
Sydney Harbour Federation Trust

Management Plan – Mosman No.5

HQ Training Command (Georges Heights)

23rd NOVEMBER 2004



Australian Government

Sydney Harbour Federation Trust

Table of Contents

| | |
|---|----|
| Introduction | 1 |
| Commencement Date | 2 |
| Land to which the Management Plan Applies | 2 |
| Aims of this Plan..... | 2 |
| Relationship with the Trust's Comprehensive Plan..... | 3 |
| Relationship with other Trust Management Plans..... | 3 |
| Related Policies and Guidelines | 3 |
| Relationship with the Headland Park Design Framework | 4 |
| PRECINCTS..... | 4 |
| STREETS AND PATHS | 5 |
| ENTRIES..... | 5 |
| SIGNIFICANT PUBLIC PLACES | 6 |
| LANDMARKS | 6 |
| EDGES..... | 6 |
| Statutory Planning Context | 6 |
| COMMONWEALTH LEGISLATION | 6 |
| STATE LEGISLATION | 7 |
| SYDNEY REGIONAL ENVIRONMENTAL PLAN NO. 23 – SYDNEY AND MIDDLE HARBOURS | 7 |
| DRAFT SYDNEY REGIONAL ENVIRONMENTAL PLAN NO. 32 SYDNEY HARBOUR CATCHMENT | 7 |
| MOSMAN LOCAL ENVIRONMENTAL PLAN 1998..... | 8 |
| Plans Prepared for Neighbouring Lands | 8 |
| SYDNEY HARBOUR NATIONAL PARK MANAGEMENT PLAN | 8 |
| PLANS MADE UNDER THE RURAL FIRES ACT 1997 | 8 |
| Non Statutory Planning Strategies..... | 9 |
| SHARING SYDNEY HARBOUR ACCESS PLAN | 9 |
| MOSMAN BICYCLE PLAN | 9 |
| Site Description | 9 |
| Site Analysis | 10 |
| HERITAGE CONSERVATION..... | 10 |
| LANDSCAPE CHARACTER | 18 |
| BUSH LAND AND NATURAL VALUES..... | 19 |
| PHYTOPHTHORA CINNAMOMI | 21 |
| GEOLOGY AND SOILS | 22 |
| STORMWATER..... | 22 |
| SITE CONTAMINATION..... | 23 |
| HAZARDOUS MATERIALS..... | 24 |



Australian Government

Sydney Harbour Federation Trust

| | |
|--|----|
| SERVICES | 25 |
| COMPLIANCE WITH THE BUILDING CODE OF AUSTRALIA | 25 |
| TRANSPORT MANAGEMENT | 25 |
| TRAFFIC, PARKING AND ACCESS | 26 |
| ACCESSIBILITY AUDIT | 27 |
| Commonwealth Heritage Values | 27 |
| Outcomes | 28 |
| HERITAGE CONSERVATION | 28 |
| INTEGRATION WITH SURROUNDING LANDS | 29 |
| PEDESTRIAN PATHWAYS | 29 |
| ROAD ACCESS | 30 |
| CAR PARKING | 30 |
| POSSIBLE NEW BUILDINGS | 31 |
| LANDSCAPE IMPROVEMENTS | 32 |
| ADAPTIVE RE-USE OF BUILDINGS | 32 |
| WATER SENSITIVE URBAN DESIGN | 35 |
| REMEDICATION | 37 |
| INTERPRETATION | 37 |
| Implementation | 38 |
| Future Actions | 42 |
| UNFORESEEN ARCHAEOLOGICAL DISCOVERIES | 42 |
| RECORDS OF INTERVENTION & MAINTENANCE | 42 |
| FUTURE CONSULTATION | 42 |
| ABORIGINAL CONSULTATION | 42 |
| MONITORING AND REVIEW OF THE PLAN | 42 |
| Acknowledgements: Images | 43 |
| Related Studies | 44 |
| Appendices | 46 |



Introduction

On 21st 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. The plan, which was prepared in accordance with the requirements of the *Sydney Harbour Federation Trust Act, 2001*, sets out the Trust's vision for the harbour sites under its control.

It also includes:

- A process for the preparation of more detailed management plans for specific precincts, places or buildings – see *Part 11*; and
- Objectives and Policies covering a range of matters such as Cultural Heritage, Biodiversity Conservation and Aboriginal Heritage that must be addressed when Management Plans or specific Activities are being considered on *Trust Land Sites* –see *Part 3*.

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

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 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 Comprehensive Plan identifies the site of the former Headquarters Training Command at Georges Heights as a campus like historic precinct within the central part of the park. The Trust has decided that this precinct should be developed as the next stage of the park.

The *Environment Protection and Biodiversity Conservation (EPBC) Act, 1999* also requires the Trust, as a Commonwealth agency, to make written plans to protect and manage the Commonwealth Heritage values of Commonwealth Heritage places that it owns or controls. The Training Command precinct has been identified as having Commonwealth Heritage value and is included on the Commonwealth Heritage list.

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



Commencement Date

This plan was adopted by the Trust on 23 November 2004 and came into force on that date.

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 202 DP 1022020 and is in the ownership of the Sydney Harbour Federation Trust.

Aims of this Plan

The aims of this Management Plan are to:

- Conserve and interpret the Commonwealth Heritage values of Training Command, particularly those relating to Bungaree's Farm and its long military occupation. This includes its initial role as part of the 1870s fortification of Sydney, the WW1 Hospital and its subsequent expansion and adaptation as barracks for various elements of the Army- notably the WRACC;
- Maximise public access;
- Facilitate the adaptive re-use of the former hospital and barracks buildings for a range of sympathetic uses within a campus style environment; and
- Integrate Training Command with adjoining precincts as part of a unified Headland Park.

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 for public access, site interpretation, education and appropriate community and commercial uses;
- Provide visitor facilities and amenities including parking, walking tracks, lookouts and access to the fortifications and other historic structures;
- Assist the conservation of the buildings' historic fabric by ensuring that they are adaptively reused in a manner consistent with the recommendations of the Conservation Management Plan prepared for the site;
- Provide opportunities for visitors to understand and appreciate the totality of the site's heritage;
- Enhance the views to and from the precinct;
- Regenerate and expand the bushland so that the sense of a 'green' gateway to Sydney Harbour is reinforced;
- Provide opportunities for visitors to understand and appreciate the natural terrain;
- Improve the quality of stormwater runoff from the site in order to ameliorate the impact on surrounding bushland and the harbour;
- Protect the bushland from the spread of *Phytophthora cinnamomi*;
- Realise the potential for easy access including access for the disabled;
- Accommodate car and bus parking facilities for visitors to the Headland Park;
- Encourage land uses and activities that promote the use of sustainable modes of transport;



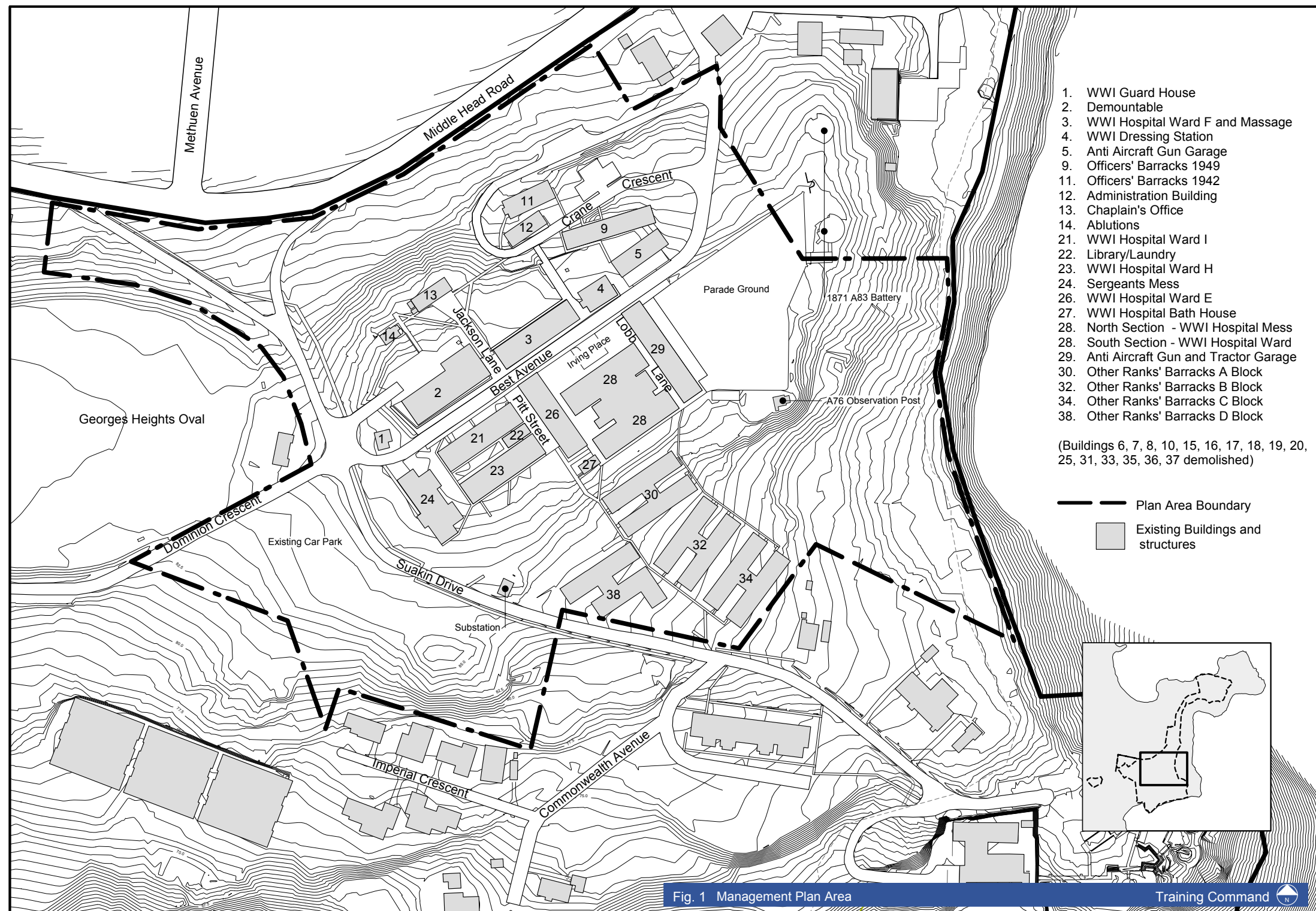


Fig. 1 Management Plan Area

-
- Ensure that traffic generated by uses within the Management Plan Area does not have a significant adverse impact on the surrounding residential areas;
 - Remediate site contamination and hazardous materials; and
 - Apply the principles of Ecologically Sustainable Development (ESD)

Relationship with the Trust's Comprehensive Plan

This Management Plan is the middle level of a three tiered comprehensive planning system developed to guide the future of the Trust's lands.

The other levels are:

- The 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 Training Command precinct at Georges Heights. It interprets the Trust's Comprehensive Plan and guides its implementation by providing more explicit detail about the way the site and buildings are adaptively reused and conserved.

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

The *Outcomes* diagram in *Part 7* of the 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 cultural and Aboriginal heritage and of the natural environment, access, the adaptive reuse of buildings, removal of buildings, transport management, stormwater management and catchment protection, contamination and remediation. 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.

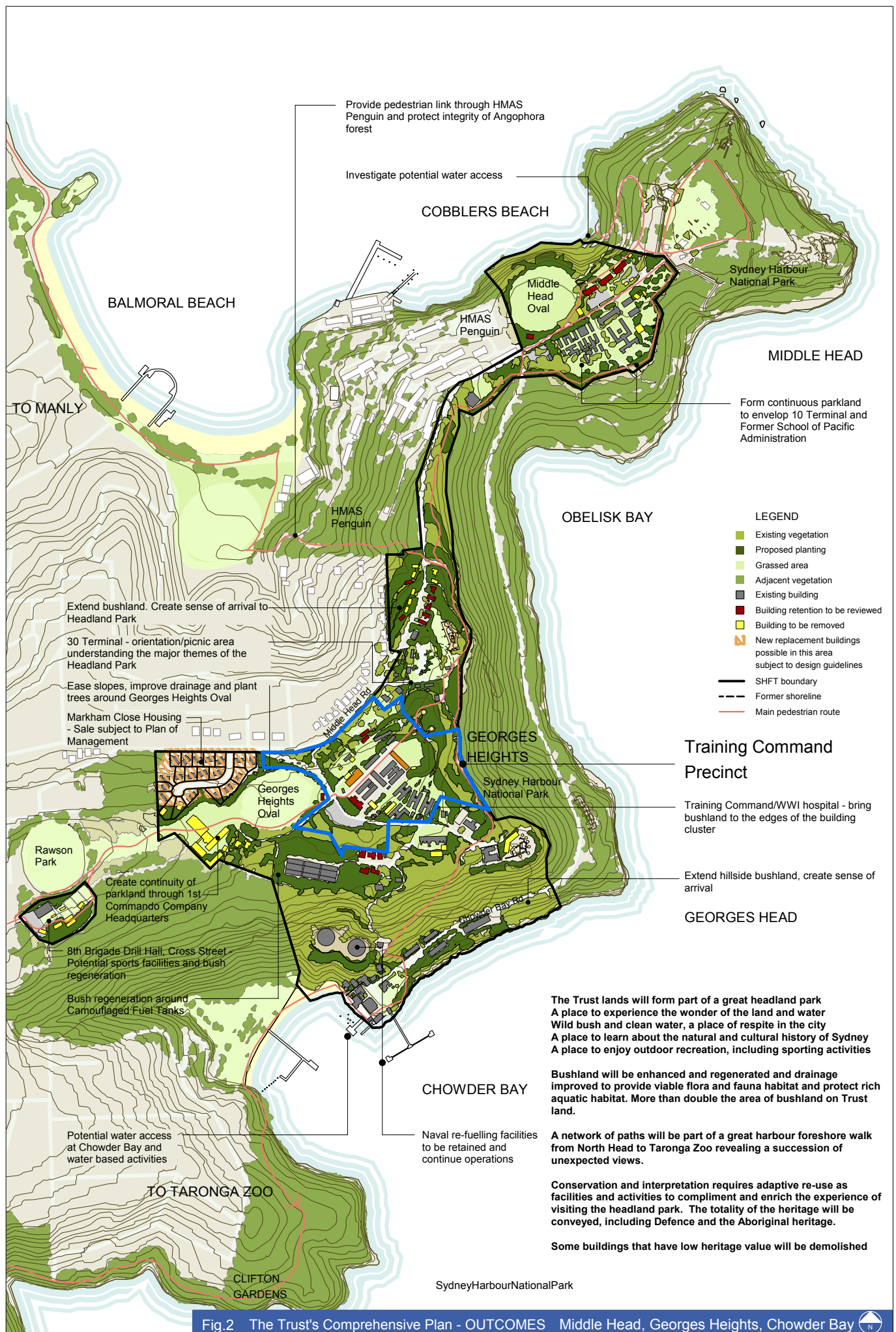
Relationship with other Trust Management Plans

This Management Plan is the fifth to be prepared by the 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.

Related Policies and Guidelines

There are a number of overarching Policies and Guidelines foreshadowed in the Trust's Comprehensive Plan that will also guide the development of the Headland Park. These policies will be adopted by the Trust. However, at this stage only a few have been prepared. As others are prepared they will also apply.





Current relevant policies are:

- The Threat Abatement Plan for *Phytophthora cinnamomi* prepared by the Department of Environment and Heritage, 2002;
- The Trust's draft Phytophthora Root-rot Management Strategy and Best Practice Procedures for Bush Regeneration Activities;
- The Trust's Leasing policy;
- The Trust's Community Leasing policy; and
- The Trust's draft Access policy.

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

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.

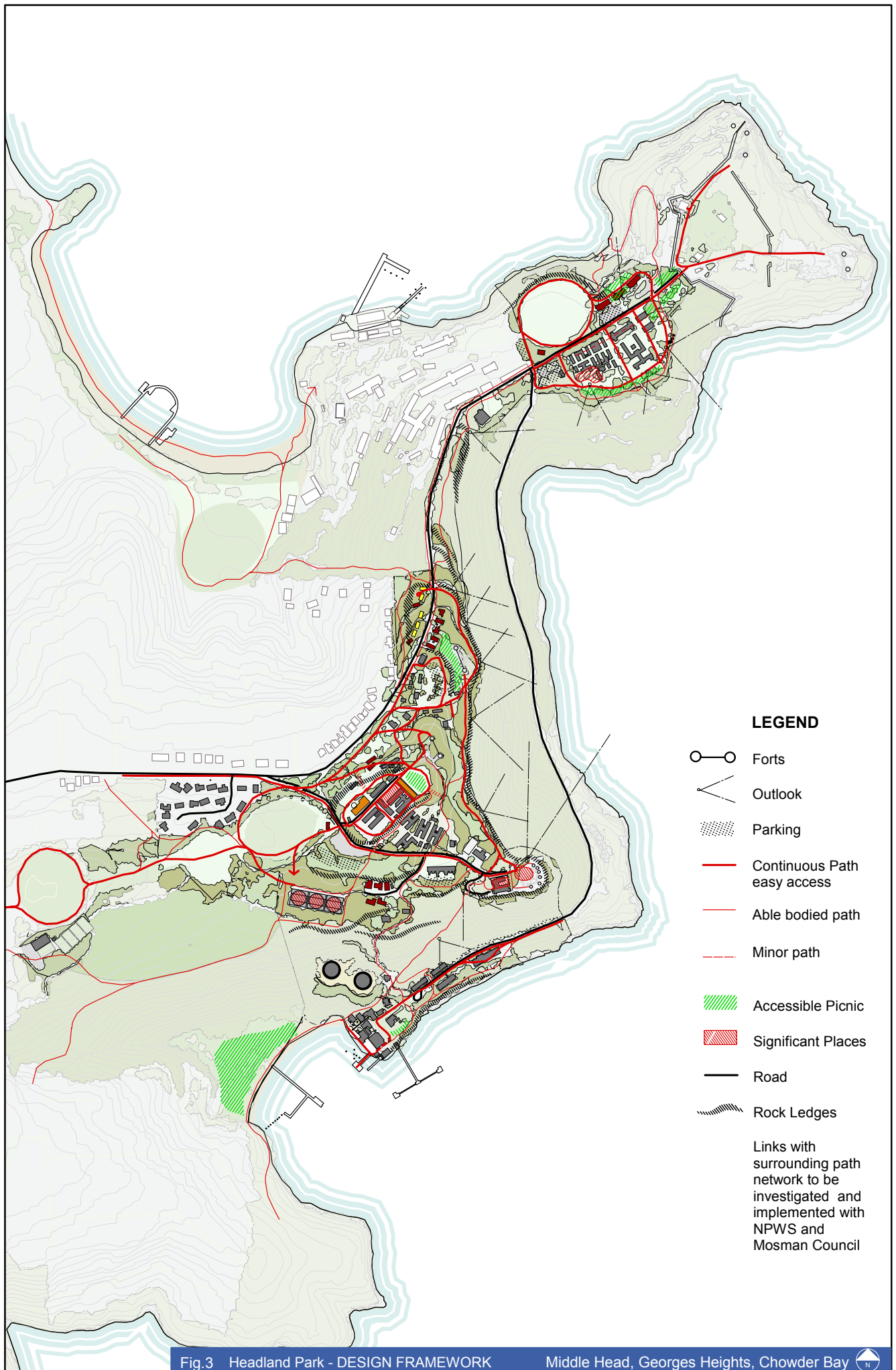
The elements of the public domain comprise:

- 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; and
- Edges – the boundaries between precincts, the borders to parks and gardens, dramatic level changes, the interfaces between buildings and the public domain.

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.





LEGEND

- Forts
- Outlook
- Parking
- Continuous Path
easy access
- Able bodied path
- Minor path
- Accessible Picnic
- Significant Places
- Road
- Rock Ledges

Links with
surrounding path
network to be
investigated and
implemented with
NPWS and
Mosman Council

Fig.3 Headland Park - DESIGN FRAMEWORK Middle Head, Georges Heights, Chowder Bay

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

- The former WW1 Hospital precinct on the highest knoll at Georges Heights;
- The former Gunners' Barracks (Officers' Mess) and fortifications at Georges Head;
- The fortifications, sheds and barrack buildings at the spur terminating the Georges Heights plateau, before the ridge drops to Middle Head;
- The Middle Head barracks; and
- The cluster of buildings on the rock ledges at Chowder Bay.

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 – such as the former HQ Training Command, 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.

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 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.

As a general principle cycling should not take place on walking paths.

Entries

It is proposed that there will be numerous “*Entry Points*” 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.

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.

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.

Edges

The most dramatic edges are along the escarpment. Here the primary consideration is the protection and enhancement of the bushland on the slopes by effective stormwater management and bush regeneration.

Where environmental conditions are suitable public access will be provided. This will be in locations related to the fortifications and scenic lookouts.

Some of the edges currently include untidy service areas, sheds and paved areas of low heritage value. In these cases intrusive elements will be removed and landscaped to reveal the natural terrain and to clearly identify the precincts.

Statutory Planning Context

Commonwealth Legislation

All 'actions' on Trust land, undertaken by either the Trust or on behalf of the 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 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 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 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. The *Commonwealth Heritage Values* section of this Plan describes the values of Headquarters Training Command.

Section 341ZD of the Act requires the Trust to seek the advice of the Minister for Environment and Heritage before it takes an action that has, will have or is likely to have a significant impact on a Commonwealth Heritage Place.

State Legislation

The *Sydney Harbour Federation Trust Act, 2001* specifically excludes any land owned by the 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 Trust has prepared this plan so that it is consistent with both State and local plans. The relevant statutory plans are:

State Environmental Planning Policy No.56 – Sydney Harbour Foreshores & Tributaries

SEPP 56 applies to the foreshores and tributaries of Sydney Harbour and includes a set of 'guiding principles' for the development of all land on the foreshores. The guiding principles relevant to the Training Command site include the provision and enhancement of open space and public access links to open spaces, conservation of significant bushland and other natural features, conservation of items of heritage significance and the maintenance of working harbour sites.

Sydney Regional Environmental Plan No. 23 – Sydney and Middle Harbours

This SREP applies to Sydney Harbour and Middle Harbours. It provides a framework for future planning, development and management of the waterway, islands and foreshores of Sydney and Middle Harbours. The general aims of the SREP relevant to Training Command include the promotion of the foreshores as a community asset and the recognition of their role as a recreation and tourist focal point; recognition, protection and enhancement of the natural, scenic, environmental, cultural and heritage qualities of the land, and encouragement of an appreciation of the remaining natural foreshores around the Harbour.

Draft Sydney Regional Environmental Plan No. 32 Sydney Harbour Catchment

This draft proposes to consolidate and replace SEPP 56 and SREP 23. The current draft does not propose any significant changes to the outcomes currently identified in SEPP 56 and SREP 23 for Training Command.



Mosman Local Environmental Plan 1998

Training Command is a 'deferred' matter under Mosman LEP 1998 so that Mosman LEP No. 1 1982 continues to apply. Under LEP 1 1982 Training Command is zoned for 'defence' purposes.

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 Management Plan

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

The Management Plan outlines general and specific objectives for the National Park with the overall strategy for the Park being the protection and where necessary restoration of the Park's natural vegetation, and the maintenance and adaptive reuse of important historic places. The Park is divided into precincts with emphasis to be given to the following strategies in the Middle Head Georges Heights Precinct:

- Interpretation of fortifications and defence history; and
- Rehabilitation of the natural vegetation.

High priority projects, that are relevant to the Trust's Headland Park, include the preparation of a weed control program, feral animal management at Middle Head and the preparation of a fire management plan.

The plan also proposes that the fortifications will continue to be used for historic tours and passive recreation.

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 Trust's land. The Manly – Mosman District Bush Fire Management Plan 2000 deals with strategies to minimise bush fire risk such as hazard reduction. While the Manly – Mosman Draft Bush Fire Operations Plan 2003 deals with the operational and management issues. Evacuation routes are determined under Local Emergency Disaster Plans.

There is also a Bush Fire Prone land map prepared under Section 146(2) of the *Environmental Planning and Assessment Act, 1979* approved by the NSW Rural Fire Service in 2003. This map identifies areas of bush fire prone vegetation and vegetation buffer areas around the Training Command Precinct. Particular developments proposed on bush fire prone lands can trigger the need to conform with requirements of the *Planning for Bushfire Protection 2001* guidelines prepared in accordance with the *Environmental Planning and Assessment Act, 1979*.



The Trust has completed an assessment of bushfire risk for its sites at Middle Head, Georges Heights and Chowder Bay and this assessment informed the preparation of this management plan. The Trust will also cooperate with other agencies in the implementation of plans prepared under the Rural Bush Fire Act.

Non Statutory Planning Strategies

Sharing Sydney Harbour Access Plan

The Sharing Sydney Harbour Access Plan (SSHAP) identifies a network of new and improved public access ways for pedestrians and cyclists, and waterway facilities for recreational watercraft.

The SSHAP identifies Training Command as a place of cultural interest. The Trust walking track from Chowder Bay to Middle Head Road, which skirts the eastern boundary of Training Command is recognised as a significant harbour access way in the SSHAP. The cycle way along Middle Head Road is also recognised in the Plan.

Mosman Bicycle Plan

Bicycle planning in the Mosman Municipality is currently directed by a regional plan prepared by Loder and Bayly-Stapleton in 1982 and the Integrated Land and Water Access Plan released by the State Government in February 2003.

Recommendations contained in the Loder and Bayly-Stapleton plan for implementation in and around the Headland Park include the marking of 3 metre centre lanes along Middle Head Road to facilitate the creation of kerb lanes for parking and cycling.

Mosman Council has resolved to prepare a Bicycle Plan that will replace the regional plan. The Trust will collaborate with the Council in the development of this plan and will give careful thought to the identification of Trust areas where cycling will be permitted so that there is no conflict with walkers.

Site Description

The plan area is approximately 7.4 hectares and is located on a plateau that overlooks the harbour. Its northwestern side fronts Middle Head Road while its eastern edge is bounded by the steep bushland slopes of Sydney Harbour National Park. To the north-east of the Plan area is the Lower Georges Heights Precinct (Management Plan-Mosman No. 1), to the south is the Georges Head Precinct (Management Plan-Mosman No.2) and to the west is Georges Heights Oval.

Suakin Drive provides the main vehicular access to the Training Command site from Middle Head Road. The access road to the Lower Georges Heights precinct also provides secondary access from Middle Head Road to the northern portion of the plan area. The current walking track from Chowder Bay to Middle Head Road skirts the eastern boundary of the site and provides pedestrian access from the direction of Georges Head.



Erected on the site are 23 former defence buildings, part of the 1871 (A83) Battery, the A76 Observation Post (now buried) and the Parade Ground – see *Figure 1*.

Bushland exists along the eastern edge of the site to the Chowder Bay to Middle Head Road walking track from where the topography falls down to the National Park and Chowder Bay Road and the harbour.

The boundary of the former base is presently marked out with a chain wire fence, which separates Training Command from Lower Georges Heights and Georges Head precincts. This fence bears no relationship to the former connection between these sites and currently divides the A83 Gun Emplacement.

The buildings and structures remaining on the site date from between 1871 (A83 Battery) to the 1987 demountable (on the site of a former hospital ward). All of the buildings are single storey and most are timber framed structures covered with a corrugated metal roof. The majority of the buildings remaining on the site have some level of heritage significance. The most important of the heritage buildings are the 1888 Observation Post, and the WW1 Hospital complex. The hospital complex is located along Best Avenue, which dissects the Training Command precinct along the top of the ridge.

Site Analysis

Heritage Conservation

The Training Command Precinct is recognised as being of great heritage significance. Its significance is derived from its:

- Aboriginal Usage-both precolonial and as part of Bungaree's Farm;
- Role as part of the outer Harbour Defence system between 1870-1915;
- Operation as a WWI military hospital between 1915-1922;
- Continuous occupation by military units between 1922-2002.

Aboriginal Heritage

The Trust engaged the Australian Museum to undertake a survey to identify Aboriginal archaeological sites and any associated issues related to Aboriginal heritage for six sites at Middle Head. This included HQ Training Command. The Museum concluded that the site has no known archaeological significance for the area's original inhabitants, the *Borogegal* clan although it is of moderate archaeological sensitivity.

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 life. 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*". Bungaree has been described as witty, intelligent and something of a



diplomat and is recognized as an example of significant collaboration between Aboriginals and Europeans. Macquarie and Bungaree were to become firm friends and at the ceremony to mark the establishment of the farm Macquarie presented Bungaree with a metal gorget (breast plate) inscribed “*Chief of Broken Bay Tribe.*”



Fig. 4 King Bungaree, Chief of the Broken Bay Tribe, died 1832. Hand coloured lithograph drawn by C.Rodius, from life in 1831 and on stone in 1834.

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.*” It is believed that the site of HQ Training Command lies substantially within the farm area.

The Trust has engaged an historian, Rosemary Kerr, to undertake further documentary research to try and determine a more precise location of Bungaree’s Farm. The findings from this will be available in early 2005.



European Occupation

Following the failure of Bungaree's Farm the Training Command Precinct passed into private ownership. However, in 1854 it was resumed by the Crown for Military purposes and from then until September 2002 was used for a variety of different Army purposes.

1870 to 1915 Harbour and Coastal Defences

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, Bradleys Head and inner South Head.

At Georges Heights these gun emplacements were located on the edge of the escarpment at Lower Georges Heights and Georges Head. The Training Command Precinct formed part of the complex but would have been largely undeveloped. Elements surviving from this period include the c.1888 Artillery Position Finding Station (thought to have been designed by James Barnet) which is located at the SE corner of the parade ground and one of the Lower Georges Heights batteries (identified as the A83 Battery). This battery is partly fenced within the Training Command Precinct and partly within the Lower Georges Heights (30 Terminal) Precinct and for planning purposes was included in the Lower Georges Heights Management Plan.

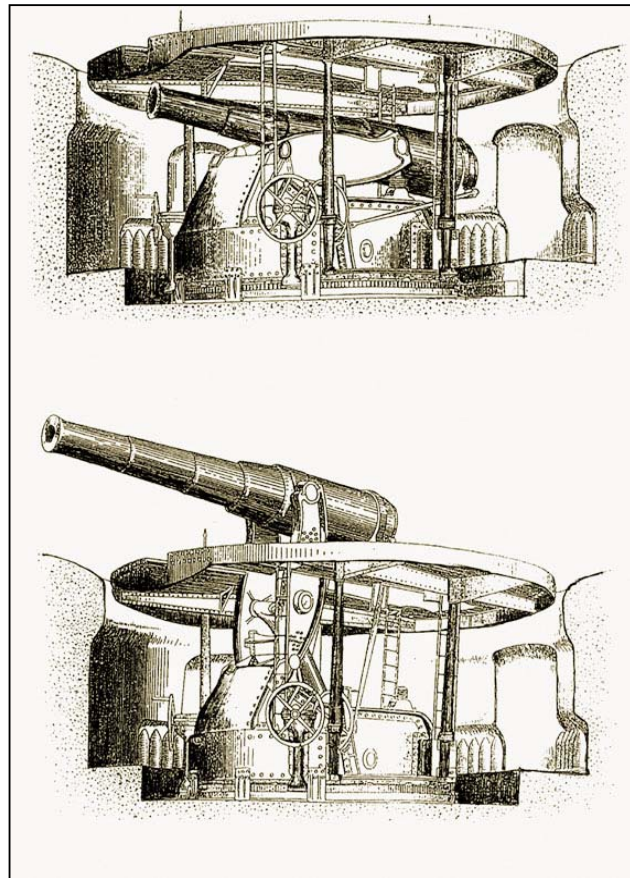


Fig. 5 The A83 Battery was completed in about 1876 and accommodated two muzzle loading guns. However, in 1889-90 two new gun pits were excavated to accommodate hydro-pneumatic guns similar to those illustrated in this drawing. These guns were commonly referred to as 'disappearing guns' because after firing the recoil forces were utilised to lower the gun beneath the shield into the defensive pit, so that the gun detachment could reload the gun in relative safety.



1916 to 1922 Auxiliary Military Hospital

The Director of Medical Services of the Australian Army had decided that the final stage of convalescence for Australian troops should be in Australian Auxiliary Hospitals. If it was possible to restore men to battle health in under six months they remained overseas but if it was going to take longer or the injuries were too severe, they were sent home. As a consequence military hospitals were established in all states. This was to accommodate the increasing number of Australian casualties returning from the trenches of the Western Front.

Documentary evidence suggests that construction of the hospital at Georges Heights began in 1915 and that it commenced operation in March 1916. It accommodated three types of men, those awaiting discharge, convalescents returned from overseas, and those able to perform light duties. It is probable that the initial patients were those wounded at Gallipoli during the campaign there from April to December 1915.

Cases needing surgery or specialist medical treatment were initially sent to 4 AGH (Australian General Hospital) at Randwick or elsewhere, although by late 1917 facilities at Georges Heights has been upgraded and the hospital was capable of treating the same class of patients as at 4 AGH. By mid 1918, Georges Heights was the third largest Military Hospital in Australia.



Fig. 6 Georges Heights, c.1918, the interior of a busy ward at No 21 Australian Auxiliary Hospital c.1918

The medical care of returned wounded men was associated with the emergence of massage as therapy, as well as the evolution of occupational therapy. Prior to World War 1 massage was regarded by the medical profession as a 'fringe' treatment and its



physiological benefits were not properly understood or recognised. World War 1 greatly accelerated the emergence of massage as an accepted treatment and was one of the treatments carried out at Georges Heights.

The end of the war reduced the number of patients requiring treatment and in January 1921 all AIF personnel became the responsibility of the Repatriation Commission, rendering the Georges Heights Military Hospital redundant.

The majority of the former hospital complex is intact and the buildings are rare surviving examples of WW I hutted hospital buildings, both within Australia and probably the world.

1922 to 1997 Army Base and Barracks

By 1922 the Hospital had been disbanded and the site put to other military uses. The former hospital wards were converted to barracks, offices and other facilities and a parade ground constructed. During this time Georges Heights quartered a number of Artillery and Engineer Units. These included the 1st Coast Artillery Brigade, the 1st Anti-Aircraft Battery and the 2nd Fortress Company (RAE). It also played an important role as a Training Centre for both permanent Army and Militia personnel. Schools included Field Engineering, Anti-Aircraft and Fortress Engineering, Camouflage and Searchlight.

As WW2 loomed and the threat of aerial attack increased the 1st Anti-Aircraft Brigade was formed and stationed at Georges Heights. Anti-Aircraft searchlight companies were also located there. Following the outbreak of war the number of troops stationed at Georges Heights greatly increased. In 1941 there were 540 troops most of whom were accommodated in tents.

In the period after the war Georges Heights was again used as a training centre. The introduction of National Service in 1951 meant that a large number of recruits had to be trained and HQ Training Group was formed at Georges Heights.



Fig. 7 Parade Ground 1938-39 showing two of the mobile anti-aircraft guns that were located there at that time. At the rear is the 'temporary' anti-aircraft gun garage. To the left is the former Hospital Ward C which was substantially demolished in 1939 and replaced with another anti-aircraft gun garage.



1958 to 1984 Women's Royal Australian Army Corps (WRAAC)

During the Korean War, the Minister for Defence saw the need to enlist women into the peacetime regular army and release men for duty in the Field Forces. As a result the WRAAC was formed in 1951

The first Commanding Officer of the WRAAC was Colonel Kathleen Best. Best pressed for the establishment of a central training school for the Corps and as a consequence the WRAAC moved to Georges Heights from Mildura. After her death in 1957 she was commemorated with the Kathleen Best Memorial Gates at Georges Heights. These gates are now located at the Royal Military College, Duntroon.



Fig. 8 Lieutenant M.A Frearson leading WRAAC recruits on parade, Georges Heights 1969.

Most of the street and place names within Training Command date from the WRAAC occupation, including Best Avenue for Kathleen Best, Irving Square from Colonel Sybil Irving and Jackson Lane for Colonel Dawn Jackson.

The WRAAC was disbanded in 1984 following moves to align the training of men and women and incorporate women into the regular army.



1984 to 2002 HQ Training Command

After a major re-organisation of the Australian Army in 1973 Headquarters Training Command was formed. Its role was to oversee all military training and all of the army schools across Australia, including professional, trade and officer schools. The only exceptions are the Joint Staff College and the Royal Military College, Duntroon.

It has been estimated that at any time, one-third of the Australian Army is under the control of Headquarters Training Command because personnel are in some form of training. There were about 50 units and schools under its control. Headquarters Training Command was also responsible for the development of doctrine for the army, the administration of training, the provision of personnel for these schools and the future planning of training for the army.



Fig. 9 Plaque showing the HQ Training Command Colour patch. This plaque was located in the Georges Heights Sergeants' Mess.

When Headquarters, Training Command first occupied the site, there was a large contingent of other ranks who acted as clerks, drivers and so on. Many of them lived on the site in the buildings now known as Numbers 9, 12, and 17. They were fed in the mess hall in Building 28, which later became a gymnasium. The H-blocks were used to house the various sub-sections of Training Command necessitating alterations to their original configuration as barracks. Gradually, the number of other ranks was reduced until there were hardly any on the site and the unit mainly consisted of staff officers.

The buildings and structures remaining from these phases of military occupation are shown in *Figure 10*.

Heritage Listings

Headquarters Training Command is listed as Historic Place No. 105584 on the Commonwealth Heritage List (Place File No. 1/13/026/0034). A Summary Statement of Significance for the Headquarters Training Command site is on the Australian Heritage Database – www.deh.gov.au

As of January 1st 2004, changes to the Commonwealth heritage legislation mean that the EPBC Act now regulates all actions relating to Commonwealth Heritage Places.



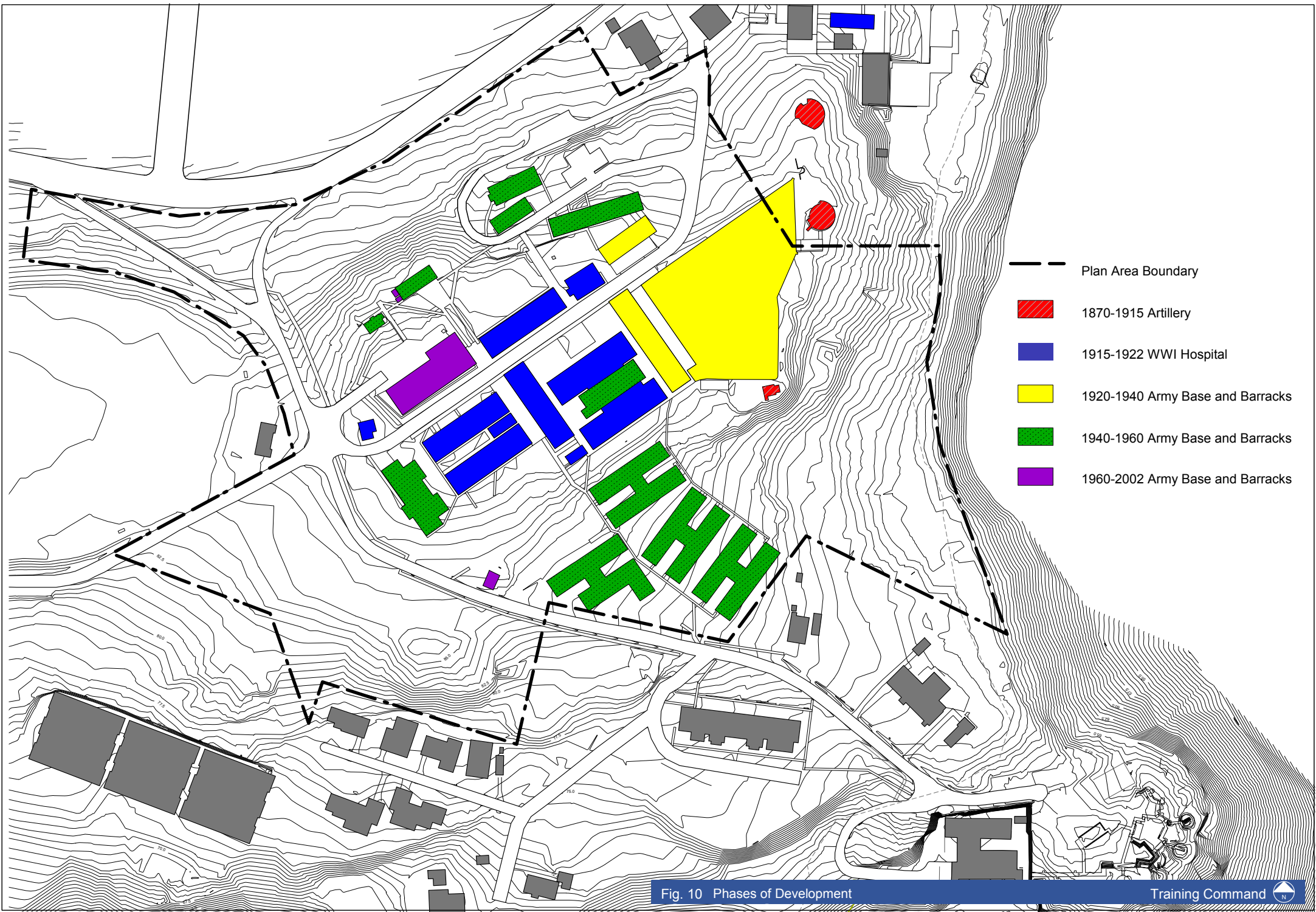


Fig. 10 Phases of Development

These controls are described in the section of the plan dealing with the Statutory Planning Context.

Training Command is also listed on:

- *Register of the National Estate*: refer to *Australian Heritage Database Number 103338*. The whole of Suakin Drive leading to the Training Command site also forms part of the Military Road Framework listing, refer to *Australian Heritage Database Number 103266*.
- Schedule 2 of Mosman LEP 1998- Heritage Conservation.

The site lies within the National Trust's "Sydney Harbour Landscape Conservation Area" classified by the National Trust in 1983, however there is no specific mention of the buildings, structures or the former or current use of the site.

Conservation Management Plan

In 2002 the Trust engaged Robertson & Hindmarsh Architects to prepare a Conservation Management Plan (CMP) for Lower Georges Heights and Training Command. The CMP recommends conservation policies or works for each building of environmental significance. These include:

- The remaining buildings that were part of the WW1 Hospital complex (Buildings 1, 3, 4, 21, 23, 26, 27, 28 [south and north sections]) should be conserved and interpreted in the context of their world importance as a surviving hutted hospital complex. It notes that the infilling of the verandahs and division of the open plan wards into sealed separate rooms diminishes the significance of these buildings.
- Building 2 (the demountable in Best Avenue) should be demolished and replaced by a building that reinstates the earlier known layout and design of the original hospital ward building.
- The sandstone retaining wall near Building 2 should be retained as evidence of the original hospital building.
- The external asbestos sheeting of the former hospital buildings are rare surviving examples of the use of prefabricated asbestos sheeting prior to its manufacture in Australia and should be preserved providing it is safe to do so.
- Buildings 29 and 5 (the Anti-aircraft gun garages) should be preserved because they represent the pre WW2 upgrade of the defence of Sydney and the changing technology of warfare and should be preserved.
- Buildings 9, 11, 12, 30, 32, 34 and 38 are significant and should be conserved and adaptively reused because they represent the post WW2 upgrade of the defence of Sydney.
- The Sergeants' Mess (Building 24) also dates from the post WW2 period and should be retained because it illustrates the social operation of an Army Base.
- Building 14 could be removed or altered without endangering the overall cultural significance of the site.
- The internal road alignment dates from the hospital phase of occupation and is highly significant and should be preserved.

The study also noted that in preparing the Management Plan for the site it should be borne in mind that the primary significance of the place depends on its development as



part of the coastal artillery defence network. Therefore, any interpretation should include an interpretation of the support buildings that no longer exist.

Archaeological Assessments

The Robertson and Hindmarsh CMP includes an archaeological overlay showing the footprints of buildings that have been demolished, however the archaeological potential of the sites of the demolished buildings is regarded as being low.

Sites such as the Observation Post (Building A76) and the site of the Trigonometric station used for the 1878 survey (under Building 2) may have archaeological potential, and excavation and interpretation may add to the understanding of the place and its development.

No physical remains of the surveyed roads remain on the site, except perhaps, for the stone marker near the A83 Battery. It is not known what the origins of the stone marker are but it may have indicated one of the corners of Beilby's grants.

Due to the potential for areas of archaeological sensitivity to be disturbed when works are undertaken at the site a monitoring program for archaeological material will be carried out during subsurface exposure or removal of superficial layers. A qualified archaeologist will undertake this monitoring.

Landscape Character

As part of the Conservation Management Plan, CAB Consulting provided advice on the landscape character and main features of the site. This can generally be described in four main phases:

- Natural Landscape
- Harbour Defences
- WW1 Military Hospital Landscape
- Army Occupation to Present

This sequence of occupation and the pattern of building construction at Training Command have created a series of enclosed courtyard spaces, institutional parkland areas and remnants of bushland.

The landscape character remaining on the site is summarised in the diagram at *Appendix 1*.

Natural Landscape

The underlying natural landform is derived from the weathered Hawkesbury sandstone geological formation. The plateau is exposed to the weather from all directions and in its natural condition consists of a ridgeline linking a series of knolls with intermediate gentle slopes of exposed sandstone outcrops.

Skeletal soils of a variable depth supported a scrub vegetation formation up to the plateau of exposed sandstone cliff with generally steeper slopes of broken sandstone terraces below. The steep slopes supported an Open Forest vegetation formation.



A Modified Landscape

Much physical change was effected by the resumption of these lands in 1854 for Military purposes and the ultimate installation of gun emplacements during the 1870s at Georges Head and Lower Georges Heights utilising strategic sites on the eastern edge of the plateau. The excavation of gun pits, trenches, tunnels and underground facilities cut into the sandstone bedrock created scree slopes downslope from the emplacements. Vegetation was cleared for sightlines and to gain unobstructed arcs of fire and to effect signaling between Shark Point, South Head and Middle Head.

Military roads were constructed of crushed stone contained by sandstone edging and generally followed earlier pathways along ridgelines. The main lines of overland paths linked Middle Head and Georges Head with Bradleys Head and St Leonards via the main ridge of Sydney's north shore. These roads and other tracks linked the military facilities.

The upgrading of the guns and their emplacements continued well into the Twentieth Century and this was often associated with increased built form and the provision of services and other infrastructure.

The layout of the hospital complex remains as a largely orthogonal one occupying the high ground with Best Avenue formed as a central spine heading from its junction with Cross Street to the west and leading down to link up with Lower Georges Heights adjacent to the Master Gunner's House and the Artillery Store.

With the Army base period came the development of the Parade Ground and task specific structures.

The extent of the indigenous scrub vegetation appears to have diminished over time and the quality of the Open Forest formation diminished through the impact of land fill, an altered freshwater drainage pattern, fire regime, exotic weeds and the introduction of the *Phytophthora Cinnamomi* disease.

An institutional parkland character has largely replaced the former scrub formation. Pockets of indigenous Open Forest vegetation have colonised cultivated areas and some of the scree slopes created in the nineteenth century whilst elsewhere the landscape is a composition of single storey buildings, military artefacts, fences, roads and paving, exotic trees, shrubs and grasses.

It was during the late 1930s and 1960s that many of the existing exotic plantings took place.

Bush Land and Natural Values

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

There is only a small remnant of bush remaining along the eastern edge of the Training Command site.



The conclusions of the study are that:

- The area supported a number of vegetation communities and sub-communities, all of which are relatively common in similar environmental conditions;
- *Acacia terminalis ssp. terminalis* was found in bushland within the Training Command 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 biological significance of the site vegetation; and
- A small area of land at Training Command to the east of the parade ground supports the *Banksia ericifolia/Hakea teretifolia* (Closed Scrub) vegetation community. This community has high species diversity with 75 native species counted and a low number of weed species (24).

The report recommended that:

- A survey to specifically locate and map the occurrence of *Acacia terminalis ssp. terminalis* is undertaken, and that these areas be protected, monitored and interpreted;
- Current weed management should continue and communities containing *Acacia terminalis ssp. 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 - both the flora and fauna, is maintained.

As recommended a targeted survey of *Acacia terminalis ssp. terminalis* was undertaken in October 2003. As a result of this survey 26 specimens were recorded within the Management Plan area. In general, the *Acacia terminalis ssp. terminalis* specimens within this community appear to be in a declined state of health. The cause of this decline is currently unknown. *Appendix 2* indicates the location of the recorded specimens.

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

The report recommends that:

- An appropriate fire regime for the area is instigated;
- The hydrology of the site is managed to reduce the amount of disturbance and pollution;
- The integrity of the site is maintained and enhanced by:
 - Minimising disturbance such as rubbish dumping and trampling by walkers;



-
- Providing nest boxes for species such as Powerful Owls and Black Cockatoos;
 - Regenerating native bushland; and
 - Undertaking exclusion and trapping programs for feral animals; 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 Trust has prepared a Recovery Plan for this species. However, the Trust will ensure that any new security grilles to the A83 Battery will be specifically designed to allow access by the Bent Wing Bat. The A83 Battery currently has unrestricted bat access.

Phytophthora cinnamomi

Dieback related to the root-rot fungus *Phytophthora cinnamomi* has been listed as a key threatening process under the *Environment Protection and Biodiversity Conservation Act 1999*. The Department of Environment and Heritage has prepared a *Threat Abatement Plan* 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 carried out by the Royal Botanic Gardens (RBG) on behalf of the Trust has identified the presence of *Phytophthora cinnamomi* in areas of dieback within the National Park, downslope from the Trust’s existing walking track and the Management Plan area.

The Royal Botanic Gardens advised that existing vectors for the introduction of the pathogen included stormwater and nutrient laden run-off. It recommended that the Trust improve these conditions in order to reduce the risk of the spread of the disease.

Bushfire Risk

In January 2004 Conacher Travers Environmental Consultants prepared a Draft Bush Fire Management Plan for Middle Head, Georges Heights and Chowder Bay. This Plan describes the recommended strategies for the Trust to implement to meet its fire management obligation between 2003 and 2011.

The Plan identifies three types of fire management zones to avoid unreasonable 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.
- Heritage Management Zones – aims to protect the environmentally and culturally significant features of the site by suppressing bush fires and where necessary conducting prescribed burns.



In relation to Training Command, the Plan recommends a Heritage Management Zone be implemented within bushland areas on the eastern slope of the Training Command Precinct and to the south west of the Training Command carpark. This will involve a series of ecological burns at four yearly intervals. *Appendix 2* identifies the location of the Heritage Management Zones relevant to Training Command precinct.

This Plan has a proposed life of eight (8) years and will be reviewed annually to take account of the extensive changes to building layouts and landscaping that will occur on Trust lands within this time period.

Geology and Soils

The weathered Hawkesbury Sandstone geology that characterises the precinct has resulted in shallow, yet locally variable, organic skeletal soils. Sandstone bedrock is at shallow depths – ranging from the surface where it outcrops at locations near the ridgeline, to 1m or greater nearer the eastern boundary and escarpment. These soils support Scrub to Open Woodland vegetation formations associated with the Sydney Sandstone Complex vegetation type.

Fill is present in many areas and ranges in depth from 0.2 m to 0.5 m. The nature of the fill material varies, but is generally crushed sandstone and sands. Gravels are also found at the surface, or under concrete or bitumen. However, there are localised areas where the fill contains ash and slag or where the fill is comprised wholly of these materials. Significant pockets of fill containing demolition rubble and rubbish have also been placed along the escarpment on the eastern boundary of the site.

The quality of these soils combined with the changes to the natural topography carried out by successive occupiers has significant implications for the type and form of new plantings and landscape treatment as well as the management of stormwater and contamination.

Stormwater

In 2003, the Trust engaged Storm Consulting Pty Ltd to undertake a stormwater management plan for the Georges Heights, Chowder Bay and Middle Head areas. The purpose of this was to determine the stormwater issues on the sites and establish objectives and a plan of implementation of stormwater management practices to deal with these issues.

Stormwater runoff on the site has changed significantly since defence infrastructure was established on the site in the 1800s. Changes in land use including removal of vegetation, increased impervious areas and increased pedestrian and vehicular movement have changed the site hydrology and pollutant loads.

The main issues for the site in relation to stormwater are:

- Dieback relating to stormwater runoff and nutrient loads
- Weed plumes and loss of native habitat associated with stormwater runoff and nutrients
- Changes to the natural hydrologic regimes
- Sedimentation and nutrients impacting on freshwater and marine aquatic habitat



-
- No current integrated management of the water cycle (no rainwater or stormwater used to augment potable demand).

At Training Command the study found that run off from the north western portion of the site is primarily directed to Mosman Council's stormwater collection system on Middle Head Road. In the south-eastern portion of the site runoff is collected in formal stormwater systems and then discharged at key points to the bushland above the escarpment. *Appendix 2* identifies the general location of dieback and stormwater flows from the site.

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.

Site Contamination

Historical land use provides an indication of site contamination likely to be present over the precinct. While the initial development was limited to gun battery facilities for the defence of Sydney Harbour, the military use of the site has been extended over the years to include various administration, training, maintenance, fuel and chemical storage and accommodation facilities. The use of these facilities intensified during the World Wars, however with the advent of more sophisticated weaponry, land use has become less involved with actual military defence and more with military training and other activities typically associated with military headquarters. Land and buildings have also been used for civil purposes such as the repatriation hospital at Georges Heights. Significant filling and waste disposal has also occurred as the site has developed.

In 1999, PPK – Environment and Infrastructure, was engaged to conduct a two-stage contamination assessment and geotechnical study of lands to be transferred to the Trust, including HQ Training Command.

The purpose of this assessment was to provide information regarding contamination on the lands so that potential land uses and initial requirements and costs for remediation could be determined.

This report identified a number of potentially contaminated areas associated with a variety of contamination sources (potential contaminant sources are identified in *Appendix 2*). For the Plan area, these include:

- Underground fuel storage tanks adjacent to the Sergeants' Mess (Building 24) and between the former gym and kitchen (Building 28) which has since been removed
- Tips and waste dumps mainly along the south and eastern edges of the parade ground, as well as other filled areas. These areas may have been filled with boiler or furnace waste and ash or demolition rubble including asbestos
- Wash Bay, between buildings 4 & 5
- Grease trap, near kitchens within buildings 24, 28, 56
- POL Store (Building 61) and other storage areas where oils, fuel and other chemicals were stored



-
- Former furnaces, possibly adjacent to buildings 12 and 28, which were a source of ash and other wastes
 - Vehicle Garage (Building 5), and the Vehicle Services Pit (Building 67) where fuels or oils may have been spilt
 - Gun Batteries and underground tunnels
 - Various buildings, which may have been a source of contamination due to deteriorating lead based paints, asbestos building materials (principally roof sheeting), and the use of pesticides and herbicides

Contamination identified by PPK was mainly heavy metals (lead and to a lesser extent copper, zinc and mercury), polyaromatic hydrocarbons (PAH) and petroleum hydrocarbons, and was generally associated with shallow fill. The PPK report concluded that remediation of some areas would be required for change to more sensitive land uses.

In 2004 a subsequent site contamination audit was conducted by Environ Australia to provide an independent review of what investigation or remediation remains necessary before the land is suitable for the land uses outcomes identified by the Trust. The Auditor generally agrees with the recommendations made by PPK, but has concluded that:

- Identified contamination may pose a risk to human health and the environment under certain land uses
- Asbestos may be present at some locations in surface soils
- Soil contamination, especially metals and PAHs may be a source of sediment and surface water contamination, which could be a source of contamination to the harbour
- Further unidentified contamination may exist at the site, particularly beneath buildings, in some areas of waste dumping / tipping or in areas of fill where limited sampling has been carried out.

Hazardous Materials

In October 2003 Hibbs and Associates Pty Ltd undertook a Hazardous Materials Survey of buildings and structures remaining at Training Command. For the purposes of this survey, 'hazardous materials' included asbestos products, synthetic mineral fibre (SMF) materials, lead based paint systems, electrical components containing the class of compounds known as polychlorinated biphenyls (PCB's) and stored dangerous goods and chemicals.

The survey found that:

- Asbestos cement (AC) has been used extensively in the buildings. However, in general, the identified asbestos materials were in a stable condition and do not pose a significant health risk.
- SMF is present in the batt insulation in the roof spaces, insulated in air-conditioning ducts and hot water tanks, and in ceiling tiles in several buildings.
- Capacitors containing PCBs are likely to be present in the fluorescent light fittings in several buildings.
- Lead based paints were used in most buildings, particularly on walls and ceilings. The lead based paints are showing signs of deterioration in a number of



-
- buildings, and in some buildings, the deterioration was advanced and in poor condition.
- Minor quantities of stored dangerous goods or chemicals were noted in many buildings during the inspection including general household cleaning chemicals, paints and thinners, 90 kg cylinders and small carbon dioxide food grade cylinders.

Services

In 2002 PPK Consulting undertook a detailed survey in order to establish the extent and condition of site services. The study looked at electricity, telephone, water, fire, sewerage and stormwater services and made a number of recommendations to rationalise and upgrade the services.

Compliance with the Building Code of Australia

In 2003 Trevor R Howse & Associates Pty Ltd was engaged to assess each building at Training Command to determine the need and consequently the nature and extent of works necessary to achieve compliance with the Building Code of Australia (BCA).

Each building was assessed in respect of:

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

In summary the study found that:

- No existing building provides compliant BCA access for disabled persons while the site's topography also makes it difficult for a disabled person to reasonably access and traverse it; and
- Toilet facilities are inadequate.

It recommended the construction of strategically located toilet blocks, incorporating facilities for both ambulant and disabled persons. It also recommended the provision of on-site carparking facilities for disabled persons.

Transport Management

In 2003 the 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, National Parks and Wildlife Service, Mosman Council and State Transit was integral to the development of the plan.



The recommendations of the TMP relevant to the Training Command area include the:

- Continued use of Georges Heights Oval as a public parking facility for large special events.
- Preparation of a submission to the State Transit Authority regarding the subsidisation of additional bus services on weekends to the Trust sites;
- Installation of bicycle facilities including bicycle storage in appropriate areas within the main precincts of the site;
- Installation of consistent public transport directional signage and timetable information across the sites; and
- Provision of consistent pedestrian directional signage and information similar to signs currently provided by the Trust.

Traffic, Parking and Access

The Transport Management Plan (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 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.

Under Defence occupation there were 211 car parking spaces accommodated at HQ Training Command. The TMP identifies the future parking required to meet demand for the adaptive reuse of the site as 188 spaces. This figure takes into account the possibility of sharing spaces between different uses as the periods of peak demand of proposed uses would not generally coincide. The parking area identified in the Georges Head Management plan will also be able to accommodate additional parking for Training Command if required.

The Transport Planning Assessment carried out for the Lower Georges Heights Precinct (Hallam 2003) concluded that provision for coach access to the Georges Heights area is desirable, and suggested a coach turning circle and parking be provided as part of the development of the Training Command Precinct.

No upgrading is required for the intersection of Middle Head Road and Suakin Drive to accommodate the use of the Training Command and Georges Head Precinct. In the short term improvements to pedestrian access, to and from the site, particularly from bus stops should be improved and in the medium to long term the traffic impacts on the site will need to be monitored to assess if further improvements are required. Suakin Drive will provide public access to the off street parking area at Georges Heights Oval and behind Gunshot Alley (Georges Head Management Plan).



Accessibility Audit

In May 2004 the Trust commissioned Spinal Cord Injuries Australia (SCI) to evaluate the accessibility of the Training Command Precinct. The report makes recommendations in respect of:

- Existing pathways in the precinct to allow a continuous and accessible path of travel between the main attractions
- The provision of accessible parking spaces within the precinct
- Provision of signage to assist in orientation for the vision impaired
- Alterations required to provide accessible thresholds to buildings, eg widening of door openings, installation of compliant ramps and handrails.

Commonwealth Heritage Values

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 largely derived from the 2003 Conservation Management Plan prepared for the site by Robertson and Hindmarsh Architects. 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:

1. The Training Command Precinct is thought to have been included in the area known as *King Bungaree's Farm*. This was Governor Macquarie's attempt to settle Aboriginals and assist them in adapting to a European lifestyle. (*Criteria a, b, c, d [ii], h*)
2. The Training Command Precinct 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. (*Criteria a, b*)
3. The Training Command precinct, developed from the 1870s onwards, was part of the outer line of defence planned at that time. The site's location adjacent to the harbour and high above the water level was an ideal location for the anti-shipping gun emplacements. (*Criteria a*)
4. Evidence remains on the site of a number of layers of use and periods of military occupation representing the different and evolving approaches to the defence of locations and nations. The precinct demonstrates defence practices, functions and designs no longer in use. (*Criteria c, d [ii], f*)
5. The site contains a range of 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. (*Criteria c, d, [ii]*)



-
6. The Training Command precinct is important because it witnessed the building of one of the major Australian military hospitals of the First World War. The remaining hospital buildings are rare survivors of a WW1 hutted hospital buildings within Australia and probably the world. In addition, the hospital buildings, constructed prior to asbestos cement production in Australia, are very rare surviving examples of the use of imported sheets of asbestos cement as an external cladding. (*Criteria a, b, f*)
 7. The site has aesthetic values, reflecting the similarity of form, scale, and materials found generally within the area and within groups of buildings in the precinct that are laid out in an orderly military manner. These values are heightened by the site's prominent location overlooking Sydney Harbour. (*Criteria e*)
 8. The precinct, as part of the larger Middle Head-Georges Heights Area, also has social significance for the Sydney community and for past and present defence personnel. (*Criteria g*)

Outcomes

The proposed outcomes for the precinct are shown at *Figures 11, 12, 13 and 14*.

The key outcomes for the site are:

- The conservation and interpretation of its heritage values through the adaptive reuse of the buildings for a range of community and commercial uses.
- 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;
- Repair the edges adjoining bushland and the escarpment by improving drainage, regenerating and expanding bushland areas;
- Connect the previously closed military base to the surrounding ridge-top parklands and adjacent urban areas, but without diminishing its sense of place as an institutional, campus-like precinct;
- Connect it as part of the sequence of civic centres along the plateau, formed by the former military bases;
- Enhance its character as an institutional, campus-like civil/military precinct with controlled entry point, uncluttered geometric spatial configuration and street pattern, with hard edged spaces with formal plantings bounded by simple buildings; and
- Retain the distinction between the WW1 Hospital and the WRAAC precincts.

These aims will be achieved through a combination of measures including conservation of heritage values, access improvements, the landscape design of the precinct and its edges and the adaptive re-use of the buildings.

Heritage Conservation

The Training Command Precinct is recognised as being of great heritage significance. Its significance is derived from its various uses from its Aboriginal usage, its role in the outer Harbour Defence system, the operation of the WW1 Military Hospital and its



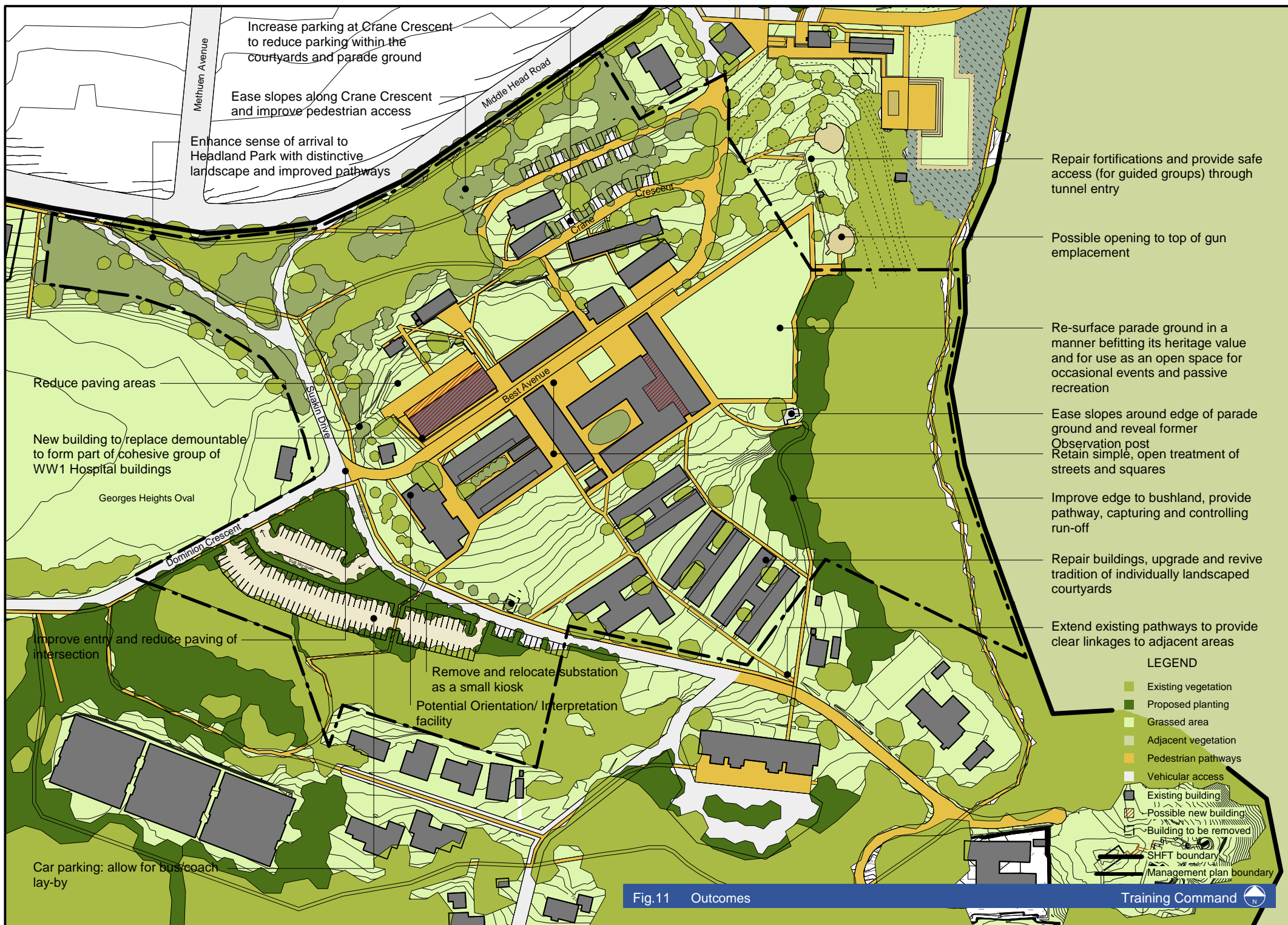


Fig.11 Outcomes



continuous occupation by military units, until 2002. The significant heritage values of the precinct will be protected, conserved and interpreted. This includes the conservation of the buildings and structures relating to the harbour and coastal defences period, the WW1 Hospital Buildings and the barracks buildings particularly the H- shaped WRAAC buildings in the south-eastern portion of the site. This will also be achieved through the use of the site as an area of public parkland interspersed with appropriate adaptive re-use of the buildings and spaces on the site.

It is proposed that the institutional character of the precinct is retained and enhanced, and the connection of the precinct to the others formed by the former military bases, is interpreted.

The scale and form of any new buildings or additions on the site will have to respect the heritage values of the place.

Interpretation of former buildings and structures such as the hospital wards, gun emplacements and the observation post will be investigated with the view of providing areas of focus for the interpretation of the various historical layers.

Integration with Surrounding Lands

Together the Trust precincts form a continuous sequence of public spaces, pathways and vantage points around the headland.

Training Command is the first of the former military bases along Middle Head Road and arriving by road it provides the entry to the Headland Park. Despite its proximity to the road, the precinct has little visual presence along the road. The road is lower than the ridge and the sloping, grassed embankment of Georges Heights Oval gives little clue as to the grand vistas available from the broad plateau above.

Design improvements will provide a clear sense of arrival from Middle Head Road. This will include signage, pedestrian paths leading to the entries, particularly from the bus stops, and a distinctive landscape treatment befitting the Headland Park. Improvements will be designed to provide clear definition of access routes to the entry points.

The main public entry will be through the main gateway facing Suakin Drive, opposite Georges Heights Oval. Pedestrian paths from Middle Head Road, Rawson Park and Georges Heights Oval will converge at this entry point.

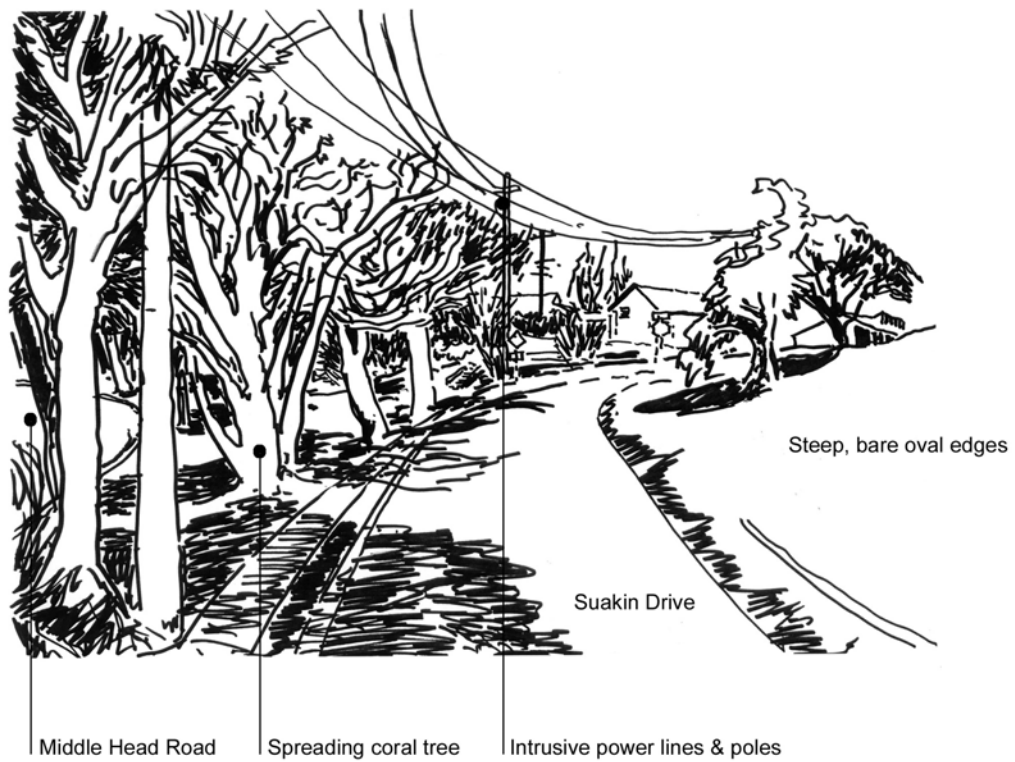
Pedestrian Pathways

The internal street and path pattern will be retained, as it is an important characteristic of the former Army occupation. Additional paths within the precinct will be minimal, mainly providing links between the established internal networks to the surrounding areas.

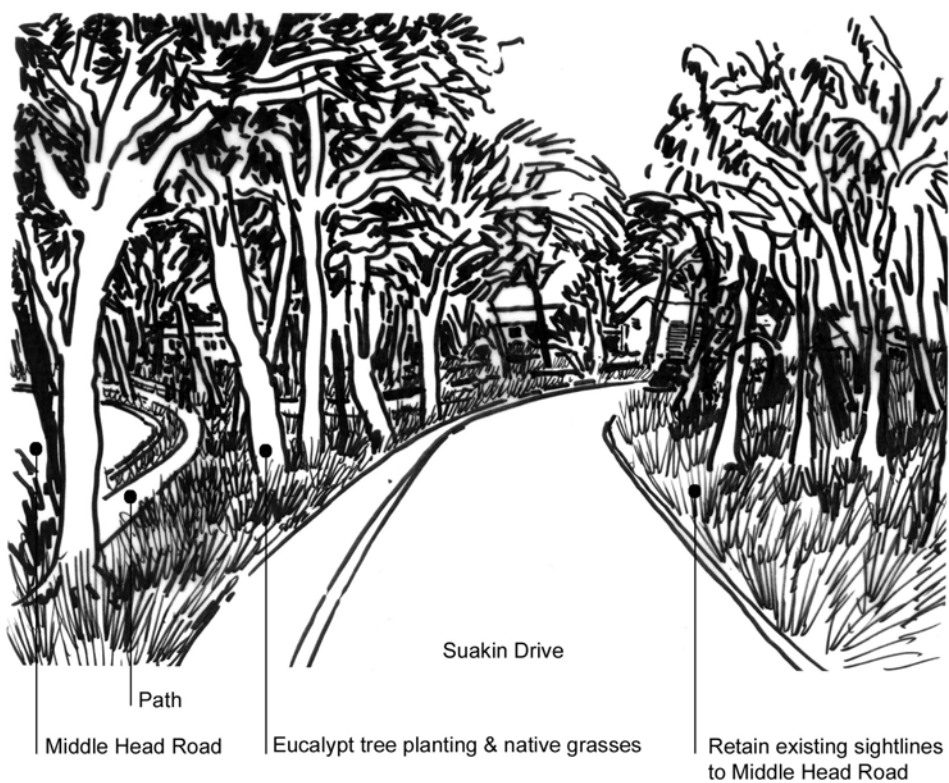
The network of paths is intended to provide:

- Diversity and choice of routes for exploring the precinct;
- Clear linkages between the surrounding urban areas, access points such as bus stops and car parks and between the main attractions or features within Training Command and in adjoining areas of the Headland Park; and
- Easy grade access to all main places and features, although not necessarily





EXISTING



PROPOSED

Fig. 12 ENTRANCE FROM MIDDLE HEAD ROAD

through one continuous path due to the topography and heritage considerations. The additional pathways proposed include access from and along Middle Head Road, particularly from the bus stops, via Crane Crescent and the existing internal pathways into Training Command, and new paths from the north-eastern ends of Crane Crescent to provide access to the Lower Georges Heights. The higher of these paths will also lead to the A83 gun emplacements.

The pathway in the south-eastern corner of the precinct, linking the former WRAAC barrack buildings to Suakin Drive, will be re-aligned to provide a more direct link to the Georges Head precinct. A new pathway may also be provided around the eastern perimeter of the WRAAC barrack buildings linking the Georges Head precinct to the parade ground. The pathway would be designed to form the edge between the areas of expanded bushland and the institutional/park-like setting of the former base.

Road Access

There are currently two road access points from Middle Head Road. It is intended that both access points be retained and will be designed to serve two distinct purposes.

Access to Training Command via Suakin Drive will provide the 'front entry' to the site and be the main public arrival point. Access to Best Avenue will be predominantly pedestrian, however disabled access and access for the delivery of goods and services will be permitted.

In contrast, the access point opposite Cobbittee Street will be a minor entry designed to provide limited access to the car parking area at the northern end of the site.

No upgrading is required for the intersection of Middle Head Road and Suakin Drive to accommodate the use of the Training Command and Georges Head Precinct. However, in the medium to long term the use of this intersection site will need to be monitored to assess if further improvements are required.

Vehicular access within the core of the site will be restricted to access to disabled parking spaces, deliveries of goods and services and access to the limited tenant parking spaces made available.

Car Parking

Cars and other vehicles historically shared the pedestrian space at Training Command. During the Army's occupation 211 parking spaces were accommodated within the precinct, including 75 spaces around the edges of the parade ground, 37 spaces scattered around the precinct between buildings and within courtyard spaces and 99 spaces in the informal car park adjacent to Georges Heights Oval.

It is proposed that the carpark adjoining the oval at the intersection of Suakin Drive and Dominion Crescent, be upgraded and formalised to accommodate approximately 110 spaces, and a coach/bus turning and layover area. This formalised car park will be the main public parking area located at the entry to the Training Command precinct. The car park design will include improved pedestrian paths and threshold treatments to provide safe and clear access to the site entry. The car park will be designed to capture and





Plateau and Entry
dominated by
extensive paving

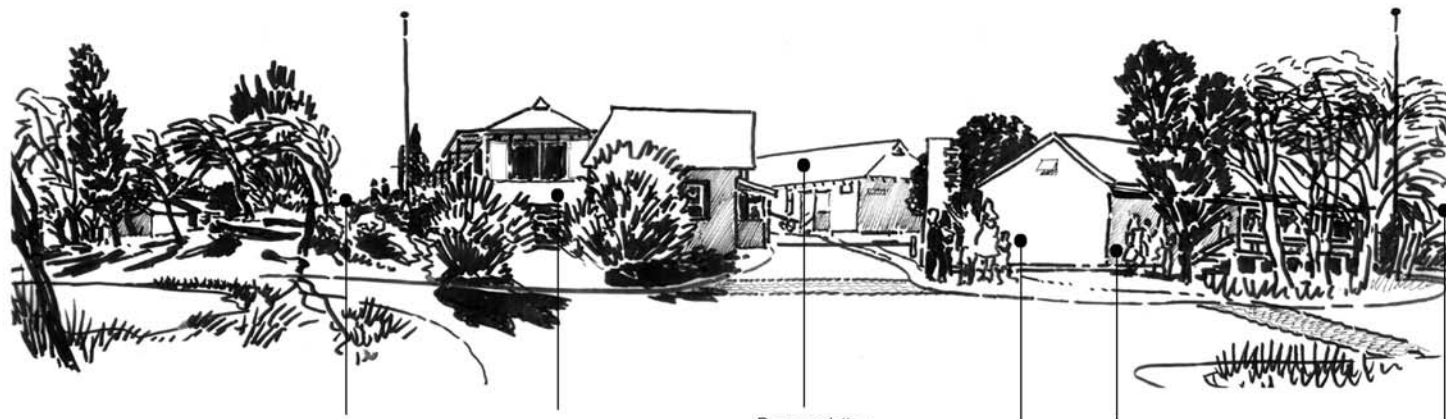
Unsympathetic
demountable building
replaced former WWI
hospital building

Overhead powerlines
and powerpoles visually
dominate

Intrusive barriers, gates
and fences at entry

Degraded institutional garden
landscape

EXISTING



Remove excessive
paving; re-landscape
and reveal rock ledges

Replace demountable with
buildings of similar scale and
form as WWI hospital buildings to
form part of cohesive group

Remove clutter
at entry

Provide entry sign,
orientation directory

Possible visitor centre;
make more open and
welcoming

Improve edge landscaping
whilst opening up visual
connection to building

PROPOSED

Fig.13

ENTRANCE TO THE BASE

control stormwater run-off and will include bands of landscaping within the carpark and along the edge of Suakin Drive.

It is expected that people using Georges Heights Oval will continue to use this car park. Use of Georges Heights Oval for parking for major events will continue when required.

Although the number of car parking spaces provided will be roughly the same as for the site's use by HQ Training Command, some of the existing, intrusive carparking within the core of the precinct will be removed, particularly from the parade ground and the small courtyards.

In order to compensate for the loss of spaces within the core area, a new car parking area will be developed adjacent to Crane Crescent to accommodate approximately 45 parking spaces. The car park has been designed to recede into the landscape with new plantings to strengthen parkland character and screen hardstand areas. Car park design will involve the easing of slopes to improve pedestrian access to the western end of Crane Crescent from Middle Head Road. The car park will be designed to capture and control stormwater runoff. These spaces will be designated for tenants of the buildings on the site and access to this car parking area will be via the entry to the Lower Georges Heights precinct, opposite Cobbittee Street.

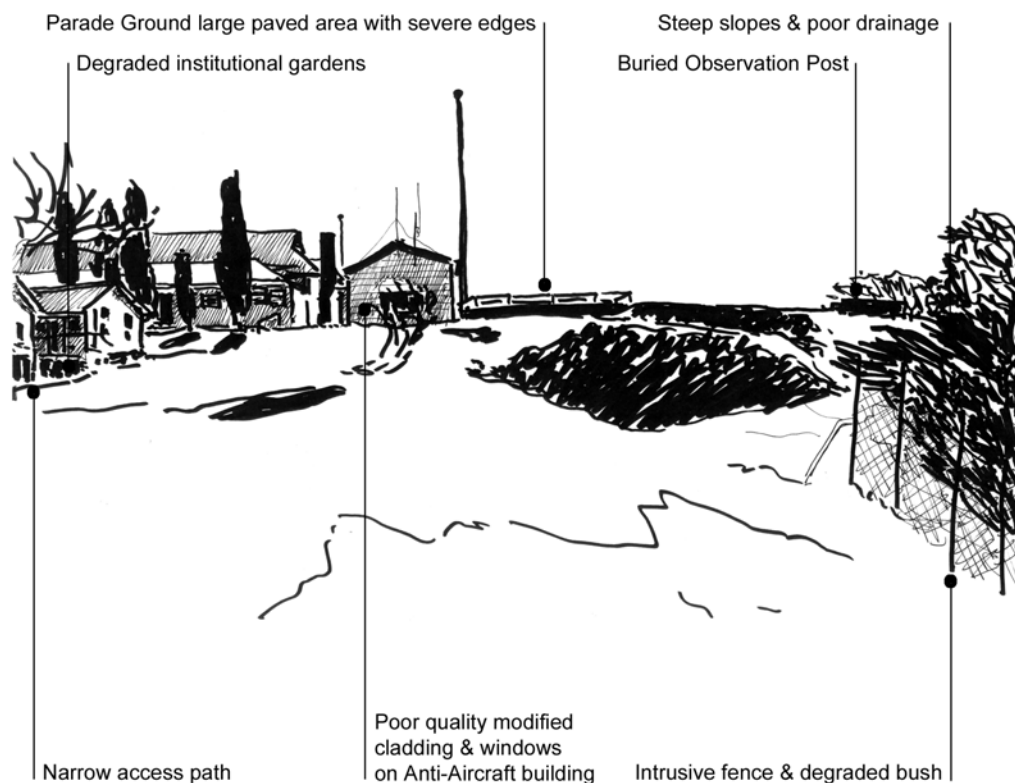
Parking for individual tenants will also be permitted in designated parking spaces in discreet locations within the precinct. This could include the former Anti-aircraft gun garages, along the northern edge of the parade ground and tucked in beside individual buildings where the location of cars will not impact significantly on the views from the site and the character of the place. The use of these spaces will be managed through building lease arrangements and will not be accessible to the general public.

Possible New Buildings

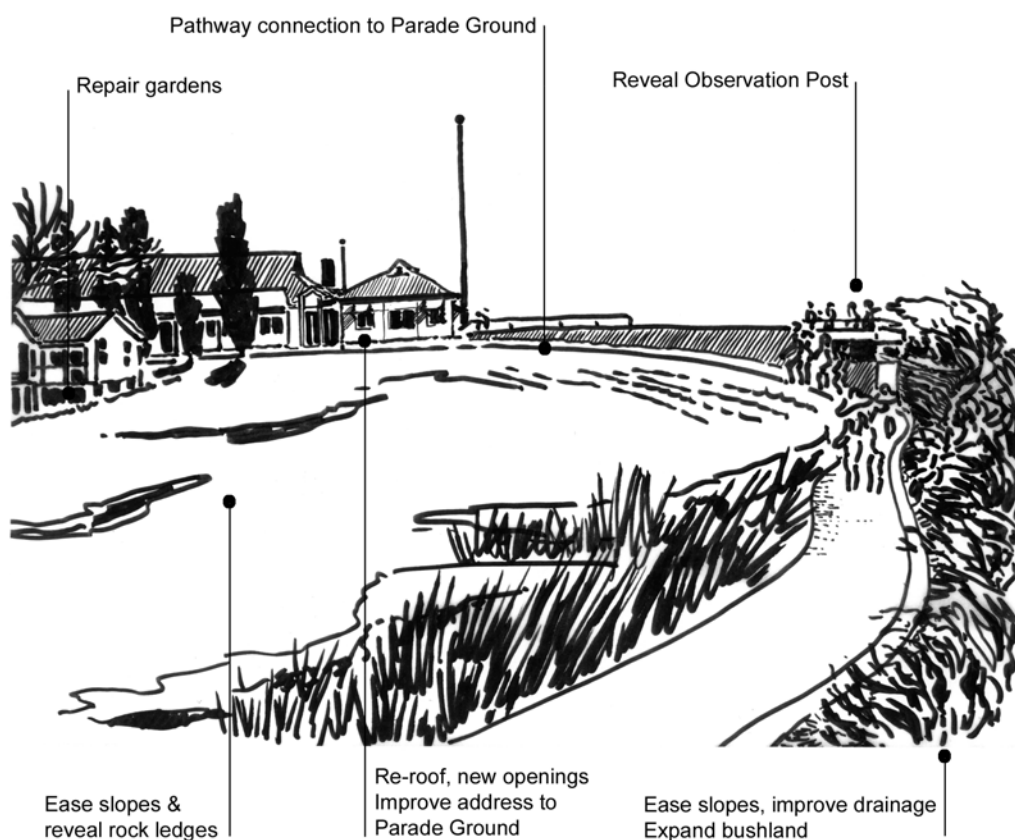
It is proposed that the existing demountable building (Building 2), be removed and is replaced with a new building that is similar in scale and form to the hospital building that previously occupied this site. This building will be of a similar character to the remaining WW1 Hospital buildings and possibly including a verandah along its north-west face. See *Figure 11 & 13*. Suitable uses for this building would be similar to those identified for the surrounding WW1 buildings (identified in the Adaptive Re-Use of Buildings section). However, given the location of this building at the top of the knoll and close to the entrance of the precinct, it could also be suitable for future uses such as an interpretation display area or orientation point.

It is also proposed that in the case of Building 29, which overlooks the parade ground, there will be substantial internal modifications and changes to openings. Although this building has been highly modified, openings should be kept within the structural modules that reflect the earlier hospital use and form of the building. This will ensure the retention of the cohesiveness of the hospital grouping. A new connecting structure improving the circulation between this building and the adjacent hospital buildings may be provided in a manner that retains the integrity of each of the buildings. See *Figures 11 & 14*.





EXISTING



PROPOSED

Fig. 14 LOOKING UP AT THE PARADE GROUND

Landscape improvements

Changes in the landscape are intended to reinforce the established character of the former base. The grouping of the modest buildings and the spaces they create, are as important as each of the individual buildings in conveying the site's heritage. The succession of small streets, plazas, sloping lawns and courtyards provide an unusual, civic milieu in contrast to suburbia and evocative of the former military presence. They also provide a succession of framed views and welcome protection from windy conditions on this high point along the ridgeline. In some locations inappropriate exotic species will be removed and replaced with more appropriate species. Most of the works proposed are therefore relatively minor, but important improvements.

Power poles will be removed and cables will be located underground with future upgrading works. The electricity substation adjacent to Suakin Drive will be removed and replaced with a small kiosk in less visually intrusive location. Visually intrusive fences will be removed and paving treatments, planting rows and gardens will be repaired in a manner consistent with the palette of existing materials and finishes. See *Figure 13*. In some areas, paving levels will need to be adjusted to remove trip hazards, improve accessibility and to bring the finished ground level lower than the timber structure of the buildings.

The parade ground is the most dramatic space within the precinct. The design treatment will retain its openness, to enable its appreciation as a former parade ground. However, it will be re-surfaced in a manner befitting its former role and its new use for passive recreation, displays, sculptures and /or occasional events. Most of it may be grassed but the edges that form part of the access network will be paved. The slope along the edges on the south-eastern side will be reduced to improve the conditions for bush regeneration while still retaining the panoramic views from a number of vantage points.

Investigations will be undertaken into the possible removal of some of the landfill at the south-eastern corner of the parade ground in order to reveal the c. 1888 Observation Post. A lookout on the parade ground at or near this point could also be used to facilitate its interpretation. See *Figure 14*.

Unlike the core areas of the precinct, which have a distinctive character, the edges require greater attention. Excessive paving, a steep driveway and hardstand extending to the crown of the knoll currently dominate the entrance from Suakin Drive. In order to enhance the sense of the precinct on the rocky knoll, this area will be landscaped to ease slopes and extend the rock ledges and low walls. See *Figure 12*.

Adaptive Re-Use of Buildings

Training Command contains 23 individual buildings, which collectively have an institutional character. The on-going conservation of these buildings and public access to them requires their adaptive re-use and occupation.

The general principles that underlie the selection of uses are:

- Uses that are compatible with managing transport demand;
- Uses that are compatible with the conservation values of the place;



-
- Uses that best respond to the place and provide a positive contribution to the enjoyment and understanding of the place and its heritage; and
 - Uses that are compatible with the heritage / environmental / public access and amenity requirements such as noise and light spillage

The permeable nature of this site and the public access it encourages should not be compromised by the use of the buildings within the precinct.

The buildings can be characterised into three main groupings:

- The Central Core - including WW1 Hospital buildings located along Best Avenue (Buildings 1,3,4,21,23,26,27,28) and surrounding buildings (the Anti Aircraft Gun Garages Buildings 5 and 29, the Sergeants' Mess Building 24 and Building 2).
- The Barrack Buildings on the Middle Head Road side of Best Avenue (Buildings 11,12,9,13 and 14)
- The 'H' shaped Barrack Buildings – in the South-Eastern corner of the precinct (Buildings 30, 38, 32, and 34)

As HQ Training Command operated on this site until 2002, all of the buildings are structurally sound and are in reasonable condition. The last use of the majority of the buildings on the site was for office, administration and training purposes. The buildings have recently been repainted and repairs to the cladding of the buildings have been carried out.

Central Core (including WW1 Hospital Buildings)

The Central Core of buildings together forms a village like atmosphere. Buildings 2, 5 and 28, although later additions to the WW1 complex, help to define the streetscape and village like feeling of the area.

The WW1 Hospital buildings are generally timber-framed structures with corrugated metal sheets cladding the roof. These buildings were last used by Department of Defence as offices for HQ Training Command, with the south wing of Building 28 used as the Other Ranks Mess, the central wing used as the kitchen and the north wing of Building 28 used as a recreation room / gymnasium.

All of the WW1 Hospital buildings are considered to be of exceptional cultural significance (Central section of Building 28 graded as high) due to them being an integral part of the WW1 Hospital Complex. As such the CMP recommends these buildings need to be preserved and interpreted in the context of their importance as part of a surviving huttred hospital complex. Specific elements of the buildings should be preserved such as the timber walls, roof framing, floorboards and cladding as well as the joinery.

Given the nature of the WW1 buildings, their heritage value and their location, the re-use of the buildings will need to be low-key uses that generate little traffic or noise and require minimal structural alterations. These buildings are considered to be suitable for institutional type uses such as for training / educational facilities and or community classes, offices / administration or meeting rooms. One of the WW1 hospital buildings will be used by the Trust for interpretation purposes, most likely Building 26, due to its proximity to the proposed visitors' centre and main entry to the precinct.



Although Building 29 is a later addition to the complex, it retains a similar footprint and scale to the earlier WW1 Hospital building it replaced. For this reason the uses in these buildings should be consistent and complementary to those identified above. Building 5, the former Anti Aircraft Gun Garage is a single storey building clad in timber with a corrugated metal roof. The CMP recommends the preservation and interpretation of this garage as part of the evolving technology of defensive warfare. The most obvious use for this building would be the continued use as a garage, however due to its location adjoining the parade ground it could also provide facilities for public events and other activities within the precinct such as a kiosk.

Building 24 (Sergeants' Mess), although not historically as significant as the WW1 buildings, given its location at the entrance to Suakin Drive close to the carpark and coach parking area, this particular building has significant potential to be used by the Trust as a visitors' centre providing an arrival and interpretation point. Uses could also include a kiosk or café, orientation and meeting point or interpretation display area. The layout of the building would suit a visitor orientation and information facility and could also be used as spaces for school groups and displays that help to interpret this precinct as well as providing an overview of the Headland Park.

Barrack Buildings (north side)

Buildings 9, 11, 12, and 13, all form part of the Army Barracks complex built in the 1940s. These buildings are single storey timber framed structures with a corrugated metal sheet roof. Buildings 11 and 9 were most recently used as barracks for short-term accommodation with Buildings 12 and 13 being used for office purposes. Buildings 9, 11 and 12 all include shower and toilet facilities; Building 11 also includes an amenities room. The last use of Building 14 was for toilets.

Due to the proximity of these buildings to residences on Middle Head Road, amenity issues such as noise and light spillage will be important considerations in the selection of appropriate uses.

The layout of these buildings lend themselves to either a continuation of the barracks being used for short term accommodation, or they could also be used for office or administration type purposes, meeting rooms, educational or training facilities or for community uses.

'H' shaped Barrack buildings (south side)

These barrack buildings are a group of 'H' shaped buildings located in the south-eastern corner of the site. These four buildings are single storey timber framed structures clad with timber and AC sheeting. Buildings 30, 32 and 34 are each divided into two wings including five large rooms and two smaller storage rooms in each wing. Access to each room is via an individual doorway leading from the open verandah. Bathroom facilities are located between the wings of the building.

Building 38 is a similar style however each doorway leads to two equal sized rooms (18 in total). Storage rooms are located at the ends of each wing with the bathroom and laundry facilities included.



The institutional layout of these buildings makes them suitable for a range of purposes including training and education, offices, studios, community facilities, child care facilities or short term accommodation related to the use of surrounding buildings.

Water Sensitive Urban Design

The principles of Water Sensitive Urban Design (WSUD) are to be incorporated into the redevelopment of the Training Command 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 Training Command precinct.

| Concept | Issue | Application at Training Command |
|---------------------|---|--|
| 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. |
| | <i>Phytophthora cinnamomi</i> | 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 <i>Phytophthora cinnamomi</i> . |

Phytophthora cinnamomi

The Trusts' 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. |



Remediation

The 2004 Site Audit identified a number of actions required to prepare the site for the land uses being considered by the Trust. These include further investigation, remediation or management requirements. In summary:

- Supplementary soil investigation will be carried out to more fully delineate identified contamination (particularly filled areas and waste dumps), investigate unassessed areas or contaminant sources, and provide sufficient information for remediation planning
- An assessment will be carried out to determine the potential for offsite migration of contamination in surface or seepage water.

A Remediation Action Plan will be prepared and implemented for protection of human health and the environment, given the land use outcomes identified in this plan. The remediation would include:

- Decommissioning, removal and remediation and validation of contaminant sources such as the remaining underground storage tank, grease traps and other facilities
- Removal and offsite disposal of contamination 'hot spots' that may be associated with areas of significant filling or dumping, asbestos or chemical use (pesticides)
- Capping materials and preparation of a site management plan, only where they may be retained in a manner that does not present a risk to health or the environment

With regards to hazardous materials identified on the site, Hibbs and Associates recommend the following remediation occur prior to the commencement of any renovations or demolition works:

- Removal of any unstable asbestos materials;
- Removal of SMF materials;
- PCB containing capacitors should be removed and disposed of in accordance with the requirements of the NSW EPA and Workcover Authority NSW;
- Implementation of control measures to stabilise the deteriorating lead based paint systems in accordance with the requirements of the appropriate Australian Standard; and
- Removal of dangerous goods from the site.

Interpretation

One of the primary objectives of the Trust, in conserving the heritage of its lands and opening them up to public access, is to convey their rich natural and cultural heritage in a meaningful, relevant and engaging way to the general public.

The proposed use of the precinct, the creation and the design of parklands and the development of public open days, events, and publications will all be considered as part of an interpretation program to convey the totality of the significant values of Middle Head and Georges Heights, the site and the setting. This will need to include the past uses of the precinct, such as Aboriginal heritage and the pattern of modifications made to the pre-European landscape. The interpretation program will need to appeal to the general public, casual passers-by, and school and special interest groups.



The Trust is preparing an interpretation strategy for the Headland Park which will provide recommendations as to how the Trust can best communicate the natural, cultural, social and other values and significance of the lands to the public.

For the Training Command Precinct, all phases of the site's previous occupation and use will be interpreted. The indigenous culture and heritage connections to this land including the story of King Bungaree, Australia's involvement in WW1 and the evolution of Australia's defence system are particularly important to this precinct.

The elements of the interpretation program will include, but will not be limited to:

- Development of a Visitors' Centre to provide an orientation point used to prepare visitors for elements of the interpretation program.
- Guided tours and walks on Trust lands.
- Extended tours in partnerships with other agencies. For example working with NPWS to interpret the evolution of the defence systems through a fortifications tour.
- Provision of a series of interpretive displays covering both previous uses and occupation of the site and related stories. For example Training Command provides an opportunity to tell stories of Australian soldiers and participation in WW1. This will include the recreation of a WW1 hospital ward on the site.
- Signage that conveys the site's past use for harbour defence purposes, WW1 military hospital and army purposes.
- Events and Open Days.
- Oral History research programs.

Implementation

Priorities for implementation have been determined in a manner consistent with *Part 11* of the Trust's Comprehensive Plan.

The following table summarises the outcomes to be achieved through the implementation of this Management Plan. 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.



**Implementation and
Action Plan**

| | Outcomes | Elements | Priority | Relevant Management Plan or Supporting Study (in addition to Design Concept) |
|---------------|--|--|--|--|
| Public Domain | Develop entry precinct, establishing a sense of arrival | <ul style="list-style-type: none"> Enhance sense of arrival to Headland Park with distinctive landscape and improved pathways, interpretation and signage Reduce paving and continue landscape character of rock ledges and native plantings on top terrace | High Medium | <ul style="list-style-type: none"> Interpretation Strategy Accessibility Audit Conservation Management Plan |
| | Improve public access and develop access links – pedestrian links, facilities for cyclists, disabled access, parking | <ul style="list-style-type: none"> Ease slopes along loop road to improve pedestrian access Extend existing pathways to provide clear linkages to adjacent areas Provision of safe pedestrian and cyclist (where appropriate) access and links to surrounding parklands Reconfigure and formalise existing carpark to allow bus/coach lay-by while retaining landscape areas and provide clear pathways linking entry and parklands Treatment of road and intersections at entry points to site Encourage improvement of public transport services | High High High High High High | <ul style="list-style-type: none"> Accessibility Audit Traffic Management Plan Transport Management Plan Transport Management Plan Transport Management Plan |
| | Improve public amenity and provision of parkland | <ul style="list-style-type: none"> Removal of buildings and structures identified for removal Removal of excess roadway and paved areas and extension of grassland and landscaping Bush Regeneration and screen planting Removal of intrusive powerlines and poles wherever possible. Provision and / or upgrade of on site services for public domain areas including facilities such as toilets, parking, disabled parking, lighting, picnic areas | High High High High High | <ul style="list-style-type: none"> Hazardous Materials Survey Stormwater Management Plan Stormwater Management Plan Accessibility Audit |

| Outcomes | Elements | Priority | Relevant Management Plan or Supporting Study (in addition to Design Concept) |
|--|---|--|---|
| Public Domain (continued...) | Improved environmental conditions | High High High / Ongoing Medium | <ul style="list-style-type: none"> Stormwater Management Plan Hazardous Materials Survey Site Audit Phytophthora Management Strategy |
| Building uses, adaptive reuse and building removal | Improved interpretation of the natural and cultural heritage and improved public access | High High High Medium | <ul style="list-style-type: none"> Conservation Management Plan Conservation Management Plan Conservation Management Plan |
| Works to enable use / leasing of buildings | <ul style="list-style-type: none"> Improve existing car parking on hardstand areas Repair and conserve building fabric Provision and upgrade of site services for building uses Removal of structures and buildings identified for removal Restoration of the water cycle through stormwater management controls Remediation of contaminated areas and hazardous materials Proposed new plantings in and around buildings adapted to new park function Planting of 'H' building courtyards to retain individual character | High High High High High High High High Medium | <ul style="list-style-type: none"> Accessibility Audit Conservation Management Plan Accessibility Audit BCA Draft Stormwater Management Plan Site Audit Hazardous Materials Survey Conservation Management Plan |
| Improved environmental conditions | | | |

| Outcomes | Elements | Priority | Relevant Management Plan or Supporting Study |
|---|--|----------|---|
| Conservation and interpretation of heritage buildings, structures and landscape | Improved interpretation of sites natural and cultural heritage | High | <ul style="list-style-type: none"> • Interpretation Strategy • Conservation Management Plan |
| | | Medium | <ul style="list-style-type: none"> • Conservation Management Plan |
| | Conservation and adaptive reuse of heritage structures | Medium | <ul style="list-style-type: none"> • Conservation Management Plan |
| | | High | <ul style="list-style-type: none"> • Conservation Management Plan |
| | | High | <ul style="list-style-type: none"> • Conservation Management Plan |
| | | High | <ul style="list-style-type: none"> • Conservation Management Plan |
| | | Medium | <ul style="list-style-type: none"> • Conservation Management Plan |
| | | High | <ul style="list-style-type: none"> • Conservation Management Plan |
| | | High | <ul style="list-style-type: none"> • Conservation Management Plan |
| | Development and interpretation of replacement buildings | Medium | <ul style="list-style-type: none"> • Conservation Management Plan |



Future Actions

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 Trust immediately informed. The Trust will arrange for an archaeologist with the appropriate experience to visit the site and undertake an assessment before determining the appropriate course of action.

Records of Intervention & Maintenance

The Trust is proposing to use the inventory sheets (prepared as part of the 2004 Draft Conservation Management Plan) 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.

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 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 Trust's Comprehensive Plan.

Aboriginal Consultation

Ongoing consultation with the Aboriginal community will take place through the Trust's Aboriginal Issues Committee and in accordance with the *Aboriginal Heritage Objectives and Policies* set out in *Part 3* of the Trust's Comprehensive Plan.

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.



Acknowledgements: Images

Front Cover

1. 'Georges Heights Hospital showing Ward J (demolished), Ward H (Building 23) Ward I (Building 21) and Ward G (demolished and replaced with demountable)', c. 1918, Australian War Memorial, AWM H18458.
2. 'Verandah, H block barracks', 2004, SHFT.
3. 'Officers' Accommodation (Building 9) built c.1949, through the trees', 2004, SHFT.

Figure 4

'King Bungaree, Chief of the Broken Bay Tribe', Hand coloured lithograph drawn by C.Rodius from life in 1831 and on stone in 1834.
Source: National Library of Australia, Rex Nan Kivell Collection, NLA.pic-an895396.

Figure 5

'Disappearing Gun in the firing and loading position', date unknown.
Source: *Middle and Georges Heads Fortifications Conservation Plan: Part of the NPWS Defence Heritage Study Stage 1*, prepared by Denis Gojak, Cultural Heritage Conservation Division for NSW National Parks and Wildlife Service, December 1993.

Figure 6

'Georges Heights, NSW The interior of a busy ward at No 21 Australian Auxiliary Hospital', c.1918.
Source: Australian War Memorial AWM H18457.

Figure 7

'Georges Heights Parade Ground showing two of the mobile anti-aircraft guns', c.1938/1939.
Source: Royal Australian Artillery National Museum, North Fort, Manly. From the Estate of Major Les Smith (Rtd), presented by his grandson J Greenwood.

Figure 8

'WRAAC Recruits on parade at Georges Heights, 1969'
Source: Margaret A. Fletcher (nee Frearson), Bungendore.

Figure 9

'Plaque showing the HQ Training Command colour patch mounted in the Sergeants' Mess,' 2002.
Source: Ron Mason, Sydney Harbour Federation Trust.



Related Studies

Australian Museum Business Services, 2003, Aboriginal Heritage Survey of Middle Head, Georges Heights and Chowder Bay.

Christopher Hallam & Associates Pty Ltd, 2003, Transport Planning Assessment for Preliminary Concept Plan for Headland Park, Stage 1 – Lower Georges Heights.

Christopher Hallam & Associates Pty Ltd, 2003, Review of Access and Parking Options, Officer's Mess and Gunshot Alley Precinct, Georges Heights

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, 2003, Threatened Species Management Plan for *Acacia Terminalis* subsp. *Terminalis* at Middle Head – Sydney Harbour for Sydney Harbour Federation Trust

Conacher Travers Environmental Consultants, 2004, Draft Bush Fire Management Plan Middle Head-Georges Heights-Chowder Bay

Environ Australia, 2004, Site Audit Report Training Command and Georges Head for Sydney Harbour Federation Trust

Hibbs & Associates, 2003, Hazardous Materials Survey Georges Heights Training Command.

Loder and Bayly-Stapleton, 1982, Regional Bike Plan Study: Report to the Municipalities of Lane Cove, Mosman, North Sydney and Willoughby.

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

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 Pty Ltd, May 2001;

PPK Environment and Infrastructure, 2001, Site Services Survey- Middle Head.

Robertson and Hindmarsh Architects, 2003, Conservation Management Plan for 30 Terminal and Headquarters Training Command.

Storm Consulting, 2004, Draft Stormwater Management Plan for Georges Heights, Chowder Bay-Middle Head.

Trevor Howse & Associates Pty Ltd, 2003, BCA Audit Report regarding Lower (30 Terminal) and Upper (Headquarters Training Command) Georges Heights, Mosman.



Appendices



