

Management Plan

Middle Head



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The Harbour Trust would also like to acknowledge the Traditional Owners of the land on which Middle Head is located, and pay respects to their Elders both past and present.

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This Management Plan was adopted by the Harbour Trust on 11 April 2017 and it came into force on that date.

Schedule of Amendments

The Middle Head Management Plan was adopted by the Harbour Trust on 7 June 2007 and came into force on that date. Subsequently, the Management Plan has been amended as follows:

Amendment 1 – Adopted and came into force on 16 September 2014:

The plan has been amended to provide for:

- The demolition of the two-storey timber barracks on the northern side of Middle Head Road and their replacement with public parkland.
- An adjustment to the permissible new building envelope at the 10 Terminal brick building complex on the southern side of Middle Head Road.
- A restriction on building heights to not exceed that of the tallest existing building (Building 7) within the 10 Terminal complex.
- An overpass link between Buildings 1/3 and 6/7.
- Enclosed courtyard gardens adjoining buildings, associated with the use of 10 Terminal.
- Re-shaped parking areas.
- The same uses for Buildings 6 and 7 as the other buildings in the 10 Terminal complex.

Amendment 2 – Adopted and came into force on 11 April 2017:

The plan has been amended to provide for:

- More detail about opportunities for coordinating outcomes for the whole headland in collaboration with the NSW National Parks and Wildlife Service
- The possible adaptation or replacement of the two-storey barracks building nearest the Oval, for a relocated sports pavilion and other visitor-focussed facilities
- A reduction to the permissible new building envelope at the 10 Terminal brick building complex on the southern side of Middle Head Road
- Re-shaped parking areas
- A landscaped curtilage to the moat on the northern side of Middle Head Road, if this is revealed
- Updates to relevant plans, strategies, site analysis and description to reflect their current status.



1. Introduction



1. Introduction

On 21 August 2003 the Minister for the Environment and Heritage approved a Comprehensive Plan for the seven harbour sites managed by the Sydney Harbour Federation Trust. An amendment to the Plan was approved by the Minister in 2009 to include the former HMAS Platypus site at Neutral Bay. The Plan, which was prepared in accordance with the requirements of the *Sydney Harbour Federation Trust Act 2001*, sets out the Harbour Trust's vision for the harbour sites under its control.

A requirement of the Harbour Trust's Comprehensive Plan is that more detailed management plans are prepared for specific precincts, places or buildings. In addition to this the *Environment Protection and Biodiversity Conservation (EPBC) Act 1999* also requires the Harbour Trust to make plans to protect and manage the Commonwealth Heritage values of Commonwealth Heritage Places that it owns. The Middle Head precinct is identified on the Commonwealth Heritage List as one of these places.

Accordingly, the purpose of this Management Plan is to guide the outcomes proposed in the Harbour Trust's Comprehensive Plan and to satisfy the requirements of Schedule 7A of the EPBC Regulations, 2000.

The Comprehensive Plan proposes the creation of a Headland Park that integrates Middle Head, Georges Heights and Chowder Bay.

The Headland Park will unify all of the elements along the Middle Head ridgeline, from Rawson Park to Middle Head.

The vision for the park is a place where the area's rich natural and cultural heritage, including its early Aboriginal and military occupation will be protected and interpreted and where access will be provided to areas that have long been inaccessible to most people.

The Harbour Trust has identified the creation of the Headland Park as one of its highest priorities. Its goals are to ensure that:

- The natural and cultural assets of Middle Head, Georges Heights and Chowder Bay are conserved;
- The bushland area is increased in size;
- A network of walking tracks is created that links the various former military precincts and other places of interest; and
- Existing facilities are adaptively reused for appropriate educational, community, recreational and commercial uses.

The Middle Head precinct is the culmination of the Headland Park: a gateway to Middle Harbour from the land and water. The precinct forms an important historic area within the proposed Headland Park. The key proposals contained in the Comprehensive Plan are: to retain and adaptively reuse the building clusters in a park with public paths through each cluster; to remove, adapt or re-build the northern barrack buildings; and to create a continuous band of parkland that straddles the ridge and envelopes the buildings.

Note: The name 'Middle Head' is used in this plan as shorthand for describing the Harbour Trust's land comprising the former Mosman Golf Clubhouse, 10 Terminal and ASOPA sites, which occupy only part of the Middle Head peninsula. The plan does not apply to HMAS Penguin and Sydney Harbour National Park.



Existing Buildings and Structures

	ASOPA
1.	Hut - Type B offices (1941)
2.	Hut - Type A Quarter Masters Store (1941)
3-6	Sleeping Huts (1941)
7.	ASOPA's Caretaker's Residence (c.1950)
8.	Hut - Signals Camp Mess (1941)
9 & 12.	Sleeping Huts (1941)
13.	Type F Recreation Hut (1941)
14.	Hut - Type D Workshop (1941)
15.	Building 15 (1951-55)
16.	Hut - Type H Latrines (1941)
17.	Hut - Type C Workshop (1941)
18.	Hut - Type E line store and Battery Changing Room (1941)
21.	Hut - (1965)
	10 Terminal
1.	Administration Building (1941)
2.	Anti - Aircraft Artillery Battery, Boiler House (1956)
3.	Barracks (1941)
6.	Building 6 (1941)
7.	Motor Transport Building (1941)
B1-B3.	Anti - Aircraft Artillery Battery, Barracks (1951)
B4.	Anti - Aircraft Artillery Battery, Laundry(1951)
	Other Buildings
19.	Former Mosman Golf Club House (1924)
-	Pavilion (mid 1980's)
-	Guard House (1991-1997)
	Plan area boundary



Fig.1 Management Plan Area

1.1. Commencement Date

This plan was adopted by the Harbour Trust on 7 June 2007 and came into force on that date. Subsequent amendments are listed in a schedule following the title page.

1.2. Land to which the Management Plan Applies

The land covered by the Management Plan is shown by broken black edging on the plan at *Figure 1*. All of the land is included within Lot 203 DP 1022020 and part of Lot 202 DP 1022020 and is in the ownership of the Sydney Harbour Federation Trust.



2. Aims of this Plan



2. Aims of this Plan

The aims of this Management Plan are to:

- Conserve and interpret the Commonwealth Heritage values of Middle Head;
- Maximise public access;
- Facilitate the adaptive re-use of the precinct's buildings for appropriate uses; and
- Integrate the precinct with adjoining lands as part of a unified Headland Park and network of open space in collaboration with the NSW National Parks and Wildlife Service (NPWS).

In doing this it also aims to:

- Be consistent with Commonwealth Heritage Management Principles;
- Conserve and interpret the whole site as an historic precinct;

- Provide opportunities and site interpretation for visitors to understand and appreciate the totality of the site's heritage;
- Encourage uses and activities that promote the use of sustainable modes of transport and ensure that traffic generated by the site's re-use has a minimal impact on the surrounding residential areas;
- Provide visitor facilities and amenities including parking and walking tracks;
- Realise the potential for easy access including access for the disabled;
- Regenerate and expand the bushland so that the sense of a 'green' gateway to Sydney Harbour is reinforced;
- Enhance views to and from the precinct;
- Remediate site contamination and hazardous materials;
- Protect adjacent bushland from the spread of *Phytophthora cinnamomi*;
- Improve the quality of stormwater runoff; and
- Apply the principles of Ecologically Sustainable Development (ESD).

3. Relationship with the Harbour Trust's Plans and Policies



3. Relationship with the Harbour Trust's Plans and Policies

3.1. Comprehensive Plan

This Management Plan is the middle level of a three tiered comprehensive planning system developed to guide the future of the Harbour Trust's lands. The other levels are:

- The Harbour Trust's Comprehensive Plan - this is an overarching plan that provides the strategic direction and planning context for all of the management plans; and
- Specific projects or actions - actions are defined in the Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) and are similar to the concept of development in the NSW planning legislation

This Management Plan describes specific outcomes for the Middle Head Precinct. It interprets the Harbour Trust's Comprehensive Plan and guides its implementation by providing more explicit detail about the way the precinct is adaptively reused and conserved.

This Management Plan has to be interpreted in conjunction with the Harbour Trust's Comprehensive Plan, in particular the *Outcomes* identified in *Part 7* of the Harbour Trust's Comprehensive Plan and the *Objectives and Policies* in *Part 3*.

The *Outcomes* diagram in *Part 7* of the Harbour Trust's Comprehensive Plan for Middle Head, Georges Heights and Chowder Bay is reproduced at *Figure 2*.

The *Objectives and Policies* most relevant to this Management Plan are those relating to the conservation of Aboriginal and cultural heritage and of the natural environment; ecologically sustainable development; access; the adaptive reuse of places and buildings; new buildings; removal of buildings; design approach; transport management; water quality and catchment protection; bushcare; bushfire management; biodiversity conservation; tourism; open space and recreation; sporting facilities; and contamination. These *Objectives and Policies* were addressed during the assessment of the site and are discussed in more detail in the relevant sections of this plan.

3.2. Relationship with other Trust Management Plans

This Management Plan is the seventh to be prepared by the Harbour Trust for land within the Mosman Local Government Area. All of the Management Plans must be consistent with each other as well as any other plans for neighbouring lands.

3.3. Related Policies and Guidelines

There are a number of overarching Policies and Guidelines foreshadowed in the Harbour Trust's Comprehensive Plan that will be developed over the lifetime of the Harbour Trust and that will also guide the development of the Headland Park. Current relevant policies are:

- The *Threat Abatement Plan for disease in natural ecosystems caused by Phytophthora cinnamomi* prepared by the Australian Department of Environment, 2014
- The Harbour Trust's *draft Phytophthora Root-Rot Management Strategy and Best Practice Procedures for Bush Regeneration Activities*
- The Harbour Trust's *Corporate Plan*
- The Harbour Trust's *Leasing Policy*
- The Harbour Trust's *Policy for the Community Use of Trust Land and Buildings*
- The Harbour Trust's *draft Access Guideline*
- The Harbour Trust's *Heritage Strategy*.

This Management Plan has to be interpreted having regard for these policies.

This Management Plan describes specific outcomes for the Middle Head Precinct. It interprets the Harbour Trust's Comprehensive Plan and guides its implementation by providing more explicit detail about the way the precinct is adaptively reused and conserved.

This Management Plan has to be interpreted in conjunction with the Harbour Trust's Comprehensive Plan, in particular the *Outcomes* identified in *Part 7* of the Harbour Trust's Comprehensive Plan and the *Objectives and Policies* in *Part 3*.

The *Outcomes* diagram in *Part 7* of the Harbour Trust's Comprehensive Plan for Middle Head, Georges Heights and Chowder Bay is reproduced at *Figure 2*.



Fig 2. The Trust's Comprehensive Plan - OUTCOMES

4. Relationship with the Headland Park Design Framework



4. Relationship with the Headland Park Design Framework

There are six former Defence bases at Middle Head, Georges Heights and Chowder Bay. The transformation of these bases into a unified area of parkland requires consideration of all of the elements that make up the public domain. It also needs to satisfy expectations about public access to and enjoyment of the site, the conservation of its natural and cultural heritage and its integration with the harbour, the foreshore and the local neighbourhood.

The development of the design framework and the design treatment of each of its elements must be drawn from the heritage values and characteristics of the lands, rather than imposing an arbitrary new “design statement”.

The design framework for the Headland Park is shown at *Figure 3*. It identifies all of the elements that make up the public domain, how they need to work together as a network of spaces and the principles that will guide their detailed design development within each of the Management Plan areas.

The elements of the public domain comprise:

- Precincts – areas with distinct characteristics by virtue of land uses or physical factors such as topography, building scale and form;
- Streets and Paths – the network of routes that provide access to and through the site for all modes – walking, cycling, public transport and private motor vehicles;
- Entries - to a precinct or significant public places;
- Significant Public Places – the destinations, the spaces used for gatherings, relaxation, ceremony or cultural or sporting activity;
- Landmarks – places, structures or natural features of public interest;
- Edges – the boundaries between precincts, the borders to parks and gardens, dramatic level changes, the interfaces between buildings and the public domain.

4.1. Precincts

The terrain and its relationship to the harbour is the first and most fundamental consideration for all of these elements. It is the terrain that has given rise to the historic uses and it is its relationship to the harbour that makes these lands special.

The early fortifications located at the escarpment and the associated defence facilities on the knolls form identifiable precincts. These precincts include –

- The group of buildings on the plateau at Middle Head;
- The cluster of buildings on the rock ledges at Chowder Bay;
- The fortifications, sheds and barrack buildings at the spur terminating the Georges Heights plateau, before the ridge drops to Middle Head;
- The former Gunners’ Barracks (Officers’ Mess) and fortifications at Georges Head;
- The former WWI Hospital precinct on the highest knoll at Georges Heights; and
- The Mosman Drill Hall and its parkland setting adjoining Rawson Park.

Generally, these precincts have an institutional - parkland character, with the buildings forming small-scale, civic spaces.

The open spaces on the saddles of the undulating plateau and the steep slopes also create distinct precincts. These include:

- The steep, wooded slopes below the escarpment;
- The plateau which is generally characterised by coastal heath and exposed rock ledges; and
- The institutional parkland areas of the former bases.

The Headland Park will form a succession of spaces from hill tops with a sense of openness and height above all the surrounding land, through to more enclosed areas in the saddles and valleys and to places along escarpment edges. As the plateau narrows and winds towards the headland, these spatial experiences will vary – as the views into Middle Harbour unfold and gain equal prominence to the views to the outer harbour and the ocean.

The former 10 Terminal and ASOPA site is clearly identifiable as a distinct precinct, due in large part to it being separated from the other former defence bases in Mosman by the belt of bushland which crosses the ridge from Obelisk Bay to Balmoral. Further defining the site as a coherent precinct, its buildings are formally arranged on a plateau, enveloped by open lawns conveying the fairways and greens of the former golf course, which in turn are ringed by the bushland and foreshores of the headland.



Fig.3 Middle Head - DESIGN FRAMEWORK

4.2. Streets and Paths

The access network needs to provide clear and convenient access to and through the Headland Park. Each of the elements of the network will be designed to reflect its role and function, and the desire to create an unfolding sequence of experiences in response to the environment it passes through. The network consists of the following elements, as shown in *Figure 3*:

- The approach roads adjoining and leading into the park – Middle Head Road, Chowder Bay Road and Suakin Drive;
- Internal streets and laneways within each precinct (within the former bases);
- A major pathway circuit around the Oval, ASOPA and 10 Terminal that provides access for people with all levels of mobility and that links the significant public places, features and landmarks, the entry roads, car parks and local neighbourhood;
- A minor pathway network providing more variety, intimacy and seclusion, and access for able-bodied walkers to limited areas within the bushland; and
- The car parks and bus set down areas.

Middle Head Road descends down the ridge to the plateau and provides the only direct road access to the precinct. The continuity of the road leading towards the headland is important to retain. There is a strong sense of arrival to the precinct, however improvements can be made to enhance this arrival. These improvements include remodelling the intersection, landscaping the car parks, and providing continuous pedestrian access along Middle Head Road.

The settlement pattern of ASOPA and 10 Terminal provides a secondary pedestrian access network linking the inner courtyards and the surrounding parkland. New pedestrian paths will be provided to offer a variety of circuit walks and to link the bus stop and car parks with the main attractions. The path network will be integrated with paths in the adjoining National Park. East of the intersection with Chowder Bay Road, Middle Head Road will become a traffic-calmed zone to create an environment that is pedestrian and bicycle friendly.

As a general principle there should be no cycling on walking paths, however cycling will be encouraged where it is safe and appropriate.

4.3. Entries

It is proposed that there will be numerous ‘*Entry Points*’ in the Headland Park so that access opportunities are maximised and dispersed. This will accommodate people arriving from many different directions and by different modes of travel and will avoid concentrations of visitors.

Entries in the public domain will not usually be built structures. Rather, they will be spaces that serve as an entry and do not need to be given strong emphasis.

The road geometry, topography and landscape treatment will be designed to work together and create a sense of arrival at the ASOPA / 10 Terminal precinct as well as the entrance to Sydney Harbour National Park.

4.4. Significant Public Places

The Headland Park will have a range of public spaces offering a diversity of activities. These will include:

- Passive recreational areas for picnics and social relaxation;
- Areas for community sporting activities;
- Places of contemplation within a bushland setting or on the escarpment with spectacular views; and
- Small civic spaces defined by former defence buildings for community gatherings or simply watching the passers by.

They will form a series of experiences connected by the main pathway network. All of these spaces are located and chosen to enhance an understanding and appreciation of the natural environment and the succession of historical uses.

The significant public places at Middle Head include the lawns that envelop the building clusters and the inner courtyards. Most notable of these are the spaces adjacent to the garages at the eastern end of 10 Terminal.

4.5. Landmarks

Within each of the precincts, there are significant features that relate to the history or the natural beauty of the place. They are often beautiful or unusual structures, buildings or natural features that provide the focus in public places or points of interest along the way. The setting of these features will be designed to assist in a greater understanding and appreciation of their significance and the Headland Park as a whole.

Some of these landmarks are in adjacent areas of the National Park such as the 1801 fortifications and the fortification walls and defensive ditch. The former Golf Clubhouse has the potential to be a local focal point / landmark.

4.6. Edges

The precinct has three distinct edges formed by its interface with the Sydney Harbour National Park, HMAS Penguin and the foreshore of Hunters Bay.

The bushland within the National Park, and the Hunters Bay foreshore will be protected by effective stormwater management in upslope areas. The saddle of the ridge where the Harbour Trust's land meets Sydney Harbour National Park will be landscaped to enhance the appreciation of the stone wall and defensive ditch, and to provide an area where people can picnic and enjoy views of the surrounding waterways.

The proposed circuit walk (see Section 4.2) will help to define the edge between the cultivated landscapes and the bushland, control stormwater and keep walkers to designated paths and tracks. The Harbour Trust will work with HMAS Penguin to landscape the western edge of Middle Head Oval to screen the car parking area.

5. Planning Context



5. Planning Context

5.1. Statutory Plans

Commonwealth Legislation

All ‘actions’ on Trust land, undertaken by either the Harbour Trust or on behalf of the Harbour Trust, are controlled by the *Environment Protection and Biodiversity Conservation (EPBC) Act 1999* as amended.

Section 26 of the EPBC Act protects all aspects of the environment on Trust land from actions taken either on the Harbour Trust’s land or on adjoining land that may have a significant impact on it, while Section 28 protects the environment from any actions of the Harbour Trust, that may have a significant impact. The environment is defined to include:

- (a) ecosystems and their constituent parts, including people and communities; and
- (b) natural and physical resources; and
- (c) the qualities and characteristics of locations, places and areas; and
- (d) heritage values of places; and
- (e) the social, economic and cultural aspects of the matters mentioned in (a), (b) or (c) above

Section 341ZC of the Act requires the Harbour Trust to have regard for the Commonwealth Heritage values of a place before it takes an action and to minimise the impact that the action might have on those values. Section 8 of this Plan describes the values of the site.

State Legislation

The *Sydney Harbour Federation Trust Act 2001* specifically excludes any land owned by the Harbour Trust from the operations of state planning law. This includes State Policies (SEPPs) and Regional Environmental Plans (REPs) prepared by the State Government and Local Environmental Plans (LEPs) prepared by councils.

Notwithstanding this the Harbour Trust has prepared this plan so that it is consistent with both State and local plans. The relevant statutory plans are:

Draft North District Plan

In November 2016, the Greater Sydney Commission released a draft District Plan for Greater Sydney’s North District. The North District includes a significant part of Sydney north of the Harbour, including Middle Head and surrounding suburbs. The draft District Plan is expected to be finalised towards the end of 2017.

The Draft District Plan identifies priorities and actions to deliver the NSW Government’s vision for the district. These priorities will inform strategic planning for infrastructure decision making, economic growth and local planning.

Of particular relevance to Middle Head are priorities related to delivering Sydney’s “Green Grid” of parks and open spaces. The Harbour Trust’s sites at Headland Park, including Middle Head, are identified as part of the Great Coastal Walk, which aligns with the Harbour Trust’s aim of maximising public access to its sites, and creating a network of paths that is integrated with adjoining lands.

Coastal Management State Environmental Planning Policy

The Coastal Management State Environmental Planning Policy (Coastal Management SEPP) establishes the strategic land use planning framework for managing NSW's coastal areas. The framework responds to existing and emerging coastal challenges and opportunities, with the aim of having thriving and resilient communities living and working on a healthy coast now and into the future. It supports implementation of the management objectives set out in the *Coastal Management Act 2016* (NSW).

The Coastal Management SEPP seeks to better equip coastal communities to plan for and effectively respond to coastal challenges such as major storms, coastal erosion and climate change impacts, through better strategic planning around coastal development and emergency management. Its aims include managing development in the coastal zone, protecting the environmental assets of the coast and establishing a framework for land use planning to guide decision-making.

Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005

This SREP applies to the whole of Sydney Harbour's waterways, the foreshores and entire harbour catchment. It provides a framework for future planning, development and management of the waterway, heritage items, islands, wetland protection areas and foreshores of Sydney Harbour. Under the SREP, the Middle Head Precinct is included in the catchment area of Sydney Harbour, as a foreshores and waterways area and is also listed as a strategic foreshore site. The planning principles of the SREP relevant to the site include:

- Development that is visible from the waterways or foreshores is to maintain, protect and enhance the unique visual qualities of Sydney Harbour;
- The role of Sydney Harbour in the history of the Aboriginal and European settlement should be appreciated;
- The number of publicly accessible vantage points for viewing Sydney Harbour should be increased;
- Development is to protect and, if practicable, rehabilitate watercourses, wetlands, riparian corridors, remnant native vegetation and ecological connectivity within the catchment;
- The heritage significance of particular heritage items in and around Sydney Harbour should be recognised and conserved;
- Significant fabric, settings, relics and views associated with the heritage significance of heritage items should be conserved; and
- The natural, scenic, environmental and cultural qualities of the Foreshores and Waterways Area should be protected.

Mosman Local Environmental Plan 2012

The Middle Head precinct is located within the Mosman Local Government Area. The Middle Head precinct is zoned 'SP 2 Infrastructure – Sydney Harbour Federation Trust' under Mosman LEP 2012. Development that is 'ordinarily incidental or ancillary to development for that purpose' is permissible with consent in that zone.

Plans made under the *Rural Fires Act 1997*

There are two sub-plans of the NSW State Bush Fire Plan made under the *Rural Fires Act 1997* that apply to the Mosman local government area, including the Harbour Trust's land and the adjoining Sydney Harbour National Park. The *Manly, Mosman, North Sydney Bush Fire Risk Management Plan 2015-2020* deals with strategies to minimise bush fire risk such as hazard reduction. The *Manly/Mosman/North Sydney Bush Fire Management Committee Operations Coordination Plan* (approved under Section 52 of the *Rural Fires Act 1997* on 30 November 2015) deals with the operational and management issues. Evacuation routes are determined under Local Emergency Disaster Plans.

The NPWS has prepared a Fire Management Plan (FMP) 2004 for Sydney Harbour and Botany Bay National Parks. The aims of the FMP include the protection of life and property, coordination of fire management with other agencies, and management of fire regimes.

There is also a Bush Fire Prone Land Map for the Mosman Local Government Area prepared under Section 146(2) of the *Environmental Planning and Assessment Act 1979* (EP&A Act) that was approved by the NSW Rural Fire Service in 2006. This map identifies the site as a vegetation buffer zone, with parts containing areas of bushfire prone vegetation. The majority of the site is surrounded by Sydney Harbour National Park, which contains large areas of bushfire prone vegetation. Particular developments proposed on bush fire prone lands can trigger the need to conform to the requirements of Planning for Bushfire Protection 2006 guidelines under the EP&A Act.

Section 63(2) of the *Rural Fires Act 1997* refers to the duty of public authorities and owners and occupiers of land to prevent the occurrence of bushfires on its land and to minimise the danger of the spread of bushfire on, or from that land. In 2016, consultants prepared a draft Bushfire Management Plan on behalf of the Harbour Trust for its sites at Middle Head, Georges Heights and Chowder Bay which is discussed in Section 9.4. The Harbour Trust will also cooperate with other agencies in the implementation of plans prepared under the *Rural Fires Act 1997*.

5.2. Mosman Bicycle Plan 2014-2019

In 2005 Mosman Council adopted a bicycle strategy which outlines bicycle related initiatives for the next five years. It covers major infrastructure projects, bicycle parking, education and signage.

In 2014 the strategy was updated to the Mosman Bicycle Plan 2014-2019. The plan contains a costed prioritised program of works over the next five years that aims to improve cycling amenity in Mosman. The plan identifies current and future on-road and off-road cycling paths linking Middle Head with the rest of Council's cycling network. The narrow road reserve on the downhill stretch of Middle Head Road is a significant constraint upon providing an off-road path for cyclists.

5.3. Plans Prepared for Neighbouring Lands

Plans and policies prepared by neighbouring land managers provide a context for this Management Plan. The following are particularly relevant.

Sydney Harbour National Park Plan of Management 2012

The Middle Head precinct adjoins the Sydney Harbour National Park. The NSW National Parks and Wildlife Service (NPWS) has prepared a Plan of Management that applies to the whole of the Sydney Harbour National Park including Middle Head and Georges Head.

The Plan of Management 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. High priority projects that have been achieved to date and that are relevant to the Harbour Trust's Headland Park, include:

- The continued development of the Sydney Harbour Scenic Walk;
- Enhancing access to Sydney Harbour National Park;
- Working with the Harbour Trust and Mosman Council to create a unified headland park and present high quality boundary areas;
- The preparation of a weed control program;
- Implementation of a feral animal management at Middle Head; and
- The preparation of a fire management plan.

The excavation of the defensive ditch and sealing of the informal car park (on the Harbour Trust's land) near Obelisk Beach were also identified as future projects, although of low priority.

NPWS prepared a draft Master Plan in 2016 to provide more detail about the implementation of the Plan of Management at Middle Head and Georges Head. The Master Plan addresses specific management and operational issues, including opportunities for coordinated outcomes on the headland in collaboration with the Harbour Trust.

Although the Master Plan will not be a statutory document, public and private activities in Sydney Harbour National Park must be consistent with the NSW *National Parks and Wildlife Act 1974*, the *Sydney Harbour National Park Plan of Management* and the *Sydney Harbour National Park Middle Head Historic Buildings Conservation Management Plan 2003*.

This management plan reflects outcomes proposed for the Sydney Harbour National Park, such as paths, as provided for in the 2016 Draft Master Plan. The draft Master Plan is subject to final approval by the NPWS.

1110 Middle Head Road

Headland **PARK**



- 1a | Salon Express Group
- 1b | ALRA | Australia's Leading Recruitment Agency
- 1c | Northshore Sports & Pain Clinic
- 2 - 3 | Loves Data
- 4 | Minchin Moore Private Wealth
- 5 | Yorkway Partners
- 6 | VIVA! Communications
- 7a | Tom Thumb / XR Element
- 7b | Hiflex Australia
- 8 | Alive
- 9b | Gove Resources
- 12a | Bombora Film & Music / Blink TV
- 12b | Bombora Film & Music / Blink TV
- 12c | Bombora Film & Music / Blink TV
- 13a | Castaway Trading
- 14a | Sach Australia
- 14b |
- 15 | Eleven Communications
- 16 | The House Family Office
- 18 | Raffertys Garden/Event 2 Event
- 21 | The Sydney Chocolate School by Coco Chocolate

14



6. Description of Site and Surrounding Lands



6. Description of Site and Surrounding Lands

6.1. Middle Head Precinct



The Middle Head Precinct is approximately 11 hectares in area and is located at the end of the Middle Head ridge, one of the three headlands that define the entrance to Sydney Harbour. The site sits on an undulating plateau providing a number of natural vantage points with excellent views of Sydney Harbour and Middle Harbour.



Middle Head Road provides the single road link and pedestrian path serving the headland, while Chowder Bay Road traverses Harbour Trust land and Sydney Harbour National Park to provide access to Chowder Bay. The southern area of the precinct contains remnant bushland (open forest) and the area north of Middle Head Oval is vegetated with open forest / tall shrubland. The northern edge of the precinct is bound by the rocky escarpment and foreshore of Hunters Bay.



The main clusters of buildings in the precinct include the 10 Terminal Regiment and the Australian School of Pacific Administration (ASOPA) complexes.

Car parking and a turning area for large vehicles is located at the eastern end of the precinct. A barbecue area is located on the lawn area to the south of ASOPA. The broad sweep of Middle Head Road bisects the precinct along the ridge and forms an organising element of the built area.



The former Mosman Golf Clubhouse is constructed in a Californian Bungalow style and is orientated towards a cleared lawn area that formed part of the former 9 hole golf course. The building has a vantage point looking out over Middle Head towards the Sydney Harbour entrance. The clubhouse has been restored by the Harbour Trust and is now used as a cafe and retail outlet. Located behind the Clubhouse is a level cleared area, which is used for parking.





The 10 Terminal complex comprises the red brick accommodation and administration buildings built around an internal courtyard in subdued art deco style, the two brick garage buildings, and the three 2-storey barrack buildings facing Middle Harbour. To the east of the barrack buildings is a small weatherboard laundry building.

The ASOPA complex consists of a group of original weatherboard huts, with subsequent built additions and infill buildings that have joined some of the huts together.



The spaces between are extensively planted and linked by internal pathways and courtyards which are maintained by Harbour Trust volunteers. The buildings were restored in 2011 and are now leased by a variety of small businesses.

These two complexes are set in an institutional parkland containing a mixture of cultural plantings, interspersed with large paved areas, including the former parade ground, tennis court and parking areas.



Middle Head Oval is a large open sports area located adjacent to HMAS Penguin. The Oval has waist-high perimeter fencing, light poles and is managed and maintained by Mosman Council. It is used by sporting groups for recreation and occasionally by HMAS Penguin for training and helicopter landings. A brick pavilion and amenities block is located in the south-western corner of the Oval. On the western edge of the Oval (outside the Harbour Trust's boundary) is a parking area used by HMAS Penguin.



Public car parking, containing the subsurface stone edged remains of the former Chowder Bay Road alignment, is located at the intersection of Middle Head and Chowder Bay Roads which has been remade as a traffic roundabout. A former guardhouse is situated on Middle Head Road near the Parade Ground and has been refurbished by the Harbour Trust as a café. Gateposts made of artillery gun barrels stand near the guardhouse.



6.2. Surrounding Lands



The bushland of Sydney Harbour National Park encloses the southern and eastern boundaries of the site, which forms a natural edge to the precinct and partly screens the precinct from the harbour.



At the eastern end of Middle Head Road lie the Middle Head fortifications in the National Park. The western perimeter of Middle Head Fort is marked by a low stone wall and defensive ditch. The northern extent of the ditch has been filled, part of which has been revealed on the Harbour Trust's land. The NPWS uses the area just east of the Harbour Trust's land as a parking and materials storage area.



South of 10 Terminal, within the National Park, is the 1801 fortification which was hewn from the rock platform. This is one of the earliest remaining European structures in Australia. Predating this, the Middle Head area of the National Park contains a number of Aboriginal engravings, shelters and middens.



Nearby, Cobblers Beach is located on the foreshore of Middle Harbour, and to the south Obelisk Beach faces the waters of Sydney Harbour. Both beaches are designated as 'clothing optional'. Obelisk Beach is named after the navigational obelisks that are found on the headland. An historic cobblestone road winds down to Cobblers Beach and this is the original track constructed to connect the fort with the former jetty at the beach. There are other paths through the National Park providing access to the beaches and other site features.





The National Park contains a collection of buildings in an open landscape and a series of gun emplacements. The Middle Head Fort was a strategic site with the first gun battery constructed in 1871 to the design of J Barnet, colonial architect, with additions made up to 1911. The whole complex is linked by underground tunnels, ancillary rooms and magazines, some of which were converted for use as 'tiger cages' where Vietnam War-era soldiers were once trained to resist torture. The National Park also contains World War II era structures such as lookout posts.



HMAS Penguin was established in the early 1940s and is an operational Naval base on the foreshore of Hunters Bay bordering the western edge of the precinct. The base comprises a range of facilities such as barracks, administration buildings, training and medical facilities and a jetty. The southern portion of the base contains remnant bushland. The main entrance into the base is near the intersection of Middle Head and Chowder Bay Roads.



7. Site History



7. Site History

Middle Head is recognised as being of great heritage significance. Its significance is derived from its:

- Aboriginal usage – both pre-colonial and as part of Bungaree’s Farm
- Role in the outer Harbour Defence system 1871-1884
- Continuous occupation of the military from the 1870s through to 1997, with intensification of use during World War I and World War II
- Recreational values including the use of land as golf course 1923-1940
- Contribution to educational and diplomatic initiatives in the Pacific region and training and education 1947-1998.

7.1. Aboriginal Heritage

While the adjoining National Park contains evidence of Aboriginal occupation of Middle Head, archaeological surveys of the Harbour Trust’s land at Middle Head have not found any Aboriginal sites or objects on the surface (see further discussion in the ‘Archaeological Assessments’ section).

Notwithstanding this, the site is important for the role it played in an attempt by Governor Macquarie to encourage Aborigines to engage in farming and to adapt to the European way of living. In 1815 Macquarie reported to London that he had succeeded in getting 16 adult Aborigines to settle on a small farm on the north side of the harbour. The families were given implements and clothing and convicts were appointed to teach them how to farm.

These Aboriginal settlers were not members of the local *Borogegal* clan, they were from the Broken Bay area and Macquarie appointed one of them, Bungaree, “to be their chief” (Figure 4). The settlement was not a success and by 1821 had been almost entirely abandoned.

The exact boundaries of the farm are uncertain. However, in 1815 the Sydney Gazette described it as being situated on “the peninsula of Georges Head, being nearly surrounded on all sides by the sea.” In Thomas Florance’s Survey of Port Jackson (1828) this showed the farm’s location as being in the Middle Head area.

In 2004 the Harbour Trust engaged historian, Rosemary Kerr, to undertake further documentary research to try and determine a more precise location of Bungaree’s Farm. Documentary searches to date have not revealed the location of the farm.

7.2. European Occupation

Following the failure of Bungaree’s Farm, in 1835 the Middle Head Precinct passed into private ownership of a single landholder, Charles Beilby, with a small portion of land retained by the Crown for Harbour defence. However, in 1861 the private land was resumed by the Crown for military purposes.

The buildings and structures from the various phases of European occupation are shown in Figure 6.

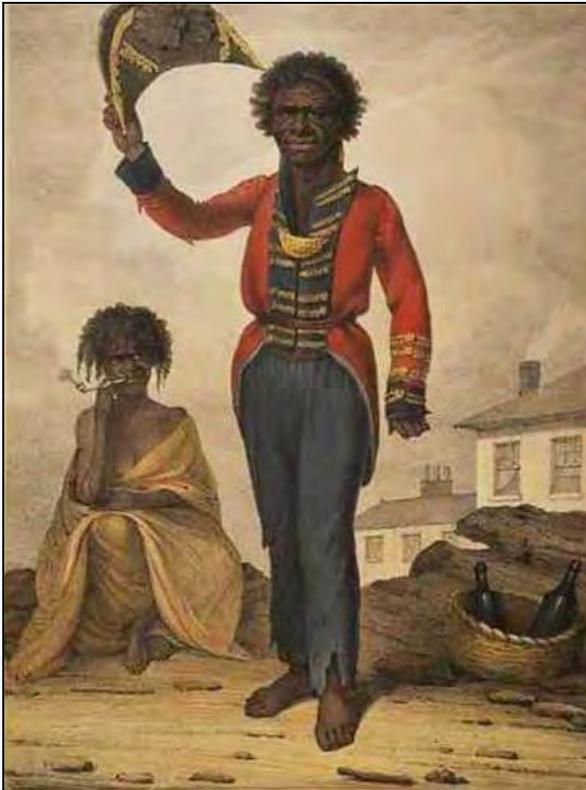


Figure 4: Bungaree (1830)
"Bungaree, a native chief of New South Wales".
 Hand coloured lithograph by Augustus Earle 1830.

7.3. A Vulnerable Colony 1801-1871

As early as 1801, during the Napoleonic War, the area was recognised as an important site for the defence of Sydney Harbour. In 1801 at Middle Head, the "Georges Head" Battery was built. It is one of the oldest surviving structures in Sydney Harbour (or even one of the earliest European structures in Australia). It is located immediately to the north of the WWII Obelisk Battery and the white navigational obelisk in Sydney Harbour National Park. It was built 15m above the water level, hollowed out of the rock platform and once held 6 guns.

In the 1840s the Middle Head area was selected as the site for defence fortifications that would form part of an outer ring to protect the main harbour and town. By this time a track connected Mosman with the Middle Head fortifications. The route of this track approximately follows the line of the current Middle Head Road and Old Fort Road at Middle Head.

In October 1853 construction works were authorised on batteries for Middle and Georges Head, but work was soon halted following orders by the newly arrived Governor Denison who preferred to strengthen the inner harbour defences given the outbreak of the Crimean War and the perceived direct threat to the colony. From the 1860s onwards, a series of war scares swept Sydney. Russia was the main enemy of Britain and it was soon realised that Sydney Harbour was poorly defended against a determined attacker as well as being many months away from Britain's help.

To counter this perceived threat the Colonial Government sought to extend the fortifications and defensive artillery which overlooked Port Jackson. Small military reserves already existed on Georges, Bradley's and Middle Heads. To extend them large areas of land backing these reserves were compulsorily resumed in haste. Land in the reserve on the headland at Middle Head was resumed on 24 December 1861.

At Cobblers Beach a stone and timber jetty (*Figure 5*) was constructed in 1861 with a military track (Cobblers Beach Road) formed around the same time to connect the jetty with the fort.

7.1. Sydney Stands Alone 1871-1914

The decision in 1870 by the British Government to withdraw its troops from the Australian colonies and to pass defence responsibilities to the individual colonies resulted in the NSW Government adopting an 'outer line' of defence strategy for Sydney Harbour. This consisted of a series of batteries at Georges Head, Middle Head, Bradley's Head and inner South Head.

The NSW Colonial Architect, James Barnet was appointed to design the defences for Sydney, resulting in the first gun at Middle Head being mounted in 1871. Work on the Outer Middle Head Battery recommenced in 1871 and by 1890 a defensive ditch had been constructed across the headland (*Figure 7*). Middle Head Road was constructed in 1870 and Chowder Bay Road in the 1890s. Both roads were built with stone edging, remnants of which are located beneath the public car park at the intersection of Middle Head and Chowder Bay Roads.



Figure 5: Cobblers Beach, 1891

Members of the long course at the NSW School of Gunnery, Middle Head, erecting a crane at Cobblers Beach jetty in 1891. The stone and timber jetty was constructed in 1861 and a track, Cobblers Beach Road, was built to connect the fort with the jetty. The later timber wharf was removed between 1955 and 1961 and the stone remains of the jetty disappeared below the High Water Mark between 1970 and 1978.

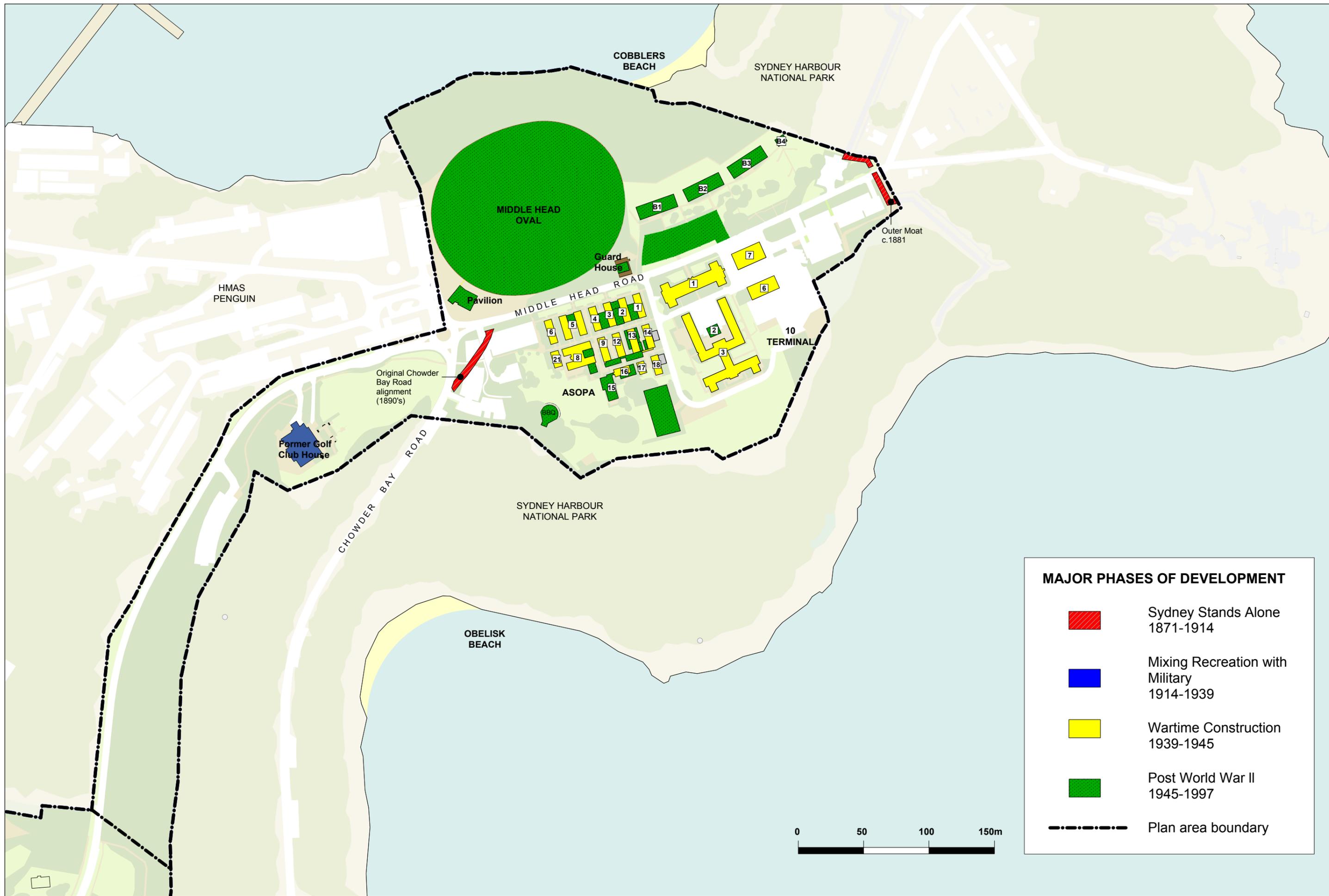


Fig.6 Phases of Development



Early maps show that by 1881 there was a cluster of buildings located at Middle Head on the land now managed by NPWS. These buildings were part of the School of Gunnery - some have been demolished but those that remain are now used by NPWS as residences, offices, public toilets, community use and for storage/depot purposes.

In 1904 the NSW Public Works Department constructed four septic tanks and eight filter beds on the south shore of Hunters Bay (Balmoral). Mosman Council also constructed an incinerator in the same area. This area is now occupied by HMAS Penguin.

Use of the septic tanks was discontinued in 1927, however one was retained and converted to a swimming pool which remains today. The remainder of the Middle Head area was undeveloped until World War I.

7.2. Mixing Recreation & Military 1914-1939

Australia's involvement in World War I saw an intensification in use of the land at Middle Head.

In 1915 a Mobilisation Camp was erected along Middle Head Road in the area to the immediate west of the Middle Head Fort defensive ditch. The camp consisted of two sets of huts and associated service buildings. One set of huts were occupied by the Royal Australian Garrison Artillery and the other set by the Royal Australian Engineers. These huts remained intact until 1955 and were then gradually removed from the site. All huts were gone by 1970.

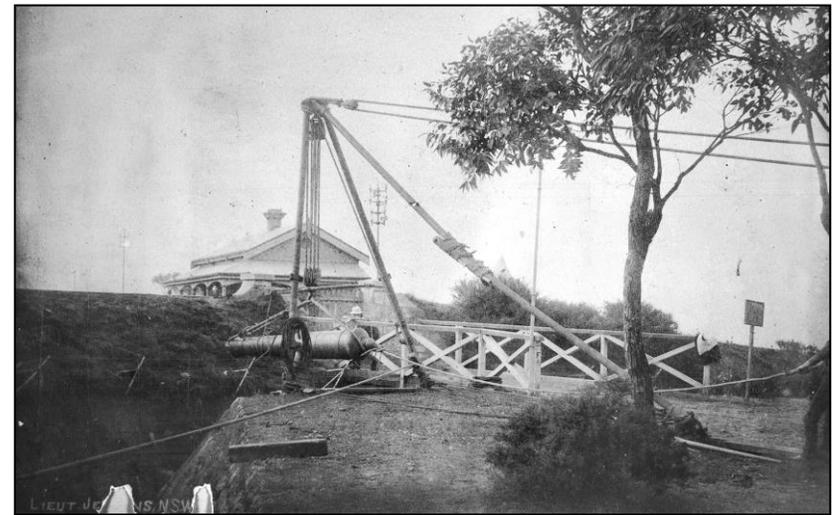


Figure 7: Entrance to Middle Head Fort, looking east, 1892

Members of the NSW School of Gunnery moving a 32 pounder gun barrel across the defensive ditch at the main entrance to Middle Head Fort, which today forms an entry point to the Sydney Harbour National Park. The ditch in this location has been subsequently filled and the timber bridge has been removed. The Guard Room can be seen in the background.



Figure 8: Mosman Golf Course (1930s)

An oblique aerial photograph from the 1930s showing the 9 hole Mosman Golf Course, with bunkers and greens evident. The golf course also extended onto land that is today occupied by HMAS Penguin. The former 1915 Mobilisation Camp buildings are visible, located near the current entry point to Sydney Harbour National Park. Former buildings in the National Park are also visible. This photograph also shows the original intersection of Middle Head and Chowder Bay Roads, before the re-alignment occurred between 1960 and 1965.

The cessation of World War I resulted in a demobilisation of armed forces and reduced military demand for the defence land behind the headlands. The natural areas of Mosman had become a major recreational attraction for locals and visitors, and public access to military areas became expected as a right.

The Mosman Golf Club was established in early 1923 and a 21 year lease from the Commonwealth formalised in 1924. The lease was made with a condition that if the Commonwealth required the land, it could take possession without compensation. The 24 hectare, 9-hole golf course was opened in 1924 with a substantial clubhouse also built that year (*Figures 8 & 9*). The public outcry and contention surrounding this proposal foreshadowed later debate about the alienation of land for private use.

In 1933 the Golf Club signed a new lease enabling it to hold the land for a further 21 years, and in the years leading up to World War II undertook a number of improvements and extensions to the course.



Figure 9: Mosman Golf Course (1933)

Golfers playing on the 9 hole Mosman Golf Course in 1933. The clubhouse can be seen in the background, occupying a prominent position allowing commanding views of Sydney Harbour.

7.3. Wartime Construction 1939-1945

The onset of World War II prompted another round of construction work on the military land. To allow this to occur, resumption of the golf course took place in 1940. The army decided to retain the clubhouse for its own purposes, which was subsequently divided into two residences for use as Married Quarters.

In 1941 buildings were constructed to house the Anti-Aircraft and Fortress Engineering School (now the 10 Terminal Regiment site) and the Army's Signal Unit (the ASOPA buildings). Throughout the war years the School provided instruction in searchlight equipment, camouflage skills and training for tradesmen and engineers. The Signals Camp was intended to be only used for temporary accommodation. The former Mobilisation Camp erected in 1915 was still in use in 1941.

On 13 August 1941 the Australian Government gave approval for the formation and control of an Australian Women's Army Service (AWAS) to release men for duty with fighting units. Between 1941 and the end of the war in August 1945, 24,026 women enlisted as volunteers in the Service. Members of the AWAS were involved in a range of duties including administration and transportation, and an AWAS contingent was attached to the Signals Unit at Middle Head (Figure 10).

In 1941, construction of HMAS Penguin began. The Naval base, designed to provide sleeping accommodation for 700 men with associated administration, support offices and recreational facilities also included the Balmoral Naval Hospital. In July 1942 the Navy commissioned HMAS Penguin. During the war HMAS Penguin was an important training school, depot and hospital. The swimming pool and the old sandstone tower remain as reminders of the period

when HMAS Penguin was previously the site of the 1904 sewerage works and the Mosman Council incinerator.

In 1945, at the end of the World War II, Italian prisoners of war were being housed in huts near Obelisk Beach, on land that is today part of the Sydney Harbour National Park. These huts were occupied by squatters after the war and were demolished by 1961.



Figure 10: Middle Head Sports Day (1944)

Members of the Australian Women's Army Service (AWAS) serving with the NSW Anti-Aircraft and Coast Artillery Signals Unit, playing basketball on the Unit's Sports Day, at Middle Head in December 1944. Note the original huts of the Signals Camp - these were subsequently converted to house ASOPA.

7.4. Post World War II Military and Institutional Use, 1945-1997

The Australian School of Pacific Administration (ASOPA)

The Australian School of Pacific Administration (ASOPA) grew out of an army civil affairs unit created during World War II. The unit was originally known as the Land Headquarters School of Civil Affairs and was based at the Royal Military College, Duntroon. In 1947 the Commonwealth Government approved the establishment of the Civil School as a permanent body – to be known as ASOPA - with teaching and research duties to be based at Middle Head.



Figure 11: Looking east along Middle Head Road, ASOPA (1950s)

ASOPA occupied the timber huts of the former Signals Camp from 1952 until 1998. A number of later additions were made to these huts (to the right of the picture) to adapt the site from a camp to a school.

The Army permitted ASOPA to occupy part of 10 Terminal for two years, but this arrangement lasted until 1952, when ASOPA was relocated to occupy the timber framed huts of the Signals Camp. A number of modifications and additions were made to the timber huts to make them suitable as a teaching facility (*Figure 11*).

From its early years ASOPA played an important role in the development of Papua New Guinea. From 1948 ASOPA offered a number of refresher courses, short courses and two year diploma courses to train Australians as administrators for Papua New Guinea. Students were originally selected from the armed forces and ASOPA trained many people who made a notable contribution to the development of Papua New Guinea.

ASOPA quickly became known for its association with a number of notable academics and administrators. In particular, John Kerr (later Sir John Kerr QC, Governor-General of Australia) served as Principal in 1947. James McAuley, noted poet, taught at the school for a number of years. Other notable associations included Lieutenant Colonel Alf Conlon, Charles Rowley, Peter Lawrence and Camilla Wedgwood.

Throughout the 1950s and 1960s, ASOPA grew in stature, size and significance. In 1954 ASOPA started to train Australians to become teachers in Papua New Guinean primary schools in addition to the training of patrol officers. Teacher training was further extended in 1960 to include training of teachers for special (Aboriginal) Schools in the Northern Territory. In 1964, the School switched teacher training from primary to secondary teaching. In 1967, the school commenced a course for senior local government officials. It was in this period that a number of extensions and alterations were made to ASOPA to cater for the growing demand for its courses and its use as a research school.

By 1970, the Commonwealth Government had realised that despite its goal of making Papua New Guinea independent, there was no adequately trained public service of indigenous people in the country. In 1971, changes were announced for ASOPA, with the school being developed as a training centre for Papuans and New Guineans, preparing them for the impending self-government. In addition, candidates for short courses could now come from any other developing nations, in the Pacific or elsewhere.

In 1973, the School was integrated into the structure of the office of the Australian Development Assistance Agency and became known as the International Training Institute. The institute ran short and refresher courses in education and middle management. The former Principal, Jack Mattes, remained on the grounds to compile the laws of Papua New Guinea, a task which took ten years.

The Institute operated until 1987. At its height in the 1980s the Institute was conducting 23 short courses per year which attracted a number of professors from the University of Sydney and upcoming talent including Bob Carr (who later became Premier of New South Wales). In 1987, the Institute was proclaimed as the AIDAB Centre for Pacific Development (or AusAid). Until its closure in 1998 the Centre still received strong demand for its education and teaching.

For 51 years ASOPA was a highly successful institution which provided continuing academic excellence and quality teaching and research. In 1993 a brief history of the Centre stated that there was “no other institution quite like it in the world”.

10 Terminal

In 1946, 160 AWAS signallers occupied quarters at 10 Terminal. From 1947 to 1950, the Army’s strategic signals in NSW was provided by transmitters and receivers situated at Middle Head. By 1952, ASOPA had moved out of 10 Terminal and this allowed the Army to provide better accommodation for its permanent military personnel with proper amenities and kitchen areas.



Figure 12: 21st Construction Regiment, Middle Head (1951)

The Regiment undertook a great deal of leveling and earthmoving work at Middle Head. In this image, the former 1915 Mobilisation Camp can be seen in the background. These buildings were progressively demolished between 1955 and 1970.

The 21st Construction Regiment, a Citizens' Military Force unit, had its first camp at Middle Head in 1951 (Figure 12). The regiment was based at 10 Terminal and carried out earth moving work including the preparation of the ground for Middle Head Oval, which was completed in 1951. The area occupied by the oval was previously used as an informal sports space during World War II. The oval is now managed by Mosman Council and is used by local sporting clubs for summer and winter ball sports.

Between 1951 and 1955 an identical set of three timber framed barracks buildings (B1, B2 and B3) and associated laundry were constructed on the northern side of Middle Head Road. They were built to serve as barracks for the III Anti-Aircraft Artillery Battery. Between this group of barracks buildings and Middle Head Road, a bituminised parade ground was constructed between 1955 and 1960.

In 1958, the School of Military Intelligence moved into 10 Terminal and operated there until its relocation to South Australia in 1967. The Unit played an important role during the Vietnam and Cold Wars. The Unit taught aerial photo interpretation, foreign army tactics and combat intelligence. Students learnt about enemy interrogation techniques that would help them endure and resist treatment if captured. The fortification tunnels in the National Park on Middle Head were used for this purpose with a series of 'tiger cages'.

In 1963 the 1 Terminal Group moved to the 10 Terminal site. This group became the 10 Terminal Group in 1974 which was then subsequently renamed in 1976 to 10 Terminal Regiment, who occupied the buildings until 1997.

The predecessor of the 1 Terminal Group was the Royal Australian Engineers, Dock and Water Transport Units which had been set up at Chowder Bay in 1948.

7.5. Public Parkland on the Headland

Sydney Harbour National Park

In 1975 a National Park was established over parts of North Head, Dobroyd Head, Bradleys Head, Shark Island and Clark Island. In 1984 following negotiations with the Commonwealth Government, former defence lands were added to the park including Middle Head. The area at Middle Head did not include the 10 Terminal and ASOPA sites. Sydney Harbour National Park now covers an area of 393 hectares and the formation of this National Park ensured that a scenic gateway to the city was created and remnant vegetation of Sydney Harbour protected.

Sydney Harbour Federation Trust

Following the departure of Defence from Georges Heights, Middle Head and Chowder Bay in the late 1990s, the former Defence lands were vested in the Sydney Harbour Federation Trust in 2001 to become Headland Park. The Harbour Trust has progressively opened up the lands to the public through the construction of walking tracks, parks and car parks and the renewal and repair of services, decontamination of lands and the restoration of buildings.

Public access into Middle Head has been steadily improved: bus services have been upgraded, public car parks and walking trails have been formalised, a formal footpath constructed beside Middle Head Road, and the Middle Head Road/Chowder Bay Road intersection remodelled as a roundabout.

By 2009, the former Golf Clubhouse had been transformed into a restaurant and retail outlet and by 2011 all of the buildings in ASOPA had been restored, the tropical gardens replanted and the buildings leased for a mix of commercial uses. In 2013, the former guardhouse was refurbished as a popular café. Middle Head Oval's floodlighting has been upgraded to accommodate evening matches, as well as practice sessions, while greatly reducing lightspill impacts. 10 Terminal and the Barracks buildings remain vacant.

In 2013, part of the historically significant defensive ditch was revealed by the Harbour Trust at the entrance to Sydney Harbour National Park. The ditch is part of the defensive system designed by colonial architect James Barnet in 1870 to protect outer Sydney Harbour.

Middle Head is an increasingly popular commercial and recreation destination, attracting small businesses, beach goers and walkers alike. HMAS Penguin remains as an operational Naval base, maintaining an ongoing Defence presence on the headland.



8. Heritage Values



8. Heritage Values

8.1. Heritage Listings and Commonwealth Heritage Values

The Commonwealth Heritage List, established under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), comprises natural, Indigenous and historic heritage places which are either entirely within a Commonwealth area, or outside the Australian jurisdiction and owned or leased by the Commonwealth or a Commonwealth Authority; and which the Minister is satisfied have one or more Commonwealth Heritage values.

The former Defence lands at Headland Park, Mosman (which includes the Middle Head precinct and the adjoining HMAS Penguin Naval base, are together listed under the EPBC Act as Commonwealth Heritage Place No 105541.

It is also listed on the Register of the National Estate as Historic Place No. 102619 and “Middle Head and Georges Heights” Historic Place No. 101087.

The precinct also contains items with individual listings:

- “Ten Terminal Regiment Headquarters and AusAid Training Centre” as Historic Place No. 105587 on the *Commonwealth Heritage List* and Historic Place No. 103342 on the Register of the National Estate.
- “Golf Clubhouse (former)” as Historic Place No. 105575 on the *Commonwealth Heritage List* and Historic Place No. 103293 on the *Register of the National Estate*.

- “Military Road Framework” containing section of Cobblers Beach Road, section of Middle Head Road to the Sydney Harbour National Park boundary, and section of *Chowder Bay Road to Middle Head Road* as Historic Place No.105572 on the *Commonwealth Heritage List* and Historic Place No.103266 on the Register of the National Estate.

The full Commonwealth Heritage listings, including Summary Statement of Significance for the listings and the Official Commonwealth Heritage Values is at Appendix A.

The EPBC Act regulates all actions relating to Commonwealth Heritage Places. These controls are described in Section 5.1.1.

Schedule 5 of Mosman LEP 2012 – Environmental Heritage contains numerous listings for the Middle Head precinct including the “10 Terminal Regiment HQ”, “AUS AID Training Centre”, and “Defence Housing” (including The Golf Club House).

The site lies within the National Trust’s “Sydney Harbour Landscape Conservation Area” classified by the National Trust on 24 January 1983. However, there is no specific mention of the buildings, structures and former and current uses of the site.

8.2. NSW State Heritage Register

The Harbour Trust’s land at Middle Head is not listed on the NSW State Heritage Register. The nearby Middle Head fortifications, in Sydney Harbour National Park, are identified on the NSW State Heritage Register.

8.3. Archaeological Assessments

In February 2006 Australian Museum Business Services (AMBS) prepared an addendum to their 2004 Archaeological Survey of Trust lands at Middle Head, Georges Heights and Chowder Bay.

The area covered by the 2006 survey included the former Golf Clubhouse, the ASOPA buildings, the 10 Terminal buildings and Middle Head Oval.

The archaeological survey found no Aboriginal sites or objects: given the disturbed nature of the area it is very unlikely that Aboriginal cultural material would have survived the past development of the site.

The report concluded that no additional archaeological survey of the property was necessary or warranted. However, due to the possible existence of sub-surface remains, where future earthworks occur, monitoring and detailed recording should be conducted by a qualified archaeologist. This policy will also ensure the protection of any non-Aboriginal archaeological material that may be present.

8.4. Conservation Management Plan

In 2006 the Harbour Trust commissioned Robertson Hindmarsh Pty Ltd to prepare a Conservation Management Plan (CMP) for the Middle Head precinct.

The draft CMP details the cultural significance of the site and the individual components within it. The draft CMP summarises the significance of the site as below:

The study site is significant as an important element in the entire former military reserve and defence lands at Middle Head, Georges Heights and Chowder Bay. The study site contains building complexes constructed in the early days of World War Two in the Pacific which are tangible reminders of the type, range, and standard of buildings required to mount a defence of Australia in wartime.

They also demonstrate the long association of the site with the training of defence personnel and the long-time use of the site for military purposes which has had the effect of preventing major urban development of the headland and its preservation as part of the landscaped nature of the major headlands of Sydney Harbour.

The site also contains one of the few remaining relatively intact interwar golf club houses and the physical evidence of Australia's only training institution established to train administrators and officers for Australia's overseas territories.

The EPBC Act provides that a place has Commonwealth Heritage value if it meets one of the criteria prescribed in the Regulations. The following statement of Commonwealth Heritage Values is derived from the Draft CMP. The statement demonstrates that the site meets several of the criteria specified in the EPBC Regulations, 2000. The primary sources of significance for the place are:

Criterion a:**The place's importance in the course, or pattern, of Australia's natural or cultural history.**

- The site is significant as an important element in the entire former military reserve and defence lands at Middle Head, Georges Heights and Chowder Bay.
- The Military Road Framework is historically important as part of a single military road system at Middle Head and Georges Heights, which developed from 1870.
- The site is important as it contains building complexes constructed in the early days of WW II in the Pacific which are tangible reminders of the rapid construction of defence facilities when Australia was under threat of invasion.
- The site is important as its long occupation by the military has had the effect of preventing major urban development of the headland and has contributed to the preservation of the landscaped character on the major headlands of Sydney Harbour.
- The site is important because the former Golf Clubhouse and the golf course remnants are physical reminders of the popularity during the interwar period for the construction of golf courses and the expansion of the sport through the middle classes in Australia.
- The former Golf Clubhouse building is a tangible reminder of the public controversy associated with the alienation of public land for a private club which occurred at the time of the club's establishment.
- The site is important as the location of the Australian School of Pacific Administration (ASOPA) which was Australia's only training institution established to train administrators and officers for Australia's overseas territories.

- The site is important in the context of Australia's contribution to the world decolonisation process following WWII. Through ASOPA, Australia was able to give practical effort to its international commitment to decolonisation. This support continued at Middle Head until Papua New Guinea achieved self-government in 1973 and beyond into the post-colonial era.

Criterion b:**The place's possession of uncommon, rare, or endangered aspects of Australia's natural or cultural history.**

- The Military Road network at Georges Heights and Middle Head is the only intact military road network remaining in Sydney from the 1870s.
- The ASOPA buildings are surviving examples of hutted WW II army buildings which are now rare at a national level.
- The 10 Terminal buildings are a rare surviving complex and probably the only permanent school of engineering erected in New South Wales during WW II.
- The former Mosman Golf Clubhouse is significant as a rare surviving example of an early 20th Century golf clubhouse in Australia which due to the cessation of its use as club house has not been subject to upgrading pressures.
- The remnant of the former golf course is significant as a surviving example of the less sophisticated design of courses in the interwar period.

Criterion c:

The place's potential to yield information that will contribute to an understanding of Australia's natural or cultural history.

- The Military Road network provides evidence of the methods of communication and troop movement important in military installations up to the end of WW I.
- The 10 Terminal site provides evidence of the standard of permanent training facilities erected during the wartime.
- The ASOPA site provides evidence of the standard of temporary accommodation facilities erected during the war time.
- The remnant golf course is significant as it contributes to an understanding of early golf course design.

Criterion d:

The place's importance in demonstrating the principal characteristics of

- i) a class of Australia's natural or cultural places; or**
- ii) a class of Australia's natural or cultural environments.**

- The ASOPA buildings are examples of WW II hutted army camps. They embody the mobilisation of the Australian economy to provide the required accommodation for the defence forces at a time of national emergency. Their standardised built form illustrates the lack of materials and labour and the requirement for rapid, economic construction.

Criterion e

The place's importance in exhibiting particular aesthetic characteristics valued by a community or cultural group.

- The site, as part of Middle Head, has aesthetic value for its prominent position overlooking Sydney Harbour.
- The overall layout, the use of standard hut types and surviving detail is typical of temporary hutted accommodation built during WW II.
- The deliberate austerity of the 10 Terminal buildings is typical of permanent military buildings of the late 1930s and early 1940s.

Criterion f:

The place's importance in demonstrating a high degree of creative or technical achievement at a particular period.

- The remnant road in the informal car park at the intersection of Middle Head and Chowder Bay Roads; and the small section at the intersection of Cobblers Beach Road are rare examples of military road construction (the sandstone edging and the remaining bitumen are rare survivors of pre-WW II Macadamised roads).
- The ASOPA huts are important because they indicate the use of standard huts developed for use during WW II.
- The former Golf Clubhouse building is an excellent example of an architect's use of the interwar California bungalow aesthetic for a non residential purpose and remains remarkably intact.

Criterion g:

The place's strong or special association with a particular community or cultural group for social, cultural or spiritual reasons.

- The site is important as a physical reminder of the nationally unique Australian School of Pacific Administration (ASOPA) and of Australian engagement in the Pacific. The buildings adapted for use by ASOPA provide a physical focus for the connection felt by former employees and students to the now defunct institution.
- The precinct, as part of the larger Middle Head–Georges Heights area, has social significance for the Sydney community and for past and present defence personnel who worked there.
- The former golf club had strong associations for members of the Mosman community in its use as a club house.

Criterion h

The place's special association with the life or works of a person, or group of persons, of importance in Australia's natural or cultural history.

- The site has an association with a number of eminent Australians, including John Kerr, one of the early principals of ASOPA (later Sir John Kerr, Governor-General) and the noted poet, James Maccauley.
- The former Golf Clubhouse building is a substantially intact example of the work of the architectural firm Morrow, Deputron and Gordon.

Criterion i:

The place's importance as part of indigenous tradition.

- The Middle Head area is thought to have been included in the area known as King Bungaree's farm, Governor Macquarie's attempt to settle Aborigines on land and introduce them to farming.

The draft CMP identifies items of significance and provides a set of policies and recommendations to maintain and enhance the cultural significance of the site and to guide its future management. These recommendations are addressed in the *Outcomes* section of this plan.

9. Site Analysis



9. Site Analysis

9.1. Landscape Character

Middle Head is at the culmination of the sequence of knolls along the ridge, winding its way to the cliffs overlooking the main waterways at the entrance of the harbour. It forms part of the gateway to Middle Harbour from land and water.

The headland, now within Sydney Harbour National Park, was an obvious place for fortifications. The Harbour Trust land, comprising the former ASOPA and 10 Terminal clusters, occupies the gentle knoll on the plateau, separated from the fortified headland by the remnant defensive ditch and fortification walls running alongside the valleys that converge to form a saddle on the undulating ridgeline.

The long occupation of the site has meant that the site has been protected from urban development and it is an important component of the landscaped nature of the major headlands of Sydney Harbour. The site is effectively a clearing on top of a ridge, which when viewed from the water is screened by bushland.

The open landscape nature of the site is probably derived from a combination of poor soils on the ridge tops and the later occupation of the land by European settlers such as Charles Beilby, who purchased the land in 1835. From the 1840s onwards the area was known as Beilby's Flat, implying a relatively level and open landscape.

The cleared nature of the land is also as a result of occupation by both the Military and Mosman Golf Club. Historical accounts report that a large number of trees had to be removed to establish the golf course.

Today, the cleared lawn area in front of the Former Golf Club house and the undulating lawn areas south of the ASOPA buildings are evocative of the golf course. Remnants of the first tee and the final green are present, although barely discernible, in front of the former Golf Club house.

The spaces between the ASOPA buildings are characterised by lush exotic plantings reflecting the tropical nature of the institution. They also illustrate the deliberate attempt to lessen the rigidity and formality of the former Signals Camp. Similarly, plantings around the 10 Terminal Regiment buildings have added a pleasant layer of humanising occupation which enhances the buildings. In contrast to this, there are extensive paved areas and former wash-down bays at the eastern end of 10 Terminal.

Apart from the buildings, the majority of the ASOPA / 10 Terminal site is either grassed or hard surfaced for pedestrian paths, roads and car parking areas. The occupation of the site and the historical uses has resulted in a dearth of mature trees on the site. The 1930s aerial photograph of the site (*Figure 10*) shows a cluster of trees in the same location and these are probably the same trees as the stand of *Eucalyptus botryoides* (Open Forest) which are located near the 2-storey Barracks buildings. These trees may be remnant specimens.

Other large trees on the site include the two mature figs located south of the Signals Camp Mess (Building 8), and non-local Eucalyptus species which were probably planted during the time of the golf course. See *Figure 13 – Landscape Character*.

9.2. Bush Land and Natural Values

Conacher Travers Environmental Consultants were engaged to prepare flora and fauna studies of Harbour Trust and NPWS lands at Middle Head and Georges Heights.

The Middle Head precinct retains limited natural values due to a long history of modification and disturbance, in particular the clearing of the majority of bushland along the ridge in the 1930s to construct the Mosman Golf Course.

There are two main sections of bushland remaining within the Middle Head precinct, as follows:

The area along the eastern edge of Middle Head Road between the Lower Georges Heights precinct and the Mosman Golf Club House, supports the *Angophora costata* / *Eucalyptus botryoides* (Open Forest) vegetation community, and further down the slope supports the *Eucalyptus botryoides* (Open Forest) vegetation community.

The northern slopes of Middle Head Oval and the Barracks buildings support the *Glochidion ferdinandi* (Closed Scrub / Tall Shrubland) vegetation community and the *Eucalyptus botryoides* (Open Forest) vegetation community.

Despite the nature of the existing bushland within the precinct boundaries, the majority of the site is surrounded by the Sydney Harbour National Park which contains significant natural values.

The conclusions of the study are that:

- The area supports a number of vegetation communities and sub-communities, all of which are relatively common in the Sydney Harbour catchment;
- *Acacia terminalis ssp. terminalis* is found in bushland within the Middle Head site. This species is listed as “Endangered” in Schedule 1 of the *Threatened Species Conservation Act* (1995) and as “Endangered” in the *Environmental Protection and Biodiversity Conservation Act* (1999) and contributes to the ecological significance of the bushland;
- The two vegetation communities supported along the eastern edge of Middle Head Road contain high levels of native biodiversity, with comparatively low levels of weed infestations. Due to the presence of *Acacia terminalis ssp. terminalis* and a number of healthy *Angophora costata* specimens, this area was identified as a priority area for bushland management including weed management and rehabilitation; and
- The two vegetation communities supported on the northern slopes of Middle Head Oval and north of the 2-storey Barracks buildings contain a moderate to low species diversity with moderate to severe weed incursions. Due to the relatively small size of this bushland area, weed management activities should prove successful in this area.

The report recommended that:

- A survey to specifically locate and map the occurrence of *Acacia terminalis* spp. *terminalis* be undertaken, and that these areas be protected, monitored and interpreted;
- Current weed management should continue and communities containing *Acacia terminalis* spp. *terminalis* should be given priority; and
- The future use of the site must maintain and / or improve the existing two main bush corridors so that the transfer of genetic material of both the flora and fauna is maintained.

As recommended a targeted survey of *Acacia terminalis* spp. *terminalis* was undertaken within the *Angophora costata* / *Eucalyptus botryoides* (Open Forest) vegetation community. 81 specimens were located within this area (Figure 16). Although specific research into identified threats has not been undertaken, of most significance to this situation are issues of exotic weed invasion and the presence of the *Phytophthora cinnamomi* pathogen.

Management recommendations to assist in enabling this population to persist within the area in the long term include:

- Establishment of a 20 metre buffer zone to any activities near the population. This includes public access, fire management and potential development works. Fencing of this area should be considered.
- Implementation of the Harbour Trust's Phytophthora Management Strategy.
- Continued weed management and bushland regeneration activities within the area.
- Management of drainage issues to minimise disturbance and nutrient enrichment to this area.

Conacher Travers Environmental Consultants also prepared a comprehensive fauna study of Harbour Trust and Department of Defence lands at Middle Head and Georges Heights which included the Middle Head precinct.

The survey identified a number of native fauna species on the site that are considered to be common in the area. Less common species observed were the Tawny Frogmouth, Boobook Owl, Diamond Python and White-striped Mastiff Bat. These species are considered to be vulnerable to numerous ecological threats.

No threatened species were found.



Fig.13 Landscape Character

Middle Head



0 50 100 150m



Fig.14 Environmental Considerations

The report recommends that:

- An appropriate fire regime for the area be instigated;
- The hydrology of the site be managed to reduce the amount of disturbance and pollution from stormwater runoff;
- The integrity of the site be maintained and enhanced by:
 - Minimising disturbance such as rubbish dumping and trampling of vegetation by walkers;
 - Providing nest boxes for species such as Powerful Owls and Black Cockatoos;
 - Regenerating native bushland and undertaking programs for feral animal control programs; and
 - Reintroducing native species.

Although the study did not identify any rare or endangered species the NPWS has advised that Bent Wing Bats (*Miniopterus schreibersii*) are known to use the underground chambers of the Middle Head gun emplacements during winter. These bats are identified as a “vulnerable species” under the *NSW Threatened Species Conservation Act (1995)*. However, they are not listed under Commonwealth legislation. Neither NPWS nor the Harbour Trust has prepared a Recovery Plan for this species.

9.3. *Phytophthora cinnamomi*

Dieback related to the root-rot disease *Phytophthora cinnamomi* has been listed as a key threatening process under the *Environment Protection and Biodiversity Conservation Act 1999*. The Department of Environment prepared a *Threat Abatement Plan* in 2014 to guide actions by Commonwealth agencies to prevent the spread of this disease and to limit its effects on vulnerable or endangered native species.

Sampling and analysis carried out on Trust and National Park lands at Georges Heights and Middle Head have confirmed the presence of *Phytophthora cinnamomi* in this landscape. As such, it is likely that the pathogen is present in the precinct although no site specific sampling has been carried out within Harbour Trust land to date. See *Figure 14* which shows existing dieback areas.

The Royal Botanic Gardens advised that vectors for the introduction of the pathogen include nutrient laden stormwater run-off, earthworks, construction vehicles and pedestrian access. It recommended that the Harbour Trust put controls in place in order to reduce the risk of the spread of the disease.

The Harbour Trust has developed a *Phytophthora Management Strategy*, in accordance with which site specific testing will be carried out prior to any disturbance of the site for development. Results of this testing will be used to develop a site-specific risk management strategy to minimise the introduction or spread of *Phytophthora* into and from the precinct.

9.4. Bushfire Risk

In 2016 Travers Bushfire and Environmental Consultants prepared a Draft Bushfire Management Plan for Headland Park. It describes the recommended strategies for the Harbour Trust to implement to meet its fire management obligations up to 2021.

The Draft Plan identifies three types of fire management zones to avoid risk to life, property (capital assets) or the environment:

- Asset Protection Zones – these zones can assist with reducing the intensity of uncontrolled fires and the potential damage caused by ember and smoke.
- Strategic Fire Management Zones – contribute towards conserving biodiversity by controlling the spread of unplanned fires, which would otherwise result in fire regimes and subsequent species extinctions.
- Land Management Zones – aims to protect the environmentally and culturally significant features of the site by suppressing bush fires and - where necessary – by conducting prescribed burns to maintain fire regimes within the biodiversity thresholds.

In relation to Middle Head, the Plan recommends an Asset Protection Zone (APZ) be established and maintained around the former Golf Clubhouse, and the existing APZ continues to be maintained around ASOPA, 10 Terminal and Barracks buildings.

An APZ is recommended along the eastern side of Middle Head Road. This would be equivalent to an ‘Outer Protection Area’, with understorey managed but with no removal of trees required.

The Draft Plan identifies a program for a mosaic fire regime across Headland Park, to reduce the risk of unplanned wildfire and to promote biodiversity. This program will be implemented in collaboration with NPWS and NSW Fire and Rescue. Recent burns include those at Land Management Zones (‘Cobblers Track’) in 2014 and Middle Head Road in 2016.

Strategic fire advantage zones on adjoining land managed by other agencies include:

- Along the boundary of Harbour Trust land, to the south of 10 Terminal, managed by NPWS in accordance with the Fire Management Plan Sydney Harbour and Botany Bay (La Perouse Precinct) National Parks
- The southern portion of HMAS Penguin, managed by the Department of Defence in accordance with the Property Bushfire Management Plan 2010 to 2013.

The Harbour Trust will engage specialist consultants to undertake a review of the Bushfire Management Plan which will provide updated recommendations, as required.

9.5. Stormwater

Stormwater management at the site is particularly important due to its proximity to Sydney Harbour National Park, downslope of the Harbour Trust site.

In 2004, Storm Consulting Pty Ltd prepared a stormwater management plan for the Georges Heights, Chowder Bay and Middle Head areas. The purpose of this was to identify the stormwater issues on the sites, and to establish objectives and a plan of implementation for stormwater management practices to deal with these issues. The main objectives set out in the stormwater plan are to protect and enhance the existing environment by means of water sensitive design principles such as source controls, conveyance controls and discharge controls.

Stormwater runoff on the site has changed significantly since defence infrastructure was established on the site in the 1900s. Changes in land use include removal of vegetation, increased impervious areas and increased vehicular and pedestrian movement have changed the site hydrology and pollutant loads.

At Middle Head, the study found that the Middle Head Road catchment was channelled down the road in an unformed drain and discharges into bushland in the Sydney Harbour National Park, south of the intersection of Middle Head and Chowder Bay Roads. The 10 Terminal buildings and associated paved areas drain to the south to outlets that discharge into Sydney Harbour National Park bushland. In addition, the parking areas, barrack buildings and Middle Head Oval drain to the north from stormwater outlets through bushland on Harbour Trust land (*Figure 14*).

The recommendations from the Stormwater Management Plan have been incorporated into the landscaping and design concept for the site as discussed in the Outcomes section of this Management Plan. Many of these have already been implemented - for example, stormwater harvesting and reuse provides non-potable water use to each building on the ASOPA site. To achieve this, water is collected from hard paved surfaces and roofs in a 250,000L tank that was installed under the ASOPA tennis court in 2011-2012. It has been designed to be connected to the 10 Terminal buildings at a later stage.

9.6. Site Contamination

In 1999, PPK – Environment and Infrastructure, was engaged to conduct a two-stage contamination assessment and geotechnical study of Defence lands to be transferred to the Harbour Trust, including the Middle Head precinct. The purpose of this assessment

was to provide information regarding contamination on the lands so that the potential uses and initial requirements and costs for remediation could be determined.

The site's Defence use (10 Terminal Regiment) was generally limited to training, administration, minor vehicle maintenance and fuel and chemical storage. The area formerly occupied by ASOPA, was only used for training activities. Based on these uses, PPK identified the following potential sources of contamination:

- Vehicle workshop areas located on the 10 Terminal site;
- Petrol, Oils & Liquid (POL) stores located at the south east corner of the 10 Terminal site;
- Above ground waste oil tank and tank bund located in the south east corner of the 10 Terminal site;
- Grease trap located near kitchens at Building 3 (10 Terminal);
- Pollution control pits, two located in the south east corner of 10 Terminal
- Transformer, located on the ASOPA site;
- A vehicle servicing pit on the 10 Terminal site, as well as general vehicle storage and repair areas;
- Some minor use of fill materials on the site, mainly under hardstands or building footprints; and
- Existing or former building footprints, where pesticides may have been used for termite control, or where lead paint or asbestos building materials may have discharged to soils.

Potential contaminants from the above sources are pesticides, total petroleum hydrocarbons (TPH), polycyclic aromatic hydrocarbons (PAHs), poly chlorinated biphenyl compounds (PCBs), lead and asbestos. Sampling and analysis carried out by PPK confirmed

elevated concentrations of Total Petroleum Hydrocarbons, PAHs and lead in soils, exceeding EPA-endorsed guidelines for public open space or commercial use (see *Figure 14*).

In 2003, Defence carried out works on the site which consisted of:

- Removal of demountable buildings;
- Removal of the above ground waste oil tank, and remediation and validation of associated soils;
- Removal of the POL store; and
- Removal of the vehicle service pit, including remediation and validation of associated soils.

In April 2005, the Harbour Trust commissioned a non-statutory audit of the precinct under the *Contaminated Land Management Act 1997*. The audit, undertaken by Environ Australia provides an independent review of what investigation or remediation remains necessary before the land is suitable for parkland/ open space use. In summary, the auditor concluded and recommended the following:

- The site has been reasonably characterised for contamination, with no widespread contamination impact;
- A hazardous materials survey should be conducted to identify the presence of lead paint and asbestos materials that may provide impact to soils;
- Drainage paths should be identified so that sediment runoff can be controlled by existing or new structures;
- The extent of potential TPH and PAH contamination in the unsealed area at the eastern boundary should be delineated and remediated as necessary;

- The reason for elevated lead contamination adjacent to Building B2 should be assessed to determine likely extent, and remediation or management requirements;
- Further assessment of PAH concentrations in fill should be conducted, particularly where fill may be disturbed or exposed (eg pavement demolition) due to proposed site works;
- Further assessment of pesticide contamination in surface soils should be conducted around and under weatherboard buildings and areas of raised timber flooring; and
- The grease trap near Building 3 (10 Terminal) should be removed and any impacted soils validated.

Between 2009 and 2012, the Harbour Trust rehabilitated the ASOPA buildings, former Golf Club House and car parking areas at Middle Head. Known contamination has been removed or safely treated and capped in situ.

9.7. Hazardous Materials

In January 2007, Getex Pty Limited carried out a detailed hazardous materials survey for buildings and structures remaining at Middle Head. Based on the findings of the survey, a Hazardous Materials Management Plan was prepared.

For the purposes of this survey, '*hazardous materials*' includes asbestos products, synthetic mineral fibre (SMF) materials, lead based paint systems, lead in ceiling dust and electrical components containing the class of compounds known as polychlorinated biphenyls (PCB's).

The survey identified:

- Asbestos cement (AC) materials present in most buildings. Asbestos materials were found in the roofing, under floor spaces, in wall linings/cladding, floor coverings and insulation.
- SMF present in the insulation of the roof spaces, in air-conditioning ducts, in hot water tanks, and in ceiling tiles.
- Capacitors containing PCBs present in the fluorescent light fittings in several buildings.
- Lead based paints present in most buildings, particularly on walls and ceilings. In a number of buildings, the lead based paints are showing signs of deterioration.
- Lead in ceiling dust, vinyl tiles, debris and some lagging materials were noted in some buildings.

As part of the Harbour Trust's works to refurbish ASOPA buildings, all hazardous materials were removed by the Contractor.

In 2013, the Harbour Trust engaged SLR Global Environmental Solutions to prepare a Hazardous Building Materials Survey Report for Headland Park, including Middle Head. In their report, SLR found a range of hazardous materials and contaminants within the buildings at Middle Head that were yet to be refurbished, including:

- Asbestos Containing Material (Fibre Cement Sheeting) in ceiling panelling, downpipes, guttering and insulation;
- Lead in internal and external paint;
- Synthetic Mineral Fibres in wall voids (for example behind laminated panelling) and associated debris; and
- Polychlorinated Biphenyls (PCBs) in lights.

The Harbour Trust will undertake hazardous materials survey, removal and abatement programs prior to building refurbishment or demolition. Any known remaining hazardous materials at Middle Head will be managed in accordance with the hazardous materials register and management plan prepared for the site.

9.8. Services

In March 2002 PPK Consulting undertook a detailed survey of the site in order to establish the extent and condition of site services. The study examined the condition of water, fire services, electricity, telecommunications, sewerage, stormwater, gas and fuel services. PPK advised that upgrades would be required for all major services to the precinct.

As part of the refurbishment of each of the buildings in the Middle Head Precinct, the Harbour Trust is upgrading all services required to meet tenant and visitor needs. All upgrades will be undertaken in such a way that supplies to existing tenants, as well as NSW National Parks and Wildlife Service and HMAS Penguin are not adversely affected.

9.9. Compliance with the National Construction Code

As buildings at Middle Head are progressively refurbished and occupied, the Harbour Trust will engage specialist consultants to determine the need and consequently the nature and extent of works necessary to achieve compliance with the National Construction Code (formerly known as the Building Code of Australia (BCA)). Detailed assessments will be undertaken once details of future uses are refined.

The matters for which each building will be assessed include:

- Fire Compartmentation
- Fire Resistance
- Protection of Openings
- Occupant Egress
- Access for Disabled Persons
- Fire Safety Protection Services
- Sanitary Facilities

Irrespective of the end use for each building, it is expected assessments will find that significant upgrades will be required to achieve compliance. Particular concerns are likely to be associated with fire compartmentation, protection of openings and access for disabled persons. Detailed design solutions will be informed by the NCC assessment.

9.10. Transport Management

In 2003 the Harbour Trust commissioned Maunsell Australia Pty Ltd to prepare a Transport Management Plan (TMP) for Middle Head, Georges Heights and Chowder Bay.

The TMP identifies measures to minimise reliance on access by private motor vehicles and to maximise access by public transport, walking and cycling. The TMP also considers the cumulative impacts of the development of Trust lands and neighbouring sites such as HMAS Penguin, Sydney Harbour National Park and local sporting facilities.

Consultation with key agencies such as HMAS Penguin, NPWS, Mosman Council and the State Transit Authority was integral to the development of the plan.

The recommendations of the TMP relevant to the Middle Head precinct include:

- Requesting the State Transit Authority to provide additional bus services on weekends
- Installing bicycle parking/lockers
- Improving signage along Middle Head Road to warn of road narrowing
- Consider installing parking meters in public parking areas
- Installing public transport signage and information, as well as a bus shelter
- Providing pedestrian directional signage and information.

Each of these recommendations have either been implemented by the Harbour Trust or are identified in this plan as a desired outcome.

The TMP for Middle Head, Georges Heights and Chowder Bay and previous traffic studies have consistently recognised that the environmental capacity (the relationship between traffic speeds, traffic volumes, pedestrian safety, traffic noise and the type of land use) of Middle Head Road to handle increases in traffic generated by Middle Head area is limited, given the road's largely residential character. The TMP recognises that traffic management and accessibility by motor vehicle are issues that are particularly important in the Middle Head and Georges Heights area.

In order to reduce the environmental and amenity impacts of increased traffic generation one of the Harbour Trust's overall transport management objectives is to limit travel demand by private car. This includes limiting the number of trips generated by

development through the setting of maximum parking numbers on Trust sites that are consistent with their traditional operational levels.

During the period of Defence occupation, the precinct had space available for approximately 162 vehicles for defence purposes. In 2007 there were approximately 119 spaces available in the two public car parks at the Chowder Bay/Middle Head Road intersection and adjacent to the Oval. The TMP identified the future parking required to meet demand for the adaptive reuse of the site as 148 spaces. The TMP also examined the possibility of sharing spaces between different uses as the periods of peak demand of proposed uses would not generally coincide. The TMP highlighted the need to address tourist coach demand in the design of parking areas.

In 2005 Christopher Hallam & Associates prepared a report for the Harbour Trust regarding the management of the Harbour Trust's roads in Mosman. The report made a number of detailed recommendations for road improvements, covering matters such as signage, traffic calming measures, road widths and speed limits. These recommendations continue to be implemented as part of the programme of works undertaken in the precinct.

In 2009, the Harbour Trust engaged traffic consultants Urbanhorizon to prepare a Parking Management Plan (PMP), to identify measures to manage parking demand at Headland Park, including Middle Head. The PMP suggested the introduction of measures to manage pedestrian and vehicle access to Middle Head, including formalising some existing car parking areas to increase supply, and introducing time restrictions and pay and display ticket parking to increase weekday and weekend car space turnover.

Between 2009 and 2012, the Harbour Trust formalised the parking areas at the Chowder Bay Road / Middle Head Road intersection; the former quarry adjacent to the former Golf Club House; and to the east of 10 Terminal. Combined, there are 277 carspaces in the "lower" Middle Head precinct. A further 41 spaces are available at the former Golf Club House.

The car parks in the Middle Head precinct also provide parking for visitors to the adjoining Sydney Harbour National Park as well as park and ride where a shuttle bus is used to and from the Chowder Bay function centre.

In addition, public access to Middle Head has been significantly improved through the upgrading of the 244 bus service that now provides a regular weekday and weekend service to Chowder Bay.

In 2012, as part of a major upgrade to HMAS Penguin, the main entrance to the base was relocated from Middle Head Road to a new entrance facing Middle Head Oval. As part of the works, the intersection of Middle Head and Chowder Bay Roads was reconfigured to accommodate a roundabout, and the informal car park adjacent to the Oval was formalised and a boom gate installed to limit access to Navy personnel only. The Harbour Trust will investigate opportunities with HMAS Penguin to allow the public to use this car park, when it is not needed for Naval purposes.

The Harbour Trust will continue to monitor traffic generation and parking demand across Headland Park.



10. Outcomes



10. Outcomes

The proposed outcomes for the precinct are shown at *Figure 15*.

The precinct will form part of the sequence of civic, village-like places along the plateau enveloped by bushland and connected by pathways integrating the Headland Park. The primary objectives for the Middle Head precinct are to:

- To work collaboratively with NPWS in the coordinated management of the whole headland.
- Improve access to and through the precinct by providing pathways and parking areas
- Adaptively re-use the buildings of ASOPA and 10 Terminal in a manner that retains and conveys their heritage values and contributes positively to the experience of visitors to the Headland Park
- Allow some buildings to be modified or removed
- Allow some sensitively designed new infill buildings and a replacement Oval pavilion building.
- Find uses for the buildings that help their conservation and that are sympathetic to their simple, institutional form and the need to open up the site to the public
- Ensure new uses achieve compliance with relevant building standards and bushfire regulations
- Retain the existing pattern of development of the former bases to help form the basis of the public access and circulation network. This will be further enhanced by some additional pathways that will help to integrate with the adjacent National Park
- Continue use of the Oval as a sports recreation facility

- Retain the institutional, garden-like character of the landscape
- Protect and expand the bushland areas around the periphery up to a new circuit pathway, which will also provide a means of controlling run-off from the lawns and gardens
- Selectively remove some of the less significant landscape elements within the former bases to reveal views of the surrounding waterways and headlands, and to improve the clarity of the setting of each of the elements that make up the site and its history: the fortifications, the barracks, ASOPA, and the Golf Clubhouse.

10.1. Coordinated Management of the Headland

A prime consideration for the future management of Middle Head is its coordinated management as one place, where significant heritage places and natural systems are protected and retain their prominence. The Harbour Trust will develop and implement a coordinated management framework in close consultation with NPWS.

The proposed coordinated approach will cover a range of areas including:

- Path and track network connections and directional signage
- More effective management of pests and weeds, fire, stormwater, threatened species and bushland
- Interpretation and visitor experience, including possible joint tours
- Parking and road management
- Coordinated planning and community engagement
- Improved information sharing

Coordinated management will allow each agency to still function as independent corporate entities maintaining their normal business operations, whilst co-operating in areas in which they can contribute to the protection and enhancement of Middle Head.

A number of management principles opportunities for joint initiatives and outcomes and have been identified to guide the Harbour Trust and NPWS in their site management and decision making process, outlined in *Figure 15* and below:

Access

To facilitate improved access to the natural and cultural assets of the headland, the Harbour Trust and NPWS will continue to work together to:

- Develop a connected network of paths and tracks as part of the Sydney Harbour Scenic Walk
- Facilitate improvements that support public transport, walking and cycling
- Explore opportunities for coordinated directional signage and clear arrival points
- Coordinate the management of traffic and parking

Interpretation

One of the primary objectives of the Harbour Trust is to increase public understanding and appreciation of the lands' rich natural and cultural heritage. A key means of achieving this is through the development of interpretive activities that are meaningful, relevant and engaging to a broad audience.

The Harbour Trust and NPWS will continue to work together to tell the stories of Middle Head across the whole landscape through the sympathetic adaption of buildings and spaces, and the development of activities and publications. Opportunities to provide integrated interpretation will continue to be explored and developed.

Environmental management

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

- Protecting threatened species, populations or communities in accordance with relevant guidelines
- Ongoing monitoring of flora and fauna species
- Ongoing management of weeds
- Implementing best practice hygiene procedures for bush regeneration or related activities
- Sourcing soil and plant materials from appropriately certified suppliers and native plant nurseries
- Coordinating the implementation of bushfire protection strategies
- Managing stormwater runoff to bushland areas by controlling the downslope dispersal of nutrients

Visitor experience

The Harbour Trust and NPWS will continue to work together to develop tours, events and education programmes across the Headland. This includes:

- Improving the sense of arrival to the headland
- Ensuring consistent and visible signage and messaging across the headland
- Examining opportunities for expanding joint programmes and developing new and unique experiences to engage a broad range of visitors
- Using a variety of interpretive techniques to engage visitors remotely and on site
- Providing a variety of public facilities to attract new and regular visitors to Middle Head
- If a visitor centre was established on the headland, the Harbour Trust and NPWS would work together to determine its location, format and content.

ACCESS

The Harbour Trust and NPWS will continue to:

- Work together on coordinating parking and road management
- Develop a connected network of paths and tracks as part of the Harbour Scenic walk
- Explore opportunities for coordinated directional signage and clear arrival points



INTERPRETATION

The Harbour Trust and NPWS will work together to tell the stories of Middle Head across the whole landscape. Opportunities to provide integrated interpretation will continue to be explored and developed



ENVIRONMENTAL MANAGEMENT

The Harbour Trust and NPWS will continue to take an integrated approach to the management of:

- Pests & weeds
- Fire
- Stormwater
- Threatened species
- Bushland management



VISITOR EXPERIENCE

The Harbour Trust and NPWS will continue to develop the tours, event and education programs available on the Headland. Opportunities exist for expanding joint programs and creating a clear sense of arrival on the Headland

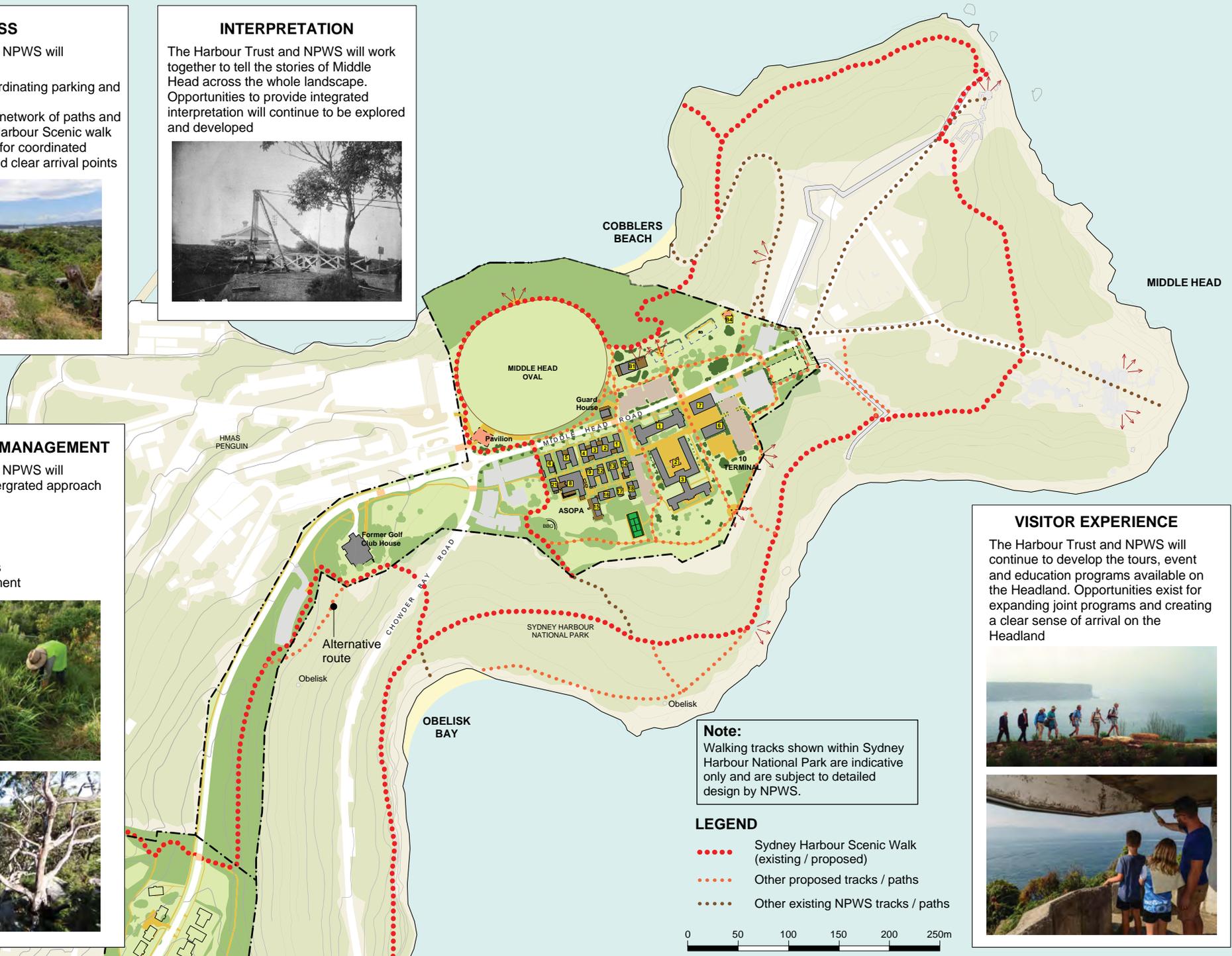


Fig.15 Coordinated Management of the Headland

10.2. Access and Circulation

Roadways

The roadway alignment and character will be retained as it is part of the historical access along the ridge that linked the fortifications and the subsequent development of bases from Military Road.

Changes in carriageway width may be needed to meet the requirements of vehicle, cyclist and pedestrian safety, control of roadside parking and stormwater run-off. These improvements will be designed in a manner that retains the overall open character of the roadway and expresses significant design features such as edgings or any special paving.

The objectives of these proposed changes are to:

- Improve vehicle, cyclist and pedestrian safety
- Provide clear and continuous pedestrian access along Middle Head Road and to all of the destinations such as the pathways to the National Park, ASOPA and 10 Terminal, the Golf Club House, HMAS Penguin, and the sporting facilities
- Provide bus and coach turning and stopping facilities
- Improve drop-off/pick up arrangements for Middle Head Oval
- Improve the sense of arrival as one descends along Middle Head Road and arrives at the saddle with views opening towards Dobroyd across Middle Harbour
- Reveal and interpret the former alignment of Chowder Bay Road.

In 2009, pedestrian paths and traffic calming devices were constructed along the length of Middle Head Road adjacent to HMAS Penguin. Any additional improvements will be developed in

consultation with relevant stakeholders including Defence, NPWS and Sydney Buses.

Beyond the intersection with Chowder Bay Road, Middle Head Road will be treated as a reduced speed road with appropriate traffic calming measures in areas of high pedestrian usage. Separate, direct paths will be provided for pedestrians, and the road appropriately treated for safe cyclist access.

The Harbour Trust will work with public transport providers to improve the level of service to Middle Head. A shelter will be installed at the city-bound bus stop near the roundabout.

Pathways

The internal street, path and track pattern will be retained as it is an important characteristic of the former base. Additional paths and tracks within the precinct will link the established internal network to the surrounding areas. The Harbour Trust will continue to work together with NPWS and Mosman Council to create an integrated network of paths on the headland.

The network of paths and tracks is intended to provide:

- Diversity and choice of routes for exploring the precinct
- Clear linkages between the surrounding areas, access points such as bus stops and car parks and between the main attractions or features within the precinct and in adjoining areas
- A circuit around the precinct linking key places and features, that is accessible for people with disabilities
- Easy grade access to all main places and features, although not necessarily through one continuous path due to the topography and heritage considerations.

A Concept Masterplan at *Figure 17* showing Public Domain Improvements provides more details of the proposed path and track network. The primary pathways are along Middle Head Road and a circuit walk linking with the National Park.

Proposed improvements include:

- Creation of a pathway in consultation with NPWS along the southern half of the circuit around the periphery of ASOPA and 10 Terminal marking the edge between cultivated landscape and bush regeneration/existing bush (see *Figure 17*)
- Working with NPWS to improve the links on this circuit walk between the intersection, car parking and the National Park, including access to the 1801 fortifications
- Upgrading of the informal track around the Oval, linking with the former “roadway” to Cobblers Beach, to provide the northern half of the circuit walk
- Investigation of a track through the bushland from the Chowder Bay-Balmoral Walking track at Middle Head Road, via the quarry and the Golf Clubhouse. Consideration will be given to required environmental controls to minimise the risk of *Phytophthora* and to protect *Acacia terminalis ssp. terminalis* located in the area
- Retention of the secondary paths linking the courtyard spaces of ASOPA and 10 Terminal and provision of links between Middle Head Road with the new circuit walk.

Car Parking

Car parking will continue to be provided in the areas which were historically used by Defence for that purpose. Paid parking was introduced in 2009 and will continue to be used as an important

means of managing demand and encouraging sustainable travel behavior. The former parking and vehicle wash down areas to the east and south of 10 Terminal (Car Parks 4 and 5) will be reduced to expand the public landscaped areas (see *Figure 1* for location of carparks).

The Harbour Trust will investigate with NPWS opportunities for revealing the defensive ditch north of Middle Head Road. If this northern section of the defensive ditch was to be revealed, then the adjacent parking spaces (Car Park 6) would be relocated to the southern side of the road to provide an open setting to the defensive ditch (see *Figure 17*). These former parking areas could occasionally be used for temporary overflow parking during special events.

Additional parking will be provided in a pocket between 10 Terminal and ASOPA. The Harbour Trust will investigate opportunities with HMAS Penguin to permit occasional public use of its car park to the west of the oval when it is not needed for Naval purposes.

The former parade ground parking area (Car Park 3) could also be redesigned to provide pedestrian access around its periphery, and improve vehicle circulation with a separate entrance and exit. A drop off/pick up point could also be incorporated, which would improve access for children playing sport on the oval.

Its design treatment will differentiate the space from other roadways and car parks and reflect its former, ceremonial use as a Parade Ground.

Provision for bus and coach turning, drop-off, pick-up and layover has been provided at Car Park 4.

5 New paths / links



6 Wayfinding / Interpretive signage



7 Lookouts / Views



8 New pavilion / picnic facilities / views



9 Open up views / relandscape



4 Playground



3 Tiered seating



2 Avenue of trees



1 Open up views / relandscape



Note:
Walking tracks shown within Sydney Harbour National Park are indicative only and are subject to detailed design by NPWS.

10 Defensive ditch



11 Lookouts / Views



Fig.17 Concept Masterplan - Public Domain Improvements



10.3. Buildings and Uses

Golf Clubhouse

The building will be conserved and adaptively reused for a restaurant, functions, visitor accommodation, or residential use. The remnant golf course landscape will be retained and enhanced. Public parking is located in the former quarry area behind the clubhouse.

Australian School of Pacific Administration (ASOPA)

New uses will be sought that complement the institutional, clustered form and character of the precinct: for example education and training, studios, offices, visitor accommodation, well-being, cultural activities, small scale retail or similar. The new uses will need to facilitate the interpretation of the former uses such as the hurried development of the area as hutted barracks in WW II and its subsequent adaptation as the ASOPA. The adaptive reuse of the buildings must ensure ongoing public access through the site to the adjacent open space and enhance the visitor experience to the headland.

The hutted interconnected pattern and built character of the precinct will be retained. The tropical landscape character of the inner courtyard will be retained, but will need to be managed to protect the built fabric from water damage.

The buildings have been retained and restored. Finishes and colour schemes should reflect the original nature of the buildings. Some buildings may need to be modified to meet current NCC standards; the requirements of new uses; to improve weather protection and resistance to insect attack.

Any intervention of this nature will need to be considered carefully and be guided by the CMP to ensure that the cohesive character and the interconnected, hutted nature of the grouping are retained. Care should be taken to avoid and minimise removal of original built fabric from the WW II barracks period and original adaptation for ASOPA, as these elements have greater significance. Any new buildings are to be of a similar scale, form and material finishes.



Fig.18 View of ASOPA from the barbecue area

Middle Head Oval, Pavilion & Guardhouse

The Pavilion is a visually intrusive element, as it obstructs views to Middle Harbour when entering the precinct along the roadways. The possibility of removing the Pavilion will be explored with Mosman Council and local sporting groups, subject to establishing replacement facilities in a less visually intrusive location on the eastern side of the Oval. A possible site for a new building to house the pavilion, amenities and possible visitors' centre, could be on the location of the existing Guardhouse, which may be removed. However the Guardhouse is now home to a café that provides much valued life and amenity to the precinct.

One possible alternative could be to relocate the pavilion to the site (or approximate location) of the barracks building closest to the oval, which could be either adapted or replaced. There is the potential to co-locate the café with this new sports pavilion, allowing the Guardhouse to be removed. See below and *Figure 21*.

In 2016, oval floodlighting was upgraded to allow for competition-level sports, while also significantly reducing light spillage and glare.

10 Terminal

The brick buildings on the south side of the road (Buildings 1, 3, 6 and 7) will be conserved, modified, added to and adaptively reused in a manner that facilitates the conservation and interpretation of their heritage values and that enhances the visitor experience of the park, for example: visitor accommodation, dining, functions, offices, studios, education, well-being, cultural activities, small scale retail or similar. The adaptive reuse of the site must ensure ongoing public access and enhance the visitor experience to the headland. Any additional structures must not detract from the significance or views to or from the site.

The courtyard formed by Building 3 will be landscaped to improve amenity. The Boiler House (Building 2) may be removed. There may be additional buildings constructed within this courtyard, and also within the smaller courtyards between the building wings. This would be to provide: improved amenity and functionality of the existing building; additional shade and shelter; and improved connections between the separate wings of the compound. Any additional building or structure in the courtyards is to be designed in a manner that is compatible with the scale, form and character of the existing building and retain its character as a courtyard. The courtyards may be used for purposes related to the 10 Terminal buildings.

The garages (Buildings 6 and 7) provide opportunities for uses that serve visitors to the park, such as café/restaurant, well-being or cultural uses. A new addition linking Buildings 6 and 7 may be constructed to improve the amenity and functionality of the garages for their new use. Any new structure linking the garages is to be designed in a manner that is compatible with the scale, form and character of the existing garages.



Figure 19: View of Middle Head precinct from Balmoral

Note how the materials and colours of the larger scale buildings at HMAS Penguin to the right blend into the landscape better than the more modestly scaled three cream coloured barracks circled.

Back of house uses (such as storage or depot buildings) are not encouraged as 10 Terminal is at a prominent location along the public pathways where the plateau narrows affording places to pause, picnic and enjoy the views towards the harbour and the fortification walls of Middle Head. If 10 Terminal is to be used for garaging or back-of house services, these uses are to be limited to the garage buildings (Buildings 6 and 7) and the space between them, if that is adequately screened.

Any additional structures must satisfy the following criteria:

- Continuous north-south public access must be provided between the courtyard buildings (to the west), and the garage buildings (to the east)
- An additional storey is permitted within Building 7, but this is to be contained within the existing roof form
- Any new addition is to be visually unobtrusive and not adversely impact near or distant views to or from 10 Terminal
- Roof form and pitch of new additions are to be compatible with existing buildings
- The palette of materials, finishes and window treatments of any new additions is sympathetic with existing buildings.

Barrack Buildings

The barracks are highly visible when viewed from across Middle Harbour (*Figure 19*). The barracks will be demolished, with the possible exception of Building B1, and replaced with landscaped parkland including lookouts and paths. Removal of these buildings will open up the parkland towards the fortification of Middle Head, as well as views to Middle Harbour.

The barracks building closest to the Oval (Building B1) could potentially be adapted or rebuilt for the purpose of a relocated sports pavilion. This could potentially incorporate a café, relocated from the Guardhouse. The use of the building would be for visitor-focussed facilities such as public amenities, change rooms, a covered picnic shelter and possibly a cafe. See *Figure 22*.

Any replacement building must not exceed the existing building envelope of Building B1, while the component related to sports facilities must not exceed the footprint of the existing pavilion.

The orientation/location of a replacement building may be modestly adjusted to achieve the best fit within the public domain (such as addressing views to the Oval and Middle Harbour, and interface with a proposed adjacent playground).

The architectural style, roof form and choice of exterior materials should interpret and be sympathetic to the existing character of the barracks building and reduce its visibility from the harbour. The visual impact of this building would be further reduced by including open-sided covered spaces, and unenclosed decks. A pedestrian ramp could be included to provide easy access to the upper level (See *Figure 22*).

The laundry/wash house (Building B4) may be removed or used for amenities or as a kiosk in the newly created park.

Existing



Proposed

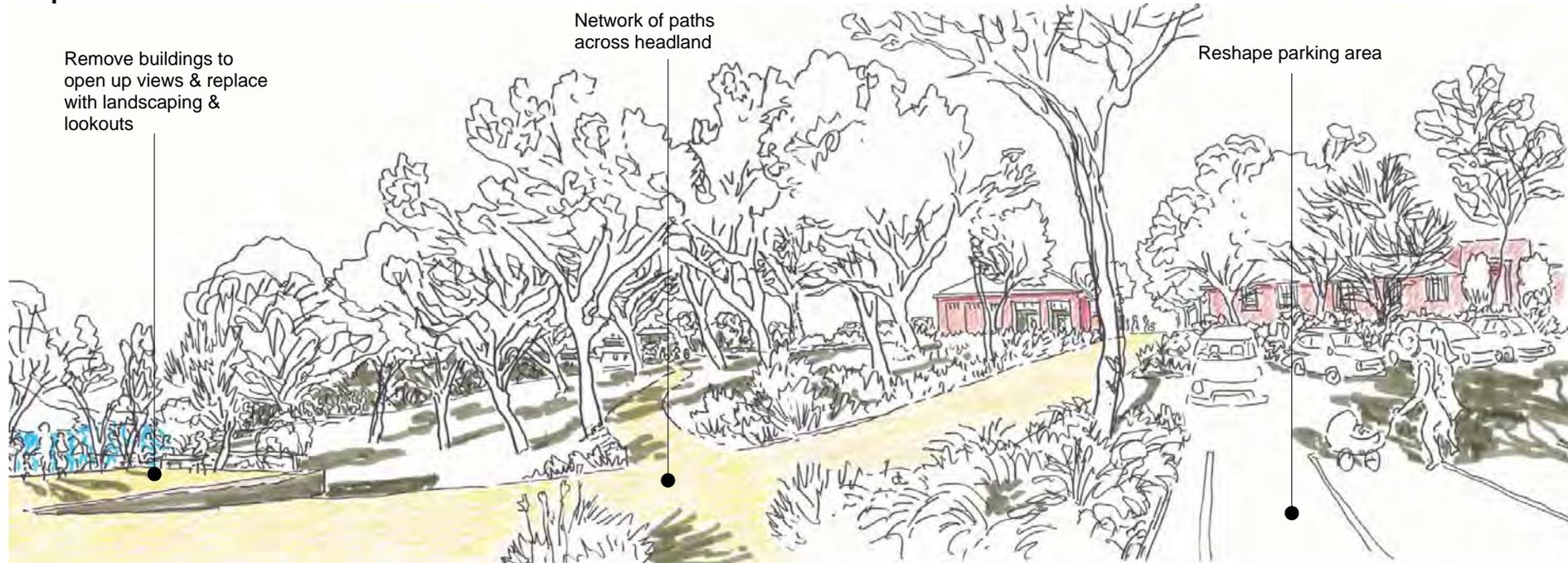
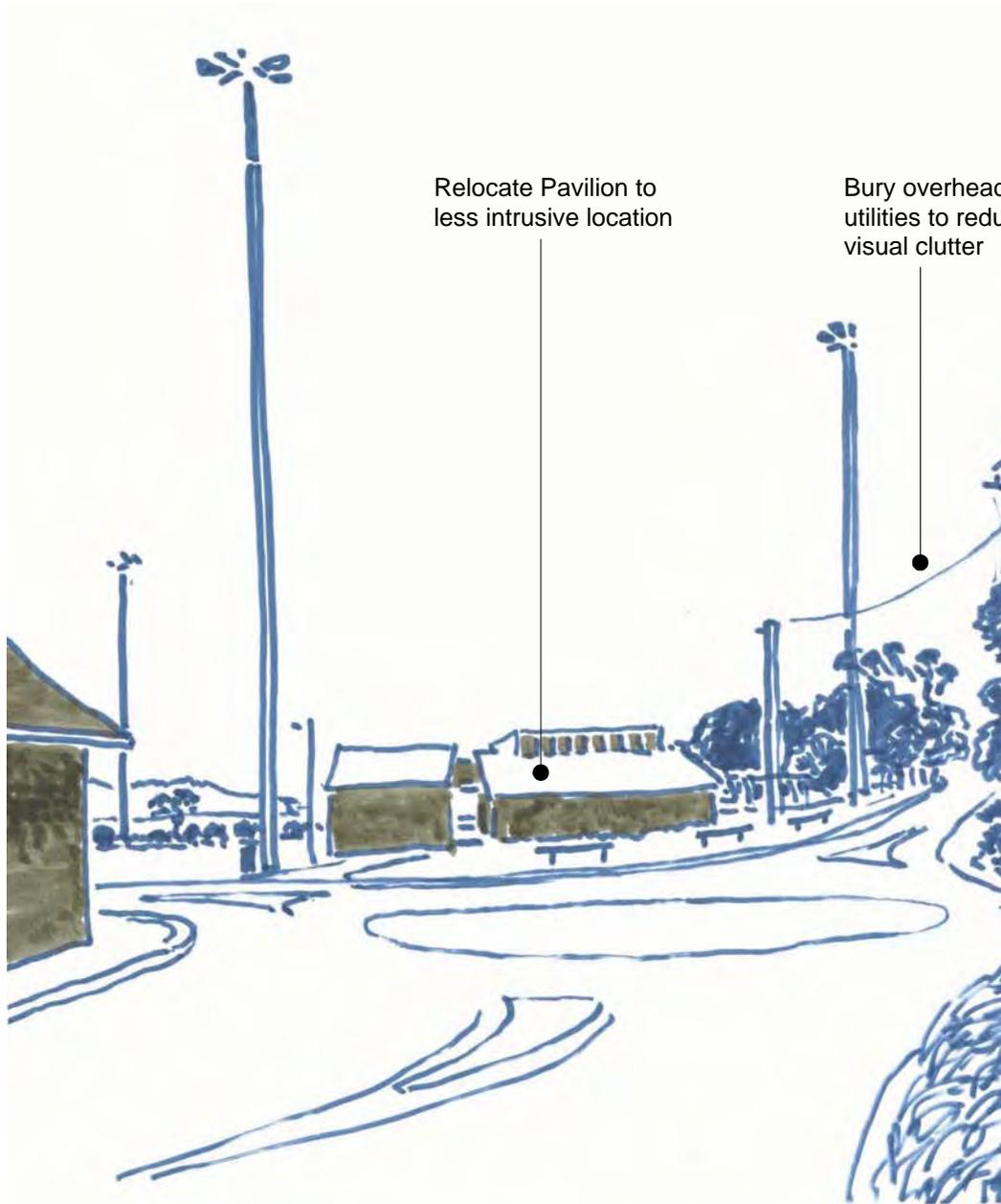


Fig.20 Barracks View looking east towards the National Park

Existing



Proposed

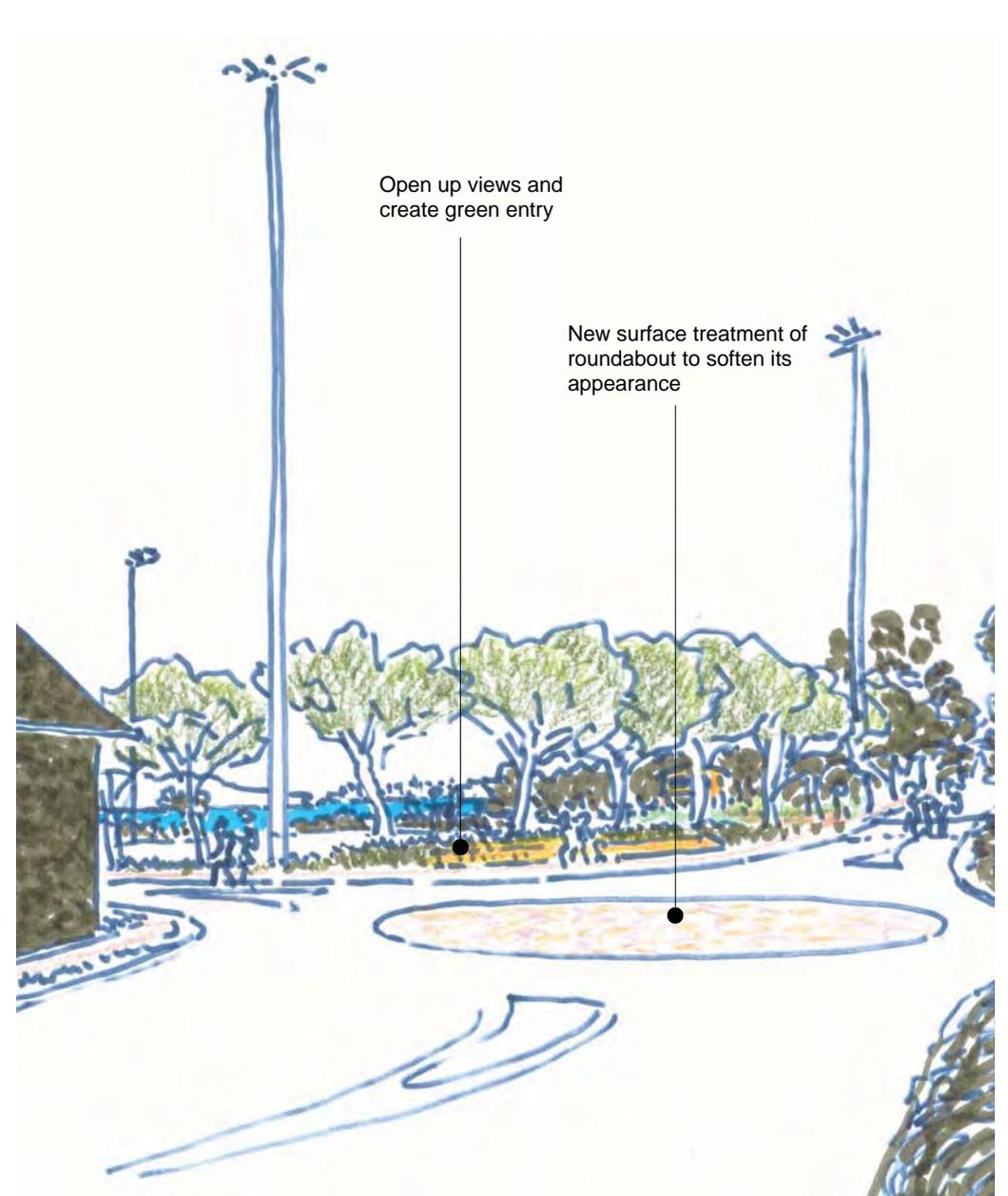


Fig.21 Removal of Pavilion at Precinct Entry

Existing



Concept

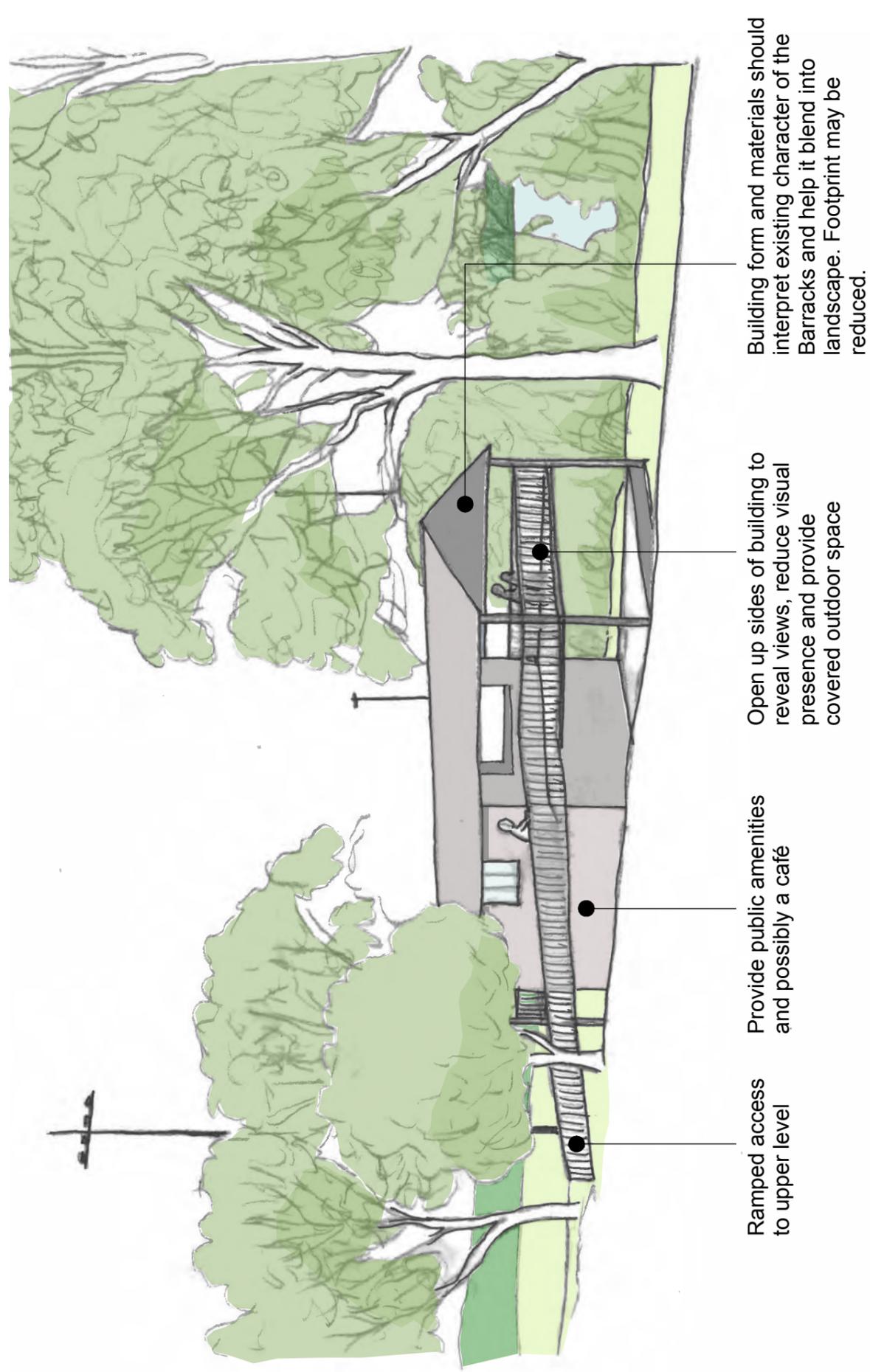


Fig.22 Concept - New pavilion on eastern side of oval

10.4. Landscape

The open, institutional park-like setting of ASOPA and 10 Terminal will be retained and enhanced, as it is an important characteristic of the former bases and provides the ingredients for creating a public park. Some of the shrubs along the south side of ASOPA and 10 Terminal buildings will be thinned out to improve the physical and visual connection between the buildings and the parkland. There is an opportunity for limited bushland regeneration and/or revegetation along the southern edge of the precinct, which would be undertaken in consultation with NPWS. The proposed relocation of the sports pavilion will allow the arrival point to Middle Head to be improved with new landscaping and views across the Oval (see *Figure 21*).



The parking areas near the defensive ditch at the eastern end of the precinct will be reduced and replaced by a simple, open landscape treatment that opens up views towards the waterways on both sides of the headland and towards the remnant fortifications of Middle Head in the National Park. The groves of native trees to the east of the Parade Ground (Car Park 3) will be retained and enhanced (see *Figure 20*).

The parking area adjacent to 10 Terminal will be reconfigured and reduced to provide additional public open space and open landscape character. Paving in the converted parking areas may need to be retained to maintain a cap on potential contaminants (see *Figure 14*). If so, its appearance could be softened with a more urbane landscape treatment such as raised planting areas and street furniture. Such open areas could provide opportunities for recreational activities which are not possible elsewhere in the park.

Although fences have been removed to open up the area for public enjoyment, the separate identity of ASOPA and 10 Terminal will be marked by the retention of gates or by other landscape means. Features that evoke the former military use of the site, such as the gun barrel gate posts will be retained. The wash-down bays at 10 Terminal provide an opportunity for water features and the landscaping of the area.

Other landscape improvements will include:

- The retention and enhancement of the lush ASOPA plantings (replanting may be necessary to allow soil levels to be lowered where necessary adjacent to buildings, and to replace invasive species).

- Selectively thinning out the formal plantings in front of 10 Terminal along Middle Head Road to reveal the main façade and to provide continuity of the grassed verge along the broad curve of the road. Trees that are too close to buildings should be monitored and may need to be removed if they threaten to damage the buildings.
- Retention of plantings between 10 Terminal and the Oval to provide visual screening.
- Retention of the retaining walls, beer garden and barbecue areas as well as paths around the buildings. These could be further enhanced to improve the connections between the inside and outside spaces.
- Improved connections between the reinstated tennis court, the barbecue area and 10 Terminal in a manner that reinforces the belt of continuous open landscape around the precinct.
- Introduction of stormwater collection from hardsurface areas/roofs.
- Improve view corridors to the Golf Clubhouse from the car park at the Chowder Bay Road intersection and beyond by removing vegetation undergrowth near the barbecue area.
- Consideration of excavation of the final green (hole 9 at Golf Club House) for interpretation.
- Continue to work with NPWS to further reveal the defensive ditch (some of which has already been revealed).
- Work with HMAS Penguin to investigate landscaping the western edge of the Oval to screen parking.
- Investigate placing overhead cables underground along part of

Middle Head Road.

10.5. Water Sensitive Urban Design

The principles of Water Sensitive Urban Design (WSUD) are to be incorporated into the redevelopment of the Middle Head Precinct to achieve water quality, water conservation and ecological objectives. Effective integration will require the application of concepts on a catchment wide basis. The key concepts to be applied are:

- *Source controls* – removal or mitigation of the pollutant source, and on-site rainwater use;
- *Conveyance controls* – applied during the conveyance of stormwater to bushland, streets or channels;
- *Discharge controls* – applied at the point where water leaves the site or the catchment;
- *Natural systems planning* – applied to the entire area. Natural systems planning recognises essential hydrological and ecological functions of watercourses, wetlands and native vegetation.

A number of measures are available to achieve stormwater management objectives by applying these concepts in the redevelopment of the Middle Head precinct.

Concept	Issue	Application at Middle Head
Source Controls	Street sweeping and landscape maintenance	Roads and organic matter are a source of many pollutants. Sweeping and maintenance will be part of the on-going management of the site.
	Rainwater tanks	The use of rainwater for toilet flushing, irrigation etc will reduce water use and stormwater flow peaks.
	Rainwater detention gardens	Applied to intercept sheet and concentrated flows. This will reduce flows and reduce scouring and erosion in bushland areas. It will also improve stormwater quality by controlling the dispersal of nutrients down slope.
	Pit pollution control traps	Installed at various locations to remove Gross Pollutants and hydrocarbons
	Stormwater Collection	Investigation of options for collection of stormwater from paved areas for reuse
Conveyance controls	Water sensitive road design	The installation or improvement of buffer strips and bioretention swales, particularly along up-gradient edges of the road and car park areas. These measures will reduce run-off velocities and reduce contaminant transport to receiving waters.
Discharge controls	Stormwater Collection	Divert flows to collection areas for possible reuse. This will assist in reducing velocities of run-off on areas down slope and reduce contaminant transport to receiving waters.
Natural systems planning	Weed removal and revegetation with native species	This will improve water retention and site amenity.
	Phytophthora cinnamomi	Reduce nutrient impact to bushland areas. Reduce ponding and concentrated stormwater flows.
	Dieback areas	Regenerate to reduce erosion, water retention and amenity. To be carried out in parallel with a strategy for controlling Phytophthora cinnamomi.

10.6. Phytophthora cinnamomi

The Harbour Trust’s Phytophthora Management Strategy will be implemented. Key components of the strategy include:

Risk of spread or introduction by -	Management Strategy
Bush regeneration activities	Implementation of best practice hygiene procedures for bush regeneration or related activities; Soil and plant materials to be sourced from appropriately certified suppliers.
Water flows and increased surface water nutrients	Introduce stormwater measures so that flows are remediated to approach the natural condition in bushland areas, or direct flows away from bushland; Reduce nutrient impact to bushland areas, by remediating nutrient and contaminant sources or nutrient removal.
Walkers	Introduction of a Phytophthora community education program; Walking track design that limits the potential for spread by walkers, including: <ul style="list-style-type: none"> – Integrated drainage controls; – Clean crushed sandstone capping; – Mulched edges. Confine walkers to tracks in bushland areas.
Construction/ earthworks/ landscaping activities	Implement hygiene protocols for personnel, machinery and tools; Soil and plant materials to be sourced from Phytophthora-free certified suppliers, or low risk sources; Use only well composted soil free mulch.

10.7. Remediation

A hazardous materials removal and abatement program is to be carried out for the Middle Head precinct, in conjunction with, or prior to building refurbishment works. The following works are required:

- Removal, or repair and management, of remaining asbestos or synthetic mineral fibre building materials, and removal of any asbestos cement fragments from beneath buildings.
- Removal and disposal PCB containing capacitors identified in light fittings to be removed;
- Removal or abatement of deteriorating lead-based paint systems.

Remediation of some minor remaining lead, PAH or TPH hotspots in surface soils will be dependent on the outcome of further assessment. Testing of groundwater may also be required. Testing for residual pesticides around and under buildings will determine management requirements (for example, by limiting access to these areas), however if buildings are removed these areas may require remediation.

10.8. Interpretation

One of the primary objectives of the Harbour Trust, in conserving the heritage values of its lands and opening them up to public access, is to increase public understanding and appreciation of the lands' rich natural and cultural heritage. A key means of achieving this is through developing interpretive activities that are meaningful, relevant and engaging to a broad audience in collaboration with NPWS.

The Harbour Trust will ensure that future uses of Middle Head, its buildings, the creation and design of public spaces, and the development of activities and materials for the public will combine to convey the totality of the site's significant values and its context and setting as part of Headland Park.

A comprehensive Interpretation Strategy was prepared for Headland Park in 2005. The strategy provides recommendations as to how the Harbour Trust can best communicate the natural, cultural, social and other values and significance of the lands.

The strategy outlines an overarching interpretive theme for Headland Park and a set of sub-themes and key stories around which interpretive information will be organised. In order to integrate interpretive activities across Headland Park, the strategy identifies a series of key destination points. At each of these, the Harbour Trust will focus its interpretation on a single sub-theme in order to avoid repetition and to maximise the impact of interpretation.

At Middle Head, all phases of the site's previous occupation and use will be interpreted, as well as interpretation of the natural environment of the Headland Park, specifically how vegetation communities around the harbour have evolved and how they have been modified by human intervention (Aboriginal and European). Integrated activities will also be investigated with Sydney Harbour National Park.

The Headland Park Interpretation Strategy addresses the needs and expectations of a diverse range of likely visitors, including locals, interstate and overseas visitors, tenants, the formal education sector and special interest groups.

A number of different interpretive tools will be used at Middle Head to best engage visitors and enrich their experience. These will include, but not be limited to:

- Publications (e.g. site brochure and self-guided walking tour brochure);
- Guided tours (possibly in conjunction with NPWS);
- Cultural events and open days (possibly in conjunction with HMAS Penguin and NPWS);
- External interpretive signage;
- Exhibitions and displays;
- School education programs; and
- Recording of oral histories.

In addition, working together with NPWS, the planned Headland Park Visitor's Centre will incorporate interpretive materials relating to Middle Head in the context of providing an overview of the entire Headland Park.

10.9. Implementation

As identified in the Harbour Trust's Comprehensive Plan, the implementation of this Management Plan will take place over a number of years.

Priorities for implementation have been determined in a manner consistent with *Section 11* of the Harbour Trust's Comprehensive Plan. The Harbour Trust has discretion as to the extent and staging of the work to be carried out.

The Implementation and Action Plan overleaf summarises the outcomes to be achieved through the implementation of the Management Plan. It identifies individual projects and priorities for implementation. The following table summarises the outcomes to be achieved through the implementation of this Management Plan, as well as noting any actions or outcomes that were listed in the original Management Plan and have been achieved. The table identifies individual elements of the project and prioritises those elements in a manner consistent with those priorities identified in the Comprehensive Plan. The relevant sections of the Management Plan and supporting studies which detail each element are also included in the table as a quick reference point.

These priorities are indicative and may change over the life of this Plan in response to funding availability and other changing circumstances.

Implementation and Action Plan

	Outcomes	Elements	Priority	Relevant Management Plan or Supporting Study (in addition to Design Concept)
Public Domain	Improved public access – pedestrian links, facilities for cyclists, disabled access, parking	<ul style="list-style-type: none"> ▪ Work with the NPWS to establish integrated network of paths and tracks ▪ Provide new pedestrian path along northern side of Middle Head Road ▪ Provide new circuit walkway and lookout points around the precinct ▪ Provide a new track through the bush along the ridge – subject to further investigation ▪ Remodel the intersection of Middle Head and Chowder Bay Roads ▪ Improve signage and traffic calming measures on Middle Head Road ▪ Improve the existing informal character of the public car park at the intersection ▪ Improve existing car parking on hardstand areas and provide additional parking in the area between 10 Terminal and ASOPA ▪ Improved public transport service ▪ Provide shelter at bus stop near Golf Clubhouse 	<ul style="list-style-type: none"> High Achieved High Medium Achieved High Achieved High (partly achieved) Achieved High 	<ul style="list-style-type: none"> ▪ Sydney Harbour National Park Plan of Management ▪ Transport Management Plan ▪ Transport Management Plan ▪ Acacia Terminalis Study ▪ Phytophthora Strategy ▪ Transport Management Plan

	Outcomes	Elements	Priority	Relevant Management Plan or Supporting Study (in addition to Design Concept)
	Improved environmental conditions, public amenity and provision of parkland	<ul style="list-style-type: none"> ▪ Remediate contaminated areas and hazardous materials ▪ Re-landscape paved areas to the east of 10 Terminal to provide setting for fortification ▪ Bush regeneration along precinct’s boundary ▪ Provide and/or upgrade on-site services for public domain areas: including facilities such as toilets, parking, disabled parking, lighting, children’s play facilities and picnic areas ▪ Investigate the potential to re-locate powerlines underground ▪ Improve stormwater management and manage local area runoff ▪ Implement Phytophthora Strategy ▪ Remove areas of noxious vegetation ▪ Reinstate tennis court /relandscape ▪ Remove fences within and around the site 	<ul style="list-style-type: none"> High (partly achieved) High High High (Partly achieved) Medium High (Partly achieved) High/Ongoing High / Ongoing Achieved Achieved 	<ul style="list-style-type: none"> ▪ Contamination Assessment ▪ Hazardous Materials Management Plan ▪ Conservation Management Plan ▪ Flora Study ▪ Site Services Survey ▪ Stormwater Management Plan ▪ Phytophthora Strategy ▪ Flora Study

	Outcomes	Elements	Priority	Relevant Management Plan or Supporting Study (in addition to Design Concept)
Building uses, adaptive reuse, building removal and new building	Works to enable use / leasing of buildings	<ul style="list-style-type: none"> ▪ Restore and conserve buildings ▪ Removal or modification of some buildings in ASOPA ▪ Work with Mosman Council and local sporting groups to relocate the pavilion to provide improved facilities and improve views. ▪ Removal of the two-storey barrack buildings or alternatively, adapting or replacing the western-most barrack buildings for a pavilion and amenities, and possibly also a café. ▪ Adaptive reuse of the Guardhouse as a café. ▪ Possible removal of the Guardhouse if café is incorporated into a new pavilion on the eastern side of the oval. ▪ Removal or modification of the Boiler House, or possible new building in this area ▪ Removal or modification of the Laundry ▪ Remediate contaminated areas and hazardous materials ▪ Upgrade site services for building uses 	<ul style="list-style-type: none"> High (partly) Achieved High High Achieved High High Medium High (partly achieved) High (partly achieved) 	<ul style="list-style-type: none"> ▪ Conservation Management Plan ▪ Contamination Assessment ▪ Hazardous Materials Management Plan ▪ Site Services Survey

	Outcomes	Elements	Priority	Relevant Management Plan or Supporting Study (in addition to Design Concept)
	Improved interpretation of site's natural and cultural heritage	<ul style="list-style-type: none"> ▪ Landscape improvements that respond to and convey the site's natural and cultural heritage ▪ Work with NPWS to partly reveal the defensive ditch ▪ Provide interpretative material and signage ▪ Investigate providing a visitor's centre as part of a new Pavilion 	<ul style="list-style-type: none"> High (partly achieved) Medium (partly achieved) High (partly achieved) Medium 	<ul style="list-style-type: none"> ▪ Conservation Management Plan ▪ Conservation Management Plan ▪ Conservation Management Plan



11. Future Actions



11. Future Actions

11.1. Assessment and Approval of Actions

Proposed actions will be assessed for their potential impacts on heritage values and the environment in accordance with the EPBC Act and the Harbour Trust's Comprehensive Plan (see Section 3, *Planning Framework* of this Plan). Approved actions will be subject to conditions to avoid potential impacts; or to put in place measures to minimise or mitigate impacts, and to manage activities in accordance with relevant legislation and standards.

11.2. Unforeseen Archaeological Discoveries

Archaeology includes: buildings, structures, objects and relics, landscapes and other remains, both above and below the ground. All of these items have enormous potential to contribute to our knowledge of the place by revealing information about how people lived and worked there. All relics are protected by Commonwealth legislation and the intentional uncovering of relics, without a permit, is forbidden.

Appropriate provisions will be included, in leases for the site and in any contracts for works to be undertaken, requiring that in the event that relics are unintentionally uncovered, work must cease in the area where the relics were found and the Harbour Trust immediately informed. The Harbour Trust arrange for an archaeologist with the appropriate experience to visit the site and undertake an assessment before determining the appropriate course of action. The Metropolitan Local Aboriginal Land Council will also be consulted in any decisions that may involve indigenous heritage.

11.3. Records of Intervention & Maintenance

The Harbour Trust is proposing to use the inventory sheets as the starting point for establishing an ongoing record for each of the site's buildings and structures. This will enable all relevant information relating to a building or structure (eg its history, statement of significance, conservation policies, leasing arrangements, etc) to be available for reference in one document.

11.4. Future Consultation

Community consultation and communications is critical to the implementation of this plan. The community includes the broad community, special interest groups, non-government organisations and Local, State and Commonwealth Governments.

The Harbour Trust has been consulting with these groups since its inception and will continue this process in accordance with the *Consultation and Communications Objectives and Policies* set out in *Part 3* of the Harbour Trust's Comprehensive Plan.

11.5. Aboriginal Consultation

Local Aboriginal Land Councils will be consulted through the development of this Plan and this will be ongoing, in accordance with the *Aboriginal Heritage Objectives and Policies* set out in *Part 3* of the Harbour Trust's Comprehensive Plan.

11.6. Monitoring and Review of the Plan

During the implementation, this plan will be continuously monitored in terms of its objectives and consistency with the Commonwealth Heritage management principles.

At least once in every 5 year period after the plan's adoption the plan will be reviewed in accordance with Section 341X of the EPBC Act, 1999 as amended. The review will assess whether the plan is consistent with the Commonwealth management principles in force at the time.





Appendices



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13. Appendix B – Acknowledgements: Images

Thumbnails (Images pages 20 to 22)

2006, Various scenes of Middle Head.

Source: Sydney Harbour Federation Trust.

Figure 4

1830, a hand coloured lithograph by Augustus Earle ‘*Bungaree, a Native Chief of New South Wales*’.

Source: National Library of Australia, Rex Nan Kivell Collection, NLA. Pic - an6016167.

Figure 5

1891, Members of the Long Course at the NSW School of Gunnery, Middle Head, erecting a crane at Cobblers Beach jetty.

Source: Australian War Memorial P.00991.011.

Figure 7

1892, Members of the Long Course at the NSW School of Gunnery, Middle Head, moving a 32 pounder gun barrel across the moat at the main entrance to Middle Head fort.

Source: Australian War Memorial P00991.027.

Figure 8

1930s, Aerial photographs of Mosman Golf Course.

Source: Mitchell Library, State Library of New South Wales (ML REF: PXD 889 number 36).

Figure 9

1933, ‘A view across the course and Mosman Golf Clubhouse’

Source: Mitchell Library, State Library of New South Wales, from the publication *Golf in Australia*, 23 Dec 1933, p.18 (ML REF: Q797.6/G).

Figure 10

1944, Members of the Australian Women’s Army Service (AWAS) serving with the NSW Anti-Aircraft and Coast Artillery Signals Unit, playing basketball on the Unit’s Sports Day, at Middle Head.

Source: Australian War Memorial 030223/06.

Figure 11

c 1950s, ‘ASOPA – Looking east along Middle Head Road’

Source: *AusAid Focus*, ‘The end of a unique institution’ Vol 13, no. 1 March 1998: 20-22.

Figure 12

1951, ‘21st Construction regiment at Middle Head’

Source: Government Printing Office, State Library of New South Wales (ML REF GPO 2 – 00938).

Figure 19

2016, View of Middle Head precinct from Balmoral

Source: Nick Hollo

Figures 18, 20 and 21

18: View of ASOPA from the barbecue area

20: Barracks view looking east towards the National Park

21: Removal of pavilion at Precinct Entry

Source: Nick Hollo

Figure 22

Concept – New pavilion on eastern side of Oval

Source: Daniel Sealey

14. Appendix C – Related Studies

Australian Museum Business Services, 2004, Archaeological Survey of Sydney Harbour Federation Trust Land at Middle Head, Georges Heights, and Chowder Bay.

Conacher Travers Environmental Consultants, 2001, Comprehensive Fauna Survey of Interim Sydney Harbour Federation Trust Land and National Parks and Department of Defence Land at Georges Heights and Middle Head.

Conacher Travers Environmental Consultants, 2003, Flora Study of Sydney Harbour Federation Trust Land and National Parks and Wildlife Service Land at Middle Head- Georges Heights.

Conacher Travers Environmental Consultants, October 2003, Acacia Terminalis ssp terminalis Threatened Species Management Plan at Middle Head – Georges Heights.

Christopher Hallam & Associates, 2002, Transport Planning Review of Sydney Harbour Federation Trust Lands.

Christopher Hallam & Associates, 2005, Management of the Trust's Roads in Mosman - Review and Recommendations.

Getex Pty Limited, 2007, Hazardous Materials Management Plan.

Maunsell Australia Pty Ltd, 2003, Transport Management Plan for Middle Head – Georges Heights and Chowder Bay.

Mosman Council, 2014, Mosman Bicycle Network 2014-2019

PPK Environment and Infrastructure, 1999, Final Draft Stage 1 Contamination Assessment and Geotechnical Study, Defence Sites at Middle Head, Georges Heights, Chowder Bay and Mosman.

PPK Environment and Infrastructure, 2001, Final Draft Stage 2 Contamination Assessment and Geotechnical Study, Defence Sites at Middle Head, Georges Heights, Chowder Bay and Mosman.

PPK Environment and Infrastructure, 2001, Summary Report, Stage 2 Contamination Assessment and Geotechnical Study, Middle Head, Georges Heights, Chowder Bay and Mosman Defence Sites.

PPK Environment and Infrastructure, 2002, Site Services Survey - Middle Head, Georges Heights and Chowder Bay, Stages 2 & 3 – Location of Services.

Robertson and Hindmarsh Architects, 2006, Preliminary Conservation Management Plan for 3 sites at Middle Head.

Storm Consulting Pty Ltd, 2004, Georges Heights, Chowder Bay- Middle Head Stormwater Management Plan.

15. Appendix D – Commonwealth Heritage Listings

Defence site - Georges Heights and Middle Head, Middle Head Rd, Georges Heights, NSW, Australia

List	Commonwealth Heritage List
Class	Historic
Legal Status	Listed place (22/06/2004)
Place ID	105541
Place File No	1/13/026/0026

Summary Statement of Significance

The Defence Site within the headland complex of Middle Head and Georges Heights is important as an area of significant cultural and natural heritage interaction recording a long history of Aboriginal occupation and the defence of Sydney Harbour since European settlement. The two areas of the Defence Site are contiguous with two sub-areas of Sydney Harbour National Park (Register No. 2584) and linked by important evolving cultural landscape frameworks within the scenic foreshores of Sydney Harbour, perhaps Australia's best-known waterway, and a nationally significant icon. The cultural landscape framework comprises a range of historic sites and structures which contribute individually and in groups to the national estate values of the Defence Site. Not all structures or sites within the boundaries are of significance. Sites and places of individual significance

include the Military Road Framework (Reg. No. 103266), Headquarters 8th Brigade Precinct (Reg. No. 103292), Batteries A83 & C9a (Reg. No. 103295), Battery B42 (Reg. No. 103294), WRAAC Officers Mess (Reg. No. 2871), Battery for Five Guns (Reg. No. 2870), Headquarters Training Command Precinct (Reg. No. 103338), 30 Terminal Squadron Precinct (Reg. No. 103339), Chowder Bay Submarine Miners Barracks (Reg. No. 2876), Navy Refuelling Depot and Caretakers House (Reg. No. 103337), Commonwealth Avenue Defence Housing (Reg. No. 103341), Ten Terminal Regiment Headquarters and AUSAID Training Centre Precinct (Reg. No. 103342) and the former Golf Clubhouse (Reg. No. 103293), most of which are or will be managed by the Sydney Harbour Federation Trust. HMAS Penguin (Reg. No. 103327) remains in use as an operational Naval Base and represents the continuing presence of Defence at Middle Head and Georges Heights.

The Defence Site occupies part of Middle Head and Georges Heights which are held in high esteem by Sydney residents for their natural and scenic values as a significant part of Sydney Harbour's foreshore, and as a relatively natural vantage point and landmark in an otherwise highly urbanised environment. Middle Head has featured in paintings of the Sydney Heads by artists such as Augustus Earle c.1825 and in photographic works by Holtermann c.1875 and, in conjunction with Georges Heights, has been a significant part of the cultural and social life of Sydney and the colony of NSW. (Criterion E.1 and G.1)

The remnant natural vegetation is contiguous with Sydney Harbour National Park which is considered one of the finest harbour foreshore parks in the world. (Criteria B.1 and D.1)

Middle Head and Georges Heights have significant associations with the science of botany and the study of eucalypts in Australia. A number of early eucalypt specimens were collected by botanists including Robert Brown in 1802, Ferdinand Von Mueller in 1855, Joseph Henry Maiden in 1897, and William S. Blakely in 1937. (Criterion C.1)

Middle Head also documents an important story in post-contact history. In 1815, Governor Macquarie attempted to settle King Bungaree and his people on the upper areas of Middle Head. (Criterion A.4)

As a natural vantage point, Middle Head and Georges Heights have played a significant role in the development of colonial and national defence policy and military training in Australia from the Napoleonic Wars until the 1960s and in the implementation of military technology important for its historic values, research and archaeological potential and social values. The evolving cultural landscapes of the headland areas, produced by over 150 years of military and naval use, and linked by a network of military roads, are important for their association with, and ability to illustrate, a broad range of processes which exemplify the strategic role of Middle Head and Georges Heights in the growth of Sydney, the Colony of New South Wales and Australia under Imperial, Colonial and Commonwealth government policies. In this respect the suite of defence related sites are particularly important in illustrating the adoption and development of military technology and the provision of housing for military personnel. The drill hall located in Headquarters 8th Brigade illustrates the universal training scheme which followed the 1909 Defence Act. The former Middle Head

barracks complex is also important for its association with the Australian School of Pacific Administration and subsequently as the Commonwealth's AUSAid Centre from the 1970s. (Criterion A.4)

The defensive works at Middle Head and Georges Heights are particularly important for their association with; Lt Colonel J Gordon, who introduced the 'two tier' Gordon scheme for the defence of Sydney Harbour in 1845; Colonial Architect James Barnet for the design of the Artillery Barracks in 1873; and General Sir William Jervis RE and Lt Colonel Peter Scratchley, whose report of 1877 formed the basis of defence planning in Australia until after federation in 1901.

The growth of leisure and recreation in the late nineteenth and early twentieth centuries, and the establishment of Mosman Municipal Council in 1893, following the sub-divisions of the 1880s, is illustrated by a number of sites which are now important elements in the cultural landscapes associated with military use of the headlands. Important structures include the former Mosman Golf Club House of 1927 and the former 'Mosman Septic Tank' used as a swimming pool during the 1920s and which remains in use as part of HMAS Penguin, the focus of Naval training and hospitalisation in Sydney Harbour. (Criterion A.4 and Criterion H.1)

(Australian Historic Themes: 4.2 Supplying urban services, 7.7 Defending Australia, 7.7.1 Providing for the common defence, 7.7.2 Preparing to face invasion, 7.7.3 Going to war, 8.1 Organising recreation)

The evolving cultural landscapes contain a wide range of military sites, structures and complexes which are important for their ability to yield information which will lead to a wider understanding of the historical context, design, construction and operation of military barracks, defence housing, fortifications, gun batteries and defensive works in Australia from 1870 to the post war years of the twentieth century. (Criterion C.2)

Individual sites and complexes within the relict cultural landscape areas are important for their ability to demonstrate technical innovation in the early use of concrete and the principal characteristics and operation of military barracks, drill halls, defence housing, fortifications, gun batteries and defensive technology and policy in Australia and the architectural styles employed by (NSW) Colonial architects from 1870 and Commonwealth architects from 1901. (Criteria D.2 and F.1))

A number of individual sites are important in demonstrating functions or designs of exceptional interest. Amongst others these include: the Submarine Miners Barracks and Workshops of 1890-93 at Chowder Bay; the former Military Hospital erected towards the end of the First World War; the three c.1930 roofed fuel storage tanks which were the first example of large scale camouflage in Australia; and HMAS Penguin as a purpose built naval training and hospitalisation complex. (Criterion B.2)

Defence land at Georges Heights and Middle Head is important for its contribution to the Sydney Harbour foreshores and contains places, which are highly valued by the community. The headland areas are also important for their associations with recreational use, which began in the

nineteenth century and for their symbolic associations as part of the setting of Sydney Harbour and the Sydney Heads. (Criterion G.1)

It is possible that Indigenous cultural values of national estate significance may exist in this place. As yet, the AHC has not identified, documented or assessed these values.

Official Values

Criterion A Processes

Middle Head documents an important story in post-contact history. In 1815, Governor Macquarie attempted to settle King Bungaree and his people on the upper areas of Middle Head.

As a natural vantage point, Middle Head and Georges Heights have played a significant role in the development of colonial and national defence policy and military training in Australia from the Napoleonic Wars until the 1960s and in the implementation of military technology important for its historic values, research and archaeological potential and social values. The evolving cultural landscapes of the headland areas, produced by over 150 years of military and naval use, and linked by a network of military roads, are important for their association with, and ability to illustrate, a broad range of processes which exemplify the strategic role of Middle Head and Georges Heights in the growth of Sydney, the Colony of New South Wales and Australia under Imperial, Colonial and Commonwealth government policies. In this respect the suite of defence related sites are particularly important in illustrating the adoption and development of military technology and the provision of housing for military personnel. The drill

hall located in Headquarters 8th Brigade illustrates the universal training scheme which followed the 1909 Defence Act. The former Middle Head barracks complex is also important for its association with the Australian School of Pacific Administration and subsequently as the Commonwealth's AUSAid Centre from the 1970s.

The growth of leisure and recreation in the late nineteenth and early twentieth centuries, and the establishment of Mosman Municipal Council in 1893, following the sub-divisions of the 1880s, is illustrated by a number of sites which are now important elements in the cultural landscapes associated with military use of the headlands. Important structures include the former Mosman Golf Club House of 1927 and the former 'Mosman Septic Tank' used as a swimming pool during the 1920s and which remains in use as part of HMAS Penguin, the focus of Naval training and hospitalisation in Sydney Harbour.

Attributes

The natural and evolving cultural landscape and the evidence of a long history of use by defence, including the drill hall, the Middle Head Barracks, the Mosman Golf Club House and the HMAS Penguin swimming pool.

Criterion B Rarity

The remnant natural vegetation is contiguous with Sydney Harbour National Park, which is considered one of the finest harbour foreshore parks in the world. A number of individual sites are important in demonstrating functions or designs of exceptional interest. Amongst

others these include: the Submarine Miners Barracks and Workshops of 1890-93 at Chowder Bay; the former Military Hospital erected towards the end of the First World War; the three c.1930 roofed fuel storage tanks which were the first example of large scale camouflage in Australia; and HMAS Penguin as a purpose built naval training and hospitalisation complex.

Attributes

The remnant natural vegetation plus the individual sites listed above.

Criterion C Research

The evolving cultural landscapes contain a wide range of military sites, structures and complexes which are important for their ability to yield information which will lead to a wider understanding of the historical context, design, construction and operation of military barracks, defence housing, fortifications, gun batteries and defensive works in Australia from 1870 to the post war years of the twentieth century.

Attributes

All of the built fabric and associated cultural landscapes from the earliest European defence related use of the site up to the post-war years of the twentieth century.

Criterion D Characteristic values

The remnant natural vegetation is contiguous with Sydney Harbour National Park.

Individual sites and complexes within the relict cultural landscape areas are important for their ability to demonstrate technical innovation in the early use of concrete and the principal characteristics and operation of military barracks, drill halls, defence housing, fortifications, gun batteries and defensive technology and policy in Australia and the architectural styles employed by (NSW) Colonial architects from 1870 and Commonwealth architects from 1901.

Attributes

Remaining natural vegetation, and the individual sites and complexes referred to above.

Criterion E Aesthetic characteristics

The Defence Site occupies part of Middle Head and Georges Heights which are held in high esteem by Sydney residents for their natural and scenic values as a significant part of Sydney Harbour's foreshore, and as a relatively natural vantage point and landmark in an otherwise highly urbanised environment. Middle Head has featured in paintings of the Sydney Heads by artists such as Augustus Earle c.1825 and in photographic works by Holtermann c.1875 and, in conjunction with Georges Heights, has been a significant part of the cultural and social life of Sydney and the colony of NSW.

Attributes

The ability of the public to continue to enjoy the views on, to and from the site.

Criterion F Technical achievement

Individual sites and complexes within the relict cultural landscape areas are important for their ability to demonstrate technical innovation in the early use of concrete.

Attributes

Relic cultural landscape areas.

Criterion G Social value

Defence land at Georges Heights and Middle Head is important for its contribution to the Sydney Harbour foreshores and contains places, which are highly valued by the community. The headland areas are also important for their associations with recreational use, which began in the nineteenth century and for their symbolic associations as part of the setting of Sydney Harbour and the Sydney Heads.

Attributes

Continued recreational access to and use of community areas, natural areas and foreshores.

Criterion H Significant people

The defensive works at Middle Head and Georges Heights are particularly important for their association with; Lt Colonel J Gordon, who introduced the 'two tier' Gordon scheme for the defence of Sydney Harbour in 1845; Colonial Architect James Barnet for the design of the Artillery Barracks in 1873; and General Sir William Jervois RE and Lt Colonel Peter Scratchley,

whose report of 1877 formed the basis of defence planning in Australia until after federation in 1901.

Attributes

Not clarified.

Criterion I Indigenous tradition

It is possible that Indigenous cultural values of national estate significance may exist in this place. As yet, the AHC has not identified, documented or assessed these values.

Attributes

Not clarified.

Description

BACKGROUND

Military fortifications and defence reserves have played a major role in the development of Sydney Harbour's landscapes. Middle Head has featured in paintings of the Sydney Heads by many artists including Augustus Earle c.1825 and in photographic works by Holtermann c.1875, recording gun batteries and fortifications. Consequently Middle Head and Georges Heights have been a significant part of the cultural and social life of the colony of NSW, as part of the backdrop to the harbour and as the site of major defence works. The defences of Port Jackson and Sydney Harbour have developed in phases subject to changes in defence policy.

HISTORY

1788-1839

During the early 1800s any threat to Sydney was seen as coming from the sea. Following a warning from Sir Joseph Banks, during the Napoleonic Wars, Governor King constructed a battery between Georges Heights and Middle Head in 1802 which remained the most forward battery in Sydney's defences until the 1850s. This site was chosen for its strategic position at the entrance to Port Jackson. The disadvantage of the site was its isolation and distance from Sydney. Middle Head was occupied for uses other than defence as early as 1815 with Governor Macquarie attempting unsuccessfully to form an Aboriginal settlement on Middle Head. By 1828 the area was described as King Bungaree's Farm, with King Bungaree having been appointed Chief of the Broken Bay tribes by the Governor. The venture appears to have failed. In 1839 the British government admitted that the harbour was defenceless, following the arrival of two American warships at night, and a number of reports into Harbour defences were commissioned.

1839-1877

A report by Captain G Barney led to the construction of defences on Pinchgut Island (now Fort Denison) and Bradley's Head but this work ceased in 1842. The first comprehensive plan for the defence of Sydney Harbour, made by Lt Colonel J Gordon in 1845, recognised the defence potential of the headlands near the entrance to Port Jackson. The 'Gordon' scheme was implemented from 1847 establishing a two line defensive system with the inner line at Sydney Cove with Georges Heights and Middle Head as part of an outer line of defence. The Gordon scheme

recognised the limitations of armaments of the day with their limited range.

The Crimean War of 1853-56 accelerated the selection of sites for defensive purposes. Sites selected at Middle Head and Inner South Head were designed to command the entrance to the harbour, the shipping channels and the area to seawards of the Heads. These outer works ceased in 1855 with the arrival of Sir William Denison, the new Governor of NSW. The experience of the American Civil War had restated the need for heavier weapons and more secure gun emplacements; the armoured casemate principle was to be used on open sites with circular gun pits in more protected areas. In 1855 Denison submitted a report which stressed that the inner defences were more important and works were concentrated in the inner harbour when Fort Denison was completed. To assist in navigation of the important shipping channel between Middle Head and the Sow and Pigs Reef two obelisks were constructed above Obelisk Bay in 1858.

In 1862 the British government resolved that colonies with responsible government should bear the cost of their own defence. During the 1860s a Royal Commission investigated the state of the colony's defences. By 1870 the last British (Imperial) line regiment had left Australia. The Defence Committee of September 1870 recommended the construction of batteries on Middle Head and Georges Heights as well as Bradley's Head, Steel Point and South Head. The 1870-1877 program concentrated on an outer line of defences with batteries erected on Middle Head and Georges Heights as well as South Head. A major development in 1872 was the formation of the

Engineers Corps of NSW, which was to assist in the works. Plans were drawn up in the Office of the Colonial Architect James Barnet, with construction starting in 1871. Executed by 1876, this work included the construction of military roads. At Georges Heights three separate batteries (B42, A83 and A84) were commenced between 1871 and 1888. A new Rock Casemate Battery constructed 1872 -76 near the shoreline at Georges Heights was designed to operate in conjunction with the batteries at Georges Heights and a series of booms and submarine mine fields.

The Outer Middle Head Battery was commenced in January 1871 with at least 8 gun pits completed by 1874 with the Inner Middle Head Battery functional by 1881. Between 1871 and 1890 the barracks area of Middle Head was developed and a defensive moat constructed across the headland separating the gun batteries from the barracks. To support the development of defences, Artillery Barracks, designed by the office of the Colonial Architect, were erected in 1873 at Georges Heights. The lower barracks for Submarine Miners at Chowder Bay was equipped with outhouses and by 1877 Officers Quarters were in place. Fortifications were of necessity connected by roads; the road to Middle Head, Military Road, was commenced in 1870 and finished by 1871. These military roads allowed guns to be rolled to the batteries and provided strategic access between batteries and barracks. These roads also became, in part, thoroughfares for the area from the 1870s, when developer Richard Harnett organised the formation of many of the roads of Mosman.

1877-1900

British fortifications expert General Sir William Jervois RE (Royal Engineers) was appointed governor of South Australia in 1877. Sir William Jervois and Lt Colonel Peter Scratchley inspected each colony's defences leading to the Jervois-Scratchley reports, which were to form the basis of defence planning in Australia for the next 30 years. The reorganisation of the batteries on Middle Head and Georges Head and South Head between 1885 and 1890 resulted from their reports in which the need for better designed defences and for torpedoes or submarine mines was stressed. In 1878 submarine mine observing stations were constructed on Green Point, Inner South Head and Georges Heights. Recommendations made 1877-1885 included the construction of an Armoured Casemate Battery in 1882 at Georges Head, completed in 1886 under the direction of Colonel Scratchley. By 1889 areas of Middle and Georges Heads were clearly identified as resumed by the Crown for military purposes.

Technical developments in the 1880s resulted in changes to the fortifications of Sydney Harbour, including the use of telephone lines in the late 1880s, and the construction of a Submarine Miners Observing Station in 1890 at Chowder Bay. The Submarine Mining facility was completed in 1893. The Hidden Guns of the 1880s were generally replaced in the 1890s, as a matter of policy, by Quick Firing Guns mounted in deep open concrete emplacements. Such emplacements were constructed on Georges Heights and Middle (and South) Head, remaining the standard form until after World War Two. The office of Colonial Architect James Barnet was responsible for much of the new works. The struggle between Lieut. Colonel de Wolski of the NSW Engineers and James Barnet in 1886, over defects in execution and design, was to lead to Barnet's retirement.

The development of defence facilities was mirrored by the subdivision of land north of Military Road in the 1880s. By July 1884 the North Shore Ferry Co was providing a regular ferry service to the city. This active subdivision continued in the 1890s with the Municipality of Mosman established in 1893. Balmoral Beach had been dedicated as a Public Reserve in 1878. During the 1880s and 1890s the headland areas provided recreational and viewing areas.

1900-1945

By 1903 the most important defence works in Sydney Harbour were concentrated on Georges Heights, Middle Head and at South Head.

Supporting structures at Georges Heights by 1903 included Sergeant Majors quarters, cool store, artificers workshop, Quarter Masters store, machine gun shed, women's wash house, huts, an asphalt (drill) yard, four married quarters, a married sergeants quarters, a laboratory for filling cartridges and an artillery store. Battery A84 stayed as a firing station for the minefield, while battery A83 kept its 6 inch pneumatic disappearing guns. Two other batteries were decommissioned. Towards the end of WW1 a weatherboard military hospital was established at Georges Heights.

In 1906 the 'pleasure ground', on the Clifton Estate at Chowder Bay, was purchased by Sydney Ferries Ltd, and a circular, offshore swimming pool added with space for over 3,000 spectators. This facility was mirrored by the 1904 Balmoral Beach 'Mosman Septic Tank', which in 1927 was

converted into a swimming pool. The pool was utilised by the Cavill family until 1940 when resumed by the Navy and incorporated into HMAS Penguin. The Cavill family are reputed to have developed the 'Australian Crawl' swimming stroke.

In 1923 two portions of military land were leased to Mosman Council and Mosman Golf Club for public recreation. The golf club on 59 acres was a Clifton Gardens initiative having been founded in the Clifton Gardens Hotel at Chowder Bay. A nine-hole golf course was cleared and a clubhouse built for the 300 members overlooking Middle Harbour. The club operated until 1940, when Defence resumed the site for the development of HMAS Penguin.

The Submarine Miners Corps was disbanded in 1922 although Battery A84 remained a fortress command post until 1934 at Georges Heights. Other developments included the installation of anti torpedo boat guns during the 1920s following the re-armament of Singapore by Britain. This type of gun was also mounted on Georges Head and Obelisk Point to guard the anti-submarine net between Green Point and Georges Head.

The only fixed armaments at Georges Heights in 1939 were two 6 inch guns at battery B42 but these were moved to South Head. Defences were in general however, improved during the Second World War when Middle Head and Georges Heights were important barracks and administration centres for the military, as well as an active part of coastal fortifications. Barracks complexes were constructed at Middle Head and Georges Heights at this time. Additional rapid-fire guns were erected at Obelisk Point and

Georges Head to provide covering fire for the Anti-Submarine Boom from Green Point to Georges Head. Similar guns were also erected at Inner Middle Head to cover the northern channel defined by the Sow and Pigs Reef. In 1942 the Navy's refuelling storage tanks at Chowder bay, erected in the 1930s, were, with a similar facility on Garden Island, camouflaged by the erection of pitched roofs above the tanks.

The only significant defence action in the harbour was the Japanese midget submarine raid in 1943. Radio monitoring equipment at the Middle Head Barracks intercepted the transmissions of the submarines alerting defence forces to the attack. Defence installations on Middle and Georges Heads failed to identify the attackers, although one of the submarines was caught in the anti-submarine net. HMAS Penguin, commissioned in 1942, has continued to operate on the northern edge of the headland since 1945. In 1945 Italian prisoners of war were housed in the barracks above Obelisk Bay.

1945-PRESENT

From 1946, with the end of the war, the almost obsolete military fortifications and barracks were rationalised. One group of barracks was handed over to the Department of Foreign Affairs to house the newly formed School of Pacific Administration, intended to train officers to work as administrators in the Pacific and Asian Islands. This school (AUSAID) played an important role in International Affairs over the next 40 years. In 1948 the Military Board decided to maintain a regular coastal artillery unit when Obelisk Section were returned to full serviceability. In 1948 the Police requested use of the area for its wireless receiving station.

The School of Military Intelligence took over part of Middle Head Barracks, constructing a barracks and teaching complex and using the fortifications for their training activities during the Vietnam War of the 1960s. However, from 1962 the role of the coastal artillery defences was considered to be outmoded.

In 1965 the army constructed houses for personnel along Middle Head Road at Georges Heights, adding to the prefabricated Swedish Åmåls Sågverks Aktiebolag type houses erected in the 1950s, for the Navy, near HMAS Penguin. Between the 1960s and 1980s new single storey houses were also erected for Defence personnel on Commonwealth Avenue. The HMAS Penguin Naval Base at Balmoral developed rapidly with training schools established from 1951 to 1964 when it was the main submarine base in Sydney harbour. In support of these developments new refuelling facilities were erected at the Navy Refuelling Depot, including steel oil tanks and a new caretakers cottage. The Diving and Hydrographic Survey teams have had a long and close relationship with the base and continue to utilise the 'septic tank' pools. The increasing role of recreation in the defence forces was expressed in the construction of the Georges Heights and Naval ovals.

In 1979 parts of the headland were included in the newly formed Sydney Harbour National Park. The transfer excluded the Naval Base, HMAS Penguin, the 10th Terminal Squadron buildings, the School of Pacific Administration (AusAid Training Centre), the Army Maritime School at Chowder Bay and the majority of the Army headquarters training

command and accommodation facilities at Georges Heights. By the 1980s military units had been dismantled or converted to other uses, with the relocation of all Defence operations imminent.

PHYSICAL DESCRIPTION

The headland areas comprise a relict cultural landscape articulated by one of the most diverse collections of coastal defence heritage in Australia set amidst remnant native vegetation, which extends in places from the high water level into developed areas. Natural and Indigenous and historic cultural values are described separately.

Natural:

Middle and Georges Heads are contiguous sandstone headlands on the western side of the main channel of Sydney Harbour. The headlands are comprised primarily of Hawkesbury Sandstone and the soils overlying this parent material are shallow, easily eroded, infertile quartz sands.

The remaining vegetation of is dominated by a mature bangalay (EUCALYPTUS BOTRYOIDES) and red bloodwood (E. GUMMIFERA) woodland with a dense shrub understorey. Because the absence of fire in recent decades, sweet pittosporum (PITTOSPORUM UNDULATUM) now dominates the vegetation at Middle Head. The area has a reasonably comprehensive fauna list, with 129 species of birds, 1 species of frog, 11 species of reptiles and 8 species of mammals. Birds recorded at Middle Head include the whistling kite (HALIASTUR SPHENURUS), rufous fantail (RHIPIDURA RUFIFRONS) and the brown gerygone (GERYGONE MOUKI).

Short-beaked echidnas (*TACHYGLOSSUS ACULEATUS*) have also been recorded at Middle Head.

Indigenous:

No evidence of King Bungaree's farm appears to remain above surface, although it is possible that there are archaeological remains. Indigenous rock carvings and engravings recorded in the nineteenth century have not been identified.

Historic:

Historic sites and precincts within the Defence Site are connected by Middle Head Road, which terminates at Middle Head in Governor's and Old Fort roads and at Chowder Bay via Chowder Bay Road. The Defence Site comprise an evolving cultural landscape, which retains pockets of native vegetation with introduced species identifying developed areas centred on the military road system. Military roads formed a strategic framework for gun emplacements, batteries and the nineteenth century military buildings as part of the evolving cultural landscape. The Military Roads Framework (Register No.103266) is an historically important link between the National Park areas (formerly Defence land) managed by the NSW NPWS.

Individually significant sites and structures within the Defence Site are discussed at items 1-10. Terminology reflects Defence usage and the 1998 Heritage Assessment by Godden Mackay Logan for Defence.

1. Headquarters 8th Brigade Precinct (Register No 103292) is adjacent to Rawson Park at the western end of the defence area on Cross Street, an

expression of the original line of the Military Road. The site includes the regionally significant 1913 former Mosman Drill Hall and several locally significant weatherboard structures. The Drill Hall in its location illustrates the political and social role of drill halls in the community in the years preceding the First World War.

2. Gun Batteries and former Officers Mess

The ridge at Georges Heights, commanding the harbour approaches, was chosen in 1870 as the location for major defensive works comprising gun batteries A83, A84, B42 and C9a and the associated Artillery Barracks completed in 1873.

- Battery A83 (Register No. 103295) is largely an underground structure with above ground features limited to circular in ground concrete roofs to the gun pits, two entrances to the complex, and a brick walled observation post. The complex retains its underground passages, gunpowder magazine and gun pits relatively intact complete with many internal fittings which illustrate the working of the battery; in this respect it is the only battery in the area with timber fittings in place.

- Battery A84 (Battery for Five Guns Register No. 2870) was built as a five-gun battery with a sixth emplacement added on completion in 1873. The complex is connected with the 1873 Artillery Barracks complex via a sloping passageway cut in the bedrock.

- Battery C9a (Register No. 103295) appears to have been excavated 1871-1888. Only the pecked sandstone glacis of one gun pit is visible at ground level.

- Battery B42 (Register No. 103294) displays two periods of construction. The earliest construction 1877-1903, located below ground level, includes the Main gallery with its dead end branches and storage alcoves, the original Cartridge Stores, the Magazine access passage and the Powder Magazine.

-The WRAAC Officers Mess (Register No. 2871), completed in 1873 as an Artillery Barracks, is an ashlar sandstone Victorian Georgian style building roofed with corrugated galvanised iron set in an excavated terrace with steep rock faces to the rear and sides. The single storey, hipped roof section, at the front, was extended c.1891 by Lt Colonel de Wolski by the addition of a two storey gabled section at the rear.

3. Headquarters Training Command (Register No. 103338) occupies buildings associated with the development of Georges Heights as the command centre of artillery defences during the nineteenth century and the military hospital of the First World War period.

Nineteenth century buildings associated with the four batteries include the WRAAC Officers Mess (with battery A84), Gunshot Alley, at the junction of Suakin Drive and Commonwealth Avenue, weatherboard cottages and the remains of an Artillery Command Post, Building A76, of the 1890s.

- Gunshot Alley built 1898-1900 as accommodation for married soldiers. The terraced form is typical of army housing of the 1890s ;exterior and cross walls of brick with internal walls in timber; gabled pitched roofs with the end houses returned as hipped bays to enclose the verandah on the north side.

- Victorian Regency weatherboard cottage (Buildings A6, A7 &A8) built as an Officers residence c.1890s and a single storey weatherboard cottage of c.1900 erected opposite Gunshot Alley.

Twentieth century structures include single storey buildings and structures dating from WW1, WW2 and the post war era. The irregularly shaped asphalt parade ground utilises part of battery A83 as the site for the ceremonial Flagpole. Notable buildings include

- Hospital buildings 1914-1918, which together represent a single storey purpose-built weatherboard and corrugated galvanised iron military hospital, include Buildings 24, 21, 23, 15, 13, 29, 26, 27, 28, 3, 4 and 5.

- Barracks style accommodation c.1918 includes a single storey brick barracks and the associated brick kitchen in the Federation style. (Buildings 54, 55)

- Weatherboard buildings associated with the Inter War, Second World War and Post War periods include the Duty Room (A1). Buildings 38, 34, 32, 30, 9, 12 and 11.

4. 30 Terminal Squadron (Register No. 103339) includes the following significant structures. a c.1890 corrugated iron, paired gable roofed shed (Building B1) used to house artillery; a corrugated asbestos cement HQ building of c.1918 (Building B4); a range of weatherboard structures including the All Ranks Club (Building B3 c.1940), Orderly Room (Building B13) and a small weatherboard Gardeners shed/cottage associated with the operation of battery B42. Stores Buildings B16 and B17 erected c.1918 appear to have been associated with the military hospital of 1914-18. Supporting buildings include a range of buildings in brick, corrugated galvanised iron and weatherboard.

5. Chowder Bay Submarine Miners Barracks (Register No. 2876) was constructed from 1890-93 to provide accommodation, storage and operational facilities for the NSW Submarine Corps. The complex developed as a series of terraces connecting Chowder Bay Road with the wharf on the western, sheltered side of the headland. The complex is listed in the RNE.

6. Navy Refuelling Depot and Caretakers Cottage (Register No. 103337) comprises 2 (in use) fuel tanks and 3 1930s roofed storage tanks (Tanks 3, 4 & 5) with associated pumps, fire fighting equipment and a 1930s brick Naval Caretakers Cottage in the prevailing Functionalist style, linked to an off-shore refuelling facility. The roofed storage tanks are the first large-scale example of camouflage in Australia.

7. Commonwealth Avenue Defence Housing (Register No. 103341)

A group of Defence housing erected from the 1930s-1980s, which illustrates the characteristics of housing types provided for Defence personnel.

-Number 5 Commonwealth Avenue erected as Officers Quarters c.1935 in brick and tile in the prevailing Art Deco style

-Former Navy Cottages of the Swedish Åmåls Sågverks Aktiebolag prefabricated type imported in the 1950s to meet the Commonwealth's demand for housing.

8. Middle Head Road Defence Housing

On Middle Head Road are five remaining representative examples of an original eight prefabricated Swedish Åmåls Sågverks Aktiebolag (ASA) houses imported in the early 1950s and used by Defence for married quarters accommodation. The ASA cottages are now rare examples of this form of housing imported to Australia after World War II at a time when building materials were in short supply. The associated group of masonry housing, MQ1101-1107, on the opposite side of Middle Head Road, was developed in the 1960s.

9. 10 Terminal Regiment Headquarters and AUSAID Training Centre Precinct (Register No. 103342)

The AUSAID Training Centre, formerly Middle Head Barracks, comprises some 15 vernacular timber and corrugated galvanised iron huts (Buildings in the range 1-21) characteristic of Defence barracks style accommodation

in the 1939-45 period, known generally as type P-1 huts. As a group the huts comprise the largest surviving complex of standard weatherboard gabled P-1 type huts on the headland areas and are important for their use as an Italian POW camp.

The 10 Terminal Regiment complex comprises a range of buildings including three weatherboard huts (Buildings 1, 14 and 18), formerly part of the adjacent former Middle Head Barracks. The School of Military Intelligence commenced in 1959 was housed primarily in red-brick buildings with green Marseilles tiled hipped roofs reflecting in general the influence of the Inter War Stripped Classical style employed at HMAS Penguin. Buildings of particular importance include Headquarters Building (1), Workshop and Rear Annexe (6 & 7), Officers Mess (2 and 3), and the later Other Ranks Accommodation (Barracks 1, 2, 3) comprising three 3-storey weatherboard dormitory buildings.

9. HMAS Penguin Naval Base (Register No. 103327) comprises significant groups of weatherboard and brick buildings in the bush setting of the Middle Harbour foreshores. The main complex comprises 12 buildings, including hospital and barracks style accommodation of 1-3 storeys with a nautical character constructed in brick with green Marseilles tiled hipped roofs. This group provides the dominant character of the site and includes: the Gatehouse (1); Conference Hall (2); Admin Support Centre (3); Naval Stores (4); Naval Hospital (8); Naval Police School (26); Accommodation (28); Senior Sailors Accommodation and Mess (17); Ward Room/Officers Mess (20); Administration (19); Information Technology (18); and Junior Sailors Quarters (16). Other structures include the Naval Flagstaff and the

Sewer Vent Stack and Swimming Pool, formerly part of the Mosman Sewage Treatment Works.

The waterfront areas include a group of weatherboard single storey gabled buildings with green Marseilles tiled roofs, amongst the earliest erected on the site, associated with the jetty complex. Of particular significance are the Diving School (46) and Workshops, Stores and Administration (47, 48).

10. Golf Clubhouse

The former Mosman golf clubhouse (Register No. 103293) constructed in sandstone in the California Bungalow style in 1925 has been adapted for Defence use but retains its essential form intact as the focus of the former 9-hole golf course. The grassed area in front of the clubhouse provides an appropriate setting.

History Not Available

Condition and Integrity

CONDITION AND INTEGRITY

Historic:

The range of historic places and their integrity and condition was documented by Godden Mackay Logan (1998) for Defence as part of the Georges Heights and Middle Head Defence Site Heritage Assessment.

Specific details of the condition and integrity of each structure is beyond the scope of this assessment.

Location

About 60ha, at Georges Heights and Clifton Gardens, comprising generally the Department of Defence lands at Georges Heights/Middle Head, and in particular:

(1) the whole of the property Headquarters 8th Brigade, Cross Street, Clifton Gardens, and

(2) the whole of the Department of Defence land, Middle Head Road, Georges Heights, other than 1st Commando Company HQ and adjacent defence housing areas on Markham Close and at the end of Dominion Crescent, being the area to the north and west of a line consisting of the rear (south) boundaries of defence housing blocks to the north of Georges Heights Oval and extending westerly from Middle Head Road to the southern most point of Lot 19 DP831153, then south easterly via the alignment of the south west boundary of Lot 19 to its intersection with AMG easting 338280mE (approximate AMG point 38305452), then directly south westerly to the intersection of the western boundary of Lot 202 with AMG easting 338200mE (approximate AMG point 38255445).

Bibliography

Godden Mackay Logan, Georges Heights and Middle Head Defence Site Heritage Assessment, December 1998

GC Wilson, 1985, Sydney Harbour Fortifications Archival Study, NSW NP & WS, Sydney

Royal Australian Artillery Historical Society Inc., 1993, NSW WW2 Fortifications Study for NSW NP & WS, Sydney

Design 5 Architects, 1996, Conservation Management Plan A83, A84, B42 & C9a Batteries and Tunnels Georges Heights, Sydney, for Department of Defence.

DECOS Building Surveying Services, 1993, NPWS Defence Heritage Study - Stage 1, Structural Condition Assessment reports, Armoured Casemate Georges Head, First draft.

NSW National Parks and Wildlife Service 1998, Plan of Management for Sydney Harbour National Park.

ERIN, 2000, Species Data held by Environmental Resources Information Network (Internally held data-sets).

D Gojak, 1985, Sydney Harbour Fortifications Study for NSW NP & WS

Middle and Georges Heads Fortifications Conservation Plan, D Gojak NPWS Historical Archaeologist, Cultural Heritage Conservation Division 1993 (an NEGP project)

NPWS Middle Head Fortifications Structural Condition Report 1990

Mosman Council LEP 1

D Gojak, Defending the Indefensible: an archaeological approach to Sydney's historic coastal defences. Summary of lecture to ASHA.

School of Landscape Architecture, University of NSW, 1995, Middle Head Heritage Study

Mosman Heritage Study, Travis and Partners Pty Ltd, 1988 for the Municipality of Mosman, Sydney

National Trust of Australia (NSW), Georges Heights bushland survey and regeneration plan for the Department of Defence, National Trust of Australia (NSW), Sydney, October 1992

D Benson and J Howell, Taken for granted: the bushland of Sydney and its suburbs, Kangaroo Press in association with Royal Botanic Gardens, Sydney, 1995 (paperback edition)

Headland Preservation Group Inc., Nomination of the Middle Head and Georges Heights site for listing on the Register of the National Estate, Headland Preservation Group Inc., Mosman, October 1997

Bonyhady Tim, Rock of Ages pp104-105 in Bulletin with Newsweek, The Bulletin December 19 2000.

Golf Clubhouse (former), Middle Head Rd, Georges Heights, NSW, Australia

List Commonwealth Heritage List

Class Historic

Legal Status [Listed place](#) (22/06/2004)

Place ID 105575

Place File No 1/13/026/0028

Summary Statement of Significance

The former Mosman Golf Club Clubhouse dates from 1924 and is historically significant. It was built on land leased from defence during a period of low defence activity following the First World War. The site reverted to military use with the outbreak of the Second World War. The building has since been used to house military personnel. There was an outcry over the golf club's lease of the land in the 1920s because it denied public access to harbourside land and potentially the loss of bushland. Public protests at exclusion from harbour access by defence and private land were a continuing feature of the headland areas in the second half of the twentieth century. (Criterion A.4) (Australian Historic Themes- 7.7 Defending Australia, 7.2.1 Protesting, 8.1.1 Playing and watching organised sports, 8.12 Living in and around Australian homes)

The former clubhouse retains much original detailing and its general plan. The building illustrates the privileged position of its original golf club occupants, while at the same time illustrating the status of senior army officers who have used the building for accommodation. (Criterion B.2)

The clubhouse expresses a number of characteristics of the Federation Bungalow and Inter-war California Bungalow architectural styles, as seen in the large roof planes, the deep verandah with exposed roof timbers, the front-facing half-timbered gable, the flat-topped chimney and other features. (Criterion D.2)

The building is visually pleasing, located in an attractive, cleared setting with bushland behind, and on a site looking out over Middle Head toward the Sydney Harbour entrance. The place therefore possesses notable aesthetic qualities. (Criterion E.1)

Official Values

Criterion A Processes

The former Mosman Golf Club Clubhouse dates from 1924 and is historically significant. It was built on land leased from defence during a period of low defence activity following the First World War. The site reverted to military use with the outbreak of the Second World War. The building has since been used to house military personnel. There was an outcry over the golf club's lease of the land in the 1920s because it denied public access to harbourside land and potentially the loss of bushland. Public protests at exclusion from harbour access by defence and private

land were a continuing feature of the headland areas in the second half of the twentieth century.

Attributes

The original styling of the clubhouse, plus evidence of subsequent modifications following resumption by Defence.

Criterion B Rarity

The former clubhouse retains much original detailing and its general plan. The building illustrates the privileged position of its original golf club occupants, while at the same time illustrating the status of senior army officers who have used the building for accommodation.

Attributes

All the fabric of the building.

Criterion D Characteristic values

The clubhouse expresses a number of characteristics of the Federation Bungalow and Inter-war California Bungalow architectural styles, as seen in the large roof planes, the deep verandah with exposed roof timbers, the front-facing half-timbered gable, the flat-topped chimney and other features.

Attributes

The features noted above.

Criterion E Aesthetic characteristics

The building is visually pleasing, located in an attractive, cleared setting with bushland behind, and on a site looking out over Middle Head toward the Sydney Harbour entrance. The place therefore possesses notable aesthetic qualities.

Attributes

The design and materials of the building, plus its landscape setting and outlook.

Description

History

The former Mosman Golf Club Clubhouse is located at Middle Head within the larger Middle Head Georges Heights area. Substantial military works began on Middle Head and Georges Head in the 1870s when batteries of guns with associated buildings were erected. These were part of the outer line of defence for Sydney Harbour. Improved technology and weaponry saw further developments. The batteries were mobilised during the First World War, but the gunners saw no action.

Such was the decline in activity after the war that in 1924 the Mosman Golf Club was able to lease a portion of land for a course and clubhouse. This resulted in a public outcry over the alienation of public land and the potential loss of bushland. Prominent residents and others, including Dr H.V.Evatt, wanted to retain Middle Head for public recreation, and not have it given to private clubs. The lease proceeded and a nine hole course was laid out, with clearing of bushland, and a clubhouse constructed.

The club used the site until 1939. A condition of the lease allowed for resumption by the Commonwealth at any time for military purposes, and when the Second World War broke out, the lease was revoked. The army turned the clubhouse into two residential units for officers. After housing various officers, in 1959 the building was shared between the CO of the Army Intelligence Centre (and later the CO of 10 Terminal Regiment) and the Commander of the RAE Transportation Depot at Chowder Bay. The building remains in use as Commanding Officer accommodation.

Physical Description:

The former clubhouse is two storeys and is constructed of sandstone and brick. It reflects characteristics of Federation Bungalow and Inter-war California Bungalow styling, as is seen in the large roof planes, the deep verandah with exposed roof timbers, the front-facing half-timbered gable, the flat-top chimney and other features. There is a semi-circular arch under the steps of the projecting porch. Much original detailing survives, as does the general plan, and the building is still suggestive of the privileged background of its original users, at the same time reflecting the status of senior officers.

The building is visually pleasing and is located in an attractive bushland setting looking out to Middle Head and beyond to the entrance of Sydney Harbour.

History Not Available**Condition and Integrity**

The clubhouse was converted over 60 years ago into two accommodation units, yet much original detailing survives, as does the plan and the original style of the building. (1998)

Location

Middle Head Road, opposite HMAS Penguin, Georges Heights.

Bibliography

Apperly, Richard, et al, 1989, A Pictorial Guide to Identifying Australian Architecture. Angus and Robertson, Sydney.

Godden Mackay Logan, December 1998, Georges Heights and Middle Head Defence Site Heritage Assessment (Draft). 2 vols. Department of Defence.

Military Road Framework - Defence Land, Middle Head Rd, Georges Heights, NSW, Australia

List	Commonwealth Heritage List
Class	Historic
Legal Status	Listed place (22/06/2004)
Place ID	105572
Place File No	1/13/026/0027

Summary Statement of Significance

The Military Road Framework-Defence Site and the Military Road Framework-Sydney Harbour National Park (see Register No. 103267) are part of a single historic military road system. The latter is significant within the Sydney Harbour National Park (see Register No.101087). Both areas were originally part of the Georges Heights-Middle Head defence site. The site is historically significant as the location of major defence works for Sydney Harbour and Port Jackson during the nineteenth and twentieth centuries.

The Military Road Framework-Defence Site comprises the alignment of the northern section of Middle Head Road, Suakin Drive, part of Chowder Bay Road and part of Cobbler's Beach Road.

The Military Road Framework-Defence Site is historically important as part of a single military road system at Middle Head and Georges Heights, which developed from 1870 following the departure of British troops. The road system was a strategic link between gun batteries, barracks and associated defence works and is a major component in a relict cultural landscape which illustrates the strategic importance of roads in the logistics of nineteenth century defence works and batteries in the defence of Sydney Harbour. (Criterion A.4) (Historic Themes: 7.7 Defending Australia, 4.1 Planning urban settlements)

Official Values

Criterion A Processes

The Military Road Framework-Defence Site and the Military Road Framework-Sydney Harbour National Park are part of a single historic military road system. The latter is significant within the Sydney Harbour National Park. Both areas were originally part of the Georges Heights-Middle Head defence site. The site is historically significant as the location of major defence works for Sydney Harbour and Port Jackson during the nineteenth and twentieth centuries.

The Military Road Framework-Defence Site comprises the alignment of the northern section of Middle Head Road, Suakin Drive, part of Chowder Bay Road and part of Cobbler's Beach Road.

The Military Road Framework-Defence Site is historically important as part of a single military road system at Middle Head and Georges Heights, which developed from 1870 following the departure of British troops. The

road system was a strategic link between gun batteries, barracks and associated defence works and is a major component in a relict cultural landscape which illustrates the strategic importance of roads in the logistics of nineteenth century defence works and batteries in the defence of Sydney Harbour.

Attributes

The single road system that linked the gun batteries, barracks and associated defence works.

Description

BACKGROUND:

The Military Road Framework-Defence Site and the Military Road Framework-Sydney Harbour National Park (see Register No. 103267) are part of a single historic military road system. The latter is significant within the Sydney Harbour National Park (see Register No.101087). Both areas were originally part of defence land at Georges Heights-Middle Head which is historically significant as the location of major defence works for Sydney Harbour and Port Jackson during the nineteenth and twentieth centuries.

HISTORY:

Middle Head and Georges Heights are of major importance in the story of the defence of Sydney Harbour and have been closely associated with the defence of Sydney since 1800. In 1801 a battery and magazine were constructed at Georges Head, however, it was soon abandoned. In the

early 1840s a foot track was established from North Sydney to Middle Head, running south of the route now known as Military Road (Military Road is not included in the registered area). In the 1840s two lines of defence, an inner and an outer line, were proposed and with the outbreak of the Crimean War in 1853 works were begun, including batteries at Middle Head as part of the outer line. But the new Governor of New South Wales, Sir William Denison, changed these plans, with renewed emphasis on the inner line, closer to Sydney.

In 1862 a British committee recommended that self-governing colonies should provide for their own defence, and in 1870 the last British regimental troops left New South Wales. A New South Wales Defence Committee recommended that the two line system should be proceeded with, and it was planned that the outer line would include Georges Heights and Middle Head. Work started in 1871, with military road access well under way by February 1871, and two batteries at Middle Head and two at Georges Head under construction. Various garrison buildings (sandstone and weatherboard) were erected. These works were designed by New South Wales Colonial Architect James Barnet, with input from the Corps of Engineers.

Late in the 1870s British military experts Sir William Jervois and Lieutenant Colonel Peter Scratchley advised on the reorganisation of the Australian colonies' defences, with the result that substantial development was undertaken at the Middle Head-Georges Heights site. In 1870, after the Legislative Council agreed to fund the construction of military roads and fortifications at Middle Head, Military Road was formed and an internal

military road was also built between Middle Head and Bradley's Head. The northern section of this route is now part of Middle Head Road and the southern section now forms part of Bradley's Head Road (Bradley's Head Road is not included in the registered area). At the same time, Governors Road and Old Fort Road were completed at Middle Head, connecting the two batteries that were constructed in 1871 with the internal military road.

These roads were used for the 'rolling of the guns' with construction of the roads providing a major stimulus to development in the Mosman district.

The completion of Cobbler's Beach Road and jetty relate to the construction of the Fort at Middle Head in the 1870s and the need for supply and access by sea. The internal military road between Middle Head and Bradley's Head was rerouted during the late 1870s or early 1880s, and Cross Street is a reminder of the alignment of the original route (Cross Street is not included in the registered area). Suakin Drive provided access to the A84 Battery (Battery for Five Guns) and the Officers Mess and Barracks, now known as the WRAAC Officers Mess (former). Suakin Drive was named following the involvement of New South Wales Colonial troops in the Sudan War.

Improvements in weaponry and other technology saw still more changes; meanwhile the Submarine Mining Corps was developed at adjacent Chowder Bay. During the early 1890s, Chowder Bay Road was constructed to connect the Submarine Mining Depot with Middle Head. This road also

gave access to the 1882-85 Armoured Casemate and to the earlier Rock Casemate of 1872-76.

In 1889, amid controversy, Colonel F.R.de Wolski replaced James Barnet as designer of Sydney's defensive works. Electricity and telephone were connected to the site. Following Federation and the Commonwealth's assumption of responsibility for defence, new guns were installed.

With the outbreak of the First World War, the defences at the site were mobilised, but no action was seen. The main activity was the construction of a major military hospital at Georges Heights, in 1916, to treat casualties from overseas. By mid 1918, as No.21 Australian Auxiliary Hospital, the complex was the third largest military hospital in Australia. It operated until 1923, after which the buildings were used as accommodation for various army units.

During the inter-war years, new technology saw new units and weapons introduced at the site. Then in the Second World War, harbour defences were upgraded and put on full alert following Japan's entry into the war. The penetration of Sydney Harbour by Japanese submarines was the first and only time that enemy forces have raided the harbour. By 1944 activity at the site was being scaled down. The post-war years saw older style port defence systems made obsolete, and the batteries were dismantled in the 1950s. Middle Head-Georges Heights now became a training area with barracks facilities. In the 1970s, some of the original military roads became part of the Sydney Harbour National Park, after areas of land were dedicated for this purpose. An overseas training school, the Australian

School of Pacific Administration, (subsequently the AusAid Centre for Pacific Development and Training) was housed at the site. With further rationalisation of defence facilities, by the late 1990s very little of the site remained occupied. In 2001 the remaining defence land was earmarked for management by the Sydney Harbour Federation Trust.

The military road framework at Middle Head and Georges Heights links all the aforementioned phases in the development of the defensive measures in the area. The major ridgeline roads that are now known as Military Road, Middle Head Road and Bradley's Head Road were built during the 1870s in order to move defence equipment around the site and secondary roads were added as the site was developed.

PHYSICAL DESCRIPTION:

The Military Road Framework is a historically important link between land that continues to be occupied for defence purposes and land that now forms part of Sydney Harbour National Park. The roads had a strategic role in linking the defensive sites and features at Georges Heights and Middle Head.

In particular, Middle Head Road connects many of the historic sites and precincts in the Middle Head-Georges Heights area. The northern section of Middle Head Road follows the alignment of the original internal military road. Governor's Road, Old Fort Road, Chowder Bay Road, and Cobbler's Beach Road are believed to retain their original alignments as is Suakin Drive.

The Military Road Framework-Defence Site comprises the alignment of the northern section of Middle Head Road, Suakin Drive, part of Chowder Bay Road and part of Cobbler's Beach Road. The present day routes follow the original routes closely and are part of a relict cultural landscape

History Not Available

Condition and Integrity

The roads generally retain their original alignments (November 2001).

Location

Comprising the following roads in Georges Heights: 1. That section of Cobblers Beach Road from its intersection with Middle Head Road to its intersection with the Sydney Harbour National Park boundary. 2. That section of Middle Head Road extending from its intersection with AMG northing 6255040mN (approximate AMG point 38765504) to its intersection with the Sydney Harbour National Park boundary. 3. The following two sections of Chowder Bay Road; that part of the road extending from its intersection with Middle Head Road to its intersection with the Sydney Harbour National Park boundary (approximate AMG point 39015537), and between its intersection with the Sydney Harbour National Park boundary (approximate AMG point 38865435) and the end of the road. 4. The whole of Suakin Drive.

Bibliography

Gavin Souter, "Mosman: a history", Melbourne University Press, 1994.

Godden Mackay Logan, "Georges Heights and Middle Head Defence Site Heritage Assessment (Draft)", 2 vols, prepared for the Department of Defence, December 1998.

Travis Partners Pty Ltd, "Mosman Heritage Study", 2 vols, January 1988.

"Town and Country Journal", 4 February 1871, p. 140; 18 February 1871, p. 204; 1 April 1871, p. 400.

Denis Gojak, "Defence Heritage Study (Draft)", Prepared for National Parks and Wildlife Service of NSW, 1993.

Ten Terminal Regiment Headquarters and AusAid Training Centre, Middle Head Rd, Georges Heights, NSW, Australia

List	Commonwealth Heritage List
Class	Historic
Legal Status	Listed place (22/06/2004)
Place ID	105587
Place File No	1/13/026/0037

Summary Statement of Significance

The 10 Terminal Regiment Headquarters and associated AusAid Training Centre is one of a number of places that are part of the larger Middle Head-Georges Heights defence site (see Register No.102619). The site is historically significant as the location of major defence works for Sydney Harbour and Port Jackson during the nineteenth and twentieth centuries. Buildings of particular significance include Buildings 1-21 in the AusAid Training centre and the related buildings 1, 14 and 18 in the 10 Terminal Regiment Head quarters in addition to the Headquarters Building (1), the Workshop and Rear Annexe (7 and 6), the Officer's Mess (2, 3), the Store and Duty Room and the Other Ranks buildings (Barracks 1, 2, 3).

This precinct is important historically in a number of ways. The area of the former 10 Terminal Regiment has associations with the Army Intelligence Centre, which played a notable role during the Cold War years and the

Vietnam War, as well as associations with the more modern period of occupation by the Regiment itself. The AusAid Centre for Pacific Development and Training (formerly the Australian School of Pacific Administration) was used during the Second World War and at the end of the war was used to house Italian prisoners of war and internees. The AusAid Centre was itself a significant diplomatic initiative within the Pacific region, operating at the site for over 50 years. The precinct, as a whole, helps to maintain the historical association between the military and Middle Head which has existed for more than a century. (Criterion A.4) (Australian Historic Themes: 7.7 Defending Australia, 7.6.5 Incarcerating people, 7.5 Governing Australia's colonial possessions, 6.3 Training people for the workplace.)

The AusAid Centre buildings are important examples of basic army weatherboard barracks buildings of the 1930s-1940s wartime period, and reflect the way that these structures have been able to be adapted for a wide variety of uses over the decades. (Criteria D.2 and B.2)

The precinct has an association with the first principal of the Australian School of Pacific Administration, John Kerr, who as Sir John Kerr QC became Governor General and figured in the controversial dismissal of the Whitlam Government in 1975. Other key associations are with James Macauley and Brigadier Alf Conlon. (Criterion H.1)

The AusAid area is a cohesive, closely sited enclave of similarly styled and clad buildings, within an area of garden beds and lawns creating a restful atmosphere. Consequently it has notable aesthetic qualities. (Criterion E.1)

The area, overlooking the harbour, has social significance for the Sydney community as well as for former and current service personnel. (Criterion G.1)

Official Values

Criterion A Processes

The 10 Terminal Regiment Headquarters and associated AusAid Training Centre is one of a number of places that are part of the larger Middle Head-Georges Heights defence site. The site is historically significant as the location of major defence works for Sydney Harbour and Port Jackson during the nineteenth and twentieth centuries. Buildings of particular significance include Buildings 1-21 in the AusAid Training centre and the related buildings 1, 14 and 18 in the 10 Terminal Regiment Head quarters in addition to the Headquarters Building (1), the Workshop and Rear Annexe (7 and 6), the Officer's Mess (2, 3), the Store and Duty Room and the Other Ranks buildings (Barracks 1, 2, 3).

This precinct is important historically in a number of ways. The area of the former 10 Terminal Regiment has associations with the Army Intelligence Centre, which played a notable role during the Cold War years and the Vietnam War, as well as associations with the more modern period of occupation by the Regiment itself. The AusAid Centre for Pacific Development and Training (formerly the Australian School of Pacific Administration) was used during the Second World War and at the end of the war was used to house Italian prisoners of war and internees. The AusAid Centre was itself a significant diplomatic initiative within the Pacific

region, operating at the site for over 50 years. The precinct, as a whole, helps to maintain the historical association between the military and Middle Head which has existed for more than a century.

Attributes

The fabric, form and landscape setting of the buildings, including courtyard spaces and connecting links. Buildings of particular significance include Buildings 1-21 in the AusAid Training centre and the related buildings 1, 14 and 18 in the 10 Terminal Regiment Head quarters in addition to the Headquarters Building (1), the Workshop and Rear Annexe (7 and 6), the Officer's Mess (2, 3), the Store and Duty Room and the Other Ranks buildings (Barracks 1, 2, 3).

Criterion B Rarity

The AusAid Centre buildings are important examples of basic army weatherboard barracks buildings of the 1930s-1940s wartime period.

Attributes

The single storey weatherboard character of the AusAid centre buildings.

Criterion D Characteristic values

The AusAid Centre buildings reflect the way that these structures have been able to be adapted for a wide variety of uses over the decades.

Attributes

Evidence of adaptive reuse in the AusAid centre buildings.

Criterion E Aesthetic characteristics

The AusAid area is a cohesive, closely sited enclave of similarly styled and clad buildings, within an area of garden beds and lawns creating a restful atmosphere. Consequently it has notable aesthetic qualities.

Attributes

The scale of the buildings, their consistent form and style, their landscape curtilage and the spaces between the buildings.

Criterion G Social value

The area, overlooking the harbour, has social significance for the Sydney community as well as for former and current service personnel.

Attributes

Not clarified.

Criterion H Significant people

The precinct has an association with the first principal of the Australian School of Pacific Administration, John Kerr who, as Sir John Kerr QC, became Governor General and figured in the controversial dismissal of the Whitlam Government in 1975. Other key associations are with James Macauley and Brigadier Alf Conlon.

Attributes

Not clarified.

Description**Background**

The 10 Terminal Regiment Headquarters and AusAid Training Centre is one of a number of places that are part of the larger Middle Head-Georges Heights defence site (see Register No.102619). The site is historically significant as the location of major defence works for Sydney Harbour and Port Jackson during the nineteenth and twentieth centuries.

History

The 10 Terminal Regiment Headquarters and AusAid Training Centre precinct is located at Middle Head within the larger Middle Head Georges Heights area. The area has a long military history. Substantial military works began on Middle Head and Georges Head in the 1870s when batteries of guns with associated buildings were erected. These were part of the outer line of defence for Sydney Harbour. Improved technology and weapons saw further developments. The batteries were mobilised during the First World War, and there was much activity during the Second World War particularly following Japan's entry into the war. The post-war years saw older style port defence systems made obsolete, and the batteries were dismantled in the 1950s. Middle Head-Georges Heights then became a training area with barracks facilities. In the 1970s large areas of bushland were dedicated as part of the Sydney Harbour National Park. With further rationalisation of defence facilities, by the late 1990s very little of the site remained occupied and in 2001 the site was earmarked for entry into the Sydney Harbour Federation Trust.

Specifically, the area formerly occupied by 10 Terminal Regiment was earlier used by the Army Intelligence Centre from 1959. The Intelligence Centre played an important role during the Cold War years and the Vietnam War. The 10 Terminal Regiment moved in, in 1968, but has now vacated the site. The area occupied by the former AusAid Training Centre was originally the Middle Head Barracks, built at the beginning of the Second World War. During the war the barracks helped to house the Army Signals Depot. By the end of the war the barracks were accommodating Italian prisoners of war and internees. The barracks were then used to house the Australian School of Pacific Administration, which had been operating during the Second World War and which was made permanent in 1947. The School trained people in the civil administration of developing countries, with particular reference to Papua New Guinea and, subsequently, elsewhere in the Pacific. John Kerr (later Governor General, who figured in the controversial dismissal of the Whitlam Government) was the first principal. Teacher training was later added to the curriculum and officers from the Pacific countries themselves were also brought to the school for training. Eventually the school became the AIDAB (or AusAid) Centre for Pacific Development and Training. AIDAB departed from the site in 1998.

Physical Description

The 10 Terminal Regiment area includes administrative, utilitarian and residential buildings. There are single storey brick office, garage, mess and workshop buildings on the south side of the precinct, and several double storey brick and weatherboard residential buildings on the north side in addition to more recent accommodation.

The more significant buildings include the following. Headquarters Building (Building 1) dating from around 1958, a single storey building in brick with a Marseilles tiled, hipped gable roof. The building features elements of Inter-War Art Deco styling and a brick parapet rises above the entrance portico. The Workshop building (Building 7) and Rear Annexe (Building 6) are similarly dated and are built of brick with a tiled hip roof. The Officers mess/amenities (Buildings 2, 3) complex also dates from around 1958 and is single storey with a hipped, tiled roof. It features long wings with projecting bays, and has elements of Bungalow styling. Earlier buildings (1, 14 and 18 late 1930s) include the Store and Duty Room which has a gable roof and is clad with weatherboards, similar to the buildings in the adjacent AusAid complex. The Other Ranks (Barracks 1, 2, 3) accommodation consists of three, double-storey, weatherboard-clad buildings with gabled metal roofs and a central brick service core erected in 1959.

The Regiment area also contains areas of asphalt paving, demountables and some lawn, tennis courts and garden spaces.

The AusAid area is a small, closely sited collection of fifteen single storey weatherboard buildings (Buildings 1-21) connected by covered walkways. They are standard pattern army barrack buildings and are good examples of surviving basic army buildings of the 1930s and 1940s wartime period. The buildings have gable roofs and are based on the ubiquitous P-1 type design. The area is a cohesive one, within an area of lawns and gardens, creating a restful atmosphere, which continues into the adjacent Ten Terminal Regimental area.

History Not Available

Condition and Integrity

Integrity:

Various buildings in the precinct have been refurbished and have modern alterations. (1998)

Condition:

Good (1998)

Location

About 4ha, Middle Head Road, Georges Heights, comprising that part of Lot 203 DP1022020 to the east of AMG easting 339040mE but excluding Middle Head Oval.

Bibliography

Godden Mackay Logan, December 1998, Georges Heights and Middle Head Defence Site Heritage Assessment (Draft). 2 vols. Department of Defence.

