinct and main car park. Reconfigure existing entrance into the Barracks Precinct to separate pedestrians and vehicles into the site. Remove public vehicle access to the Barracks Precinct to limit vehicle movements around the precinct and along the shared walkway for pedestrians and bicycles, with the exception of tenants and specific service vehicles. Use the one-way loop to exit vehicles onto Bluefish Road and consider coach loop route and drop off zone (refer to page 30 and 31)
- strengthen the Gate House as the main pedestrian entry threshold to the precinct. Adapt the building to house public facing functions of site management, visitor orientation and services, interpretation and food and beverage
- link the path from Shelly Beach to the main entry to the Gate House, with landscaping around the entry threshold to be welcoming and sympathetic to the heritage values of the Barracks Precinct through formal planting design.

2. Parade Ground and restoration of Main Barracks Building. Limited change is proposed.

- in design phase examine providing movable planters and street furniture to improve amenity as a place for day-to-day use for the Parade Ground
- use the Parade Ground for public events for ceremonial occasions including commemoration of military values
- in design phase examine adaptive re-use and restoration of Main Barracks Building
- new car parking at rear (east) of the Main Barracks Building and examine a new road connection from the existing main car park to the additional angled parking along the back of the building.

3. Restoration Workshop and Makers Place

- consolidate on-site production, workshops and restoration functions building on existing volunteers and tenancies
- in design phase examine relocation of the ARMCO restoration workshop and one existing shed building from North Fort Precinct to this zone.

4. Establish access around the Barracks Precinct as a shared zone. Create a pedestrian priority environment.

- create a shared zone around the Parade Ground to allow a loop that interfaces with the four buildings arranged on the two axis of the Parade Ground
- create a shared walkway for pedestrians, cyclists, service vehicles and circuit shuttle to move visitors through the site, with a change of material and paving to indicate the shared zone
- utilise the Barracks Precinct car park as an appropriate pick up/drop off location.
- provide seating and amenities along the shared walkway.

5. Habitat and ecological rehabilitation

- maintain and protect sensitive areas of high ecological value.

6. Former Gymnasium, restored to sports use



Figure 21. An overview of the key proposed actions within Barracks Precinct



3.1 Barracks Precinct

Adaptive re-use and tenancy of the Main Barracks Building is a key objective of the master plan. Noting the Main Barracks Building original function was accommodation and messing for other ranks, the building presents considerable opportunity to provide similar use. The building requires upgrade for current compliance and is largely in good condition. The character, presentation and heritage fenestration of the building are to be retained and are considered of primary importance to master plan principles of adaptive re-use.

Traditionally, parade grounds are places that embody and symbolise 'holding ground', places where troops would gather formally for ceremony or use for various informal or functional purpose. As a significant place in its own right the North Head Artillery Barracks Parade Ground demands sensitivity and carries limited tolerance for permanent change. The Parade Ground plays a pivotal role in precinct planning, a formal space serving as open public domain, the first space in the proposed shared walkway and a space to be used for events and public enjoyment.

The Harbour Trust's Events and Activation Strategy 2023-2028 provides the management controls to events on the North Head Parade Ground and is considered a key supporting document to the master plan.

Master planning considers the Parade Ground as an important space designed to seamlessly transition between event mode and day-to-day mode. Events on the Parade Ground will continue, enabling a diverse range of programming and ceremony to take place. In its day-to-day condition the Parade Ground presents a somewhat barren place with limited shelter or amenity. Master planning considers that in design, examination of the green perimeter curtilage is examined and may be enhanced so that the space continues to evoke its military formality and symbolism whilst providing greater public domain amenity in day to day use. To adapt to various occasions, movable planting could be considered, allowing for a flexible landscape. The creation of gardens of remembrance in

each corner could also be examined providing enhanced green edges. Further, temporary shade structures could be considered, ensuring the space remains flexible whilst improving shelter and amenity.

Pedestrian access through the site will be prioritised through shared pedestrian paths. These walking tracks facilitate the primary strategic and thematic movement pattern through the site with the Parade Ground and Gate House forming one end of the main movement shared walkway for pedestrians and bicycles that connects the Barracks Precinct and North Fort Precinct.



Figure 23. Indicative illustration of the Barracks Precinct events



Figure 24. Indicative illustration of the Gate House

3.2 Central Precinct

The Central Precinct will be revitalised to create an engaging and activated sanctuary heart that centres itself in Country. The precinct will celebrate the First Nations cultural significance and ecological values of North Head, while incorporating a variety of community places where vibrant cultural activities can be ongoing.

This precinct is central to the site, being located on the main access shared walkway for pedestrians and bicycles that connects the Barracks Precinct and North Fort Precinct. It is suitably located to form a bridge between these distinct characters to create a cohesive sense of place.

Additionally, through considering the principles of water sensitive urban design the master plan proposes revitalising the sedgeland, a historical native feature of the site, to enrich the ecological values of the precinct.

Proposals within the master plan at Central Precinct are outlined below:

1. Activation and amenity along the shared walkway.

There will be public-facing activated spaces along the shared walkway with appropriate functional uses that celebrate the values of the site and utilise the existing assets

- central bush walk circuit has a focus on providing an educational and learning experience, telling the stories and values of the site. The circuit will take the visitor along the shared walkway to the proposed First Nations Cultural Space and Ecology and Environmental Centre, while experiencing several important military heritage remnants
- shared walkway for pedestrians and cyclists
The shared walkway will provide a pedestrian priority activated walking place that will link Barracks Precinct to North Fort Precinct
- the shuttle bus will move visitors through the site with drop-off zones along the shared walkway. Service vehicles allowed
- seating, gathering spaces and amenities will be provided for visitors along the shared walkway.

2. First Nations Cultural Space. A focus on First Nations cultural practice at the heart of the site

- at one of the highest points of the site the master plan proposes a new, purpose built building to house First Nations cultural practice, multi purpose community facilities and dedicated education programs
- in design phase the intent is to develop this program of functions in collaboration with Traditional Owners. Additionally, design may examine an elevated platform lookout that enables views of North Head and detailed First Nations interpretation 'story of place' program. This proposal includes the relocation of the ARMCO shed.

3. Ecology and Environmental Centre. Adaptive re-use of existing buildings to accommodate the co-location of education, North Head Sanctuary Foundation, management of biodiversity, research programs and enhancing the current nursery

- in collaboration with Northern Beaches Council and key stakeholders establish a multi-use environment centre with public-facing focus on environmental education, rehabilitation and ecology of North Head Sanctuary
- in design phase examine removal of cladding and conversion of existing structural frames to glasshouses for nursery greenhouse functions.

4. Operational space and site storage facility. Consolidate operational and back of house functions to this zone

- in design phase examine relocation of existing shed buildings to service operational functions and consider solar PV array generation and battery storage facilities
- in design phase consider the interface with the adjacent wetlands
- in design phase examine and integrate car parking within this zone.

5. Protect and enhance existing walking tracks and important lookouts through signage and wayfinding and creating a journey of experiences

- in design phase examine this area for potential to set aside for education programs
- opportunity to enhance interpretation of the Battery Observation Post, Counter Bombardment Observation Post and Plotting Room. The remains of structures associated with the observation posts and Plotting Room are located along the proposed central bush walk circuit, for visitors to experience how the observation and communication infrastructure is crucially linked in the defence of Sydney
- examine trail access from the Restoration Workshop and Makers Place to the east of the site. This would be beneficial for uses such as the potential for camping. The remains of structures associated with the Counter Bombardment Observation Post are located along the proposed trail, as a place for visitors to experience
- preserve and protect Hanging Swamp through controlled access and conservation of ecology
- conserve and protect remnant and endangered Sedgelands vegetation community which are a vital part of the North Head ecology.

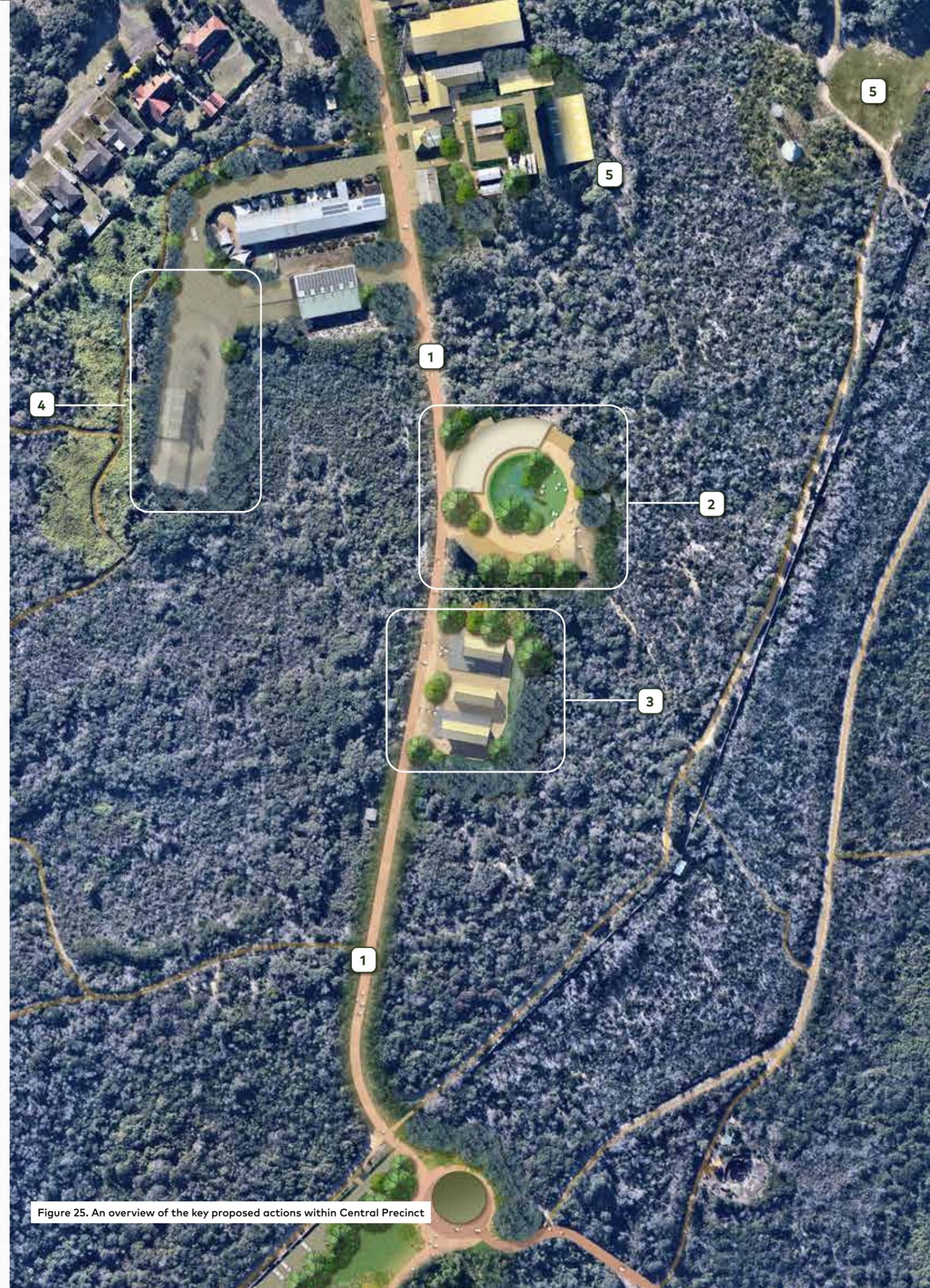


Figure 25. An overview of the key proposed actions within Central Precinct



Figure 26. Artist impression - Central Precinct

3.3 North Fort Precinct

North Fort Precinct contains the most intact of the 9.2 inch coastal batteries in NSW. It retains the perimeter walling, gun battery, most of the functional support buildings and remnants of the communications network and drainage system directly associated with the pre-Second World War North Fort which was the last stage of the artillery-based coastal defence of Sydney Harbour.

The vantage point from this position looks towards the harbour, allowing visitors to appreciate the surrounding landscape while reflecting on the defence of Sydney stories.

Proposals within the master plan at North Fort Precinct are outlined below:

- 1. Defence of Nation Interpretation Space.** Positioned on the crest of the hill, this space will be sensitive to the nature of its surroundings and sense of place
 - collaboration with the Australian War Memorial, a new partly subterranean structure emulating camouflaged gun emplacements and slotting into landscape will develop the interpretation program for the North Fort Precinct. The position will replace the relocated industrial sheds for a space that is dedicated to sharing the stories of the nation's defence, promoting the ongoing ecological restoration of the surrounding environment.
- 2. Gun emplacements and Memorial Walkway Loop pathway.** The looped heritage walk incorporates and enhances the Australia's Memorial Walk, and the Second World War gun emplacements
 - enhance public access, safety and interpretation of the gun emplacements and tunnels. Examine pathway connection from gun emplacement to existing walkway
 - encourage use of North Head Sanctuary Lawn will for passive recreation, a visitor lookout point and defence of Nation commemoration events.
- 3. Enhance interpretation of Third Quarantine Cemetery**
 - a controlled walking route to, and interpretation of, the cemetery will be enhanced to maximise secure and safe public access and link more clearly to the Q Station on the west of the headland.
- 4. Enhance pedestrian safety and the sense of place.** Two key objectives clash at the southern Scenic Drive entry to North Fort Precinct: separating vehicles and pedestrians to enhance safety, and retaining and adaptively re-using heritage assets. The entry condition for vehicles is narrow off Scenic Drive and there appears limited scope to alter or remove heritage

fabric to change the road entry condition. This requires detailed design options that must include civil and road design and review of heritage fabric tolerance for change. The design phase should examine significant public domain improvements to the zone between the existing buildings with a view to separating vehicles and improve pedestrian safety as follows:

- examine vehicle entry from Scenic Drive to the existing stone wall gate within context of pedestrian safety
 - consider and conceal back of house functions to food and beverage while looking to enhance food and beverage capacity of offer within design
 - examine tolerance for change of heritage buildings, such as removal or adaptive re-use of the western domestic building for public-facing functions of site management, visitor orientation and services, interpretation and food and beverage, and examine a new path from the outdoor terrace to heritage buildings
 - beyond the formal gate entry, examine alteration of the road to separate cars and pedestrian movement
 - in limiting change to the North Fort Precinct car park, establish a landscape buffer to east of the car park to visually obscure parking area, including native trees and vegetation on the edge of the car park to screen any views of the car park from the central garden space of North Fort Precinct
 - introduce the potential shuttle bus to service the shared walkway enabling visitors to journey from Barracks Precinct to North Fort Precinct, with North Fort Precinct car park an appropriate pick up/drop off location.
- 5. Enhancement of North Fort Precinct through native endemic planting and landscaping**
 - landscape North Fort Precinct to highlight the natural beauty of the surrounding vegetation and area through the use of endemic plant species and circulation paths
 - provide an open lawn that can be programmed to serve various public functions
 - utilise the pedestrianisation of North Fort Precinct central space to increase biodiversity, enhancing and conserving the ecological values of the site.



Figure 27. An overview of the key proposed actions within North Fort Precinct



Figure 28. Artist impression - North Fort Precinct

3.4 A walking place

Thematic exploration

North Head is a landscape that offers a diverse range of experiences and environments. Therefore, developing immersive thematic circulation networks throughout the landscape is a critical aspect of this master plan. These networks are organised to take visitors through the highlights of North Head in the heart of the headland, and through linked routes, invite deeper exploration of the natural and heritage values of the site. Interpretation will be light touch to minimise visual clutter, with consideration of geolocated digital interpretation through visitors own devices.

These experiences will range from intimate interactions with nature to grand and open vistas, while other routes lead to historical installations or through places of cultural significance. Each of these routes will also feature unique and distinct landscape elements which will contribute to an intuitive sense of navigating through the site.

The existing shared cycle route will be retained, and enhanced with new wayfinding signage, and links to access points at Barracks Precinct and North Fort.

Primary pedestrian spine – through improved arrival, pavements and pedestrian-friendly management the North Fort service road will be transformed into the main route for visitors to explore North Head, running from the Gate House south to the Burragula Lookout and passing through the Barracks, Central and North Fort precincts. The route will also be shared with cyclists and options for bike hire will be explored. A shuttle bus would support those with mobility issues, or who wish to get a ride back after walking across the headland, and for those who wish to return by a different route, the Avenue of Honour, or western walk to the Third Quarantine Cemetery and back through the bush boardwalk will be encouraged as options.

Experiences along the shared walkway consist of entry to North Head, Gate House, Parade Ground, Restoration Workshop and Makers Place, First Nations Cultural Space, Ecology and Environmental Centre, NICOH Range Observation Post, underground Plotting Room, Defence of Nation Interpretation Space, North Fort Precinct, Third Quarantine Cemetery, Burragula Lookout and Yiningma Lookout.

Bush walk – starting and finishing at the new environment centre once completed, the bush walk winds west through the biodiversity of the Eastern Suburbs banksia scrub and then east through the magnificent Hanging Swamp, giving visitors a sense of the different habitats, and providing opportunities to see different flowering seasons, and bird and insect life of the headland.

Some experiences along the walk consist of Restoration Workshop and Makers Place, remnant sedgeland vegetation, Eastern Suburbs banksia scrub, Defence of Nation Interpretation Space, Ecology and Environmental Centre, First Nations Cultural Space, Hanging Swamp, Counter Bombardment Observation Post, former hockey field and former oval.

North Fort heritage walks – starting from North Fort, two linked walks can be explored. The first, the Memorial circuit, is to remain as before. The second, the Defence of the Nation walk, takes visitors through the sequence of gun emplacements built for the Second World War and gives insight into how they were used. From the Close Observation Post, to the Plotting Room and the gun emplacements, this walk is best experienced as a guided tour for those without mobility issues when the tunnels can be accessed, but at all times the surface route will be marked for all to explore.

Some experiences along the walks include the NICOH range Observation Post, underground Plotting Room, Defence of Nation Interpretation Space, Flag Post and Lawn, tunnel network entrance, start of Memorial Walk, Sanctuary Lawn and lookout, No.1 and No.2 gun emplacement, Barrel Display and Avenue of Honour and Close Defence Observation Post.

Quarantine walk – this walk provides visitors with the opportunity to visit two of the three quarantine cemeteries that are open to the public. Visitors can experience the dramatic lookout to the harbour, and then walk down to the Q Station itself and explore its rich history, and learn about its many occupants who had to stay there on arrival to Australia. We aim to build links with the operators of the Q Station and with NPWS for improved walking connectivity between our sites.

Some experiences along the walks include the Third Quarantine Cemetery, harbour lookout, northern lookout, entry to Q Station and Q Station Wharf.

Bondi to Manly Walk – North Head provides some of the most dramatic vistas of the 80 km long-distance walk from Bondi to Manly. The walking route will be retained and integrated into the new wayfinding and signage, giving the long-distance walkers the opportunity to dive deeper into areas of interest through sidewalks along their journey.

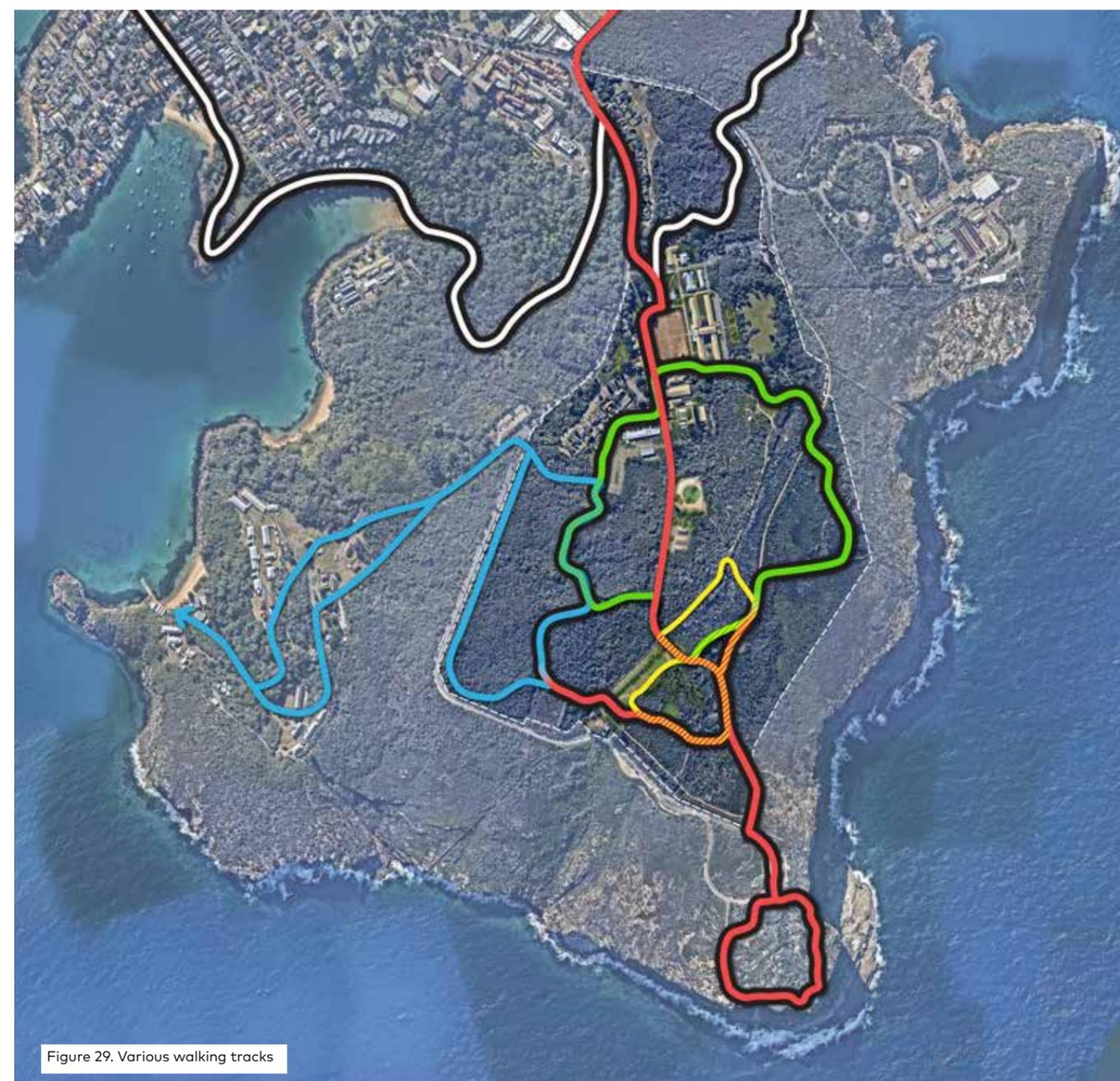


Figure 29. Various walking tracks

- Primary pedestrian spine
- Bush walk
- North Fort heritage walks
- Quarantine walk
- Bondi to Manly Walk

3.4 A walking place



Figure 30. North Head Sanctuary Hanging Swamp. Source: Sarah Nyugen



Figure 33. Lone Pine, Australia's Memorial Walk, North Head Sanctuary. Source: Stephen Fabling



Figure 34. Entrance to Australia's Memorial Walk, North Head Sanctuary. Source: Dave Swift

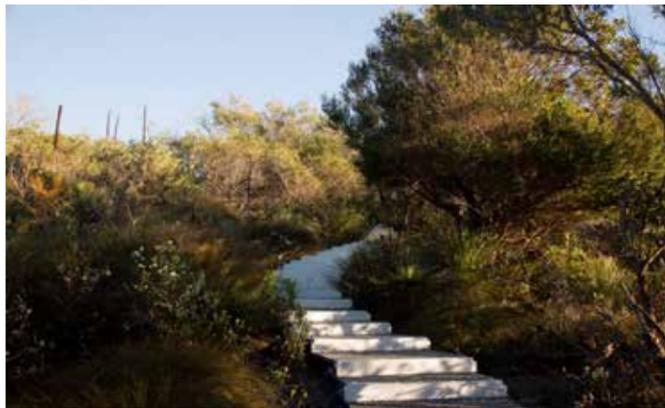


Figure 31. Walking track at North Head Sanctuary. Source: Harbour Trust



Figure 35. Third Quarantine Cemetery, North Head Sanctuary, Manly. Source: Zakarij Kacmarek



Figure 36. North Head view to city. Source: Harbour Trust



Figure 32. Entrance to new Headland Park Walkway. Source: Stephen Fabling

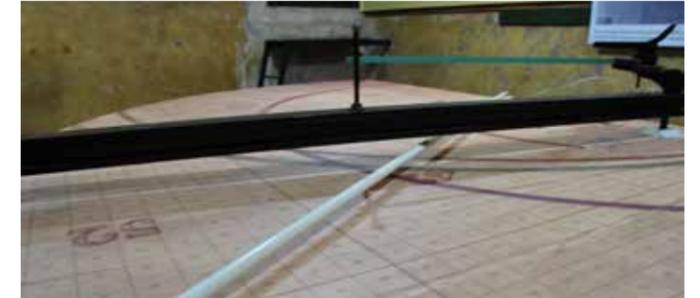


Figure 37. Plotting equipment at North Fort. Source: Harbour Trust

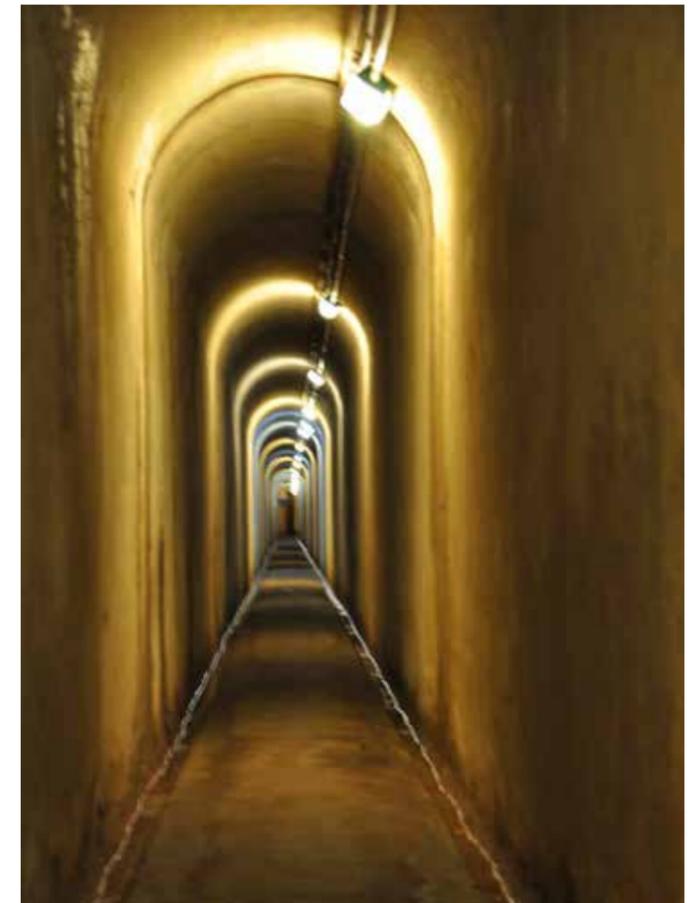


Figure 38. Tunnels at North Fort. Source: Harbour Trust

3.5 Vehicle access and movement

Due to the range of the current and expected users and activities within and surrounding the precinct, the transport and access demands vary in relation to:

- Seasonal dependent activities and use
- Time of day/night and days of week
- Operational hours spikes related to commuter arrival and departure times.

Master planning considers the key requirement of vehicle access design and traffic movement to address the pedestrian as priority. This will require detailed examination of vehicle drop off and pick up functionality, speed limits, pedestrian movement, bicycle movement, proposed shuttle services loop and improvements to site access from Manly by public transport. Additionally equitable access for impaired mobility and the disabled will be a critical design factor. This set of parameters will require detailed design response and sensitive examination in the civil and road design phase.

External movement

The existing external vehicle movement will remain as is with the opportunity of connecting the movement from the north and south bus stops. This allows drop-off for the public at the entrance of the Barracks Precinct and North Fort Precinct. This opportunity will enhance the introduction of the Gate House as the address for the northern end of the site.

Internal movement

Master planning proposes management and limitation on vehicle movement within the site. In principle the objective is to separate vehicles and pedestrians to create a walking place. Consolidation of entry points is key to this objective, separating public vehicles from tenant and service requirements. Time of day (or day of week) management protocols may also play a part in achieving this objective and is to be considered in detail design.

Barracks Precinct

The proposed vehicle entry to the Barracks Precinct is to be separated from pedestrians to allow a one way system from the Scenic Drive to the existing car park. This system also allows drop off zones for visitors to the Gate House. The car park can also be accessed by Bluefish Road. The master plan proposes a service lane on the eastern side of the Main Barracks Building for allowing vehicles to access the eastern edge of the building for loading and car park.

North Fort Precinct

The existing North Fort Precinct vehicle entrance is to be reconfigured to slow vehicle movement and allow pedestrian priority within a shared zone at the entrance of the site, taking the vehicles to the perimeter beyond the gate and keeping the central space of North Fort Precinct to pedestrian.

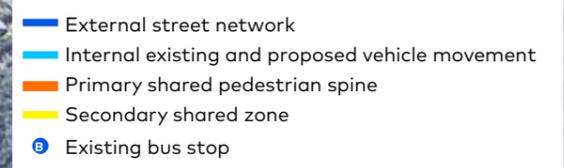


Figure 39. Proposed vehicle access and movement within North Head Sanctuary

3.5 Vehicle access and movement

Car parking

Due to the highly variable activity and occupancy of the precinct and surrounds, improvements proposed within the master plan should be considered in the context of minimising the impacts of private car parking and movements in-line with the higher-order objectives within the statutory framework.

The primary forms of access and movement associated with North Head Sanctuary are considered in the following key access modes of transport:

- Road network and access
- Car parking
- Walking
- Public transport
- Cycling

The master plan outlines a consolidation of the car parks where possible. Safer by design principles will be considered at the detailed design stage.

Existing main car park

The existing car park to remain as is, with the potential to increase spots where possible.

Proposed Main Barracks Building car park

The master plan proposes a new strip of car parking to the east of the Main Barracks. This proposal aims to utilise existing space for both tenancy and service vehicles whilst reducing/removing vehicle demand on the Parade Ground side of the barracks.

Reconfigured overflow car park

The existing overflow car park will house the new operational space and site storage facility and services for the site. Detail design is to consider the functional configuration to include car parking to service tenancy and public parking associated with existing tenancies, future uses and the proposed Restoration Workshop and Makers Place.

Reconfigured North Fort Precinct car park

The master plan reconfigures the North Fort Precinct car park, removing the existing road loop through the site. Public car parking remains on the western edge only with a landscape buffer.

Existing North Head Scenic Drive (NPWS) car park

Recently reconfigured car park on NPWS to remain as is.



Figure 40. Master plan outlining the car parks within North Head Sanctuary

4. Guidelines

Part four provides guidelines, strategies and explanatory diagrams in relation to the North Head Sanctuary Master Plan.



Figure 41. View from North Head Hanging Swamp. Source: Elena Mehrabani, TURF Design Studio

4.1 Proposed landscape and public domain strategy

North Head will be a sanctuary for flora and fauna as well as a retreat. It will be regenerated by emphasising its unique natural landscape and different layers of history such as First Nations occupation and significance as well as the military occupation and built forms to interpret in an integrated manner expansion of the habitat and reinvigoration of bushland.

The sense of sanctuary will be enhanced by activity in core areas of the former School of Artillery and Central Precinct and carefully managing and minimising traffic and parking to prioritise viability of the natural landscape, particularly endangered species.

The master plan values both cultural and historic elements and natural features and celebrates numerous picturesque views that combine with sandstone walls and other structures to create sites of interest and focal points within the landscape.

The Hanging Swamp is a remnant of the ecological character through nature's restorative work and the ecological system provides valuable habitat for the endemic flora and fauna of North Head.

The story of water will weave through the site and connect areas of historical and present hydrological significance.

Principles of water sensitive urban design will be integrated into the landscape and allow for the capture of run-off water and its reintegration back into the site through native vegetation regeneration to increase water retention, groundwater filtration and pollutant remediation.



Figure 43. North Head bunker ledge

Unique sense of place

Interpretative and respectful interactions with nature and the heritage values of North Head will provide a memorable experience, activating and creating a unique character for each precinct in a holistic approach with a focus on ecological values.



Figure 42. Banksia serrata at North Head

Ecological conservation and sustainability

Care for the unique environment of North Head will create a sanctuary for flora and fauna to connect and immerse people in nature.

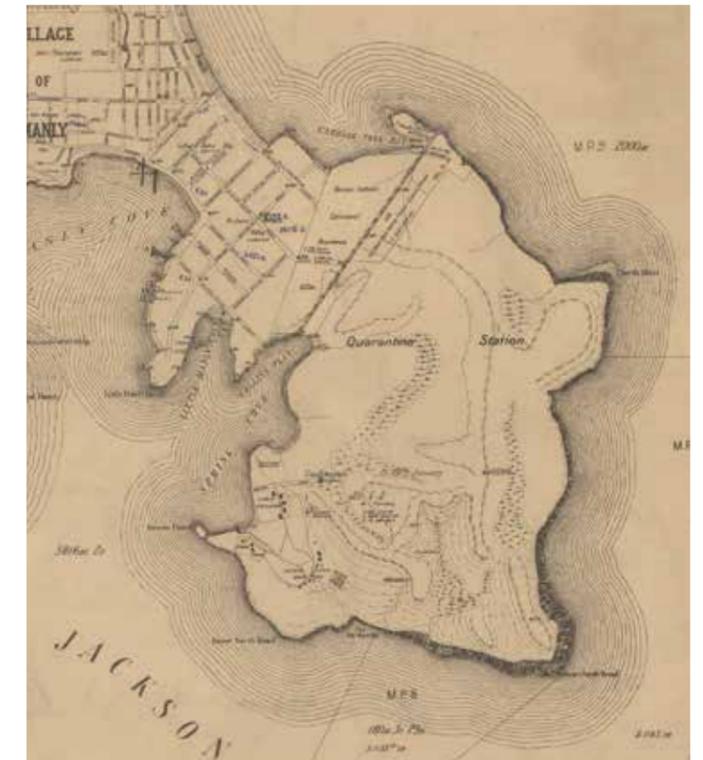


Figure 44. Parish of Manly Cove. Source: Department of Lands

A walking place

North Head is a unique landscape that showcases both the intimate and grandeur of nature reflecting many layers of history from First Nations occupation through European settlement to the landscape of today. The site's many narratives and ecological values will be weaved together by telling stories from Country to the present day.

4.1 Proposed landscape and public domain strategy

Ecological conservation and sustainability

North Head is home to unique and endangered vegetation communities and animal populations. However, the introduction of invasive or exotic species, changes in the site's hydrology and lack of fire management have contributed to a fragile ecosystem that requires a careful management practices. To protect and conserve these fragile ecosystems, the master plan aims to:

- maintain and protect sensitive areas of high ecological value by strategically managing pedestrian and vehicular access to the bushland
- prevent disturbance to regeneration areas
- improve ecological connectivity (no further fragmentation and encroachment)
- collaborate with land managers, community groups and volunteers to promote conservation, restoration and bush care programs
- work with relevant authorities and Traditional Owners to integrate cool burn management of the site to promote the natural cycle of fire and regeneration of the endemic ecology
- locate and designate space for regeneration and ecological rehabilitation works within the site, especially in areas that have been subject to clearing due to historical occupation and uses of North Head
- draw on legislative requirements for threatened ecological communities, raise people's awareness about the presence of the endangered Eastern Suburbs banksia scrub and continue working with volunteers
- investigate controlled/cool burns to complete investigation of the First Nations occupation of North Head (currently encumbered by the thick regrowth scrub and the presence of the endangered ecological community of Eastern Suburbs banksia scrub)
- investigate harnessing water from the natural springs and water sensitive design, based on the wartime plans that show spring water being reticulated from the gun emplacements back up the hill to the water reservoir on the western side of the stone wall separating the fort from the barracks area near the temporary Second World War camp
- remove vegetation from around the battery, the Battery Observation Post and the Command Post/Close Defence Battery Observation Post to reinstate the Second World War conditions of clear views up and down the coast

- further investigate and consider the vegetation at a distance from the 1930s brick buildings, which were clear to reinstate the Second World War cleared curtilage around the facilities while acting as fire breaks around the built assets
- maintain and improve the ecological connectivity of the site by rehabilitating areas of previous vegetation clearance
- consolidate areas of high usage and visitation to reduce traffic and disturbance to the wider site
- integrate water sensitive urban design to rehabilitate the site's hydrology, manage soil nutrient status and mitigate erosion
- incorporate appropriate ecological management regimes to mitigate damage from disease, pathogens, invasive species and feral animals
- support and grow community engagement that is focused on the ecological care of North Head
- reintroduce locally extinct species
- support and grow community engagement consistent with other ecological objectives and utilise the community volunteers who operate the native plant nursery, educate the community and participating in ecological monitoring and on-ground activities (e.g., weed removal).

Contamination

Parts of the site have been contaminated primarily from defence installations and military activities or related uses. These include underground storage tanks, fuel and chemical storage areas and workshop areas. Additionally, hazardous building materials such as lead paint and asbestos also contribute to the contamination of the site.

The Department of Defence has carried out a significant remediation program where contamination was assessed, remediation actions taken and results validated. In relation to contamination from radioactive materials, underground storage tanks and stormwater sediments, contamination reports show these have been remediated. Identified dumped waste materials have been removed; however, more are being progressively remediated as they are found. Furthermore, reports recommended no further investigation or clearance was necessary in regards to military materials as they pose minimal risk to human health or the environment.

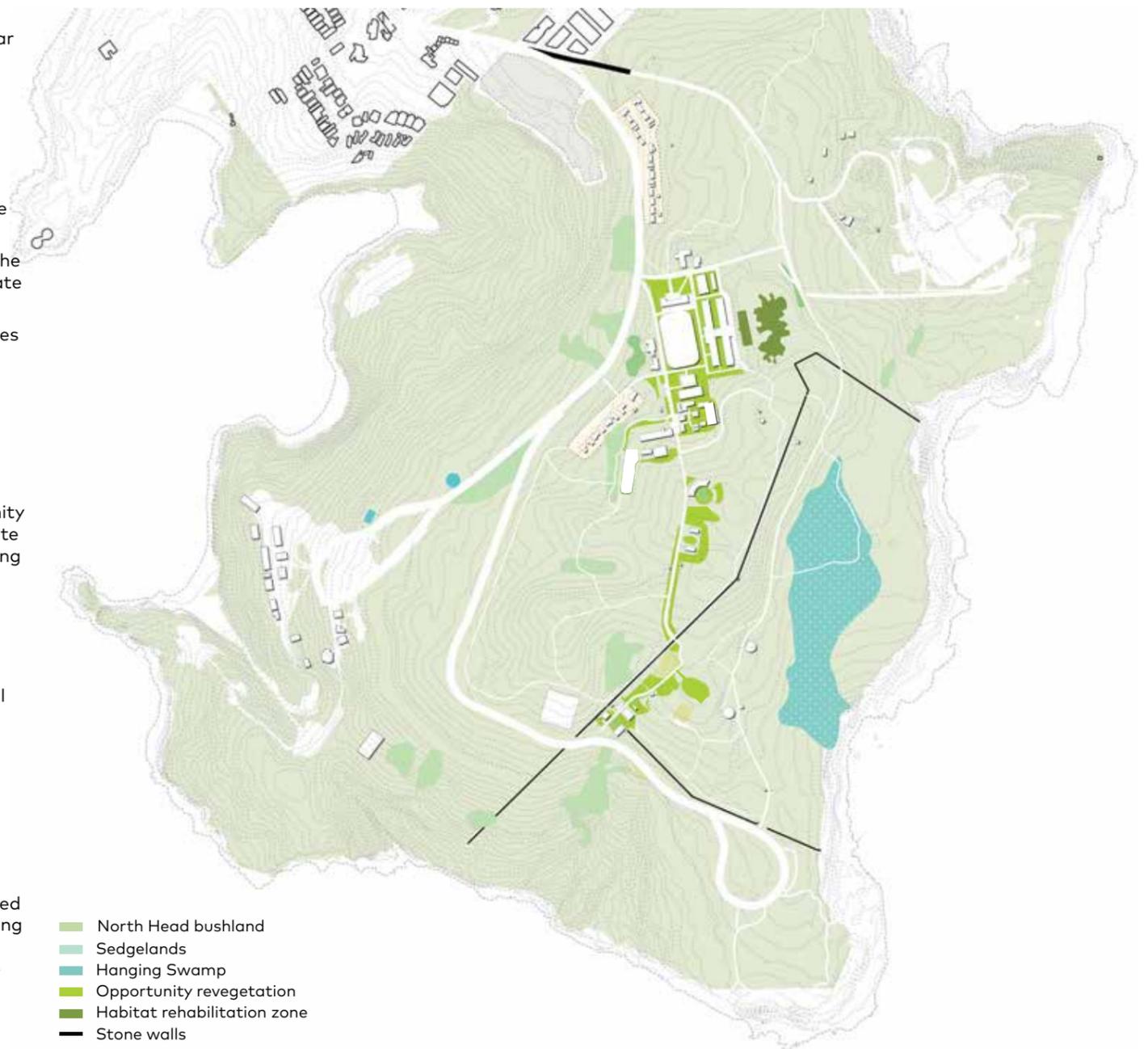


Figure 45. Landscaping diagram. Source: Turf design Studio

4.1 Proposed landscape and public domain strategy

Unique sense of place

Arrival and intuitive wayfinding

The next steps of North Head's design build on this remarkable landscape and create a unique sense of place.

Developing a defined entry experience into North Head will create a unique sense of place at the Barracks Precinct and North Fort Precinct. These will create a welcoming and visually appealing environment where visitors can orient themselves and begin their journey through North Head. The landscape character at these entry points will reflect their immediate context with the one at the Barracks Precinct adopting a formal appearance and the one at North Fort Precinct reflecting its more natural surroundings.

Intuitive way-finding and interpretive signage design will direct visitors and provide educational opportunities to build an appreciation of the unique landscape of North Head. The interpretive signage will draw on local flora and fauna, First Nations stories and the various heritage values of the site.

Additionally, thematic and place-specific materiality, landscaping and furnishings will all contribute to an intuitive way of navigating through the site. This will also function along with the proposed thematic movement network to further uncover and tell the unique story of North Head.



Figure 46. Strategic utilisation of materiality to create intuitive wayfinding - Yarning circle at Carrum Station. Source: Turf design Studio



Figure 47. Lizard Log Park Nature Playground. Source: McGregor Coxall



Figure 48. Lizard Log Park Nature Playground. Source: Turf design Studio



Figure 49. Reeded creekbed. Source: Turf design Studio



Figure 50. Stone storytelling in boardwalk. Source: Turf design Studio

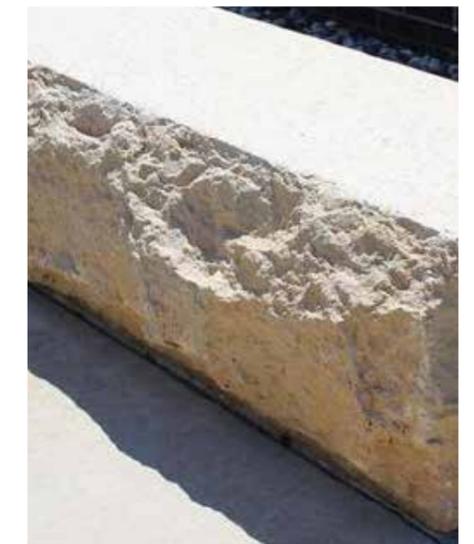


Figure 51. Sandstone seating. Source: Turf design Studio

4.2 Regeneration and adaptive re-use

Section 4.2 outlines guidelines for adaptive re-use, primarily of built assets.

The adaptive re-use of Main Barracks Building and various smaller buildings will assist in the conservation and interpretation of their heritage values. The primary objective is to find uses that:

- retain the scenic qualities of the place as part of a green headland
- respect and retain the significant views and vistas within and from the place
- site and design the First Nations Cultural Space to respect the cultural landscape values of the place, together with the significant views to, from and within the sanctuary
- enhance understanding and appreciation of the natural and cultural heritage of the area and each former base
- provide exceptional venues for people to appreciate the park, the headland and the harbour
- suit the basic and simple character of buildings, i.e. do not require extensive additional services or amenities that would inevitably alter and diminish the heritage value and character of the places
- are compatible with public access through the areas around the buildings and will open significant heritage items to occasional public access
- can operate within constraints of limited parking on existing disturbed areas that are not required for bush regeneration
- retain the pedestrian friendly internal carriageway network of shared traffic zones
- avoid reliance on private vehicle use at times of peak traffic flow in the neighbouring areas and are compatible with development of public transport and shuttle services.

Fulfilling these requirements may include a range of leisure, recreational, cultural, informal educational and community uses.

Principles for adaptive re-use

Historically, given the lack of public access, most buildings should be used in a way that is compatible with public access. Buildings from the military time, though dominant in scale, are plain and their relationship to the military is in plan form and location. They are a great adaptive re-use opportunity. Generally, the military planning of the site should be conserved, particularly the arrangement of the core buildings around the Parade Ground and the connection to North Fort Precinct. The military presence, however, can be refined to specific highly significant areas that best relate to the military values:

- Defence of Australia - tunnels and gun emplacements
- School of Artillery – military planning of the site particularly the centrality of the Parade Ground and surrounding buildings
- social – dance hall located in Main Barracks Building
- commemorative – Memorial Walk and Avenue of Honour remnants.

In these locations changes and new uses should conserve or elevate the associated value. In other spaces the military values may share space or give way to other values. Adaptive re-use of the Parade Ground and surrounding buildings should not diminish their relationship to one another, nor the prominent presence of the vast Parade Ground. Significant rooms, such as the dance hall, may be best interpreted through a new use that relates to or reimagine the original use. Where change of use is not proposed, such as continued tours of the tunnels, there may be opportunity to elevate or improve their use or significance.

Landscaping has evolved from no or limited planting during the war to restrained plantings during the School of Artillery. It was during the latter period that trees and shrubs were planted to frame architectural elements of the buildings. This could be re-implemented. Plantings would not need to be identical to historical plantings but a similar planting strategy to elevate architecture is recommended.

Public domain/landscape

The sense of sanctuary will be enhanced by concentrating human activity in core areas of the former School of Artillery and Central Precinct, and carefully managing and minimising traffic and parking in a manner subservient to the viability of the natural landscape, and in particular, endangered species.

The landscape will value cultural and historic elements and natural features. Picturesque views will combine with sandstone walls and other structures to create sites of interest and focal points within the landscape. This coherent character will link and activate the three main precincts through a shared walkway for pedestrians and bicycles with a focus on the unique and fragile nature of North Head.

Interpretation

Interpretation of the history of the site will contribute to the reading and understanding of the place. Interpretive elements will be clear and unobtrusive, and explain the former functions of North Head Fort and its support buildings on the adjoining former School of Artillery site in the context of the development of the site and its role in military training and the coastal defence of the port of Sydney.

Promotion and public awareness

The site and facilities available should be actively promoted within the community, as compatible and appropriate usage will increase the level of public awareness of the values of the site. Collaboration with Northern Beaches Council should explore cultural and tourism opportunities at the School of Artillery enhancing the existing attractions of North Head and the Manly area.

There are extensive opportunities for educational and recreational enjoyment by the community, not just for appreciation of the natural setting and views but also the potential for cultural experiences through appropriate interpretation and guided use of former defence buildings and understanding of the history of the place.

4.3 Proposed building removal and relocation

Principles for retention, removal and re-location

Retention and removal of buildings in North Head must be strictly controlled in accordance with the policies of North Head Sanctuary Management Plan 2011 to minimise potential for impact on elements of significance and important views to and from the site.

In general, new buildings and renewal of existing elements will be restricted to:

- providing recreational and amenities facilities for staff and visitors
- removing non-significant elements and replacing them with new elements that will contribute more positively to the site
- constructing new or relocating existing buildings, subject to visual impact assessment that must assess views from harbour and foreshore
- removing and relocating highly intrusive buildings and pavements where this is required for the rehabilitation of bushland and drainage.

Further, retention, removal or re-location works must reduce bushfire risk and exposure. This means:

- utilising the former oval, Parade Ground and North Fort Precinct open lawn area as a refuge area when acting under instruction from emergency services
- considering the capacity of North Head Scenic Drive and Bluefish Road as evacuation routes
- incorporating Planning for Bush Fire Protection 2019 to any building work
- identifying opportunities for First Nations cultural fire management
- maintaining fire regimes specific to Eastern Sydney banksia scrub and implementing threatened species management strategies [refer to North Head Bushfire Management Plan (2022)]
- providing a defensible space between bushland and the wall to allow for hazard reduction burning and back burns
- using a mosaic fire regime appropriate to vegetation type
- avoiding any fire occurrence within fresh water wetlands
- tagging threatened species prior to burns and monitoring them afterwards to assess any impacts
- considering a weeding program as part of any prescribed burn activity or wildfire event

- monitoring the long-nosed bandicoot population following fire events
- ensuring any new proposed static water supply (water tanks) should allow access for fire-fighting services in accordance with Planning for Bush Fire Protection 2019.

Proposed building removal and re-location

The built form proposed for removal or re-location will be investigated in the next stage of development.

North Fort Precinct

- the **Museum Display Sheds at the top of North Fort Precinct** to be relocated to the new operational space and site storage facility, in place of the Defence of Nation Interpretation Space
- the **Museum Workshop Sheds** are to be relocated to provide a native garden with an accessible pathway leading from the entry to the top of the hill at North Fort Precinct
- relocate Sir Roden Cutler VC Australian Artillery Research Centre to appropriate facility and location.



Figure 53. Proposed built form relocation within North Fort Precinct

■ To be relocated

Barracks Precinct and Central Precinct

- The new operational space and site storage facility will accommodate the facilities that currently located along the shared walkway for pedestrians and bicycles and at North Fort Precinct
- The First Nations Cultural Space has the potential for the following existing built form changes:
 - **relocate the existing ARMCO Building (B34) to the Restoration Workshop and Makers Place.** Built in 1956 for optical and radar equipment and later a RADAR store. Relocating the ARMCO Building will not be a heritage issue as it is proposed for new operational space and site storage facility use which is appropriate considering its historical use. The Robertson and Hindmarsh, North Fort Precinct, North Head: Conservation Management Plan, 2010 (CMP) states that 'Any adaptation should be carried out in such a way that the scale, form and industrial qualities are maintained, and the construction system is expressed. Expansion is possible to the northern side, providing the design is complementary with the original structure' (p.94)
 - the specific location is not critical to its significance. The proposed location will not remove it from its setting between the school and North Fort Precinct
 - **removal or re-location of the Air Defence Lecture Room (B34A) and RAEME Repair parts/metal Store (B34B).** Constructed in the early 1980s as standard Army demountable initially as additional accommodation and stores and later training rooms. The CMP states that these buildings are in poor condition and can be demolished if suitable uses cannot be found
 - **the Ecology and Environmental Centre has two options proposed for the space.** This includes: Re-use of the existing three Radar Sheds (B64, B65, B67). Constructed in 1989 for use as storage, radar training facilities. Full conservation is not required by the CMP but it does recommend adaptive re-use where possible. Either relocation of the middle Radar Shed (B65) to the Restoration Workshop and Makers Place or removal, to provide for an outdoor education and research nursery. Re-use of the remaining two Radar Sheds. There are no heritage concerns regarding the removal or adaptation of the shed B65.

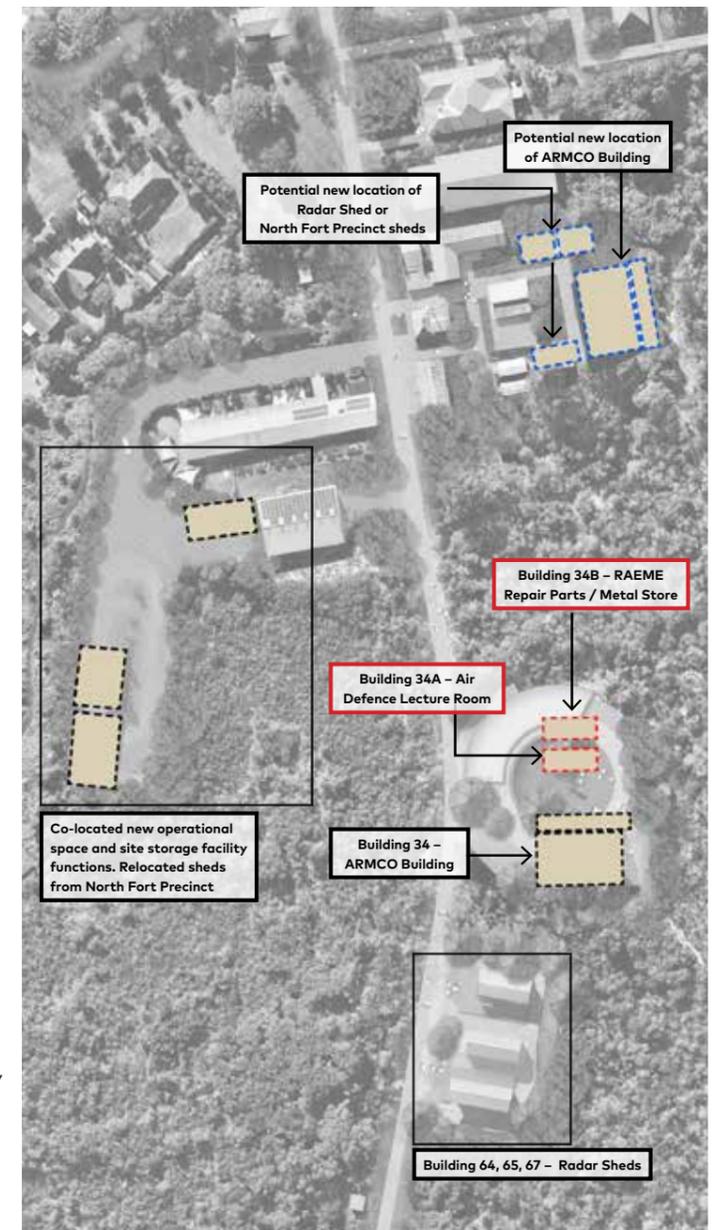


Figure 52. Proposed built form removal and relocation within the Barracks Precinct and Central Precinct

- To be demolished/removed
- To be relocated
- Relocated building

4.4 The architectural design language

First Nations Cultural Space

The First Nations Cultural Space will transcend the conventional notions of buildings and place, evolving into a transformative space, a cultural landmark and a vibrant heart for making and creativity. Rooted in the concept of confluence, this high point at the heart of the site will represent a meeting place where Country, people and ideas merge. It offers a unique opportunity to reclaim, acknowledge and redistribute space for First Nations people's use and community engagement, while serving as a place for reflection on history and regeneration of the land. Guided by First Nations management, this space will be designated for cultural and community purposes.

The space will unlock a multitude of opportunities for Country and contemporary First Nations communities. It will embrace design and materiality that pays homage to the land, acknowledging its significance and deep connection to cultural practices as a cultural cornerstone within Sydney Harbour. It will foster a warm and welcoming environment for First Nations peoples, recognising their needs and aspirations as fundamental to its purpose.

Beyond being a gathering place, the space will be a vibrant place for cultural expression and exchange. Visitors will learn directly from First Nations peoples about their rich traditions and cultures, cultivating a deep understanding and appreciation. The centre will showcase authentic and regionally specific products, supporting local artists and ensuring that economic benefits flow directly back to their communities.

Embracing an eco-centric approach, the centre will be rooted in the wellbeing of the land. The potential to relocate the ARMCO Building to the Restoration Workshop and Makers Place will place this community space alongside the Ecology and Environmental Centre to nurture ongoing cultural practices to protect and promote Country. This creates a powerful conduit for ecological revitalisation and cross-cultural engagement, fostering unity, understanding and respect for Country and each other.

The cultural space will be a profound and dynamic space that celebrates the living culture of First Nations peoples. It will be a testament to the enduring significance of First Nations voices and aspirations, creating a transformative area where traditions are honoured, creativity thrives and diverse communities come together in harmony with North Head.

Ecology and Environmental Centre

The Ecology and Environmental Centre will form a harmonious partnership that intertwines cultural preservation with ecological restoration. Its creation involves repurposing existing sheds in the Central Precinct to form a nursery facility, dedicated to supporting sanctuary initiatives, ecological research and on-site conservation efforts. This nursery will not only serve practical purposes but will also serve as a public-facing space, providing educational opportunities and conveying the captivating story of the site's ecology.

With regards to potential additions, a key consideration is the seamless integration of safe, secure and well-maintained outdoor spaces that blur the boundaries between the interior and the exterior. The architecture will foster a deep connection with the natural surroundings. Any new or repurposed buildings will respond to the unique climate of North Head, incorporating weather protection elements to ensure year-round comfort for visitors and the preservation of sensitive ecological environments.

As the Ecology and Environmental Centre emerges from the bush, it embodies the essence of the site's natural beauty and offers a transformative experience for all who venture within.

Through the integration of the Ecology and Environmental Centre alongside the First Nations cultural centre, visitors will be offered a holistic and profound experience. The relationship between cultural awareness and ecological restoration highlights the interconnectedness of humans and the natural world, promoting a sense of responsibility and stewardship towards the environment. As a result the Ecology and Environmental Centre will form a key part of the Central Precinct that becomes a beacon of education, engagement, and inspiration, empowering individuals to embrace sustainable practices and work towards a harmonious coexistence with Country.

Defence of Nation Interpretation Space

The proposed Defence of Nation Interpretation Space will integrate seamlessly within the landscape with a semi-submerged lookout serving as a key architectural element of the North Fort Precinct. Emulating the tunnels, Plotting Room, and gun emplacements of the site, the indicative design incorporates subterranean elements, including an immersive theatre, to bring visitors into the historical experience.

The architectural language of the centre takes inspiration from the circular form, reminiscent of the 9.2-inch coastal batteries that are co-located in the precinct. These batteries were shaped to not only sit within the landscape, but to lookout across the ocean, creating a distinct and recognisable visual identity.

Around the centre, a circular ringed lookout offers panoramic views of the city, the harbour and the ocean, providing visitors with a breathtaking vantage point. This lookout serves as a connection between the past and the present, allowing visitors to appreciate the surrounding landscape while reflecting on the defence of Sydney.

The design of the space will incorporate strategic use of voids and a double-height space to elevate the visitor experience. Voids within the architecture are strategically placed to create a sense of openness, allowing glimpses into different areas of the centre to foster a sense of curiosity and anticipation, enticing visitors to explore further.

The double-height space within its centre adds an additional sense of awe and reverence, creating a memorable and immersive experience for visitors. This soaring vertical space not only creates a visual focal point but also allows for the display of large-scale objects or installations that evoke a strong emotional response, serving as a powerful storytelling element, capturing visitors' attention and immersing them in the historical narrative.

Functionally, the place serves as an enclosed space dedicated to sharing the stories of the nation's defence and allows the experience to be shared while complying with the Disability Discrimination Act 1992 (DDA). It will link to the rest of the memorial walk, tunnel tours and event/ceremony spaces. The exhibit display area will showcase historical artefacts and interactive exhibits, while a central space will highlight significant interpretive objects, creating a focal point for visitors.

Tunnels

Master planning proposes enhanced public access to the underground tunnel system. Without doubt the extensive underground fortification is an impressive feature with considerable interpretation and visitor experience opportunity. However, investigation indicates that access will need to be on a managed basis and compliance with disabled access requirements is not possible. A management system (escorted tours) will influence the extent and requirement of interpretation as the escort guide will play a significant part in the telling of story. This aspect must be considered within the context of architectural language as precedent suggests 'less is more'. Light and sound may play a relevant role in immersive interpretation.

To enhance visitor experience and navigation (while not DDA possible), the entrance to the North Head tunnel fortifications will feature improved information and wayfinding. Informative displays will provide details about the tunnels, including visuals and graphics illustrating their layout, destinations and purpose.

This will enable visitors to grasp a comprehensive understanding of these historical structures. Additionally, the entrance will facilitate tour access, allowing guided exploration of the tunnels.

Recognising their significance within the broader context of the North Fort Precinct and the extensive 300 km coastal defence system during the Second World War, the displays will establish a connection between the tunnels and the heritage gun emplacements.

By linking these elements, visitors can appreciate the interconnectedness and historical importance of this remarkable site.

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5. Place analysis

This part provides analysis of place. It provides an overall context, a timeline of post contact development, an overview of the fragile ecology, an insight into the sites unique hydrology and a review of the sites military heritage significance. Further and more technical analysis is provided in Part 6 Site analysis.

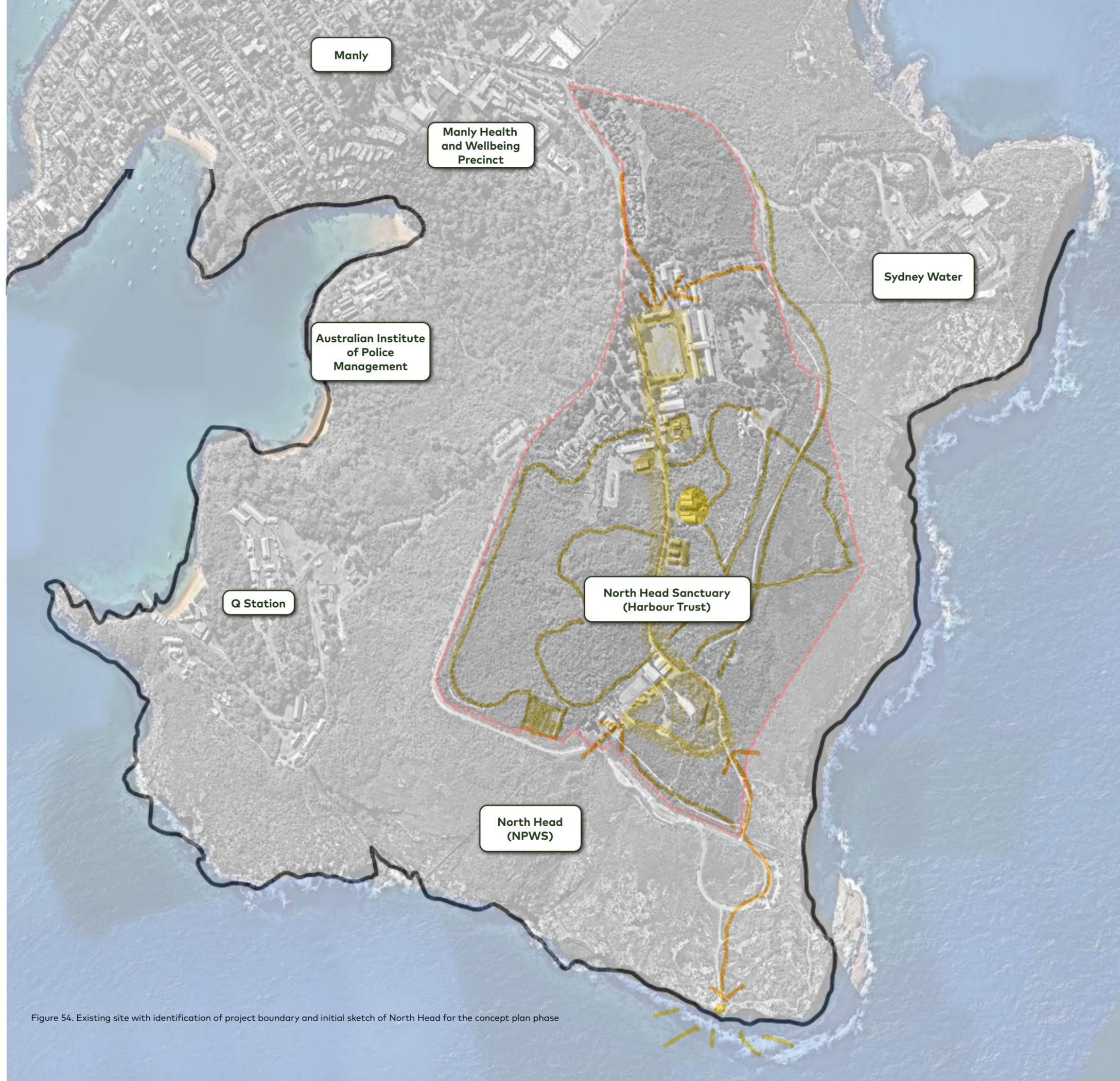


Figure 54. Existing site with identification of project boundary and initial sketch of North Head for the concept plan phase

5.1 Context

North Head is a coastal landmark that is steeped in a rich history, cultural value and ecological importance. Located to the south east of Manly on the peninsula at the northern entrance to Sydney Harbour, North Head Sanctuary is an area of approximately 74 hectares resting on the natural ridge of North Head with almost 80% being bushland with around 80 built features. North Head Sanctuary is surrounded on three sides by Sydney Harbour National Park, including the nationally significant former North Head Q Station, North Head Sewage Treatment Plant and Australian Institute of Police Management.

First Nations people lived in and around the Sydney Harbour area for thousands of years before Europeans arrived in 1788. North Head continues to be a place of cultural significance for First Nations peoples, who have cared for this Country since time immemorial. Over thousands of generations, they have shaped the landscape and formed part of its identity. Traditional Owners of Coastal Sydney still live around the harbour with unbroken links.

Perched at the entrance of Sydney Harbour, this headland is defined by its rugged cliffs, lush vegetation and historical installation and buildings, making it a popular destination. The vantage point from North Head provides an unparalleled panorama of the Sydney skyline and the vast Pacific Ocean.

Today North Head is largely open to the public and much of its landscape is comprised of the endangered Eastern Suburbs banksia scrub that was once common across Sydney. This important ecological environment provides a window into the past and supports a number of endangered flora and fauna.

A strategy of the site is to provide greater access from within the site, out towards lookouts in the national park.

It is noted that strategic plans and plans of management for surrounding land parcels and assets are in place and form part of context. Sydney Water, and Manly Health and Well Being Precinct.



Figure 55. Aerial of the site's context in relationship to surrounding areas

5.2 Timeline of post contact uses and development at North Head

Located at the entrance to Port Jackson, North Head was the site where Arthur Phillip first landed in his reconnaissance from Botany Bay. Phillip camped at what he named Spring Cove and sent out parties to explore the area for a suitable settlement site. North Head is the site of the some of the earliest encounters between the British invaders and First Nations. Such contact included the kidnappings in 1788 and 1789 of Aranbanoo, Colbee (Cadigal) and Benelong (Wangal), and the spearing of Phillip in 1790.

In 1833 North Head was proclaimed a quarantine station and in 1859 land was granted to the Catholic Church for the construction of its episcopal residence. The next major addition to North Head was the construction of shared walkway for pedestrians and bicycles in 1928.

From 1932 to 1933 a wall was built to allow large parts of the Quarantine Station land to be opened to the public, but within a year the access was revoked and land handed over for defence purposes leading to the construction of North Fort Precinct and major barracks. During the Second World War, public access was denied to the whole of North Head. Following the war, the barracks and fort became the School of Artillery until the 1990s.

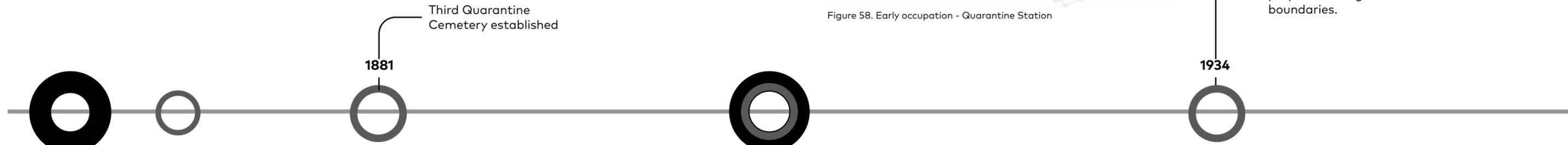


Figure 57. Port Jackson from the South Head, Supply sailing in. William Bradley, First Fleet Journal entitled 'A Voyage to New South Wales' December 1786 - May 1792. Although labelled South Head, the view would appear to be from North Head



Figure 58. Early occupation - Quarantine Station

Permissive occupancy revoked. Most of 279 acre [113 ha] reserve to be for defence purposes. Disagreement over boundaries.



1800s

EARLY COLONIAL OCCUPATION - QUARANTINE STATION

1788 - Landing and camping of the First Fleet at Spring Cove

1790 - Spearing of Arthur Philip at North Head

1833 - All land within a quarter of a mile of the high water mark of Spring Cove at North Head designated as a quarantine station

1837 - Virtually the whole of North Head declared as a quarantine area

1879 - Catholic seminary established at North Head and stone walls constructed to separate it from the Quarantine Station

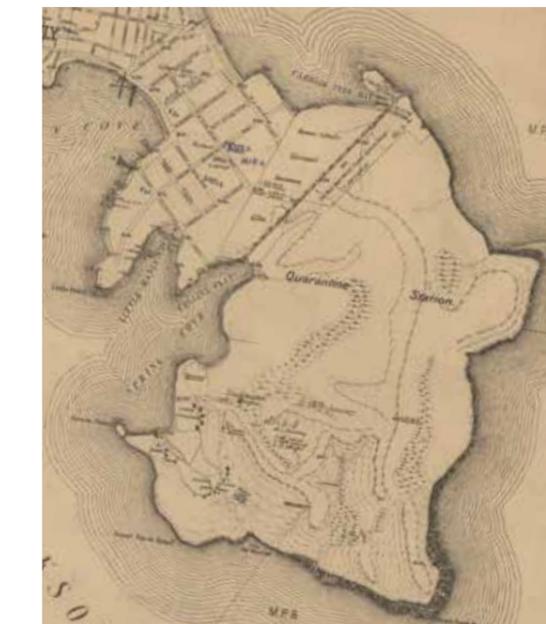


Figure 56. Parish of Manly Cove, County of Cumberland (1900). Source: <https://collection.sl.nsw.gov.au/record/74Vv5gPElp3>

EARLY 1900s

REMEMBRANCE & RECREATION

1909 - Petition signed by 5,000 people to allow public access to North Head

1927 - Public access to North Head for the first time when the quarantine lands were partially opened for the arrival of the Prince of Wales in Sydney

1928 - Construction of Manly War Memorial Hospital commences

1932 to 1933 - Construction of dividing wall commenced as an Unemployment Relief project

1933 - Road through the Parkhill Reserve completed (Avenue of Honour) and Parkhill Reserve opened



Figure 59. Avenue of Honour. Source: Turf Design Studio

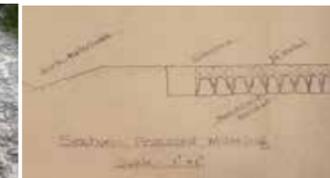


Figure 60. Avenue of Honour. Source: Conservation management plan 2010

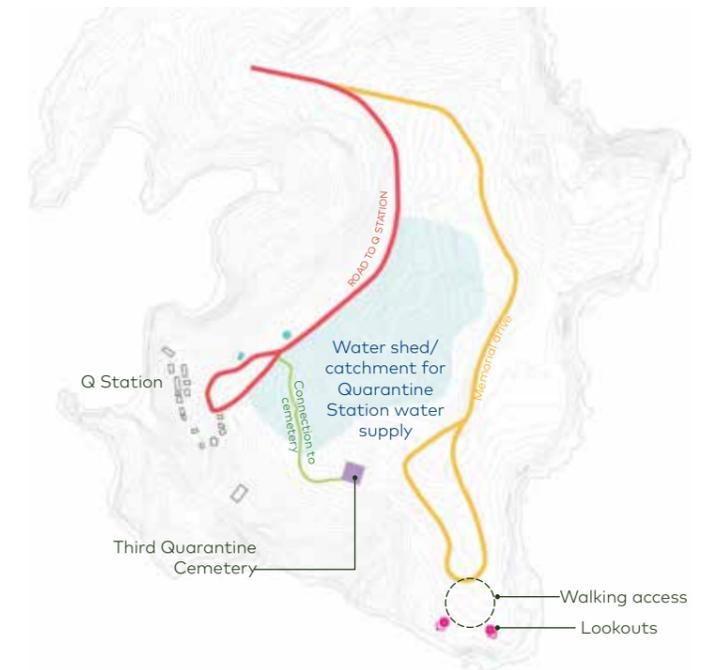


Figure 61. Remembrance and recreation

MILITARY OCCUPATION

1934 – North Head to be the first headquarters of the Australian Coast Artillery Brigade

1935 – Wall separating section of reserve at North Head from fort constructed

1935 – Road through the Quarantine Station constructed to link the two remaining portions of Parkhill Reserve; originally known as Anstey Drive (Now known as North Head Scenic Drive)



Figure 62. Aerial during military occupation. Source : <https://portal.spatial.nsw.gov.au/>



Figure 63. North Head during military occupation. Source: <https://portal.spatial.nsw.gov.au/>

1984 – NSW National Parks and Wildlife Service acquired the Quarantine Station (National Heritage Listing, North Head)

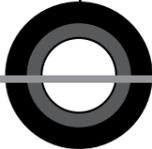
1990 – The Royal Australian Artillery (RAA) Museum was established at North Head within the North Fort Precinct area. The North Fort Precinct Museum is one of a series of artillery museums which, collectively, comprise the RAA National Museum

1997 – School of Artillery moved from North Head to Puckapunyal in Victoria

Harbour Trust established to administer, conserve and adaptively re-use surplus Commonwealth (primarily Defence) lands around Sydney Harbour

North Head included in the National Heritage List (DEWHA website)

1934-1935



1936

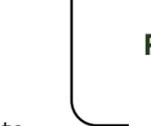


1939



North Head closed to the public following incidents of people trespassing on the military reserve. Guards were posted on the Parkhill Gate to prevent unauthorised entry.

1947-1972



POST WAR

1946 – Separate wings of the School of Artillery moved from Holsworthy and Randwick to North Head Barracks

1947 – Reopening to the public of the scenic road named Anstey Drive on Park Hill at North Head sought

1957 – Quarantine Station linked up to mains water supply (superseding the reservoir supplies) and a new power transformer was installed

1960 – Guns and associated control equipment and engines dismantled. Coast artillery batteries dismantled, North Head battery scrapped

1970 to 1976 – Original Parkhill Gate on Bluefish Drive widened and amenities building demolished, probably to allow for the construction of the water pollution control plant

1972 – Water pollution control plant constructed behind Bluefish Point

- Installation of gun in No.2 (north) emplacement, control and engine room equipment commenced

- Installation of gun in No. 1 (south) commenced

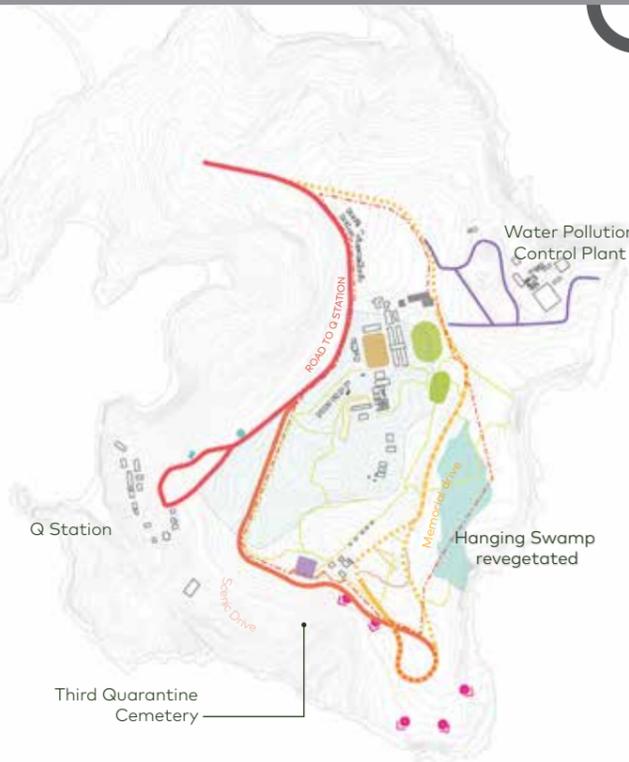
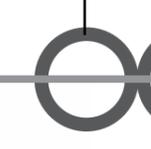
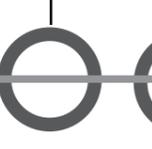


Figure 64. North Head post-war diagram

1984-1997



2001

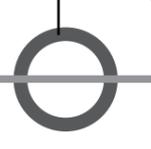


2003

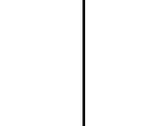


Minister for the Environment and Heritage approved the Harbour Trust plans for its seven sites around the harbour. The North Fort Precinct Complex was included in the Comprehensive Plan under the former School of Artillery. The plan proposed that North Head become a sanctuary

2006



2024



NORTH HEAD SANCTUARY

MASTER PLAN



Figure 65. North Head aerial map. Source: <https://www.nearmap.com/>

Source : Robertson and Hindmarsh, North Fort Precinct, North Head: Conservation Management Plan (2010), 26-40.

5.3 Management of a fragile ecology

Flora and fauna

North Head is a prominent headland that boasts a diverse range of ecosystems, including coastal heathlands, sandstone cliffs and diverse marine habitats. North Head is home to a recorded 64 native flora species and 205 native fauna species. It also features a variety of habitats and vegetation communities such as:

- critically endangered Eastern Suburbs banksia scrub ecological community
- shrubland, woodland/forest
- fern heath
- rocky heath
- exotic grassland
- hind dune, beach and rocky foreshore
- sedgeland
- wetland
- creek lines and artificial water bodies
- cliff face, boulder slope
- sandstone caves, sandstone outcrops
- stone walls
- built structures, and tunnels and gun emplacements.

Coastal heathlands are one of the defining features of the North Head ecological landscape. These heathlands are characterised by a wide variety of plant species that have adapted to the harsh coastal environment. Vegetation communities such as the banksia heath, dominate a majority of the landscape. On the more sheltered western side, smooth barked apple trees, coast banksia, and cheese tree open forests are present. The sandstone cliffs that border the North Head landscape on the east also harbour unique ecological communities such as bracelet honey myrtle and heath leaved banksia scrub. Towards the western edge of the site is a hanging swamp with its unique ecology of banksia, melaleuca and baumea sedgeland. Over time exotic species have also been introduced onto the site through European occupation. These have generally been located around facilities or installations such as the Barracks Precinct, North Fort Precinct, Q Station and water treatment plant.

These vegetation communities provide vital habitat for a rich diversity of reptiles, insects, birds and small mammals, which rely on the vegetation for shelter and food. One of those animal species is the endangered North Head long-nosed bandicoot which is endemic to the area. The rugged cliffs also provide nesting sites for several seabird species, including the endangered little penguin. These unique birds find shelter in the nooks and crevices of the cliffs, forming large colonies during the breeding season. North Head also forms part of the migratory route for endangered bird species such as the pied oystercatcher, southern giant petrel and wandering albatross.



Figure 66. *Acacia terminalis* subsp. Eastern Sydney (sunshine wattle) Source: Mike Young. 2009



Figure 67. *Eucalyptus camfieldii* (Camfield's stringybark) Source: Bryan Myers. 2011. www.flickr.com



Figure 68. *Banksia ericifolia* (heath banksia) - Eastern Suburbs banksia scrub Source: 'Photo of Banksia ericifolia' 2006. Wikimedia.org



Figure 69. *Phylidonyris novaehollandiae* (New Holland honeyeater). Source: Fauna of North Head. GIS environmental consultants. 2003



Figure 70. *Underwoodisaurus milii* (thick-tailed gecko). Source: Fauna of North Head. GIS environmental consultants. 2003



Figure 71. *Perameles nasuta* (long-nosed bandicoot). Source: Fauna of North Head. GIS environmental consultants. 2003

5.3 Management of a fragile ecology

The historic events and uses of North Head are connected by the landscape. An isolated peninsula at the entrance to Port Jackson providing sheltered waters, to its western side, it was an ideal landing place for Phillip to assess the land, to quarantine diseases, to watch for enemy attack and for public enjoyment of this unique location. For some stories there are no physical marks on the land; however, the pre-invasion burials, middens and rock engravings and art, Q Station, archbishops' residence, former hospital, fort and barracks are reminders of these histories and the importance of North Head. The stone walls that spread across North Head separated new uses, such as the archbishop's residence from the Q Station. Historically, public access to North Head was highly restricted but the opening of the vast majority of the peninsula has readily changed this relationship.

It is clear that North Head is a place of pre-eminent ecological value that has been encroached upon since the nineteenth century. Environmental regeneration is vital including restriction of further encroachment on ecology by the built environment.

Dispossession and the imposing nature of built elements has disguised First Nations cultural values connected to North Head. A reconciling of conflicting values will need to occur to reveal the prominence of previously under-represented significance. All values will need to be recognised fairly and equal to their significance.

Natural heritage values

North Head retains significant natural values with bushland containing a rich diversity of flora and fauna surrounding clusters of buildings. Although relatively intact, the bushland has significantly changed from pre-European times due to impacts of altered fire regimes, sporadic clearing of vegetation, creation of boardwalks, infection of native plants by *Phytophthora cinnamomi*, weed and feral animal incursion and altered drainage patterns.

North Head supports a number of vegetation communities and populations that are vulnerable to further changes and disturbance. Furthermore, the exclusion of fire for the past 30 years has resulted in changes to North Head's ecology, with scrub communities being outgrown by species that benefit from the absence of natural bush fires.

Ecological analysis

The North Head landscape showcases a remarkable array of ecosystems, from coastal heathlands to sandstone cliffs and vibrant marine habitats. As such the ecological significance of North Head extends beyond its terrestrial and marine habitats. Much has been done to conserve the natural and cultural heritage of the area. Management strategies for the ecology of North Head have focused on the preservation of diverse ecosystems and the protection of threatened species. Furthermore, the local community has also been intimately involved with many individuals volunteering to assist with its protection and enhancement.

However, the North Head landscape also faces numerous potential risks if appropriate measures are not put in place. These potential risks include:

- loss of habitat through clearing, development and maintenance activities
- altered soil nutrient status and hydrology
- infection and dieback of native plants caused by *Phytophthora cinnamomi* (and other pathogens)
- inappropriate fire regimes and arson
- mowing/slashing and inappropriate use of herbicides
- invasion of weed species
- inappropriate plantings in and around remnants
- seed and wildflower collection
- erosion and/or physical damage from surface water run-off, wind, vehicles, rabbits and pedestrian use
- predation of native flora and fauna by domestic and feral animals including rabbits, foxes, dogs, cats and rats
- dumping of rubbish, garden refuse and soil
- wildlife fatalities due to road traffic.

This remarkable landscape attracts thousands of visitors each year, and while this is a testament to the ecological and cultural character of the site, unmanaged visitation to the site would have detrimental effects on North Head's fragile ecosystems. Additionally, climate change also poses an acute challenge to the preservation of vulnerable vegetation communities and endangered animal species.

Invasive plant species

North Head holds considerable ecological value with endangered flora and fauna found on site. With historical occupation of the site, exotic invasive plant species, weeds and pests have been introduced into North Head. Some of these species and animals can pose a threat to the endemic ecology include coastal tea trees, foxes and rabbits and the fragile native ecology of North Head.

Management practices such as the removal of dominant invasive species, prevention of soil erosion, run-off pollution mitigation, weed management and pest number monitoring and suppression should be implemented. This should be done in cooperation with NPWS, residents and community groups to ensure that all stakeholders are informed and engaged.

Summary of ecological management principles

In 2022 an Ecological management review was undertaken by the Harbour Trust. It provides a set of guiding principles and recommendations that are summarised below. The review is a key supporting document to the master plan.

The Harbour Trust and NPWS will continue to work together to protect the natural heritage values and reduce the threats to biodiversity at North Head by:

- conserving the natural ecosystems
- protecting and enhancing the remnant plants, animals and vegetation by ameliorating environmental impacts associated with pest species, inappropriate use and past land use practice
- identifying and conserving habitat corridors in partnership with the relevant stakeholders
- managing fire as a key element in the care of the bush's ecology
- interpreting the North Head natural values to engage and inspire the community and to assist with management of inappropriate visitor use
- improving energy efficiency of visitor and operational facilities
- sustainably managing water and waste, including the use of recycled water and water sensitive design in facilities

- developing partnerships for environmental sustainability innovation, aiming for carbon-neutral operations
- developing partnerships with universities for research and monitoring of natural values
- controlling the spread of *Phytophthora cinnamomi* where possible to reduce the impact on native vegetation
- improving knowledge of *Phytophthora cinnamomi* and the threats it places on the long-term survival of plant and animal species in the area
- managing water quality and flows moving onto and off the North Head to mimic natural conditions.

Source : Ecological Management Review & Recommendations (2022).Eco Logical Australia

5.4 Military themes

The military history has been broken down into four themes: defence of Australia, School of Artillery, social significance and commemoration.

Defence of Australia

A pre-eminent example of defence of a port, North Head was part of a network of gun emplacements constructed before and coordinated during the Second World War for the defence of the Australian East Coast. Though some gun emplacements were constructed much earlier, others such as North Head were constructed on the eve of the Second World War in response to concerns over an international threat. The place can be considered a fortress landscape where the terrain and coastline have been adapted for defence purposes.

North Head had both macro and micro defence considerations. In the event of an attack, North Head had fire command out to sea and inland as far north as Broken Bay, south to Kurnell and west to Parramatta. A close defence scheme, prepared in 1942, considered the defence of North Head as an isolated location in the event of a ground attack. These defences were never engaged and North Head became a passive albeit highly valuable cog in the Australia's defence. In May and June 1942, three Japanese submarines entered Sydney Harbour but the role of North Fort Precinct was minimal.

Following the war, the place became the School of Artillery. While the barracks and fort were constructed under the British Empire, the syllabus, theories and work of the School of Artillery related to a period when Australia was making its own decision about defence and were applied in wars such as Vietnam.

School of Artillery

The earliest buildings were constructed for North Head Barracks in 1936 and 1937. They exemplify a British design used since the nineteenth century and were the largest barracks to be erected in Australia before the war. The buildings were first occupied by those stationed at North Head for the nation's defence during the Second World War. After the war, in 1946, the School of Artillery was relocated from Holsworthy, taking over use of the former barracks buildings.

Many buildings important to the place's defence capacity, have been demolished, and over its years the School of Artillery adapted the use of the various buildings. The general layout, centring of the core buildings around the Parade Ground and the style of the buildings is largely unchanged.

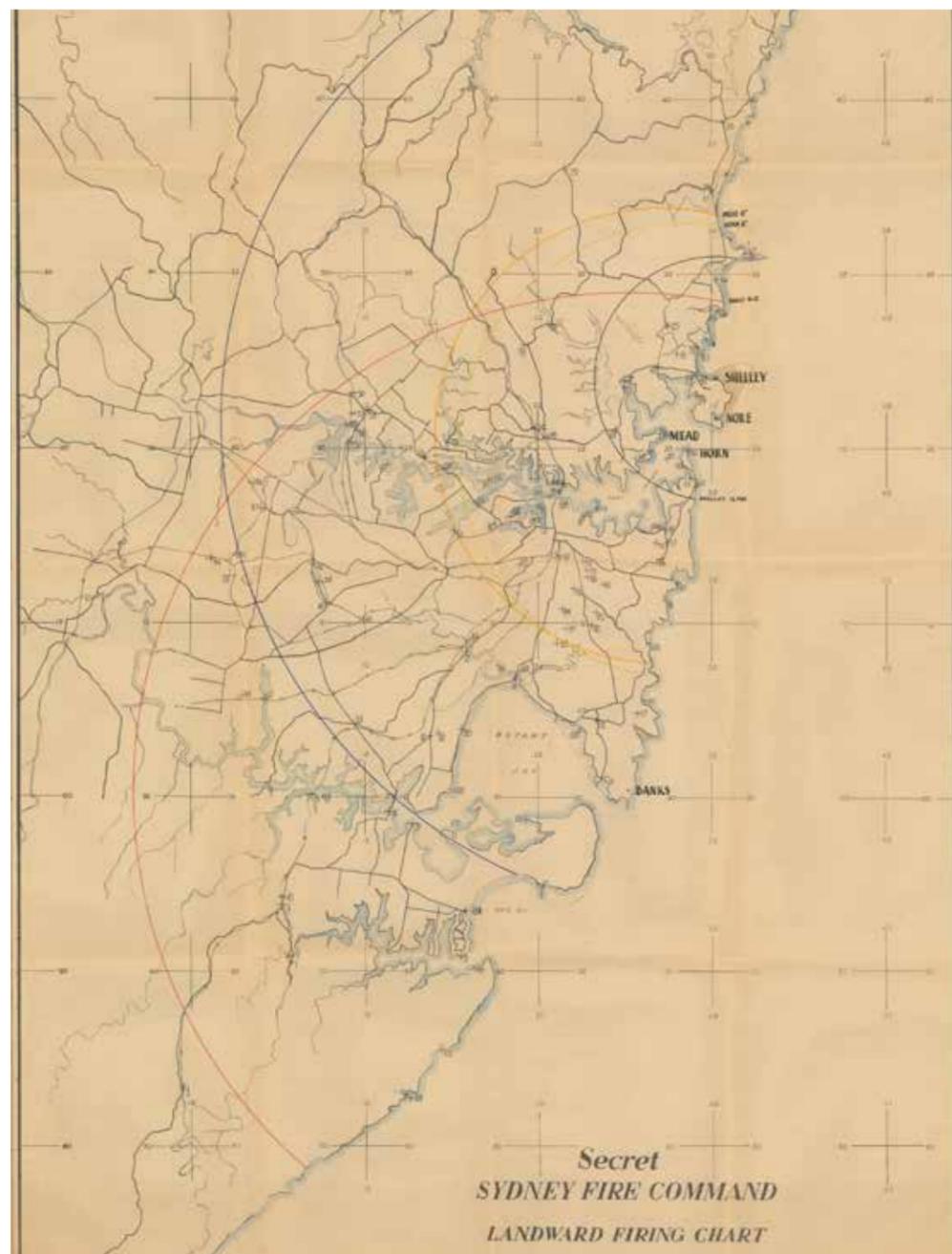


Figure 72. Map of greater Sydney with lines showing the inland firing range Source: NAA 33163537

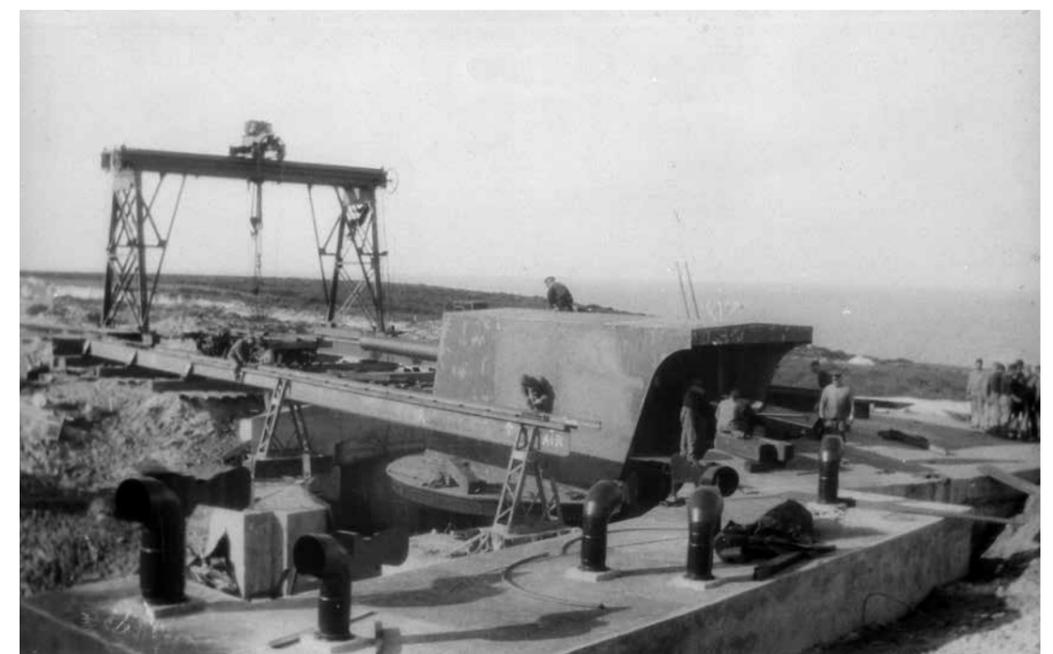


Figure 73. Gun and mount construction of North Fort. Source: Harbour Trust



Figure 74. Barrel gun being moved. 1935. Source: Harbour Trust

5.4 Military themes

Social significance

Given its location in Manly, the School of Artillery was a sought-after place to study. More than 42,000 Australian men and women undertook courses at the school which typically ran for 12 weeks with up to 500 people attending at any one time. Life at the school was both regimented and social. The Parade Ground was a ceremonial space regularly used for functional purposes. There were strong social and leisure connections to Manly and the debutant ball was an important annual event.

Commemoration

Early commemoration at North Head occurred before the war, in 1933, with the construction of the Avenue of Honour. Lined with more than 200 trees, the avenue was dedicated to local servicemen who had lost their lives in the First World War. Demolished in 1935 to make way for the barracks and fort, the avenue today survives as a relic with no commemorative purpose. Volunteer efforts after the closure of the School of Artillery established the Memorial Walk. The Memorial Walk is dedicated to the conflicts which Australia has been involved and its location relates to the gun emplacement and the views out to sea.

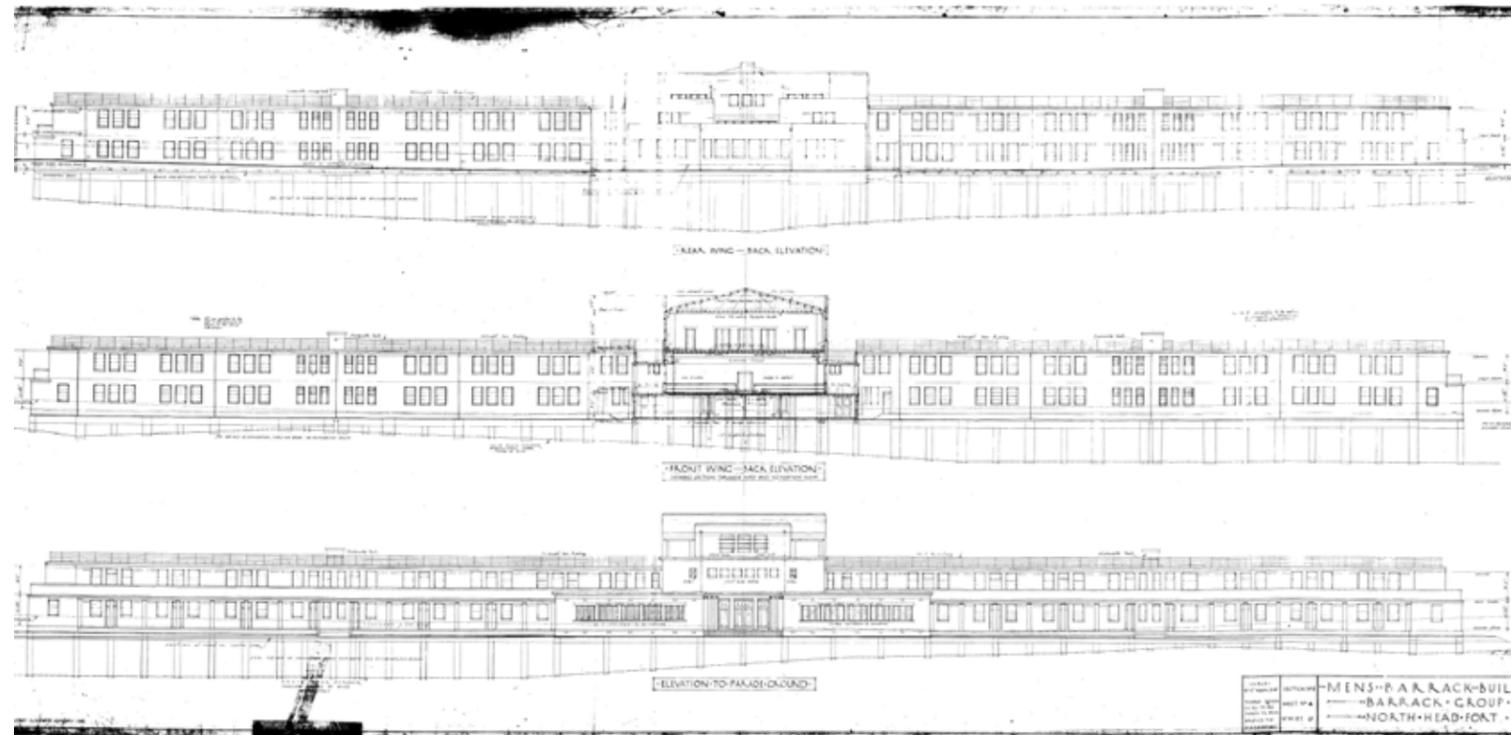


Figure 75. Front and back elevation drawings of Main Barracks Building formerly the Men's Barrack Building. Source: Harbour Trust



Figure 76. North Head - Gathering at Artillery School. Source: Harbour Trust

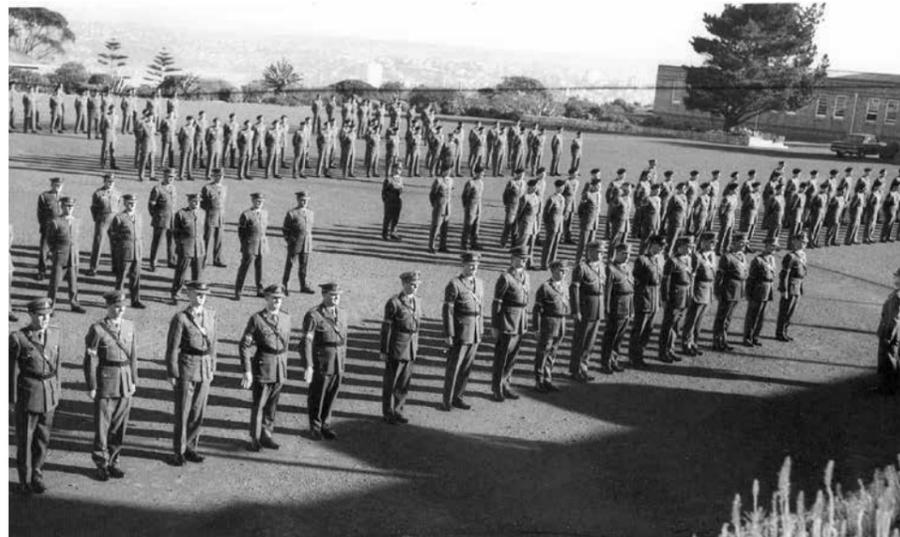


Figure 77. On parade, c. 1940s. Source: Harbour Trust



Figure 78. Group photo of service men and women at North Head. Source: Harbour Trust



Figure 79. Australian Womens Army Service working in the Plotting Room. 1940. Source: Harbour Trust

5.5 Story of water

Prior to colonial occupation, North Head was a place where water was present and embedded within its landscape. A large water catchment covers a significant portion in the centre of the site and depressions in the sites topography combined with the landscape's hydrological systems created swamp areas known as the Hanging Swamp. These ecological features were essential parts of North Head and were epicentres of ecological interaction that provided habitat and sustenance for the local flora and fauna.

Once North Head became the site of a quarantine facility, the hydrology was altered for water that fell within the catchment to be redirected to two reservoirs that were constructed to collect water to service the quarantine station. From the 1930s, many of the military buildings and installations were located within the catchment and the earthworks that were required to develop adversely affected the hydrological systems of the landscape.

Over time as military use of the site lessened and slowly nature regrew. The new hydrological and topographical character of the site led to the development of a new Hanging Swamp along the eastern edge of North Head.

This Hanging Swamp is a remnant of the ecological character from before European occupation of the site. Through nature's restorative work, this unique ecological system was rebuilt and provides valuable habitat for the endemic flora and fauna of North Head.

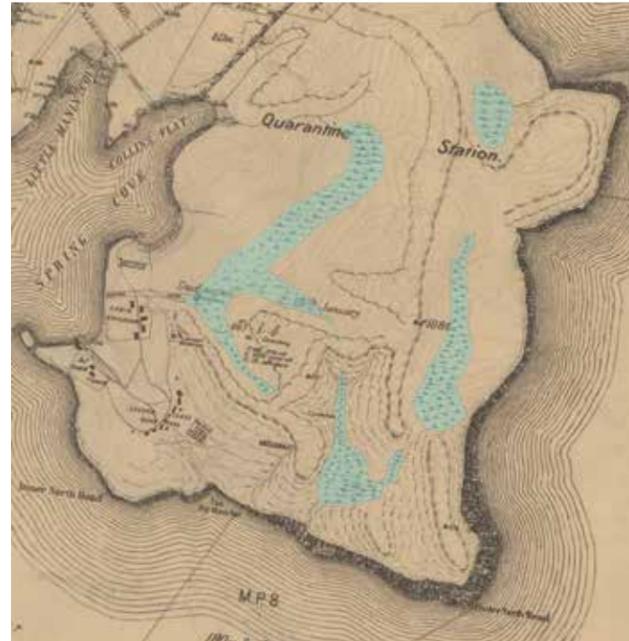


Figure 80. Hanging Swamp throughout the North Head



Figure 81. Quarantine Station water catchment



Figure 82. Barracks built inside the water catchment



Figure 83. Hanging Swamp was destroyed during the Second World War

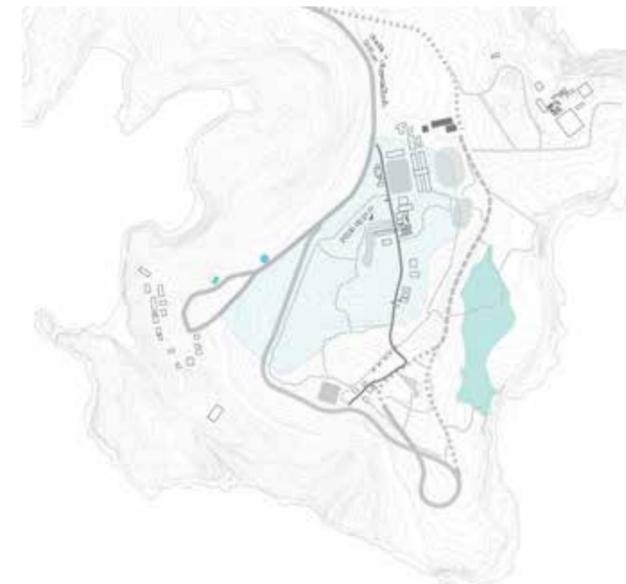


Figure 84. Hanging Swamp was rehabilitated and came to life

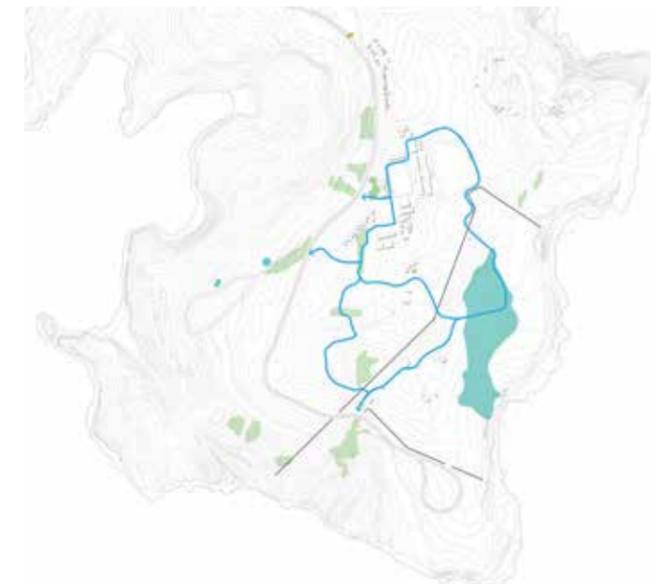


Figure 85. Hanging Swamp was rehabilitated and came to life

6. Site analysis

This part looks at the urban and technical analysis of North Head Sanctuary. It examines the existing conditions of place with a focus on transport and current conditions of the site.



Figure 86. Memorial Walk at North Head Sanctuary. Source: Harbour Trust

6.1 Ecological analysis

The site subject to ecological analysis covers an approximate area of 21.1 hectares and examines the area within North Head Sanctuary identified as having the most potential for future planned activities. The site assessment, in conjunction with historical vegetation, soil mapping and historical threatened species records:

- confirmed historically recorded threatened ecological communities
- identified impacts to threatened flora and fauna species present and previously recorded
- mapped biodiversity values.

Revegetation and weed management

- The site contains areas along some of the roads and in garden beds, where native revegetation has commenced. Any proposed activity should aim to continue current works and contribute towards the improvement of habitat connectivity.
- Additional street landscaping and re-vegetation of garden beds allow for large-scale canopy connectivity, providing habitat and safe havens for numerous bird and mammal species, while also improving the aesthetic of the area.
- Local indigenous trees should be utilised as they provide the greatest habitat resources for native species, and are better suited to the conditions so require less maintenance and upkeep.
- Efforts should be made to remove target weed species during these revegetation works. Priority weeds such as *Olea europaea subsp. (African)* and *Asparagus aethiopicus* (ground asparagus), though identified in only in a small number of areas, should be removed whilst they are easily managed.
- An environmental weed, *Nerium Oleander* (oleander), was also identified and has been historically planted in some of the open exotic lawn areas. This species should be removed as it is known to be highly toxic to both humans and animals.



Figure 87. Existing flora at North Head Sanctuary. Source: Harbour Trust



Figure 88. Existing flora at Third Quarantine Cemetery. Source: Harbour Trust

- Smooth-barked Apple - Coast Banksia / Cheese Tree open forest on sandstone slopes on the foreshores of the drowned river valleys of Sydney
- Crimson Bottlebrush - Banksia - Melaleuca / Baumea woody sedgeland in dune swales of the Sydney basin
- Heath-leaved Banksia - Scrub She-oak heath on sandstone headlands in the Sydney basin
- Bracelet Honey-myrtle - Heath-leaved Banksia - Scrub She-oak coastal cliffline scrub in the Sydney basin
- Lilly Pilly - Cabbage Tree Palm littoral rainforest on escarpment slopes and gullies of the Sydney basin
- Seagrass meadows of the estuaries and lagoons of the New South Wales coast
- Banksia heath on aeolian sands of eastern Sydney suburbs, Sydney Basin Bioregion
- Urban Exotic / Native

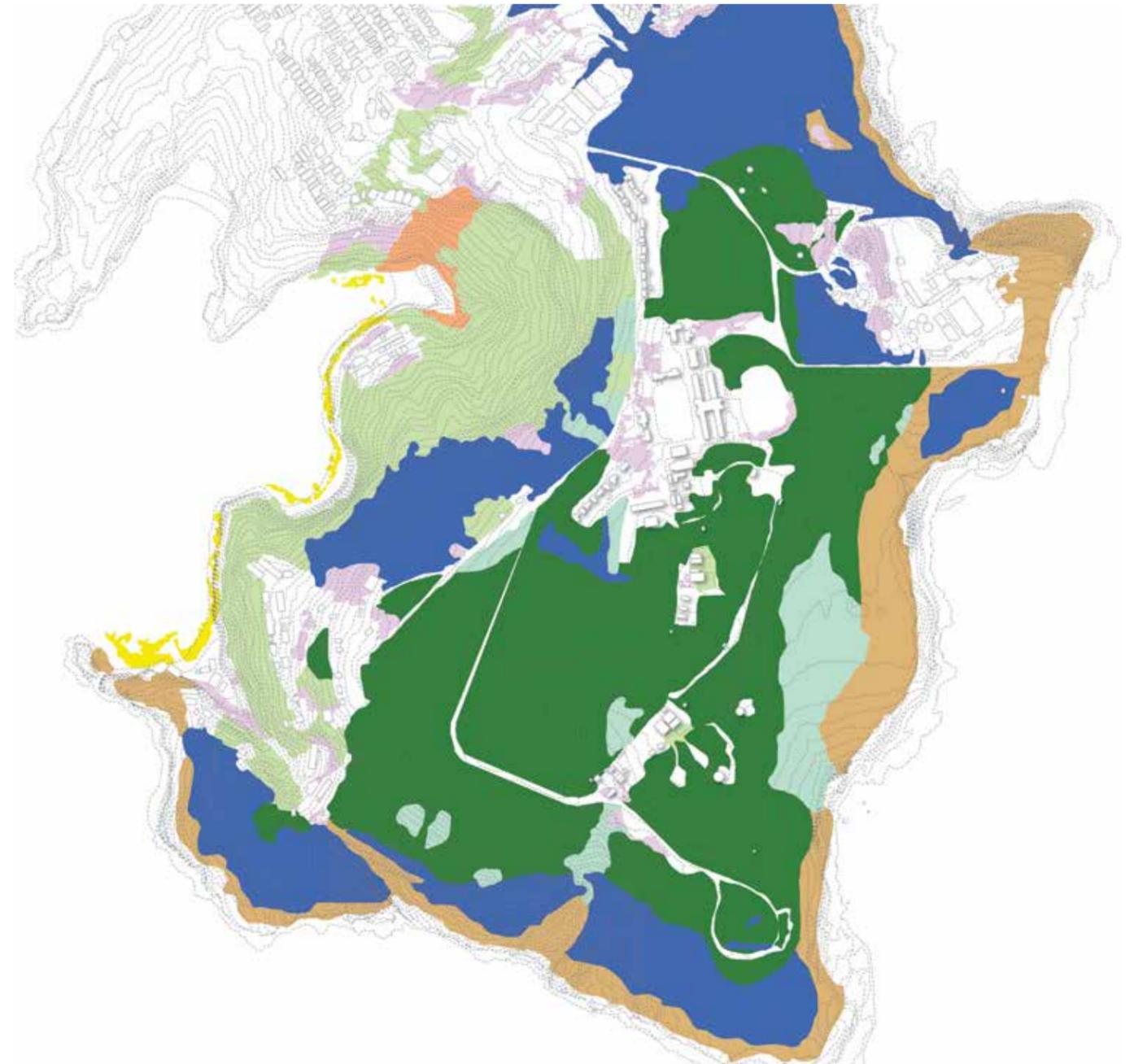


Figure 89. North Head vegetation. Source: Ecological Management Review & Recommendations (2022), eco Logical Australia

6.1 Ecological analysis

Biodiversity constraints

The biodiversity constraints mapping outlines the areas of North Head Sanctuary that are deemed threatened and in need of high conservation. These areas are designed to be rehabilitated, reinforced and protected through future master planning phases.

These areas have been identified below as:

- Low constraint area: Potential for future development with accompaniment of the appropriate environmental assessments. This zone encompasses:
 - hardstand, tracks and buildings (all new/occupied structures) without biodiversity values mapping
 - urban exotic lawns
 - planted native/exotic vegetation deemed to have low habitat potential for endangered long-nosed bandicoots.
- Moderate constraints area: Potential for future development however development considerations may be required in regards to the following:
 - habitat features of moderate value: soaks, drainage lines
 - buildings (all old/unoccupied structures) that may provide roosting habitat for threatened microbat or small mammal species
 - nest-bearing trees
 - planted native/exotic vegetation areas identified as containing moderate potential habitat (dense planted exotic vegetation) for endangered long-nosed bandicoot.

- High constraints area: Low potential for future development without the implementation of appropriate environmental assessment, impact mitigation strategies, assessments of significance or biodiversity offsets. This zone encompasses:
 - areas mapped as Sydney Coastal sand mantle heath (Eastern Suburbs banksia scrub)
 - areas with historically recorded threatened flora species
 - planted native/exotic vegetation areas identified as containing high potential habitat (dense native planted vegetation) for endangered long-nosed bandicoot
 - areas containing habitat features of high value such as hollows or small mammal burrows associated with threatened species previously recorded within proximity to the site
 - areas of biodiversity values mapping.

The areas outside the subject site will need further investigation to determine any constraints if development is proposed in the future.

- Subject property ▭
- Subject site ▭
- Low constraints area ▭
- Moderate constraints area ▭
- High constraints area ▭

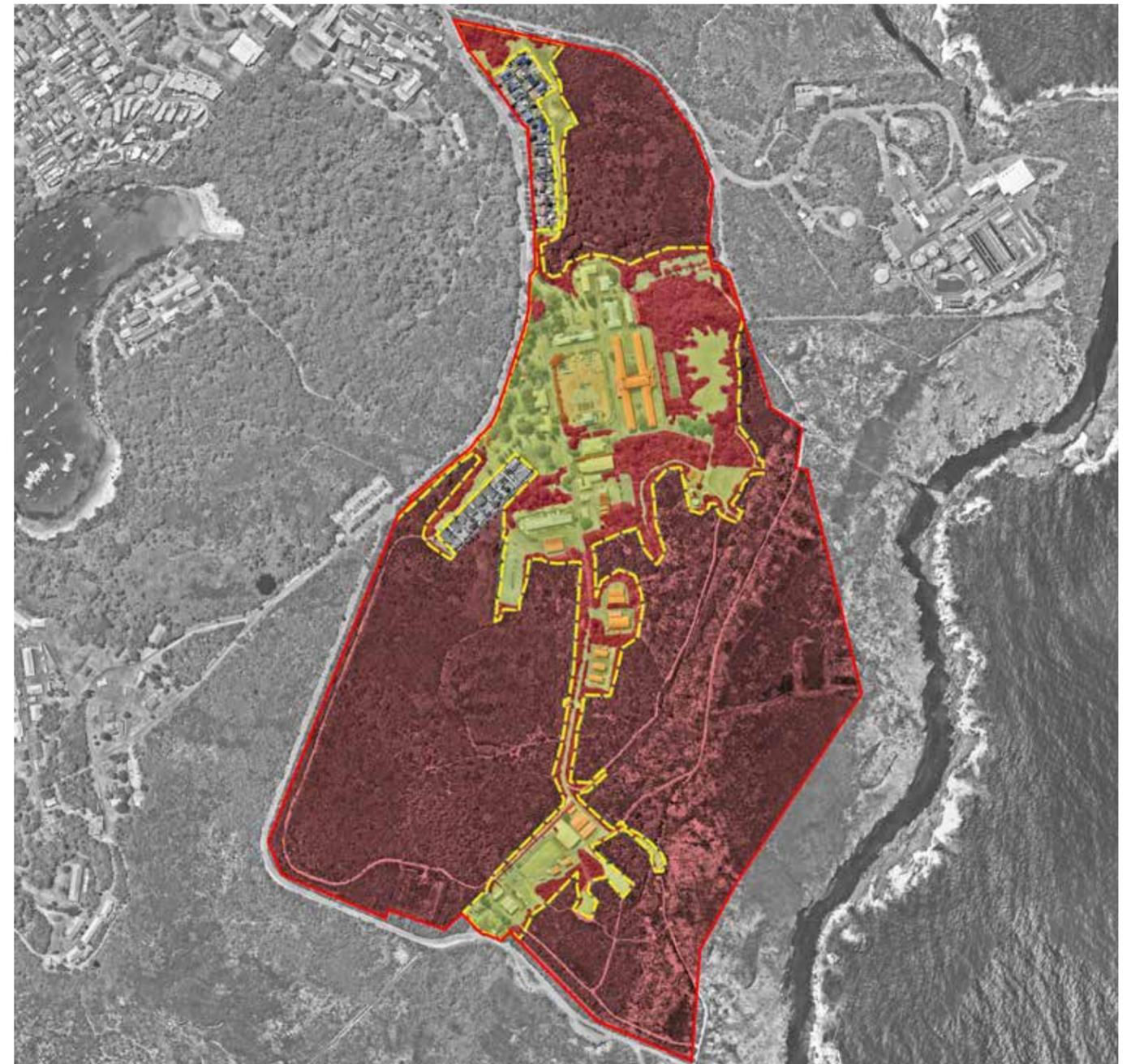


Figure 90. Biodiversity constraints mapping within the subject site. Source: Narla Environment, Ecological Constraints Assessment, January 2023

6.2 Bushfire

The heath and scrub vegetation has evolved with fire over many thousands of years to the extent that they require fire to trigger reproduction. For many of the native plants, fire stimulates flowering and seed dispersal, germination of the soil stored seed bank, or regrowth from epicormic buds and lignotubers (depending on the species and its tolerance to fire).

The absence of fire for the last 30 years due to its former use by Defence has favoured dominance of senescent *Leptospermum laevigatum* (tea tree scrub) whose tall thick canopy suppresses regeneration of the diverse range of groundcover and shrub species.

The following recommendations have been made in the bushfire management plan (2022):

- protect life and property within North Head Sanctuary and adjoining lands
- protect items and areas of natural, scenic and cultural values
- minimise the risk of unplanned bush fires at North Head Sanctuary
- minimise the potential for bush fires to spread onto and from North Head Sanctuary
- maintain natural environments where fire regimes are an integral part of the ecological processes
- work cooperatively with neighbours (NPWS, Fire and Rescue NSW) and lessees managing bushfire
- facilitate the adaptive re-use for appropriate land uses taking into consideration the potential bushfire threat and evacuation issues.

Further investigation and bushfire assessment will be required in the next stage of development when considering:

- proposed revegetation within the site
- proposed building removal or re-location
- tolerance and management options for each of the building users and activities within the site.

Adaptive re-use of existing buildings will need to be considered on a risk and merit-based case by case review, balancing the bushfire risk, vulnerability of occupants, lease and licence controls and the emergency management arrangements that can be utilised within the site and for the intended purpose.

Subject property 
BAL FZ 
BAL 40 
BAL 29 
BAL 19 
BAL 12.5 

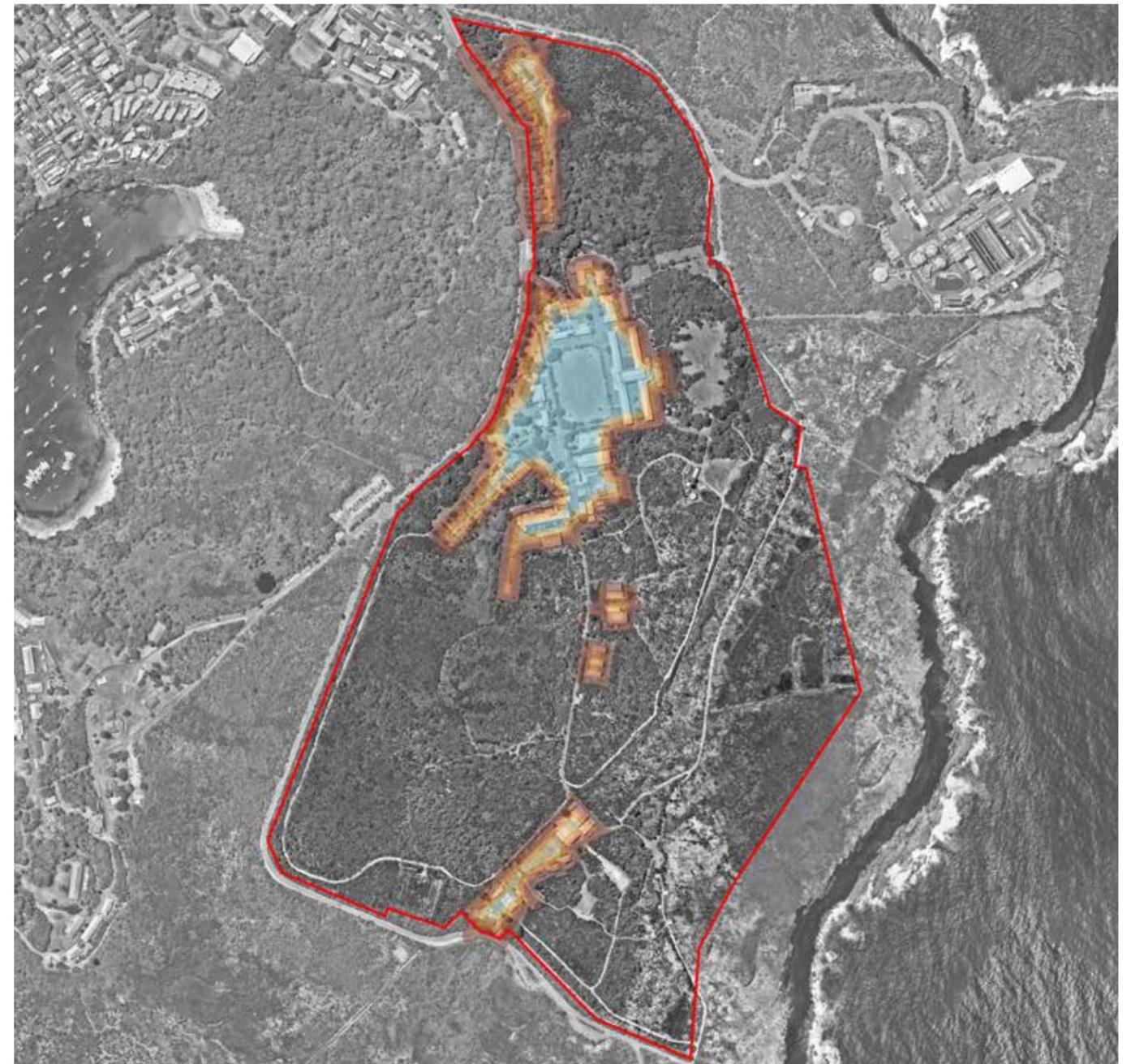


Figure 91. Bushfire attack levels. Source: North Head Bushfire Management Plan

6.3 Topography, character and views

North Head features high cliffs that tower over the water on its eastern and southern edges and then slope down to the west. Most of the site sits at 80 metres above sea level with its highest point sitting at around 115 metres above sea level.

The vistas offered by North Head include the numerous gun emplacements, the lookouts along Scenic Drive and Burragula Lookout and Yiningma Lookout, Memorial Walk and North Head Sanctuary Lawn. However, over time the

dense vegetation growth has developed over the previously used sites and therefore presents a challenge when attempting to interpret the site and the broader cultural landscape of stone walls, pathways, recreational amenities and defence structures.

Three of the high points within the site are H1 and H2 - Central Precinct and H3 - Third Quarantine Cemetery.



Figure 92. Significant view towards South Head. Source: Elena Mehrabani, TURF design Studio



Figure 93. Significant view from car park lookout towards the CBD skyline. Source: Elena Mehrabani, TURF Design Studio

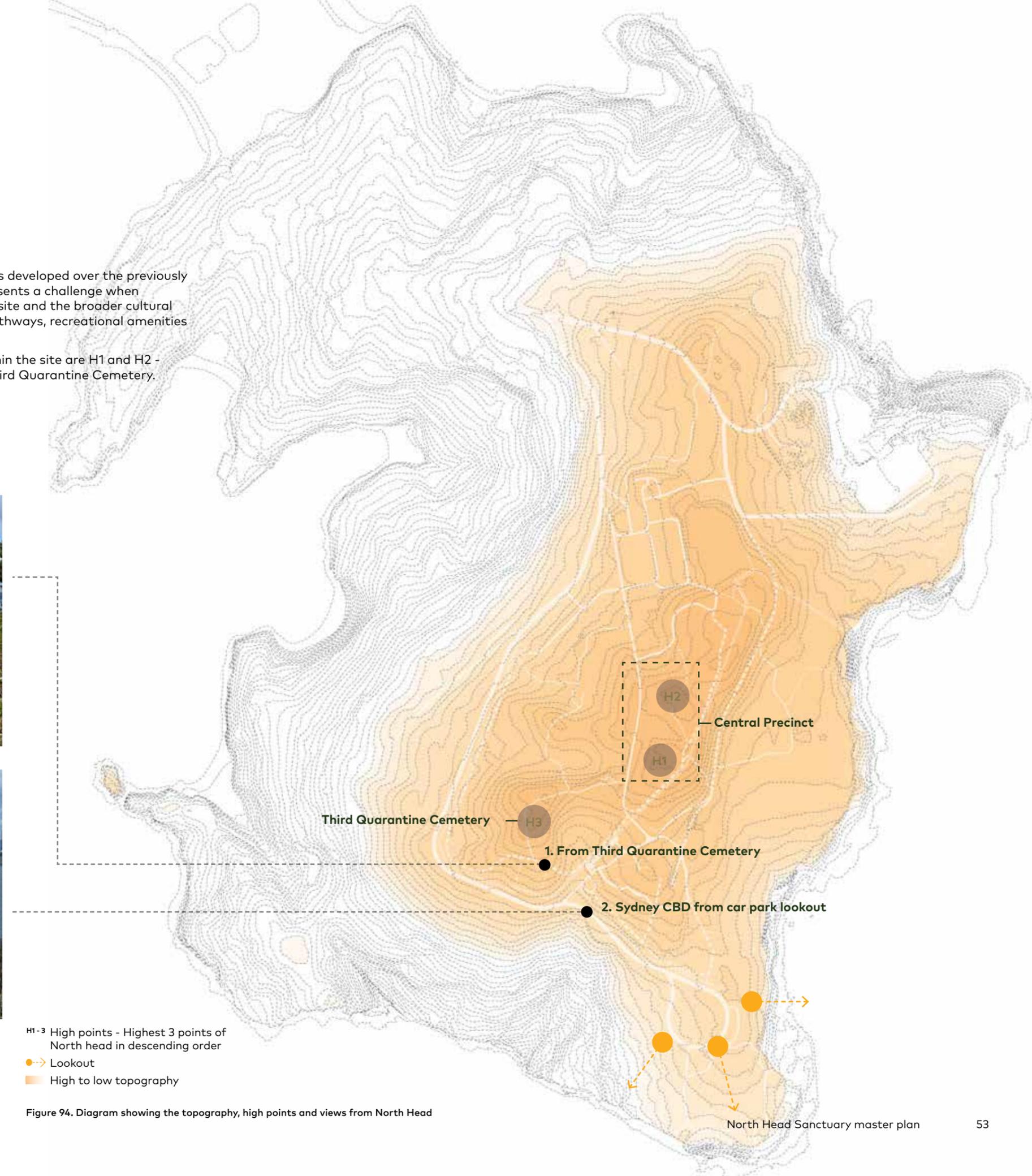


Figure 94. Diagram showing the topography, high points and views from North Head

6.4 Site visitation and uses

This section analyses the existing conditions of use and visitation of the site within the context of future site planning. Users are identified and approximate population numbers are outlined.

General use and users of North Head Sanctuary

Broadly, the existing recreational use of North Head Sanctuary is considerable. The lands are currently used as a recreational destination, for work or in support of existing associated functional use.

The Harbour Trust collects visitation data via (heat sensitive) pedestrian counters and (hydraulic) vehicle counters at entry points to North Head Sanctuary. In overall terms, this visitation data indicates the number of visits to North Head Sanctuary throughout financial year 2019-20 at approximately 396,315 visitors. The total number of visitation for 2022-23 was 426,277 visitors.

There is a high level of return visitation, with most visitors to North Head Sanctuary visiting more than once before (64% in 2019-20). Anecdotally, visitation was suggested to be influenced by seasonal variations. However, the visitation data suggests that seasonal variations are limited with visitation sitting at around 25-30% each quarter.

Visitors

North Head Sanctuary attracts:

Active explorers aged between 34 and 74 years that visit North Head Sanctuary with their partner or family. They are passionate and knowledgeable about North Head Sanctuary, with some having a military background connecting them to the site.

Aspirations of active explorers for the site include:

- retain the site as a sanctuary or refuge
- support face to face interactions
- support cultural tourism, cultural festivals, music recitals
- protect and enhance the natural environment
- adaptively re-use the site for community benefit.

Implications for experiencing the site include:

- easy to get to – accessible via public transport, walking and car
- safe and accessible pathways and cycleways
- accessible information sharing
- immersive and/or educational experiences - First Nations/Country, native plants and animals
- comfortable, weather protected seating and tables

Local families and couples that visit North Head Sanctuary every once in a while for a walk, to meet with friends, or even a specific function or event. These visitors need to be familiarised with the site and be able to access unique, local experiences that give them a reason to keep coming back.

Aspirations of families and couples for the site include:

- unique one of a kind experiences/retreats
- cultural festivals, food and arts markets, evening outdoor cinemas
- protecting and enhancing the natural environment

Implications for experiencing the site include:

- weekend activation and programming which may be paid or free
- a good quality cafe for sit down coffee, breakfasts and lunches
- quality restaurant
- bookable event/function space

Considerations

Below is a summary of the key considerations regarding visitation by key audiences to North Head Sanctuary.

- Improve accessibility and wayfinding – clear and legible wayfinding and pathways throughout North Head Sanctuary could support easier exploration of what the site has to offer for both locals and visitors
- Create a predominantly pedestrian, welcoming, legible, and connected environment within Harbour Trust land, including North Fort Precinct Road
- Leverage partnerships to support activation and attract visitors - recent events at the Parade Ground demonstrate opportunities to work with other partners to deliver activations that offer artistic and cultural experiences to attract new audiences
- Introduce the sanctuary to the next generation - the sanctuary offers opportunity for young children to learn about First Nations culture, military histories and native wildlife. This could be an opportunity to increase awareness of the site and attract future visitation
- Adaptively re-use existing buildings to offer new attractions - finding new uses for the existing built form infrastructure which have unique characteristics could be an opportunity to bring a new dimension to the experience to attract new audiences
- Upgrade amenities to extend current visitation - new bathrooms and parents facilities, comfortable seating, shaded areas and picnic facilities were seen as an opportunity to extend or grow current visitation, particularly for families
- Create an experience that is a 'must do' when visiting Sydney - given the significance of the site and the compelling views, there is an opportunity to put North Head Sanctuary on the map as a must visit destination for domestic and international tourists
- Showcase the work being done by the volunteer team - the volunteer team at North Head Sanctuary are a valuable resource, providing knowledge and information to visitors via the visitor centre and tours. This provides an opportunity for an increased level of engagement in military history, quarantine and environmental education of the public and to attract more volunteers
- Celebrate the environmental significance of the native flora and fauna
- Acknowledge the deep history and significance that First Nations peoples have for the site
- Showcase the military history and significance associated with the defence of Sydney
- Protect flora and fauna from the impact of increased visitation - which brings with it increased risk of damage to native flora and fauna the Sanctuary aims to protect
- Manage on-site uses and activities during fire danger days, which are likely to become more frequent
- Due to site capacity constraints for large scale events, spread large-scale events over several days to manage visitation numbers given site accessibility and parking capacity
- Manage restricted evening access to protect nocturnal fauna, noting this limits the potential of the site for evening uses and activations.

6.4 Site visitation and uses

Increasing visitor numbers

Domestic tourists visiting North Head Sanctuary for the first time are often interstate visitors holidaying or visiting family and friends. While they do not spend as much as a typical interstate visitors, they do enjoy eating out at cafes and restaurants, going to the beach, going sightseeing and spending time with family and friends.

Aspirations of domestic tourists for the site include:

- opportunities for exercise, relaxation and wellness
- events and spaces that enhance the place, surrounds and history
- a chance to experience a more 'hidden' Sydney.

Implications for experiencing the site include:

- easy to get to – accessible via public transport and walking
- clear entry points and wayfinding throughout site
- good quality cafe and/or restaurant
- somewhere to purchase affordable food and drinks to cater to day-trippers.

International first timers are usually tourists visiting Manly from the UK, USA and New Zealand. They are often second time visitors to Australia, perhaps seeking a new experience different from their last visit. Many may be travelling along and/or be backpacking. While visiting, they eat out, and visit beaches and national parks.

Aspirations of international visitors for the site include:

- something unique and different from typical tourist destinations they may have already seen
- an experience that represents 'Australia' or 'Manly' – something to write home about.

Implications for experiencing the site include:

- easy to get to – accessible via public transport and walking
- clear entry points and wayfinding throughout site
- bush tracks and walkways
- audio/self guided tours and signage available in a range of languages and use of highly recognised visual vernacular
- somewhere to purchase affordable food and drinks to cater to day-trippers
- parking for tour coach buses.

Attracting visitors

There is a strong desire for the site to become a place where First Nations peoples can welcome others to engage with culture and learn about Country.

Aspirations of **First Nations visitors** for the site include:

- collaborate on the future
- heal the site and acknowledge past trauma
- restore North Head to a place for cultural activities and business
- invite others onto the site to experience Country – a place for mob to share their story
- ensure accessibility for all.

Implications for experiencing the site include:

- embedded culture through the site, guided by local Knowledge Holders and First Nations consultants
- educational and cultural experiences for non-Aboriginal visitors
- First Nations-owned businesses
- uses that maintain the space as a sanctuary for healing
- safe access to the site at different times of day and night.

Early learning and primary school aged children (under 12 years) have a lot to learn and enjoy in North Head Sanctuary. They may be visiting school children or local families with young kids; some may even have children attending the Montessori school in North Head.

Aspirations of **families with young children** for the site include:

- opportunities to engage First Nations culture, Australian military history and native wildlife and environment
- fun, unique and age appropriate activities
- family friendly performances/entertainment

Implications for experiencing the site include:

- parking for school coach buses
- safe roads with low speeds and safe spaces
- clean and accessible parents facilities
- educational and engaging learning experiences
- weekday and weekend activities
- opportunities to engage with the site for little or no cost.

Many **people working locally** around North Head are still regularly working from home. As predominately educated professionals, they are more likely to have high incomes and may be seeking places away from work to detach and reset. They may be familiar with the existing wellness uses on site, such as the gymnasium. Health, wellbeing, arts and culture are important influences.

Aspirations of **local workers** for the site include:

- opportunities for exercise, relaxation and wellness to disconnect from work
- potentially a outdoor, natural space to work remotely.

Implications for experiencing the site include:

- lighting and safety measures for people walking before and after working hours (which may be in the dark in winter)
- weekday activation and programming
- a good quality cafe for quick, affordable takeaway coffee, breakfasts and lunches
- comfortable seating and tables that are protected from the sun
- free Wi-Fi.

6.5 Existing condition analysis

This section analyses the existing conditions. There is no precedence or order to each of the items listed below.

List of current uses and building conditions within North Head Sanctuary:

- A. Gate House (B6)
- B. Main Barracks Building (B1)
- C. Parade Ground Precinct
- D. Officers' Mess (B44)
- E. Sergeants' Mess (B16)
- F. North Head Fort Workshop Group (NF05-08)
- G. District Gunners Cottage No. 1 (NF09)
- H. District Gunners Cottage No. 2/North Fort Precinct Cafe (NF10)

The key objectives and actions are in part a response to the current conditions identified and are further illustrated within the master plan design response.

- 1. Lack of defined arrival experience
- 2. The Main Barracks Building remains empty and provides significant opportunity for precinct activation with appropriate use
- 3. Degraded pathways, walking tracks and Avenue of Honour
- 4. Fragile Hanging Swamp ecosystem
- 5. Closed off spaces/buildings within the Central Precinct
- 6. Dense vegetation obscuring views
- 7. Interface with gun and observation emplacements
- 8. Underutilised spaces and buildings within North Fort Precinct
- 9. Disturbed endemic ecology
- 10. Access to and within the Third Quarantine Cemetery
- 11. Lack of connectivity to the national park



Figure 95. Aerial showing the site's existing conditions and current uses

6.5 Existing condition analysis

A. Gate House (B6)

The Guard House (also formerly known as Headquarters Building) forms the entry and security facility for the entire School of Artillery site and the parade group of buildings. The building was the administrative headquarters for the school and security control point for all military personnel and visitors upon entry to the complex. It was the headquarters and management centre for the School of Artillery.

It is one of the four buildings arranged on the two axis of the Parade Ground, located on the north-south axis, forming a counterfoil to the Sergeants Mess. The axiality of this relationship was reinforced by complementary form and design, with parapet walls, symmetrical façades and centrally composed archway and two storey 'tower' section.

B. Main Barracks Building (B1)

One of the original buildings constructed on the site, the Main Barracks Building is the largest building in the School of Artillery complex. It is located on the east-west axis of the Parade Ground, on high ground opposite the Officers' Mess. The building provided an imposing backdrop to ceremonial occasions and parades on the Parade Ground, and the balconies and flag stations on the building were important for the review of major ceremonies.

The building was used for multiple functions including accommodation for recruits, dining facilities, ballroom for ceremonial and social functions and lecture rooms.

The Main Barracks Building embodies the relative ranking of military personnel, and the standard of the facilities is a direct consequence of this relationship.

- The main entry lobby, the split staircase, the soldier's dining room and the ballroom comprise interiors of high significance with elements of Art Deco style.
- The building was important to the social life and interaction of a large group of base ranking soldiers and recruits, stationed at or undergoing courses at the Artillery School.

C. Parade Ground

The Parade Ground has historical significance as the venue for ceremonial occasions at the School of Artillery, inspections and military drill activities. The Parade Ground, the associated buildings and bordering landscape are the central aesthetic element of the Artillery School and are important for their creative and design achievement. The entire formal planning and layout of the building complex is based on the axis of the Parade Ground. It has social significance given its role in the life and military protocols of both the North Fort Precinct Barracks and the School of Artillery.

D. Officers' Mess (B44)

The Officers' Mess is one of the four core buildings arranged on the two axis of the Parade Ground, located on the east-west axis, on lower ground opposite the Main Barracks Building (Building 1).

The Officers' Mess is a highly significant building in the former school precinct. It provided facilities for dining, entertainment and formal celebrations for the senior ranks of staff at the school or attending courses. Accordingly, the building is the most sophisticated and well appointed of the three mess buildings. The major function rooms comprise interior spaces of high significance, featuring a variety of quality Art Deco finishes, joinery, plasterwork and fittings.

E. Sergeants' Mess (B16)

This Art Deco building is strategically located within the planning of the Parade Ground, forming a counterfoil to the Gate House at the opposite end of the north-south axis. This axiality has now been largely lost since the building was replanned in the 1950s resulting in changes to the formerly symmetrical plan featuring the projecting dining room and parapetted elevations. The Sergeants' Mess is nevertheless a major component of the composition of the core buildings and the Parade Ground.

The formal interiors of the Sergeants' Mess, the dining room and the ante room are significant both for the quality and restrained ambience of the spaces and the accomplished design in the finishes and fittings.

F. North Head Fort Workshop Group

The workshop group consisted of four buildings. They provided the service and repair back-up infrastructure for the gun battery.

- Workshop Building (NF05) – the Fort Workshop Building is single storey and consists of three parallel sections. The building's historical significance is in its role in supporting the operations of the gun battery. The workshop building would have provided maintenance and repair services for the equipment used in the battery.
- Skidding and Cordage Store Building (NF06) – the current Visitors Centre is divided into two rooms which reflects the organisation of the stored items into skidding and cordage that were used to support the maintenance and operation the gun barrels and other gun parts.
- Paint and Oil Store Building (NF07) – the flammable liquids store is a single storey building divided into two rooms.
- Latrine Building (NF08) – the building's division into three rooms is meant to align with the three classes of male servicemen for which the building was designed: officers, non-commissioned officers and other ranks.

G. District Gunners Cottage No. 1 (NF09)

The District Gunners Quarters No. 1 is a single storey building comprising an entry hall, two offices (former bedrooms 1 & 2), main office (former sitting room), a general meeting room (former dining room), a kitchen, enclosed verandah, bathroom and laundry.

H. District Gunners Cottage No. 2/North Fort Precinct Cafe (NF10)

The North Fort Precinct Cafe (original District Gunners Quarters No. 2) is a single storey building comprising an office (former bedroom 1), a toilet (former bathroom) and a

dining area (the former hall, former original dining room and former enclosed verandah combined by the removal of the dividing brick walls). The former sitting room and bedroom 2 have been combined to create a large serving area and the kitchen has been opened into this serving area. The laundry remains as a separate room accessible from the outside.

Refer to *Robertson and Hindmarsh, North Fort Precinct, North Head: Conservation Management Plan (2010)* on all existing structures and built form within North Fort Precinct such as observation posts, gun emplacements and Third Quarantine Cemetery.



Figure 96. The Gate House



Figure 97. Main Barracks Building (B1)



Figure 98. Parade Ground and the Officers Mess (B44)



Figure 99. North Head Fort Workshop Group (NF05 Workshop)



Figure 100. District Gunners Cottage No. 1 (NF09)



Figure 101. District Gunners Cottage No. 2/North Fort Precinct Cafe (NF10)

6.5 Existing condition analysis



Figure 102. Entry gate



Figure 103. Barracks Precinct



Figure 104. Avenue of Honour

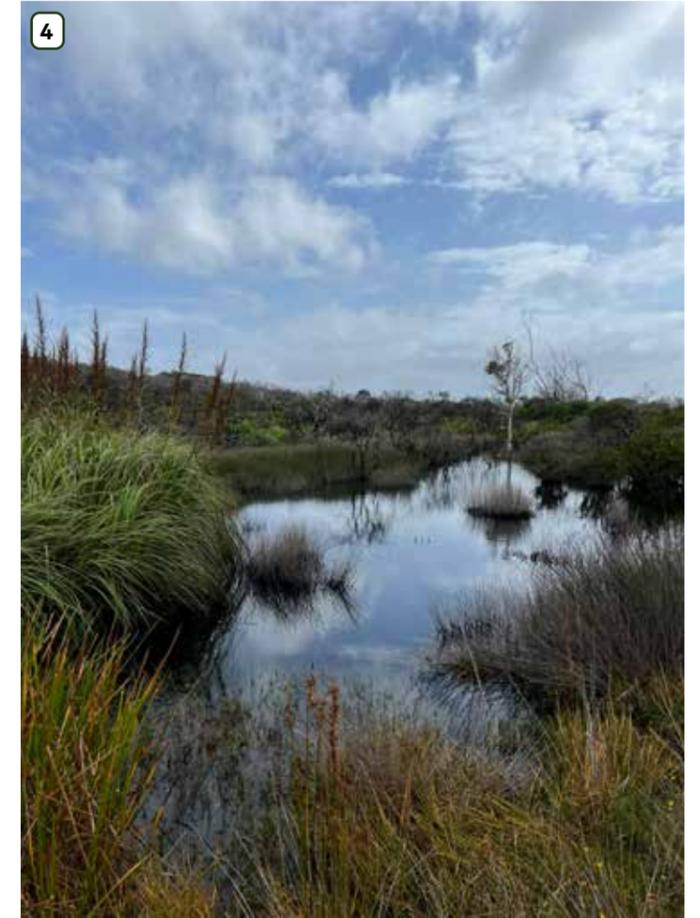


Figure 108. Hanging Swamp



Figure 105. North Fort Precinct entry



Figure 106. Ballroom



Figure 107. Current cobblestone construction

1. Lack of defined arrival experience

The arrival to North Head is defined by two gates, one on Scenic Drive and the other is the entrance to the North Fort Precinct. These entry points do not currently provide a defined arrival experience and can result in a sense of disorientation when navigating through the site.

2. Main Barracks Building (Building 1)

The Main Barracks Building provides significant opportunity for precinct activation with appropriate use.

3. Degraded pathways, walking tracks and Avenue of Honour

The Avenue of Honour is a physical remnant of a unique historical moment in the history of North Head and could be enhanced through signage and wayfinding.

Assembled by volunteers with a unique cobblestone construction, it was built in remembrance of fallen soldiers who were locals of the area. This walking track also provided access to the previously inaccessible site.

4. Fragile Hanging Swamp ecosystem

Through the history of the site, much of the natural hydrology has been altered. This has resulted in the development of the current Hanging Swamp. Due to its ecological significance, it must be maintained and protected.

6.5 Existing condition analysis



Figure 109. Restrictive signage and fencing



Figure 110. Restrictive signage and fencing

5. Closed off spaces/buildings within the Central Precinct

The Central Precinct presents an opportunity to provide valuable space for the revitalisation efforts in North Head. The current conditions of fencing and prohibitive signage does not engage the public which gives the perception it is restrictive access.



Figure 111. Dense vegetation obscuring view from sheds

6. Dense vegetation obscuring views

The Central Precinct is well positioned to be a lookout point that provides views out to the ocean. However, dense vegetation currently obscures this view.



Figure 112. Gun Observation Post



Figure 113. Gun Emplacement

7. Interface with gun and observation emplacements

Throughout North Head Sanctuary there are numerous military installations. Most notable are the gun emplacements that are oriented eastward towards the ocean. The gun emplacements provide potential lookout points and are focal points within the landscape. These sites do not currently provide good lookout points as the views out from these gun emplacements are obstructed. Consideration may be given to limited vegetation management however significant vegetation removal is not considered warranted.



Figure 114. North Fort Precinct gate



Figure 115. North Fort Precinct sandstone perimeter wall

8. Underutilised spaces and buildings within North Fort Precinct

North Fort Precinct is a popular point for visitors to take in the expansive views of the Sydney CBD skyline and the harbour. This area also provides the most direct access to other popular spots in North Head Sanctuary, such as the numerous gun emplacements, tunnels and walking tracks. The current condition of the spaces and buildings are underutilised.

6.5 Existing condition analysis



Figure 116. Open space from historical clearing

9. Disturbed endemic ecology

North Head Sanctuary is a vital landscape for endangered flora and fauna. The site's evolution has led to the introduction of invasive species, vegetation fragmentation caused by clearing for development and the construction of numerous walking track networks and public access into sensitive ecological areas.



Figure 117. View from Third Quarantine Cemetery



Figure 118. Overgrown vegetation within cemetery

10. Access to and within the Third Quarantine Cemetery

North Head features several cemeteries of historical significance. Of these, the Third Quarantine Cemetery sits within the site and is positioned on one of the highest points within North Head. Currently, access through this site is not easily facilitated due to a lack of defined circulation paths. Improvement to pathways may be considered however this must be undertaken sensitively to protect the Eastern Suburbs banksia scrub population community.

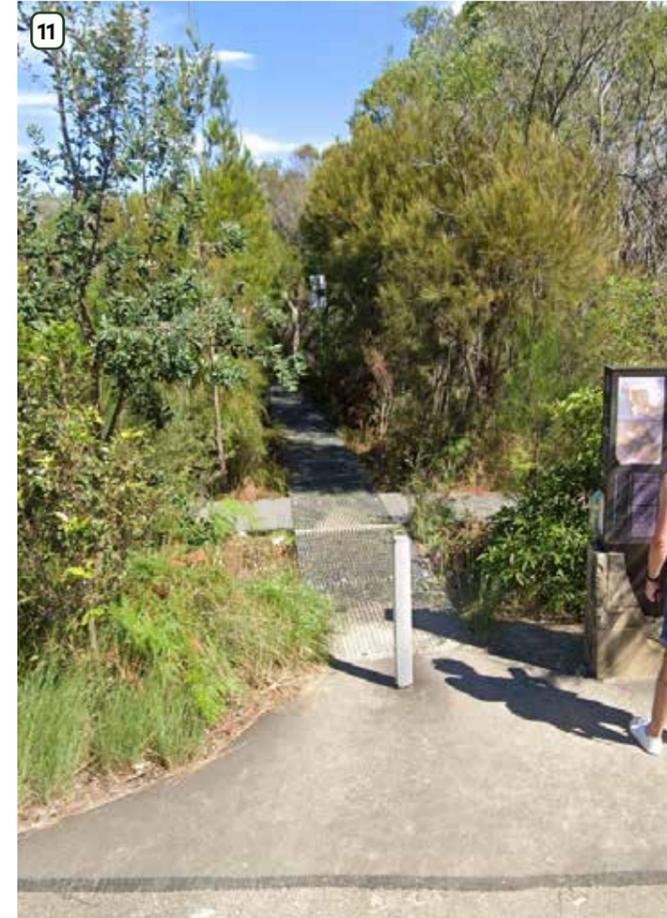


Figure 119. Entry to North head walking track from Sydney Harbour National Park

11. Lack of connectivity to national park

Much of the area of the North Head landscape is part of the Sydney Harbour National Park. There is opportunity for the Harbour Trust area of North Head to connect seamlessly to the national park land and vice versa.

6.6 Existing transport network considerations

A review of available transport and access reports and analysis of precinct car parking data identified the existing transport network constraints within North Head Sanctuary and surrounding areas.

The conditions and constraints outlined in this section will guide sustainable improvements for movement to, from and within North Head Sanctuary.

North Head Scenic Drive provides the main roadway into and out of the site, providing a connection through to Darley Road. The road provides for traffic flow in both directions with a centre-line to delineate traffic movements.

North Head Scenic Drive provides access to both North Fort Precinct and the Barracks Precinct via Darley Road. The North Head Scenic Drive gate is open from dusk to dawn. Bluefish Drive provides an alternate access point to the Barracks Precinct via Darley Road into the Gunner Road car parking area.

Vehicle access and entry conditions to Barracks Precinct

Pedestrian access to the Barracks Precinct via North Head Scenic Drive is a vehicle-dominated environment lacking in connectivity.

The southernmost access point is a paved roadway without any formal pedestrian facility, with the existing footpath terminating at the vehicle driveway with no supporting pram or kerb ramp. To the north of this access point, pedestrians are forced to walk along a narrow strip of landscape towards the second entry point to the precinct.

Vehicle access and entry conditions to North Fort Precinct

The existing access point to North Fort Precinct is approximately four metres in width which does not provide the ability for two cars to pass one another at the same time. While this has the benefit of reducing vehicle speeds it can also create points of conflict when vehicles are attempting to enter and exit at the same time. In addition to this challenge, this is the access point to the precinct for pedestrians.

There is no visual indicator at the North Fort Precinct access point that informs drivers they are entering a different road and speed environment from the external road network. The entry road has the aesthetic of a car dominated environment with asphalt paving and no change in pavement material and colour. The style of pavement provided and road surface

is consistent with the external roadways, giving no indication to drivers that they are entering an environment with high levels of pedestrian activity.

This compares to other parkland environments (e.g. Centennial Parklands) where 'gateway' treatments are provided at the key entry points to provide visual cues to drivers to slow down and look out for other road users.

Internal road network

North Head and the broader Sydney Harbour National Park is serviced by an existing road network which includes both sealed and unsealed roads – although unsealed roads are only open to the general public for walking and cycling. The roads are relatively narrow, with some sections only providing one-way traffic flow.

North Fort Precinct Road is an internal roadway through the site, connecting the Barracks Precinct and North Fort Precinct, however it is not publicly accessible south of the Barracks Precinct, with only authorised vehicles permitted to use this internal roadway. While North Fort Precinct Road is not publicly accessible for motor vehicles, it remains available for use by people walking and cycling.

Pedestrian movement

Currently the majority of pedestrians walking up from Manly and travelling to North Fort Precinct/Burragula Lookout and Yiningma Lookout make the conscious decision to continue along North Head Scenic Drive, rather than travel through the North Head Sanctuary. The key decision point is at the entry to the Barracks Precinct which is not inviting for pedestrians.

Internal pedestrian circulation

North Fort Precinct Road offers an important connection between the Barracks Precinct and North Fort Precinct to the south. North Fort Precinct Road is vehicle dominated, with car parking scattered around the area with no pedestrian facilities. Similarly, the roadway serving the Gate House and Parade Ground provides no sense of pedestrian priority.

Visitor travel behaviours

Surveys undertaken by the Harbour Trust in 2019 provide insights into how visitors travel to the North Head Sanctuary. Nearly half of visitors arrive by walking from the surrounding area, taking into consideration those who arrive from the ferry as well as walking from the surrounding area. Car travel accounts for approximately 40% of visitor travel to the area, while a small proportion of visitors arrive by bus or bicycle.

Staff and tenant travel behaviours

A review of recent journey to work Census data was undertaken to understand how people travel to the area surrounding the site. The area considered as part of the analysis takes in the former shared walkway for pedestrians and bicycles site as well as surrounding areas up to North Head. The results of the analysis indicates the majority of staff currently drive to the site due to the availability of on-site parking and the limited nature of public transport services.



Figure 120. Existing vehicle and pedestrian access to Barracks Precinct



Figure 122. North Fort Precinct Road in the Barracks Precinct



Figure 121. Existing vehicle access into North Fort Precinct



Figure 123. Pedestrians walking on North Head Scenic Drive

6.6 Existing transport network considerations

Public transport

North Head is serviced by a single bus route, route 161, which operates as a loop between Manly Wharf and North Fort Precinct. Operating hours during weekdays are every 20 minutes at peak and every hour at off-peak. On weekends the service frequency is every hour. The low service frequencies of up to one hour, particularly on weekends where visitation to North Head is generally highest, limits the ability for users to utilise public transport services and increases reliance on private vehicles to access the precinct.

Walking and cycling infrastructure

Pedestrians generally share the internal road network with vehicles, with limited formal pedestrian pathways. Some infrastructure is available around North Fort Precinct and the Barracks Precinct but this is generally limited to one side of the roadway only. For much of North Head Scenic Drive (which is managed by NPWS) no footpaths are available which results in pedestrians walking along the roadway.

Cycling is a popular mode of travel to North Head Sanctuary however limited infrastructure is provided. No bike lanes exist on North Head Scenic Drive, with infrastructure limited to a less than five bicycle parking rails near the entry to North Fort Precinct on land owned by NPWS. No bicycle parking facilities are currently available in the vicinity of the Barracks Precinct.

North Head Scenic Drive is a popular recreational cycle route and is identified as a 'Tier 2 – District Route' in the Northern Beaches Council bicycle map. This route provides connectivity to Darley Road, the Manly town centre as well as East Esplanade.

Traffic volumes

Traffic counts were undertaken in early December 2022 to understand the existing level of traffic movements in different areas within North Head.

A review of previous traffic count data collected in 2013 indicates that traffic flows on North Head Scenic Drive have not changed significantly over the past decade. This previous traffic data indicated North Head Scenic Drive (south of the turnoff to Q Station) carried 1,100 vehicles per weekday and 1,880 per weekend day in 2013, with this figure now sitting at 1,170 and 1,810 vehicles per day respectively.

While roads within the Sydney Harbour National Park have no formal classification in respect to a state or local government road hierarchy plan, an assessment has been undertaken based on Transport for NSW established guidelines for the functional classification of roadways. This functional classification is based on the role roads perform and the volume of traffic they should carry, with guidelines based on the following criteria:

Arterial road typically a state road which carries more than 15,000 vehicles per day (over 1,500 veh/h) and performs the role of major inter-regional links

Sub-arterial road typically regional road defined as secondary inter-regional links which carry volumes between 5,000 and 20,000 vehicles per day (500 veh/h to 2,000 veh/h)

Collector road provides links between local areas and regional roads and typically carries between 2,000 and 10,000 vehicles per day (200 - 1,000 veh/h)

Local road provide access to individual allotments and carry low volumes, desirably less than 2,000 vehicles per day (200 veh/h) with a recommended maximum of 300 veh/h proceeding at a speed of about 40 km/h.

On this basis it is concluded that North Head Scenic Drive and North Fort Precinct Road are consistent with a road under a 'local' classification with traffic volumes well below the desirable 2,000 vehicles per day. Observed traffic flows on Bluefish Drive are lower than those on North Head Scenic Drive and this would also fall well within the bounds of a 'local' road function.

Car parking

In conjunction with the traffic counts undertaken in December 2022, parking occupancy surveys were undertaken on a Sunday between 7am and 7pm. Weather conditions were fine and sunny at the time of the survey, with no special events occurring. Further capacity modelling and investigations are required prior to civil and road design.

The findings show all car parking areas had spare capacity throughout the day – particularly those serving the Barracks Precinct. The car parks close to North Fort Precinct were observed to be busier however were still recorded to contain approximately 40% spare capacity at the busiest time of the day.

These survey results indicate that existing parking facilities may be utilised to accommodate potential growth in visitation to North Head and/or occupation of existing building by tenants rather than relying upon new or upgraded parking facilities.

Car parking within the Barracks Precinct and North Fort Precinct is free while parking on Scenic Drive (controlled by NPWS) is subject to parking fees. This inconsistency results in many visitors parking within North Fort Precinct and using other parts of North Head – occupying parking spaces for visitors wanting to experience North Fort Precinct itself.

Key challenges

- improve pedestrian access to both North Fort Precinct and the Barracks Precinct with a threshold/gateway treatment to be introduced to slow vehicle speeds and provide for pedestrian priority at the primary access point
- provide clear direction that the primary pedestrian route through to North Fort Precinct/Burrigula Lookout and Yiningma Lookout is not along North Head Scenic Drive but via the Barracks Precinct, to encourage pedestrians to North Fort Precinct, Burrigula Lookout and Yiningma Lookout through the Barracks Precinct along North Fort Precinct Road.
- reduce vehicle dominance on North Fort Precinct Road, the main shared walkway for pedestrians and bicycles linking the two precincts, which is scattered with car parking and no pedestrian facilities

- consider a 20 km/h speed limit within Harbour Trust land
- improve pedestrian and cycling linkages between surrounding areas, access points, car parks and key buildings
- utilise North Head Sanctuary as a north-south connection to allow safety pedestrian movement rather than North Head Scenic Drive, which has limited footpaths
- improve infrastructure for cycling to address the lack of bike lanes along North Head Scenic Drive and provide bike parking at Barracks Precinct and more parking rails at North Fort Precinct
- provide designated shared walkway for cyclists to reduce impact on the surrounding ecology
- at North Fort Precinct and the Barracks Precinct, address the current requirement for pedestrians to travel well past their intended destination and cross North Head Scenic Drive to access the bus stop.



Figure 124. Existing 161 bus service route

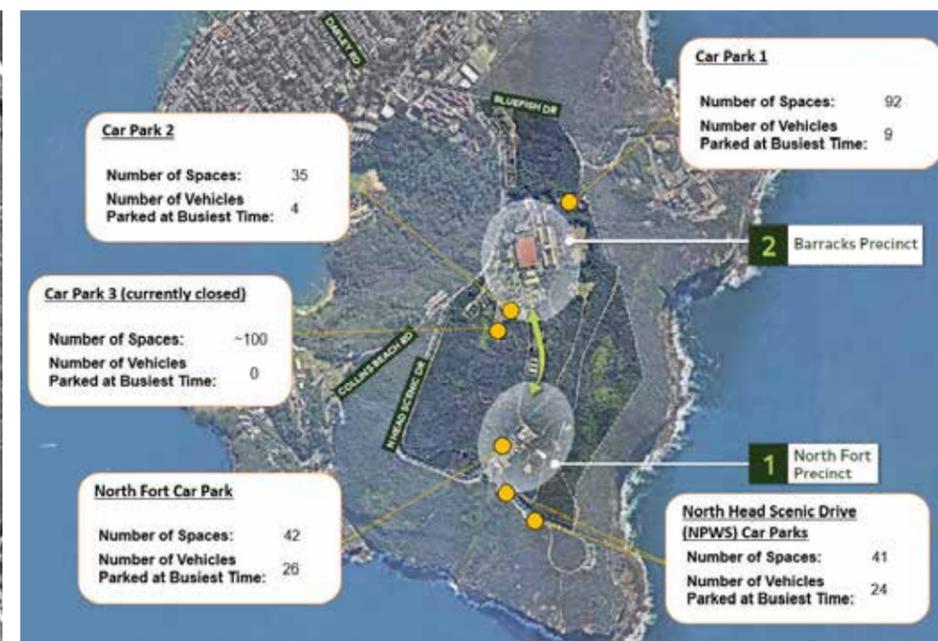


Figure 125. Results of car parking surveys

6.7 Site analysis and key considerations

The analysis outlines a series of opportunities and constraints that have been used to identify and establish a set of key considerations for the master plan. These items have been categorised by arrival and movement, environment and uses, and users.

Arrival and movement

- Improve signage and wayfinding at the northern point of the site, throughout the site, and pedestrian loop path to allow movement around and through the site.
- Consolidate the vehicle and pedestrian entry to the site allowing a separation for different users.
- Create an address to the north and south of the site to welcome and orient visitors.
- Create a pedestrian focused shared walkway for pedestrians and bicycles to give pedestrians a safe and legible space to move north-south and throughout the site.
- Reconfigure and use different materials for the vehicle road and car park hardscape.
- Use permeable paving and landscaping so these areas can be multifunctional.

Environment

- With Scenic Drive being the single access road into and out of the site, consider the uses and occupants in regard to bushfire safety.
- Consider of optimal views throughout the site.
- Protect ecology in and around the site by limiting additional movement throughout the sanctuary.
- Identify areas for environmental regeneration.

Users and uses

- Celebrate the existing heritage assets on the site by adaptively re-using existing structures and stories.
- Manage heritage constraints on existing buildings that inhibit building upgrades to reduce bushfire risk and exposure.
- Selectively remove and relocate built form to enhance the use of the site.

- | | |
|---|--|
|  Adaptive re-use – Barracks Precinct |  Main shared walkway for pedestrians and bicycles |
|  Central Precinct |  Gateway |
|  North Fort Precinct |  Views |
|  Residential area |  Manly |
|  Removed building |  Existing parking |
|  Site boundary | |



Figure 126. Key considerations

7. References



Figure 127. Walking track at North Head Sanctuary. Source: Harbour Trust

7.1 Key reference documents

- Harbour Trust, North Head Sanctuary: Draft Concept, (2021). <https://www.harbourtrust.gov.au/media/3965/north-head-sanctuary-draft-concept-may-2021.pdf>
- Jakelin Troy, The Sydney Language, (Canberra: Aboriginal Studies Press, 2021).
- Dawbin Architects, North Head Former School of Artillery (2008).
- Robertson and Hindmarsh, North Fort, North Head: Conservation Management Plan, (2010)
- "Eastern Suburbs Banksia Scrub in the Sydney Basin Bioregion – profile," Office of Environment & Heritage, last updated 23 March 2022, <https://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10257>
- Eco logical Australia, North Head Sanctuary, Manly: Ecological Management Review & Recommendations, (2023).
- Sydney Harbour Federation Trust Management Plan – North Head Sanctuary (2011). <https://www.harbourtrust.gov.au/media/1379/north-head-sanctuary-management-plan.pdf>
- Narla Environmental, Ecological Constraints Assessment – North Head Sanctuary Master Plan. (2023).
- Brickfields, North Head Sanctuary Experience Strategy, (2023).
- JMT Consulting, North Head Sanctuary Master Plan Transport Strategy, (2023).
- Arcadis, North Head Sanctuary Utilities Advice Report, (2023).
- North Head Sanctuary - Planning for Bushfire Protection - strategic land use planning investigation, BlackAsh (2022).
- Bushfire Emergency Management and Evacuation Plan, BlackAsh (2021).
- North Fort North Head Conservation Management Plan, Robertson & Hindmarsh Pty Ltd, January 2010.
- North Head Former School of Artillery Conservation Management Plan Volume 1 : The Core Buildings, Dawbin Architects Pty Ltd Architects and Heritage Consultants, Final Draft 6 June 2008
- North Head Former School of Artillery Conservation Management Plan Volume 2 : The Outer Areas, Dawbin Architects Pty Ltd Architects and Heritage Consultants, November 2009
- North Head Sanctuary Draft Concept, Community Consultation Outcomes Report, KJA, July 2021
- Statement of Heritage Impact, Proposed actions at North Head Sanctuary, Manly, Heritage 21, February 2018.
- 'Night at the Barracks' The Barracks Precinct North Head, Heritage Impact Statement, Purcell, June 2022.
- North Head Adaptive Re-use Transport Management Plan, GTA (2013).
- North Head Sanctuary Consultation Report, Hello Lamp Post Ltd
- Heritage Asset Audit - Cockatoo Island and North Head Sanctuary, Purcell, 06 January 2021.
- SHFT Comprehensive Plan, 2003.
- Arts NSW, Communities NSW. (2010). Aboriginal Arts and Cultural Strategy. Retrieved from <https://www.create.nsw.gov.au/news-and-publications/publications/aboriginal-arts-and-cultural-strategy/>
- City of Sydney. (2014). Creative City Cultural Policy and Action Plan - 2014-24. Retrieved from <https://www.cityofsydney.nsw.gov.au/strategies-action-plans/creative-city-cultural-policy-action-plan>
- City of Sydney. (2014). Creative City Cultural Policy and Action Plan - 2014-24. Retrieved from <https://www.cityofsydney.nsw.gov.au/strategies-action-plans/creative-city-cultural-policy-action-plan>
- City of Sydney. (2020). Making Space for Culture in Sydney - Cultural Infrastructure Study. Retrieved from <https://www.cityofsydney.nsw.gov.au/surveys-case-studies-reports/understanding-the-cultural-sector-research-and-studies>
- Create NSW. (2015). Create in NSW: NSW Arts and Cultural Policy Framework. Retrieved from <https://www.create.nsw.gov.au/arts-in-nsw/create-in-nsw/the-nsw-arts-and-cultural-policy-framework-create-in-nsw/>
- Create NSW. (2019). Cultural Infrastructure Plan. Retrieved from <https://www.create.nsw.gov.au/create-infrastructure/create-infrastructure/>
- Department of Climate Change, Energy, the Environment and Water. (2020). Independent review of the Sydney Harbour Federation Trust. Retrieved from <https://www.dcceew.gov.au/parks-heritage/heritage/publications/shft-independent-review>
- Destination NSW. (2017). Aboriginal Tourism Action Plan 2017-2020. Retrieved from <https://www.destinationnsw.com.au/about-us/strategies-and-plans/aboriginal-tourism-action-plan#:~:text=The%20new%20Aboriginal%20Tourism%20Action,2013%2D2016%2C%20to%20develop%20a>
- Destination NSW. (2019). State-wide Destination Management Plan. Retrieved from <https://www.destinationnsw.com.au/about-us/strategies-and-plans/statewide-destination-management-plan>
- Destination NSW. (2022). Visitor Economy Strategy 2030. Retrieved from <https://www.destinationnsw.com.au/about-us/strategies-and-plans/visitor-economy-strategy-2030>
- Government Architect NSW. (2020). Better Placed, Connecting to Country Framework. Retrieved from <https://www.governmentarchitect.nsw.gov.au/projects/designing-with-country>
- NSW Biodiversity and Conservation Act, No 63. (2016). Retrieved from <https://legislation.nsw.gov.au/view/html/inforce/current/act-2016-063>
- NSW Heritage Act (1977) Review. (2021). Retrieved from <https://legislation.nsw.gov.au/view/html/inforce/current/act-1977-136#statusinformation>
- NSW Major Events Act (2009) - Amendment Bill. (2022). Retrieved from <https://legislation.nsw.gov.au/view/html/inforce/current/act-2009-073#statusinformation>
- North Sydney Council, North Sydney Community Strategic Plan to 2040. (n.d.). North Sydney Community Strategic Plan to 2040. Retrieved from https://www.northsydney.nsw.gov.au/Council_Meetings/Policies_Plans/Integrated_Planning_Reporting/Community_Strategic_Plan
- Northern Beaches Council. (2019). Arts and Creativity Strategy – Connected Through Creativity 2029. Retrieved from <https://www.northernbeaches.nsw.gov.au/council/publications/policies/arts-and-culture-strategies>
- NSW Department of Planning and Environment - NSW National Parks & Wildlife Services. (2012). Sydney Harbour National Park Plan of Management. Retrieved from <https://www.environment.nsw.gov.au/research-and-publications/publications-search/sydney-harbour-national-park-plan-of-management>
- NSW Department of Planning and Environment - NSW National Parks & Wildlife Services. (2018). Sydney Harbour National Park, Middle Head and Georges Head Master Plan. Retrieved from <https://www.environment.nsw.gov.au/topics/parks-reserves-and-protected-areas/park-management/community-engagement/walking-tracks-and-trails-in-national-parks/sydney-harbour-scenic-walk/middle-head-master-plan>
- NSW Department of Planning and Environment. (2020). Greater Outdoors, Sydney Study. Retrieved from <https://www.planning.nsw.gov.au/Policy-and-Legislation/Open-space-and-parklands/The-Greater-Sydney-Outdoors-Study>
- NSW Department of Planning and Environment. (2022). NSW Guide to Activation, Public Spaces. Retrieved from <https://www.transport.nsw.gov.au/industry/cities-and-active-transport/cities-revitalisation-and-place/great-public-spaces-toolkit-4>
- NSW Department of Planning, Industry and Environment. (2021). NSW Public Spaces Charter, Ten principles for public space in NSW. Retrieved from <https://www.dpie.nsw.gov.au/premiers-priorities/great-public-spaces/nsw-public-spaces-charter-sign-up>
- NSW Protection of the Environment Operations Act 1997. (n.d.). Retrieved from <https://legislation.nsw.gov.au/view/html/inforce/current/act-1997-156#statusinformation>
- Place Design Group for Committee for Sydney. (2019). Sydney Harbour, our greatest asset. Retrieved from <https://sydney.org.au/policy-library/>
- Sydney Harbour Federation Trust. (2001). Sydney Harbour Federation Trust Act 2001 (Cth). Retrieved from <https://www.legislation.gov.au/Details/C2021A00049>
- Sydney Harbour Federation Trust. (2003). Comprehensive Plan (The Plan). Retrieved from <https://www.harbourtrust.gov.au/en/corporate/planning/>
- Sydney Harbour Federation Trust. (2020, August). Harbour Trust announces approach to Independent review recommendations. Retrieved from <https://www.harbourtrust.gov.au/en/our-news/harbour-trust-independent-review-recommendations-statement-of-intent/>
- Sydney Harbour Federation Trust. (2021). North Head Sanctuary Draft Concept Consultation Overview. Retrieved from <https://www.harbourtrust.gov.au/media/4338/north-head-sanctuary-consultation-overview-october-2021.pdf>
- Sydney Harbour Federation Trust. (2022, March). Statement of Expectations. Retrieved from <https://www.harbourtrust.gov.au/en/corporate/publications/>
- Sydney Harbour Federation Trust Amendment Bill. (2021). Retrieved from https://www.aph.gov.au/Parliamentary_Business/Bills_Legislation/bd/bd2021a/21bd064#:~:text=The%20purpose%20of%20the%20Sydney,of%20the%20Harbour%20Trust%20Board
- Sydney Harbour Federation Trust Annual Report, 2020-2021. (2020). Retrieved from <https://www.harbourtrust.gov.au/en/corporate/publications/>
- Sydney Harbour Federation Trust Corporate Plan 2022-2026. (2021). Retrieved from <https://www.harbourtrust.gov.au/media/oOplOito/ht-corporate-plan-2022-final.pdf>
- Sydney Harbour Federation Trust. (2022). Visitor Insights Report 2021-22 (Q1 and Q2)
- North Head Sanctuary Draft Master Plan – Consultation Outcomes Report, December 2023. Retrieved from https://www.harbourtrust.gov.au/media/wOvhox42/20231207_north-head-draft-master-plan_consultation-outcomes-report_final.pdf

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7.3 Terminology and abbreviations

Term	Abbreviation	Definition / outline of term with respect to this project
Term	Term is abbreviated or not to be abbreviated	Generally, throughout this document there is firstly a generic definition of the term followed by a project specific statement. The project specific statement typically starts with 'In this case' referring to this Harbour Trust project at North Head.
Acknowledgement of Country		An 'Acknowledgement of Country' is a way where any person can show awareness and respect for First Nations culture and heritage and the ongoing relationship the traditional custodians have with their land. Both First Nations and non-First Nations peoples can perform 'Acknowledgement of Country'. It is a demonstration of respect dedicated to the traditional custodians of the land (or sea) where the event, meeting, or activity takes place. It can be formal or informal.
Action		An action is defined broadly in the EPBC Act and includes: a project, a development, an undertaking, an activity or a series of activities, or an alteration of any of these things. A lawful continuation of an existing use is not an action. In this case any proposal for development on North Head is termed under EPBC as an action.
Asset activation		An active asset is an asset that is used by a business in its daily or routine business operations to generate benefit either financial or social. Active assets can be tangible, such as buildings or equipment, or intangible, such as cultural heritage values. In this case the asset is the lands, the buildings and the inherent cultural heritage values of place. Additionally, the term activation refers to use and function of the asset including 'what the buildings and land are used for,' how the use generates benefit (either financial or social) how the uses are sustainable and critically how the values are protected, conserved and interpreted.
Budget		The PCG approved total funded sum that is to be applied to the project. Revision of this sum is a formal action by PCG under governance
Budget breakdown		The approved breakdown of total funded sum applied to the project that is revised and approved by PCG at gates under governance. This is not to be confused with the cost plans. The budget breakdown is an internal Harbour Trust generated document.
Main Barracks Building	B1	One of the original buildings constructed on the site, the Other Ranks' Mess is the largest building in the School of Artillery complex. It is located on the east-west axis of the Parade Ground, on high ground opposite the Officers' Mess.
Concept plan	CP	An approved document that once complete provides, describes, illustrates the long-term view of an overall development scope. In this case the concept plan will develop a framework for future development that examines and describes key elements of planning, land use, asset use and activation, heritage conservation of both landform and built asset feature
Concept plan consultant	CPC	The engaged concept planning consultant for this project is COX Architecture
Concept plan brief of services		The brief of services issued by the Harbour Trust to the consultant for development of the concept plan deliverables
Conservation management plan	CMP	Conservation Management Plan – North Head – A detailed analysis of the place's heritage values that guides the preservation and management of North Head Sanctuary; Dawbin Architects, November (2008) and Robertson & Hindmarsh Pty Ltd, January 2010
Connecting with Country Draft Framework		Developed by the NSW Government Architect - Connecting with Country Draft Framework is a framework for developing connections with Country that can inform the planning, design and delivery of built environment projects in NSW.

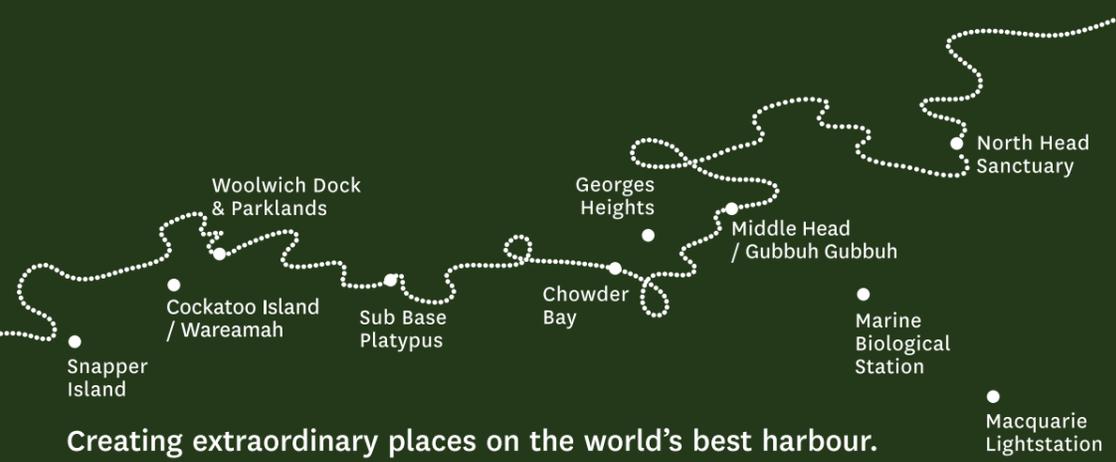
Term	Abbreviation	Definition / outline of term with respect to this project
Cost plan		A report document that is developed by the Harbour Trust and /or a cost planning consultant to analyse and describe cost elements of a capital works project. A cost plan is typically structured around total development cost that breaks down all costs inclusive of internal resource cost, consulting costs, forecast capital works costs and contingent allocations
Cost planner		A consultant quantity survey or that assesses proposed development in capital terms based on referenced rates and cost for similar projects
Colonial heritage values		The term 'heritage values' refers to the meanings and values that individuals or groups of people bestow on heritage (including collections, buildings, archaeological sites, landscapes and intangible expressions of culture, such as traditions). In this case the colonial heritage values are derived from the actions, events and material remnant of the colonial era specific to North Head
Community working group		The group set up by the Harbour Trust to attend workshops and provide input to project development prior to broader formal public consultation.
Country		Government Architect NSW provides this definition: 'Country' (capital C) has a different meaning to the western understanding of the word 'country' (small c). <i>In the Aboriginal sense of the word, Country relates to the nation or cultural group and land that they/we belong to, yearn for, find healing from and will return to. However, Country means much more than land, it is their/ our place of origin in cultural, spiritual and literal terms. It includes not only land but also skies and waters.</i>
Cultural heritage values		UNESCO provides this simple definition: The values embodied in cultural heritage that are identified in order to assess significance, prioritize resources and inform conservation decision-making.
Designing with Country principles		Government Architect NSW <i>Research to date suggests three essential elements of designing with Country: nature, people and design.</i> <i>The binary relationships across these three elements offer distinctive design approaches:</i> <i>1 – Architecture considers design and people (informed by nature). Architecture without people is just a sculptural object.</i> <i>2 – Passive design considers design and nature, and when used by people becomes environmental design.</i> <i>3 – Biophilic design considers the innate relationship between people and nature. Informed by design, this relationship could be understood as a genesis for Indigenous architecture.</i>
Development application	DA	The Harbour Trust is its own consent authority and requires that development proposals follow a development application process not unlike a local authority or council. In this case a DA will likely be developed and submitted following approval of the concept plan and identification of priorities for capital works that align with available funds and generally meet with community agreement. The DA process involves formal public consultation.
Environment Protection and Biodiversity Conservation Act	EPBC	The <i>Environment Protection and Biodiversity Conservation Act 1999</i> (the EPBC Act) is the Australian Government's central piece of environmental legislation. It provides a legal framework to protect and manage nationally and internationally important flora, fauna, ecological communities and heritage places – defined in the EPBC Act as matters of national environmental significance All 'actions' on Harbour Trust land, undertaken by either the Harbour Trust or on behalf of the Harbour Trust, are controlled by the <i>Environment Protection and Biodiversity Conservation (EPBC) Act 1999</i> as amended.

Term	Abbreviation	Definition / outline of term with respect to this project
EPBC referral		Whilst the Harbour Trust is its own consent authority it often chooses to refer a development application to the department/. minister under EPBC referral provisions. The referral is a process of seeking delegated approval of the proposal (ministerial delegate) and provides the Harbour Trust with an additional (and in cases somewhat critical) layer of authority as to approval of a proposal.
Expression of interest	EOI	The Harbour Trust uses this term to describe an approach to market where proponents submit 'expressions of interest' for commercial or non-commercial activity within the asset.
First Nations heritage values		The term 'heritage values' refers to the meanings and values that individuals or groups of people bestow on heritage (including collections, buildings, archaeological sites, landscapes and intangible expressions of culture, such as traditions).
First Nations consultation		The project specific process that brings First Nations input to the design and development of place.
First Nations guiding principles		A single page document summarising the commitment from the Harbour Trust in recognising the importance of First Nations peoples, places and culture and a renewed focus on building deep long-term relationships, exchange of knowledge and providing greater opportunity to be on Country
Formal public consultation		Refers to public consultation undertaken by the Harbour Trust via exhibition relating to a Development Application
Governance		Governance encompasses the system by which an organisation is controlled and operates, and the mechanisms by which it, and its people, are held to account. Ethics, risk management, compliance and administration are all elements of governance. In this case the term governance refers to the approved Harbour Trust governance document designed for use in major capital works projects that describes the process and control mechanisms for projects from inception, through design to construction and completion. Harbour Trust capital works projects are structured in process around gates.
Governance gates		A stage gate (sometimes called a phase gate) is a project management technique , used by/for organisations with projects that involve large teams, multiple departments and numerous stakeholders. At each of these points, work is reviewed to decide whether the project is able to move to the next stage or gate. In this case all gates are defined within governance
Gun emplacements		The term applies to the remnant structures
Interpretation		A means of communicating which helps people enrich their understanding and appreciation of the world and their role within it (Interpretation Australia). In this context the term refers to visitor or public interpretation . Visitor interpretation is used by sites of cultural heritage significance, visitor attractions, destinations, museums etc to tell the stories of a site's significance and its cultural context (physical, natural, social, aesthetic or spiritual). The purpose of visitor interpretation is informal education and first-hand participatory learning, often about heritage (Moscardo, 1996)
Lead Design Services Consultant	LDSC	Term LDSC describes a multi-disciplinary group of consultants that are tasked with design under terms of contract. Typically, the LDSC is an architect (but not always). Disciplines are project specific and generally comprise engineering and landscape architecture.

7.3 Terminology and abbreviations

Term	Abbreviation	Definition / outline of term with respect to this project
Master plan		<p>A master plan is an approved long-term planning document that provides and guides future growth and development. A master plan includes analysis, recommendations, and proposals for a site's population, economy, housing, transportation, community facilities and land use. The difference between a master plan and a concept plan is (i) the extent and depth of study and (ii) a master plan is generally considered an approved document that 'sets the rules' of future development. A concept plan focuses more on vision and values of place and is less technical in its scope.</p> <p>This link is a good description</p> <p>www.governmentarchitect.nsw.gov.au/resources/ga/media/files/ga/other/advisory-notes/advisory-note-master-plans-2018-09-12.pdf</p>
Military heritage values		<p>The term 'heritage values' refers to the meanings and values that individuals or groups of people bestow on heritage (including collections, buildings, archaeological sites, landscapes and intangible expressions of culture, such as traditions). In this case the military heritage values are derived from the actions, events and material remnant of the military occupation and development era specific to North Head.</p>
National Parks & Wildlife Service	NPWS	<p>NPWS is the adjacent land manager and a statutory stakeholder. The ongoing relationship with NPWS is critical to Harbour Trust capital works projects and the digital pilot</p>
Natural heritage values		<p>Refers to inherent values of place that are part of the natural environment i.e. landform, flora and fauna</p>
Precinct plan		<p>The term precinct plan is a relatively new (or re-used) term perhaps borrowed from recent English or European town planning context. The NSW Government recently (2020) outlined A new approach to Precinct planning has been developed to provide certainty and a way forward for precincts. This is part of our work to centre the planning system around people, places, public spaces and the environment, putting greater responsibility for planning in the hands of councils and local communities.</p>
Program of works or program		<p>A program is a collection of projects that are managed as a group to achieve efficiencies of scale. Just as project management involves the coordination of individual tasks, program management is the coordination of related projects that are grouped together.</p>
Project program		<p>A project program is a Gantt chart typically developed in MS Project or other software that sets out tasks, task durations and interlinking or related tasks. The Harbour Trust develops its own programs for projects and these must not be confused with construction management programs developed by contractors to manage construction tasks and time.</p> <p>In this case the project program will plot task and time in terms of all work streams (i.e. consultation, concept planning, preservation works and digital pilot). The interface of task and time across the streams is a critical aspect to programming at this point as it relates closely to consultation inputs and concept planning outputs.</p>
Services infrastructure		<p>The term refers to infrastructure that provides permanent supply of services in accordance with codes and standards relating to use and function. The services are potable water, stormwater, hydraulics including sewerage, electrical services (including substations kiosks and supply lines), communications (including optic fibre) and fire services (including ring mains and hydrants).</p> <p>In this case the infrastructure services to the site are considered minimal, in disrepair, redundant or absent.</p>
Statutory or key stakeholder		<p>A statutory or key stakeholder is an organisation that has specific business or statutory interest</p>

Term	Abbreviation	Definition / outline of term with respect to this project
Welcome to Country		<p>Traditionally, a Welcome to Country was an invitation or permission for a person from a different area to pass through or enter. Doing so without it was unacceptable. A welcome to Country statement can only be spoken by a recognised custodian of the lands. Incorporating a Welcome (or Acknowledgement protocol) into official meetings and events shows that we recognise Aboriginal people as the First Australians and custodians of their land. It demonstrates that the organisation, are aware of the past and ongoing connection of Aboriginal people to place and land.</p> <p>Source: Welcome to Country & Acknowledgement of Country - Creative Spirits, retrieved from https://www.creativespirits.info/aboriginalculture/spirituality/welcome-to-country-acknowledgement-of-country</p>



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