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**NEWINGTON ARMAMENT DEPOT AND NATURE RESERVE  
SYDNEY OLYMPIC PARK  
CONSERVATION MANAGEMENT PLAN**

**VOLUME ONE**



Prepared for  
Sydney Olympic Park Authority

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## EXECUTIVE SUMMARY

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### Introduction

This conservation management plan (CMP) has been prepared on behalf of the Sydney Olympic Park Authority (SOPA) by a team of heritage consultants consisting of Tanner Architects, Taylor Brammer Landscape Architects Pty Ltd, Industrial Archaeology consultant Tony Brassil, Biodiversity Monitoring Services and Australian Museum Business Services. The primary objectives of the CMP are:

- To guide SOPA in the conservation and management of the place for the next five years;
- To establish the cultural heritage significance of the whole of the Newington Armament Depot and Nature Reserve including its buildings, infrastructure, natural and cultural landscape and moveable heritage;
- To develop clear policies and guidelines for the conservation and management of the Newington Armament Depot and Nature Reserve;
- To provide guidance for the conservation of the significance of the place while recognizing and providing for the need to incrementally enhance the place, increase public uses and initiate maintenance management activities.

The findings of the CMP include an assessment of the Newington Armament Depot and Nature Reserve's significance, of which this executive summary provides an overview.

### History

The Newington Armament Depot and Nature Reserve is a place of exceptional heritage significance. Now an integral part of the Parklands associated with Sydney Olympic Park, the site comprises an extensive open cultural landscape that is intimately associated with the development and consolidation of the buildings and infrastructure of the Newington Armory for over six decades, from the 1890s to the 1940s, and the regenerating wetland and forest of the Nature Reserve.

Originally part of an estate owned by wealthy free settler John Blaxland, the site was resumed by the colonial government of New South Wales in 1882 for a powder magazine, on which construction commenced during February 1897. The first buildings and structures were completed the following year. The Newington Armory was taken over by the Commonwealth after Federation, and in 1921 control passed to the Australian Navy, which progressively upgraded it over the next 20 years for ammunition storage and associated functions. During World War II, the facility was greatly expanded, partly due to the presence of the United States of America's Navy, which also stored ammunition at the Armory. The Australian Navy continued to occupy the site after the war ended, progressively vacating it between 1996 and 1999. The site was transferred to the Government of New South Wales in 2000.

In 1993, Sydney won the right to host the 2000 Olympic and Paralympic Games. As a result, the southern portion of the Newington Armory was developed as the Olympic Village, which subsequently became the suburb of Newington. The remainder of the Armory formed part of the concept for the Millennium Parklands, associated with the development and remediation of the Olympics site. The Silverwater Nature Reserve, subsequently known as the Newington Nature Reserve, was dedicated in 2000. The Sydney Olympic Park Authority was established on 1 July 2001 to manage the public assets of the 640 hectare Sydney Olympic Park, which included the Newington Armament Depot and Nature Reserve.

Today the site is evolving as part of the developing Parklands, now receiving over 2.6 million visits annually. The site is attracting people from local and regional communities, enjoying a diversity of leisure activities, educational and interpretation programs.

### **Heritage Significance**

The heritage significance of the Newington Armament Depot and Nature Reserve, which has been endorsed by inclusion in the State Heritage Register kept by the Heritage Council of NSW, is derived from its manifold natural, Aboriginal, historical and landscape attributes. Its natural significance is derived from the lands within and adjoining the Newington Nature Reserve, which although a disturbed landscape that is now regenerating, provides valuable habitat for rare and endangered flora and fauna and migratory birds, along with a limited number of Aboriginal archaeological artefacts. Its distinctive cultural landscape results from the integrated development of an industrial landscape combining buildings, berms and artificial landforms during the establishment and consolidation of the Newington Armory, spanning the decades from the 1890s to the 1940s. The character of the place is the result of deliberate isolation, which is still evident today and critical to the interpretation of the place.

The role of the Newington Armament Depot and Nature Reserve has changed since the 2000 Olympics, and it is playing an increasingly important role as a valuable local and regional destination for leisure, recreation and education.

### **Summary Statement of Significance**

**Aboriginal values:** Aboriginal stone artefact sites identified within the study area are representative of similar Aboriginal sites across Sydney and the rest of NSW. Isolated artefact sites and potential archaeological deposits previously identified within the study area have potential to contain small, relatively undisturbed subsurface archaeological deposits, and have low local significance due to their research potential. Although all Aboriginal heritage sites contain intrinsic cultural significance, MLALC did not identify any further cultural significance for the identified sites in the study area.

**Natural values:** The wetland and forest areas within and adjoining the Newington Nature Reserve have high natural heritage values because they are rare remnants of ecological communities and ecosystems that once dominated this region.

**Cultural values:** The cultural landscape of the Newington Armament Depot and Nature Reserve includes evidence of early nineteenth century industrial ventures and the pastoral activities of the Blaxland family.

The site clearly demonstrates the combination of factors that influenced its evolution and development since the 1890s. These factors include the growth of the Royal Australian Navy, the advent of World War II, changing explosives technology and explosive ordnance regulations and the availability of land. This is reflected in the minimum separation distances between explosives storehouses, the evolving technology of the building stock, ribbon development through the wetland, the isolation of buildings around the forest and the development of the light rail system.

The first buildings that were constructed at the Armory are unusual examples of the work of the Colonial Architect's Office. The site contains a wide variety of functionally related blast containment structures, support buildings, transport networks, landforms and movable items associated with the storage and handling of explosive ordnance, all of which were closely integrated with the topography and other natural features of the site. It also contains significant natural landscapes, which preserve regionally rare ecological systems.



All of the structures, in combination with their operational fixtures and equipment and the way in which the natural landscapes have been utilised and modified, contribute significantly to an understanding of explosives storage and the evolution of the Armament Depot.

The Armament Depot formed part of a historically significant network of naval sites in the metropolitan area that express the strategic importance of Sydney in the Pacific region in the early decades of the twentieth century. The Armament Depot played a vital role in naval fleet operations, being the major depot for the storage of explosive ordnance, and was historically linked to other magazine sites such as Goat and Spectacle Islands. The Newington Armament Depot and Nature Reserve still contains a rare combination of buildings and landscape features which were constructed by and for the Royal Australian Navy, the Royal Navy and the US Navy, which are of national significance in demonstrating the logistics support which Australia gave to its allies during World War II.

The Newington Armament Depot and Nature Reserve, under the management and control of the Sydney Olympic Park Authority, demonstrates best-practice late twentieth century and early twenty-first century responses and actions to the adaptive reuse of historic sites and management of natural areas that are environmentally sensitive. The site demonstrates the changing cultural role that purpose designed facilities must undergo to enable effective conservation and public appreciation.

### **Use of the Conservation Management Plan**

The CMP is structured into two volumes.

Volume 1 is the principle guiding document that follows the requirements of the NSW Heritage Office guidelines. It contains the Historical Overview, Physical and Comparative Analysis of the site, Assessment of Heritage Significance, Opportunities and Constraints, and the Conservation Management principles, policies and guidelines.

Volume 2 is the supporting document associated with the CMP, which contains the reference material to be considered for future planning and management decision-making for the Newington Armament Depot and Nature Reserve. It includes such references as:

- *The Burra Charter*, published by Australia ICOMOS;
- *The Australian Natural Heritage Charter*;
- *The International Cultural Tourism Charter*, published by ICOMOS;
- Heritage Listing Inventory Sheets;
- *Millennium Parklands Heritage Precinct Conservation Master Plan* (Graham Brooks and Associates, July 2003);
- *Newington Armament Depot & Nature Reserve, Sydney Olympic Park, Conservation Management Plan: Natural Environmental Assessment* (Biodiversity Monitoring Services, September 2011);
- *Newington Armament Depot & Nature Reserve, Sydney Olympic Park, Conservation Management Plan: Aboriginal Heritage Assessment* (Australian Museum Business Services August 2011).

The CMP will form the basis for which other more detailed plans, strategies, policies and procedures can be developed and implemented. It will be used to ensure that the cultural significance of the Newington Armament Depot and Nature Reserve is retained and conserved.

The policies contained in Section 8 of Volume 1 include the following overarching guidance:

- Retain and conserve the significant heritage attributes of the Newington Armament Depot and Nature Reserve;
- Conserve the functional relationships of existing buildings and groups of buildings, spaces, views and vistas;
- Conserve the natural heritage of the place;
- Fulfil the objectives of the *Sydney Olympic Park Authority Act 2001*, the *Parklands Plan of Management 2010* and other instruments;
- Maintain the management structure of the Newington Nature Reserve;
- Record elements of significance affected by change;
- Enhance visitor appreciation through appropriate education and interpretation;
- Enhance visitor awareness and enjoyment through improved amenity and access;
- Allow ongoing use, change, development and maintenance while retaining heritage significance.

The CMP, however, forms only one reference document to be considered for the future planning, development and management of the place. It is to be referenced together with other statutory planning documents as follows:

- *State Environmental Planning Policy (Major Development) 2005*;
- *The Burra Charter*;
- *Parklands Plan of Management 2010*;
- *Newington Nature Reserve Plan of Management*.

### **Relationship to other Planning Documents**

The *Parklands Plan of Management 2010* (PPOM) was adopted on 8 November 2010 and will cease to operate 10 years after the date of commencement. The principal objective of the PPOM is to provide a statutory scheme of operations as the basis for managing the Parklands. It controls public access and land use regimes (including permitted and prohibited uses) for the Parklands. Sections of the *Parklands Plan of Management* specifically relate to the Newington Armament Depot and Nature Reserve. One of the priorities of the *Parklands Plan of Management* is to incrementally transform Newington Armory from its former role as an operational defence facility into a place accessible to the public, at the same time conserving and interpreting its heritage and cultural values and features.

This Conservation Management Plan is the principal informant of the management of the built historic elements and the landscape of the Newington Armament Depot and Nature Reserve.

The ***Newington Nature Reserve Plan of Management 2003*** was adopted, in accordance with Section 75 of the NSW *National Parks and Wildlife Act (1974)*, on 28 January 2003. The document is part of a system of management policy and planning developed by the NSW National Parks and Wildlife Service (NPWS) and SOPA. The policies and actions established in the *Newington Nature Reserve Plan of Management* provide the framework for future management of the Newington Nature Reserve consistent with resources anticipated to be available to the NPWS and SOPA over the next five to ten years.

Newington Nature reserve is unique in that, as well as being gazetted as a Nature Reserve under the *National Parks and Wildlife Act (1974)*, it is defined as part of the Parklands of Sydney Olympic Park by the *Sydney Olympic Park Authority Act 2001*. The Parklands are managed by SOPA. Newington Nature Reserve is managed by SOPA under agreement with the NPWS.



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## 1 INTRODUCTION

---

### 1.1 PURPOSE OF THE REPORT

The Conservation Management Plan (CMP) has been prepared on behalf of the Sydney Olympic Park Authority (SOPA) for the endorsement of the Heritage Council of NSW. The CMP is for the State heritage-listed Newington Armament Depot and Nature Reserve, part of the evolving regional Parklands at Sydney Olympic Park.

The primary objectives of the CMP are:

- To guide SOPA in the conservation and management of the place for the next five years;
- To establish the cultural heritage significance of the whole of the Newington Armament Depot and Nature Reserve including its buildings, infrastructure, natural and cultural landscape and moveable heritage;
- To develop clear policies and guidelines for the conservation and management of the Newington Armament Depot and Nature Reserve;
- To provide guidance for the conservation of the significance of the place while recognising and providing for the need to incrementally enhance the place, increase public uses and initiate maintenance management activities.

In the preparation of the CMP, the *Millennium Parklands Heritage Precinct Conservation Master Plan* (Graham Brooks and Associates, July 2003) has been reviewed and incorporated by means of referencing, and relevant sections have been included in the appendices in Volume 2 of this CMP.

### 1.2 BACKGROUND

The *Millennium Parklands Heritage Precinct Conservation Master Plan* (CMP 2003) was written by Graham Brooks and Associates Pty Ltd. The report was endorsed by the Heritage Council of NSW on 18 June 2004 for a period of five years. The endorsement lapsed on 18 June 2009.

The Newington Armament Depot and Nature Reserve was subsequently nominated for inclusion in the State Heritage Register and the listing was gazetted on 14 January 2011. Recommended management in the listing required a review of the Conservation Management Plan, in this case CMP 2003.

The Newington Armament Depot and Nature Reserve forms part of the evolving urban regional Parklands at Sydney Olympic Park. The Sydney Olympic Park Authority Act requires the Authority to maintain the Parklands and permit the use of the whole or any part of the Parklands for activities of a recreational, historical, scientific, educational and cultural nature in accordance with the provisions of the Plans of Management pertaining to the lands.

The Newington Armament Depot and Nature Reserve is a historic place of significance and an environmental area of significance; a unique place providing opportunities for a diverse range of community needs and uses.

In this context, SOPA requires the CMP to focus on specific policies and strategies for the conservation and ongoing contemporary and adaptive reuse of the site. This includes:

- Land uses across the site and interaction with areas adjoining the site;
- Reviewing statements of significance to identify priority elements and ranking of relative

significance;

- Building conservation and adaptive reuse, including opportunities for intervention and sites for new development;
- Access to the site and movement within the site;
- Amenities and facilities for public use and integration within the various land use contexts;
- Landscape (landforms as well as plantings) conservation including consideration of views, opportunities for new plantings and removal of existing inappropriate plantings;
- Strategic level interpretation of past uses and activities.

It is important for the CMP to evaluate the natural heritage significance of the site, embodied in the Newington Nature Reserve and to consider in detail the interface between the areas of natural heritage significance and the Armory and its associated infrastructure, as well as considering the site in the surrounding context and the recent developments at Blaxland Riverside Park.

### 1.3 STUDY AREA

Newington Nature Reserve is contained within, and forms an integral part of, the Newington Armament Depot. Together they form the State Heritage Register item Newington Armament Depot and Nature Reserve (SHR No. 01850) that is located on the northern side of the Sydney Olympic Park. It is part of the Millennium Parklands as defined in the *Sydney Olympic Park Authority Act 2001* No. 57, where it is defined as Lots 2 and 3 Deposited Plan 883215, Lot 2005 Deposited Plan 878356 and Part 1 Deposited Plan 883215 (which applies to the wetland and forest in the Newington Nature Reserve). The subject site, which covers an area of approximately 100 hectares, is described in the following diagrams.

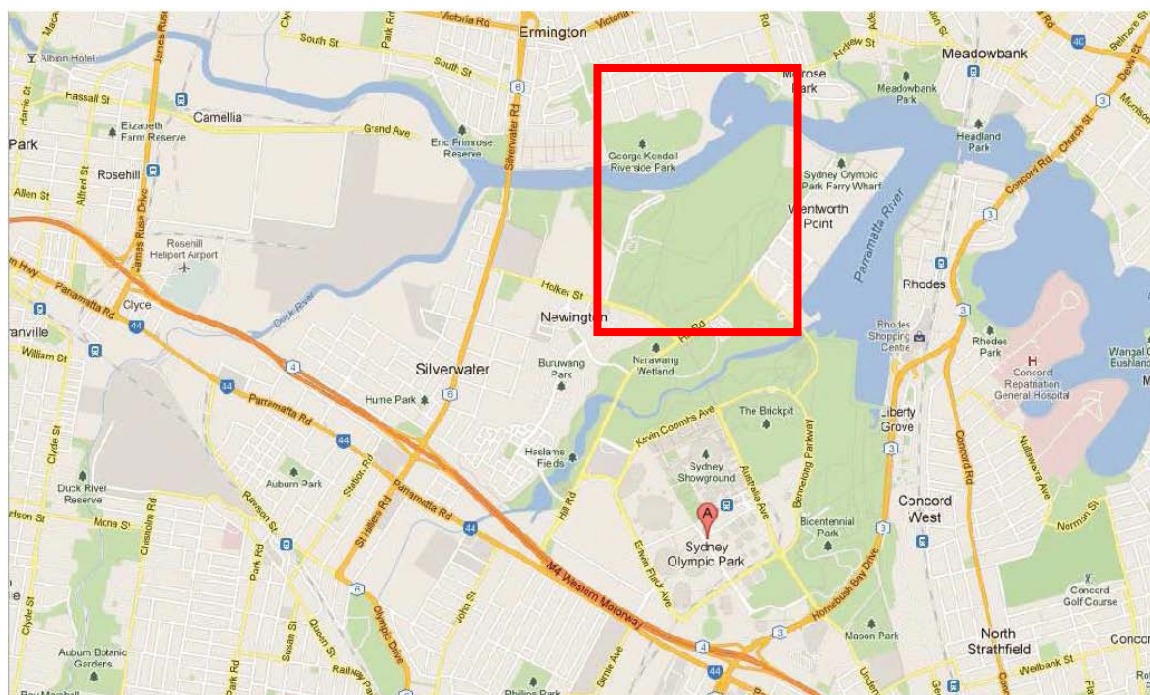


Figure 1-1 Location plan (not to scale) (Source: Google Maps).





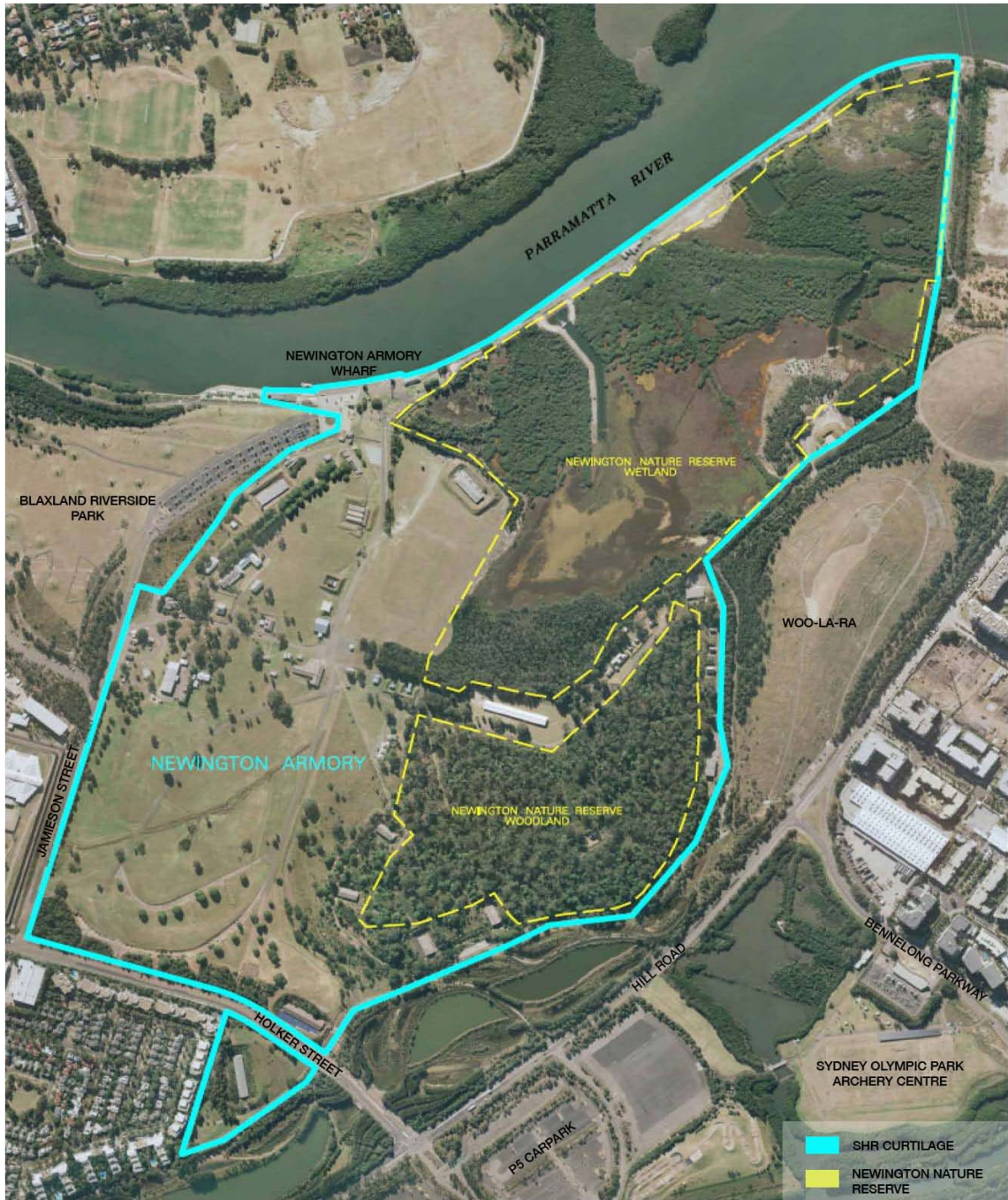


Figure 1-2 Site plan - not to scale (Source: SOPA).



#### 1.4 REPORT METHODOLOGY AND STRUCTURE

The CMP has been prepared in accordance with the guidelines contained in *The Australia ICOMOS Charter for Places of Cultural Significance 1999 (The Burra Charter)*. *The Burra Charter* is widely acknowledged as the principal guiding document for conservation work relating to places of cultural significance. *The Burra Charter* has been widely adopted as the standard for best practice in the conservation of heritage places in Australia.

The content and format of the CMP follow the guidelines for the preparation of significance assessments and conservation policy provided by the Heritage Office, Office of Environment and Heritage. It is also consistent with the methodology set out in *The Conservation Plan* (Sixth edition, 2004), prepared by James Semple Kerr and published by the National Trust of Australia (NSW).

The CMP consists of the following sections:

- **Section 1 Introduction** (this section) provides the key background information that is relevant to the preparation of the report.
- **Section 2 Historical Overview** provides a summary history of the site and the development of the buildings and landscape.
- **Section 3 Physical Analysis** provides a summary of the analysis of built elements within the landscape, a landscape analysis and a visual analysis of the place.
- **Section 4 Comparative Analysis** provides a comparative analysis of the Newington Armament Depot and Nature Reserve.
- **Section 5 Assessment of Significance** provides a statement of heritage significance for the site. This section identifies the varying levels of significance of individual elements and components of the site.
- **Section 6 Legislative Controls** outlines the various legislation and regulations that control the site.
- **Section 7 Opportunities and Constraints** sets out the heritage management context for the site, including client requirements and a discussion of any heritage opportunities and constraints that might apply.
- **Section 8 Conservation Management Policies** sets out policy recommendations for the effective management of the heritage significance of Newington Armament Depot and Nature Reserve and guidelines for the effective implementation of the policies.
- **Section 9 Bibliography** lists primary and secondary source material used during the preparation of the CMP.
- **Appendices** include selective supplementary material referred to in the CMP including existing heritage listings, detailed site history and other relevant material. The appendices are contained in Volume 2 of the CMP.

## 1.5 RELATIONSHIP TO SUPPORTING DOCUMENTS

Individual conservation reports are recommended to guide adaptation or modification of significant buildings for new uses other than for works covered by general and site specific exemptions under the Heritage Act. Individual conservation plans, collective conservation plans or concise conservation reports should be prepared for buildings or groups of buildings depending on their relative heritage significance, as outlined in Section 8.3.1 of this CMP.

## 1.6 AUTHOR IDENTIFICATION

The CMP has been written by a specialist team that includes:

- Roy Lumby, Senior Heritage Specialist, of Tanner Architects, who oversaw the project and compiled the CMP report, and Megan Jones, Director of Tanner Architects, who reviewed the report;
- Matthew Taylor, Director of Taylor Brammer Landscape Architects Pty Ltd;
- Dr Martin Denny, Director of Biodiversity Monitoring Services;
- Tony Brassil, Industrial Archaeologist;
- Jenna Weston of Australian Museum Business Services (AMBS), who undertook the Aboriginal heritage assessment of the site.

## 1.7 LIMITATIONS

CMP 2003 has formed the basis for this CMP, as much of the information contained in it is still relevant. Where information has been used in sections of the report, it is acknowledged at the beginning of the section. Extracts from the report have been included in **Appendix E**.

A limited amount of additional research was undertaken to clarify the historical background of the site.

There was no intervention into any significant building fabric or significant natural and cultural landscape components of the site.

The extent and full scope of moveable heritage items under the jurisdiction of SOPA across the site has not been evaluated. It is recommended that a collection management plan for moveable heritage be undertaken that will also determine its level of significance for listing on the State Heritage Register.

## 1.8 ACKNOWLEDGEMENTS

The authors wish to acknowledge the assistance of the following people during the preparation of the report:

### SOPA Project Control Group

- Andrew Ferris, Executive Manager Parklands and Asset Maintenance;
- Andrew Brown, Executive Manager Urban Planning and Design;
- Kerry Darcovich, Manager Environment and Ecology;
- Darlene van der Breggen, Executive Manager Design;
- David Martin, Manager Public Domain Design;
- Darren Troy, Manager Planning;
- Catherine Snelgrove, Manager, Priority Projects, Visitor Facilities and Service Section, National Parks and Wildlife Service.

## Stakeholders

- Kate Freedman, Heritage Officer, NSW Heritage Branch;
- Alejandra Rojas, Heritage Officer, NSW Heritage Branch;
- Cmdr Shane Moore, Naval Heritage, Royal Australian Navy;
- James Smith, Metropolitan Local Aboriginal Land Council.

The review of CMP 2003 undertaken by Robert Curran, Naval armament depot historian, provided valuable accurate historical detail that has been incorporated into the relevant sections of the CMP.

## 1.9 DEFINITIONS

Definitions have been reproduced from *The Australia ICOMOS Charter for Places of Cultural Significance 1999 (The Burra Charter)* as follows:

**Place** means site, area, land, landscape, building or other work, group of buildings or other works, and may include components, contents, spaces and views.

**Cultural significance** means aesthetic, historic, scientific or social value for past, present or future generations.

**Fabric** means all the physical material of the place, including components, fixtures, contents, and objects.

**Conservation** means all the processes of looking after a place so as to retain its cultural significance.

**Maintenance** means the continuous protective care of the fabric and setting of a place, and is to be distinguished from repair. Repair involves restoration or reconstruction.

**Preservation** means maintaining the fabric of a place in its existing state and retarding deterioration.

**Restoration** means returning the existing fabric of a place to a known earlier state by removing accretions or by reassembling existing components without the introduction of new material.

**Reconstruction** means returning a place to a known earlier state and is distinguished from restoration by the introduction of materials (new or old) into the fabric.

**Adaptation** means modifying a place to suit the existing use or a proposed use.

**Use** means the functions of a place, as well as the activities and practices that may occur at the place.

**Compatible use** means a use which respects the cultural significance of the place. Such a use involves no, or minimal, impact on cultural significance.

**Setting** means the area around a place, which may include the visual catchment.

**Related place** means a place that contributes to the cultural significance of another place.

**Related object** means an object that contributes to the cultural significance of a place but is not at the place.

**Associations** mean the special connections that exist between people and a place.

**Meanings** denote what a place signifies, indicates, evokes or expresses.

**Interpretation** means all the ways of presenting the cultural significance of a place.

**1.10 ABBREVIATIONS**

The commonly used abbreviations in the CMP are:

|          |  |
|----------|--|
| AHC      | Australian Heritage Council (formerly Commission)        |
| AHIMS    | Aboriginal Heritage Information Management System        |
| AHPI     | Australian Heritage Places Inventory                     |
| AMBS     | Australian Museum Business Services                      |
| BCA      | Building Code of Australia                               |
| CMP      | Conservation Management Plan                             |
| CMP 2003 | Millennium Parklands Conservation Master Plan, July 2003 |
| DCP      | Development Control Plan                                 |
| EP&A     | Environmental Planning and Assessment                    |
| EPBC     | Environment Protection and Biodiversity Conservation Act |
| ICOMOS   | International Committee on Monuments and Sites           |
| LEP      | Local Environmental Plan                                 |
| MLALC    | Metropolitan Local Aboriginal Land Council               |
| NATO     | North Atlantic Treaty Organisation                       |
| NPWS     | National Parks and Wildlife Service                      |
| OEH      | Office of Environment and Heritage                       |
| PAD      | Potential Archaeological Deposit                         |
| PPOM     | Sydney Olympic Park Parklands Plan of Management 2010    |
| RAN      | Royal Australian Navy                                    |
| RANAD    | Royal Australian Navy Armament Depot                     |
| RNE      | Register of the National Estate                          |
| SEPP     | State Environmental Planning Policy                      |
| SHR      | State Heritage Register                                  |
| SLNSW    | State Library of NSW                                     |
| SOP      | Sydney Olympic Park                                      |
| SOPA     | Sydney Olympic Park Authority                            |
| TSCA     | NSW Threatened Species Conservation Act 1995             |



## **2 HISTORICAL OVERVIEW**

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### **2.1 INTRODUCTION**

The following historical overview has been extracted and summarised from CMP 2003. It has also been expanded where necessary, particularly in regard to events that have taken place in the last decade. It is intended to provide a concise summary of the history and development of the site. The thematic history that was included in CMP 2003 has been appended to this report (Volume 2, **Appendix E**) and incorporates commentary provided by Robert Curran.

### **2.2 ABORIGINAL SETTLEMENT**

The long Aboriginal occupation and use of the Sydney area asserted by Aboriginal oral tradition is amply supported by archaeological evidence from the region. A number of Aboriginal sites have been excavated throughout the region from a variety of environments. A rock shelter site in the Blue Mountains (Kings Tableland) has been dated to about 22,000 years ago, implying that the Sydney region has been occupied by Aboriginal people for at least 20,000 years.

Whilst Aboriginal occupation of the Homebush Bay area is likely to date back well into the last ice age over 15,000 years ago (before it even became a bay), there are few scientifically dated sites within the area. At present the oldest (and one of the only) dated sites within the area is the John Curtin Reserve rock shelter on Toongabbie Creek (some 6 kilometres northwest of Homebush Bay), which has an initial occupation date of around 5,600 years ago. By about 6,000 years ago, waters had completely flooded over the old coastal plain, and the Sydney environment with which we are now familiar was largely stabilised. The vast majority of sites in the area date to within the last 5,000 years, well after the sea had reached its present level.

Physical evidence of the usage of the Homebush Bay area by Aboriginal people has been found in the form of several stone artefacts located at the site of the Newington Olympic Village (now the suburb of Newington) and within the Newington Nature Reserve. Aboriginal shell middens (campsites where shellfish and other foods were consumed) are also known to have lined Homebush Bay and the Parramatta River, but were destroyed by lime burners in the eighteenth and nineteenth centuries (who quarried the middens to burn the lime-rich shell for use as mortar) and subsequent alterations to the shoreline.

Documentary evidence of Aboriginal traditional life in the Homebush Bay area is scant. A majority of early historical observations of Aboriginal people in Sydney are from the Sydney Cove and outer harbour area, and it is currently unclear to what extent the picture of traditional life they paint can be transposed to the Parramatta River area. It is likely that Aboriginal people in the area exploited a wide range of fish, shellfish, land animal, bird and plant foods.

When Europeans arrived in 1788, the Homebush Bay area formed part of the traditional lands of the Wanngal (or Wanegal) clan. The lands of the Wanngal clan extended along the southern shore of the Parramatta River, roughly between Leichhardt and Auburn. The Wanngal clan would have had access rights to the resources of the Homebush Bay area, but would have routinely interacted with neighbouring clan groups.

### **2.3 EUROPEAN SETTLEMENT**

Only 10 days after landing at Sydney Cove, members of the First Fleet were exploring the areas to the west of Port Jackson in search of suitable land for farming and reliable sources of water. A settlement was established at Rose Hill (subsequently renamed Parramatta) by the end of 1788.



Governor Phillip and Lieutenant Bradley were the first to write about the area around Newington, after an exploratory trip in 1788:

“We proceeded to the beginning of the flats, where we landed and went 2 or 3 miles into the country. Found the trees a considerable distance apart and the soil in general good – grass very good and no underwood. After dinner went in the smallest boat over the mudflats past a mangrove island and followed a creek some distance to the westward.”

This landscape reflected Aboriginal burning practices. Fire stick farming, as the practice of burning by Aboriginal people is called, was used to create passage through the forest and encourage the movement of animals for hunting. The grassy, park-like landscapes, which were discovered by explorers like Major Mitchell, are assumed to have been the result of fire stick farming.



Figure 2-1 Lieutenant Bradley's 1790 map showing Newington and the mangrove island offshore (Source: Fox and Associates, reproduced in Graham Brooks and Associates, 2003, p.26).



The viability of the newly founded colony depended on the development of farms and the production of crops and livestock. The lands between Parramatta and Sydney began to be settled soon after the establishment of the town of Parramatta. By 1791, Governor Phillip was granting acreage to well-behaved convicts and the militia in an effort to increase farming production. The Parramatta Road, built in 1794, became a major thoroughfare and trading route, which competed with the river as the main access and transport corridor. Small land grants were made in the vicinity of Newington from 1797. Captain Waterhouse and Lieutenant Shortland of the militia both received 25 acres (about 10 hectares) each. In 1800, an adjoining grant of 80 acres (about 32 hectares) was made to Isaac Archer. These grants were situated across the present site. In 1806, Samuel Haslam was granted land on the Parramatta Road.

In 1807, John Blaxland was granted 1,290 acres (522 hectares) at Newington and immediately purchased the smaller holdings along the riverfront. Blaxland was a free settler, a man of some wealth willing to invest £6,000 in the colony in return for free passage, a land grant and 18 months of convict labour at Government expense. The Colonial Office thought Blaxland an appropriate person to encourage in the settlement, as he was a man of “property and education”.<sup>1</sup> The Newington grant comprised all the land between the Parramatta River and Parramatta Road, between Duck River and Haslam’s Creek. Blaxland built a fine house, Newington House (circa 1829-1832), on a rise within the area (now part of Silverwater prison) and began to establish a series of industrial and pastoral enterprises on the property. The area where the Armament Depot is situated was probably initially used for grazing or collecting timber. Blaxland does not appear to have utilised the wetland and no roads or tracks ran through his property in this area.



Figure 2-2: Watercolour portrait of John Blaxland by R Read (Source: SLNSW ML 308).

<sup>1</sup> *Australian Dictionary of Biography*, Volume 1:117.



Figure 2-3 A romantic depiction of Newington House by architect William Hardy Wilson (Source: National Library of Australia nla.pic-an2726970).

Thirty years of pastoral and light industrial activity and the ever-growing numbers of settlers in the area had by 1840 left the land in a state that was probably similar to the grasslands area of the site now. Louisa Meredith, who lived at Home Bush where Sydney Olympic Park is now, described the area as completely empty and denuded:

“The house stood on the highest ground on the estate and for some hundreds of acres all around not a native tree nor even a stump was visible, so completely had the land been cleared.”<sup>2</sup>

Although it was largely cleared, she describes the area as having a lot of remaining wildlife. She writes of the plentiful dingoes in the area, possums, flying foxes, goannas, lizards and snakes. Most of these, it is presumed, were living in the uncleared or less disturbed areas of mangroves, wetland or forest and other parts of Homebush Bay.

The history of the Newington estate is a familiar story from the mid decades of the nineteenth century. The severe recession of the 1840s saw John Blaxland mortgage the property in 1843. After his death in 1845, the main house and areas close to it were sold by the mortgagee in 1851 and then repurchased by the family in 1854. They remained too costly to keep. Subdivision of the southeastern portion of the estate, known as the “Village of Newington”, took place but sales were extremely slow. Land was then leased to numerous small industrial ventures such as slaughterhouses, timber cutters and other tenants. By 1860, the area between Newington House and the river was occupied by a salt works, boiling down works and slaughterhouses.

<sup>2</sup> Mrs Charles Meredith, *Notes and Sketches of New South Wales During a Residence in the Colony from 1839 to 1844*, p.56.

In 1860, the estate was sold to merchant Charles Kent, but he transferred the property back to the auctioneers the following year. In 1863 Newington House and 10 hectares of land were leased to the Methodist Church, and the “Wesleyan Collegiate Institution” began taking students on 16 July 1863.<sup>3</sup> The requirement for a larger and more permanent establishment led to the relocation of the college to Stanmore from July 1880. The name of the institution was changed to Newington College that year.

The estate was sold in 1877. The new owner, draper John Weatherill, bought the property with an eye to subdivision. His efforts were not successful and the site reverted to government control in 1880. After the Wesleyan College had vacated Newington House, female inmates from the Hyde Park Barracks were relocated there and the building was used as a hospital for the insane. By 1882, an area of 248 acres 1 rood 8 perches (about 100.5 hectares) had been resumed for “certain works for and in connection with the erection of a magazine for the storage of gunpowder and other explosives and certain buildings in connection therewith”.

## **2.4 NEWINGTON POWDER MAGAZINE**

### **2.4.1 Preamble**

A detailed description of the operation of the Newington Armament Depot, which provides a comprehensive analysis of its various facilities, infrastructure and procedures, has been extracted from CMP 2003 and is appended to this report (Volume 2, **Appendix E**).

### **2.4.2 The Establishment of the Newington Armament Depot**

When the colonial government resumed the area for the powder magazine in 1882, most of the 217 acres (about 88 hectares)<sup>4</sup> was mudflats, swamp, mangroves or saltmarsh. The site had been recommended by an appointed committee known as the Gunpowder Board because of concerns over existing powder magazine facilities that were close to the centre of Sydney.

In 1837, the first colonial gunpowder and explosives magazine had been completed at Goat Island.<sup>5</sup> In less than a decade it was found to be inadequate for storing civilian and military stock, and an additional magazine was constructed on the island for civilian stock. In 1863, this was also deemed to be overcrowded and so another magazine was built at Spectacle Island, further down the harbour and away from the main centre of population.

The Colonial Government of New South Wales established the Ordnance and Barrack Department in 1871 following the removal of the British Army garrison. The Department, under the direction of the Warlike Stores Board, provided and regulated military supplies and ammunition (exclusive of torpedoes) and had supervision and responsibility for all public magazines and storage of explosives in the colony.

Agitation for a new powder magazine was very evident in the mid 1870s. At the beginning of March 1875, the Colonial Secretary received a deputation made up of representatives of the Sydney and suburban municipalities and the Sydney Chamber of Commerce urging removal of the powder stored at Goat Island to a safer location. During discussion general reference was made to the possibility of relocation somewhere on the Parramatta River.<sup>6</sup>

Whether or not as a result of the deputation, a Gunpowder Board was appointed around the beginning of May 1875 to investigate “the desirability of the removal of the Goat Island Magazine”.

<sup>3</sup> Advertisement, *Sydney Morning Herald*, 24 June 1863, p.8.

<sup>4</sup> *New South Wales Government Gazette* No. 334, 22 August 1882, p.4317. Early newspaper reports also refer to 217 acres of land (“News of the Day”, *Sydney Morning Herald*, 20 October 1882, p.7).

<sup>5</sup> “Ship News”, *The Sydney Gazette and New South Wales Advertiser*, 19 December 1837, p.2.

<sup>6</sup> “Storage of Gunpowder”, *Sydney Morning Herald*, 5 March 1875, p.3.

When its recommendations were released several months later, they included amongst other things “that a separate and distinct magazine for merchants’ gunpowder, capable of storing about 300 tons, be established on the right bank of the Parramatta River, at the site indicated by the tracing forwarded by letter from the Board on the 30<sup>th</sup> August last.”<sup>7</sup> This was evidently Newington.<sup>8</sup> The Colonial Government appeared to take the proposal seriously, to the extent of debating an estimate of £15,000 for the construction of a powder magazine on the Parramatta River in the middle of May 1876.<sup>9</sup> However, there was reluctance to commit to a site so far from the powder ground at Rose Bay while the waterlogged land required major reclamation and the narrow, busy passage down the river was considered to be a risk to shipping.

By 1880, the overcrowding at Spectacle Island had reached crisis point and plans were prepared for a new magazine at Newington, but a decision to erect it at Newington was by no means unanimous.<sup>10</sup> In the event, the new facility was designed and documented in the Colonial Architect’s Office<sup>11</sup> and constructed for the New South Wales Military Forces, which invited tenders for its construction during March 1897.<sup>12</sup>

Work on the construction of the so-called Government Powder Magazine, which was intended to contain “all the powder to be used for military purposes in the colony”, evidently commenced on 15 February 1897 (this may have been preparatory site clearing and excavation rather than construction) and took about 15 months to complete.<sup>13</sup> The facility was constructed by master builder John Howie and Sons.<sup>14</sup>

By the following September a substantial amount of work had already been completed:

“The superintendent’s cottage and the workmen’s cottages have been completed, as have also the guard house, lock-up and lamp-room. These are neat and substantial red brick buildings with slate roofs. There is to be a cooperage for the repairing of barrels, an examining room and a laboratory for the making up of cartridges, and a gun-cotton store for the storage of dry gun-cotton. A convenient wharf has been placed on the river, and the river is to be deepened to the wharf. From the wharf, on which the iron gates will form the main entrance, there will be a thorough system of tram lines running around the reserve. One line will run right to the gun-cotton store on the right hand side, and a double line of rails will run to the powder magazine. The water has been laid on, and there is a thorough system of fire services right throughout.

The powder magazine is being built with the utmost care and no expense is being spared to render it absolutely safe. The magazine is dug out of the land and the building erected with specially strong double walls and damp-proof floors. It will be arched overhead, and at the entrance end will be the lobbies where the workmen will be required to change before entering the chamber.

<sup>7</sup> “Storage of Gunpowder”, *Sydney Morning Herald*, 27 October 1875, p.7.

<sup>8</sup> “Legislative Assembly”, *Sydney Morning Herald*, 18 May 1876, p.3.

<sup>9</sup> *Ibid.* *The Gunpowder and Explosive Consolidation Act 1876* (40 Victoria, No. 1), which came into effect towards the end of 1876, was prescriptive about the design, layout and operations of powder magazines.

<sup>10</sup> *Sydney Morning Herald*, 7 October 1881, p.4. The Legislative assembly at this time was advised that directions had been given for the preparations of plans for the work.

<sup>11</sup> “Explosives”, *Sydney Morning Herald*, 14 February 1883, p.9.

<sup>12</sup> “Foundation of the RAN Armament Depot Newington”, [http://users.tpg.com.au/borclaud/ranad/foundation\\_newington.html](http://users.tpg.com.au/borclaud/ranad/foundation_newington.html), 5 October 2011; tender notice, *Sydney Morning Herald*, 27 March 1897, p.14.

<sup>13</sup> “Newington Powder Magazine”, *The Cumberland Argus and Fruitgrowers’ Advocate*, 4 September 1897, p.8.

<sup>14</sup> “Death of Mr John Howie”, *Sydney Morning Herald*, 15 October 1917, p.8.

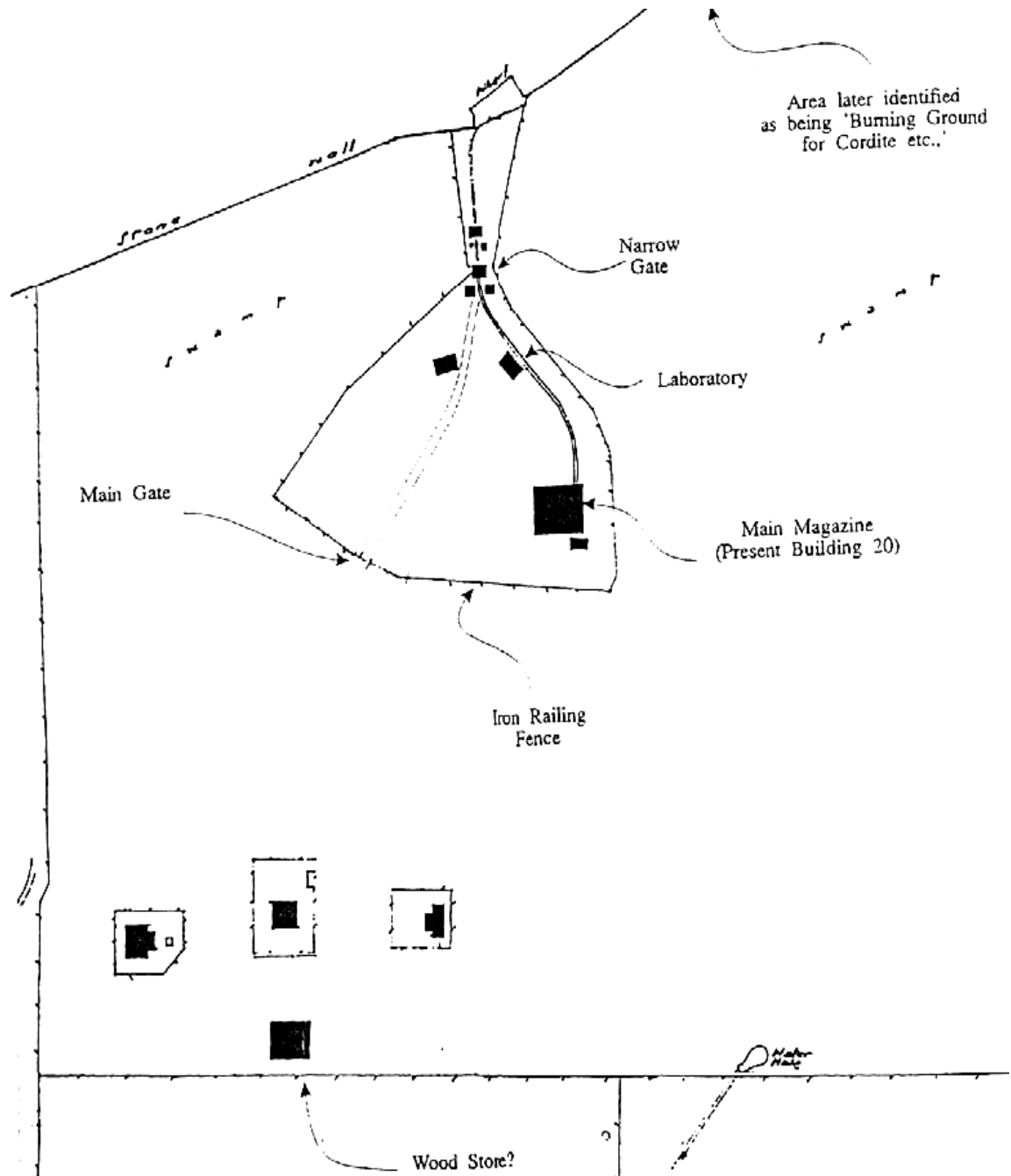


Figure 2-4 Plan of original layout of the Powder Magazine (Source: Schwager Brooks and Partners, 1996, reproduced in Graham Brooks and Associates 2003, p.30).

The magazines are on a very large scale indeed, and will meet the requirements of the colony for years to come. The dry-cotton store on the other side of the ground is being built on much the same lines, but on a much smaller scale. It is proposed to surround the reserve with a high concrete wall and iron fence.”<sup>15</sup>

The topography of the site was largely the reason it had been left unsettled for so long, and also the reason it was initially seen as unattractive for the erection of a public gunpowder magazine in the 1880s. It was isolated and it had good water access, but it was also marshy and boggy and a long way from Sydney Harbour. In 1889, large-scale reclamation works were begun, which saw almost 200 acres (81 hectares) of mudflats drained and the foreshore straightened and banked. By 1893, two miles (3.22 kilometres) of fascine banks had been constructed. Even though hundreds of acres of land had been reclaimed, the areas directly behind the riverbank were still considered unsuitable for extended building works. However, this very unsuitability made the area ideal for the dangerous and polluting work of disposal, burning and testing of armaments and explosives. Reclamation of the wetland continued on the site through the 1930s and into World War II. Thousands of pounds were spent to drain the soil and raise buildings and infrastructure above the waterlogged ground.

In general, Newington was never used for the manufacture of explosive substances or armaments although some non-explosive components had been made on site. Ammunition was assembled there from components made elsewhere.

The Newington Armament Depot had two primary functions: the receipt, storage and dispatch of stock related to naval weapons systems, and ensuring that the stock matched and was maintained at the level of quality established at the time of manufacture.

During the early decades of the Armament Depot's operation, all stock was brought in by water to the wharf on the Parramatta River. Water-borne access reflects the fact that the majority of naval armament was imported either from the United Kingdom, or, until the middle of the twentieth century, manufactured in Melbourne and transported to Sydney by ship. It was only after an armament manufacturing facility at St Marys was established that some stock was transported by road. However, large quantities of stock were still imported and transported directly up river from the Port of Sydney.

When built in the 1890s, Newington Powder Magazine was managed by the colonial government's Ordnance Department. At the time of Federation, the site and its workforce were included amongst New South Wales' Military Forces assets that passed into the control of the Commonwealth Military Forces, and the site languished for many years.

## 2.5 THE ADVENT OF THE NAVY

After World War I ended, the Army centralised its ammunition storage in the Sydney region at the Liverpool Ordnance Depot. In 1921, control of the Newington Armament Depot passed from Australian Military to Australian Naval use, which assessed the site as being suitable for only a proportion of the reserve ammunition which it was necessary to keep in Australia, that is, two complete outfits for each ship on the station and two years' practice ammunition. The Royal Australian Navy (RAN) was initially reluctant to take the site, as it was considered too small to accommodate its needs. However, by 1922 works had commenced on new buildings. By 1924, the Navy was requesting that more land be made available from the area leased to the State Abattoir.

In turn, the higher and drier areas directly to the south of the wharf and parts of the wetland to the east were leased by the adjacent Homebush State Abattoir, which ran sheep and cattle in resting paddocks. In 1928, the abattoir gave the eastern areas back to the magazine, and then in 1938 and 1941 all lands were resumed for military uses.

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<sup>15</sup> "Newington Powder Magazine", *The Cumberland Argus and Fruitgrowers' Advocate*, 4 September 1897, p.8.



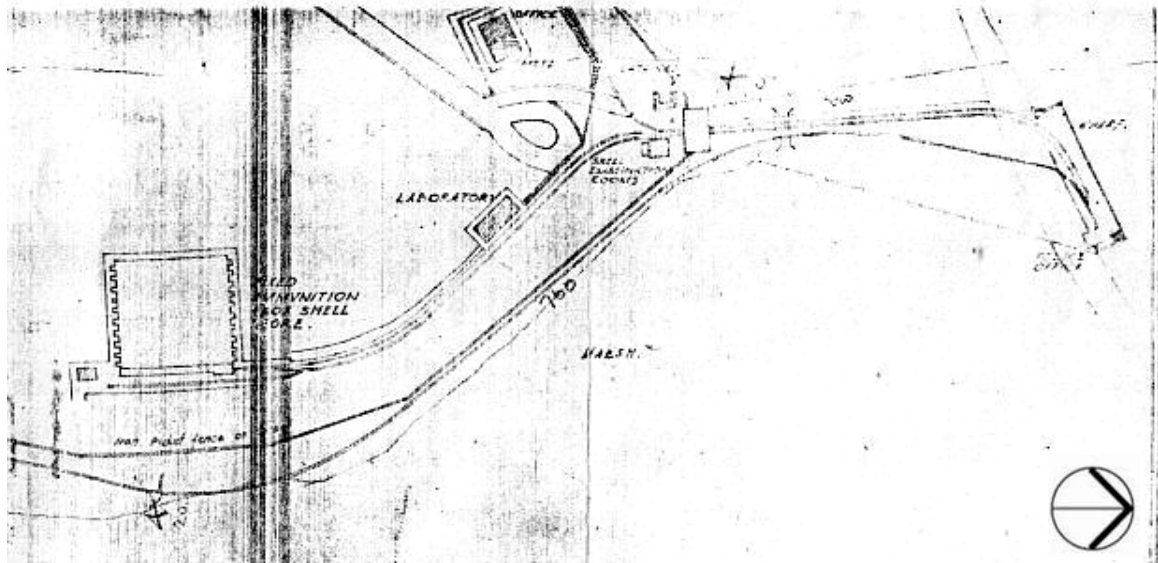


Figure 2-5 Portion of a circa 1921 map describing the original magazine precinct around the time the Navy took up occupation of the site.

(Source: [http://users.tpg.com.au/borclaud/ranad/foundation\\_newington.html](http://users.tpg.com.au/borclaud/ranad/foundation_newington.html), 5 October 2011).

The growth of the facility not only reflected the pre-eminent position of the Navy, which was building its presence in Port Jackson, but also the increasingly threatening international situation. Perhaps another more pressing reason was pressure to move mass-detonating explosives from Spectacle Island. After a decade of constant building, the development of the site tapered off during the Depression. Then, in 1938 with a deteriorating political situation in Europe and concerns about the growth of Japan's military, the RAN's expansion was reignited. A 1938 memorandum from the Department of Defence referred to the RAN's expansion program and the necessity of acquiring more land. The expansion program included the erection of magazines and other facilities. More land was acquired from the State Abattoir, and new buildings were planned to separate domestic buildings from storehouses. Reclamation works were undertaken with Unemployment Relief Scheme funds, and the Armament Depot reached its period of peak production as World War II was declared.

The dominant influence on Australian naval capacity until the start of the Pacific War in 1941 was the Royal Navy (RN). Even after its formation in 1911, the RAN was in effect a colonial arm of the RN, using British ships, stores and ordnance. This situation developed in the colonial period when Sydney was the centre of British imperial power in the Pacific. From 1859, the RN operated the Australia station from Sydney, and gradually made substantial progress to enhance its position in the Pacific. World War II changed the way Australia thought about and prepared for its defence and the way the RAN functioned in the harbour. The arrival of thousands of ships of the Allied Forces and merchant navy impacted on not only the docking facilities, but also the armaments bases, supply stores and munitions factories in the Sydney region.

In 1941, the Armament Depot was expanded by the acquisition of 38 hectares of land, precipitated by American entry into the war. The Carnarvon Golf Course, to the west of this newly acquired land, was also acquired to provide an ammunition store for the US Navy. An additional 81 hectares to the south were acquired to provide additional storage for the Imperial and Australian Navies, and the so-called Auburn depot was completed in 1944.

Newington Armament Depot was an intrinsic part of a defence system, which was known as the Sydney Ammunition Pipeline. During World War II, the Navy's storage facilities expanded to encompass a sub-depot at Kingswood (now usually referred to as Orchard Hills) and some storage at St Marys and Bogan Gate. The Kingswood sub-depot, formerly a US Army chemical weapons storage depot, later became the RAN Armament Depot Kingswood. Newington was still on a full contingent of staff, and storage capacity was full for several years after the war had ended.



Figure 2-6 The ultimate extent of the Newington Armory can be gauged from this aerial photograph taken in July 1943. The State Brickworks pit is visible at lower right (Source: RTA, *From the skies*).





Figure 2-7 Development across the Armory site, which now forms the basis of the Newington Armament Depot and Nature Reserve, in 1943 (Source: RTA, *From the skies*).

The Navy did not, at the end of the war, begin disposing of assets and land, and an additional 20 hectares were acquired in 1949. By 1967, the Commonwealth controlled about 1.3 kilometres of harbour foreshores for both military and naval purposes. The administrative and personnel quarters located on parts of Middle Head and South Head, the North Head fortress and Artillery School, together with waterfront industrial naval uses, occupied about 420 hectares. In addition, 280 hectares were held as reserves of largely vacant land on Middle and North Heads, lending a distinctive undeveloped forest and bush character to parts of Port Jackson and its harbour-side suburbs. Much of this land has now been incorporated into the Sydney Harbour National Park.

In 1981, the Department of Defence adopted NATO safety principles for the storage, transport and handling of explosives. The NATO safety principles replaced earlier quantity-distance tables and were based on a better understanding of the effects of explosions. The principles deal with acceptable risk, the spacing required between potential explosion sites, exposed sites that may be other potential explosion sites, other facilities, transport routes and residential areas. In general terms, the introduction of the NATO principles reduced the amount of explosives that could be held in storehouses, wharves, lighters and around ships when ammunitioning. The efficient functioning of the Newington Armament Depot was greatly compromised by these new regulations. The existing infrastructure and the increasingly dense settlement around the Armament Depot meant that it could not physically expand any further and so its closure was a *fait accompli*.

The Department of Defence had been interested in relocating the functions of the Newington Armament Depot to another facility since the 1960s. Closing Newington meant closing the Sydney ammunition pipeline, and establishing another East Coast Armament Complex. It also meant that Port Jackson was no longer practicable as a place to ammunition RAN ships. The availability of Fleet Base West (in WA) translated into fewer ships based in Sydney dockyards. In 1992, Cockatoo Island dockyard was closed.

In 1993, the islands of Sydney Harbour not specifically used for storage purposes were also placed under the control of the National Parks and Wildlife Service. In March 1994, it was announced that the Newington Armament Depot would be closed, and during 1996 the southern portion of the site was vacated by the Navy. Newington was officially closed in 1999, and the Navy moved the bulk of its administration and other facilities to other locations in NSW. The Newington Armament Depot was transferred from the Commonwealth to the State Government on 1 January 2000.

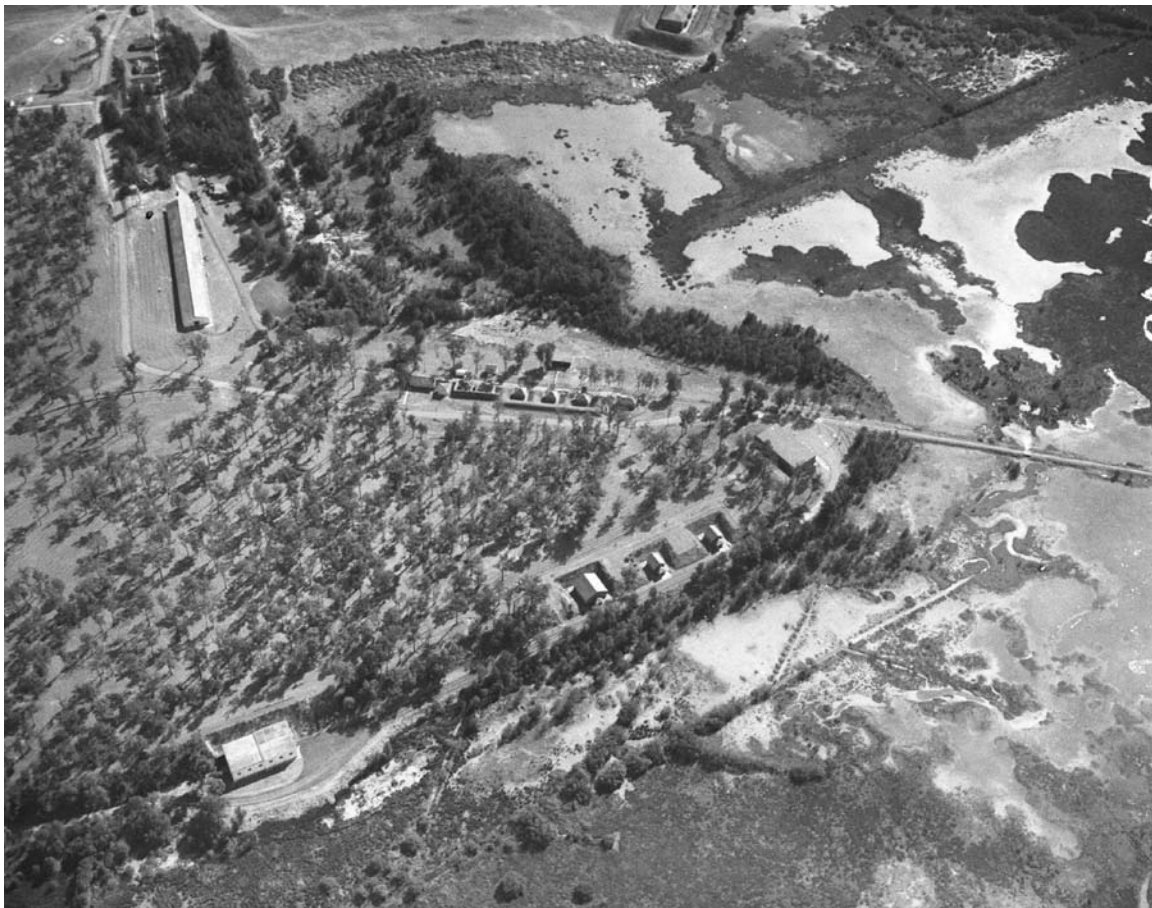


Figure 2-8 Aerial photograph dated 12 August 1970 of the eastern section of the Armament Depot. Building 30 is at bottom left, Building 39 at bottom right and Buildings 35-38 at middle left (Source: SLNSW, Maurie Wilmott photograph, Australian Photographic Agency – 34442).



Figure 2-9 Aerial photograph dated 12 August 1970 of the Armament Depot viewed from the south. Buildings 48 and 47 are at lower right; the two buildings to their west have since been demolished. The character of planting along service roads is clearly evident (Source: SLNSW, Maurie Willmott photograph, Australian Photographic Agency – 34445).

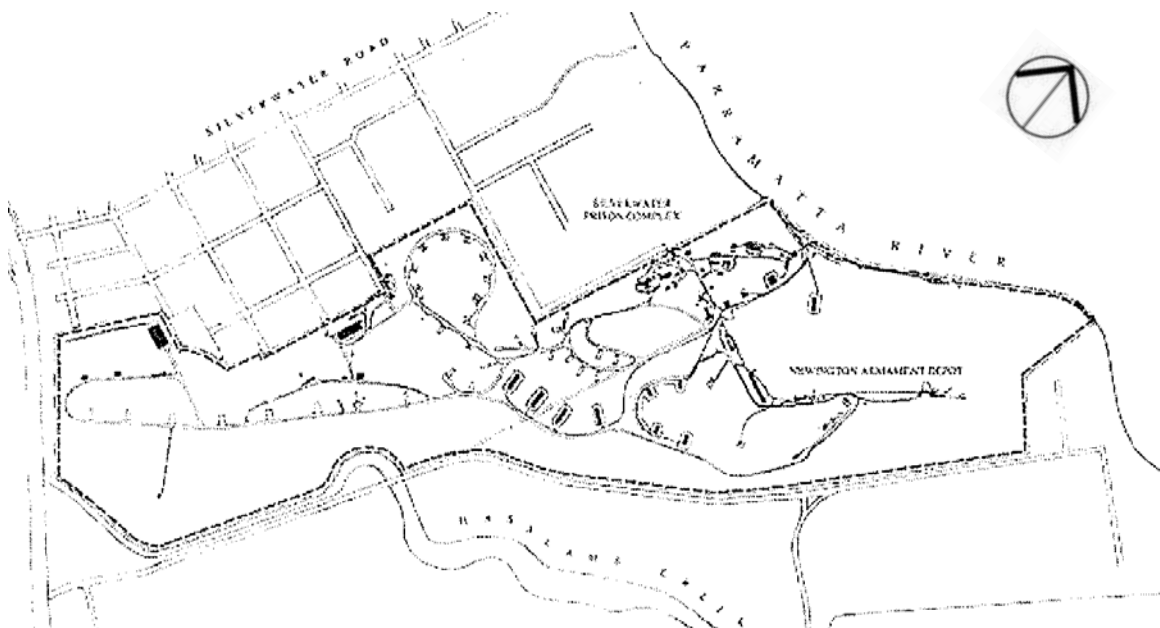


Figure 2-10 Extent of the Armory site in 1996, just prior to the closure of the establishment (reproduced in Graham Brooks and Associates, p.17).

## 2.6 OLYMPICS AND AFTERWARDS

Redevelopment of the area in the vicinity of the Newington Armament Depot and Nature Reserve goes back to the 1980s, when a private business park known as the Australia Centre (bounded by Australia Avenue and what are now Herb Elliott Avenue and Sarah Durack Avenue) was established. The State Sports Centre and Bicentennial Park were also established in this period. The closure of the Homebush Abattoir and the NSW Brickworks in the late 1980s provided a vast area of additional land with the potential for urban renewal. The Homebush Bay Development Corporation was set up to oversee the urban renewal of Homebush Bay, which commenced in 1991 and was scheduled for completion in 2000.

Sydney won the right to host the 2000 Olympic and Paralympic Games on 24 September 1993.<sup>16</sup> The Olympic Coordination Authority, operating between 1995 and 2001, was responsible for the planning, urban development and management of the area and facilities for the Sydney Games from 1995 onwards. The southern portion of the Newington Armament Depot was developed as the Athlete's Village, subsequently to become the suburb of Newington. This caused a substantial diminishment of the 259 hectare Armament Depot site. Remediation and development of the area required the removal of all but two explosives storehouses from the site and the construction of the new Holker Street extension between the northern and southern sections. The village was designed with ecologically sustainable development principles.

The announcement of the Sydney 2000 Olympic Games and the choice of Homebush as the main Olympic venue meant that the remediation of land on the western and southern sides of Homebush Bay became an urgent priority, and this program was used to demonstrate new environmental attitudes and commitments. The remediation works were completed in 2000 and included the treatment of 155 hectares of land for soil and ground water contamination. Significant wetland rehabilitation and engineering works were conducted between 1997 and 1999 to what would become the wetland of the Newington Nature Reserve. The imminent departure of the Commonwealth Government from the Newington Armament Depot also caused concern about future management, since the exclusion of the public for many decades had already left an important cultural legacy. The proclamation of the dedication of the Silverwater Nature Reserve (renamed the Newington Nature Reserve in 2001) was published in the *Government Gazette* of 15 September 2000.

The Olympic Games were staged between 15 September and 1 October 2000, followed by the Paralympic Games, staged between 18 and 29 October.

In July 2001, the Sydney Olympic Park Authority (SOPA) was established, a statutory body of the NSW Government under the *Sydney Olympic Park Authority Act 2001*. The Authority's charter to manage and promote the 640-hectare Sydney Olympic Park site, including protection of the 425 hectare Millennium Parklands, which included the Newington Armament Depot and Nature Reserve,<sup>17</sup> were defined in the Act.

The *Millennium Parklands Concept Masterplan* and *Parklands 2020* documents outlined a clear vision and strategy for the development of a world-class parklands. The Newington Armory was integrated into this overall vision. These vision and strategy documents were formulated into the first *Parklands Plan of Management*, adopted by the Minister for the Environment in 2003. The *Parklands Plan of Management* outlined a detailed scheme of operations for the future development, use and management of the Millennium Parklands. The Plan of Management outlined the role of the Newington Armory, which "will be the heart of the programs ... evol[ving] into a campus like precinct in which the combination of complementary co-located programs will generate uses and activities".

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<sup>16</sup> The establishment of the Homebush Bay Development Corporation pre-dated Sydney's bid for the 2000 Olympic Games.

<sup>17</sup> The Silverwater Nature Reserve was not vested in SOPA.

The following summary, although not exhaustive, describes a number of the initiatives that have been undertaken at the Newington Armament Depot and Nature Reserve since it came under the control of SOPA. These initiatives were part of broader endeavours to continue the transformation and activation of the Millennium Parklands.

In its first years of operation, SOPA initiated several programs at the Newington Armament Depot and Nature Reserve, including building refurbishment, engineering services upgrades, renovation of the light rail system (which was subsequently extended to form a loop within the Newington Nature Reserve forest), repairs to the sea wall and upgrading of the weir associated with the wetlands. An Aboriginal Historical Research program was launched in March 2002.<sup>18</sup> The Aboriginal History and Connections Program progressed during 2002 and 2004.

On 6 March 2003, the Louise Sauvage Pathway and the River Walkway were officially opened by Olympic gold medallist Louise Sauvage and the Hon Michael Egan. The paths skirted the northern end of the Armory and the eastern edge of the Nature Reserve, creating a regional pedestrian and cycle access from Silverwater in the west to the Sydney Olympic Park ferry wharf. Later that year, an open day was held at Newington in association with Western Sydney Environment Week, at the beginning of June. This event was attended by about 600 people.<sup>19</sup>

At an early stage, the Authority identified a number of key buildings for adaptive reuse to house and support the role of the Armory for visitor programs such as arts, cultural events and education. In 2003, Building 46 was adapted into an education facility consisting of two classrooms. The facility hosted primary and secondary school curriculum-based environmental education programs, wetlands education training, teacher professional development programs, seminars and workshops and education events such as “Science in the Suburbs” and the Youth Eco Summit. This led to a later sponsorship from Energy Australia to assist in further fitout and programming.

In the summer of 2003-2004, Art at the Armory was launched. This featured works associated with ArtExpress, the exhibitions of outstanding artworks produced by Higher School Certificate students. This was accompanied by a school excursion program that included an interpretive guided tour of Newington. In January 2004, *The Glass Garden*, a music theatre production associated with the Sydney Festival, was staged in Building 18. The following month Newington was opened to the public for one day and attracted 800 visitors. SOPA’s efforts were recognised later that year when it was awarded first prize in the Tourism Category of the 2004 Energy Australia National Trust Heritage Awards for the development and presentation of the Secrets Revealed Program.<sup>20</sup>

Cultural initiatives were consolidated over the following years. During the 12 months between June 2004 and June 2005, Building 18 was adapted for use as an exhibition space, Building 22 was adapted for use as a performance space and Building 24 was adapted for use as artists’ studios. Building 18 was the venue for the first annual ArtExpress exhibition, which has become a regular program at the Armory. Over this period, the “Explore the Armory” program opened the site to the public on a quarterly basis on weekends.<sup>21</sup>

The following 12 month period saw the development of artists’ studios and workshop facilities at Newington, which included an indoor performance space, an outdoor performance area and an exhibition space. A collaborative endeavour between Sydney Olympic Park and Sculpture by the Sea was piloted in October 2005 when six artists from India, Iceland, England, Mongolia, Japan and Australia were invited to participate in the Sydney Olympic Park Artists at the Armory program. The artists lived and worked at the Armory to create works for Sculptures by the Sea. The success of the

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<sup>18</sup> SOPA Annual Report 2001/02, pp. 21,-22, 28, 30.

<sup>19</sup> SOPA Annual Report 2002/03, p.22.

<sup>20</sup> SOPA Annual Report 2003/04, pp.29, 37.

<sup>21</sup> SOPA Annual Report 2004/05, pp.19, 25.



initiative led to the commencement of the ongoing Artist at the Armory program. The Sydney Olympic Park Lodge, a 96-bed facility involving the adaptive reuse of Buildings 4, 5, 6, 23 and 105 and managed in partnership with the YMCA, opened in 2005 and proved immediately successful.

Work commenced on the adjacent Blaxland Riverside Park in 2006. This included the extension of Jamieson Street to the riverside, which provided a new public entrance to Newington at the wharf. The Park was opened by the Hon Minister Sandra Nori on 3 March 2007. The Blaxland Riverside Park included the Armory Wharf Café, which was housed in Building 13 (originally a stores building constructed prior to World War II). It was subsequently destroyed by fire in January 2008 and quickly rebuilt, reopening in December 2009.<sup>22</sup> The new Armory Café, designed by Lahz Nimmo Architects, won an Australian Institute of Architects (AIA) New South Wales Chapter's Commercial Architecture category Award and the adjoining Armory Wharf Precinct to its east, designed by architects Hargreaves Associates, Lahz Nimmo Architects and Lacoste + Stevenson in association, the AIA Urban Design category Award for 2009.<sup>23</sup>



Figure 2-11 Rebuilt Armory Café, 2009 (Source: Tanner Architects).

During this period, the former explosives storehouse known as Building 46 was adapted for reuse as an education centre for Energy Australia.

A disc golf course was installed in the southwestern section of the Armory site in 2007, while in May 2008 the Bird Discovery Centre, operated by Birds Australia, opened in Buildings 130 to 133, providing information, courses and displays on bird conservation to visitors. Two management documents were completed during 2008. A concept plan for the Newington Armory buffer zone, which was completed in February, provided management guidelines for a sensitive part of the site adjacent to the forest and wetlands, while an interpretation strategy for the precinct was prepared to assist initiatives towards making visitor experiences informative and rewarding.

<sup>22</sup> The timber and steel shade structure survived the fire.

<sup>23</sup> *Architecture Bulletin Awards 2009* issue, pp.10 and 12. Jacaranda Square in Sydney Olympic Park won an Urban Design commendation.

During 2010, the Newington Armament Depot and Nature Reserve was nominated for inclusion in the NSW Heritage Council's State Heritage Register. The listing was gazetted on 14 January 2011.

Apart from these varied visitor and cultural initiatives there was ongoing conservation, maintenance and enhancement of the Newington Nature Reserve wetland and forest, with monitoring of species, consolidation of planting and other projects. An ongoing program of tours and educational programs was initiated to increase awareness and knowledge of environmental management.

## 2.7 CHRONOLOGY

### Pre-European Occupation

Pre 1788 Aboriginal use of the site, evidenced by remains in the Newington Nature Reserve.

### Eighteenth Century

1788 First European exploration of the area around Homebush Bay.

1797 Grants to Captain Henry Waterhouse and Lieutenant John Shortland Archer in the area of Holker Street, fronting the Parramatta River.

### Nineteenth Century

1806 Grant to Samuel Haslam.

1807 Land grant to John Blaxland of about 562 hectares, which was named Newington. It comprised all of the land between the Parramatta River and Parramatta Road, and between Haslam's Creek and Duck River. Blaxland is likely to have acquired earlier grants (excepting Haslam's) shortly after his purchase.

1811-1819 Early industrial development at Newington.

1832 Newington House built.

1837 First powder magazine built on Goat Island.

1843 Newington was mortgaged to the Australian Trust Company for £2,000.

1845 Death of John Blaxland.

1851 Australian Trust Company sold the Newington Estate to John Dobie.

1854 The Blaxland family re-acquired the Newington Estate. Subdivision of the "Village of Newington" in the southeastern portion of the estate took place, but sales were very limited.

1860 The Newington Estate was sold to merchant Charles Kent, who transferred it back to the auctioneers the following year.

1863 Newington House and 10 hectares of land were leased to the Methodist Church. What was to become Newington College was established. Another powder magazine was built, on Spectacle Island.

1871 The Colonial Government of New South Wales established the Ordnance and Barrack Department under the direction of a Warlike Stores Board, after British troops were removed.

1875 Appointment of Gunpowder Board to investigate removal of the Goat Island magazine. It recommended establishment of a magazine on the Parramatta River in the vicinity of Newington.

1877 The Newington Estate was sold to draper John Weatherill, who subdivided the land. The sale of land was not successful.

- 1880 Newington College vacated the site and Newington House became a hospital for the insane.
- 1882 About 100 hectares at Newington were resumed for the purposes of erecting a powder magazine.
- 1897-98 Construction of the first buildings at the Newington Armament Depot, which were designed in the Colonial Architect's Office and erected by John Howie & Sons. The facility was managed by the Ordnance Department.

### Twentieth Century

- 1901 The Newington Armament Depot passed into the control of the Commonwealth Military Forces with the advent of Federation.
- 1921 The Depot passed from Australian Military to Australian Naval use, which consolidated and expanded its facilities over the next two decades.
- 1939-45 World War II. The Armament Depot was greatly expanded to the south and served the needs of Australian, British and American Naval forces.
- 1981 The Department of Defence adopted NATO safety principles for the storage, transport and handling of explosives, which compromised the functioning of the Newington Armament Depot.
- 1992 Cockatoo Island dockyard was closed.
- 1993 Sydney won the right to stage the Olympic and Paralympic Games in 2000.
- 1994 Announcement that the Newington Armament Depot would be closed.
- 1996 The southern portion of the Depot was vacated by the Navy and was subsequently developed as the Olympic Village (later the suburb of Newington).
- 1999 The Newington Armament Depot was officially closed.
- 2000 The site was transferred from the Commonwealth to the New South Wales Government on 1 January.
- Dedication of the Silverwater Nature Reserve gazetted on 15 September 2000.
- The Olympic Games and Paralympic Games were staged in September and October.

### Twenty-First Century

- 2001 The Sydney Olympic Park Authority was established with the enactment of the *Sydney Olympic Park Authority Act 2001*.
- Silverwater Nature Reserve renamed the Newington Nature Reserve.
- 2003 *Parklands Plan of Management (2003)* was adopted.
- Newington Nature Reserve Plan of Management* was adopted.
- Era of incremental activation, building adaptation for reuse and public programs commences.
- The *Millennium Parklands Heritage Precinct Conservation Master Plan* was completed.
- 2011 Gazettal of the Newington Armament Depot and Nature Reserve listing in the NSW State Heritage Register.



### **3 PHYSICAL ANALYSIS**

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#### **3.1 INTRODUCTION: AN INTEGRATED ECOLOGICAL AND CULTURAL LANDSCAPE**

The natural landscape of the Newington Armament Depot and Nature Reserve comprises three general areas; grasslands, wetland and forest. Within these landscapes are numerous buildings, transport systems and landforms. The entire landscape of the Newington Armament Depot and Nature Reserve has experienced varying degrees of cultural modification. But despite many changes, the natural features of the landscape and their underlying ecological processes remain of significance, alongside the cultural features. The wetland, for example, is still enclosed by a fascine dyke and stone sea wall, which expanded parts of the original foreshore and led to the reclamation of the lands behind, which are now being managed for reinstatement of the wetland values.

Within this landscape, the built elements and infrastructure are integrated into the forest, hillsides, wetland and grasslands. Each has been shaped by, or in response to the other.

In many places, the natural landscape has been extensively modified and revegetated to suit the site's occupants and built elements have been sited and laid out in response to topography. Undisturbed areas of forest and wetland acted as protective buffers and screens for the activities that took place in them.

The Newington Armament Depot and Nature Reserve is therefore a thoroughly integrated natural and cultural landscape, and might be viewed from various perspectives as a landscape with many layers of meaning.

#### **3.2 ECOLOGICAL LANDSCAPE**

##### **3.2.1 Preamble**

From the late nineteenth century until 1980, the management and treatment of the area epitomised the then-prevailing Australian attitude to natural wetland. Homebush Bay and surrounding areas were seen as convenient wastelands for the dumping of industrial and household wastes. The history of industry in the area around what is now the Newington Armament Depot and Nature Reserve had started with Blaxland, then Government industries such as the brickworks, abattoirs and powder magazines at the turn of the twentieth century. These industries were intrinsically polluting and with no environmental controls, draining of wetland, dumping of toxic wastes and pollution of the air by burning, were commonplace.

In the 1960s and 1970s, uncontrolled dumping of wastes was common in the Homebush Bay area, and to the east of the forest. Seepage from contaminants including chemical residues, metals and tar waste flowed into the saltmarsh of the site, and were trapped by the sea wall.

Within the wetland, the Navy used the saltmarsh as a convenient site for testing and dumping of wastes connected with proofing activities. Three burning grounds were also situated on the site. One was in the forest and another in the wetland, where explosives and armaments were destroyed in metal lined pits. The third burning ground was located on low ground in the southern section of the Depot near Haslam's Creek. Here gun propellant was burnt, amongst other things.

The structure and floristics of the forest area, with its now well developed understorey, can now be assessed as regeneration towards a state more closely approximating its natural condition, with fires at less-frequent intervals than the regime instituted by Aboriginal people. The increasing environmental awareness of Australians and the value attached to the restoration of these small natural areas has added a new and very important quality to the Newington Armament Depot and Nature Reserve, which gives it enormous value. The importance of these small remnants of

ecological communities that once covered large parts of the Sydney Basin is reflected in the gazettal of the natural areas as Newington Nature Reserve.

The Newington Armament Depot and Nature Reserve is one component of the Parklands, which constitute 430 hectares of the Sydney Olympic Park. The continuity of the Parklands is disrupted by roads, including Holker Street, Hill Road and Bennelong Road/Parkway but at the same time roads also define edges. The sense of containment that is part of the intrinsic character of Newington is in part reinforced by bounding streets.

The following section has been extracted from the report, *Newington Armament Depot and Nature Reserve, Sydney Olympic Park, Conservation Management Plan: Natural Environment Assessment* (September 2011), written by Dr Martin Denny of Biodiversity Monitoring Services. The full report is appended to the Conservation Management Plan (Volume 2 **Appendix F**).

### **3.2.2 The Ecological Landscape**

The area provides a unique setting within urban Sydney with representatives of the original natural environment still retained within a purely residential and industrial region. The history of development in and near RANAD allowed for the retention, partly by neglect, of several areas of the original vegetation that would have occurred along the Parramatta River. There are representatives of the littoral vegetation communities of Mangrove Forest and Coastal Saltmarsh that once were part of much of Sydney Harbour and the associated rivers (e.g. Parramatta and Lane Cove Rivers). Slightly inland from Parramatta River are Swamp Oak and Eucalypt Forest that also represent vegetation communities lost from much of the Sydney Basin.

The values of these communities were recognised in the gazettal of the Newington Nature Reserve in 2000. However, the area now encompassing the Nature Reserve was considered of natural importance far earlier, with the cessation of mowing activities to remove the understorey (fire hazard reduction) in 1981, and understorey plants have been allowed to regenerate since that time. Newington Nature Reserve is unique in that as well as being gazetted as a Nature Reserve under the *National Parks and Wildlife Act 1974* (NPW Act), it is defined as part of the Parklands of Sydney Olympic Park by the *Sydney Olympic Park Authority Act 2001* (SOPA Act). The Parklands are managed by the Sydney Olympic Park Authority (the Authority). Newington Nature Reserve is managed by the Authority under the terms of an agreement with the NSW National Parks and Wildlife Service (NPWS).

Newington Nature Reserve is in two disparate parts, a forest of 13 hectares and a wetland of 34.7 hectares, together providing the Newington Nature Reserve of 47.7 hectares. The two parts of the Nature Reserve are separated by a narrow band of grassland that contains scattered trees, a railway line, buildings associated with the former Newington Armament Depot, and a sealed service road. Ownership of this separating land is vested in the Sydney Olympic Park Authority and it is part of the Parklands.



Figure 3-1 The Newington Nature Reserve wetland viewed from the Silverwater Marker (Source: Tanner Architects).

According to the *Newington Nature Reserve Plan of Management*, the ecological features and physical characteristics of the Newington Nature Reserve wetland and forest reveal a number of important values (including natural, landscape, cultural, knowledge and educational values) associated with an isolated saltwater wetland and native vegetation remnant. Important values described in the State Heritage Register listing for the Newington Nature Reserve include:

- The Newington Nature Reserve supports 13 hectares of Sydney Turpentine Ironbark Forest, classified as a critically endangered ecological community under the *Commonwealth Environment Protection and Biodiversity Act 1999*, and as endangered under the *NSW Threatened Species Conservation Act 1995*. Twenty eight native plants, identified as being of regional conservation significance, have been recorded within the forest. It has a high density of hollow-bearing trees (uncommon in other similar remnants of this community), which provide nesting sites for birds and potential microbat roosts. It is an important local and regional stronghold for bush bird and bat species, and provides a base for species that rely on the forest for shelter and breeding habitat, but utilise parkland and urban habitats for feeding and movement;
- The Newington Nature Reserve supports a 35-hectare estuarine wetland, which contains Mangrove Forest, mudflats, Swamp Oak Floodplain Forest and Coastal Saltmarsh. Mangroves are classified as protected marine vegetation under the *NSW Fisheries Management Act 1994*; Swamp Oak Floodplain Forest and Coastal Saltmarsh are each classified as an endangered ecological community under the *NSW Threatened Species Conservation Act 1995* (TSCA). *Wilsonia backhousei*, listed as vulnerable under the TSCA, is a component of the saltmarsh community. The saltmarsh community also supports two species of restricted distribution and local conservation significance. These are *Halosarcia pergranulata* and *Lampranthus tegens*;

- The Newington Nature Reserve contains a complete zonal succession of Eucalypt Forest, Casuarina Forest, saltmarsh and mangroves; the only such succession remaining on the Parramatta River estuary;
- It supports the only known maternity roost of the White-striped Freetail Bat (*Tadarida australis*) in the Sydney area. This maternity roost is established in the roof and wall cavity of a former explosives storehouse. Several other former explosives storehouses within the precinct also show evidence of recent use as maternity roosts by several bat species;
- It supports a population of the Green and Golden Bell Frog, listed as an endangered species under the NSW TSCA, and as a vulnerable species under the Commonwealth EPBC;
- It supports 144 species of birds, including migratory species listed under international agreements between the governments of Australia, China, Japan and Korea;
- The Newington Nature Reserve takes up land approximately one kilometre long along Parramatta River without actually including the edge of the river frontage; the estuarine wetlands form part of a network of estuarine habitats along the Parramatta River utilised by migratory shorebirds;
- The Newington Nature Reserve supports one of two remaining Sydney populations of the White-fronted Chat (*Epthianura albifrons*). This species is listed as vulnerable under the *Threatened Species Conservation Act*, and the Sydney Olympic Park population as a whole is listed as an endangered population (SOPA 2010).

The important values listed for the Newington Nature Reserve forest include:

- A reserved area of Sydney Turpentine Ironbark Forest, which is listed as a critically endangered ecological community under the NSW *Threatened Species Conservation Act 1995* and is listed as vulnerable nationally under the provisions of the Federal *Environment Protection and Biodiversity Conservation Act 1999*;
- Mature forest habitat for a large number of flora and fauna species;
- A high density of hollow-bearing trees, not found elsewhere in the region;
- A “base” for fauna that rely upon the forest for shelter and breeding, but utilise habitats in surrounding Parklands and suburban areas for feeding and movement;
- A stepping stone for native species, particularly birds and bats, moving between remnants within Sydney;
- An important local and regional stronghold for forest bird and bat species.

The key habitats within Newington Armament Depot and Nature Reserve are shown in Figure 3-2.

Newington Nature Reserve is contained within and forms an integral part of Newington Armament Depot. The land outside the Nature Reserve contains extensions of the endangered ecological communities of the Reserve, as well as maintaining and enhancing the natural features conserved within the Nature Reserve. The location of Newington Nature Reserve in the context of the Armament Depot is shown in Figure 3-3. The figure also shows other areas of importance within the Depot’s surrounds. Each part of the Depot has different priorities and these influence the overall planning and management.

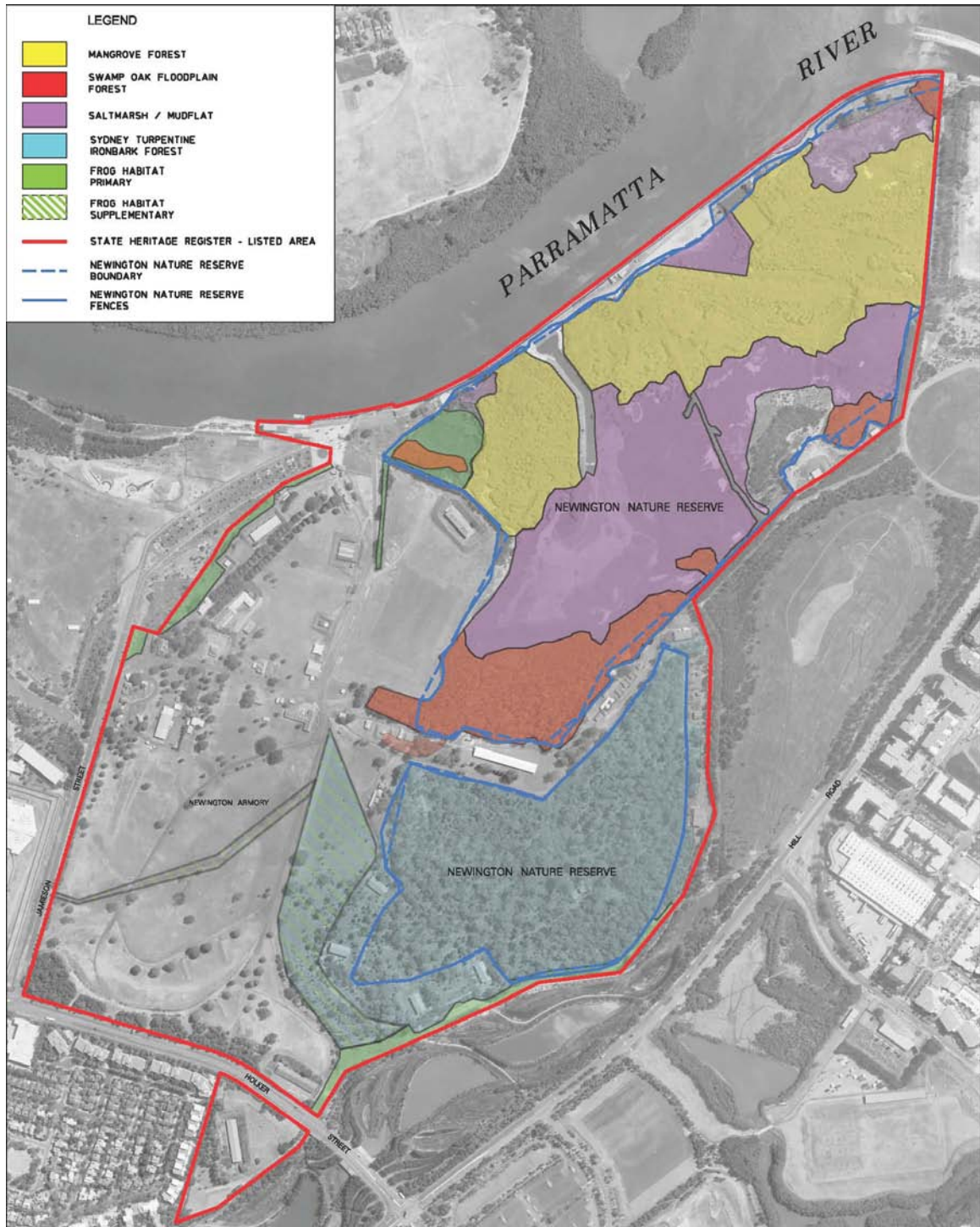


Figure 3-2 Key habitats within the Newington Armament Depot and Nature Reserve (Source: SOPA).



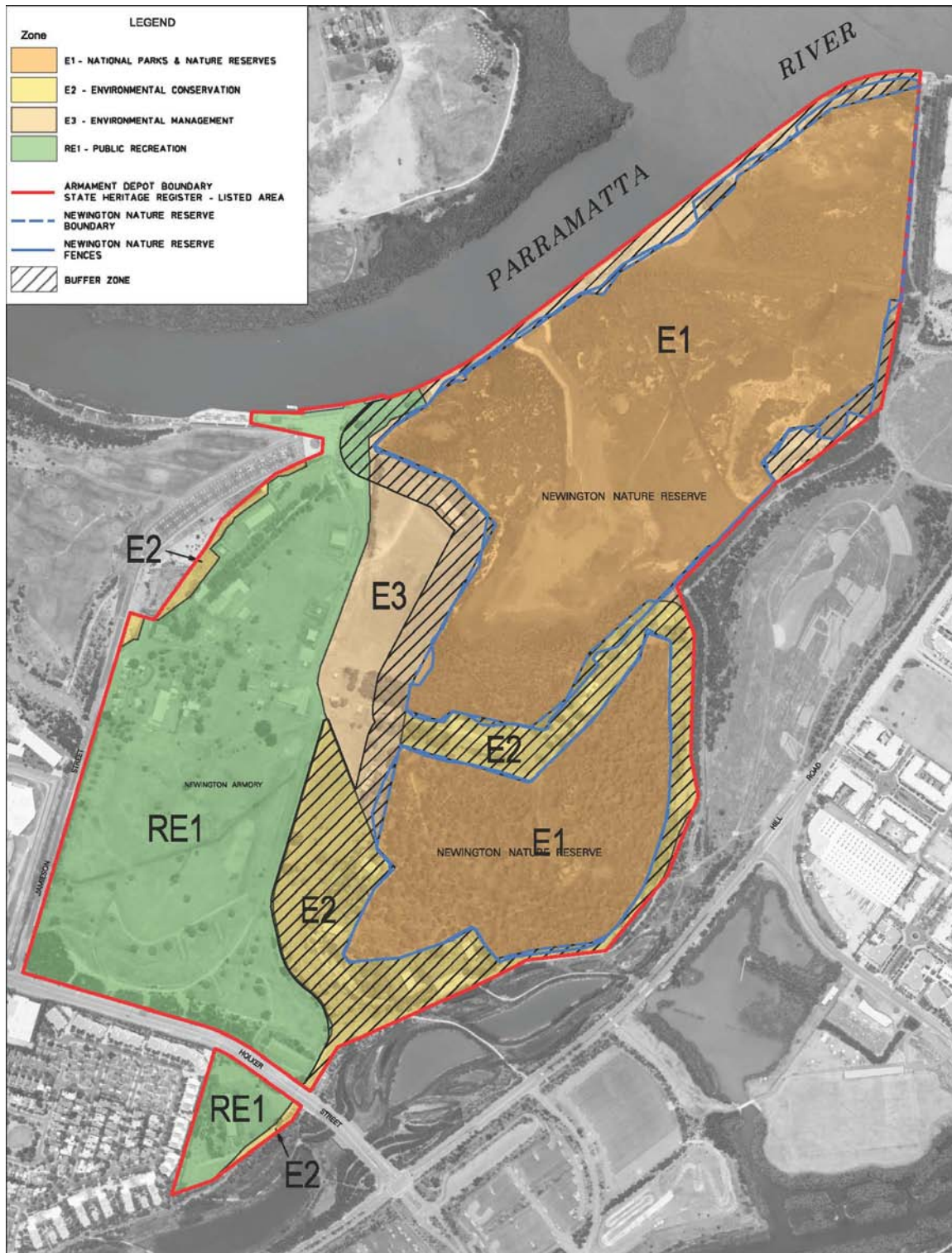


Figure 3-3 Main zones within the Newington Armament Depot and Nature Reserve (Source: SOPA).

### 3.3 ABORIGINAL PRESENCE

This section of the report is based on the *Aboriginal Heritage Assessment* (January 2012) prepared by Australian Museum Business Services. The full report is appended to the Conservation Management Plan (Volume 2, **Appendix G**).

An understanding of environmental factors within the local landscape provides the context for past human occupation and the history of the area. The geology of the study area is underlain by quaternary alluvium along the Parramatta River shoreline, which consists of alluvium, gravel, sand, silt and clay. The southeastern parts of the study area consist of Triassic Wianamatta Group Shales<sup>24</sup> that consist of shale with some sandstone beds. Soils in the study area are Birrong, Blacktown and Ettalong Soil Landscapes and areas classified as disturbed terrain.<sup>25</sup>

Characteristically, Aboriginal occupation was often focused on prominent landforms such as ridges, which were favourable locations for camping and travelling, and from which surrounding plant and animal resources could be viewed. Aboriginal people also camped on lower elevated areas adjacent to reliable water sources. Locations along the Parramatta River such as the Newington Armament Depot and Nature Reserve would have been frequently occupied for water and marine food resources. However, the long period of historic land use across the site has impacted on the presence and integrity of any Aboriginal archaeological deposits within the study area.

The Aboriginal Heritage Information Management System (AHIMS) database indicates there are three isolated finds and two potential archaeological deposits (PADs) recorded in the study area (refer to Figure 3-5). The Newington Armament Depot and Nature Reserve has been the subject of several archaeological investigations. During a 2003 survey undertaken by Paul Irish, three isolated silcrete and chert artefacts and two PADs were identified in the Newington Nature Reserve forest.

As part of the preparation of this CMP an Aboriginal cultural heritage survey was undertaken on 28 June 2011 by AMBS archaeologist Jenna Weston, accompanied by Aboriginal community representative James Smith. The purpose of the survey was to verify the location of previously recorded sites within the Newington Nature Reserve, possibly locate any new archaeological sites and to identify the potential for archaeologically sensitive areas. The survey involved pedestrian transects throughout the forest section of the Newington Nature Reserve, focusing particularly on previously recorded site locations and areas of ground exposure.



Figure 3-4 Extensive grass and undergrowth within the Newington Nature Reserve forest, left, and silcrete on an old track within the forest (Source: AMBS, p.23).

<sup>24</sup> These are comprised of the Liverpool Sub-Group of Minchinbury Sandstone and Bringelly and Ashfield Shales.

<sup>25</sup> Refer to Appendix G Section 3.2.



The methodology in the event that Aboriginal artefacts were encountered included the following:

- Taking notes regarding the type, size and material of the artefacts;
- Describing the associated site, including environmental setting and details of any disturbance to archaeological material in the site's vicinity;
- Taking Geocentric Datum of Australia co-ordinates;
- Photographic recording of objects and their location.

Although there is likely to have been extensive Aboriginal occupation of the area, evidence of this occupation is only likely to remain in the relatively undisturbed forest area as the remainder of the site has been extensively disturbed. However, the extent of ground cover in the forest prevented identification of new and previously recorded Aboriginal sites. No new sites were located and previously recorded sites were verified, although this was anticipated because the sites were isolated artefacts that are unlikely to be verified by later investigators. No artefacts were located on the ground surface of the PADs.

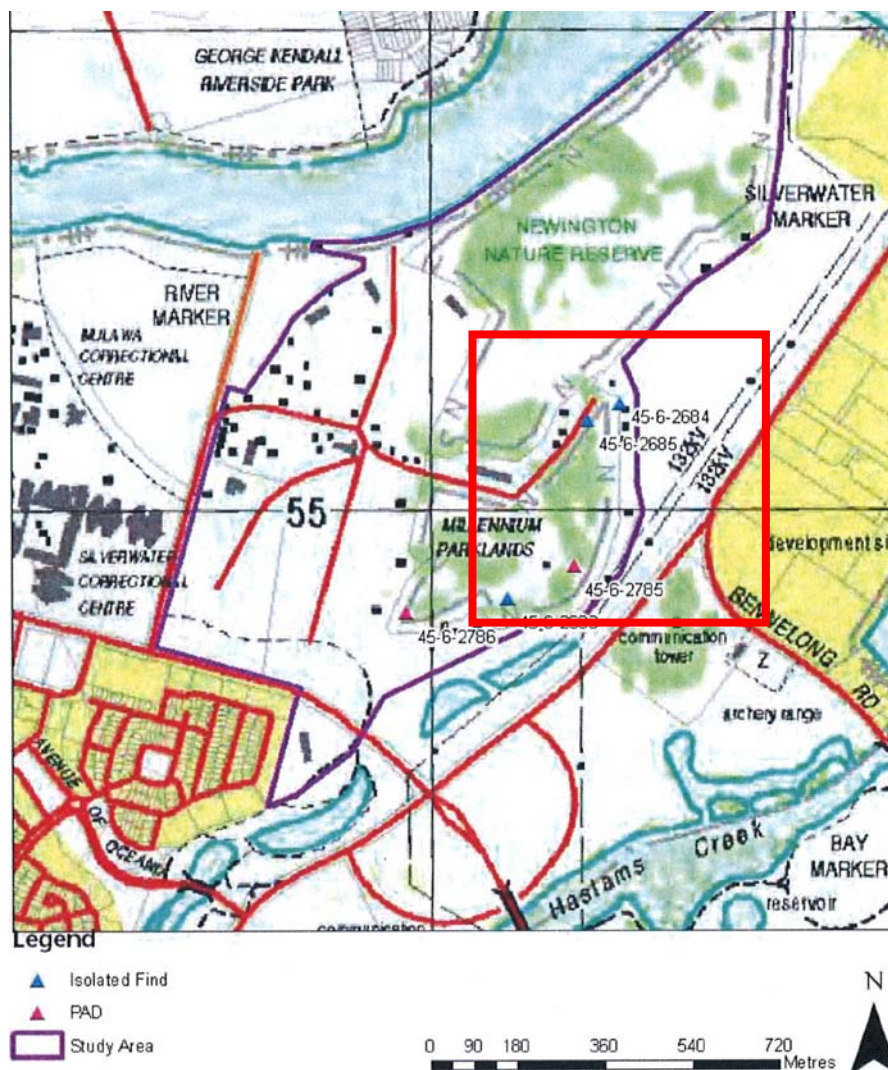


Figure 3-5 Sites in the Newington Armament Depot and Nature Reserve identified in the AHIMS database. The sites are all within the forest of the Newington Nature Reserve (Extracted from AMBS, p.15).



### 3.4 CULTURAL LANDSCAPE

#### 3.4.1 Preamble

Many aspects of the landscape of the Newington Armament Depot and Nature Reserve have been formed and reformed by human interference and manipulation. It was a culturally influenced landscape well before Europeans settled on land previously occupied by Aboriginals. Artefacts found in the forest and at Newington provide evidence that Aboriginal people utilised the site if not for food gathering and hunting then at least for the making of implements.

The cultural landscape of the site consists of areas of wetland, foreshore, grasslands and forest and Armament Depot infrastructure and buildings. The buildings and infrastructure are spread right across the site, within the forest and wetland areas as well as in the open grasslands.

As the land was used for defence purposes for about 100 years from the end of the nineteenth century, it retains the character and qualities of an institutional landscape. It is the outcome of the requirements of the handling and storage of armaments. The berms associated with the storage buildings and ground modelling associated with access paths, roads and railway are an integral part of the cultural landscape's character. Berms have a pragmatic form, being formed to deflect explosive blasts.

The cultivated open landscape character of much of the Newington Armament Depot is in stark contrast to the forest and wetland. This contrast is an important characteristic of the Depot's overall sense of place. The landscape is generally characterised by broad open space, with clear sight lines over areas of mown grass to numerous built items and the Newington Nature Reserve. There is a limited range of historical planting, which includes Camphor Laurels from the late nineteenth century and Brushbox trees from the inter-war period. Other substantial trees and shrubs reflect attitudes to cultural plantings from the last third of the twentieth century. This array of planting reflects concerns about the operational characteristics of the place and the need for clear views across the site to facilitate security and operations. Avenue planting associated with some of the access roads has eroded over time and needs to be reinstated.

For the purposes of description and analysis, this section of the report makes use of the four precincts outlined in CMP 2003. The precincts allow analysis of the relationships between cultural landscape and historical development. They principally relate to historical periods of development but also reflect changing processes of explosives storage and handling and the integration of these developments into different landscape elements.

The historic precincts are:

1. Original Establishment Precinct (Precinct 1);
2. Early Naval Occupancy Precinct (Precinct 2);
3. RAN Wartime Expansion Precinct (Precinct 3); and
4. US Navy Utilisation Precinct (Precinct 4).

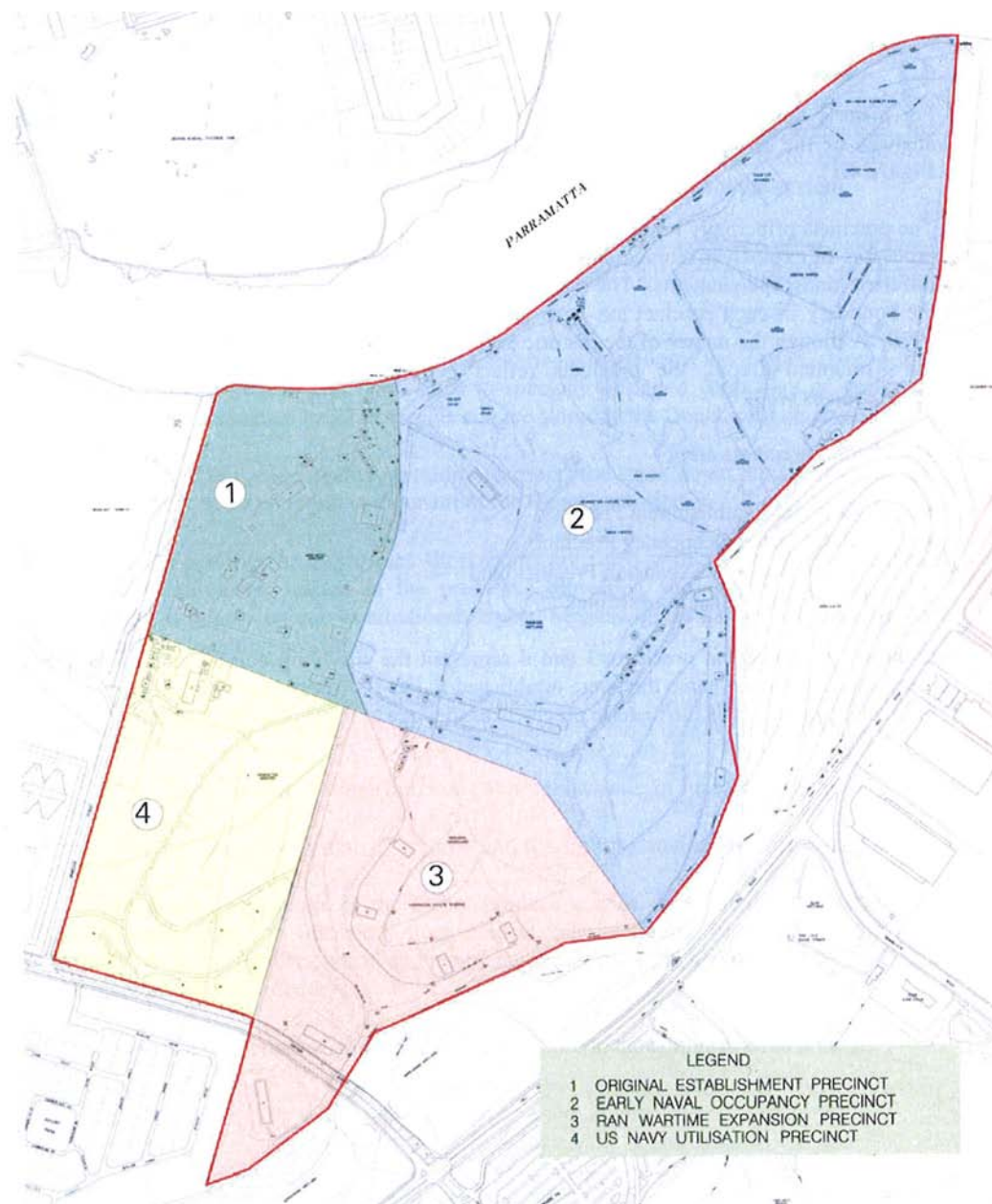


Figure 3-6 Historic precincts (Extracted from Graham Brooks and Associates 2003, p.78).

### 3.4.2 Original Establishment Precinct (Precinct 1)

Prior to the military occupation of the site, this portion was part of the first three small land grants that preceded Blaxland’s Newington Estate. The precinct contains areas of cleared grassland, ornamental plantings, reclaimed land and the Parramatta River interface.

This precinct contains a historical association with part of the first land grants made in this area between 1797 and 1800. The river frontage holds the key to the early granting of this area, as with the later Defence establishment, as it provided transport and access. Altering the flow of water over the site and reclaiming land on the river’s edge probably began soon after settlement and has continued to this day. The northwest corner of the precinct was originally marshland, which was cleared and drained during the establishment of the first powder magazines. This area had retained some wetland character until recent works associated with the Parklands saw more levelling and clearing of the area.



Figure 3-7 Relationship of Newington House and the Original Establishment Precinct (Precinct 1).  
(Source: Google Maps with Tanner Architects overlay).

There is a close relationship in this precinct (as with the other three precincts), between topography and building function. The precinct is divided into two landscape areas, the flat areas close to the riverfront and the hill to the south. Although the landscape is open it is interspersed with trees. The avenue of Camphor Laurel trees that extends along the northwestern section of this precinct may have been planted during the 1930s – aerial photographs taken during 1943 show small, widely spaced trees. The landscape between this avenue and Jamieson Street is a shallow valley interspersed with shrubs and trees that are relatively recent plantings. There are also stands of trees in the vicinity of the Jamieson Street entry and along the road forming the southern boundary of the precinct. Young eucalypts planted in the 1970s and afterwards are located on the higher sections of this precinct.

Views from the high section to the Newington Nature Reserve capture the breadth of the site and highlight the relatively well-vegetated character of this section of the precinct.





Figure 3-8 Cultural landscape resulting from the requirements of the early powder magazine in the low section of the Original Establishment Precinct (Source: Tanner Architects).



Figure 3-9 The change in topography on the western side of the precinct terminates views from other parts of the site (Source: Tanner Architects).



Figure 3-10 The avenue of Camphor Laurels defines the ridge beyond the shallow valley to the east of Jamieson Street (Source: Tanner Architects).



Figure 3-11 The view from near Building 123 to the northeast provides a vista that embraces the open grassland and part of the Nature Reserve in the northeastern section of the site (Source: Tanner Architects).



Figure 3-12 Landscape character near the Jamieson Street site entry (Source: Tanner Architects).



Figure 3-13 Planting associated with the grounds of Building 123, which interprets its domestic garden setting (Source: Tanner Architects).



Figure 3-14 Post-1970 eucalypts in the Original Establishment Precinct (Source: Tanner Architects).

### 3.4.3 Early Naval Occupancy Precinct (Precinct 2)

This precinct is situated along the central and southern edge of the Newington Armament Depot and Nature Reserve. It includes wetland and forest in the Newington Nature Reserve as well as undulating lands to the south. The forest is a remnant of Cumberland Plain Forest in metropolitan Sydney. Within it there is evidence of Aboriginal occupation of the site in the form of three isolated silcrete and chert artefacts and two PADs, which are likely to be of historic and social significance to the Aboriginal community.

The shape of the wetland, along with the remains of the 1890s fascine dyke and stone sea wall, indicate a period of early landfilling prior to the construction of the magazine. The wetland is a valuable remnant of saltmarsh and mangroves, which indicates the character of the area before European settlement.

The wetland environment and the perception that it was an isolated and unproductive area of land coloured the development of the precinct. The function of buildings in the wetland and the processes of disposal carried out there reflect the lack of value placed on this part of the site at that time. The remediation of the wetland environment for the Parklands, with the reinstatement of tidal flushing and other efforts to restore the saltmarsh, demonstrates the continuing history of environmental change on the site, continuing human impact on the Depot's environment and new approaches to ecological restoration.

The northern edge of the wetland is bordered by a pedestrian and cycling path, which separates it from the Parramatta River. To the west of the Newington Nature Reserve is a large open area of grassland, which is a significant intermediate area between the Nature Reserve and the rest of the Armament Depot. At its northern end, the berms associated with Building 18 rise abruptly above the open area and are a defining feature. The cultural landscape intrudes into the Nature Reserve as a corridor containing isolated groups of buildings surrounded by areas of mown grass. The open spaces, with their well tended grass and rounded berms, form a striking contrast to the surrounding regrowth of native vegetation.



Figure 3-15 Pedestrian path/cycleway along the northern edge of the precinct demonstrates new uses for the site (Source: Tanner Architects).



Figure 3-16 Interface between the wetland and the open area to its immediate west (Source: Tanner Architects).



Figure 3-17 The area of open land to the immediate west of the Nature Reserve has been defined as a buffer zone. The view looking north to Building 18 at left demonstrates the impact of protective berms in the cultural landscape. The photograph at right is a view looking to the south across the area from the berm adjacent to Building 18 (Source: Tanner Architects).



Figure 3-18 Buildings and berms within the open corridor traversing the Nature Reserve. The buildings and berms demonstrate the importance of the Armory in establishing the distinctive cultural landscape of Newington (Source: Tanner Architects).



#### 3.4.4 RAN Wartime Expansion Precinct (Precinct 3)

The most distinctive area within this precinct is the forest in the Newington Nature Reserve. The forest area, like the wetland, is a landscape shaped by the needs of the Armament Depot. The forest was largely preserved from wholesale clearing which occurred over the rest of the Newington Armament Depot, though it would have been utilised in timber getting, which was carried out in the time of Blaxland's Newington Estate. Sheep and cattle from the State Abattoir would have grazed the area and during the period of naval occupation the area was regularly mown to reduce fire hazard.

The landscape in this section of the site has also been influenced by transport infrastructure. A cutting has been formed to allow the light railway to sweep along a relatively deep cutting to loop around to the southern periphery of the Nature Reserve.



Figure 3-19 This area of grasses in the RAN Wartime Expansion Precinct shows how the site has evolved since the end of the 1990s (Source: Tanner Architects).



Figure 3-20 Light railway cutting in the southern section of the precinct, showing natural regrowth in the foreground (Source: Tanner Architects).

#### 3.4.5 US Navy Utilisation Precinct (Precinct 4)

The landscape in this precinct is grassland with scattered trees (some of which appear to be regrowth from original forest) and an undulating character. A creek line meanders through the site, probably following the course of the original drainage line.

The clearing, grazing and later the constant mowing by the Navy has left this precinct with the appearance of an undulating paddock, strengthened by the placement of buildings under earth berms. The dearth of native trees in the grassland area was probably due in large part to the use of stock by the abattoir and later by the military for fire prevention, as well as the mowing regime of later years. In parts of the site today, along the western and southwest boundary of the forest where mowing ceased in the 1980s, there has been some natural regeneration of native species, where propagules have remained in the soil, or from seed spread into the grasslands area from the forest.

The cultural landscape in the southern section of this precinct is characterised by expansive areas of open space necessitated by the requirements of explosives storage. Landforms have been created by burying structures as a measure to mitigate the effects of accidental explosions. This part of the Newington Armament Depot has a strong sense of isolation.



Figure 3-21 View looking south across the US Navy Utilisation Precinct from its northern edge (Source: Tanner Architects).



Figure 3-22 Vista from the northern section of the US Navy Utilisation Precinct to the Newington Nature Reserve forest (Source: Tanner Architects).



Figure 3-23 Open character of the eastern side of the US Navy Utilisation Precinct (Source: Tanner Architects).



Figure 3-24 Looking north along the Burma Road towards the road junction known as Five Ways (Source: Tanner Architects).





Figure 3-25 The construction of explosives stores and associated road access generated the industrial landscape associated with the Armory in the southern part of the US Navy Utilisation Precinct (Source: Tanner Architects).



Figure 3-26 Brushbox trees on either side of the roadway known as The Banana (Source: Tanner Architects).

### 3.5 BUILDINGS AND INFRASTRUCTURE

#### 3.5.1 Preamble

This section of the report is based on material contained in CMP 2003 and makes use of the four precincts outlined in the report, which allows analysis of the relationship of historical development and built elements. As stated in Section 3.4 above, the development of buildings and infrastructure contributed to the cultural landscape.

The buildings and infrastructure are generally (but not invariably) grouped in terms of their function and date of construction and linked to each other and the wharf by roads and the light rail network. The significance of the road network is exemplified by the road junction known as Five Ways, which is located at the intersection of the four precincts and is an important focal point within the site. There have been four main periods of construction, augmented by buildings that were erected as needed. The main periods of construction are:

- The 1890s, when the Armory was originally established;
- The inter-war period (1920s and 1930s), when the site became the responsibility of the Royal Australian Navy and was consolidated to suit its needs;
- World War II, when the facility was greatly expanded in response to the war effort and the presence of the US;
- The post World War II era, during which the Armory continued to serve the RAN.

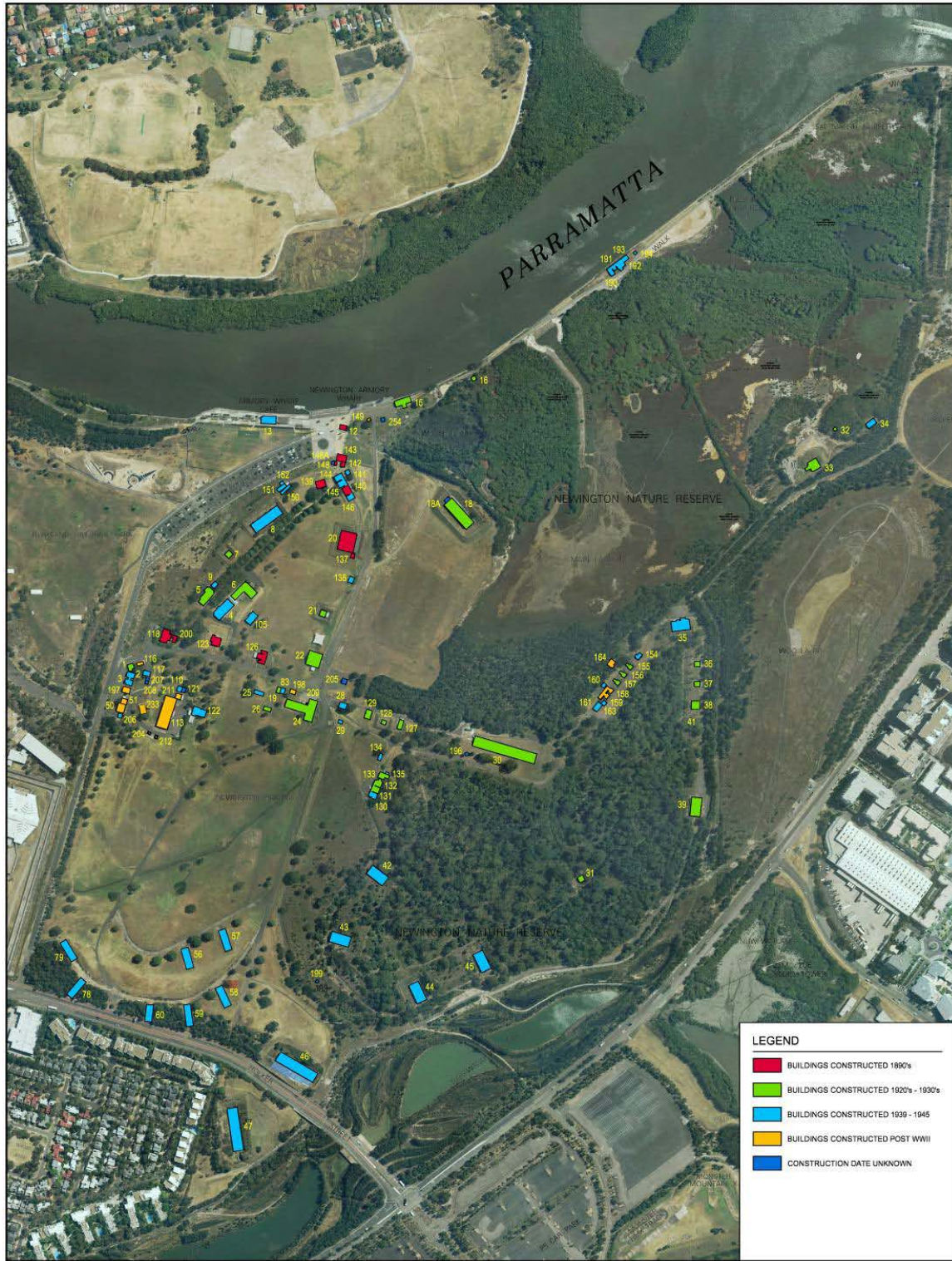


Figure 3-27 Main periods of building construction  
(Source: SOPA/Tanner Architects).





Figure 3-28 Main periods of infrastructure  
 (Source: SOPA/Tanner Architects).



Figure 3-29 Roads, as well as being significant infrastructure, are also important defining and unifying elements within the site. The road extending east from the Jamieson Street entry, at left, defines the Original Establishment and US Navy Utilisation Precincts, while the Burma Road, at right, links all four precincts and is the major pathway through the site (Source: Tanner Architects).

### 3.5.2 Original Establishment Precinct (Precinct 1)

#### 3.5.3 Description of the Precinct

This precinct is situated in the northwest corner of the Newington Armament Depot and Nature Reserve. It reflects the extent of the original Armament Depot development in the 1890s, but not the full extent of the early military reserve. This precinct contains several Federation period armaments buildings, which were the first on the site to be constructed for military purposes. A number of inter-war and later amenity buildings and supporting structures, as well as the wharf, the gatehouse and part of the light rail system are also located within this precinct. The area associated with the wharf and gatehouse is the principal entrance to the Newington Armament Depot. The precinct contains structures, infrastructure and other elements documenting the establishment and development of the Armament Depot from 1897 to the early decades of the twentieth century.

The original Gunpowder Magazine facility built in 1897 consisted of a magazine, which has been partly obscured by a later addition on its east side (20), a gun cotton store, a workroom (140), a toilet block (148), a packing room (142), three residences (118, 123 and 126) and a gatehouse (143). The facility faced the river, while three of the residences were placed close to the road entry at Jamieson Street. The facility was placed close to the wharf and was built in an area which had been cleared and partially reclaimed by the earlier pastoral settlers. The original magazine was surrounded by an iron fence, evidence of which remains in its exposed footings (242) and two gateposts (241), which are at one end of an early roadway. The original facility was placed as close as possible to the unloading point of the wharf, and linked to it by a light rail system to transport the explosives. The original magazine, along with later magazines, were built into the hillside to allow some natural blast containment and faced out onto an empty wetland. The Jamieson Street entry was the point of road access. The river was the link with the harbour, which was the source of gunpowder from ships, stores and naval facilities.

The environment also played a determining role in the evolution of the precinct as the availability of flat land for the light rail system and the design of blast containment measures determined the placement of buildings. The administration facilities on the hill are linked to the original depot and the wharf by roads. A roadway leads from the wharf, past the storehouses, up the hill to Jamieson Street. Along this roadway are a number of workshops built in the 1940s and a 1929 stable, which housed the police horses. The offices for the Police (1) were sited at the gateway on Jamieson Street.





Figure 3-30 Wharf area viewed from the west (Source: Tanner Architects).



Figure 3-31 The gatehouse and other early buildings viewed from the wharf area (Source: Tanner Architects).



Figure 3-32 Original section of the Newington Armory viewed from Jamieson Street (Source: Tanner Architects).



Figure 3-33 Building 143, the gatehouse, is amongst the most architecturally considered buildings within the site (Source: Tanner Architects).



Figure 3-34 Late nineteenth century stone gateposts, with the early road beyond (Source: Tanner Architects).



Figure 3-35 Footings of early fence. Other footings extend across open ground to the east of the gateposts (Source: Tanner Architects).



Figure 3-36 Building 20 viewed from the west graphically demonstrates the procedure of containing explosions through earthworks. The roof form of this building is the most distinctive built element on the site (Source: Tanner Architects).



Figure 3-37 Building 20 with Building 137 in foreground. The flat roofed section is a later addition to Building 20. The berms associated with these structures are a significant feature of the precinct (Source: Tanner Architects).



Figure 3-38 Former residence, Building 118 (Source: Tanner Architects).



Figure 3-39 Former residence, Building 123. The verandah has been reconstructed – photographs taken in 1996 show it had been removed before that time. The building is now part of Sydney Olympic Park Lodge (Source: Tanner Architects).

The buildings on the hill area performed mainly staff and administrative functions. They were sited away from dangerous operational areas, close to the road access point and staff facilities. The first buildings were three 1897 bungalow residences for officers and staff (118, 123, now part of Sydney Olympic Lodge, and 126, now artist studios). These illustrate the isolation of the early Depot from housing areas and the requirement to provide 24 hour emergency and security staff at the facility.

In the 1920s, an office was added (6) with naval flagpole and changing room (5) and in the 1940s another building for a cafeteria (4) and training (105). Buildings 4, 5 and 6 have been adapted for use as the Sydney Olympic Park Lodge. Another small 1897 residence (139) to the southwest of the original magazine was sited on the brow of the hill and linked by footpaths to the workshops. The functions of all these buildings have changed over the years to reflect changing explosives regulations and storage regimes, but the general patterns of siting and function, which were maintained from the point of establishment until the 1940s are still extant.





Figure 3-40 Sydney Olympic Park Lodge includes the group formed by Buildings 4, 5 and 6 (Source: Tanner Architects).



Figure 3-41 Building 139. Intrusive verandah infills evident in 1996 photographs have since been removed and the verandahs reconstructed (Source: Tanner Architects).

The siting of the explosives storehouses was determined in the first place by blast containment considerations, which in turn was influenced by the site topography. The process of inspection and testing of the ordnance, before it was placed into storage, determined the placement of workshops between the point of unloading on the wharf and the storehouses. All these inter-relationships can be seen in the layout and structures of the precinct today.

The area close to the wharf is dense with storage and workshop buildings. Workshops and office buildings were sited before storehouses, as a means of facilitating the administrative, inspection and storage processes. This pattern was retained over time with the addition of new buildings before 1940 as the Armament Depot prepared for the advent of World War II. Four workshops were built between the original magazine and the gatehouse, and adjoined the 1897 explosives workroom (140). The explosives workrooms (141, 144, 145 and 146) were sited to continue the pattern of inspection and testing prior to storage. In 1937, a second explosives storehouse (21) was built beyond the 1897 magazine (20), repeating the techniques of building into the hillside to take advantage of natural blast containment. It is thought this building was constructed on the site of the 1897 gun cotton store.

On the wharf itself where the bulk of explosives handling was carried out, are two stores (13, 15), which performed temporary storage functions. Two large industrial cranes (247) built in 1973, replaced two other cranes from 1929. These lifted stock onto the wharf from concrete lighters, which were moored at Spectacle Island. The wharf was the main hub of the Depot transport system with multiple light rail tracks and transport buildings and therefore acts as a focal point for all other transport infrastructure elements in the precinct. The wharf has undergone two major refurbishments, in 1924 and 1940.

From the wharf, a light rail line goes to the west servicing two brick explosives storehouses (7, 8) of the inter-war period, which have been built to take advantage of the hillside. The hillside provides a safe area for the administration facilities and also a natural blast containment landform for the storehouses, thus patterns of siting are repeated from 1897, 1937 and 1940 constructions. To the south, the light rail travels from the wharf through the workshops and storehouses of the original facility, to two 1920s timber framed non-explosives stores, Buildings 22 and 24 below the hill. All the storehouses are built on level ground with level access provided for the light rail. Building 22 is currently used as the Armory Theatre.



Figure 3-42 Buildings 144-146, which are integrated with the light rail system passing under the verandah (Source: Tanner Architects).



Figure 3-43 Building 20 is totally enclosed by a high berm, with light rail access cutting through it (Source: Tanner Architects).



Figure 3-44 The wharf precinct is distinguished by cranes, open space interspersed with trees and the major entrance to the Armament Depot site. Building 12 is a prominent element within this precinct (Source: Tanner Architects).



Figure 3-45 The monolithic form of Building 8 is modulated by the small porches used by workers (Source: Tanner Architects).



Figure 3-46 Building 22 (the Armory Theatre), which occupies an important location at Five Ways. Building 24 is visible beyond it (Source: Tanner Architects).



The operational processes of the Original Establishment Precinct are demonstrated not only in the relationships between the elements, but also in the building details. The roofs of the workrooms and storehouses are crossed by systems of lightning prevention with conductors, earthing strips on all fixtures and low fire-risk materials. The internal fixtures and equipment are all designed for spark prevention and fire minimisation. Over the period of development of explosives storehouses, 1897-1940, materials and types of explosives changed but the principles of siting did not. The building functions and work processes are illustrated in occupational health and safety signage, explosives warning signs and handling fixtures such as gantries, benches, tools and fire fighting equipment, which again illustrate the development of explosives technology.

**Table 3.1 Buildings in the Original Establishment Precinct**

| Number | Name and Date of Construction                     | Present Use (2012)                            |
|--------|---|---|
| 1      | Dockyard Police Office, 1928                      | Vacant  |
| 2      | NDP Mess Room/Toilet, circa 1940                  | Temporary Accommodation                       |
| 3      | NDP Change Room, circa 1940s                      | Temporary Accommodation                       |
| 4      | Canteen, 1944                                     | Sydney Olympic Park Lodge                     |
| 5      | Change Room/Toilets, 1926, 1944 alterations       | Sydney Olympic Park Lodge                     |
| 6      | Office/Explosives Workshop Office, 1926/1972/1984 | Sydney Olympic Park Lodge                     |
| 7      | Brick Explosives Storehouse, pre 1937             | Vacant  |
| 8      | Brick Explosives Storehouse, 1940                 | Vacant  |
| 9      | Toilet Block, 1944                                |   |
| 12     | Wharf Transport Office, circa 1930s-1940s         | Armory Wharf Kiosk                            |
| 13     | Store, 1937/1944                                  | (Fire) Replaced – Armory Wharf Café           |
| 15     | Return Store, 1937                                | Licensed to NSWIS Rowing                      |
| 19     | Riggers' Store, circa 1930s-1940s                 | Vacant  |
| 20     | Original Gunpowder Magazine, circa 1897           | Vacant  |
| 21     | Brick Explosives Storehouse, pre 1937             | Vacant  |
| 22     | Non-explosives Store, circa 1922                  | Armory Theatre                                |
| 24     | Smoke Float Store, pre 1922, 1943                 | Artist Studios                                |
| 25     | Stencil Cutting and Tool Room, circa 1940s        | Licensed to Segway                            |
| 26     | Stables, 1926                                     | Vacant  |
| 83     | Sail Makers' Store, circa 1940s                   | Vacant  |
| 105    | Training Centre, 1944                             | Sydney Olympic Park Lodge                     |
| 116    | Time Clock Race, 1970                             | Vacant  |
| 117    | Toilet/Ablution Block, 1939                       | Vacant  |
| 118    | Residence, 1897                                   | Licensed to Cinewest & Scientist in Residence |
| 121    | Electrical Substation                             |   |

| Number                | Name and Date of Construction                   | Present Use (2012)                 |
|-----------------------|---|------------------------------------|
| 123                   | Residence, 1897                                 | Sydney Olympic Park Lodge          |
| 126                   | Residence, circa 1897                           | Artist Studios                     |
| 137                   | Office, 1897.1924-1926                          | Vacant                             |
| 138                   | Storeman's Office, circa 1939                   | Vacant                             |
| 139                   | Residence, circa 1897                           | Licensed to Scouts Australia (NSW) |
| 140                   | Explosives Workroom, 1897                       | Licensed to Scouts Australia (NSW) |
| 141                   | Explosives Workroom (Office), 1940              | SOPA Interpretation                |
| 142                   | Explosives Packing Room, circa 1897             | Licensed to Centennial Cycles      |
| 143                   | Explosives Workroom/Gatehouse, 1897             | SOPA Visitor Centre and Bike Hire  |
| 144                   | Explosives Workroom, circa 1940s                | SOPA Interpretation                |
| 145                   | Explosives Workroom, circa 1943                 | Licensed to Segway                 |
| 146                   | Explosives Workroom, pre 1939                   | Licensed to Scouts Australia (NSW) |
| 147                   | Compressor Room, circa 1939                     | Removed                            |
| 148                   | Toilet Block, 1897                              | Adaptive Reuse – Public Toilets    |
| 149                   | NDP Wharf Office, post 1950                     | Vacant                             |
| 150                   | Electromobile Garage, circa 1940s               | Vacant                             |
| 151                   | Electromobile Workshop, circa 1940s             | Vacant                             |
| 152                   | Transformer Room, circa 1940s                   | Vacant                             |
| 198                   | Flammable Liquids Store, 1963                   | Vacant                             |
| 200                   | Toilet Block, circa 1897                        |                                    |
| <b>Infrastructure</b> |   |                                    |
| 235                   | Light Railway, 1897-1909                        | Part Public Use                    |
| 236                   | Wharf, circa 1895                               | Public Use                         |
| 237                   | Burma Road, pre 1937                            | Public Use                         |
| 241                   | Camphor Laurel Avenue and Gateposts, circa 1897 |                                    |
| 242                   | Footings of Original Fence Line, circa 1897     |                                    |
| 247                   | Cranes on Wharf, circa 1973                     | Not Used                           |

### 3.5.4 Early Naval Occupancy Precinct (Precinct 2)

#### Description of the Precinct

This precinct is situated in the northeast corner of the Newington Armament Depot and Nature Reserve site. It provides evidence of the period of expansion of the Armament Depot during the decades prior to World War II. This precinct is characterised by the great distances between groups of buildings and the ribbon expansion into areas with little dry and stable land. The light rail system was extended to the west to provide access to newly built stores, workshops, laboratories and explosives storehouses between the forest and saltmarsh. Several small buildings used for the proofing of ammunition are isolated between the river and the mangroves, four large storehouses are built along the edge of the wetland and five storehouses fringe the forest on the eastern boundary.

This precinct contains within it structures, infrastructure and landscape elements which chart the development of the Depot from the 1920s to the 1940s.

#### Analysis of the Early Naval Occupancy Precinct

This precinct contains within it the whole of that area which can broadly be described as wetland. This area of saltmarsh, mangrove and Casuarina stands was once part of the tidal mudflats of the Parramatta River.



Figure 3-47 Two views of the northern end of the Newington Nature Reserve wetland near the Parramatta River. The rehabilitation of the wetland has been accompanied by hydrology management and various monitoring programs (Source: Tanner Architects).

The difficulty of building in the wetland affected the patterns of development in the precinct once expansion for Defence purposes became a pressing concern. Available land was scarce and the great distances, which separate areas of development, therefore distinguish the precinct. In 1890, reclamation of the foreshore began and the fascine banks were built, followed by the sandstone sea wall (248). The foreshore was shaped artificially and the shape remains to this day. From the wharf the light rail system turns east, towards an explosives storehouse surrounded by an impressive berm (18) built in 1938 and now used as the Armory Gallery. The storehouse is isolated within earth surrounds in an expanse of open grass on the edge of the saltmarsh. It was built on reclaimed land, at the same time as those on the western side of the Original Establishment Precinct, and its design mirrors those of Buildings 7 and 8. Its siting demonstrates the outer limits of flat and firm ground close to the wharf and the pressing need of the Armament Depot to expand prior to World War II.



Figure 3-48 Reclaimed foreshore and Building 193 (Source: Tanner Architects).



Figure 3-49 Building 18, used as the Armory Gallery (Source: Tanner Architects).

The environment played a key part in determining the layout of structures in the precinct, and the design of blast containment measures. The availability of land and the laws governing separation distances between explosives storehouses determined the placement of buildings. There is a close relationship between environment and building function. The precinct in fact contains three areas of development that relate to landscape type and the ecosystem: the riverfront; the wetland; and the Casuarina forest.

The light rail system continues in flat areas to service the workshops and storehouses of the precinct. From the centre of the site it branches east and passes along an area of dry flat land between the forest rises and the wetland, fringed by dense Casuarina stands. The ribbon development in this area reflects the narrow corridor of land available for building in the inter-war period.

The first building along the light rail line is an administration office (28) from the 1940s, three workshops (127, 128 and 129) from 1924 and a storehouse (30) from 1922. As in the first precinct there is a strong relationship between functional components of the place, elements with an order approximating administration, inspection and testing, and armament storage. This pattern was maintained even as the site evolved, buildings were added and the technology of explosives changed. These patterns of siting buildings of particular functions together are shown particularly well in the area distinguished by Casuarina stands. A striking water tower (196) rises beyond Building 30.



Figure 3-50 Buildings 128 (left) and 129 (right) are components of a small group of buildings originally used for inspection and testing, and demonstrate the close links between buildings and infrastructure, in this case the light rail, that are one of the important characteristics of the Armament Depot (Source: Tanner Architects).



Figure 3-51 Building 30, an integral component of the light rail system (Source: Tanner Architects).



Figure 3-52 Water tower Building 196 (Source: Tanner Architects).

The light rail passes along the edge of the Casuarinas from Building 30, which is presently used to house the light rail trains, and reaches a picturesque area of small offices, facilities and workshops. In a line from west to east are a large toilet block (161) from 1944, an office (160) from the 1940s and another office (163) from 1944. Three inspection workshops (155, 156 and 157) were added from 1926 and then two additional workshops (158, 159) were added from the late 1940s. At the end of the group, a soldering room (154) was built in 1939 and a large explosives storehouse (35) in the 1940s. These buildings form a distinctive and coherent group distinguished by consistency in scale, form and use of building materials.





Figure 3-53 The roofs of Buildings 55, 56 and 57 rise above the protective berm (Source: Tanner Architects).



Figure 3-54 Former soldering room, Building 154, with the group of workshops Buildings 155-157 beyond (Source: Tanner Architects).



Figure 3-55 Building 155, erected during the 1920s, is typical of the other former inspection workshops (Source: Tanner Architects).



Figure 3-56 Bunkers cut into the berm on the south side of Building 155. The signage on the wall of the building is characteristic and is important in understanding the operations of the Armory (Source: Tanner Architects).

The light rail extends from this corridor in a parabola around the natural curving rise of the forest to finish at a series of four magazines (36, 37, 38, 39) built circa 1922. These isolated magazines have been built into the hill, providing some natural blast containment and face out onto what was once empty marshland. The isolation of the area was exploited by siting the storehouses with their backs to the forest and their faces to the marshes, where the effect of any blast would be minimal. Their distance from the wharf indicates the lack of flat land at this stage of the Armament Depot's development. Building 39 is now used for interpretive purposes, displaying various Navy moveable heritage items. It is an integral component of the light rail tour that is offered to visitors.

A bomb storehouse (33) built in 1928 for HMAS Albatross on an island of firm ground in the wetland was even more isolated. The light rail was extended out to the site and in 1939 a pyrotechnic store (34) was built at the eastern extremity of the wetland. The boggy natural landscape, although restricting expansion, also provided isolation and minimisation of blast impact from these high-risk storehouses.



Figure 3-57 Buildings 36, 37 and 38 are similar in appearance although Building 38 is larger than the other two (Source: Tanner Architects).



Figure 3-58 Building 39, an important destination for visitors undertaking light rail tours of Newington (Source: Tanner Architects).



Figure 3-59 Cluster of former proofing facilities on the edge of the Parramatta River, consisting of Buildings 190 to 193 (Source: Tanner Architects).

Along the riverfront east of the wharf was another operational area, which exploited the isolation of the wetland. The proofing ground was a series of workshops and laboratories for the testing of explosive ordnance. These proofing facilities (190, 191, 192 and 193) were all built between 1939 and 1941 and are linked to the main area of activities by a foreshore road along the sea wall. The reclaimed riverfront was an isolated strip of firm ground between the river and the mangroves behind, and the remains of the 1890s fascine bank and sandstone sea wall can be seen in parts. Also in this area was a burning ground and explosive disposal area, which took advantage of the limited use that the Depot could make of the wetland.

The operational processes of the precinct are demonstrated not only in the relationships between functional elements, but also in the construction of the buildings. The explosives magazines and workrooms of the 1920s have small porches at the front of the building where staff could change into regulation clothing. The workshops of the 1920s and 1940s are built to accommodate only two men at a time, restricting the amount of material that could be handled and thereby reducing the risk to staff. Workshops are constructed in rows along the light rail, and as an added precaution it was common to use only every second workshop at a time. As in all the workshop and storage areas staff facility buildings are present. The ubiquitous toilet blocks, which are dotted all over the site, reflect the great distances that the staff had to travel from the main administration area on Jamieson Street. The work patterns of the staff meant that much time was spent in one area, moving from

workshop to storehouse and back. Staff facilities and small administration offices in workshop areas were necessary to keep work practices efficient.

Lifting and moving processes were vital to the work of the Depot and these functions can be seen in the operational fixtures of the buildings. The large 1920s storehouses have the light rail passing through the centre of the building. The storehouses of the 1930s and 1940s were fitted with internal gantry cranes and similarly the workshops were fitted with external gantries to move stock from the light rail into the building. The 1920s workshops used gantries and porches. As in the first precinct all the roofs are crossed by systems of lightning prevention with decorative conductors, earthing strips on all fixtures and low fire-risk materials.



Figure 3-60 Earthing strips associated with work areas and a gantry in Building 155 (Source: Tanner Architects).

**Table 3.2 Buildings in the Early Naval Occupancy Precinct**

| Number | Name and Date of Construction                             | Present Use (2012)                         |
|--------|---|--|
| 15     | Return Store, 1937  | Vacant                                     |
| 16     | Acid Storehouse/Detonator Storehouse, 1937                | Vacant                                     |
| 18     | Explosives Storehouse, 1938                               | Armory Gallery                             |
| 28     | Office, circa 1940s                                       | Vacant                                     |
| 29     | Toilet Block, circa 1940s                                 | Public Amenity Use                         |
| 30     | Empty Package Store, 1922                                 | Heritage Railway Operations                |
| 32     | Toilet Block, 1930s-1940s                                 |  |
| 33     | Explosives Storehouse (former HMAS Albatross), circa 1928 | SOPA Operations                            |
| 34     | Pyrotechnic Store, 1939                                   | Vacant                                     |
| 35     | Explosives Storehouse, circa 1939                         | SOPA Archives and Moveable Heritage Stores |
| 36     | Explosives Magazine, circa 1922                           | Vacant                                     |



| Number                | Name and Date of Construction  | Present Use (2012)                  |
|-----------------------|--|-------------------------------------|
| 37                    | Explosives Magazine, circa 1922  | Vacant                              |
| 38                    | Explosives Magazine, circa 1922  | Vacant                              |
| 39                    | Explosives Magazine, circa 1922  | Armaments Display, Heritage Railway |
| 41                    | Toilet, circa 1930s  | Vacant                              |
| 127                   | Warhead Examining Room, circa 1924                                     | Vacant                              |
| 128                   | Shell Scraping Room, circa 1924  | Vacant                              |
| 129                   | Shell Marking Room, circa 1924   | Vacant                              |
| 154                   | Soldering Room, 1939   | Vacant                              |
| 155                   | Shell Examining Room, 1926   | Vacant                              |
| 156                   | Shell Examining Room, 1926   | Vacant                              |
| 157                   | Shell Examining Room, 1926   | Vacant                              |
| 158                   | Explosives Workshop, pre 1950s   | Vacant                              |
| 159                   | Explosives Workshop, pre 1950s   | Vacant                              |
| 160                   | Office, circa 1940s  | Vacant                              |
| 161                   | Amenity Block, 1944  | Vacant                              |
| 163                   | Office, circa 1944   | Vacant                              |
| 164                   | Explosives Workshop, circa 1980s                                       | Vacant                              |
| 190                   | Heat Test Room/Proof House, 1939-1941                                  | Vacant                              |
| 191                   | Colour Test Room/Proof House, 1939-1941                                | Vacant                              |
| 192                   | Proof House, 1939-1941   | Vacant                              |
| 193                   | D A Proof House, 1939-1941   | Vacant                              |
| 194                   | Toilet, circa 1939   | Vacant                              |
| 196                   | Water Tower  | Vacant                              |
| 205                   | Fuel Filling Station, circa 1986                                       | Vacant                              |
| <b>Infrastructure</b> |  |                                     |
| 235                   | Light Railway, circa 1897  |                                     |
| 243                   | Road between Forest and Wetland, circa 1920s                           |                                     |
| 244                   | Foreshore Road, circa 1930s  |                                     |
| 248                   | Fascine Banks along River Foreshore and Sandstone Sea Wall, circa 1890 |                                     |

### 3.5.5 RAN Wartime Expansion Precinct (Precinct 3)

#### Description of the Precinct

This precinct demonstrates the second major expansion of the Armament Depot during the years preceding and during World War II to service the Royal Australian Navy. It contains a group of RAN storehouses and associated workshops and the first period of major roadway development in the Depot.

This precinct contains within it structures, infrastructure and landscape elements which document the development of the Armament Depot during the build-up to World War II.

#### Analysis of the RAN Wartime Expansion Precinct

By the outbreak of World War II availability of land became an urgently pressing concern. The forest would almost certainly have been sacrificed if flat and cleared ground had not become available to the south. The forest does contain one 1937 magazine building (31) which was set into the ground, maximising blast containment on all sides, serviced by a light rail line. The forest was, similarly to the wetland, seen as a buffer for explosives stores and as a convenient place for dangerous disposal practices.



Figure 3-61 The isolated Building 31 (Source: Tanner Architects).

The siting of structures in this precinct is determined as it has been in other precincts, by availability of land and blast containment considerations. This precinct also sees the arrangement of structures following the pattern of administration, workshop and then storage, linked by transportation infrastructure. From the centre point of the site the light rail line goes east, south and southeast. The southeast line leads to a garage (134), an office (133), toilets (135) and three laboratories (130, 131, 132) all built in the 1930s. This group of buildings was built to service the explosives storehouses further along the spur line of the light rail, which connects them. The original use of these laboratory buildings was associated with inspection and testing and are now tenanted by Birds Australia. These buildings occupy an important place in the vicinity of Five Ways as they terminate a vista across the site, make an important visual contribution to this part of the site and have great functional potential.



Figure 3-62 Group of buildings occupied by Birds Australia – Buildings 130 to 133 and 135 (Source: Tanner Architects).



Figure 3-63 Light rail tracks at the southern end of the precinct (Source: Tanner Architects).

Brick storehouses (Buildings 42, 43, 44 and 45) were built in 1939, of identical design, to store cordite, which requires maintenance at a constant temperature. They are all accessed by the light rail network, which due to the storehouses being cut into the rise of the forest, runs through a steep cutting. The arrangement of the storehouses in a U shape takes advantage of the forest hillside, maximising the available land to best effect and creating efficient blast separation between the storehouses, which faced out onto empty marshland.



Figure 3-64 Characteristic configuration of Buildings 42 to 45 (Source: Tanner Architects).

From the centre of the site to the south, another light rail line services explosives storehouses (46 and 47) built at the start of World War II. One of these is on the other side of Holker Street, but connected by the Louise Sauvage Pathway (245) to the rest of the Armament Depot. These galvanised iron storehouses are probably the most simple of all the storehouses, with a single entrance at the front reached through a massive earth berm. They were built at a time of mounting pressure and probably reflect the need for speed as well as cheapness of materials. These were the last storehouses built on the site that relied on the light rail for transport. It is interesting to note that these are the only items that do not conform to the previous arrangement of workshops placed in direct relationship to stores. It may be that by this time the packaging of explosives and the enormous quantities that were handled during World War II meant that the normal workshop arrangement was inadequate. Building 46 is currently serving as the Energy Australia Education Centre and is augmented by a large array of solar panels on one side of the building.



Figure 3-65 Entrance to Building 46 (Source: Tanner Architects).



Figure 3-66 Building 46 viewed from the top of the surrounding berm (Source: Tanner Architects).

The operational changes wrought by the advent of trucks and the volume of work carried out during World War II can be seen in the changing nature of storehouse construction and the development of roads. This precinct was the first to develop an extensive road system as the introduction of trucks superseded use of the light rail. The Burma Road (237), which runs down the centre of the Newington Armament Depot, was used to transport stores and staff to the southern areas of the Armory as well as to the State Abattoir and Brickworks which were used for storage during critical periods. The Louise Sauvage Pathway was a connecting road along what was once empty marshland, between magazines on the eastern side of the forest and those on the western side.

In recent times, visitor movement has been augmented by new infrastructure such as bridges, which are simple and pleasing in design, and harmonise with the bushland setting.



Figure 3-67 Intersection of the Burma Road and the loop road known as The Banana (Source: Tanner Architects).



Figure 3-68 A recently constructed bridge at the southern end of the precinct (Source: Tanner Architects).



**Table 3.3 Buildings in the RAN Wartime Expansion Precinct**

| Number                | Name and Date of Construction      | Present Use (2012)                         |
|-----------------------|------------------------------------|--|
| 31                    | Explosives Storehouse, circa 1937  | Vacant                                     |
| 42                    | Explosives Storehouse, circa 1939  | Vacant                                     |
| 43                    | Explosives Storehouse, circa 1939  | Vacant                                     |
| 44                    | Explosives Storehouse, circa 1939  | Vacant                                     |
| 45                    | Explosives Storehouse, circa 1939  | Vacant                                     |
| 46                    | Explosives Storehouse, circa 1939  | SOPA Education Centre                      |
| 47                    | Explosives Storehouse, circa 1939  | Vacant                                     |
| 130                   | Explosives Workshop, circa 1930s   | Licensed to Birds Australia Interpretation |
| 131                   | Explosives Workshop, circa 1930s   | Licensed to Birds Australia Interpretation |
| 132                   | Explosives Workshop, circa 1930s   | Licensed to Birds Australia (Library)      |
| 133                   | Office/Change Room, circa 1930s    | Licensed to Birds Australia (Office)       |
| 134                   | Electromobile Garage, circa 1939   | Vacant                                     |
| 135                   | Toilet Block, circa 1939           | Licensed to Birds Australia                |
| 136                   | Toilet Block, circa 1939           | Vacant                                     |
| 199                   | Toilet Block, circa 1930s          | Vacant                                     |
| <b>Infrastructure</b> |                                    |  |
| 235                   | Light Railway, circa 1897          |  |
| 237                   | Burma Road, circa 1930s            |  |
| 245                   | Louise Sauvage Pathway, circa 1999 |  |
| 246                   | Burning Ground, circa 1930s        |  |

### 3.5.6 US Navy Utilisation Precinct (Precinct 4)

#### Description of the Precinct

This precinct is situated to the south of the original facility area on the wharf, and to the west of the Burma Road. The precinct contains explosives storehouses erected for the US Navy sited along a road system known as The Banana. Also located within this precinct are administration buildings and general workshops erected during the inter-war years, generally clustered to the south of the access gate on Jamieson Street.

#### Analysis of the US Navy Utilisation Precinct

This precinct has an historical association with Blaxland's Newington Estate, the subdivision of the Estate in the early twentieth century and the period of grazing by the State Abattoir. The area along Jamieson Street, being high and firm ground, would have been cleared and grazed during the period of occupation by Blaxland. When the region began to develop closer settlement, it was marked out into subdivisions from which the arrangement of Jamieson and Holker Streets is derived. The area was then leased to the Meat Board as grazing paddocks for the State Abattoir across the marshland on Homebush Bay.

The underground explosives storehouses were constructed in 1942-1943 by Australian contractors. The gentle rises towards Holker Street were used to their best advantage, with explosives storehouses cut into the hill and facing out onto the road. Blast containment measures as well as the most efficient use of space were the main stimulus for the arrangement here. Linking the storehouses is a road system, which takes the shape of two crescents, hence the name for this area, The Banana.

There are few obvious structures in much of this precinct; many temporary buildings have been taken away. The large storehouses are underground, which heightens the sense of emptiness. The arrangement of buildings is deliberately sparse in this industrialised landscape and well-spaced to mitigate blast damage and maximise staff safety. This precinct shows an interesting development because of the absence of inspection and testing facilities. The storehouses (56, 57, 58, 59, 60, 78 and 79) in this precinct are all underground explosives storehouses built by and for the United States Navy during their Pacific campaigns in World War II. The lack of inspection and testing facilities indicates that this section of the site was intended as a short-term depot with a flow of ammunition in and then out of the precinct. This precinct is also unique in that it does not have light rail. During World War II, trucks replaced light rail for delivery and transport of stores and the visual dominance of road systems in the precinct illustrates this.



Figure 3-69 Building 56, left, and Buildings 58 and 59, right. These buildings are presently used for storage (Source: Tanner Architects).



Figure 3-70 The “roofs” and vents of the storehouses contribute to the character of this section of the Armament Depot (Source: Tanner Architects).



Figure 3-71 Several of the storehouses feature steel “facades” (Source: Tanner Architects).



The staff and administrative areas for the US storehouses are thought to have been built a long distance from the storehouses, on the natural rise near the Jamieson Street entrance. This area had already been developed in the inter-war period for administration functions and so the choice of the hill was not guided by topography so much as centralising of administrative functions. The function of the buildings is also quite different to that in other precincts with sail makers' (211), joiners' (50) and fitters' (233) shops all constructed during World War II. However, anecdotal evidence suggests US facilities may have been located at the Carnarvon Golf Clubhouse, to the southwest of the Bullring. A residence (122) was built during the 1940s, possibly to service American personnel and a garage (113) was added in the 1960s.



Figure 3-72 Buildings 2, 3 and 197, situated close to the Jamieson Street entry to the site (Source: Tanner Architects).



Figure 3-73 Building 24, situated at Five Ways. This building is currently used for artist studios (Source: Tanner Architects).

The Banana is linked to the wharf by the main north-south route in the Depot, the Burma Road. Stores still arrived mostly via the river and therefore the wharf is still the focal point for this precinct. Between the administration area and the storehouses is a natural gully, which has a deep drainage channel, which drains the storehouse and administration areas. This channel appears to follow the original creek line that drained the catchment.



Figure 3-74 Items in the US Navy Utilisation Precinct reflect different times and uses. Strategically placed stairs and fire safety equipment underscore the conditions when the site was an Armory, while equipment associated with disc golf highlights the recreational role that the Armament Depot is now beginning to fulfil (Source: Tanner Architects).

**Table 3.4 Buildings in the US Navy Utilisation Precinct**

| Number | Name and Date of Construction     | Present Use (2012)  |
|--------|-----------------------------------|---------------------|
| 50     | Joiners' Shop, pre 1950           | Artist Studios      |
| 51     | Timber Store, pre 1950            | Vacant              |
| 56     | Explosives Storehouse, 1942-1943  | SOPA Operations     |
| 57     | Explosives Storehouse, 1942-1943  | SOPA Operations     |
| 58     | Explosives Storehouse, 1942-1943  | SOPA Operations     |
| 59     | Explosives Storehouse, 1942-1943  | SOPA Operations     |
| 60     | Explosives Storehouse, 1942-1943  | SOPA Operations     |
| 78     | Explosives Storehouse, 1942-1943  | SOPA Operations     |
| 79     | Explosives Storehouse, 1942-1943  | SOPA Operations     |
| 110    | Generator House, circa 1940s      | Generator House     |
| 113    | Workshop/Garage, 1966             | SOPA Operations     |
| 116    | Time Clock Race, 1970             | Vacant              |
| 117    | Toilet/Ablution Block, circa 1939 | Toilet              |
| 121    | Electrical Substation             | Substation          |
| 122    | Residence, circa 1940s            | Artist in Residence |
| 197    | Store, circa 1950s                | Vacant              |
| 204    | Fuel Filling Station, circa 1986  | Vacant              |
| 206    | Joiners' Store, circa 1939        | Vacant              |
| 207    | Naval Police Fire Equipment Store | SOPA Operations     |
| 208    | Naval Police Fire Equipment Store | SOPA Operations     |
| 209    | Naval Police Fire Equipment Store | SOPA Operations     |
| 211    | Sail Makers' Shop                 | Vacant              |
| 212    | Fuel Attendant's Shed             | Vacant              |
| 233    | Fitters' Workshop, circa 1980s    | Artist Studios      |

### 3.6 MOVEABLE ITEMS

Moveable items can be defined as items which are not fixed, such as tools, trucks, stores, safety equipment, signage, clothing, documents and ephemera. When vacated by the Department of Defence, the Newington Armament Depot possessed a large quantity of moveable items, most of which was removed by the Department of Defence in 1997. There are currently approximately 1,200 moveable heritage items on permanent loan to SOPA under agreement from the Royal Australian Navy, which are Commonwealth property. This collection, which has been inventoried, is to be maintained on site. The majority of items are held in storage but some of the collection is open to the public in Building 39, accessed by the heritage railway discovery tour.

There are also items across the site that belong to it and are an essential component of its heritage significance. These items are diverse in nature and include (but are not limited to) cranes, signage within open areas and signage on buildings, tables and other furnishings within buildings, telephone and fire boxes. There is also material associated with the light rail system, including the two original trolleys, contemporary trolleys, the electromobiles, pallets and other forms of containers for transporting stock around the Depot. There is a workshop complex for the electromobiles, containing a variety of equipment and tools used to maintain the system.



Figure 3-75 Some of the moveable heritage items contained in Building 39. These items are included on public tours of Newington that are conducted on the light rail system (Source: Tanner Architects).





Figure 3-76 Moveable heritage items directly associated with the Armory range from the locomotives and rolling stock of the light rail system and the small crane at Five Ways to building identification and function signage and modest items used by people working on a daily basis at the site (Source: Tanner Architects).



### 3.7 ENVIRONS

The environs of the Newington Armament Depot and Nature Reserve are relatively diverse and in some cases reinforce the site's sense of containment. The site is physically defined by the Parramatta River to the north and Jamieson Street to the west. The river and the road are historic defining elements of the site and were important means of accessing the site. Holker Road to the south was extended when the residential development for the 2000 Olympics was constructed and bisects the northern section of the Armory from its largely redeveloped southern section. The eastern side of the site is defined by the remediated landscape of Woo-la-ra and the Narawang Wetland. The site is linked to the Blaxland Riverside Park at the northern end of Jamieson Street and via the wharf precinct, while there are two access points from Jamieson Street and access points from Holker Street and the southeastern corner of the site from the Narawang Wetland.

Notwithstanding the size of the site and its sense of enclosed isolation, visual encroachment of development in the greater area is increasing. The Silverwater Correctional Centre, which is visible to its west, is relatively low in scale and is not overly intrusive. Buildings associated with Sydney Olympic Park are visible to the south of the site while the large areas on the eastern side of Hill Road extending towards Wentworth Point are being progressively developed for residential purposes.





Figure 3-77 The Parramatta River forms the northern edge of the site (Source: Tanner Architects).



Figure 3-78 The mounds of the Silverwater Marker and Woo-la-ra to the east are tangible reminders of past industrial and noxious uses on and near the site (Source: Tanner Architects).



Figure 3-79 Residential and industrial development along Hill Road towards Wentworth Point. High density residential development in the immediate and wider locality of the Newington Armament Depot and Nature Reserve will dramatically increase in the coming years, thus increasing demands on the site and Sydney Olympic Park as a whole (Source: Tanner Architects).

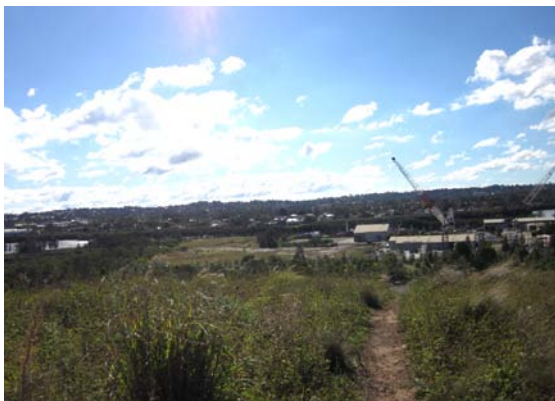


Figure 3-80 Industrial development to the north-east of the site (Source: Tanner Architects).



Figure 3-81 Silverwater Correctional Centre rises above vegetation along the Jamieson Street boundary (Source: Tanner Architects).



Figure 3-82 Development in Sydney Olympic Park rises above planting along the southern (Holker Street) boundary (Source: Tanner Architects).



Figure 3-83 Development along the southern side of Holker Street (Source: Tanner Architects).

The former Building 87, a British World War II era explosives store that has strong historical associations with the Newington Armament Depot, is an original part of the site but is not included in the State Heritage Register listing boundary. The building is located in the middle of the suburb of Newington, on the southern side of Avenue of Oceania. The building is listed as a heritage item by Auburn City Council (Item 142, Schedule 5, *Auburn Local Environmental Plan 2010*).

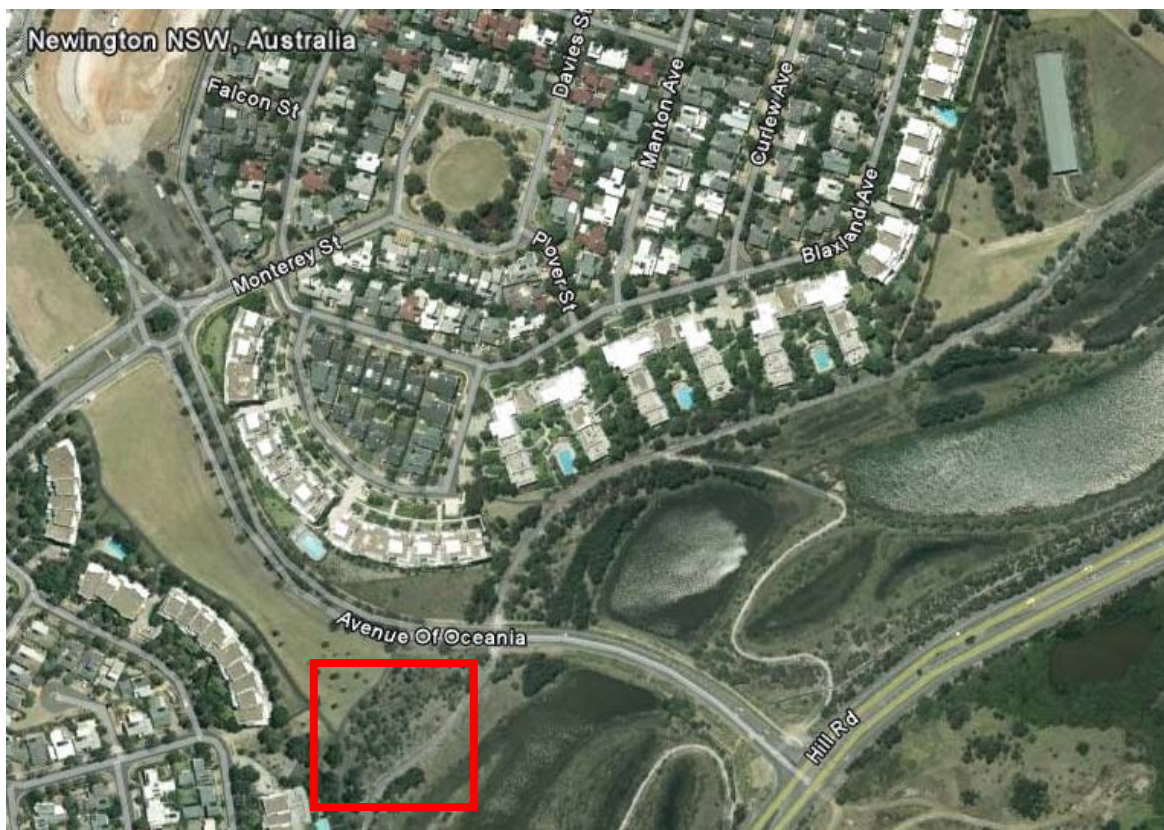


Figure 3-84 Location of the former Building 87, now within the confines of the suburb of Newington (Source: Google Earth).



### **3.8 HISTORICAL ARCHAEOLOGY**

#### **3.8.1 Introduction**

The historical archaeological potential of the Newington Armament Depot and Nature Reserve has been identified in the Newington Armory Historical Archaeological Zoning Plan written by Cosmos Archaeology Pty Ltd (September 2004, reissued August 2013). The purpose of this document is to protect historical archaeological resources within the Newington Armament Depot and Nature Reserve and make the management of these archaeological resources more efficient.

The Archaeological Zoning Plan analyses the archaeological potential of the site across several historical phases:

- Phase A: 1788-to 1807 – Early Land Grants;
- Phase B: 1807 to 1880 – Blaxland's Grants;
- Phase C: 1880 to 1920 – Establishment of the Armory;
- Phase D: 1921 to 1939 – Expansion of the Armory;
- Phase E: 1939 to 1960 – World War II and Maximum Expansion;
- Phase F: 1950 to 1994 – Decline and Closure.

The following sections have been extracted from Section 6 of the Newington Armory Historical Archaeological Zoning Plan.

#### **3.8.2 Phase A: 1788 to 1807 – Early Land Grants**

The southern part of the Newington Armory, incorporated the pre-1807 land grants (Figure 5.1). There is no evidence available at present to suggest that any buildings or other structures were erected on these grants. Should there have been any domestic or agricultural structures on these grants, in particular Archer's, the gentle northern facing slope in the southern portion of the site near Holker St would have been a good location for such buildings. Equally good locations would be along the higher ground further to the west and for a short distance to the south. Given the ambiguity over whether such structures were built in the first place, it should be considered unlikely that the archaeological remains of such structures are present within the Newington Armament Depot and Nature Reserve.

It is also possible that there may have been informal tracks and fence lines within the early grant and leading north from the early grants to a jetty or landing on Parramatta River, as at the time the primary mode of transport and communication with Sydney was by water. Given the absence of documentary evidence, it is unlikely that the archaeological remains of such features would be present within the Newington Armament Depot and Nature Reserve.

The northern most point of the spur leading into the River, in the immediate vicinity of the original Newington Armory would have been a good location for a jetty. It is no coincidence that the Armory wharf was located in this area as this point was the shortest distance between solid ground and sufficiently deep water for vessels of some draft. Given the absence of documentary evidence for the early grants being occupied, it is unlikely that the archaeological remains of such a feature would be present within the Newington Armament Depot and Nature Reserve.

Other early activities that may have taken place in the study area may have been timber cutting, whether for firewood or land clearance for grazing. Given the absence of documentary evidence of such activities occurring, it is unlikely that related archaeological remains would be present within the Newington Armament Depot and Nature Reserve.

### 3.8.3 Phase B: 1807 to 1880 – Blaxland’s Newington Estate

The domestic and industrial structures, as well associated tracks and salt works, of Blaxland’s Newington Estate were located to the west of the Newington Armament Depot and Nature Reserve. The 1859 plan<sup>26</sup> however shows fence lines and corresponding cleared areas, which would have served as paddocks. It is likely that these fence lines and established paddocks existed up until the 1880s when the land was resumed for the establishment of the Armory. It is presumed that these fences were removed, as they do not appear on the detailed 1890-91 survey of the area. Some of these fence lines may have survived into the 20<sup>th</sup> century, however with the southern portion of the Newington Armament Depot and Nature Reserve being leased to the State Abattoirs in 1915 it should be considered that any remaining fence lines would have been removed.

The 1929 plan of the Armory clearly shows that the orientation of the allotments and corresponding fences differ greatly from those depicted previously. Vestiges of fences associated with the Blaxland Estate period – *relics* - are likely to be present within the Newington Armament Depot and Nature Reserve. Such remains would be localised and confined to post holes, possibly with timber fragments present in some of the post holes.

It is very likely that the activities of the Australian Timber Company in the 1850s would have extended into this area. This activity would have resulted in the creation of tracks, informal camps and tree stumps. Given the paucity of the historical documentation of this activity it should be considered unlikely that cultural remains – *relics* – associated with this activity are present within the Newington Armament Depot and Nature Reserve.

The search for coal that took place within Blaxland’s grant would certainly have left behind physical evidence of this activity in the form of large backfilled holes. It is unclear where the prospecting was carried out. Given the absence of additional historical documentation of this activity it should be considered unlikely that cultural remains – *relics* – associated with this activity are present within the Newington Armament Depot and Nature Reserve.

### 3.8.4 Phase C: 1880 to 1920 – Establishment of the Armory

The establishment of the Armory resulted in three major alterations to the landscape, which would have had an impact on earlier cultural remains. Firstly the area would have been cleared of scrub and fences. Secondly, buildings were constructed. In some circumstances such as Buildings 20, 118, and 126, they were built into the slope of the low spur upon which the original establishment was sited. This involved benching of the ground, thereby destroying any earlier archaeological remains. In the case of the traverse around Building 30, it can be expected that the material was obtained from the immediate vicinity, thereby resulting in the localized destruction of earlier archaeological deposits.

The third impact was the reclamation of mud flats along the edge of the Parramatta River. It is likely in this pre-motorised period that the fill used for reclamation would have been obtained locally, either through dredging in the River or from stripping the ground surfaces on and around the low spur upon which the establishment was built. If the latter occurred, though no documentary evidence was found to say that it did, then much of the earlier cultural remains in the north western part of the Newington Armament Depot and Nature Reserve would have been destroyed. Inversely, cultural remains that would have been present in the reclaimed mud flats/swamp area would have been preserved. However there is no indication, through documentary sources, what, if any, European cultural remains may be present in these areas.

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<sup>26</sup> Plan of Homebush, c1859 showing layout of Blaxland Farm (ML 811.13 gbbd/1859/1).

### **3.8.5 Phase D: 1921 to 1939 – Expansion of the Armory**

This phase saw more or less the same activity as described for Phase C. The area taken up by the Armory expanded eastwards. More buildings were constructed on sloping ground, which involved relatively deep excavation in places to create level building surfaces. New storehouses and magazines were surrounded by traverses, which required fill to be obtained. As motor vehicle transport was now available it is more likely that this material may have been bought in from outside the Newington Armament Depot and Nature Reserve. Reclamation also continued across the whole site. These activities would have continued to impact earlier cultural remains. Curiously enough the core of the Wanngal Woodland appears to have been relatively untouched by these activities at this time.

### **3.8.6 Phase E: 1939 to 1960 – World War II and Maximum Expansion**

The expansion of the Armory during this phase increased the extent of the impact on earlier cultural remains within the Newington Armament Depot and Nature Reserve. The expansion into the grounds previously used for grazing in the southern half of the Newington Armament Depot would have immediately resulted in the fence lines being removed. The construction of additional magazines and storehouses would have resulted in the destruction of earlier cultural remains within the footprint of the buildings and possibly in the immediate vicinity if the buildings were surrounded by traverses. The construction of Buildings 144 and 146 impacted on the loop road that leads from the original main gate to the wharf.

Substantial reclamation took place at this time in the vicinity of the original Armory, especially around Building 18. This renewed activity resulted in the alignment of the original light rail line, which linked the Wharf complex with the current Building 21, being altered. The new alignment was slightly further to the east, on the newly reclaimed ground. It is likely that the remains of the original rail lines are still present, and buried under fill, in the form of the foundation and possibly the timbers upon which the rails were laid. The remnants of other rail lines, which had been altered around this time, such as at Building 24 and Building 39, may also be present in similar conditions.

The reclamation works around the wharf complex resulted in the open drain separating the reclaimed area around the wharf and the rest of original armory being covered. It is still likely to be functioning as a drain. The walls of the former open drain were probably lined with stone. The bridge that spanned the drain was most likely demolished rather than completely buried, though it is expected that the footings of this structure are likely to be still present.

The only building known to be demolished around this time was the old Department of Works and Railways wood store. It is not known why it was demolished; perhaps it was derelict and a fire hazard. This was a timber structure, rebuilt in the 1920s with a timber floor. Sub-floor deposits are unlikely to be present but post holes with possible buried stumps of the posts are likely to be present.

### **3.8.7 Phase F: 1950 to 2004 – Decline and Closure**

Soon after the end of World War II construction projects at the Armory slowed down. However this period did not result in the ‘freezing’ of the World War II cultural landscape. It was in this period that a number cultural features associated with the Armory were demolished. Most notably, the World War II era magazines and storehouses in the south western section of the Newington Armament Depot were demolished. Many small buildings and sheds, such as the “Articles in use” shed were also removed. In addition to this, the myriad of fences, which isolated the complex itself, areas within the Armory and around individual buildings were taken down.

It is likely that archaeological remains associated with these mentioned above are present. Indeed evidence of the location of the magazine/store houses are still visible, as is the concrete dwarf wall of the original iron fence enclosure.

### 3.8.8 Areas Likely to Contain Relics

The most striking aspect of the historical archaeological resources of the Newington Armament Depot and Nature Reserve is that the majority of the areas identified as likely to contain *relics* are linear in nature. These linear features can be divided into three distinct groups – **fences, drains and roads/rail**.

Of these three groups, **fences** are the most prevalent. Fences in general are represented in the archaeological record in the form of regularly spaced post holes. Therefore, the width of archaeological remains is very narrow, < 0.5 m, shallow, < 0.5 m. and hundreds of metres in length. As a consequence the individual components of these archaeological features, post holes, are easily destroyed through the most superficial surface excavation. Yet they are equally difficult to totally destroy because of the overall length of many of the fence lines and the great number of post holes. The exception is the remains of a dwarf wall within which iron bars were set that formed the original fence line around the Armory. In this case the remains are quite substantial.

The **drains** determined to possess archaeological potential are those identified through the examination of the archival plans. There are two types of drains within the Newington Armament Depot and Nature Reserve, open and buried. In general open drains, such as the drain to the west of Burma Road, have not been included in the archaeological zoning plan as they are functioning, visible and covered by the management provisions of the CMP. The exception to this is the drain network within the wetlands. It appears that many of these drain lines have fallen into disuse with the recent creation of the flushing channels. Therefore not only are they archaeological by definition but also they are largely rendered invisible in places by dense vegetation. The buried drains considered to be *relics* for the purposes of this study are those, which were once open and have since been buried. There appears to be many more drains, and similar underground cultural linear features such as cables, water and sewer mains within the Newington Armament Depot and Nature Reserve. A good proportion of these may pre-date the 1950s as is evidenced by the abundance of hydrants in the 1940s plan of the site. Most of these are still functioning and are covered by the Standard Exemptions to the NSW *Heritage Act 1977*.

The third type of linear cultural feature defined in this study is the **roads and light rail**. The Newington Armory Historical Archaeological Zoning Plan only considers those sections of road and light rail that are disused and/or buried. The functioning roads and intact light rail are covered by the CMP.

The majority of demolished buildings pre-dating the 1950s identified in this study were small sheds, most likely constructed from timber and fibro or even corrugated iron. Therefore their subsurface remains are not likely to be substantive. However, it should be expected that the remains associated with the magazines and ammunition storehouses dating to World War II would be substantial.

The standing buildings and associated features such as traverses, which were constructed prior to 1954, are included as areas where there are likely to be *relics*. This archaeological designation does not cover existing and aboveground fabric for these structures, as that is covered within the CMP. The reason for their inclusion is that some buildings, such as in the old smoke apparatus store (Building 24), have seen substantial reconstructions and extensions over time. In such cases the footings belonging to the initial layout, other building components or cultural deposits associated with the original buildings may be present and buried or concealed by the floors of the current building.

The same logic applies also to the wharf and sea wall. The former feature has undergone successive repairs and reconstructions. Pile stumps associated with the original wharf may be present on the river bed as well as cultural deposits formed by activities that took place on the wharf. The sea wall would also have been repaired over time. It is possible that earlier sections of the sea wall may be preserved behind the facing of the current seawall.

### 3.8.9 Areas Unlikely to Contain Relics

The areas within the MPHP, which are unlikely to contain relics, can be divided into two distinct components, the land that has been reclaimed and the original land surface. As reclamation commenced at the Newington Armory from the 1890s, the fill that comprises the reclaimed land is a *relic* under the NSW *Heritage Act 1977*. However any disturbance of 'fill' is exempted from the need for a Section 60 permit. In addition, as there does not appear to have been any known European cultural activity that took place in the mud flats and mangroves of the area prior to reclamation it is unlikely that there are *relics* under the fill.

Little is known of the cultural activities that took place on the original ground surface within the Newington Armament Depot and Nature Reserve prior to the establishment of the Armory. It would seem that the area was used for grazing and timber getting. Apart from a fence line associated with the Blaxland Estate dated to 1859 no other distinct cultural features are depicted on maps of the area until the 1880s. Therefore apart from the aforementioned fence line it is unlikely that *relics* associated with activities that took place within the boundaries of the Newington Armament Depot and Nature Reserve prior to the 1880s will be found. The same applies to the land used by the State Abattoirs from 1915 until the 1930s. In this case, only the areas where there are documented fence lines associated with this activity have been considered to be likely to contain *relics*.

An armaments depot by its very nature requires a strict regulation of space and movement. For reasons of safety and minimising the damage caused to the facility through fire and explosions, buildings had to be separated by set distances. The spaces between these buildings usually had to be open and uncluttered. This observation, coupled with the fact that the good surveys of the Armory have been carried out from the 1920s onwards, suggest that it is unlikely that *relics* which have not been depicted in the archival maps, aerial photographs or mentioned the text sources would be present within the study area.





Figure 3-85 Management zones for the historical archaeological resource. Areas likely to contain relics are shaded blue; areas unlikely to contain relics are shaded yellow (Source: Newington Armory Historical Archaeological Zoning Plan, p.48).

## **4 COMPARATIVE ANALYSIS**

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### **4.1 INTRODUCTION**

This section of the CMP compares the Newington Armament Depot and Nature Reserve with other places in order to establish its relative significance in terms of its historic, aesthetic and scientific values. Sections 4.1 and 4.2 are based on information contained in CMP 2003.

Due to the specific requirements of explosives storage, the siting and landscape nature of the sites show similar elements in a diverse range of environments and across a broad time frame. The architectural and technological specifics of explosives storage have given rise to common design elements in structures across all sites identified. The landscape arrangement and the adaptations for the primary functions of transport and storage also give rise to common elements. Historical comparisons can be primarily drawn from regional sites; however, there are a number of sites across the country, which have associations with American forces in World War II and similar histories of military armaments storage.

Those sites which have been registered on State Inventories and the Australian Heritage Places Inventory (AHPI) have been compared using registration statements, rather than heritage analyses or conservation plans. Such a comparison is necessarily reliant on the accuracy of available documentation and interpretation of very brief descriptions.

Due to the large number of comparative sites uncovered, the analysis will have to be restricted to listing types of sites, some of which can fit in more than one category. The full registration documentation is available at the AHPI database at <http://www.heritage.gov.au>.

### **4.2 COMPARATIVE CONTEXT FOR ASSESSMENT**

#### **4.2.1 Preamble**

This section of the CMP identifies other places in Australia that are comparable to the Newington Armament Depot in order to understand its history and characteristics in the context of its peers.

The Newington Armament Depot and Nature Reserve, in its history, location and associations, is a unique site with few comparable examples in Australia. However, there are many sites associated with explosives handling and storage in Australia. The Australian Heritage Places Inventory contains over 100 sites containing explosives, armaments or powder storage magazines and many of these also sit within significant areas of natural landscapes, owing to the isolation requirements of the materials. Many of these, however, are single buildings, providing secure storage for commercial explosives used in mining sites and in construction works and most states in Australia have operated government explosives magazines at several locations in each state. Further, every military base in Australia and every major coastal artillery emplacement was served by its own magazine.

The architectural and technological requirements of explosives storage have created common design elements in most explosives storage structures and the landscape arrangements and particular nature of transport and storage lead to the adoption of common approaches and layouts. Consequently, most sites exhibit some features and characteristics which have elements in common with Newington. The use of dispersed magazine buildings set within earth mounds and a location characterised by large areas of relatively undeveloped land serving as a buffer zone around the magazines are typical of all explosives storage facilities that operated in the twentieth century.

Due to the large number of explosives handling and storage sites in Australia, the following analysis focuses on large explosives storage complexes, especially those of a military nature. Notably, it is the Navy that requires and operates the largest armament and explosives stores, with the Army's

and Air Force's requirements being relatively modest in peacetime. Magazines associated with individual coastal artillery sites, army bases and attached to military airports are not included, owing to their being specialised in nature and relatively small in extent. Similarly, individual buildings associated with mining places and construction sites are excluded from this analysis, although, of course, comparisons with the individual buildings at Newington may be possible.

In the following sections, the explosives storage sites which have elements in common with Newington are identified on a state-by-state basis. A small number of large nineteenth century government powder magazines are also identified, especially where they demonstrate features and approaches in common with those demonstrated in Building 20 at Newington.

#### **4.2.2 Explosives Storage Facilities in New South Wales**

##### **Goat Island, Sydney**

Goat Island was established as a powder magazine in 1839 and operated as a combined public and military (Army/colonial militia) magazine until 1900. The complex retains two early magazine buildings within a fortified stone wall and there is some surviving evidence of the light rail system. The Queens Magazine demonstrates mid-nineteenth century features such as massive walls, earth mounds, vaulted interiors and non-ferrous detailing.

##### **Bantry Bay Public Magazines, Killarney Heights**

Bantry Bay Public Magazines sit within an extensive area of bushland within Middle Harbour. Constructed in 1913, the brick magazines are set into the escarpment along the shoreline. The complex includes an extensive hand-propelled light rail network linking the isolated magazines to the wharves, comparable in extent to the rail network at Newington. The magazines were taken over by American services personnel for the storage of small arms and explosives during the Pacific war. In addition to its ecological values, Bantry Bay contains numerous art and occupation sites of great significance to the Aboriginal community.

##### **Spectacle Island Explosives Complex, Drummoyne**

Established as a Colonial Government powder magazine in 1865, Spectacle Island was operated by the Royal Navy as its ordnance store for three decades before becoming a RAN establishment which was operationally linked to Newington. The explosives storage buildings demonstrate the evolution of magazine design from insulated powder magazines to simple storehouses, and the tramway system and explosives handling methods are similar to those at Newington.

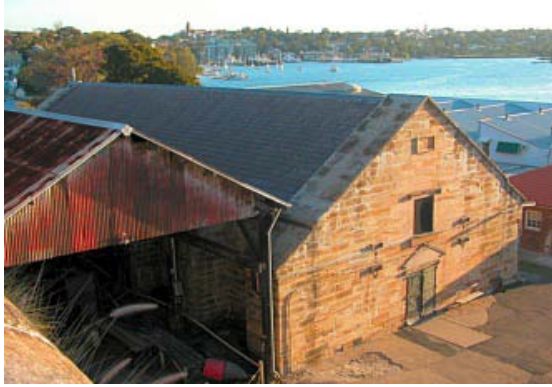


Figure 4-1 Goat Island – The Queens Magazine dates from the 1840s (Source: NSW Heritage Database).



Figure 4-2 Bantry Bay was built as the primary public magazine in NSW. It occupies the foreshores of a harbour inlet (Source: Tony Brassil).



Figure 4-3 Spectacle Island Magazine operated as a management and transshipment centre for Newington. It is a compact island utilising its location to provide physical seclusion (Source: Australian Heritage Database, Google Earth).



### **RANAD Kingswood/Orchard Hills**

Established during World War II, the site was first occupied for military purposes by the US Army, which constructed a chemical weapons depot there. The RAN first occupied the site as a sub-depot of RANAD Newington when the US Army left in 1945 and the site was also occupied by the Royal Australian Air Force 1 Central Ammunition Depot for munitions storage. RANAD was developed during the 1950s and 1960s as the RAN's primary ordnance storage site and is designed around the use of bulk packaging and forklift trucks. The use of isolated magazines surrounded by earth mounds remains a common feature.





Figure 4-4 RANAD Kingswood at Orchard Hills in western Sydney demonstrates an orderly layout on a flat landscape (Source: Google Earth).

#### 4.2.3 Explosives Storage Facilities in Victoria

##### Jack's Magazine, Maidstone

Built in 1878, Jack's Magazine comprises two bluestone magazine buildings demonstrating similar construction techniques to Building 20 at Newington. These include massive walls, earth mounds, vaulted interiors and non-ferrous detailing. The complex sits within a second layer of earth mounds and is surrounded by a massive stone wall. The utilisation of both river transport to the site and horse drawn tramlines within the site is comparable to Newington.

##### Point Wilson Explosives Storage Area, Lara

A Commonwealth explosives storage area established in 1959, replacing an earlier facility at Laverton, Victoria. The magazines are sited within an extensive coastal area with wetland and salt marshes supporting endangered water birds and demonstrate earth mounding and physical separation.

##### RANAD Somerton

The Somerton Magazine Area was established by the Army in 1941, was later shared with the Royal Australian Navy, and finally taken over entirely by the Navy circa 1950. The site was truncated in the late 1960s by the construction of Greendale Reservoir and, in 1988, there were 11 explosives storehouses, including two magazines for dusty explosives, and seven explosives workshops on the site. The depot closed circa 2000 and the land is proposed for residential development.

##### Maribyrnong Defence Site

The major explosives manufacturing facility in Australia for the majority of the twentieth century, Maribyrnong is a large, complex site containing a wide range of buildings and facilities for handling explosive material, including workshops and stores which demonstrate earth mounding, climate management design and containment structures. The explosives factory closed circa 2000 and is proposed for residential development.





Figure 4-5 Jack's Magazine, above, is the former public powder magazine for the state of Victoria. Port Wilson, left, is a relatively small complex of magazines set along a spine road leading to the wharf (Sources: Australian Heritage Database, Google Earth).



Figure 4-6 RANAD Somerton, left, was the RAN's armament storage depot in Melbourne from 1941 to 2000 while the explosives factory at Maribyrnong was the primary source of military explosives in Australia throughout the twentieth century (Source: Google Earth).



Figure 4-7 The Albion Explosives Factory at Deer Park manufactured gunpowder and other explosive material (Source: Google Earth).

## Deer Park

Deer Park was originally established as the Albion Explosives Factory and became part of the British ICI Chemical company in the 1920s. It specialised in the manufacture of black powder and large quantities of TNT; and nitro-glycerine-based cordites, as well as a wide range of various armament chemicals, were produced throughout the twentieth century. It ceased operations in 1986 and is proposed for residential redevelopment.

### 4.2.4 Explosives Storage Facilities in Queensland

#### Enoggera Magazine Complex, Enoggera

Enoggera Magazine Complex was established in 1915 and has operated as an explosives and munitions storage area through two world wars until the present. Attached to Gallipoli Barracks, formerly Enoggera Army Base, this small complex demonstrates blast containment with buildings built into natural mounds. The design and operation of the magazines, cordite stores and laboratories are comparable with Newington.

#### RANAD Brisbane

A large armament storage and processing area was established during World War II at Darra, utilised both by the US Army and the RAN. The site was cleared after World War II and no evidence remains today. Similarly, Mt Coot-tha was established by the Americans in 1942, with over 50 earth-covered Armco steel bunkers set into the hillside, and was taken over by the RAN in 1945. Most structures were demolished within a few years, but some physical evidence remains.



Figure 4-8 The magazine at Gallipoli Barracks was an important military magazine throughout the twentieth century (Source: Google Earth).



Figure 4-9 Brookhill Explosives Magazine is a government explosives magazine still in use in Far North Queensland (Source: Google Earth).

#### Brookhill Explosives Reserve

The Brookhill Ammunition Magazine was established in the 1890s as the depot for the coastal artillery established in Townsville in the same decade. In the 1930s, magazine buildings were erected which exhibit many similar features to those at Newington, including climate control design, earth mounds and physical separation. During World War II, the site was taken over and operated by the RAN to store naval ammunition but was returned to the Queensland Government post-war and re-established as a Government Explosives Storage Facility holding mining and construction explosives. It continues in use.



#### 4.2.5 Explosives Storage Facilities in Tasmania

##### Powder Magazine, Queens Domain, Hobart

A well-preserved sandstone three-bay powder magazine built in 1851, set within an extensive parkland adjacent to the central business district of Hobart. It demonstrates massive walls, sparkless materials and indirect ventilation.

##### North Esk Powder Magazine Group, Launceston

The complex of six magazines was constructed between 1860 and 1914. The design of the magazines exhibits concerns with temperature control, fire safety and blast containment and the site demonstrates the evolution of explosives technology over 54 years. An extensive 2-foot gauge tram or light rail system operated on elevated concrete blocks around the site and then down to the jetties for loading and unloading. The site stored military munitions during World War II but was closed in the 1950s.



Figure 4-10 The Hobart Powder Magazine, located in the Queens Domain, operated from 1851 to 1970 (Source: Australian Heritage Database).



Figure 4-11 North Esk Explosives Magazine is a small complex that served as the public magazine in northern Tasmania (Source: Google Earth).

#### 4.2.6 Explosives Storage Facilities in Western Australia

##### Woodman Point Natural Area, Cockburn

An area of land that was reserved for explosives storage in 1903 and operated until the 1980s, with three magazine buildings surviving from circa 1941 which demonstrate climate control, isolation and earth mounds. It sits within a landscape containing rare and endangered species of flora and many rare pre-European characteristics. The retention of bushland and the use of topography for transport and blast containment are all relevant to Newington.



Figure 4-12 Woodman Point retains three large magazine buildings, with one reused as the caravan park administration building at the lower end of the photograph (Source: Google Earth).

#### 4.2.7 Explosives Storage Facilities in the Northern Territory

##### Snake Creek Armament Depot, Adelaide River

The Snake Creek Armament Depot is a former RAN explosives storage area constructed in 1943-1945. Sixty-nine explosives storage magazines were built, using the natural topography for blast containment, including underground barrel vaulted explosives storehouses. Constructed during preparations for defence against Japanese attacks, the site exhibits comparable World War II underground explosives storehouse structures and above ground laboratories, canteens for personnel and magazines. Its road and rail network, earthworks, blast barriers and use of topography are similar to Newington.



Figure 4-13 Snake Creek Armament Depot was an RAN armament depot located far inland and camouflaged by earth and trees to escape aerial bombardment (Source: Google Earth).



Figure 4-14 The Frances Bay Explosives Complex was a sub-depot of Snake Creek. It is now a feature of Charles Sturt National Park in Darwin (Source: Google Earth).

##### Frances Bay Explosives Complex, Darwin

The site contains a complex of different magazine types, which were constructed in 1937. The complex includes a mine storage magazine – 10 above and three earth-covered magazines. The design of the magazines is unique in its concern to keep excessive temperatures reduced, but the blast containment and fire prevention measures are comparable to other similar sites. Built in 1937 in response to the Japanese build-up in the Pacific, the site demonstrates Australia's defence preparations and wartime activities and was used by allied naval and army forces, including the

Americans, during World War II. It is now abandoned and incorporated into the Charles Darwin National Park.

#### 4.2.8 Explosives Storage Facilities in South Australia

##### Dry Creek Explosives Magazine

Dry Creek Explosives Magazine was established from 1903 as the Government Magazine, holding primarily mining and construction explosives, and operated in this capacity until 1995. It retains 10 magazine buildings, designed for temperature stability, set into earth mounds and separated along a spinal roadway. It is unusual for adopting the friable building design advocated by the Nobel Company and practised by it from 1900.

##### Smithfield Magazine Area

The Smithfield Magazine Area was constructed during World War II, to store explosives that were produced at the Salisbury Explosives Factory and was the Commonwealth's largest construction project during World War II. The design of the individual magazine buildings, their spacing, blast mounds, guardhouse and protective fencing illustrates the principal characteristics of a large mid-twentieth century explosives store and reflects the dangerous nature of the materials. The Smithfield Magazine Area was greatly reduced in area in the 1960s and continued to operate until 1998.



Figure 4-15 Smithfield Magazine Area in Adelaide was laid out in a grid pattern on a level site. It closed in 1998 owing to the encroachment of residential development (Source: Google Earth).

#### 4.2.9 Conclusions

No other explosives storage complex in Australia reproduces Newington's unique mix of buildings, topography and historic associations. However, a number of sites have similar physical characteristics (earth mounding and dispersed buildings), buildings (both massive and friable storehouses) and infrastructure (such as the use of water transport and light railways). Examples of individual storage buildings comparable with individual buildings at Newington exist at different sites but few, if any, other sites contain the mixture of building types from different periods of explosives technology that is evident at Newington. Many sites contain bushland and landscapes of some significance, owing to the large areas of land around the magazines, and virtually all sites that existed during World War II were notably affected by the presence of allied military forces in Australia.

Newington Armament Depot is unique for its long and close association with the Royal Australian Navy as its primary armament depot in Australia and for its retention of buildings and features from most of the important phases of its history, which express most aspects of its historic development. The Newington Armament Depot also has significance because it is part of the Sydney Olympic Park



Parklands and thus an important component of a broader site. This is recognised by its inclusion in the *Sydney Olympic Park Authority Act* and the *Parklands Plan of Management*.

### 4.3 COMPARABLE URBAN PARKLANDS

#### 4.3.1 Sydney Olympic Park Context

Sydney Olympic Park, now a suburb of Sydney covering an area of approximately 640 hectares, is a diverse amalgam of precincts that include a growing town centre with commercial and residential development, major sporting and entertainment venues and the Royal Agricultural Society's showground, iconic public infrastructure and open space, all the legacy of the Sydney 2000 Olympic Games.

The Parklands associated with the Sydney Olympic Park have an area of 430 hectares or about 67% of the overall Olympic Park area. The Parklands are playing an increasingly important role as both a local park and a significant regional park destination as Sydney grows, a role that will expand as the surrounding areas are further developed for residential purposes.

The Parklands are an association of several different parks and places brought together as a single entity for management purposes. They include:

- Bicentennial Park, which was created by the state and federal governments to celebrate Australia's Bicentenary in 1988; the formation of the Park involved works that included remediating 47.4 hectares of land into a regional recreation area and the conservation of 53 hectares of a wetland ecosystem on the Parramatta River; the Park was officially opened on 1 January 1988;
- The diverse wetland areas south of Homebush Bay;
- The excavated area formerly associated with the State Brickworks;
- The lower reaches of Haslams Creek;
- The remediated waste mounds of Kronos Hill, Silverwater Marker and Woo-la-ra;
- The open area comprising Archery Park;
- The Wilson Park sports grounds;
- Blaxland Riverside Park and Wentworth Common; and
- The Newington Armament Depot and Nature Reserve.

The Newington Armament Depot and Nature Reserve is an integral component of the Parklands, but is distinguished by several layers of use management that include the Nature Reserve, areas dedicated to environmental conservation that link the site to the Narawang and Nuwi Wetlands to the south and east, and a large public recreation component that is linked to the adjacent Blaxland Riverside Park.



Figure 4-16 The network of Parklands at Sydney Olympic Park (Source: *Parklands Plan of Management 2010*, p.38).

### 4.3.2 Context of Metropolitan Sydney

Parkland has been an important component of Sydney’s recreational life from the earliest days of the colony of New South Wales. Hyde Park, the oldest park in Australia, was officially proclaimed by Governor Lachlan Macquarie in 1810, but had been earlier reserved by Governor Phillip in 1792 as a place for the use of the citizens of Sydney. It was first used for horse racing, but by the 1820s was used for cricket matches and other games.<sup>27</sup>

In 1866, the Municipal Council of Sydney dedicated 378 acres (153 hectares) of the northwest section of Sydney Common for public recreation. The Common had been designated by Governor Macquarie in 1811 and was originally used for grazing, lime burning and timber clearing. The section of Common dedicated by the Municipal Council was named Moore Park and was created in response to growing public pressures for outdoor activities, particularly organised sports. In 1888, Sir Henry Parkes dedicated the eastern part of the Sydney Common as Centennial Park, a public open space for the enjoyment of the people of NSW. Unemployed men were enlisted to turn swamps, scrub and rock into a grand park in the Victorian tradition with formal gardens, ponds, statues and wide avenues. On 1 January 1901, Centennial Park became the site of the inauguration of Australian Federation. Both of these parks are now part of the 360 hectares of the Centennial Parklands, which also include Queens Park, established to commemorate the centenary of European settlement in 1888. The three main parks (excluding the Entertainment Precinct in Moore Park) are listed on the State Heritage Register of NSW, and various components within the Parklands are of national, state or local heritage significance. Centennial Parklands is owned in **fee simple** by the Centennial Park and Moore Park Trust, acting as trustee for the NSW State Government. Administratively, the Trust is an agency within the Office of Environment and Heritage.

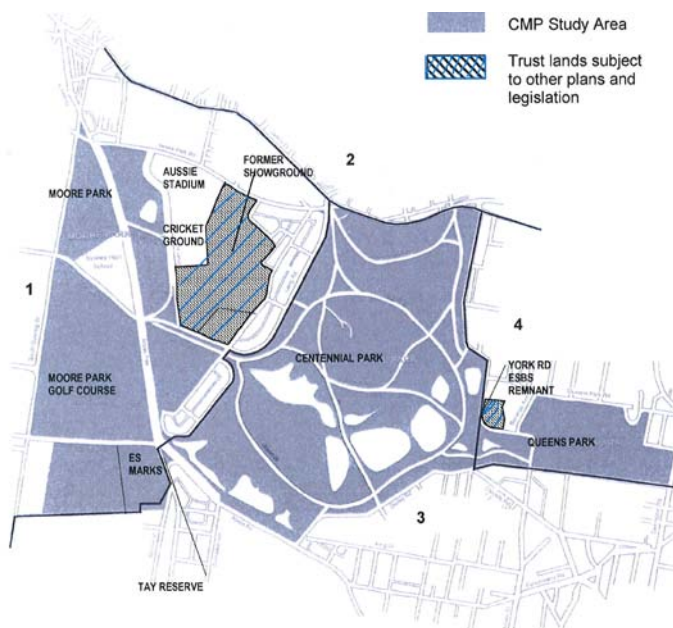


Figure 1: Local Councils areas that are adjacent to or encompass sections of Centennial Parklands

1. South Sydney City Council
2. Woollahra Council
3. Randwick City Council
4. Waverley Municipal Council

Figure 4-17 Centennial Parklands. The Parklands fall within several local government areas. (Source: *Centennial Parklands CMP* Volume 1, p.1-2).

<sup>27</sup> <http://www.cityofsydney.nsw.gov.au/AboutSydney/HistoryAndArchives/SydneyHistory/ParksHistory/HydePark.asp> , 26 October 2011.

Although outside the limits of Sydney's metropolitan area when they were proclaimed, the Royal National Park (1879) to Sydney's south and Ku-ring-gai Chase National Park (1894) to its north were highly significant initiatives in preserving the natural realm and providing recreational opportunities for the people of Sydney.

During the closing decades of the twentieth century, several major parks were established in metropolitan Sydney.

The 44 hectares of Sydney Park at St Peters were associated with brick making between the 1840s and 1970. The site was also home to other industrial activity such as gas storage, manufacturing and warehousing. The pits dug by the brickworks were progressively filled with waste material from 1948 until 1976 and after the closure of the tip, a layer of soil and building rubble was placed over the site to create a new regional park. Park facilities include the Alan Davidson Oval, which is located in the northeastern corner of the park and is a first class sports oval providing facilities for cricket and Australian Rules football. There is also a Community and Road Education Scheme and a large landscaped children's playground. A series of wetlands and water courses run from the centre of the park to its southeastern corner, providing habitat for native and visiting waterfowl. Elevated timber viewing platforms are located around many of the wetlands. The brick kilns precinct in the northwestern corner of the park provides evidence and interpretation of the site's previous use as a municipal brick works. The park is administered by the City of Sydney.

In 2001, the Sydney Harbour Federation Trust was established by the Australian Government to protect and improve public access to eight former defence and Commonwealth sites around Sydney Harbour. The diverse sites include:

- Cockatoo Island and Snapper Island in Sydney Harbour;
- Woolwich Dock and Parklands;
- HMAS Platypus in Neutral Bay;
- Headland Park and Chowder Bay in Mosman;
- North Head Sanctuary in Manly;
- The Marine Biological Station in Watson's Bay; and
- The Macquarie Light Station in Vacluse.

Headland Park and Chowder Bay provide an instructive precedent for the future use and management of the Newington Armament Depot and Nature Reserve. For almost 150 years Georges Heights was a strategic vantage point used by the military for the protection of Sydney, and work commenced on the construction of fortifications, batteries and gunners' barracks from 1871 after the last British troops departed from Australia. Evidence of strong military presence remains – apart from these items, there is also a military hospital constructed during World War I, gun emplacements, a parade ground, and buildings at Chowder Bay that were constructed for the Submarine Miners' Corps.

The bushland in Headland Park provides habitat for a wide range of native species, while there are many marine plant and animal species to be found at Chowder Bay, where its isolation and restricted access in the past has left the shoreline relatively undisturbed. The natural and heritage components of the place have been augmented by a wealth of facilities and attractions. There are walking tracks designed for the enjoyment of natural and historical attractions and views, barbecue facilities, cafés and restaurants, and a sculpture park, implemented in association with Sculpture by the Sea. Visitors are offered the opportunity of overnight stays in a limited number of former naval cottages, while various buildings are available for leasing by companies and small businesses.



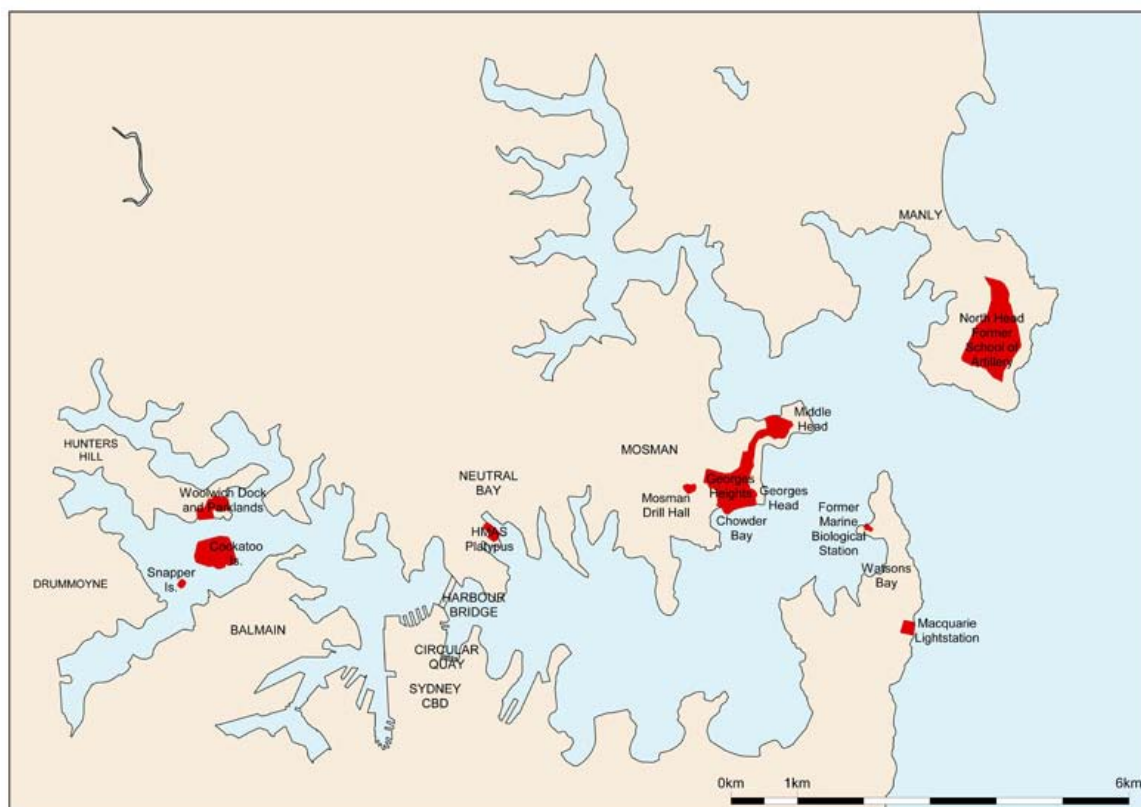


Figure 4-18 The former defence and Commonwealth sites administered by the Sydney Harbour Federation Trust (Source: <http://www.harbourtrust.gov.au/visit-our-sites/map-of-whole-harbour/index.html> 26 October 2011).

The largest of the recent parkland programs in metropolitan Sydney is the Western Sydney Parklands, which consist of 5,280 hectares of land extending 27 kilometres from Quakers Hill south to Leppington. It will be Australia's largest urban parkland and amongst the largest in the world.

The *Sydney Region Outline Plan* of 1968 identified a corridor to provide open space and infrastructure, parts of which were confirmed through inclusion in local planning schemes during the 1970s. From that time until the present, there has been ongoing acquisition of land, and in 2006 the *Western Sydney Parklands Act* established a Trust, to which a board was appointed and land vested during 2008. *SEPP Western Sydney Parklands (2009)* provides the statutory planning framework, and a *Parklands Plan of Management* was completed in 2010.

Much of the land is still undeveloped for parkland purposes, but it already includes major recreational facilities such as Blacktown International Sportspark (developed as a major training and playing venue for athletics, baseball and softball for the 2000 Olympics), Eastern Creek International Raceway, Western Sydney International Dragway, Sydney International Equestrian Centre and Sydney International Shooting Centre (both associated with the 2000 Olympics). The Parklands include picnic grounds, walking and cycling areas, but about 21% is devoted to long-term regional infrastructure. Prospect Reservoir and its associated canal and pipelines are incorporated into the Parklands, along with electricity, gas and water easements and other essential infrastructure. Extensive areas of land are leased for agricultural use, waste processing, motor sports and rural residential purposes. As with Newington, the Parklands are informed by Aboriginal and European heritage considerations.

Three sites are gazetted and preserved under the NPWS Act – Kemps Creek Nature Preserve, Western Sydney Regional Park and Prospect Nature Reserve. According to the *Metropolitan Plan for Sydney 2036* the Parklands provide a best practice demonstration of integrated urban parkland for the twenty-first century by:

- Providing regional environmental and conservation opportunities;
- Protecting and promoting ongoing agriculture in suitable areas;
- Developing park tourism and commercial uses on sites adjacent to major transport corridors;
- Maintaining secluded areas for interaction with nature; and
- Delivering significant regional community and recreation facilities.

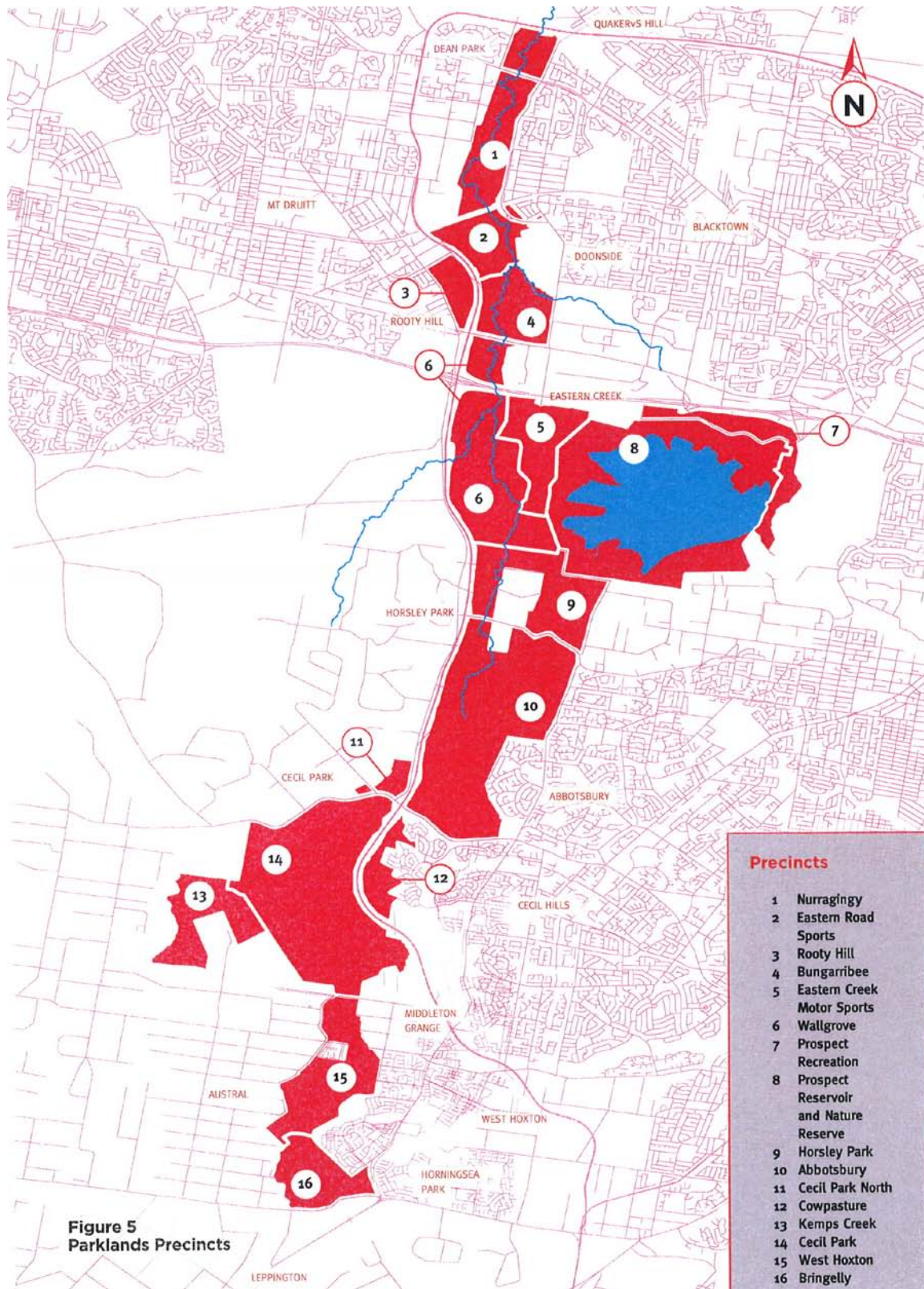


Figure 4-19 Extent of the Western Sydney Parklands  
 (Source: *Western Sydney Parklands Plan of Management 2020*, January 2011, p.45).

### 4.3.3 Wider Context

The Maribyrnong Defence Site extends over 128 hectares and is located about 10 kilometres from the centre of Melbourne. It was established in 1908 to manufacture explosives and was progressively vacated between 1996 and 2002. It has several similarities with the Newington Armament Depot and Nature Reserve, including many small scattered groups of historically significant buildings and frontage to the Maribyrnong River. At this stage it remains a closed site and is subject to master planning. Objectives of this process include:

- Increasing housing supply, choice and affordability in Melbourne's inner west;
- Reintegration of the isolated site into its urban context;
- Provision of public access to the riverfront and significant open space; this will link the site to the existing regional park network;
- Restoration and reuse of significant heritage buildings on the site; and
- Delivery of a range of community facilities such as education and health.

The Sydney Olympic Park Parklands are a large urban park when compared to significant urban parks in other parts of the world. Central Park in New York contains 340 hectares, the chain of parklands known as the Emerald Necklace in Boston extends across 405 hectares, as do Lincoln Park in Chicago and Stanley Park in Vancouver. Golden Gate Park in San Francisco spreads over 410 hectares.

There are relatively few parks that have associations with historic military sites. Although there are battlefields in Europe and America that have become parklands, the reuse of sites such as Newington, used for other military purposes, is less common. One parkland that is distinguished by a past military presence is the Presidio of San Francisco, which encompasses about 603 hectares. The Presidio was a fortified location from 1776, when it was established as the military centre of Spanish colonisation in this part of California and continuously served the military until it was vacated by the Sixth US Army in 1994. The Presidio had previously been recognised as a National Historical Landmark in 1962 and was transferred to the control of the US National Park Service. In 1996, a Trust was set up to oversee and manage the interior of the site. Under the direction of the Trust, the Presidio achieved financial self-sufficiency around 2005.

At the present time, the Presidio boasts a wide range of environments and attractions:

- The so-called Main Post is the historic focus of the place and contains barracks, landscaping, residential areas and a commercial presence;
- Crissy Field is a large open meadow bordered by a promenade and tidal marshland; it is also used as an environmental education centre;
- The Letterman District, formerly a military hospital complex, houses a variety of private organisations and the Lucasfilm Digital Arts Centre;
- Baker Beach includes coastal defence batteries and an ecologically diverse plant habitat;
- 21 architecturally diverse residential neighbourhoods in former military housing;
- San Francisco National Cemetery;
- The Presidio Golf Course;



- Lobos Creek Valley, a restored dune habitat;
- An historic forest extending over 121 hectares that was planted in the 1880s; and
- A major watershed known as Tennessee Hollow that supports diverse wildlife habitats.

#### **4.3.4 Conclusions**

Whilst there are parklands in other parts of metropolitan Sydney, in other parts of Australia and in other parts of the world that combine a significant military site with areas of high natural significance, the Newington Armament Depot and Nature Reserve is unique because of its context within the boundaries of Sydney Olympic Park and within a major urban centre. It is also unique because the remaining areas of the former Armory have retained a remarkable degree of intactness. It is still possible to appreciate the historical character and scale of the place, and its formerly isolated circumstance. At the same time, it offers a distinctive cultural landscape that is linked regenerating natural landscapes.

The Newington Armament Depot and Nature Reserve is integrated into legislation and planning instruments that apply to Sydney Olympic Park, and therefore its management and control are not isolated from its surroundings.

## 5 ASSESSMENT OF SIGNIFICANCE

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### 5.1 PREVIOUS ASSESSMENTS OF HERITAGE SIGNIFICANCE

#### 5.1.1 State Heritage Register Listing

The following Statement of Significance is included in the State Heritage Register listing for the site:

“The former Royal Australian Navy (RAN) Armament Depot - Newington known as the Newington Armament Depot and including the area now known as the Newington Nature Reserve, is potentially of State heritage significance as a place which demonstrates the historical and technical development of systems and regulations of explosives handling and storage from the 1890s to 1999 and also demonstrates the importance of Sydney as a Navy Port. Newington Armament Depot and Nature Reserve is historically significant as it contains physical evidence demonstrating the history of European occupation through to the end of the 20<sup>th</sup> century. The site is a valuable tool for research relating to the early settlement and development of the colony of NSW and the development of defence from colonial times.

Newington Armament Depot and Nature Reserve is potentially of State significance as an extensive cultural landscape containing features from all periods of its human occupation as well as regionally rare forests and wetlands. Newington Nature Reserve is reserved under the NSW National Parks and Wildlife Act 1974 because of its significant ecological values; these extend beyond the boundaries of the reserve into other parts of the site. The site’s estuarine wetland and forest communities are rare remnants of ecological communities that once dominated this region. These provide a valuable resource for research and include a number of rare and endangered ecological communities, flora and fauna including Sydney Turpentine Ironbark Forest, Coastal Saltmarsh, the Green and Golden Bell Frog, *Wilsonia backhousei* [sic] and the White Fronted Chat. The site supports 144 bird species and ten bat species including the only known maternity roost of the White-striped Freetail bat in the Sydney area. In addition, it supports the only remaining example of a complete zonal succession from eucalypt forest, saltmarsh, mangroves and tidal mudflats on the Parramatta estuary.”

#### 5.1.2 Australian Heritage Council

The site is listed by the Australian Heritage Council as the Newington Arms Depot Conservation Area. Its heritage significance is described in the following terms:

“The Newington Arms Depot illustrates the sequence of design philosophies for explosives handling throughout this [twentieth] century. The contrast between these structures and those elsewhere on the site document the change in policy from containment of blasts (arched buttressing on original magazine) to protection of other structures from high energy fragments (earth covering of later stores). The complex also provides an insight into the growth of Australia’s Navy from the time when it was merely a component of the Royal Navy, through a formative phase of continuing use of Royal Navy equipment and techniques to its present independent status.”

The Newington Arms Conservation Area was included in the Register of the National Estate (RNE) on 14 May 1991 (Place Identification 15054). The statement of significance for this listing is the same as the statement of significance included in the Australian Heritage Places Inventory.

### 5.1.3 National Trust of Australia (NSW)

The site is identified as the Newington Arms Depot (RANAD) by the National Trust of Australia (NSW) and is classified by the organisation. Reasons for classification are the same as the statements of heritage significance in the Australian Heritage Places Inventory and the Register of the National Estate, but were drafted prior to these two documents.

The Newington Arms Depot was approved for classification on 5 November 1984. Its identification number is 9094.

## 5.2 ASSESSMENT OF CULTURAL SIGNIFICANCE

### 5.2.1 Introduction

The following assessment uses the framework for the assessment of heritage significance advocated by the NSW Heritage Office in the guidelines included in the NSW Heritage Manual. In this framework, places are assessed in accordance with the defined criteria set out below.

### 5.2.2 Assessment against Criteria

**Criterion A** *An item is important in the course, or pattern, of NSW's cultural or natural history (or the cultural or natural history of the local area).*

The Newington Armament Depot and Nature Reserve is historically significant for the preservation of evidence of Aboriginal and European occupation along the Parramatta River. It was the site of an early land grant to pastoral and industrial entrepreneur John Blaxland (1769-1845), whose family was influential in the early history of the colony. Newington House, built by Blaxland, is located within the grounds of the Silverwater Correctional Centre.

The site demonstrates the importance of the Parramatta River in the opening up of the colony and the early rural settlement of areas close to Parramatta.

The historical importance of the site as an Armament Depot partly lies in its demonstration of the evolution of systems and regulations of explosives handling and storage since the 1890s. The site is important because of the evidence it provides of colonial defence prior to Federation and the subsequent role of Sydney as a major port for the Australian naval fleet. It is highly illustrative of the extent of involvement of the Royal Australian Navy and the US Navy in World War II and the logistics support provided by Australia to its allies.

The work of the Armament Depot is significant as part of a network of sites that provided for the general defence of Australia and its allies during World War II. The nature of the work carried out at the Armament Depot has great significance to members of the community with an interest in armaments, explosive ordnance and military history.

The Newington Nature Reserve is significant because it provides a mature forest habitat for a large number of flora and fauna species. It is an important “stepping stone” for native species moving between remnant areas of forest in Sydney and an important local and regional stronghold for forest bird and bat species.

The wetland in the Newington Nature Reserve has national significance. This is borne out by its inclusion in the document *A Directory of Important Wetlands in Australia* (Environment Australia, third edition 2001). The Newington Wetland is identified as NSW 085 and demonstrate a typology combining marine and coastal (inter-tidal marshes), permanent rivers and streams and permanent saline/brackish marsh. The Newington Wetland is included in the *Directory* because it is a good example of a wetland type occurring within a biogeographic region in Australia, plays an important

ecological or hydrological role in the natural functioning of a major wetland system/complex and is of outstanding historical or cultural significance.

The site demonstrates changing attitudes to ecological management and the conservation of ecologically sensitive environments through the management and enhancement of the Newington Nature Reserve, which includes the wetland and the forest.

Aboriginal stone artefact sites identified within the study area are representative of similar Aboriginal sites across Sydney and the rest of NSW, and therefore do not meet the threshold for inclusion for this criterion (*Newington Armament Depot & Nature Reserve, Sydney Olympic Park, Conservation Management Plan: Aboriginal Heritage Assessment*, p.25).

The site demonstrates the evolution of a historically significant precinct from its original uses to a place of public recreation and education. As part of the Sydney Olympic Park and a component of the Sydney Olympic Park Parklands Newington has become an important regional recreational resource.

**Criterion B** *An item has strong or special association with the life or works of a person, or group of persons, of importance to NSW's cultural or natural history (or the cultural or natural history of the local area).*

The Newington Armament Depot and Nature Reserve site has historical associations with John Blaxland (1769-1845) who arrived as a free settler in 1806. He was an entrepreneurial man given to speculative ventures, who held official posts as a magistrate and non-official member of the Legislative Council.

The site has a long association with the personnel of the Royal and Royal Australian and US Navies, through its use, from 1921 to 1999, as the principal naval armament depot that supported fleet operations based in Sydney.

The original buildings, constructed during the 1890s, are associated with the Colonial Architect's Office under the direction of James Barnet and the Government Architect's Office under the direction of Walter Liberty Vernon. The buildings are evidence of the first military occupants of the site, the New South Wales Military Forces.

Aboriginal stone artefacts identified within the study area are representative of activity by the local Wann-gal people. Although such deposits retain cultural significance, a sense of place, and heritage value for the local Aboriginal people, and are representative of the daily lives of their ancestors, individually they are not rare at a local or regional level, and do not meet the threshold for inclusion for this criterion (*Newington Armament Depot & Nature Reserve, Sydney Olympic Park, Conservation Management Plan: Aboriginal Heritage Assessment*, p.25).

**Criterion C** *An item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in NSW (or the local area).*

The Newington Armament Depot and Nature Reserve consists of a number of different landscape types that include forest, wetland, and an open park-like area with ornamental trees and man-made landforms, which gives the area great visual contrast and variety.

The unusual patterns and formation of blast mounds, light rail and sunken roads that cut through the site define the character of open areas – it's cultural landscape. These various landscape forms are revealed as the visitor moves through the site.



Although not all of the buildings and structures across the site are of equal heritage significance, as a coherent collection of individual buildings and groups of buildings they have a great deal of heritage significance because of their ability to demonstrate the historical growth and operation of the Newington Armament Depot and because of their important contribution to the formation of the cultural landscape.

The buildings that were constructed as part of the original facility demonstrate the work of the New South Wales Colonial Architect's Office. The buildings are an unusual component of the body of work produced by this important architectural office during the latter part of the nineteenth century. The association of a number of buildings with protective berms is a distinctive feature of the site and emphasises the strong links between built form, cultural landscape and the functions of the site.

The different building types from different periods of expansion, such as the Federation and inter-war eras and World War II, display interesting details such as those associated with lightning and spark prevention, safety and handling features.

The open working environment of the Newington Armament Depot provides a distinctive landscape, including built features, which forms a dramatic contrast with the dense, "closed" vegetation of the forest and the wetland.

Aboriginal stone artefact sites identified within the study area are representative of similar Aboriginal sites across Sydney and the rest of NSW, and as such, do not meet the threshold for inclusion for this criterion.

***Criterion D An item has strong or special associations with a particular community or cultural group in NSW (or the local area) for social, cultural or spiritual reasons.***

James Smith (MLALCO) has indicated that, although all Aboriginal heritage sites contain intrinsic cultural significance, the study area does not have any specific cultural significance to the MLALC Aboriginal community. As a consequence, the Aboriginal stone artefact sites identified during the survey do not meet the threshold for this criterion (*Newington Armament Depot & Nature Reserve, Sydney Olympic Park, Conservation Management Plan: Aboriginal Heritage Assessment*, p.25).

The Newington Armament Depot is significant to the civilian naval employees and their families who worked, and sometimes lived, at the Armament Depot. The importance of the work carried out at the site and the occupational health and safety procedures that the dangerous work necessitated, are clearly illustrated by the remaining structures.

***Criterion E An item has potential to yield information that will contribute to an understanding of NSW's cultural or natural history (or the cultural or natural history of the local area).***

The saltwater wetland area is significant as a research site that can benefit the wetland and provide a model for managing other wetlands. There are very few wetlands where the tidal regime can be similarly monitored and managed; this provides one of the best possible opportunities to understand such areas and test the outcomes of a range of management prescriptions.

The forest provides the opportunity to monitor and understand recovery processes of this ecological community and the individual species within it. The soils of this area are a rare intact example that will provide information about management of soils that are generally disturbed by urban development.

The Newington Armament Depot and Nature Reserve displays a high degree of integrity in regard to its structures, cultural landscape, buildings and movable heritage items. Therefore, it has high potential for interpretation and research into technological developments in explosives handling and storage. It illustrates the development of structures and design philosophies to accommodate changing international explosives regulations. The buildings constructed for the US Navy during World War II are significant examples of military storehouse technology. Specific building types demonstrate the adaptation of building technology for armaments handling and storage and the specific nature of armaments work practices.

The natural environment contains habitats that are increasingly rare in the Sydney region. It harbours rare flora and fauna species that provide opportunities for scientific research.

The Aboriginal cultural deposits located within the study area have low potential to answer research questions about the cultural history of the Wann-gal people. The potential archaeological deposits previously identified within the study area have been described as comprising only a thin layer of remnant soil with the potential to contain stone artefacts. Although areas of possibly intact soil are rare within the study area, and these potential archaeological deposits were considered likely to contain undisturbed *in situ* archaeological deposits, such deposits are not considered to be extensive. Further, the isolated artefacts previously identified within the study area were not identified as likely to be indicative of any subsurface deposit. Therefore, these potential archaeological deposits and isolated finds are considered to have low research potential (*Newington Armament Depot & Nature Reserve, Sydney Olympic Park, Conservation Management Plan: Aboriginal Heritage Assessment*, p.25).

**Criterion F     *An item possesses uncommon, rare or endangered aspects of NSW's cultural or natural history (or the cultural or natural history of the local area).***

The Newington Nature Reserve contains a complete zonal succession of Eucalypt Forest, Casuarina Forest, saltmarsh and mangroves, which is the only such succession remaining along the Parramatta River estuary.

The precinct's forest is Sydney Turpentine Ironbark Forest, one of the Cumberland Plain's 17 ecological communities. It is listed as a critically endangered ecological community under the *Environment Protection and Biodiversity Conservation Act 1999* and endangered under the *Threatened Species Conservation Act 1995*.

The Newington Nature Reserve includes an estuarine wetland consisting of Mangrove Forest, mudflats, Swamp Oak Floodplain Forest and Coastal Saltmarsh. Swamp Oak Floodplain Forest and Coastal Saltmarsh are both classified as endangered ecological communities under the *Threatened Species Conservation Act 1995*. The precinct's saltmarsh flora has additional significance with the presence of three important plant species. The species are *Wilsonia backhousei*, listed as vulnerable under the Threatened Species Conservation Act, *Halosarcia pergranulata* and *Lampranthus tegans*, both of which have restricted distribution and local conservation significance.

The significance of the Wetland is acknowledged through its listing in *A Directory of Important Wetlands of Australia* (Environment Australia, third edition, 2001).

One hundred and forty-four bird species have been recorded in the Newington Armament Depot and Nature Reserve, which has a high density of hollows and nesting places. Species include migratory species listed under international agreements. The estuarine wetlands are an important part of a network of estuarine habitats utilised by migratory shorebirds along the Parramatta River.

The saltmarsh community provides habitat for one of two remaining Sydney populations of White-fronted Chat (*Ephthianura albifrons*).

The endangered Green and Golden Bell Frog (*Litoria aurea*) has been recorded within the brackish pond (Wharf Pond) located between the freshwater catchment and the intertidal wetland.

The Newington Nature Reserve and Armament Depot supports the only known maternity roost of the White-striped Freetail Bat (*Tadarida australis*) in the Sydney region.

The relatively unmodified habitats provide a reference and benchmark with which to compare and understand original vegetation and soils of Sydney coastal estuarine zones.

The Royal Australian Navy Armament Depot at Newington was unique in the history of New South Wales for its role as the major storage and supply depot of explosives, firstly for the New South Wales Military Forces and then the Royal Australian Navy, to service fleet facilities in Sydney Harbour from the 1890s to the 1990s. It was the only site in New South Wales where there was a combination of operation activities and physical facilities for the Australian, US and Royal Navies in this regard.

The Aboriginal stone artefact sites identified within the study area may be regarded as being relatively common in the local region, although they do have value in demonstrating the presence of Aboriginal people in the area, which has almost been eradicated by the extensive disturbance that has occurred during the long history of the place as an armory. Nevertheless, such sites are the most common site type both locally and regionally, and are therefore not considered to have archaeological rarity (*Newington Armament Depot & Nature Reserve, Sydney Olympic Park, Conservation Management Plan: Aboriginal Heritage Assessment*, p.26).

**Criterion G**     *An item is important in demonstrating the principal characteristics of a class of NSW's (or the local area's) cultural or natural places; or cultural or natural environments.*

The forest and wetland areas of the Newington Nature Reserve demonstrate the characteristics of their respective classes of ecological community.

The Newington Armament Depot is a fine example of an historic former armament depot. It exhibits characteristics that are typical of many other Australian armament depots, but is unique in the extent of its preservation of a variety of elements over the full extent of its history. An outstanding setting further enhances it, as does the combined integrity of the natural and cultural elements.

Aboriginal stone artefact sites identified within the study area are representative of similar Aboriginal sites across Sydney and the rest of NSW. Stone artefact sites are the most common type of site previously recorded in the local region. Such site types represent a continuity of use of water resources across the study area. The previously recorded isolated finds and potential archaeological deposits within the study area are likely to represent Aboriginal activity around the bays of the Parramatta River, but have low site integrity given the previous disturbance. Consequently, Aboriginal stone artefact sites identified during the survey do not meet the threshold for this criterion (*Newington Armament Depot & Nature Reserve, Sydney Olympic Park, Conservation Management Plan: Aboriginal Heritage Assessment*, p.26).

### **5.3 SUMMARY STATEMENT OF SIGNIFICANCE**

The Newington Armament Depot and Nature Reserve is of state significance as a rare and extensive military/industrial landscape, with largely intact natural, Aboriginal and historic cultural features, which clearly demonstrate the natural and cultural development of the site.

Aboriginal stone artefact sites identified within the study area are representative of similar Aboriginal sites across Sydney and the rest of NSW.

The wetland and forest areas within and adjoining the Newington Nature Reserve have high natural heritage values because they are rare remnants of ecological communities and ecosystems that once dominated this region and because they support endangered flora and support a diverse range of fauna, including indigenous and migratory birds, indigenous animals and indigenous reptiles.

The cultural landscape of the Newington Armament Depot and Nature Reserve includes evidence of early nineteenth century industrial ventures and pastoral activities of the Blaxland family, and early twentieth century military occupation.

The site clearly demonstrates the combination of factors that influenced its evolution and development since the 1890s. The first buildings that were constructed at the Armory are unusual examples of the work of the Colonial Architect's Office and are associated with the New South Wales Military Forces. Other factors include the growth of the Royal Australian Navy, the advent of World War II, changing explosives technology and explosive ordnance regulations and the availability of land.

The site contains a wide variety of functionally related blast containment structures, support buildings, transport networks, landforms and movable items associated with the storage and handling of explosive ordnance, all of which were closely integrated with the topography and other natural features of the site. All of the structures in combination with their operational fixtures and equipment and the way in which the natural landscapes have been utilised and modified contribute significantly to an understanding of explosives storage and the evolution of the Armament Depot.

The Armament Depot formed part of a historically significant network of naval sites in the metropolitan area that express the strategic importance of Sydney in the Pacific region in the early decades of the twentieth century. The Newington Armament Depot and Nature Reserve played a vital role in naval fleet operations and still contains a rare combination of buildings and landscape features which were constructed by and for the Royal Australian Navy, the Royal Navy and the US Navy, which are of national significance in demonstrating the logistics support which Australia gave to its allies during World War II.

The Newington Armament Depot and Nature Reserve, under the management and control of the Sydney Olympic Park Authority, demonstrates best practice late twentieth century and early twenty-first century responses and actions to the adaptive reuse of historic sites and management of natural areas that are environmentally sensitive. The site demonstrates the changing cultural role that purpose-designed facilities must undergo to enable effective conservation and public appreciation.

### **5.4 SIGNIFICANCE OF INDIVIDUAL ITEMS**

#### **5.4.1 Introduction**

The key elements of a place may make a different relative contribution to its heritage significance. Loss of integrity or poor condition may diminish relative significance. Understanding the importance that the contribution of key elements makes to the heritage significance of a place assists in the determination of appropriate future actions.



The NSW Heritage Office has formulated gradings of significance to facilitate this process. The following table sets out these gradings, which have been adjusted to suit the Newington Armament Depot and Nature Reserve.

| Grading of Significance | Justification for Grading   |
|-------------------------|---|
| Exceptional             | <p>Element (or space/component/fabric of an element) that makes a direct and irreplaceable contribution to the overall heritage significance of the Newington Armament Depot and Nature Reserve. It will exhibit a high degree of integrity, with any alterations of a minor nature and generally reversible.</p> <p>Demolition/removal or inappropriate alteration would substantially diminish the heritage significance of the Newington Armament Depot and Nature Reserve.</p>                                |
| High                    | <p>Element (or space/component/fabric of an element) that makes a substantial contribution to the overall heritage significance of the Newington Armament Depot and Nature Reserve. It may have alterations that do not detract from its significance.</p> <p>Demolition/removal or inappropriate alteration would diminish the heritage significance of the Newington Armament Depot and Nature Reserve.</p>   |
| Moderate                | <p>Element (or space/component/fabric of an element) that makes a moderate contribution to the overall heritage significance of the Newington Armament Depot and Nature Reserve. It may have undergone alteration that detracts from its heritage significance.</p> <p>Demolition/removal or inappropriate alteration may diminish the heritage significance of the Newington Armament Depot and Nature Reserve.</p>  |
| Low                     | <p>Element (or space/component/fabric of an element) that makes only a minor contribution to the overall heritage significance of the Newington Armament Depot and Nature Reserve. It has undergone substantial and irreversible alteration and is difficult to interpret.</p> <p>Demolition/removal would not diminish the heritage significance of the Newington Armament Depot and Nature Reserve.</p>   |
| Contributory            | <p>Element (or space/component/fabric of an element) that has relatively little overall heritage significance but makes a contribution to the overall heritage significance of the Newington Armament Depot and Nature Reserve. It has undergone substantial and irreversible alteration and is difficult to interpret.</p> <p>Demolition/removal would not necessarily diminish the heritage significance of the Newington Armament Depot and Nature Reserve, but retention and adaptive reuse is desirable.</p> |
| Intrusive               | <p>Element (or space/component/fabric of an element) that adversely impacts on the overall heritage significance of the Newington Armament Depot and Nature Reserve.</p> <p>Demolition/removal would enhance the heritage significance of the Newington Armament Depot and Nature Reserve.</p>  |

#### 5.4.2 Natural Heritage

The Newington Nature Reserve incorporating the forest and the wetland is an element of exceptional heritage significance.

#### 5.4.3 Aboriginal Heritage

According to the findings of the AMBS study, the current evidence indicates that the previously identified Aboriginal sites have low heritage significance.

**5.4.4 Cultural Landscape**

The cultural landscape as a whole is of exceptional significance.

The significance of individual berms is considered to be exceptional because of the contribution that they make to the cultural landscape. The heritage significance of the buildings with which they are associated may be different – refer to Section 5.4.5.

The Camphor Laurel trees in the Original Establishment Precinct are of exceptional significance. This is less to do with the actual species than the avenue form of planting.

The Brush Box avenue trees are of high significance. This is less to do with the actual species than with the avenue form of planting.

Eucalypts and other planting from 1970 onwards are of contributory significance.

**5.4.5 Built Items**

The following schedules summarising the relative heritage significance of built items at the Newington Armament Depot and Nature Reserve is based on Volumes 1 and 2 of the *Newington Armament Depot Heritage Inventory* (April 1996), undertaken by Schwager Brooks & Partners for the Department of Defence. The assessment of the heritage significance of the place made during the preparation of this report confirms the assessments contained in the Heritage Inventory.

There are no built items on the site that are considered to have low or intrusive levels of heritage significance.

| EXCEPTIONAL SIGNIFICANCE |  |                        |
|--------------------------|--|------------------------|
| Number                   | Building and Date of Construction  | Precinct               |
| 20                       | Original Gunpowder Magazine, circa 1897                                  | Original Establishment |
| 118                      | Residence, 1897  | Original Establishment |
| 123                      | Residence, 1897  | Original Establishment |
| 126                      | Residence, circa 1897  | Original Establishment |
| 137                      | Office, 1897/1924-1926   | Original Establishment |
| 140                      | Explosives Workroom, 1897  | Original Establishment |
| 142                      | Explosives Packing Room, circa 1897                                      | Original Establishment |
| 143                      | Explosives Workroom/Gatehouse, 1897                                      | Original Establishment |
| 235                      | Light Railway, 1897-1909   | Original Establishment |
| 236                      | Wharf, circa 1895 (Later Additions including Cranes – High Significance) | Original Establishment |
| 241                      | Camphor Laurel Avenue and Gateposts, circa 1897                          | Original Establishment |
| 242                      | Footings of Original Fence Line, circa 1897                              | Original Establishment |

**HIGH SIGNIFICANCE**

| <b>Building</b> | <b>Building and Date of Construction</b>                  | <b>Precinct</b>        |
|-----------------|---|------------------------|
| 7               | Brick Explosives Storehouse, pre 1937                     | Original Establishment |
| 8               | Brick Explosives Storehouse, 1940                         | Original Establishment |
| 18              | Explosives Storehouse, 1937; Armory Gallery               | Early Naval Occupancy  |
| 21              | Brick Explosives Storehouse, pre 1937                     | Original Establishment |
| 22              | Non-explosives Store, circa 1922                          | Original Establishment |
| 24              | Smoke Float Store, pre 1922, 1943                         | Original Establishment |
| 26              | Stables, 1926   | Original Establishment |
| 30              | Empty Package Store, 1922                                 | Early Naval Occupancy  |
| 31              | Brick Explosives Store, circa 1937                        | RAN Wartime Expansion  |
| 33              | Explosives Storehouse (former HMAS Albatross), circa 1928 | Early Naval Occupancy  |
| 34              | Pyrotechnic Store, 1939                                   | Early Naval Occupancy  |
| 35              | Explosives Storehouse, circa 1939                         | Early Naval Occupancy  |
| 36              | Explosives Magazine, circa 1922                           | Early Naval Occupancy  |
| 37              | Explosives Magazine, circa 1922                           | Early Naval Occupancy  |
| 38              | Explosives Magazine, circa 1922                           | Early Naval Occupancy  |
| 39              | Explosives Magazine, circa 1922-1923                      | Early Naval Occupancy  |
| 42              | Explosives Storehouse, circa 1939                         | RAN Wartime Expansion  |
| 43              | Explosives Storehouse, circa 1939                         | RAN Wartime Expansion  |
| 44              | Explosives Storehouse, circa 1939                         | RAN Wartime Expansion  |
| 45              | Explosives Storehouse, circa 1939                         | RAN Wartime Expansion  |
| 46              | Explosives Storehouse, 1939-1942                          | RAN Wartime Expansion  |
| 47              | Galvanised Iron Clad Explosives Store, 1939-1942          | RAN Wartime Expansion  |
| 56              | Explosives Storehouse, 1942-1943                          | US Navy Utilisation    |
| 57              | Explosives Storehouse, 1942-1943                          | US Navy Utilisation    |
| 58              | Explosives Storehouse, 1942-1943                          | US Navy Utilisation    |
| 59              | Explosives Storehouse, 1942-1943                          | US Navy Utilisation    |
| 60              | Explosives Storehouse, 1942-1943                          | US Navy Utilisation    |
| 78              | Explosives Storehouse, 1942-1943                          | US Navy Utilisation    |
| 79              | Explosives Storehouse, 1942-1943                          | US Navy Utilisation    |
| 122             | Residence, circa 1940s                                    | US Navy Utilisation    |
| 127             | Warhead Examining Room, circa 1924                        | Early Naval Occupancy  |
| 128             | Shell Scraping Room, circa 1924                           | Early Naval Occupancy  |

**HIGH SIGNIFICANCE**

| <b>Building</b> | <b>Building and Date of Construction</b>                           | <b>Precinct</b>                                 |
|-----------------|--|---|
| 130             | Explosives Workshop, circa 1940s                                   | RAN Wartime Expansion                           |
| 131             | Explosives Workshop, circa 1930s                                   | RAN Wartime Expansion                           |
| 132             | Explosives Workshop, circa 1930s                                   | RAN Wartime Expansion                           |
| 139             | Residence, circa 1897  | Original Establishment                          |
| 144             | Explosives Workroom, circa 1940s                                   | Original Establishment                          |
| 145             | Explosives Workroom, circa 1943                                    | Original Establishment                          |
| 146             | Explosives Workroom, pre 1939                                      | Original Establishment                          |
| 148             | Toilet Block, 1897   | Original Establishment                          |
| 155             | Shell Examining Room, 1926   | Early Naval Occupancy                           |
| 156             | Shell Examining Room, 1926   | Early Naval Occupancy                           |
| 157             | Shell Examining Room, 1926   | Early Naval Occupancy                           |
| 158             | Explosives Workshop, pre 1950                                      | Early Naval Occupancy                           |
| 159             | Explosives Workshop, pre 1950                                      | Early Naval Occupancy                           |
| 200             | Toilet Block, circa 1897   | Original Establishment                          |
| 235             | Light Railway – Extensions to Original System                      | Early Naval Occupancy and RAN Wartime Expansion |
| 237             | Burma Road, pre 1915   | Newington Armament Depot                        |
|                 | The Banana, circa 1939   | US Navy Utilisation                             |
|                 | Jamieson Street  | Original Occupancy                              |
| 247             | Cranes on Wharf, circa 1973  | Original Establishment                          |
| 248             | Fascine Banks along River Foreshore and Sandstone Wall, circa 1890 | Early Naval Occupancy                           |

**MODERATE SIGNIFICANCE**

| <b>Number</b> | <b>Building and Date of Construction</b>          | <b>Precinct</b>        |
|---------------|---|------------------------|
| 1             | Dockyard Police Office, 1928                      | US Navy Utilisation    |
| 2             | NDP Mess Room/Toilet, circa 1940                  | US Navy Utilisation    |
| 3             | NDP Change Room, circa 1940s                      | US Navy Utilisation    |
| 4             | Canteen, 1944                                     | Original Establishment |
| 5             | Change Room/Toilets, 1926, 1944 Alterations       | Original Establishment |
| 6             | Office/Explosives Workshop Office, 1926/1972/1984 | Original Establishment |
| 9             | Toilet Block, 1944                                | Original Establishment |
| 12            | Wharf Transport Office, circa 1930s-1940s         | Original Establishment |

**MODERATE SIGNIFICANCE**

| <b>Number</b> | <b>Building and Date of Construction</b>   | <b>Precinct</b>        |
|---------------|--|------------------------|
| 13            | Store, 1937/1944                           | Original Establishment |
| 15            | Return Store, 1937                         | Early Naval Occupancy  |
| 16            | Acid Storehouse/Detonator Storehouse, 1937 | Early Naval Occupancy  |
| 19            | Riggers' Store, circa 1930s-1940s          | Original Establishment |
| 25            | Stencil Cutting and Tool Room, circa 1940s | Original Establishment |
| 28            | Office, circa 1940s                        | Early Naval Occupancy  |
| 29            | Toilet Block, circa 1940s                  | Early Naval Occupancy  |
| 32            | Toilet Block, circa 1930s-1940s            | Early Naval Occupancy  |
| 50            | Joiners' Shop, pre 1950                    | US Navy Utilisation    |
| 105           | Training Centre, 1944                      | Original Establishment |
| 110           | Generator House, circa 1940s               | US Navy Utilisation    |
| 129           | Shell Marking Room, circa 1924             | Early Naval Occupancy  |
| 133           | Office/Change Room, circa 1930s            | RAN Wartime Expansion  |
| 134           | Electromobile Garage, circa 1939           | RAN Wartime Expansion  |
| 135           | Toilet Block, circa 1939                   | RAN Wartime Expansion  |
| 136           | Toilet Block, circa 1939                   | RAN Wartime Expansion  |
| 138           | Storeman's Office, circa 1939              | Original Establishment |
| 141           | Explosives Workroom (Office), circa 1940   | Original Establishment |
| 150           | Electromobile Garage, circa 1940s          | Original Establishment |
| 151           | Electromobile Workshop, circa 1940s        | Original Establishment |
| 152           | Transformer Room, circa 1940s              | Original Establishment |
| 154           | Soldering Room, 1939                       | Early Naval Occupancy  |
| 160           | Office, circa 1940s                        | Early Naval Occupancy  |
| 161           | Amenity Block, 1944                        | Early Naval Occupancy  |
| 163           | Office, circa 1944                         | Early Naval Occupation |
| 164           | Explosives Workshop, circa 1980s           | Early Naval Occupancy  |
| 190           | Heat Test Room/Proof House, 1939-1941      | Early Naval Occupancy  |
| 191           | Colour Test Room/Proof House, 1939-1941    | Early Naval Occupancy  |
| 192           | Proof House, 1939-1941                     | Early Naval Occupancy  |
| 193           | DA Proof House, 1939-1941                  | Early Naval Occupancy  |
| 194           | Toilet Block, circa 1939                   | Early Naval Occupancy  |
| 199           | Toilet Block, circa 1930s                  | RAN Wartime Expansion  |



**MODERATE SIGNIFICANCE**

| Number | Building and Date of Construction            | Precinct                 |
|--------|--|--------------------------|
| 243    | Road between Forest and Wetland, circa 1920s | Early Naval Occupancy    |
| 244    | Foreshore Road, circa 1930s                  | Early Naval Occupancy    |
| 246    | Burning Ground, circa 1930s                  | Early Naval Occupancy    |
|        | Fire Safety Hydrants and Equipment.          | Newington Armament Depot |
|        | Stairs in Embankments, circa 1940s           | US Navy Utilisation      |

**CONTRIBUTORY ITEMS**

| Number | Building and Date of Construction  | Precinct               |
|--------|------------------------------------|------------------------|
| 15     | Return Store, 1937                 | Early Naval Occupancy  |
| 51     | Timber Store, pre 1950             | US Navy Utilisation    |
| 83     | Sail Makers' Store, circa 1940s    | Original Establishment |
| 113    | Workshop/Garage, 1966              | US Navy Utilisation    |
| 116    | Time Clock Race, 1970              | US Navy Utilisation    |
| 117    | Toilet/Ablution Block, circa 1939  | US Navy Utilisation    |
| 121    | Electrical Substation              | US Navy Utilisation    |
| 149    | NDP Wharf Office, post 1950        | Original Establishment |
| 196    | Water Tower                        | Early Naval Occupancy  |
| 197    | Dept H/C Store, circa 1950s        | US Navy Utilisation    |
| 198    | Flammable Liquids Store, 1963      | Original Establishment |
| 204    | Fuel Filling Station, circa 1986   | US Navy Utilisation    |
| 206    | Joiner's Store, circa 1939         | US Navy Utilisation    |
| 207    | Naval Police Fire Equipment Store  | US Navy Utilisation    |
| 208    | Naval Police Fire Equipment Store  | US Navy Utilisation    |
| 209    | Naval Police Fire Equipment Store  | Original Establishment |
| 211    | Sailmakers' Shop, circa 1980s      | US Navy Utilisation    |
| 212    | Fuel Attendant's Shed, circa 1980s | US Navy Utilisation    |
| 233    | Fitters' Workshop, circa 1980s     | US Navy Utilisation    |

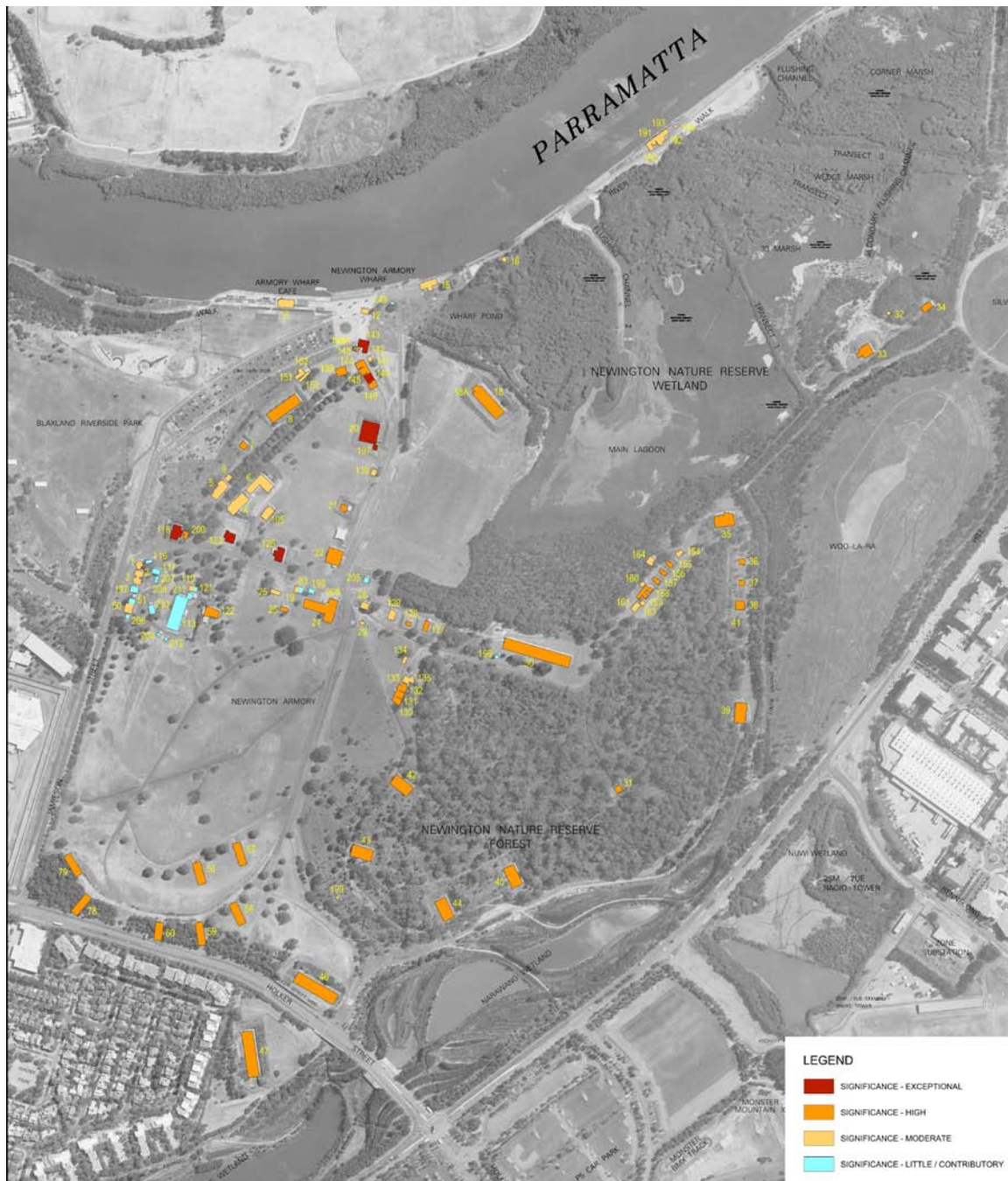


Figure 5-1 Relative heritage significance of built items. Refer also to Attachment 1 in Section 10 (Source: Tanner Architects/SOPA).

#### 5.4.6 Significant Groups of Built Items

There are groups of buildings that combine buildings with different levels of heritage significance. The relative heritage significance of each building is reinforced and enhanced by the group association. Important groups include the following:

- Buildings 139, 140-146 and 148;
- Building 20 and 137; the group has visual links to the group above;
- Buildings 28 and 127-129;
- Buildings 130-133 and 135;
- Buildings 36-38;
- Buildings 154-161 and 163;
- Buildings 56 and 57;
- Buildings 58-60 and 78-79; and
- The two large cranes (Item 247) and Buildings 15, 12 and 149.

#### 5.4.7 Moveable Heritage

As described in Section 3.6 above, the Newington Armament Depot and Nature Reserve contains a vast array of moveable heritage items.

The items on permanent loan to SOPA under agreement from the Royal Australian Navy, which are Commonwealth property, are not included in this assessment. However, there are many moveable items under the jurisdiction of SOPA, which include but are not confined to:

- Light rail rolling stock, equipment and signage;
- Secondary cranes;
- Identification, information and safety signage on buildings;
- Purpose-designed furniture, equipment and devices associated with the various tasks and functions of the Armory;
- Fire safety equipment (fire hose reels, hydrant points).

While the relative heritage significance of each individual item has not been evaluated, and while some items may have greater heritage value than others, their overall value in understanding and interpreting the site is invaluable and as a collection they have high heritage significance.

### 5.5 HISTORICAL ARCHAEOLOGY

The assessment of heritage significance of historical archaeology at the Newington Armament Depot and Nature Reserve has been identified in the Newington Armory Historical Archaeological Zoning Plan written by Cosmos Archaeology Pty Ltd (September 2004, reissued August 2013). The following section has been extracted from this report.

As there are over 400 identified cultural features that are likely to survive as *relics* within the study area, it is not considered feasible within the scope of reporting to provide cultural significance assessments for each of them. Instead preliminary significance statements have been made for the two distinctive cultural activities that took place within the Newington Armament Depot and Nature Reserve:

1. Grazing and agriculture; and
2. The storage and preparation of ordnance.

With regard to the first cultural activity, the three separate periods in which this activity was practiced; early land grants, the Blaxland Estate and then the State Abattoirs are examined separately. With regard to the second activity relating to the Newington Armory period, the storage and preparation of ordnance, identified archaeological resources will be divided into themes, relating to the functions of the facility.

#### **5.5.1 Agriculture and grazing (includes the early land grants, Blaxland Estate and the lands leased by the State Abattoirs)**

**1788 to 1807: Early Land Grants.**

***Criterion (a) an item is important in the course or pattern of NSW, or the local area's, cultural or natural history.***

The early land grants of Shortland, Waterhouse and Archer were the earliest evidence of European settlement in the Homebush area.

***Criterion (e) an item as potential to yield information that will contribute to an understanding of NSW, or the local area's, cultural or natural history.***

An understanding of how these farms operated, if they were occupied, would give some insight on the plight and demise of the small landholder of early Sydney.

Though it is unlikely that archaeological remains associated with this period will be present in the Newington Armament Depot and Nature Reserve, the rarity of such remains within the context of Sydney would make them of High State significance.

**1807 to 1880: Blaxland's 'Newington' Estate.**

***Criterion (a) an item is important in the course or pattern of NSW, or the local area's, cultural or natural history.***

The activities that took place on Blaxland's grant prior to the 1850s were of some significance to the economy of early Sydney, with particular reference to the salt works.

***Criterion (b) an item has strong or special associations with the life or works of a person, or group of persons, of importance in NSW, or the local area's, cultural or natural history.***

The land that comprises the Newington Armory once belonged to John Blaxland (1769-1845) who arrived as a free settler in 1806. It was part of a land grant of 1290 acres (522 ha) on the Parramatta River, which he called Newington. Blaxland was a speculative and entrepreneurial man who also held official colonial posts. He is of historical importance for NSW.

***Criterion (e) an item as potential to yield information that will contribute to an understanding of NSW, or the local area's, cultural or natural history.***

An understanding of how Blaxland's industries operated would give some insight on the technologies, resources and capital expenditure available in early Sydney.

The anticipated archaeological remains associated with this period within the Newington Armament Depot and Nature Reserve are confined to the remains of paddock fences, in the form of post holes. The archaeological value of such remains, in the terms of the information that could be obtained from their investigation, can be considered to be of Moderate State significance.

**1915 to 1930s: Land leased to the State Abattoirs**

***Criterion (a) an item is important in the course or pattern of NSW, or the local area's, cultural or natural history.***

The significance of activities undertaken by the State Abattoir within the Newington Armament Depot and Nature Reserve lies in the effects they had on the development and functioning of the Newington Armory. In the second and third decades of the 20<sup>th</sup> century the leasing of land around the original precinct of the Armory seriously curtailed its expansion. The presence of cattle grazing in adjacent paddocks often caused friction through the cattle causing damage to drainage and the occasional fire caused by the Abattoir workers. The benefits were also recognised in the reduction of the fire hazard resulting from the cattle minimising the fuel load in the adjacent paddocks. It is also possible that some of the fencing within the Armory may have been a response to wandering cattle.

***Criterion (e) an item as potential to yield information that will contribute to an understanding of NSW, or the local area's, cultural or natural history.***

The anticipated archaeological remains associated with this period within the Newington Armament Depot and Nature Reserve are confined to the remains of paddock fences, in the form of post holes. The archaeological value of such remains, in the terms of the information that could be obtained from their investigation, can be considered to be of Little State significance.

**5.5.2 The Newington Armory**

**The demarcation and regulation of space** (includes fences and gates)

***Criterion (a) an item is important in the course or pattern of NSW, or the local area's, cultural or natural history.***

An armaments depot is a dangerous environment. The business of the storage of explosives is accompanied by security so as to prevent theft and sabotage. The variety of activities that take place inside the depot require controls and set standards of conduct of behaviour. The establishment of zones or barriers, which dictated movement and behaviour, was expressed through fences. The types of fences ranged from 'man proof' fences along the perimeter of the Armory, barbed wire fences around some of the buildings, to white painted posts delineating danger zones. Fences were also erected around the residences in the middle of the establishment for privacy and in an attempt to create a domestic situation in a very atypical domestic environment.



***Criterion (e) an item as potential to yield information that will contribute to an understanding of NSW, or the local area's, cultural or natural history.***

With the exception of the remains of the concrete dwarf wall associated with the original enclosure, the anticipated archaeological remains associated with this period within the Newington Armament Depot and Nature Reserve are confined to the remains of fences, in the form of post holes. It is expected that the investigation of these archaeological remains would add little that could not be ascertained from archival plans and historical documentation. However such information would contribute to the overall significance of the Newington Armory. Therefore within the context of the Newington Armament Depot and Nature Reserve this category of archaeological remains should be considered to be of Moderate State significance.

**Transport** (includes roads, light rail, paths, tracks and the wharf)

***Criterion (a) an item is important in the course or pattern of NSW, or the local area's, cultural or natural history.***

The establishment of the Armory in the 1880s on the banks of the Parramatta River is a reminder that in the days before the introduction of the motor vehicle, the moving of bulk goods over water was a very efficient means of transport. The dangerous nature of the goods being transported increased the longevity of the viability of water transport for reasons of safety well after motor vehicles became commonly available.

The nature of the storage and preparation of ordnance requires that the various components that go to make up the ordnance be stored in separate locations and be assembled and checked in stages. The heightened requirement for ordnance in times of war demands that this process is fluent. The intra-site transport of the Newington Armory reflected the need for order and the efficiency of movement. The interconnecting light rail system is indicative of this requirement and is of critical importance in illustrating not only the traditional nature of transportation but was a major determining factor in the layout of the depot by the way it exploited the topography and available firm ground.

***Criterion (e) an item as potential to yield information that will contribute to an understanding of NSW, or the local area's, cultural or natural history.***

The archaeological remains associated with this theme will vary from pile stumps from the original wharf, road base and surfaces that may be buried or even intact and exposed paths that have become overgrown and concealed through disuse. It is expected that the investigation of these archaeological remains would add little that could not be ascertained from archival plans and historical documentation. However such information would contribute to the overall significance of the Newington Armory. Therefore within the context of the Newington Armament Depot and Nature Reserve this category of archaeological remains should be considered to be of Moderate State significance.

The exception to the above statement is the potential remains of the abandoned sections of the original light rail alignments. The light rail system that exists today, even those sections that were laid down in the early 1900s, has been modified and upgraded over time. The remains of the abandoned light rail system may provide information the materials and manner of construction used at the Newington Armory between the 1920s and 1940s. For this reason such remains should be considered to be of High State significance.

**Altering and managing the environment** (includes drains, sea walls and landfill)

***Criterion (a) an item is important in the course or pattern of NSW, or the local area's, cultural or natural history.***

A casual observation of the land resumed for the establishment of the Armory in 1880s would suggest that there was more than enough land available for the facility to meet its needs. However approximately three quarters of the land originally resumed was inter tidal mud flats and mangroves and completely unsuitable for the construction of the buildings required. One of threads of the history of the Newington Armory is the struggle to utilise the land that was available to it. Initially the preparation for the large scale reclamation of the area took the form of the construction of the present seawall which encompassed the whole of the wetlands on the western side of Homebush Bay. Apart from some localised reclamation along the periphery of the original establishment, the wholesale reclamation of the wetlands within the boundaries of the Armory never developed. Even with the critical demands for space during World War II, it was preferable and more economical to appropriate land to the south of the original establishment. Some reclamation took place immediately to the east of the original establishment but for the remainder of the wetlands the impact of the Armory was confined to the construction of isolated buildings on patches of firm ground, connected with narrow causeways and the excavation of an intricate network of drains.

***Criterion (e) an item as potential to yield information that will contribute to an understanding of NSW, or the local area's, cultural or natural history.***

The archaeological remains associated with this theme will vary from early sections of seawall to open drains that have since been buried under fill or are concealed by re-growth. It is expected that the investigation of these archaeological remains would add little that could not be ascertained from archival plans and historical documentation. However such information would contribute to the overall significance of the Newington Armory. Therefore within the context of the Newington Armament Depot and Nature Reserve this category of archaeological remains should be considered to be of Moderate State significance. The exception to this would be the landfill itself, which should be considered to be of Little State significance.

**The business end of the Armory – the storage and preparation of ordnance** (includes the buildings – existing and demolished, as well as the associated traverses).

***Criterion (a) an item is important in the course or pattern of NSW, or the local area's, cultural or natural history.***

The heart of an armaments depot is the variety of buildings, which exist for the storage, and preparation of ordnance. Such activities require very stringent specifications with regards to construction, layout and siting. It is these structures that provide the essence of the character of the Newington Armory.

***Criterion (e) an item as potential to yield information that will contribute to an understanding of NSW, or the local area's, cultural or natural history.***

The archaeological remains associated with this theme will vary from post holes associated with timber sheds, brick foundations, concrete footings and the massive earthworks of the traverses. Some of these archaeological remains may be found under existing buildings which have been modified and re-built over time.

It is expected that the investigation of some of these archaeological remains would add significantly to the understanding of the functioning of the Armory, especially for those buildings of which there remains little archival documentation. Such information would contribute to the overall significance

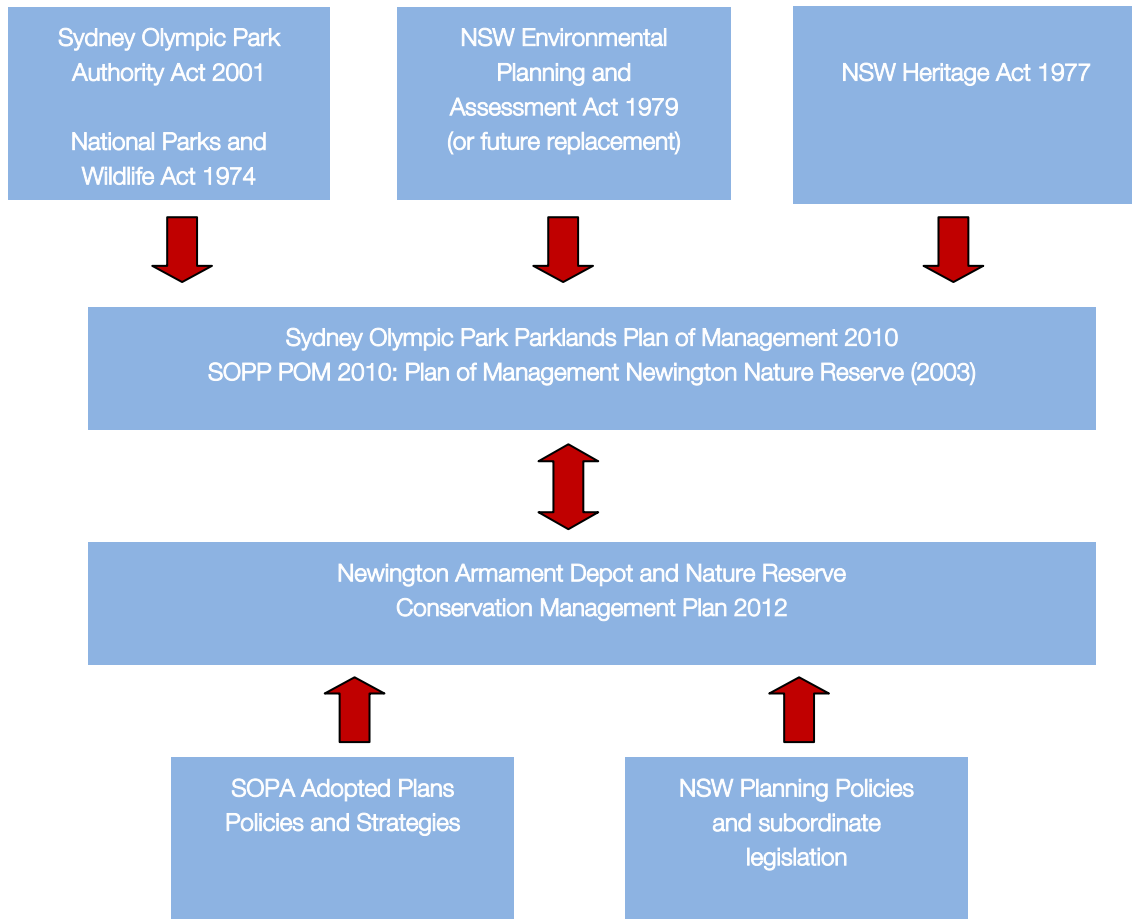
of the Newington Armory. Therefore within the context of the Newington Armament Depot and Nature Reserve this category of archaeological remains should be considered to vary from Moderate to High State significance.

## 6 LEGISLATIVE CONTROLS AND PLANNING INSTRUMENTS

### 6.1 INTRODUCTION

The Newington Armament Depot and Nature Reserve is managed and regulated by a relatively large number of Acts of Parliament, planning instruments and management reports. Because of this they have been included in a separate section of the CMP, parts of which have been extracted from the CMP 2003.

The basic hierarchy of legislation is as follows:



### 6.2 SYDNEY OLYMPIC PARK AUTHORITY ACT 2001

The *Sydney Olympic Park Authority Act 2001* No. 57 (SOPA Act) has several objects:

- a) to ensure that Sydney Olympic Park becomes an active and vibrant centre within metropolitan Sydney; and
- b) to ensure that Sydney Olympic Park becomes a premium destination for cultural, entertainment, recreation and sporting events; and
- c) to ensure that any new development carried out under or in accordance with this Act accords with best practice accessibility standards and environmental and town planning standards; and
- d) to ensure the protection of the natural heritage of the Millennium Parklands.

The gazettal of the Sydney Olympic Park Authority Act in 2001 established the Sydney Olympic Park Authority (the Authority) as the relevant management agency for the Sydney Olympic Park, of which the Newington Armament Depot and Nature Reserve is a component. The Act covers the formation and functions of the Authority. The Act provides that the Minister for Planning is the consent authority for Sydney Olympic Park.

In reference to heritage, a function of the Authority:

13(c) to protect and enhance the natural and cultural heritage of Sydney Olympic Park, particularly the Millennium Parklands.

The Authority is required under the Act to produce a Plan of Management for the Parklands, which includes the Newington Armament Depot and Nature Reserve and to guide operational and future use of the site. The Act also allows for the Plan of Management to incorporate a Plan of Management (prepared under Part 5 of the NPWS Act) for the Newington Nature Reserve, which is a component of the subject site. The *Sydney Olympic Park Parklands Plan of Management 2010* was adopted by the Minister responsible for Sydney Olympic Park on 8 November 2010.

The Act also includes specific requirements for the Newington Armament Depot and Nature Reserve in Section 34 (6):

The Authority must ensure that the plan of management includes, after consultation with the Director-General of National Parks and Wildlife, a proposal that land adjoining the Newington Nature Reserve is to be managed as a buffer to that reserve.

and Section 30 (5):

In order to assist the making of future additions of land to the Newington Nature Reserve, the Authority must manage the lands adjoining the Reserve in sympathy with the Reserve.

The Act establishes a management structure for the Parklands. The Act requires that the Board of the Authority must establish an Advisory Committee for the Parklands. That Advisory Committee can make recommendations to the Board with respect to care, control and management of the Parklands. That Advisory Committee has been established.

The Act provides for a balance between ecological and cultural management, and guides the Authority to ensure that ecological sustainability is a primary goal in works and actions carried out by the Authority on its lands.

### **6.3 NATIONAL PARKS AND WILDLIFE ACT 1974**

The majority of the forest and wetland areas of the Newington Armament Depot and Nature Reserve were gazetted in September 2000 as the Silverwater Nature Reserve (the name was changed later to the Newington Nature Reserve with passage of the SOPA Act). Management and co-ordination of the Reserve has been partially devolved under an agreement between the Authority and the NPWS, to be managed in accordance with the Parklands Plan of Management, which is incorporated into a Plan of Management for the Newington Nature Reserve, adopted on 28 January 2003. The Newington Nature Reserve gazettal recognises the ecosystems of the Newington Armament Depot and Nature Reserve and places an additional set of management and statutory requirements over the gazetted land. The Newington Nature Reserve is to be managed in accordance with the management principles for Nature Reserves contained in Division 2 30J of the *National Parks and Wildlife Act 1974*.



The stone artefacts recorded within the forest are registered as individual Aboriginal sites with the Registrar of Aboriginal Sites, NPWS. The *National Parks and Wildlife Act 1974* provides statutory protection for all Aboriginal objects whether or not they have been formally identified and/or registered with the NPWS.

The NPWS also has a wider role in the implementation of the *Threatened Species Conservation Act 1995* as it applies to the Newington Armament Depot and Nature Reserve and the wider Parklands.

SOPA and NPWS should consider revising the current Memorandum of Understanding to ensure it is up to date and addresses all the relevant issues

#### **6.4 STATE ENVIRONMENTAL PLANNING POLICY (MAJOR DEVELOPMENT) 2005**

The aims of this State Environmental Planning Policy (SEPP) are as follows:

- to facilitate the development, redevelopment or protection of important urban, coastal and regional sites of economic, environmental or social significance to the State so as to facilitate the orderly use, development or conservation of those State significant sites for the benefit of the State; and
- to facilitate service delivery outcomes for a range of public services and to provide for the development of major sites for a public purpose or redevelopment of major sites no longer appropriate or suitable for public purposes.

The Newington Armament Depot and Nature Reserve is included in Part 23 of Schedule 3 - state significant sites, which applies to the Sydney Olympic Park site.

The SEPP defines zoning across the site. The zones that apply to the Newington Armament Depot and Nature Reserve are E1 National Parks and Nature Reserves, E2 Environmental Conservation, E3 Environmental Management and RE1 Public Recreation (Part 23 Clause 7; State Environmental Planning Policy (Major Development) Amendment (Sydney Olympic Park) 2009 Land Zoning Map). Clauses 11 to 14 describe objectives, uses and permitted development in the respective zones.

Clause 29 of Part 23 controls development within an environmental conservation area and applies to land within the SOP shown on the Environmental Conservation Areas Map as within an environmental conservation area. Clause 31 of Part 23 relates to heritage conservation (including Aboriginal heritage) and stipulates where consent is and is not required and considerations that need to be taken into account. Conditions relating to exempt and complying development are defined.

#### **6.5 NSW HERITAGE ACT 1977**

The *Heritage Act 1977* (NSW) aims to conserve the environmental heritage of New South Wales. The Act established the State Heritage Register (SHR) to protect places of state heritage significance with particular importance to the people of New South Wales.

Although under Section 57(1) of the Act, Heritage Council approval is required to undertake any works, in the case of the Newington Armament Depot and Nature Reserve, the Heritage Council is not the consent authority. Rather, development is referred to it in some instances as a concurrence agency.

### **Management of Archaeology under the Heritage Act**

The Heritage Act also has provisions to protect historical archaeological relics. The Act defines a “relic” as any deposit, artefact, object or material evidence that:

- a) relates to the settlement of the area that comprises New South Wales, not being Aboriginal settlement; and
- b) is of state or local heritage significance.

Archaeological remains that do not meet the threshold for local or state significance are not considered to be relics under the Act.

### **State Heritage Register**

The State Heritage Register is a list of places and items of state heritage significance endorsed by the Heritage Council and the Minister for Urban Affairs and Planning. The Register replaces the previous system of Permanent Conservation Orders as a means of protecting items of state significance. The inclusion of the Newington Armament Depot and Nature Reserve in the State Heritage Register was gazetted on 14 January 2011.

In the case of the Newington Armament Depot and Nature Reserve, listing on the State Heritage Register means that the item:

- Is of particular importance to the state and enriches our understanding of the history of NSW;
- Is legally protected under the NSW Heritage Act.

Under Section 57(2) of the Heritage Act, the Minister may make exemptions from approval otherwise required under Section 57(1) for works to State Heritage Register items. Such exemptions are intended to streamline the approvals process. There are two types of exemptions:

- Standard exemptions under Section 57(2) of the Heritage Act, which apply to all State Heritage Register items; and
- Site specific exemptions, which also apply to the site.

A copy of the State Heritage Register inventory for the Newington Armament Depot and Nature Reserve is appended to this report (**Appendix D** in Volume 2). The standard exemptions and site specific exemptions that apply to the site are included in Section 8.4 of this report.

Section 118 of the Heritage Act provides for the regulation of minimum standards for the maintenance and repair of State Heritage Register items. These standards apply to all State Heritage Register items and apply to weatherproofing, fire protection, security and essential maintenance.

## **6.6 BUILDING CODE OF AUSTRALIA**

The Building Code of Australia (BCA) is concerned with establishing uniform building regulations across Australia. The BCA is implemented in New South Wales through the *Local Government Act 1993*.

The main provisions of the BCA concern structural requirements, fire resistance, access and egress (including provisions for people with disabilities), services and equipment and health and amenities. Generally, minimum standards are required to be reached in new building works.

In general, when considering the BCA in heritage buildings, proposals must ensure that significant fabric and spatial qualities are not compromised while full BCA compliance is achieved and public safety is assured.

## **6.7 DISABILITY DISCRIMINATION ACT**

The *Disability Discrimination Act 1992* provides protection to members of the community with a limited ability/disability and ensures that reasonable access is provided to both public and private buildings and places. As a complaint-based Act it has the potential to require the construction of additional access arrangements to buildings and may impact on the fabric of existing buildings at the Newington Armament Depot.

## **6.8 SYDNEY OLYMPIC PARK AUTHORITY REGULATION 2007**

The *Sydney Olympic Park Authority Regulation 2007* commenced on 1 September 2007 and is due to be automatically repealed on 1 September 2012.

The various sections of the Regulation give SOPA control over: commercial and other activities; access to any of the Park; liquor; vehicular parking; use of land by buses; closure and use of roads; use of wharves; personal conduct; provision and operation of public services and facilities; functions as a local government council; fees; removal of persons; and confiscation of articles.

## **6.9 OTHER LEGISLATION**

### **6.9.1 Threatened Species Conservation Act 1995**

The *Threatened Species Conservation Act 1995* aims to conserve threatened species, populations, ecological communities and their habitats; to promote their recovery and manage the processes that threaten or endanger them.

A scientific committee has been established under this Act, which reviews nominations for the listing of species, ecological communities, critical habitat and threatening processes under the TSCA. Threatened species, including flora and fauna, may be listed under Schedules 1 and 2 of the Act, and those plant communities considered to be at risk of extinction as “endangered ecological communities” under Schedule 3.

Sydney Turpentine Ironbark Forest, Green and Golden Bell Frog, Swamp Oak Floodplain Forest and saltmarsh listed under this Act are found across the precinct, both within and outside the Newington Nature Reserve, and must be managed in accordance with the provisions of this Act.

### **6.9.2 Environmental Protection and Biodiversity Conservation Act**

The **Environment Protection and Biodiversity Conservation Act 1999** (the EPBC Act) is the Australian Government’s central piece of environmental legislation. It provides a legal framework to protect and manage nationally and internationally important flora, fauna, ecological communities and heritage places – defined in the EPBC Act as matters of national environmental significance.

The status of significant components and species associated with the Newington Nature Reserve is evaluated by the Act:

- Turpentine Ironbark Forest is listed as “critically endangered” under the Act.
- The Green and Golden Bell Frog is listed as “vulnerable” under the Act.
- Migratory birds are protected under the Act.

### 6.9.3 Environmental Planning and Assessment Act 1979

The *Environmental Planning and Assessment Act 1979* (NSW) (the EP&A Act) provides for the preparation of planning instruments to guide land use management at state, regional and local levels. Of particular relevance to heritage matters are the mechanisms for inclusion of heritage conservation provisions in planning instruments and the assessment of development proposals.

The provisions of *Auburn Local Environmental Plan 2010* and *Auburn Development Control Plan 2010* do not apply to the site. However, the Newington Explosives Store located on the Avenue of Oceania is identified as an item of local significance (Item I42) in *Auburn Local Environmental Plan 2010*, Schedule 5 Environmental Heritage. This item lies outside the study area.

### 6.9.4 Miscellaneous Legislation

Other legislative instruments that may apply to the site include:

- *NSW Fisheries Management Act 1994*;
- *NSW Prevention of Cruelty to Animals Act 1979*;
- *Draft Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2004*;
- *Draft Development Control Plan for Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2004 Sydney Harbour Foreshores and Waterways Area*;
- *State Environmental Planning Policy No. 19 – Bushland in Urban Areas*; and
- *State Environmental Planning Policy No. 55 – Remediation of Land*.

## 6.10 PLANNING INSTRUMENTS AND AGREEMENTS RELATING TO THE SITE

A number of planning instruments and agreements have been prepared, which relate to the management of the Newington Armament Depot and Nature Reserve.

### 6.10.1 Parklands Plan of Management 2010

The *Parklands Plan of Management 2010* (PPOM) is the second Plan of Management to have been prepared for the Parklands at Sydney Olympic Park. The PPOM was adopted by the Minister responsible for Sydney Olympic Park on 8 November 2010 and will cease to operate 10 years after the date of commencement. The PPOM is governed by the SOPA Act and the *NSW Local Government Act 1993*. The principal objective of the PPOM is to provide a statutory scheme of operations as the basis for managing the Parklands. The PPOM controls public access and land use regimes (including permitted and prohibited uses) for the Parklands.

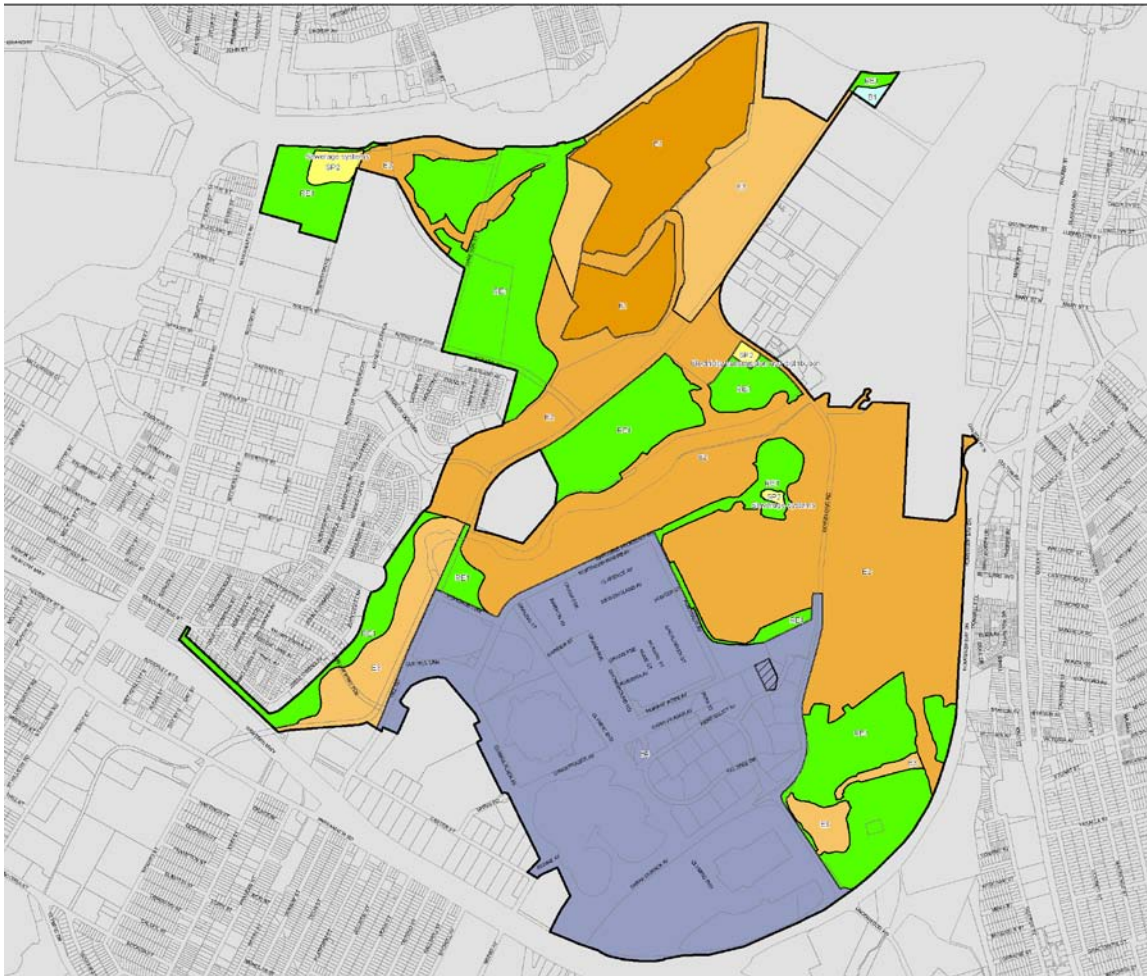
Sections of the PPOM specifically relate to the Newington Armament Depot and Nature Reserve. The Armament Depot has the land category of Leisure and Play. The Nature Reserve has the category of Nature Reserve, and areas adjacent to the Nature Reserve are categorised as conservation areas. One of the priorities of the PPOM is to incrementally transform Newington Armory from its former role as an operational defence facility into a place accessible to the public for a suitable range of new and contemporary uses – while conserving and interpreting its heritage and cultural values and features.

Development in the Parklands is subject to development approval under *SEPP (Major Development) 2005* or *SEPP (Exempt and Complying Development) No. 60* or *SEPP (Temporary Structures) 2007*.



Figure 6-1 Identification of land categories within the Parklands (Source: PPOM Plan 2).





- Subject Land
- Zone**
- B1 Neighbourhood Centre
- B4 Mixed Use
- E1 National Parks and Nature Reserves
- E2 Environmental Conservation
- E3 Environmental Management
- RE1 Public Recreation
- SP2 Infrastructure
- Additional Permitted Use**
- Site 62
- Cadastre**
- Cadastre 08/07/2009 © Dept of Lands

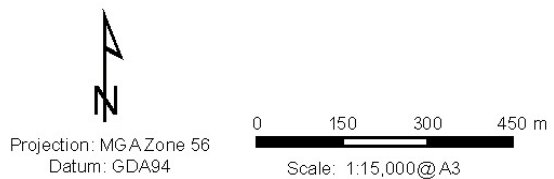
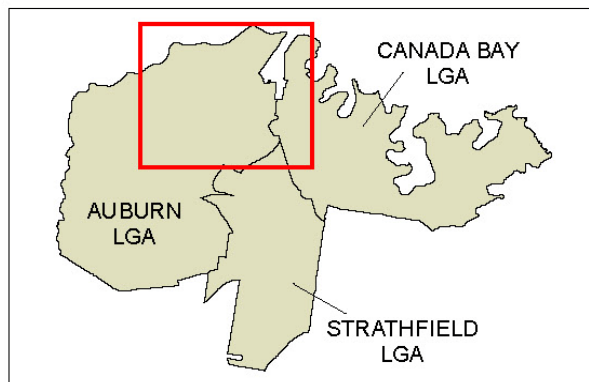


Figure 6-2 SEPP (Major Development) 2005 Land Zoning Map (Source: SOPA).

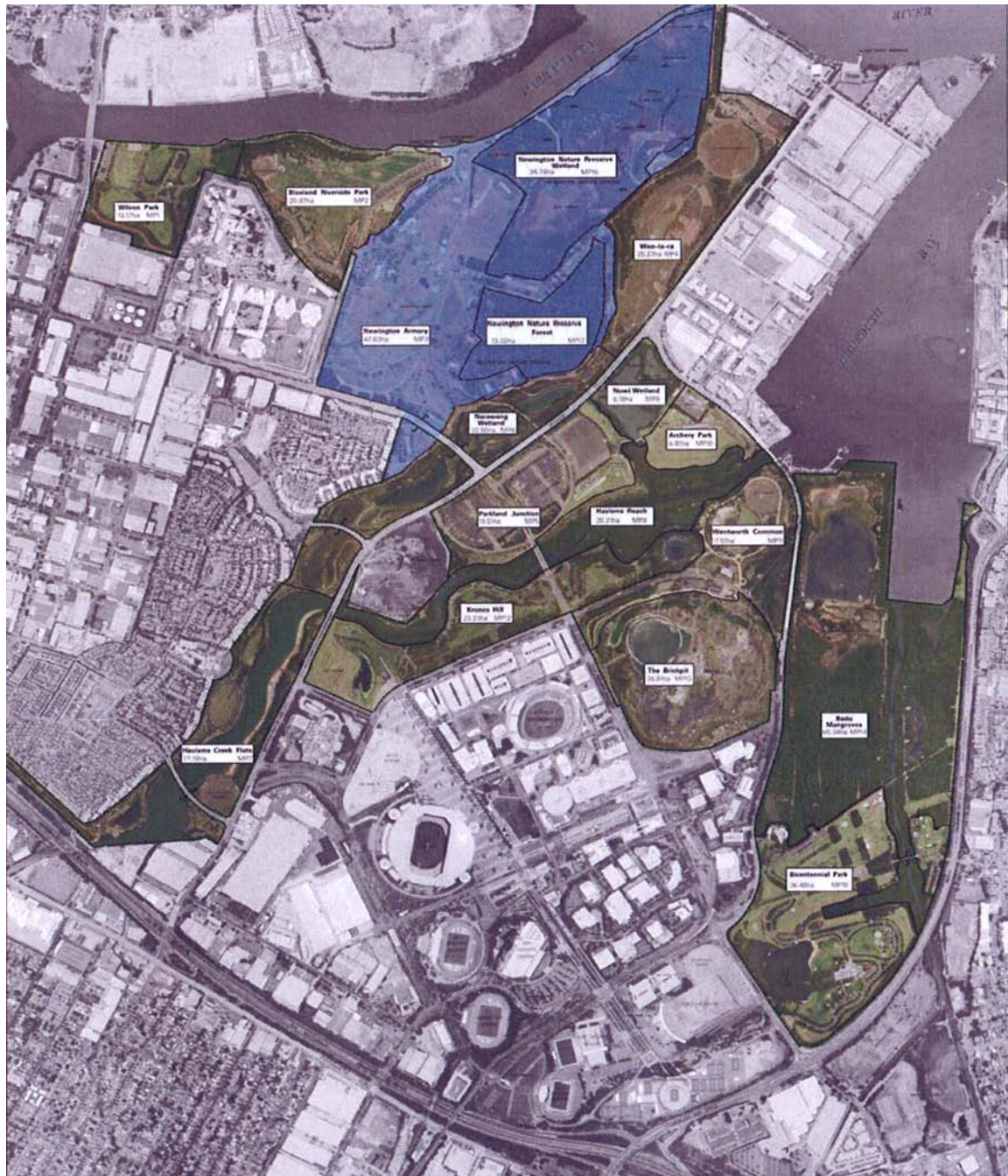


Figure 6-3 Heritage areas identified in the Parklands Plan of Management. The Newington Armament Depot and Nature Reserve is coloured blue (Source: PPOM Plan 5).



### **6.10.2 Newington Nature Reserve Plan of Management 2003**

The Silverwater Nature Reserve was gazetted on 15 September 2000 as a Nature Reserve under the NPWS Act and defined as part of Parklands in the SOPA Act. The name was changed to Newington Nature Reserve with the gazettal of this Act. The Newington Nature Reserve is managed by SOPA under agreement with the NPWS. The *Newington Nature Reserve Plan of Management* was adopted by the Minister for the Environment on 28 January 2003 and is a statutory document. A Plan of Management is required for each reserve under the NPWS Act.

The *Newington Nature Reserve Plan of Management* provides comprehensive guidelines and protocols for the conservation and management of the Nature Reserve. It identifies the wetland and the forest as individual management precincts. Amongst its objectives are the management of the Nature Reserve and Armory precincts in a complementary manner. The document also includes provisions for the conservation of Aboriginal and European heritage.

The *Newington Nature Reserve Plan of Management* refers to the 2002 *Parklands Plan of Management* and may need minor revision.

## 7 OPPORTUNITIES AND CONSTRAINTS

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### 7.1 EXPLANATION

Conservation policies and recommendations for their implementation are developed from an understanding of legislative and planning controls, as outlined in the preceding section of the report. They also require an understanding of:

- The owner's requirements;
- The cultural significance of the place as a whole and the level of significance of the individual elements, groups of elements and the physical fabric;
- Uses which are both feasible and compatible with the retention of major aspects of significance;
- Statutory and other external constraints;
- Structural adequacy and the general condition of the fabric; and
- Development constraints and opportunities in relation to the retention of the significance of the place.

The importance of the Newington Armament Depot and Nature Reserve is intimately related to its integrated cultural and natural significance, which is acknowledged by its inclusion in the NSW Heritage Council's State Heritage Register.

The significance of the Newington Armament Depot and Nature Reserve means that it is subject to several different statutory and agency requirements, which impose different legislative and regulatory obligations and constraints on the conservation management of the place. These are discussed in Section 6 of the CMP.

The heritage significance of the place also means that it is the subject of obligations under the Australia ICOMOS *Burra Charter* and the *Australian Natural Heritage Charter*, both of which are discussed below.

### 7.2 OPPORTUNITIES AND CONSTRAINTS RELATING TO SIGNIFICANCE

The Newington Armament Depot and Nature Reserve is a place of state heritage significance requiring that it be managed in accordance with accepted best-practice conservation principles, including *The Burra Charter* and associated guidelines. A detailed examination of the place indicates that there is the opportunity to:

- Find new uses that are consistent and compatible with the heritage significance of the place and ensure that it is appropriately maintained into the future;
- Interpret its history and heritage significance to visitors and the general community.

The following opportunities and constraints arise from the heritage significance of the place:

- Conserve and manage the wetland and the forest within and adjoining the Newington Nature Reserve;
- Retain, conserve and enhance the heritage significance of the place in accordance with accepted conservation principles and practices, including spaces, elements and fabric of

the cultural landscape, significant buildings and structures, landscape features, archaeological deposits and moveable heritage;

- Regain and interpret aspects of the place that once contributed to the heritage significance of the place including spaces, elements and fabric;
- Conservation of buildings should be accompanied by adaptive reuse, which should conserve cultural significance and not detract from it;
- Moveable heritage should be retained and conserved on the site; removal should only be considered for conservation or security purposes;
- Ensure that new works, such as alterations and additions and the construction of new buildings, and upgrading of the cultural landscape, retain the heritage significance of the place.

### **7.3 OPPORTUNITIES AND CONSTRAINTS RELATING TO OWNER REQUIREMENTS**

The Newington Armament Depot and Nature Reserve offers great potential for enhancement and upgrading of its cultural and natural significance, new uses, adaptive reuse and visitor enjoyment and amenity. At the same time, there are constraints arising from the need to conserve its heritage significance and unique character.

#### **7.3.1 Opportunities**

There is the opportunity to continue and manage the integration of the Newington Armament Depot and Nature Reserve with the adjoining developing Parklands for incremental public use and access. Opportunities arising from the owner's requirements include:

- Developing a clear and separate identity for the Newington Armament Depot and Nature Reserve founded on the historical significance and former uses of the site;
- Enhancing and improving infrastructure to support increased visitor use; this may include increasing visitor access by activating additional points of entry to the site and the number of days that the site is open to the public;
- Ensuring that the heritage significance and character of the Newington Armament Depot and Nature Reserve – its buildings and cultural landscape – informs complementary future tenant use;
- Increasing public leisure activities so long as these do not increase impacts on the place and its heritage;
- Undertaking new staged amenity tree planting and asset management programs;
- Erecting new buildings in carefully selected locations;
- Improving security across the site;
- Implementing the Interpretation Strategy - there is the opportunity to initiate self-guided, technology-based interpretation devices;
- Facilitating increased awareness and access to the Nature Reserve and the area of the Armory that lies between the Nature Reserve forest and the wetland;



- Formalising a plan for cyclic maintenance; and
- Developing a program of prioritised building, services and infrastructure maintenance.

### **7.3.2 Constraints**

Constraints arising from the owner's requirements include:

- Conserving and managing the natural and cultural heritage of the Newington Armament Depot and Nature Reserve in a holistic manner, as a single entity;
- Carrying out management tasks and implementation of opportunities within the constraints of its funding;
- New construction, its design and placement will be constrained by the significance of the cultural landscape, existing buildings and their inter-relationship;
- Capital and recurrent funding is a constraint but staging will ease requirements, requiring the Authority to be strategic and prioritise essential works and staging over longer timeframes.

## **7.4 OPPORTUNITIES AND CONSTRAINTS RELATING TO THE CONDITION OF THE SITE**

Comparison of the photographs of buildings in the two volumes of the *Newington Armament Depot Heritage Inventory* (Schwager Brooks and Partners, April 1996) with the present physical good condition of buildings and infrastructure reveals that a great deal of effort has been expended by SOPA on repair, maintenance and conservation since the site came under its jurisdiction. Similar attention has been paid to the cultural landscape and the wetland and the forest in the Newington Nature Reserve. Substantial stabilisation and restoration works were undertaken to buildings and the light rail infrastructure in 2001 while the forest and wetland communities are generally in good condition due to implementation of a long-term bush regeneration and enhancement program.

Remediation has been carried out across the Armament Depot. However, access to the Newington Nature Reserve wetland is restricted in order to conserve the ecologically sensitive environments and also because of the possibility of undiscovered unexploded ordnance on this part of the site.

### **7.4.1 Acid Sulfate Soils**

The SEPP (Major Development) Amendment (Sydney Olympic Park) 2009 Acid Sulfate Soils Map indicates a high probability of acid sulfate soil materials within one metre of the ground surface across extensive parts of the site.

Any works relating to those parts of the site affected by acid sulphate soils should be undertaken in accordance with the guidelines provided in the Acid Sulfate Soils Manual (1998) prepared by the Acid Sulfate Soils Management Advisory Committee. Reference should also be made to Queensland Acid Sulfate Soils Investigation Team Guidelines, available through the Queensland Government's Department of Environment and Resource Management.

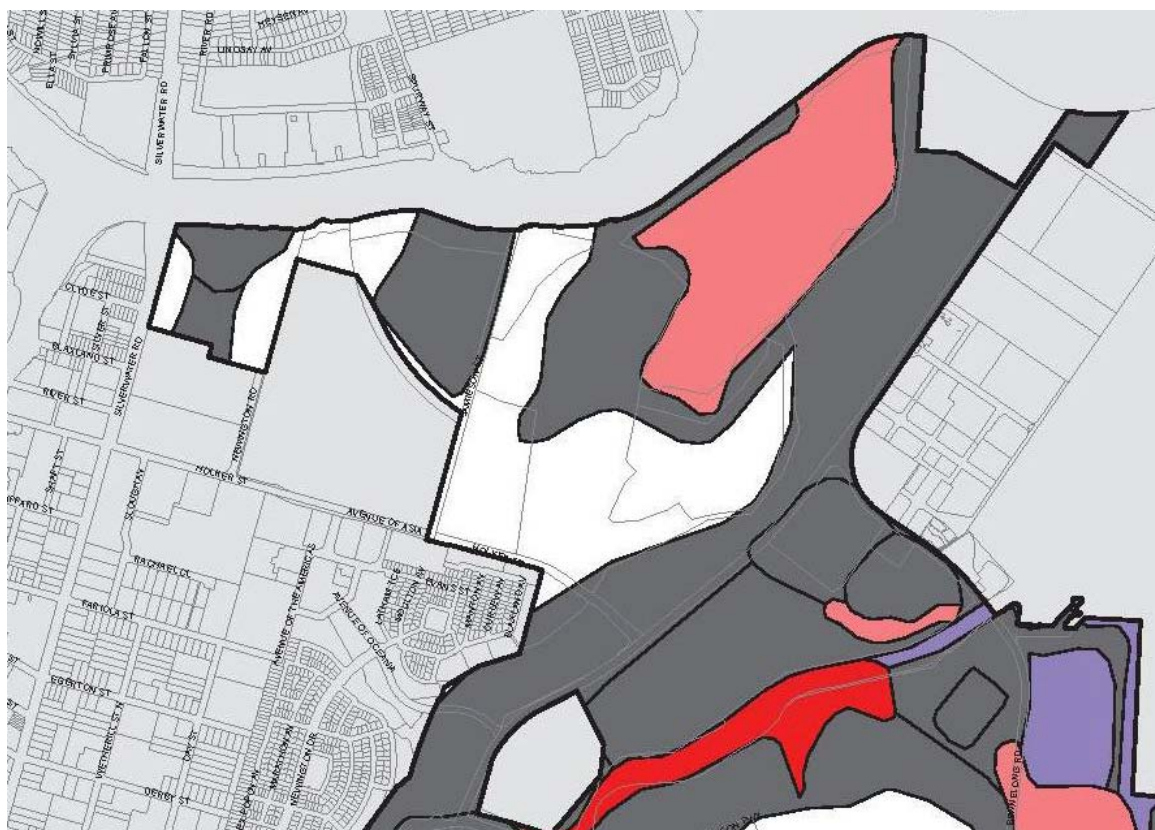


Figure 7-1 Acid sulphate soils within the Newington Armament Depot and Nature Reserve site.  
 (Source: SEPP (Major Development ) Amendment (Sydney Olympic Park) 2009 Acid Sulfate Soils Map)

## 7.5 OPPORTUNITIES AND CONSTRAINTS RELATING TO NEW USES

New uses for the Newington Armament Depot and Nature Reserve that are compatible with its heritage significance would provide opportunities to retain and conserve the place and assist with ensuring that it is appropriately maintained into the future.

Constraints on development across the site are included in the zoning provisions in Part 23 of SEPP (Major Development) 2005. The provisions define conditions relating to exempt and complying development. Prohibited uses are also defined. The current SEPP zoning provisions offer a limited number of permissible uses. SOPA may need to approach the Department of Planning and Infrastructure on this matter.

Any new uses associated with the Newington Nature Reserve must recognise its great significance and fragility. New uses must not impact on endangered or vulnerable flora and fauna and the important ecological features contained in the Reserve. The facilitation of increased access to the Nature Reserve should be within the Newington Nature Reserve Plan of Management framework and undertaken in consultation with NPWS.

New uses will include the cultural landscape, which has a relatively simple and robust open character. Care will need to be taken to ensure that the character of the landscape is not impaired by new uses, whether temporary or permanent in nature.

The Armament Depot is a remarkably intact facility containing many buildings and groups of buildings that were purpose designed for specific functions. Most have been subjected to little change, allowing these uses to be appreciated by visitors to the site. Nevertheless, this does not mean that the buildings cannot be put to new uses, provided their significance and intactness is acknowledged. Care will need to be exercised throughout any adaptation works to ensure that significant spaces, elements and fabric are retained and conserved and not obscured or damaged. Removal of intrusive elements that may exist such as non-original and obsolete services infrastructure would also provide an opportunity to expose fabric and features from the initial or early phases of development.

There is the opportunity to improve and enhance visitor access to the Newington Armament Depot and movement through the site, encouraging greater use and awareness of the place and potentially enabling greater integration with Sydney Olympic Park. However, the cultural and natural significance of the place will place a constraint on the types of movement so that impacts of increased visitation are minimised. For instance, pedestrian and bicycle use are preferable to motorised vehicles.

## **7.6 NON-STATUTORY HERITAGE CONSIDERATIONS**

### **7.6.1 The Australia ICOMOS Burra Charter**

*The Australia ICOMOS Charter for Places of Cultural Significance 1999*, known as *The Burra Charter*, is widely accepted in Australia as the underlying methodology by which all works to sites/buildings, which have been identified as having national, state and regional significance, are undertaken. The Newington Armament Depot and Nature Reserve is of demonstrated cultural significance. Therefore, procedures for managing change and activities should be in accordance with the recognised conservation methodology of *The Burra Charter*.

The principles of *The Burra Charter* are included in **Appendix A** of this report.

### **7.6.2 The Australian Natural Heritage Charter**

*The Australian Natural Heritage Charter* is a distillation of best practice conservation principles for Australia and is based on a consensus of a broad range of experts. It was formulated over a two year period of Australia-wide consultation and relates closely to the structure and logic of *The Burra Charter*. The project was funded by the Australian Heritage Commission.

*The Australian Natural Heritage Charter* was first adopted in December 1996. It was revised and updated in 2002. In dealing with the natural heritage of the site, the conservation principles of the *Australian Natural Heritage Charter* should be adopted.

The principles of the *Australian Natural Heritage Charter* are included in **Appendix B** of this report.

### **7.6.3 International Cultural Tourism Charter**

The role of the Sydney Olympic Park as the major event precinct for New South Wales, in combination with the diversity of events, programs, activities, infrastructure and services, attracts tourists who will encounter the historic, social, scientific and aesthetic significance of the Newington Armament Depot and Nature Reserve as a secondary benefit. Similarly, for those visiting the site with ecology as their focus, the historic, social and aesthetic significance needs to be available for them to appreciate in addition to the natural features. It is expected that tourists will come from many locations within metropolitan Sydney, from other parts of Australia and from overseas.

In 1999, the ICOMOS General Assembly ratified the *International Cultural Tourism Charter*. This charter provides guidance, through a set of six primary principles, for managing tourism at places of heritage significance. A copy of the *International Cultural Tourism Charter* is appended to the CMP.

#### **7.6.4 Register of the National Estate**

A new national heritage system commenced on 1 January 2004 with the proclamation of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). Its main features include:

- A new National Heritage List of places of national heritage significance;
- A new Commonwealth Heritage List of heritage places owned or managed by the Commonwealth;
- The formation of the Australian Heritage Council, an independent body that was established to advise the Minister on the listing and protection of heritage places; and
- Continued management of the Register of the National Estate (RNE).

The National Heritage List will record the natural, indigenous and historic places with outstanding heritage value to our nation. These places will have values or characteristics that have special meaning for all Australians.

The Newington Armament Depot and Nature Reserve is not included on the National Heritage List.

Following amendments to the Australian Heritage Council Act 2003 (AHC Act), the Register of the National Estate (RNE) was frozen on 19 February 2007, which meant that no new places could be added, or removed. In February 2012 all references to the Register were removed from the EPBC Act and the Australian Heritage Council Act. The RNE will be maintained after this time on a non-statutory basis as a publicly available archive.

The Newington Armory Conservation Area is included on the Register of the National Estate (registered 14 May 1991, place ID: 15054, place file No: 1/14/002/0006).

#### **7.6.5 National Trust of Australia (NSW)**

The National Trust of Australia (NSW) maintains a register of places and items of cultural significance, including buildings, sites, items and areas that the Trust has assessed to be:

“places which are components of the natural or the cultural environment of Australia, that have aesthetic, historical, architectural, archaeological, scientific, or social significance, or other special value for future generations, as well as for the present community.”

The National Trust is a non-statutory, non-government organisation; however, it has significant influence based on community support.

The site was classified by the National Trust of Australia (NSW) on 5 November 1984. The Trust’s classification documentation was taken from the RNE listing and is similarly out of date and lacking information on the new boundaries and recent redevelopment.

#### **7.6.6 Directory of Important Wetlands in Australia**

The natural landscape of the Newington Nature Reserve has national significance, reflected by its inclusion in *A Directory of Important Wetlands in Australia* (Environment Australia, third edition 2001). The Directory is a co-operative project that was undertaken by the Commonwealth, State and Territory Governments of Australia and co-ordinated by Environment Australia. The project involved instrumentalities from all states and territories, including the New South Wales National Parks and Wildlife Service.

The Newington Wetland is one of 178 wetlands in New South Wales evaluated as having national significance. It is defined under several categories included in the Directory:

- A8 Marine and Coastal Wetland – Intertidal marshes; includes saltmarshes, salt meadows, saltings, raised saltmarshes, tidal brackish and freshwater marshes;
- B1 Inland Wetland – Permanent rivers and streams;
- B11 Permanent saline/brackish marshes.

The Newington Wetland fulfils several of the criteria for inclusion agreed to by the Australian and New Zealand Environment Conservation Council's Wetlands Network in 1994:

- It is a good example of a wetland type occurring within a biogeographic region in Australia (Criterion 1).
- It is a wetland which plays an important ecological or hydrological role in the natural functioning of a major wetland system/complex (Criterion 2).
- The wetland is of outstanding historical or cultural significance (Criterion 6).

#### **7.6.7 Community Groups**

Although the report has not identified specific local community groups that have a strong interest in the site, there is likely to be interest from former employees. Their knowledge and interests should be taken into consideration as part of the management of the site and in the identification of potential interpretive resources.

### **7.7 CLIMATE CHANGE**

Recent climate change sea level projections will have a significant bearing on the management of the Newington Armament Depot and Nature Reserve. Global sea levels have risen by 200 millimetres between 1870 and 2001 and the current global average rate of increase equates to around twice the historical average. Sea levels are expected to continue rising throughout the twenty-first century. The process is incremental and will have medium to long-term impacts.

A synthesis of the best available scientific information suggests that sea level rise due to climate change could range from around 400 millimetres by 2050 to 900 millimetres by 2100. By 2050, a sea level rise of 400 millimetres will affect the wetlands in particular by regular inundation. This is noted on Figure 7-1. It is noted that sea level rise is projected to continue to increase beyond 2100.<sup>28</sup>

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<sup>28</sup> *NSW Sea Level Rise Policy Statement.*



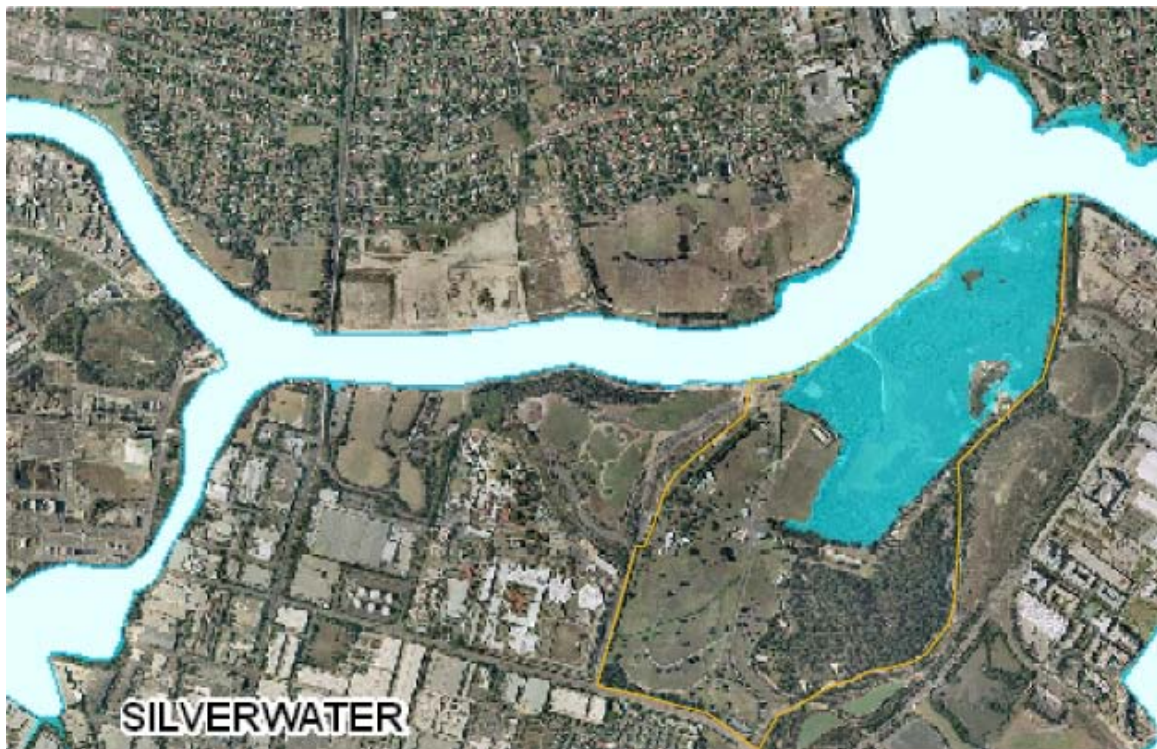
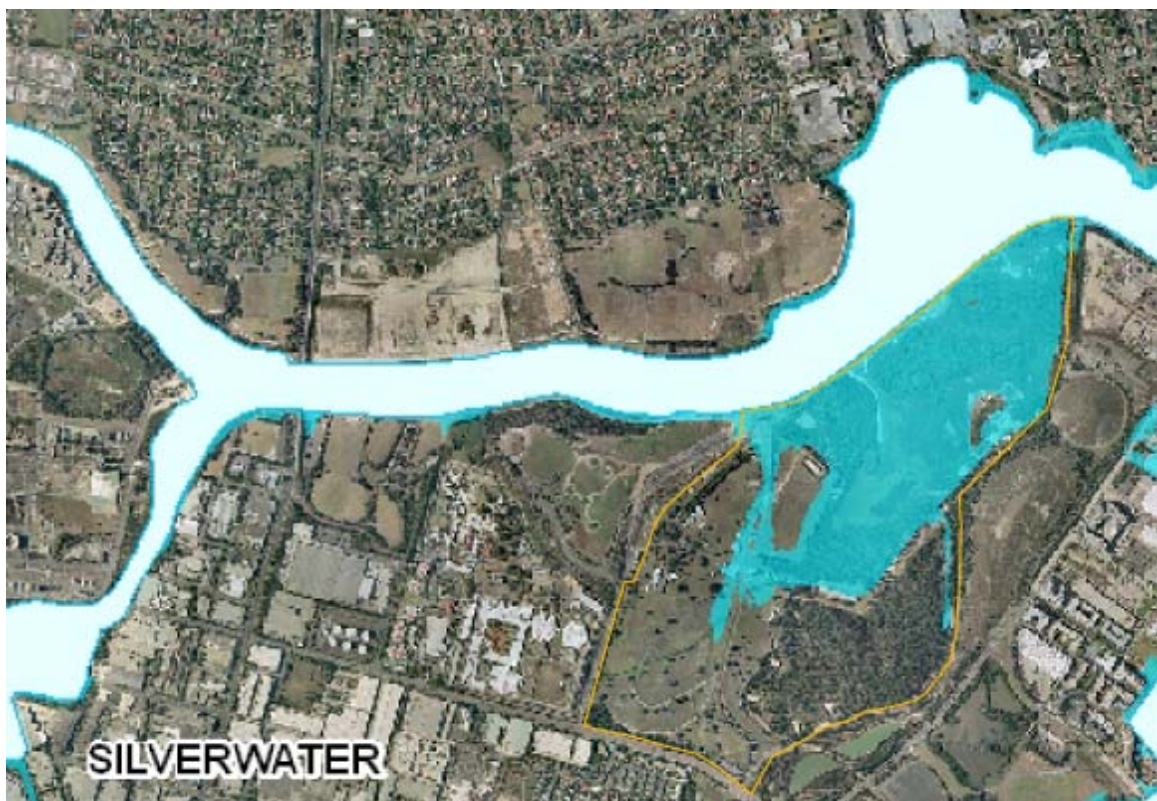


Figure 7-2 Predicted best case 0.5 metre sea level rise by 2100, above, and worst case 1.1 metre sea level rise by 2100, below. The site is outlined in yellow (Source: [www.ozcoasts.org.au](http://www.ozcoasts.org.au)).



The Newington Armament Depot and Nature Reserve will be affected by climate change in the future, particularly by rises in sea levels. Changes in high water level will affect low lying areas of the site, the Nature Reserve wetland and built elements of the site. Early planning is essential so that SOPA is prepared for future actions.

Actions could include:

- Gathering information on expected rates of sea level rise in Sydney Harbour and the Parramatta River and seeking advice on time frames for action to take place;
- Monitoring changes in research on an annual basis and reviewing time frames based on these changes;
- Developing long-term strategies for interpretation of areas at risk;
- Planning for a budget to undertake archival recording;
- Developing strategies for protection or removal of buildings that are at risk; and
- Monitoring sea level changes to ascertain a time frame for when access to foreshore areas and the Newington Nature Reserve will no longer be possible due to water inundation. In the event that sea level change predictions require this action, investigate strategies that will be required for buildings and other items that will be damaged by rising sea levels.



## 8 CONSERVATION MANAGEMENT POLICIES

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### 8.1 INTRODUCTION

The conservation management policies provide an overall guiding framework for the conservation and retention of the cultural significance of the Newington Armament Depot and Nature Reserve and its relationship to its surroundings. The policies provide for courses of action in the consideration of future incremental change, increased public uses, appropriate development and maintenance management activities for the site.

The policies are based on the relevant Articles of *The Burra Charter* and the sections of this Conservation Management Plan which fundamentally underlie each policy. The policies are presented as **Primary Conservation Management Policies**, which provide overarching guidance for the overall management of the place – the attitudes, processes and advisory resources necessary for the proper and efficient management of change – and **Operational Conservation Management Policies**, which provide specific guidance for the natural and cultural landscape, built items and uses of the place. The **Operational Conservation Management Policies** are structured under various management categories that are seen to be of critical importance for the future conservation of the site's cultural significance. Each Operational Management Policy section identifies the principle, which is the intent underlying the policy, the management policy or policies relating to the management category and guidelines explaining the intent and general implementation of the policy or policies.

### 8.2 PRIMARY CONSERVATION MANAGEMENT POLICIES

#### Principle

As stated above, these policies provide the necessary general guidance for the proper and efficient management of change at the Newington Armament Depot and Nature Reserve.

#### Policies

*Policy 1 The CMP should be endorsed by the National Parks and Wildlife Service and formally adopted by the Board of the Sydney Olympic Park Authority as the basis for the future management of the Newington Armament Depot and Nature Reserve. The CMP should be submitted to the Heritage Council of NSW for endorsement. The CMP should be reviewed every five years.*

*Policy 2 Ensure the CMP is referenced in future revisions to the Parklands Plan of Management (2010) and Newington Nature Reserve Plan of Management (2003).*

*Policy 3 The Statement of Cultural Significance and schedule of items detailed in Section 5 should be accepted as one of the bases for future planning and conservation works to the Newington Armament Depot and Nature Reserve. Areas assessed to be of exceptional and high significance should be allocated uses which do not compromise the character and significance of those areas.*

*Policy 4 The future conservation and development of the place should be carried out in accordance with the principles of The Burra Charter. The approach and options recommended for the conservation of specific fabric, spaces and qualities of the place should be endorsed by relevant stakeholders as a guide to future work, the recommendations having been related to the principles of The Burra Charter.*

*Policy 5 The focus of conservation management for the Newington Armament Depot and Nature Reserve will aim to incrementally increase appropriate public use and awareness of the site and promote the regional/local significance as a destination within Sydney through managed interpretation and visitor programs.*

*Policy 6 Conserve the diverse natural and cultural values of the site by minimising impacts and ongoing deterioration of the buildings, landscape, infrastructure and moveable heritage such that reuse options and opportunities are available into the future.*

*Policy 7 Management of the Newington Armament Depot and Nature Reserve is consistent with the Parklands Plan of Management and the Newington Nature Reserve Plan of Management. The part Newington Nature Reserve will continue to be managed by agreement with the National Parks and Wildlife Service by the Sydney Olympic Park Authority in accordance with the National Parks Act and the Plan of Management for the Reserve.*

*Policy 8 In accordance with the Sydney Olympic Park Act 2001 and the Parklands Plan of Management, future use of the Newington Armament Depot and Nature Reserve should aim to:*

- Develop the place as an integral and integrated part of the larger regional Parklands and open space network of Sydney Olympic Park;*
- Promote the significance of the precinct and its historic relationships with Sydney Harbour and other related armament establishments and naval sites.*

*Policy 9 The Authority will ensure that adequate recurrent funding and long term capital funding is secured for the implementation of visitor programs including education, arts and interpretation; promotion, maintenance and conservation management programs for buildings, landscape, infrastructure and moveable heritage.*

*Policy 10 All works will be undertaken in compliance with the NSW Heritage Council's General and Site Specific Exemptions (refer to Section 8.4).*

## **Guidelines**

The responsibility for continued management for the whole of the Newington Armament Depot and Nature Reserve will continue to remain with the Sydney Olympic Park Authority.

Reviews of the CMP should be based on *The Burra Charter* and other guidelines prepared by the NSW Heritage Branch. Reviews should also take into account any other relevant legislation, planning frameworks, appropriate literature and widely recognised conservation practices and procedures. Reviews should be undertaken by experienced conservation practitioners in conjunction with relevant ownership and management representatives.

Irrespective of the requirement to review the document every five years, the CMP should remain as a valid basis for ongoing heritage management until such reviews are completed.

Referencing the endorsed CMP in the Parklands Plan of Management will allow the documents to be a principal informant of the management of the built historical elements and the landscape of the Newington Armament Depot and Nature Reserve.



This CMP should be used to inform the management of the Newington Armament Depot and Nature Reserve. The Statement of Cultural Significance, assessments of the significance of the contributory elements, spaces, and fabric within the site, together with policies recommended and options discussed throughout this report will guide future planning and work.

The following heritage conservation practices and processes should be initiated:

- Apply to have this CMP endorsed by the NSW Heritage Council; confirm with the NSW Heritage Office that the precinct can be managed in accordance with this CMP.
- Undertake all works in line with the policies, recommendations and guidelines contained in this CMP;
- Conservation work to cultural landscape, buildings and moveable heritage should be undertaken in conjunction with or under the direction of recognised conservation practitioners with relevant expertise;
- All conservation work should follow *The Burra Charter* principle of a cautious approach of changing as much as necessary but as little as possible.
- Ensure that any funding raised by the Armament Depot is available for its conservation management;
- Physical modifications to buildings or changes of use to buildings and new buildings will need to comply with the legal requirements of the EP&A Act, as defined in Section 6.9.3;
- Any other part of the site that does not have a general or site-specific exemption will need to comply with the legal requirements of the EP&A Act;
- Statements of heritage impact will conform to the requirements of the NSW Heritage Branch publication *Statements of Heritage Impact* as a minimum standard.

The CMP should be made available to, and read by all relevant officers. In addition it is essential that all officers are made aware of the processes which are to be followed when proposing maintenance, or other work which involves the modification of significant fabric. SOPA should ensure that copies of *The Burra Charter* and the Heritage Council guidelines are readily available to all staff and managers of the site.

A person shall be delegated to be responsible for ensuring compliance with the CMP policies and guidelines and reporting on CMP implementation on an annual basis.

### **8.3 OPERATIONAL CONSERVATION MANAGEMENT POLICIES**

#### **8.3.1 Buildings and Infrastructure**

##### **Principle**

The buildings and infrastructure at the Newington Armament Depot and Nature Reserve are the tangible evidence of the history and development of the site as a highly significant place, associated with the military and naval history of New South Wales. Buildings and infrastructure elements have differing levels of heritage significance depending on factors such as age, function and built form. The collection of all elements as a whole is important because they form part of a group of historically and functionally associated buildings and elements. This is the case regardless of the level of significance of individual buildings within the collection. A great deal of the significance of the

Newington Armament Depot and Nature Reserve is derived from this coherent collection of buildings and infrastructure that provides a remarkably complete picture of its past use.

The following policies provide guidance for the conservation of buildings and infrastructure. The best means of conserving this type of heritage item is for it to have ongoing and appropriate use, which does not preclude considered and sympathetic change.

## **Policies**

*Policy 11 Conservation of buildings and infrastructure should aim to retain components consistent with their assessed level of heritage significance and in accordance with the guidelines included in this CMP. Building and infrastructure assets will also be conserved and adapted in accordance with the Australia ICOMOS Burra Charter (refer to **Appendix A** in Volume 2 of this CMP) and to the minimum standards of maintenance and repair required by the regulations contained in section 118 of the NSW Heritage Act (refer to **Appendix H** in Volume 2 of this CMP).*

*Policy 12 Retain and conserve all buildings and structures evaluated as having exceptional or high levels of heritage significance. Conserve the historical and visual relationships of building groups identified as having exceptional and high heritage significance.*

*Policy 13 Adaptive reuse of existing built form is preferable to constructing new buildings. Compliance with the Building Code of Australia and the aims of the Disability Discrimination Act should be undertaken in a manner that does not damage the cultural significance of the building, the historical and visual relationships of building groups and landscape setting.*

*Policy 14 Retain, conserve and adapt buildings and infrastructure with moderate or contributory levels of heritage significance, but demolition is possible so long as it does not compromise the heritage significance of the place.*

*Policy 15 A conservation management document is to be developed for designated buildings and infrastructure that considers heritage significance, current condition, current and future use potential, and provides guidance for adaptation or modification for new uses other than those covered by general and site specific exemptions under the Heritage Act. Refer to Tables 8.2, 8.3 and 8.4.*

*Policy 16 Any adaptation to buildings within the Newington Nature Reserve will need to be consistent with the adopted Plan of Management and the National Parks and Wildlife Act. Any changes or adaptation will only be undertaken in consultation and with approval from the National Parks and Wildlife Service.*

*Policy 17 Building and open space uses will be licensed in accordance with the notification provisions of the SOPA Act and include such conditions to appropriately manage the protection of the environmental, heritage and cultural values of the precinct.*

*Policy 18 Consider public/private partnerships to facilitate complimentary community facilities provision and the potential revenue generation to provide funding assistance for conservation management of the site.*

*Policy 19 Appropriate conservation skills and experience should be employed for documentation and supervision with project teams to deal with any programs of conservation and upgrading of building components.*

*Policy 20 SOPA should commission a building remediation specialist and conservation architect to assess the costs and feasibility of a staged program of asbestos materials removal and replacement.*

*Policy 21 New and infill development is limited to restricted areas within the Newington Armament Depot defined in Attachment 2 in Section 10 of this CMP, provided it also accords with the recommendations and policies in the relevant individual conservation plan, collective conservation plan or concise conservation report for the area.*

*Policy 22 The design of new buildings should acknowledge the scale, design and materials of significant historic buildings across the site. The siting of new buildings must recognise the heritage significance and values associated with nearby buildings and archaeology, and should not intrude on important views and vistas across the site.*

*Policy 23 All works, including changes to building fabric and landscape features, particularly unavoidable changes to significant elements, spaces or fabric should be recorded in a manner that is consistent with the following guidelines published by the Heritage Branch of the Office of Environment and Heritage:*

- *Photographic Recording of Heritage Items Using Digital Film Capture;*
- *How to Prepare Archival Recordings of Heritage Items; and*
- *Maintenance series 1.2: Documenting Maintenance and Repair.*

*Policy 24 Materials such as face brick, stone, terra cotta, slate and off-form concrete that were originally not painted will remain unpainted. Materials such as timber or metal that were originally painted and rely on an effective paint system for their preservation will remain painted.*

*Policy 25 The internal spaces of buildings having exceptional and high heritage significance will generally be retained. Any subdivisions of spaces will be reversible and have little impact on the fabric of the building.*

*Policy 26 Deteriorating building fabric will wherever possible be repaired rather than replaced. Where replacement is unavoidable, new work will be based on existing or historical evidence. Conservation works will not reconstruct faulty building detailing or poor repairs.*

*Policy 27 Retain and conserve original internal wall, ceiling and floor finishes where possible. Damaged or removed sections of finishes will be replaced to match the existing.*

*Policy 28 Detailing of buildings and other features or items that demonstrates their operational uses (e.g. spark protection, lightning rods, signage, fittings and fixtures) will be conserved in situ.*

*Policy 29 The extension or alteration of existing services in buildings is acceptable in the context of reuse, but should not have a detrimental impact to the significance of buildings as a whole.*

*Policy 30 All tenants of the buildings and the site of the Newington Armament Depot and Nature Reserve are to be made aware of the heritage significance of the place. Tenancies should only be selected and approved by the Authority on the basis that the proposed or future uses are compatible with the significance of the item and the sensitive fabric and spaces, and that the required changes to the item can be installed and removed without impact. Tenants will undertake induction and be made aware of existing building operation protocols.*

### General Implementation Guidelines

Make use of all available expertise and knowledge and adopt an evidence-based approach to materials conservation.

A clear process for engaging suitably qualified consultants, building contractors, project managers and trades people that have experience with working on historic sites having cultural and heritage significance and buildings should be established.

In the case of items with exceptional and high heritage significance, ensure that the authenticity of original elements and fabric is maintained.

Aim to retain significant components, elements, spaces and fabric of the place consistent with their assessed levels of significance in Sections 5.4.5 and 5.4.6 and Figure 5.1, and in accordance with specific actions identified in this CMP. Table 8.1 in the Guidelines of this section, which is based on NSW Heritage Branch guidelines, summarises appropriate conservation actions.

**Table 8.1 Recommended Management for Buildings and Infrastructure based on Assessed Levels of Heritage Significance**

| Significance | Recommendations for Management   |
|--------------|--|
| Exceptional  | Retain, conserve (restore/reconstruct) and maintain. Intrusive elements and fabric should be removed. Adaptation is appropriate provided that it is in accordance with principles in <i>The Burra Charter</i> and with the specific guidance provided in this CMP.   |
| High         | Retain, conserve (restore/reconstruct) and maintain. Intrusive elements and fabric should be removed. Adaptation is appropriate provided that it is in accordance with principles in <i>The Burra Charter</i> and with the specific guidelines provided in this CMP. There is generally more scope for change than for components of exceptional significance. |
| Moderate     | Retain, adapt and maintain. Demolition/removal is acceptable provided that there is no adverse impact on the heritage significance of the place. Retention in some cases may depend on factors other than assessed heritage values, including physical condition and functionality.  |
| Low          | Retain, alter or demolish/remove as required provided there are no adverse impacts on the heritage significance of the place. Sensitive alteration or demolition/removal may assist with enhancing the heritage significance of components of greater heritage significance.   |
| Contributory | Retain, alter or demolish/remove as required.  |
| Intrusive    | Demolish/remove when the opportunity arises while ensuring there are no adverse impacts on the heritage significance of other more significant components. Components that are actively contributing to the physical deterioration of components of higher heritage significance should be removed as a matter of priority.                                    |

## New Building Uses Guidelines

The best way to ensure that a building is conserved is to occupy and use it in an appropriate manner. While the buildings at the Newington Armament Depot and Nature Reserve were purpose-designed to serve specialised functions it is possible to adapt all of them to new uses while retaining their heritage significance and enabling interpretation of their past roles.

The preferred new uses for buildings at the Newington Armament Depot and Nature Reserve are those that enhance the appreciation of the place, evolving role of the place, are consistent with the SEPP zoning and ensure conservation of the buildings and the landscape features of the place. Inappropriate uses can confuse the historical associations of the place and have the potential to damage significant spaces and fabric. It is essential that representative examples of buildings of various types and ages be retained exclusively for interpretative purposes, to explain and illustrate their place within and contribution to the operational nature of the former Newington Armament Depot.

Selection of appropriate adaptive uses also must be consistent with Parklands planning and management instruments. Building uses and activities need to comply with the requirements of SEPP (Major Development) 2005 and the Parklands Plan of Management. New uses for existing buildings may be considered compatible if the following criteria are met:

- Accords with the policies of the relevant individual conservation plans, collective conservation plans and concise conservation reports, as outlined in the section on conservation report guidelines below;
- The cultural significance of the buildings and their extant internal spaces and detailing are not compromised;
- The integral relationship between the landscape setting including structured berms associated with buildings and the buildings themselves is not compromised but is enhanced and conserved;
- In general terms, buildings of Exceptional Significance are to have internal modifications only. There should be no external modifications or additions to these buildings;
- Buildings of High Significance can be subjected to sensitive internal and external modifications, so long as their heritage significance is not compromised. It may also be possible to construct carefully placed additions to these buildings;
- Buildings of Moderate Significance present more opportunity for change, but impacts of change on their significance and contribution to an understanding of the place must be evaluated before change takes place;
- Contributory buildings may be retained or demolished, provided an evaluation is made of their relative contribution to the interpretation of the place and the impact that demolition will have on groups of buildings and infrastructure. An archival recording should be made of the item prior to its demolition, and retained on site;
- The proposed new use does not detract from original uses and does not diminish the cultural significance or setting of the building;
- Significant spaces and fabric are not destroyed or irreversibly altered;
- The relationships of groups of buildings is not obscured;



- Uses are consistent with the SEPP zoning;
- Adaptation of a building's interior should ensure that the original fabric or significant architectural and spatial features are retained and interpreted as far as possible;
- The detailed requirements of the new uses should not generate undue changes to the existing fabric that cannot be reversed in the long term, or which do not respect and work within the existing architectural framework;
- Subdivision of internal spaces, where appropriate, should be undertaken in a secondary manner, using such items as partitions that can eventually be removed and which do not impact on the existing finishes or details;
- External alterations or additions should be discouraged; however, if required to meet approved interpretation, reuse or cultural tourism requirements, these should be of a minor nature, and subservient to the primary architectural features and composition of the existing structure;
- The introduction of new services and associated fittings as part of approved reuse programs should be carried out with the minimum of disruption to the fabric and spaces;
- Uses that require an unacceptable degree of intervention for upgrading to Building Code of Australia and Disability Discrimination Act compliance should be avoided;
- New works associated with adaptive reuse should be clearly identifiable as such and detailed in a contemporary manner rather than replicating the original detailing of the affected building;
- Prepare a concise illustrated document outlining signage controls on buildings for tenants. This document should form part of leasing arrangements. New signs should be carefully and unobtrusively placed on buildings with simple and legible typefaces and the action should be reversible.

### **Building Services Guidelines**

Existing services will be checked, conserved or upgraded as necessary to facilitate the reuse of existing buildings or new buildings to support the achievement of approved management programs (as set out in the Plan of Management), to support temporary cultural events and activities and to maintain fire fighting capabilities.

The provision of new or upgraded services to buildings should not damage significant building fabric or disrupt spaces:

- Existing or old service paths should be used in preference to forming new paths;
- Services should be grouped where possible to minimise intrusion on significant spaces or fabric;
- Areas that have been previously modified for services should be reused where possible;
- Any intervention into significant building fabric should respect its integrity and be limited to that required by the proposed works;
- No externally mounted air-conditioning, ventilation equipment, water heaters or service components should be visible or impact negatively on building exteriors or roof scapes.

### Conservation report guidelines

Any adaptation or modification of significant buildings for new uses other than for works covered by general and site specific exemptions under the Heritage Act (refer to **Appendix H**) are to be consistent with the recommendations of specific CMPs, collective CMPs or concise conservation reports. The type of report will depend on the relative heritage significance of the building. The appropriate Conservation Plan, Collective Conservation Plan or Conservation Report should be prepared when it is proposed to adapt a building to new uses prior to commencing documentation of the works. All Conservation Plans and Reports will be prepared in consultation with experienced conservation practitioners.

The following tables provide guidance for the contents of the individual conservation reports and the buildings to which they apply.

**Table 8.2 Recommended Contents for Individual Conservation Plans**

| Section   | Subsections | Contents  |
|-----------|-------------|---|
| Section 1 |             | History of building in relation to history presented in this CMP                |
| Section 2 |             | Analytical description of building  |
|           | Section 2.1 | Construction techniques   |
|           | Section 2.2 | Technological details   |
|           | Section 2.3 | Signage, fixtures and associated structures                                     |
|           | Section 2.4 | Chronology of historic function and changes to fabric                           |
| Section 3 |             | Assessment of significance of building  |
|           | Section 3.1 | Significance in relation to overall significance of the site                    |
|           | Section 3.2 | Assessment of significant characteristics of item: fabric; integrity; condition |
| Section 4 |             | Assessment of adaptive reuse/interpretation options against this CMP            |
| Section 5 |             | Assessment of fabric conservation against this CMP                              |
| Section 6 |             | Formulation of conservation policies  |
|           | Section 6.1 | Building fabric conservation policies   |
|           | Section 6.2 | Adaptive reuse conservation policies  |
| Section 7 |             | Formulation of an interpretation plan for the building                          |
| Section 8 |             | Recording of building   |
|           | Section 8.1 | Measured drawings   |
|           | Section 8.2 | Photographic recording of exterior and interior                                 |

Individual conservation plans should be prepared for:

Original Establishment Precinct

- Building 18;

- Buildings 20 and 137;
- Buildings 118 and 200;
- Building 123;
- Building 126; and
- Building 139.

**Table 8.3 Recommended Contents for Collective Conservation Plans**

| Section   | Subsections | Contents  |
|-----------|-------------|---|
| Section 1 |             | History of buildings/items in relation to history presented in this CMP         |
| Section 2 |             | Analytical description of buildings/items                                       |
|           | Section 2.1 | Construction techniques   |
|           | Section 2.2 | Technological details   |
|           | Section 2.3 | Signage, fixtures and associated structures                                     |
|           | Section 2.4 | Chronology of historic function and changes to fabric                           |
| Section 3 |             | Assessment of significance of building  |
|           | Section 3.1 | Significance in relation to overall significance of the site                    |
|           | Section 3.2 | Assessment of significant characteristics of item: fabric; integrity; condition |
| Section 4 |             | Assessment of adaptive reuse/interpretation options against this CMP            |
| Section 5 |             | Assessment of fabric conservation against this CMP                              |
| Section 6 |             | Formulation of conservation policies  |
|           | Section 6.1 | Building fabric conservation policies   |
|           | Section 6.2 | Adaptive reuse conservation policies  |
| Section 7 |             | Formulation of an interpretation plan for the buildings                         |

Collective conservation plans should be prepared for:

#### Original Establishment Precinct

- Buildings 7, 8 and 21;
- Buildings 139, 140-146 and 148; and
- Buildings 150-152.

#### Early Naval Occupancy Precinct

- Buildings 28 and 127-129;
- Buildings 36-38; and
- Buildings 154-161 and 163.

RAN Wartime Expansion Precinct

- Buildings 130-133 and 135;
- Buildings 42-45; and
- Buildings 46 and 47.

US Navy Utilisation Precinct

- Buildings 56 and 57, 58 and 59 (masonry fronted stores); and
- Buildings 60, 78 and 79 (steel fronted stores).

**Table 8.4 Recommended Contents for Concise Conservation Reports**

| Section   | Subsections | Contents  |
|-----------|-------------|---|
| Section 1 |             | History of buildings/items in relation to history presented in this CMP |
| Section 2 |             | Analytical description of buildings/items                               |
|           | Section 2.1 | Construction techniques   |
|           | Section 2.2 | Technological details   |
|           | Section 2.3 | Signage, fixtures and associated structures                             |
|           | Section 2.4 | Chronology of historic function and changes to fabric                   |
|           | Section 2.5 | Condition, integrity  |
| Section 3 |             | Assessment of significance of building in relation to the site          |
| Section 4 |             | Assessment of adaptive reuse/interpretation options against this CMP    |
| Section 5 |             | Assessment of fabric conservation against this CMP                      |
| Section 6 |             | Assessment of exemption based on significance and integrity             |

Concise conservation reports should be prepared for:

Original Establishment Precinct

- Building 4;
- Building 5;
- Building 6;
- Building 12;
- Building 15;
- Building 19;
- Building 22;
- Building 105;

- Building 138;
- Item 241 (stone gateposts and fence line base);
- Item 235 (light railway);
- Item 236 (wharf); and
- Item 247 (cranes).

#### Early Naval Occupancy Precinct

- Building 16;
- Building 30;
- Building 33;
- Building 34;
- Building 35;
- Building 39; and
- Item 196 (water tower).

#### RAN Wartime Expansion Precinct

- Building 31; and
- Building 134.

#### US Navy Utilisation Precinct

- Building 1;
- Building 2;
- Building 3;
- Building 24;
- Building 25;
- Building 50;
- Building 83; and
- Building 122.



### **New Buildings Guidelines**

Should there be the need to construct new buildings, then the following guidelines apply:

- Given that the current nature of the site is defined by the interaction of natural and cultural landscapes with the buildings and other site works, it is essential that new buildings be first tested against the existing buildings before any consideration is given to the construction of new facilities;
- New buildings will be sited generally within restricted locations and be of a scale, form and architectural expression that respects the character and natural and cultural heritage values of the Newington Armament Depot and Nature Reserve;
- Based on relative significance of built items, visual impacts, access and operational impacts associated with new uses, locations for new buildings could be the area in the vicinity of Jamieson Street at the northwestern corner of the US Navy Utilisation Precinct, the northeastern section of the US Navy Utilisation Precinct at Five Ways and the ridge line near the western boundary of the Original Establishment Precinct. Refer to Attachment 2 in Section 10;
- New buildings are to be constructed in accordance with permissible uses described in the Sydney Environmental Planning Policy (Major Development) 2005 zoning, an approved development plan and with development consent approval.

The overall form and design of any new buildings should refer to the palette of materials that already exist on site. Architectural forms should be simple and direct. Heights of buildings should be determined by their location on the site and views across and through groups of buildings and individual buildings. No new building should be any higher than the significant buildings on the site.

### **Specific Guidelines for Precinct 1: Original Establishment Precinct**

Retain the visual character and relationships of significant buildings in the Original Establishment Precinct, especially at the northern end of the Precinct and along the eastern edge on the Burma Road. This can be achieved by restricting the size and location of additions (where appropriate).

There shall be no additions to the following buildings because of their exceptional heritage significance, high level of integrity and overall architectural form:

- Building 20;
- Building 142;
- Building 143; and
- Building 137.

It is possible to undertake careful small scale additions to the rear of Buildings 118, 123 and 126. The additions must be designed with a scale and form that is deferential to the original sections of the buildings.

Buildings of exceptional and high significance in the precinct can be adapted to sympathetic new uses. It may be possible to construct minor additions to buildings of high heritage significance, subject to evaluation of individual circumstances and potential heritage impacts.

Buildings identified as having moderate heritage significance may be able to tolerate a higher level of change. However, the contribution of these buildings to the overall heritage significance of the place should be recognised and not compromised.

Retain, conserve and maintain the light rail system in this precinct where it is operational and needs to comply with the requirements of the Rail Safety Act.

Retain and conserve the light rail system in this precinct where it is not operational but has the potential for future operational reuse.

Retain the light rail corridor for interpretive purposes where there is no foreseeable potential future use.

### **Specific Guidelines for Precinct 2: Early Naval Occupancy Precinct**

Individual buildings of high significance – Buildings 18, 30, 35 and 39 – should be retained and conserved. Modifications are to be restricted to building interiors.

The precinct contains significant groups of buildings, the integrity of which should be retained and conserved. There should be no additions to buildings in these groups because of their small scale and visual relationships. The groups consist of:

- Buildings 28, 127, 128 and 129;
- Buildings 154-159, 160, 161 and 163; and
- Buildings 36-38.

There should be no additions to the buildings that are within the Newington Nature Reserve or in close proximity to its boundaries. Any adaptive reuse of these buildings will need to be mindful of the sensitive character of the Nature Reserve and have minimal impacts in terms of noise and movement.

Retain, conserve and maintain the light rail system in this precinct where it is operational and needs to comply with the requirements of the Rail Safety Act.

Retain the light rail corridor for interpretive purposes where there is no foreseeable potential future use.

### **Specific Guidelines for Precinct 3: RAN Wartime Expansion Precinct**

The buildings in this precinct generally have high heritage significance.

The group comprising Buildings 130-132 and 135 can be adapted to new uses but there should be no further additions to them and their overall form and relationship should be retained. Consideration should be given to replacing the ramp with more sympathetically designed means of access.

New uses for Building 31 that are permissible under the Newington Nature Reserve Plan of Management may be investigated.

Buildings 42 to 45 can be adaptively reused. New uses will need to consider the location of the buildings adjoining the Newington Nature Reserve forest and the significant role they serve as a breeding habitat for bats. The use will be determined in consultation with, and the approval of, the NPWS. There should be no additions made to these structures.

Building 46 is currently used as an education centre. It is important for the building to retain a visible presence on the site so that it is easily accessible for visitors. Sensitive additions are acceptable.

Building 47 should be adaptively reused. Ways of integrating its use into the rest of the Newington Armament Depot site should be investigated. Sensitive additions are acceptable.

Retain the light rail corridor for interpretive purposes where there is no foreseeable potential future use.

#### **Specific Guidelines for Precinct 4: US Navy Utilisation Precinct**

Generally retain and conserve all buildings evaluated as having high heritage significance in this precinct. Buildings 24, 26 and 122 are capable of sensitive modification. Sensitive additions that do not obscure the original form of the buildings can be made to Buildings 24 and 122 so long as their overall form is not obscured or deleteriously affected.

Interiors of Buildings 56-60 and 78-79 can be carefully modified to facilitate adaptive reuse. There should be no further additions to these structures.

The buildings in the group located at the Jamieson Street site entrance have moderate or little heritage significance and can be adaptively reused or demolished. The buildings should be archivally recorded if demolition is to take place.

#### **8.3.2 Natural Landscape**

##### **Principle**

The ecological values of remnant plant communities, the wetland, forest and fauna will be conserved and enhanced in a manner that accounts for the conservation of natural heritage.

##### **Policies**

*Policy 31 The Newington Nature Reserve will continue to be managed in accordance with the Newington Nature Reserve Plan of Management, prepared in accordance with the requirements of the National Parks and Wildlife Act 1974.*

*Policy 32 The Authority will protect and enhance adjoining lands to the Nature Reserve within the Newington Armament Depot as an ecological transition and extension of the ecological communities, consistent with values for which the Newington Nature Reserve was gazetted.*

*Policy 33 SOPA and NPWS will continue to collaborate in the joint management of all areas of high natural heritage values within the Newington Armament Depot and Nature Reserve such that communities crossing the land tenure boundaries are managed in a holistic manner.*

*Policy 34 The land between the Newington Nature Reserve wetland and forest will be managed to support an ecological corridor and habitat linkage and facilitate continued operation of the heritage railway and guided tour programs.*

*Policy 35 Flora within the Newington Nature Reserve and adjoining buffer zone is to be managed in accordance with approved Vegetation Management Plans. These plans are to be periodically reviewed and implemented in consultation with NPWS. Planting and vegetation*

*management will be in general accordance with the Landscape Concept Plan (Attachment 3 in Section 10 of this CMP).*

*Policy 36 The area of “The Flats” to the south of Building 18 is to be managed into the future as both an ecological transition area and an area that supports higher levels of visitor use and activity in a manner that is consistent with the objectives of the Newington Nature Reserve and without compromising the views and open qualities of the cultural landscape.*

*Policy 37 Activities conducted in the Newington Armament Depot and Nature Reserve will minimise disturbance to wildlife in the natural areas of the precinct.*

## **Guidelines**

The SOPA Biodiversity Management Plan is the primary reference document informing conservation of species and communities across the Newington Armament Depot and Nature Reserve.

General public access to the Newington Nature Reserve will continue to be restricted. Public visitation will be limited to controlled numbers for guided educational/interpretive tour programs and activities.

Local provenance stock will only be planted within the buffer area of the Newington Nature Reserve.

New developments, modifications of ecosystems and changes of use in and adjoining the Newington Nature Reserve will be subject to an ecological and heritage impact assessment.

### **Specific Guidelines for Precinct 2: Early Naval Occupancy**

Disturbance to wildlife resulting from visitor activity and programs will be minimised.

Views across The Flats into the Newington Nature Reserve will be maintained. Tall vegetation (trees and shrubs) will only be planted or allowed to grow on revegetation areas of The Flats where views into the wetlands are already screened by Swamp Oak Floodplain Forest.

Only passive recreation activities will be conducted on areas of The Flats that remain as mown turf. Activities involving organised sports, amplified noise or large crowds will be minimised.

Formalising The Flats for active sports is not permissible.

### **Specific Guidelines for Precinct 3: RAN Wartime Expansion**

Allow for natural regeneration of vegetation in the nominated buffer zones while respecting the cultural landscape values of the site.

Views to the 130s group of buildings will be maintained. Only isolated trees and shrubs will be allowed to regenerate between these buildings and Burma Road.

Retain the existing mown grass character in the vicinity of the buildings in the 130s group.

### 8.3.3 Cultural Landscape

#### Principle

The cultural landscape of the Newington Armament Depot and Nature Reserve is an embodiment of the phases of its development during the nineteenth and twentieth centuries. It is a remarkable example of an institutional landscape devoted to specific functions and purposes that has survived amidst a diverse and evolving urban setting.

#### Policies

*Policy 38 SOPA will protect and maintain an understanding of the long-standing institutional nature of the Newington Armament Depot and Nature Reserve and its influence on the cultural landscape of the place. The integrity of the unique elements of this institutional landscape character will be also maintained and protected.*

*Policy 39 The cultivated open landscape character of the Newington Armament Depot as opposed to the forest and wetland character of the Newington Nature Reserve is to be retained and conserved.*

*Policy 40 The continued use of the cultural landscape of the Newington Armament Depot will be managed to balance the competing use, heritage and environmental objectives for these areas in accordance with the Parklands Plan of Management 2010, the Nature Reserve Plan of Management and the guidelines contained in this CMP.*

*Policy 41 Future use of the site should not compromise the intrinsic visual and physical qualities that exist throughout the Newington Armament Depot and Nature Reserve.*

*Policy 42 Planting will be in general accordance with the Landscape Concept Plan in this CMP (Attachment 3 in Section 10).*

*Policy 43 Maintain existing cultural planting patterns and species diversity rather than creating new planting typologies and introducing new species.*

*Policy 44 Retain and conserve berms as an integral component of the cultural landscape.*

#### Guidelines

As set out in the Plan of Management and as required by the *Sydney Olympic Park Authority Act 2001*, land immediately adjacent to the Newington Nature Reserve will be managed in sympathy with the values and objectives for the Nature Reserve and will progressively provide an increased level of habitat value and an ecological corridor function, with due regard to the conservation of historic cultural buildings and rail infrastructure.

Undertake tree planting in accordance with the Landscape Concept Plan, which forms part of this CMP and has been endorsed by the NSW Heritage Council. Refer to Attachment 3 in Section 10.

Consolidate planting along the periphery of the site (southern and western boundaries along Jamieson and Holker Streets) to reinforce the site's historic character as a place set apart for specific purposes;



Maintain the species selection used in peripheral planting and supplement understorey planting adjacent to fencing, to limit visual permeability;

Ensure intrusive uses in localities that adjoin the site are screened through judicious planting design, while providing for a number of strategic viewing windows to key areas of the US Navy Utilisation Precinct;

Open up significant selective view corridors into the site on the western site boundary from Jamieson Street.

### **Specific Guidelines for Precinct 1: Original Establishment**

The open grassland with scattered trees character of the Original Establishment Precinct, with its rising topography towards the west and avenue of Camphor Laurels will be retained. The planting of large scale bands of trees or other vegetation that would disrupt the open character of the grassland should be avoided.

The strongly defined landscape character of the old roadway in the Original Establishment Precinct from Jamieson Street down to the wharf precinct, with its rows of mature Camphor Laurels, should be retained and conserved. Should the condition of any of the Camphor Laurels deteriorate to a point that the grandeur of the avenue is affected then the subject tree will be replaced with a species which is of similar scale and form but which is not a noxious or environmental weed.

Consider forward planting with appropriate replacement species where the assessment of the trees is such as the Safe Useful Life Expectancy (SULE) rating indicates a short-term scenario for the longevity of the trees.

The integrated nature of the Early Naval Occupancy Precinct, with carefully sited buildings and rail infrastructure threaded through the landscape, will be retained and conserved.

The open views over the Original Establishment Precinct to the north and northeast from the roadways at the crest of the hill near Building 123 should be retained and conserved.

### **Special Guidelines for Precinct 2: Early Naval Occupancy**

Trim, contain and/or remove as necessary Casuarina plantings along the drainage line at the northern section of the site.

### **Special Guidelines for Precinct 3: RAN Wartime Expansion**

Undertake limited consolidation of tree planting in the grassland area adjacent to the forest and Holker Street road bridge at the southern end of the RAN Wartime Expansion Precinct as described in the Landscape Concept Plan (Attachment 3 in Section 10).

Retain and conserve the combination of grassland with scattered trees and forest Nature Reserve character of the RAN Wartime Expansion Precinct, with its gently sloping topography and complex biodiversity.

Review the existing planting in the southern section of the RAN Wartime Expansion Precinct to enhance the entry experience associated with the proposed entry portal.

### **Special Guidelines for Precinct 4: US Navy Utilisation**

Aerial photographs taken in 1943 and 1970 show that avenues of trees were planted along roads, leaving large areas of open space between the roads. Maintain spaced planting of trees, based on the precedent of these historical photographs (the 1943 images depict the definitive era of the Armory), rather than introducing dense avenue planting that will create intrusive walls of vegetation. This applies to the Original Establishment Precinct and the US Navy Utilisation Precinct. Consolidate tree planting along these road networks as shown on the Landscape Concept Plan (Figure 8-2). Species to be used should be the same or consistent in form and habit with existing historical roadside planting and should be local provenance stock where feasible.

The open views over the site to the south and southeast from the roadways at the crest of the hill near Building 123 should be retained.

Retain and manage the open grassland character of the US Navy Utilisation Precinct, with its rising topography towards the south. The existing physical framework of the US Navy Utilisation Precinct has the potential to allow for the use of this part of the site as a gathering location for larger events and the potential use of the armament buildings as support facilities and shelter.

### **Special Guidelines: Berms**

Berms are an important component of the Newington Armament Depot. They are significant generators of the cultural landscape, are an integral component of the past operation and use of many buildings, and key interpretive devices.

Change to berms is permissible if it facilitates the adaptive reuse of a significant building, for example BCA compliance and public access. Where sections of berm are removed, the configuration of the berm should still be able to be interpreted.

In cases where removal is required, the minimum amount of berm removal necessary to achieve compliance or access should be undertaken. Tunnelling through a berm, where practicable, is preferable to removal of whole sections.

Any change to berms is to be the subject of a Statement of Heritage Impact.

### **8.3.4 Aboriginal Heritage**

#### **Principle**

The site has associations with pre-European Aboriginal inhabitation, evidence for which is to be found in the Newington Nature Reserve. This evidence is limited in extent and is not exposed. Although evaluated as having low heritage significance, these archaeological remains are nevertheless important because they provide tangible links to pre-European use and occupation of the place. There is also the possibility that further archaeological evidence of Aboriginal occupation will be uncovered in the future

#### **Policies**

*Policy 45 The Aboriginal heritage and archaeological potential of the Newington Armament Depot and Nature Reserve, as a component of the Homebush Bay area, will be recognised as an integral part of the cultural significance of the site.*

*Policy 46 Should excavation, ground disturbance or vegetation removal within the Newington Nature Reserve be proposed, then the Metropolitan Local Aboriginal Land Council (MLALC) should be contacted and opportunities provided for a representative to monitor the work.*

*Policy 47 Should previously unidentified Aboriginal objects (or potential objects) be discovered during excavation, ground disturbance or vegetation removal then all works should cease immediately and the Cultural Heritage Division of OEH informed. Depending on the outcomes of discussions with OEH, the MLALC may also need to be informed.*

## **Guidelines**

The Aboriginal Heritage Assessment Report undertaken by AMBS has found that the Newington Armament Depot and Nature Reserve has a limited number of archaeological remains and potential archaeological deposits, which are located within the Newington Nature Reserve forest. These have been evaluated as having low heritage significance. Further, only the Newington Nature Reserve forest is considered to have any archaeological potential for further Aboriginal heritage deposits.

There is still the possibility that unrecorded and previously unknown archaeological relics may be discovered in other parts of the site in the future and if this takes place there will need to be mechanisms put in place to record and preserve the relics. In the event that relics are uncovered during site excavation or works, an archaeological program should be implemented to the satisfaction of the NSW Heritage Council. If relics of state significance are identified they should be conserved and interpreted.

Management of Aboriginal heritage should refer to the principles contained in the Office of Environment and Heritage (OEH) 2010 Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW, augmented by the NPWS Aboriginal Cultural Heritage Guidelines and Standards Kit (1997) where this covers areas not included in the OEH Code of Practice.

In the event of future works being proposed in the vicinity of known and potential Aboriginal archaeological deposits, an Aboriginal Heritage Impact Assessment should be undertaken in consultation with the local Aboriginal community and the National Parks and Wildlife Service.

Should previously unidentified Aboriginal objects (or potential objects) be discovered during excavation, ground disturbance or vegetation removal then all works should cease immediately and the relevant section of the Office of Environment and Heritage informed. Depending on the outcomes of discussions with the Office of Environment and Heritage, the MLALC may also need to be informed.

The following recommendations are guidelines to determining management protocols whilst retaining cultural significance. These have been formulated with reference to the principles contained in the NPWS Aboriginal Cultural Heritage Guidelines and Standards Kit (1997):

- The relevant Aboriginal community group will be consulted on revisions to the Plan of Management for the Newington Nature Reserve;
- The management, conservation and analysis of the Newington Armament Depot and Nature Reserve must at all times recognise that Aboriginal culture is living and unique and that Aboriginal people have a right to protect, promote and preserve their culture;
- Joint and equitable management of Aboriginal sites must be maintained with Aboriginal participation in decision-making processes;

- The registration of the stone artefacts does not necessarily mean that they are the only Aboriginal sites extant within the site, which imposes obligations or constraints in relation to the Aboriginal community. The archaeological surveys conducted so far have been surface survey examinations only and the results of a future archaeological study may identify other sites within the Parklands.

### 8.3.5 Historical Archaeology

#### Principle

The site has been identified as potential archaeological resource in the Newington Armory Historical Archaeological Zoning Plan (September 2004, reissued August 2013). It has been associated in various ways with European settlement and development since the beginning of the nineteenth century. There is the possibility that historical archaeological remains will be uncovered on the Newington Armament Depot and Nature Reserve in the future and this possibility needs to be incorporated into the management of the place.

#### Policies

*Policy 48 Archaeological management of the Newington Armament Depot and Nature Reserve should be guided by the recommendations and findings of the Newington Armory Historical Archaeology Zoning Plan.*

*Policy 49 Where possible, proposed excavation or ground disturbance at the Newington Armament Depot and Nature Reserve should be kept to a minimum. If uncovered, historical archaeological relics should be retained in-situ wherever possible.*

*Policy 50 All archaeological investigation, recording, artefact cataloguing and reporting should be undertaken by a qualified archaeologist and in accordance with best-practice principles and consistent with relevant Heritage Council of NSW policies and guidelines.*

*Policy 51 Any artefacts found during excavation, ground disturbance or archaeological excavation should be appropriately cleaned, bagged, labelled, catalogued and stored in archive boxes. The artefacts should be provided to SOPA, which will need to provide an appropriate repository once reporting has been finalised.*

*Policy 52 Artefacts should be stored in a secure and weathertight location at the Newington Armament Depot and Nature Reserve consistent with best-practice principles.*

*Policy 53 Where previously unidentified substantially intact archaeological relics of state or local significance are uncovered during excavation, work in the vicinity must cease immediately and the Heritage Council of NSW notified. Work should not proceed until approval to do so has been provided by the Heritage Council of NSW or its delegate.*

#### Guidelines

The archaeological potential map (Figure 6.2 - Management zones for the historical archaeological resource in the Newington Armory Historical Archaeological Zoning Plan and reproduced below) should be imported as a formal layer in the Sydney Olympic Park Authority survey department, as recommended in the Zoning Plan.

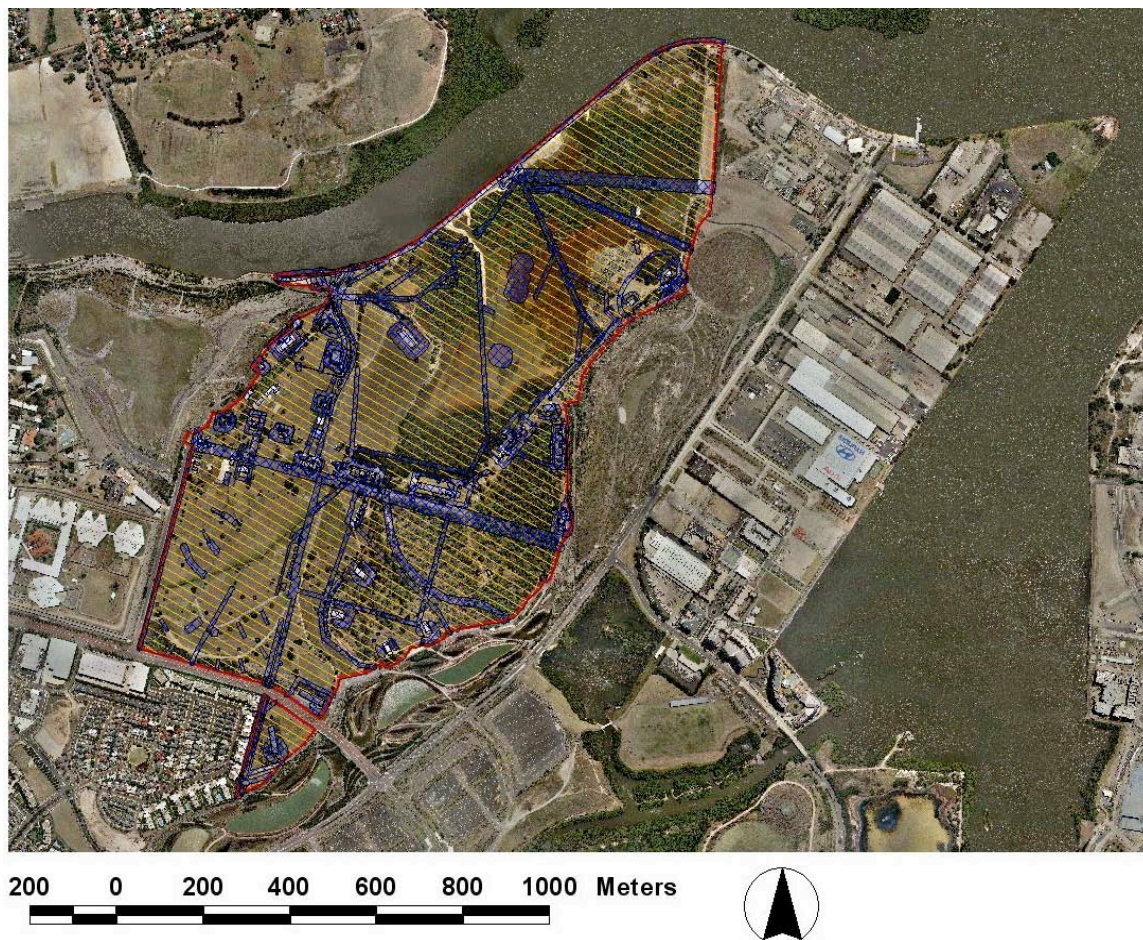


Figure 8-1 Archaeological potential map

It is expected that elements of the Newington Armory Historical Archaeological Zoning Plan will become redundant with time as new information on the history and development of the site become available either through research or the findings of archaeological investigations in response to development projects within the Precinct. It is therefore recommended that the historical archaeological zoning plan for the Newington Armory is to be reviewed every five years. As part of the next review it is recommended that the c1859 plan of Homebush (Figure 5.2 in the Newington Armory Historical Archaeological Zoning Plan) be georeferenced for the purposes of digitising additional archaeological objects and features.

The potential historical archaeological resource of the Newington Armament Depot and Nature Reserve may include artefacts that range from the earliest days of European occupation and activity to the long period of military use. These potential remains are of heritage significance for their ability to provide information on occupation.

Future uses are likely to require excavation for construction of new buildings and site infrastructure and landscaping. Such works have potential to impact remnant historical archaeological resources and should therefore be managed to avoid, minimise or mitigate impacts as much as possible.

Any development proposals will take account of the likelihood of there being historical archaeological resources within the Newington Armament Depot and Nature Reserve.



Conservation, refurbishment or upgrading works associated with any compatible future use proposal may result in the potential disturbance of, or uncovering of, the evidence of functions associated with earlier uses. In order that the history and significance of buildings and site may be fully understood and appreciated, the evidence shall be professionally recorded and assessed.

Priority should be given to retaining the archaeological resource undisturbed. To this end, recommendations to mitigate disturbance should be put forward once details of specific works and their impacts are known.

Contractors on site are required, under heritage legislation, to report archaeological remains.

### **8.3.6 Moveable Heritage**

#### **Principle**

The Newington Armament Depot is the repository of a substantial amount of moveable heritage. Moveable heritage items consist of those items inventoried by SOPA's The Naval Heritage Collection (2005), on permanent loan and managed by SOPA with agreement from the Royal Australian Navy and moveable items that are intrinsic to the site and make a significant contribution to the cultural heritage of the place. Many of these moveable heritage items are valuable resources when interpreting the place, adding an additional depth of meaning to built items and the cultural landscape. The heritage significance of moveable heritage items needs to be evaluated and significant items conserved and safeguarded against damage or potential loss.

#### **Policies**

*Policy 54 SOPA will continue to maintain an inventory and keep secure moveable heritage items that are associated with the site and that are owned and on permanent loan under agreement to the Authority from the Royal Australian Navy.*

*Policy 55 SOPA will develop and maintain an inventory of moveable heritage and establish security protocols for the moveable heritage that is not owned by the Royal Australian Navy.*

*Policy 56 SOPA will undertake research and documentation to establish provenance, function, history and associations of the moveable heritage collection for its future use and interpretation within the site.*

#### **Guidelines**

Any moveable item should be assessed for its potential heritage value before it is altered or disposed of. If the heritage value of a moveable item is not known, a precautionary approach should be adopted and it should be considered significant until an assessment is undertaken. To determine the significance of a moveable heritage item, a suitably qualified expert professional should be engaged to assess the significance of moveable heritage items and catalogue the items.

Management of moveable heritage items owned by SOPA should be based on the guidelines provided by the document *Moveable Heritage Principles* (2000), jointly written by the NSW Heritage Office and the NSW Ministry of the Arts. If a moveable heritage item is to be disposed of, then it should be done in accordance with appropriate guidelines. If there are none in place, SOPA should consider formulating guidelines for future use.

Generally, it is preferable to leave any moveable item of heritage value *in-situ* or within the boundaries of the site. If this is not feasible or not an acceptable means of storing and protecting the item, then it may need to be relocated to an appropriate storage facility.

There are numbers of moveable heritage items, such as fire hose reels, hydrants and telephone points, that are found across the site. It is not necessary to retain all of these items, but a sufficient representative number should be retained as evidence of past uses and for interpretive purposes in the various parts of the site in which they are located.

### **8.3.7 Access and Connectivity**

#### **Principle**

Public access to the Newington Armament Depot and Nature Reserve is presently available from the northern wharf precinct and from the Louise Sauvage Pathway at the southern end of the site on weekends. There is the need to improve and enhance access to the site so that pedestrians and cyclists can easily gain entry from several vantage points, thus encouraging public use and enjoyment of the place. At the same time, consideration needs to be given to the control of vehicular access. However, while access is an important issue, there is still the need to maintain the security of the site.

In a broader context, the key to successful integration of the Newington Armament Depot and Nature Reserve within the broader context of Sydney Olympic Park is the enhancement of links to the parking station near the southern end of the site (P5) and the Blaxland Riverside Park.

#### **Policies**

*Policy 57 Continue to manage the Newington Armament Depot and Nature Reserve as a secured and fenced precinct.*

*Policy 58 Increased public access to the site will continue to be controlled and managed in accordance with the Newington Armory Access and Security Policy and Procedures.*

*Policy 59 Continue to progressively open up the Newington Armament Depot to the general public subject to visitor demand for structured and unstructured programs, events and activities as well as available resources for visitor management.*

*Policy 60 General public access to the Newington Nature Reserve will be strictly managed to protect its significant ecological values, manage safety hazards such as unexploded ordnance and comply with the legal requirements contained in the Newington Nature Reserve Plan of Management.*

*Policy 61 Maintain the internal boundary fencing and security management to prevent unauthorised access to the Newington Nature Reserve.*

*Policy 62 Continue to manage and enhance the wharf area to the north of the Newington Armament Depot as the principal public point of entry to the place. Reinforce and enhance its sense of entry. Maintain and enhance the connections that it provides between the Armament depot and the Blaxland Common.*

*Policy 63 Enhance and upgrade pedestrian and bicycle access and movement within the Newington Armament Depot and Nature Reserve in accordance with the guidelines of the CMP Access and Visitor Facilities Plan (Refer to Attachment 4 in Section 10) and connectivity with other Sydney Olympic Park precincts. Improve and enhance the sense of entry to the Newington Armament Depot from the wharf area, Jamieson Street and the Louise Sauvage Pathway.*

*Policy 64 Upgrade access to the site from the south so that it provides a sense of entry to the site and a sense of anticipation for visitors. Improved access will provide an entry portal for visitors using the P5 Car Park and will facilitate pedestrian and bicycle access to and from the site.*

*Policy 65 Retain and enhance the Jamieson Street entrance as the principal vehicular entrance onto the site. Vehicular access to the Newington Armament Depot for authorised purposes will be restricted to the existing Jamieson Street vehicle entrances.*

*Policy 66 Restrict all car parking on site to essential parking for SOPA management, people with disabilities and tenancy car parking in limited authorised areas. General public visitor vehicle parking will generally be prohibited or authorised in the case of limited areas associated with events and programs.*

*Policy 67 Continue to implement the Parklands Wayfinding Signage Strategy to improve the integration of the Newington Armament Depot and Nature Reserve with the wider Parklands and Sydney Olympic Park.*

### **Site Security Guidelines**

The Newington Armory Access and Security Policy and Procedures will be developed to:

- Preserve the sense of place of the site;
- Protect the high cultural heritage values of buildings, light rail, cultural landscape and moveable heritage;
- Protect the high ecological values of the Newington Armament Depot and Nature Reserve;
- Manage visitor impacts;
- Manage potential safety and risk hazards.

The Newington Armament Depot and Nature Reserve has always been a secure and isolated place. Existing fencing maintains this historical circumstance and contributes to the special sense of place that the site possesses. Maintain institutional type of fencing that is consistent with the historical character of the place.

Visitor management control will include devices such as CCTV surveillance, passive and targeted Ranger surveillance and visitor service staff. Investigate the extent of needed security devices and prepare procedures for implementation.

Security devices such as CCTV surveillance will be planned so that they are unobtrusively placed and do not obscure the heritage significance of buildings and cultural landscape in which they are situated.

### **Vehicular Access Guidelines**

The extensive network of internal roads is to be retained and maintained and will continue to be the primary means of shared authorised vehicular, pedestrian and cycle movement through the site.

New roads and paths should only be considered after a thorough evaluation of the capacity of existing roads and paths and priorities for improving shared pedestrian and bicycle connections to and within the Newington Armament Depot and Nature Reserve.

Private motor vehicles should only be permitted under very restricted circumstances. These include access for people with disabilities, staff, service contractors; limited buses and coaches associated with approved programs or tours; and temporary parking in designated areas associated with special approved cultural events and activities where parking outside the site is not appropriate. Access and parking is only available provided that the movement or parking of any vehicle or equipment does not occur on areas not designed for that use.

The existing road network will not be extended except as required to serve new buildings in the designated areas (refer to Attachment 2 – Appropriate zones for new development in Section 10). New roads will only be constructed to the minimum necessary extent.

New paths in Precinct 4 will be sufficiently wide to allow shared pedestrian and bicycle movement. Detailing of kerbing and finishes is to match the detail and finishes of existing roads in this precinct.

Carefully upgrade and enhance the pedestrian amenity of the original section of road on the western side of Precinct 1. The works will respect the heritage significance of the road and associated kerbing. Undertake investigation into the materials used for the original surface of the road prior to undertaking conservation and reconstruction works. The results of investigation should form the basis of the works.

Parking of authorised vehicles will ensure that views and the curtilages of significant buildings are protected. Parking will be restricted to the western areas of Precinct 1 and Precinct 4 in accordance with the Access and Visitor Facilities Plan. Refer to Attachment 4 in Section 10.

Temporary car parking is permissible to provide access for disabled persons, tenancies and for authorised visitors associated with special events or programs and activities.

### **Public Access Guidelines**

Pathways adjoining the Newington Nature Reserve will be managed to minimise disturbance to adjoining areas. Installation of lighting on these pathways will generally be avoided.

Visitor movement and access will be enhanced in accordance with the guidelines included in the CMP Access and Visitor Facilities Plan (Attachment 4, Section 10).

A portal should be created at the southern access point in the RAN Wartime Expansion Precinct (Precinct 3) that celebrates entry to the Newington Armament Depot, provides essential visitor amenity and interpretation devices that provide an overview of the site and encourage visitor exploration.

Personal visitor movement within the Newington Armament Depot will be restricted to pedestrians and bicycles. Non-personal movement will be restricted to the light rail system and authorised buses.

Upgrade the shared pedestrian and bicycle entry portal at the northeastern corner of the Early Naval Occupancy Precinct (Precinct 2).

Internal pedestrian/cycle path options linking The Banana road to Jamieson Street need to be enhanced through accessible site entry points at Jamieson Street and improved paths in the US Navy Utilisation Precinct (Precinct 4).

Continue exploration of options to facilitate ferry access and local bus services to the Newington Armory wharf and the wider precinct generally.

Implement the entry portal at the principal site entry in the Early Naval Occupancy Precinct. The portal should be designed to complement significant buildings in this part of the site and give a sense of arrival to the place.

### **8.3.8 Visitor Use and Management**

#### **Principle**

One of the main aims of this CMP is to guide consolidated planning with increased visitor use of the Newington Armament Depot and Nature Reserve over the next five years. As visitor numbers increase, with the range of available programs, activities, and events, there will be increasing pressures on the cultural and natural significance of the place. Visitor use needs to be carefully managed so that these heritage values are retained and enhanced, at the same time allowing a rich and enjoyable experience for those using the place and its facilities.

#### **Policies**

*Policy 68 Future use of the site should not compromise the intrinsic visual, physical and heritage qualities that contribute to the significance and experience of the Newington Armament Depot and Nature Reserve. Ensure that the increased and diverse use of the Newington Armament Depot and Nature Reserve is sustainable and the potential cumulative use impacts on the heritage significance are monitored and managed.*

*Policy 69 The Newington Armament Depot and Nature Reserve will continue to be managed as a secure precinct that is appropriately fenced and progressively opened to the public for well-managed programs, events and activities, under increased levels of visitor management control.*

*Policy 70 The Newington Armament Depot and Nature Reserve will be managed to achieve optimal public use through a diverse range of programs, events and activities in an appropriate and highly managed way.*

*Policy 71 Visitor-related infrastructure supporting increased amenity and new uses is not to be located in open areas across the site but limited to entry and exit points and visitor facilities, without impacting on the visual and heritage character of the place.*

*Policy 72 All new and temporary signage should be designed and located in accordance with a purpose-written signage strategy for the place.*

*Policy 73 Retain and conserve original building signage (including the building numbering system) as a means of enhancing interpretation.*

*Policy 74 The present high standard of directional and way-finding signage should be maintained and enhanced.*



## Guidelines

Continue to build on the opportunities for the place to host a diverse range of community programs, events and activities including:

- passive leisure activities;
- guided and self-guided interpretive programs;
- music, cultural and art exhibitions and events;
- educational programs and events.

Undertake a trial period of public access for seven days of the week to determine feasibility and any pressures that frequent regular visitor use might impose on the place.

Explore options for the establishment of a sustainable Friends/Volunteer Group and closer links to ex-workers, naval, heritage and railway enthusiasts to enhance the potential of visitor attractions to the Newington Armament Depot.

The design of visitor-related infrastructure such as litter bins, amenities, seats, shelters and bicycle racks that are supporting new uses and increased amenity should be site specific and have a distinctive character, as opposed to the consistent design of the Parklands Elements Design Manual.

Develop and promote a clear identity for the Newington Armament Depot and Nature Reserve that builds on the heritage significance and unique values and character of the place.

All new directional signage should maintain the high standard of the existing directional signage at the Newington Armament Depot and should continue to reflect the direct industrial character of the place.

Consider carefully any additional signage and its placement within the landscape so as not to intrude into the open cultural landscape character.

The initial encounters with the site, by way of signage, entry gates or other “barriers”, will be designed and constructed to enhance the visitor experience.

The Authority will make the visitor aware of the need for restricted access to parts of the site and the need for restricted access hours.

The provision of public and staff toilet accommodation on site will be confined, where possible, to the reuse and upgrading of existing toilet facilities, or to the careful introduction of new amenities into existing buildings. Where no existing buildings are available for required amenities to support approved programs and new buildings are required to house these amenities, the scale of any new building will respect the scale of the existing building stock in the area and be articulated to avoid dominating that scale and complexity. Subject to careful site analysis and placement, new public amenities will be located in the areas designated on the Access and Visitor Facilities Plan (Attachment 4 in Section10).

As appropriate, the provision of additional facilities and amenities to support temporary cultural events and activities on the site will be based on the principle of temporary supply and complete removal at the conclusion of the event or activity.

### 8.3.9 Interpretation Guidelines

#### Principle

Interpretation of the history and heritage significance of the Newington Armament Depot and Nature Reserve and their many significant elements is an important conservation action. Interpretation of historic places reveals long-term connections and cohesions which underpin our cultural identity. To 'interpret' a historic place, in its geographic and physical setting, is to bring its history to life to increase the public's understanding and, through its extended understanding, to give them an enhanced appreciation of the significance of the place.

A considered approach to interpretation will enable the site's full cultural significance to be clearly and attractively explained to visitors and occupants alike.

#### Policies

*Policy 75 Develop interpretation of the place to enhance visitor appreciation and understanding of its diverse levels of heritage significance. The Newington Armory Interpretation Framework (February 2008) should be developed into a five year interpretation plan*

*Policy 76 The five year interpretation plan should include recommendations for interpretation methods, locations of interpretative information and installations, and ongoing maintenance of the interpretation material.*

*Policy 77 As part of the program of interpretation oral histories should be collected from people associated with the Newington Armament Depot.*

#### Guidelines

In communicating to the visitor, it must be kept in mind that not all visitors are alike and each visitor brings a different level of understanding, needs and interests to the site. For instance, not all visitors are able to read English easily or at all, some visitors will have disabilities, large numbers of visitors will be children and some visitors will not be Australian so will not necessarily understand or agree with our national histories. Interpretation should therefore be designed to take diverse visitor circumstances into account.

Interpretation should take into account and integrate the natural and cultural values of the site.

The natural values of the site should be interpreted. These are highly significant in themselves and as a component of the Newington Armament Depot and Nature Reserve, and are rare within the urban context of metropolitan Sydney.

Further interpretation of the Aboriginal heritage of the place should be considered. The most appropriate place may be in the vicinity of the forest. Interpretation should be undertaken in consultation with the local Aboriginal community and the MLALC.

Maximise the use of the moveable heritage collections to enrich visitors' experience, appreciation and awareness of the historical role and operations of the site.

Protect and conserve buildings, elements and features that clearly allow interpretation and contribute to the significance of the place. Key buildings are indicated on the CMP Access and Visitor Facilities Plan (Attachment 4 in Section 10).

Encourage a range of tours, including guided, assisted, self-guided, train, foot and bike. Provide a diversity of interpretive programs focusing on self-guided tours utilising new technologies and applications. There is also the opportunity to interpret the site for prospective visitors on SOPA's website.

As part of the Interpretation Strategy review process oral histories should be collected from people associated with the Newington Armament Depot.

### **8.3.10 Maintenance Management**

#### **Principle**

The nature of any asset is that its fabric will deteriorate due to the effects of age, weathering and use. Ongoing routine maintenance and repair are required to offset these effects. This is best achieved by preparing and implementing a program of planned maintenance, that is, inspection, condition assessment, routine and scheduled maintenance, and having a strategy for planned maintenance and repairs..

As a place of State heritage significance, the Newington Armament Depot and Nature Reserve is also subject to the statutory requirements under the *Heritage Act 1977* (NSW) to meet specified minimum standards of maintenance and repair.

#### **Policies**

*Policy 78 SOPA's approach to maintenance management of the various buildings, site infrastructure, services and landscapes will be the general Burra Charter principle to do as little as possible but all that is necessary to retain and stabilise fabric or items and avoid the need for extensive capital replacement funds.*

*Policy 79 A program of "catch up" major maintenance works should be developed and implemented with the intention of stabilising and preventing further deterioration of building fabric, site infrastructure, services and landscapes.*

*Policy 80 SOPA will liaise with NSW Maritime regarding the ongoing management of the areas of the Parramatta River and management and access of the Armory wharf.*

*Policy 81 The Authority will comply with the relevant provisions of the NSW Department of Transport Railway Safety Act in relation to the use, maintenance and operation of the light rail system.*

*Policy 82 All works including changes to building fabric and landscape features, particularly unavoidable changes to significant elements spaces or fabric should be recorded consistent with the heritage guidelines published by the Heritage Office.*

*Policy 83 Maintenance of the building and infrastructure fabric should be undertaken on a planned cyclical basis. It should be based on a regular program of condition-based auditing taking into account base condition, level of current and future use potential and level of significance. Maintenance should be carried out in accordance with the NSW Heritage Office publication *The Maintenance of Heritage Assets: A practical guide*.*

*Policy 84 Ensure the adequate funding for planned priority maintenance management.*

*Policy 85 Ensure the appropriate qualified team of consultants, tradespersons and SOPA supervisory staff is established to plan and carry out maintenance, conservation and capital works.*

*Policy 86 Potential impacts to microbats will be assessed prior to conducting maintenance or alteration works affecting building roof, ceiling or wall cavities in buildings where microbats are known to roost.*

#### **Guidelines**

The minimum standard of maintenance to be undertaken is to prevent deterioration of building fabric, ensure weather tightness and keep vermin out of structures. Standards that must be met to ensure compliance with the provisions for minimum standards of repair and maintenance in the Heritage Amendment Regulation 1999 under the Heritage Act are Inspection, Essential Maintenance and Repair, Weather Protection, Fire Protection and Security.

- Continue the established annual condition audit of built items, infrastructure and cultural landscape across the site.
- Establish a maintenance plan for significant built items. The maintenance plan will reference publications such as the NSW Heritage Branch document Minimum Standards of Maintenance and Repair (Refer to **Appendix H** in Volume 2).
- In addition to regular maintenance activities, prompt preventative action and repair should be taken as necessary and is a cost-effective way to achieve conservation. Prevention of continuing deterioration should take priority over widespread repair or reconstruction.
- Inspection and maintenance works should only be conducted by those with professional knowledge and demonstrated experience with buildings and materials of this nature.
- Investigate the condition of storm water and subsoil drainage associated with built items and across the Armament Depot site. Undertake needed repairs as a matter of priority.
- Aged fabric, which is not likely to be causing ongoing deterioration, should not be repaired for visual reasons if by doing so the patina of age and ability to successfully interpret various stages of use is degraded.
- Where repairs are required, new material should closely match original or adjacent materials. However, evidence of change should be identifiable on close inspection.
- Fabric, which is of exceptional or high significance but is hazardous, should be replaced with a suitable modern material to match existing profiles.
- Routine maintenance and renewal of existing landscaping, including garden beds and general landscaping, is a site specific exemption under the Heritage Act.

A detailed landscape management plan should be prepared for the cultural landscape by a recognised practitioner with expertise in heritage landscapes and horticultural practices.

## **8.4 EXEMPTIONS**

This section of the report contains the Standard Exemptions and Site Specific Exemptions that apply to the Newington Armament Depot and Nature Reserve because of its inclusion in the State Heritage Register.

### **8.4.1 Standard Exemptions**

The following Standard Exemptions have been extracted from the Heritage Council of New South Wales publication, *Standard Exemptions for Works Requiring Heritage Council Approval*.

The standard exemptions apply to all items listed on the State Heritage Register. Their purpose is to clarify for owners and the Heritage Branch what kinds of maintenance and minor works can be undertaken without needing Heritage Council approval. Subsection 57(1) of the Act.

### **Standard Exemption 1: Maintenance and Cleaning**

1. The following maintenance and cleaning does not require approval under subsection 57(1) of the Act:
  - (a) the maintenance of an item to retain its condition or operation without the removal of or damage to the existing fabric or the introduction of new materials;
  - (b) cleaning including the removal of surface deposits, organic growths or graffiti by the use of low pressure water (less than 100 psi at the surface being cleaned) and neutral detergents and mild brushing and scrubbing.

Note 1: Traditional finishes such as oils and waxes must continue to be used for timber surfaces rather than modern protective coatings such as polyurethane or acrylic which may seal the surface and can cause damage.

Note 2: Surface patina which has developed on the fabric may be an important part of the item's significance and if so needs to be preserved during maintenance and cleaning.

### **Guidelines**

Maintenance is distinguished from repairs, restoration and reconstruction as it does not involve the removal of or damage to existing fabric or the introduction of new materials. It is a continuous process of protective care. Typical maintenance activity includes:

- The removal of vegetation and litter from gutters and drainage systems;
- Resecuring and tightening fixings of loose elements of building fabric;
- Lubricating equipment and services which have moving parts;
- The application of protective coatings such as limewash, polish, oils and waxes to surfaces which have previously has such coatings applied;
- Cleaning by the removal of surface deposits using methods other than aggressive mechanical or chemical techniques such as high pressure, high temperature or strong solvents which may affect the substrate.

This standard exemption applies to the maintenance of all types of heritage items including buildings, works, landscapes, cemeteries and movable heritage. Reference should be made to other relevant standard exemptions (numbers 12, 14 and 17) for particular types of items.

### **Standard Exemption 2: Repairs**

1. Repair to an item which is of the type described in (a) or (b) below does not require approval under subsection 57(1) of the Act:
  - (a) the replacing of services such as cabling, plumbing, wiring and fire services that uses existing service routes, cavities or voids or replaces existing surface mounted services and does not involve damage to or the removal of significant fabric;



- (b) the repair (such as refixing and patching) or the replacement of missing, damaged or deteriorated fabric that is beyond further maintenance, which matches the existing fabric in appearance, material and method of affixing and does not involve damage to or the removal of significant fabric.

Note 1: Repairs must be based on the principle of doing as little as possible and only as much as is necessary to retain and protect the element. Therefore replacement must only occur as a last resort where the major part of an element has decayed beyond further maintenance.

Note 2: Any new materials used for repair must not exacerbate the decay of existing fabric due to chemical incompatibility, obscure existing fabric or limit access to existing fabric for future maintenance.

Note 3: Repair must maximise protection and retention of fabric and include the conservation of existing detailing, such as vents, capping, chimneys, carving, decoration or glazing.

### **Guidelines**

This standard exemption is not intended to allow the cumulative replacement of large amounts or a high proportion of the fabric of an item. If replacement of large amounts of fabric is necessary an application will be required to be submitted under s.60 of the Heritage Act. If there is uncertainty about whether the proposed extent of repair is exempt from approval, advice should be sought from the Heritage Branch, Department of Planning.

Repairs should have detailed specifications and be carried out by licensed tradespeople with experience in the conservation of heritage buildings. It is essential that the composition of elements of the fabric such as renders, mortars, timber species and metal types remain the same to assist with matching appearance and avoiding chemical incompatibility.

Repair may involve reconstruction which means returning an item to a known earlier state. This may involve the use of new or recycled materials.

Reconstruction must satisfy a four-part test to qualify for exemption from approval:

1. the nature of the earlier state being reconstructed must be known. Where there is conjecture about the earlier state of the fabric or where it is proposed to change the appearance, material or method of fixing of the fabric an application under s.60 of the Heritage act will be required.
2. The replacement fabric must be matching in appearance and method of fixing. The use of salvaged or recycled fabric can be a valuable resource in matching appearance in preference to the use of new fabric which may appear obtrusive. However, the damage to other heritage buildings by the salvaging of fabric for reuse is unacceptable. Salvaged materials must be judiciously sourced so as not to encourage secondary damage to other heritage resources. The use of artificial ageing techniques to assist the matching of new with original fabric is only advocated where there is an obtrusive mismatch of materials which negatively impacts on the heritage significance of the item. Ideally, new and original fabric should be subtly discernable on close examination to assist interpretation of the history of change to the building.
3. The fabric being replaced must be beyond further maintenance. The replacement of fabric may only occur where fabric is missing or it is so damaged that it is beyond further maintenance. In many cases the judgement about the level of deterioration

and the effectiveness of further maintenance will require the advice of a person who is suitably experienced in similar heritage conservation projects. If it is unclear that the fabric is beyond further maintenance, its replacement will require the submission of an application under s.60 of the Heritage Act.

4. Significant fabric must not be damaged or removed. In all cases of repair, the damage or removal of significant fabric is not permitted without approval. Significant fabric is that which contributes to the heritage significance of the item. The identification of the level of significance of fabric will usually require the advice of a person who is suitably experienced in similar heritage conservation projects. The damage or removal of significant fabric will require the submission of an application under s.60 of the Heritage Act.

New material used in repairs should where possible be date stamped in a location which is not conspicuous but is legible on close examination. Archival recording of removed and replacement fabric is advocated and should be used in interpretive displays where practicable.

### **Standard Exemption 3: Painting**

1. Painting does not require approval under subsection 57(1) of the Act if the painting:
  - (a) does not involve the disturbance or removal of earlier paint layers other than that which has failed by chalking, flaking, peeling or blistering;
  - (b) involves over-coating with an appropriate surface as an isolating layer to provide a means of protection for significant earlier layers or to provide a stable basis for repainting; and
  - (c) employs the same colour scheme and paint type as an earlier scheme if they are appropriate to the substrate and do not endanger the survival of earlier paint layers.
2. Painting which employs a different colour scheme and paint type from an earlier scheme does not require approval under subsection 57(1) of the Act, provided that:
  - (a) the Director-General is satisfied that the proposed colour scheme, paint type, details of surface preparation and paint removal will not adversely affect the heritage significance of the item; and
  - (b) the person proposing to undertake the painting has received a notice advising that the Director-General is satisfied.
3. A person proposing to undertake repainting of the kind described in paragraph 2 must write to the Director-General and describe the proposed colour scheme, paint type, details of surface preparation and paint removal involved in the repainting. If the Director-General is satisfied that the proposed development meets the criteria set out in paragraph 2(a) the Director-General shall notify the applicant.

NOTE: Preference should be given to the re-establishment of historically significant paint schemes of the item that are appropriate to the significance of the building.

## Guidelines

Painting of surfaces which have not previously been painted such as face brickwork, stone, concrete or galvanised iron is likely to adversely affect the heritage significance of the item and is not exempt from approval under this standard exemption. Likewise, the stripping of paint coatings which were intended to be protective may expose the substrate to damage and cause the loss of the historical record and significance of the building. In cases where surface preparation has revealed significant historic paint layers, repainting should facilitate the interpretation of the evolution of the building by displaying appropriately located sample patches of historic paint schemes. This information should also be examined if it is proposed to recreate earlier finishes or paint schemes.

Paint removal of failed layers to achieve a stable base for repainting is exempt from approval but intervention should be minimised to avoid the loss of the significant historical record. Where old paint layers are sound they should be left undisturbed. The removal of paint with a high content of lead or other hazardous materials requires considerable care and use of experienced tradespeople as its disturbance can create health hazards. If the removal of such paint layers will adversely affect the heritage significance of the item, an application will be required under section 60 of the Heritage Act.

Reference should be made to The Maintenance Series, NSW Heritage Branch, particularly Information Sheets 6.2 Removing Paint from Old Buildings, 7.2 Paint Finishes and 7.3 Basic Limewash which are available online at [www.heritage.nsw.gov.au](http://www.heritage.nsw.gov.au).

### Standard Exemption 4: Excavation

1. Excavation or disturbance of land of the kind specified below does not require approval under subsection 57(1) of the Act, provided that the Director-General is satisfied that the criteria in (a), (b) or (c) have been met and the person proposing to undertake the excavation or disturbance of land has received a notice advising that the Director-General is satisfied that:
  - (a) an archaeological assessment, zoning plan or management plan has been prepared in accordance with Guidelines published by the Heritage Council of NSW which indicates that any relics in the land are unlikely to have State or local heritage significance; or
  - (b) the excavation or disturbance of land will have a minor impact on archaeological relics including the testing of land to verify the existence of relics without destroying or removing them; or
  - (c) a statement describing the proposed excavation demonstrates that evidence relating to the history or nature of the site, such as its level of disturbance, indicates that the site has little or no archaeological research potential.
  
2. Excavation or disturbance of land of the kind specified below does not require approval under subsection 57(1) of the Act:
  - (a) the excavation or disturbance of land is for the purpose of exposing underground utility services infrastructure which occurs within an existing service trench and will not affect any other relics;

- (b) the excavation or disturbance of land is to carry out inspections or emergency maintenance or repair on underground utility services and due care is taken to avoid effects on any other relics;
  - (c) the excavation or disturbance of land is to maintain, repair, or replace underground utility services to buildings which will not affect any other relics;
  - (d) the excavation or disturbance of land is to maintain or repair the foundations of an existing building which will not affect any associated relics;
  - (e) the excavation or disturbance of land is to expose survey marks for use in conducting a land survey
3. A person proposing to excavate or disturb land in the manner described in paragraph 1 must write to the Director-General and describe the proposed excavation or disturbance of land and set out why it satisfies the criteria set out in paragraph 1. If the Director-General is satisfied that the proposed development meets the criteria set out in paragraph 1 (a), (b) or (c) the Director-General shall notify the applicant.

NOTE 1: Any excavation with the potential to affect Aboriginal objects must be referred to the Director-General of the Department of Environment and Climate Change.

NOTE 2: If any Aboriginal objects are discovered on the site, excavation or disturbance is to cease and the Department of Environment and Climate Change is to be informed in accordance with section 91 of the National Parks and Wildlife Act, 1974.

NOTE 3: This exemption does not allow the removal of State significant relics.

NOTE 4: Where substantial intact archaeological relics of State or local significance, not identified in the archaeological assessment, zoning plan, management plan or statement required by this exemption, are unexpectedly discovered during excavation, work must cease in the affected area and the Heritage Council must be notified in writing in accordance with section 146 of the Act. Depending on the nature of the discovery, additional assessment and possibly an excavation permit may be required prior to the recommencement of excavation in the affected area.

NOTE 5: Archaeological research potential of a site is the extent to which further study of relics which are likely to be found is expected to contribute to improved knowledge about NSW history which is not demonstrated by other sites or archaeological resources.

#### **Standard Exemption 5: Restoration**

- 1. Restoration of an item by returning significant fabric to a known earlier location without the introduction of new material does not require approval under subsection 57(1) of the Act.
- 2. The following restoration does not require approval under subsection 57(1) of the Act, provided that the Director-General is satisfied that the criteria in (a) have been met and the person proposing to undertake the restoration has received a notice advising that the Director-General is satisfied:
  - (a) the restoration of an item without the introduction of new material (except for fixings) to reveal a known earlier configuration by removing accretions or reassembling

existing components which does not adversely affect the heritage significance of the item.

3. A person proposing to undertake restoration of the kind described in paragraph 2 must write to the Director-General and set out why there is a need for restoration to be undertaken and the proposed material and method of restoration. If the Director-General is satisfied that the proposed development meets the criteria set out in paragraph 2(a), the Director-General shall notify the applicant.

#### **Guidelines**

Restoration in accordance with clause 1 of this standard exemption does not involve the removal of fabric and only relates to the return of fabric which has been removed to storage or has been dislodged from its original location.

#### **Standard Exemption 6: Development Endorsed By Heritage Council Or Director-General**

1. Minor development specifically identified as exempt development which does not materially impact on heritage significance, by a conservation policy or strategy within a conservation management plan which has been endorsed by the Heritage Council of NSW or by a conservation management strategy endorsed by the Director-General does not require approval under subsection 57(1) of the Act.
2. A person proposing to do anything of the kind described in paragraph 1 must write to the Director-General and describe the proposed development. If the Director-General is satisfied that the proposed development meets the criteria set out in paragraph 1, the Director-General shall notify the applicant.

#### **Guidelines**

This standard exemption does not exempt development that is consistent with a conservation policy or strategy contained in an endorsed conservation management plan or interim conservation management strategy other than development that is specifically identified as exempt development in that conservation plan or strategy.

#### **Standard Exemption 7: Minor Activities with Little or No Adverse Impact on Heritage Significance**

1. Anything which in the opinion of the Director-General is of a minor nature and will have little or no adverse impact on the heritage significance of the item does not require approval under subsection 57(1) of the Act.
2. A person proposing to do anything of the kind described in paragraph 1 must write to the Director-General and describe the proposed activity. If the Director-General is satisfied that the proposed activity meets the criteria set out in paragraph 1, the Director-General shall notify the applicant.

#### **Guidelines**

This standard exemption has the potential to relate to a wide range of minor development. In determining whether a proposed development is minor the Director may have regard to the context of the particular heritage item such as its size and setting. For instance a development may be



considered to be minor in the context of Prospect Reservoir's 1200ha curtilage whereas a similar proposal affecting an item on a smaller site may not be considered to be minor.

In order to assess whether a proposal has an adverse affect on heritage significance it is necessary to submit a clear and concise statement of the item's heritage significance and an assessment of whether a proposal impacts on that significance.

#### **Standard Exemption 8: Non-Significant Fabric**

1. The following development does not require approval under subsection 57(1) of the Act, provided that the Director-General is satisfied that the criteria in (a) have been met and the person proposing to undertake the development has received a notice advising that the Director-General is satisfied:
  - (a) the alteration of a building involving the construction or installation of new fabric or services or the removal of building fabric which will not adversely affect the heritage significance of the item.
2. A person proposing to do anything of the kind described in paragraph 1 must write to the Director-General and describe the proposed development. If the Director-General is satisfied that the proposed development meets the criteria set out in paragraph 1(a), the Director-General shall notify the applicant.

#### **Guidelines**

In order to assess the level of significance of fabric it is necessary to submit a clear and concise statement of the item's heritage significance and to grade the fabric of the place in accordance with its association with or impact on that significance. It may not always be concluded that more recent fabric is of less or no heritage significance.

#### **Standard Exemption 9: Change of Use**

1. The change of use of an item or its curtilage or the commencement of an additional or temporary use does not require approval under subsection 57(1) of the Act, provided that the Director-General is satisfied that the criteria in (a) and (b) have been met and the person proposing to undertake the change of use has received a notice advising that the Director-General is satisfied:
  - (a) the use does not involve the alteration of the fabric, layout or setting of the item or the carrying out of development other than that permitted by other standard or site specific exemptions; and
  - (b) the use does not involve the cessation of the primary use for which the building was erected, a later significant use or the loss of significant associations with the item by current users;
2. A person proposing to change the use of an item or its curtilage or to commence an additional or temporary use of an item or its curtilage in the manner described in paragraph 1 must write to the Director-General and describe the changes proposed. If the Director-General is satisfied that the proposed development meets the criteria set out in paragraph 1(a) and (b), the Director-General shall notify the applicant.

**Guidelines**

For the purposes of this standard exemption any change of use which is inconsistent with specific conditions of any previous approval or consent such as hours of operation or nature of conduct of an activity requires approval under section 57(1) or the modification of an approval under section 65A of the Heritage Act.

**Standard Exemption 10: New Buildings**

1. Subdivision under the Strata Scheme (Freehold Development) Act or Strata Scheme (Leasehold Development) Act of the interior of a building that has been constructed since the listing of the item on the State Heritage Register or the publication of an interim heritage order in the Gazette which applies to the land does not require approval under subsection 57(1) of the Act.
2. Alteration to the interior of a building which has been constructed since the listing of the item on the State Heritage Register or the publication of an interim heritage order in the Gazette which applies to the land does not require approval under subsection 57(1) of the Act.

**Guidelines**

Subdivision to which clause 1 of this standard exemption applies must not subdivide the curtilage of the exterior of a building other than approved car spaces. A strata plan which otherwise proposes the subdivision of the curtilage of a heritage item requires approval under section 57(1) of the Heritage Act.

For the purposes of clause 2 of this standard exemption, alterations to the interior of a building:

- do not include internal alterations to additions to buildings which existed prior to the listing of the site on the State Heritage Register or publication of the interim heritage order;
- must not affect the external appearance of the building such as by balcony enclosure or window screening; and
- must not be inconsistent with any specific conditions of a previous approval.
- Such alterations require approval under section 57(1) of the Heritage Act.

**Standard Exemption 11: Temporary Structures**

1. The erection of temporary structures does not require approval under subsection 57(1) of the Act, provided that the Director-General is satisfied that the criteria in (a) and (b) have been met and the person proposing to erect the structure has received a notice advising that the Director-General is satisfied:
  - (a) the structure will be erected within and used for a maximum period of 4 weeks after which it will be removed within a period of 2 days and not erected again within a period of 6 months; and
  - (b) the structure is not to be located where it could damage or endanger significant fabric including landscape or archaeological features of its curtilage or obstruct significant views of and from heritage items.

2. A person proposing to erect a structure of the kind described in paragraph 1 must write to the Director-General and set out the nature of the structure, the use for the structure and how long it will remain in place and the next occasion on which it is anticipated that the structure will be erected. If the Director-General is satisfied that the proposed development meets the criteria set out in paragraphs 1(a) and 1(b) the Director-General shall notify the applicant.

### **Guidelines**

The cumulative impact of the multiple use of this standard exemption will be considered by the Director in the assessment of the simultaneous construction of a number of temporary structures or a succession of temporary structures which may have a prolonged adverse impact on heritage significance of the item.

### **Standard Exemption 12: Landscape Allowance**

1. Landscape maintenance which is of the type described below does not require approval under subsection 57(1) of the Act:
  - (a) weeding, watering, mowing, top-dressing, pest control and fertilizing necessary for the continued health of plants, without damage or major alterations to layout, contours, plant species or other significant landscape features;
  - (b) pruning (to control size, improve shape, flowering or fruiting and the removal of diseased, dead or dangerous material), not exceeding 10% of the canopy of a tree within a period of 2 years;
  - (c) pruning (to control size, improve shape, flowering or fruiting and the removal of diseased, dead or dangerous material) between 10% and 30% of the canopy of a tree within a period of 2 years;
  - (d) removal of dead or dying trees which are to be replaced by trees of the same species in the same location; or
  - (e) tree surgery by a qualified arborist, horticulturist or tree surgeon necessary for the health of those plants.
2. A person proposing to undertake landscape maintenance in the manner described in paragraph 1(b) 1(c) or 1(d) must write to the Director-General and describe the maintenance proposed and provide certification by a qualified or experienced arborist, horticulturist or tree surgeon that the maintenance is necessary for the tree's health or for public safety. If the Director-General is satisfied that the proposed maintenance meets these criteria, the Director-General shall notify the applicant.

NOTE 1: In relation to cemeteries, landscape features include monuments, grave markers, grave surrounds, fencing, path edging and the like.

NOTE 2: Other standard exemptions may apply to landscape maintenance such as #4 Excavation and #6 Development endorsed by the Heritage Council; and #7 Minor works with no adverse heritage impact. 24

## Guidelines

Landscape features and gardens can be of heritage significance in their own right. They are often vital to the curtilage of a heritage item and fundamental to the setting of other (eg; built or archaeological) heritage items and important to the appreciation of their heritage significance. Landscape setting is by its nature evolving and often requires more regular maintenance than other elements of heritage fabric. Horticultural advice may be required to ensure a regime of maintenance appropriate to the retention of the heritage significance of a place.

General advice about landscape maintenance is provided by The Maintenance of Heritage Assets: A Practical Guide Information Sheet 9.1 Heritage Gardens and Grounds, printed versions available from the Heritage Branch, Department of Planning.

General advice about heritage gardens is also available on the Heritage Branch website at: [http://www.heritage.nsw.gov.au/06\\_subnav\\_10.htm](http://www.heritage.nsw.gov.au/06_subnav_10.htm) and at: [www.gardenhistorysociety.org.au](http://www.gardenhistorysociety.org.au).

### Standard Exemption 13: Signage

1. The erection of signage which is of the types described in (a) or (b) below does not require approval under subsection 57(1) of the Act:
  - (a) temporary signage which is located behind or on the glass surface of a shop window which is not internally illuminated or flashing and is to be removed within eight weeks; or
  - (b) a real estate sign indicating that the place is for auction, sale or letting and related particulars and which is removed within 10 days of the sale or letting of the place;
  
2. The erection of signage which is of the types described in (a) or (b) below does not require approval under subsection 57(1) of the Act, provided that the Director-General is satisfied that the criteria in (a) and (b) respectively have been met and the person proposing to erect it has received a notice advising that the Director-General is satisfied:
  - (a) the erection of non-illuminated signage for the sole purpose of providing information to assist in the interpretation of the heritage significance of the item and which will not adversely affect significant fabric including landscape or archaeological features of its curtilage or obstruct significant views of and from heritage items; or
  - (b) signage which is in the form of a flag or banner associated with a building used for a purpose which requires such form of promotion such as a theatre or gallery, which is displayed for a maximum period of eight weeks and which will not adversely affect significant fabric including landscape or archaeological features of its curtilage;
  
3. A person proposing to erect signage of the kind described in paragraph 2 must write to the Director-General and describe the nature and purpose of the advertising or signage. If the Director-General is satisfied that the proposed development meets the criteria set out in paragraph 2(a) or 2(b), the Director-General shall notify the applicant.
  
4. Signage of the kind described in paragraphs 1 and 2 must:
  - (a) not conceal or involve the removal of signage which has an integral relationship with the significance of the item;

- (b) be located and be of a suitable size so as not to obscure or damage significant fabric of the item;
- (c) be able to be later removed without causing damage to the significant fabric of the item; and
- (d) reuse existing fixing points or insert fixings within existing joints without damage to adjacent masonry.

### **Guidelines**

In addition to the requirements of clause 4 of the standard exemptions, signage may be controlled by development control plans or signage policies prepared by the relevant local council. The operation of the standard exemptions does not affect the requirements for consent by local councils or the need to satisfy any signage policies which may have been adopted by them.

Additional forms of signage not addressed by this standard exemption may not require approval under section 57(1) of the Heritage Act if they satisfy the requirements of other standard exemptions such as Standard Exemption 7 (Minor Activities with no Adverse Impact on Heritage Significance) or Standard Exemption 8 (Non-significant Fabric).

Signage in accordance with clause 2(a) of the standard exemption for the purpose of assisting the interpretation of heritage significance:

- requires approval under section 57(1) of the Heritage Act if additional information is provided which is unrelated to heritage interpretation such as commercial promotion or sponsorship; and
- must be in accordance with Interpreting Heritage Places and Items published by the Heritage Council and available online.

### **Standard Exemption 14: Burial Sites and Cemeteries**

This Standard Exemption is not applicable to the Newington Armament Depot and Nature Reserve.

### **Standard Exemption 15: Compliance with Minimum Standards And Orders**

1. Development which is required for the purpose of compliance with the minimum standards set out in Part 3 of the Heritage Regulation 1999 or an order issued under either:
  - (a) section 120 of the Heritage Act 1977 regarding minimum standards of maintenance and repair; or
  - (b) section 121S of the Environmental Planning and Assessment Act 1979 regarding an order which is consistent with a submission by the Heritage Council under subsection 121S(6) of that Act;

does not require approval under subsection 57(1) of the Act.

### **Guidelines**

This standard exemption is intended to facilitate and expedite compliance with orders and minimum standards of maintenance and repair.

The Minimum Standards of Maintenance and Repair replaced the “wilful neglect” provisions of the Heritage Act in 1999. The minimum standards are contained in Part 3 of the Heritage Regulation 2005 and are reproduced in the Heritage Information Series published by the Heritage Branch, Department of Planning. The minimum standards only apply to items listed on the State Heritage Register and relate to:

- weather protection;
- fire prevention and protection;
- security; and
- essential maintenance and repair to prevent serious or irreparable damage.

Maintenance and repair which exceed the minimum standards in the Regulation may be exempt from approval under other standard exemptions (refer to #1 and #2).

Orders under s.121S(6) of the EP&A Act are those given by a council or other consent authority in relation to an item listed on the State Heritage Register, land to which an interim heritage order applies or a heritage item listed under an environmental planning instrument. Orders must not be given in relation to items listed on the State Heritage Register or land to which an interim heritage order relates unless the consent authority has given notice of it to the Heritage Council and considered any submission made by it.

**Standard Exemption 16: Safety and Security**

1. The following development does not require approval under subsection 57(1) of the Act, provided that the Director-General is satisfied that the criteria in (a) or (b) have been met and the person proposing to undertake the development has received a notice advising that the Director-General is satisfied:
  - (a) the erection of temporary security fencing, scaffolding, hoardings or surveillance systems to prevent unauthorised access or secure public safety which will not adversely affect significant fabric of the item including landscape or archaeological features of its curtilage; or
  - (b) development, including emergency stabilisation, necessary to secure safety where a building or work or part of a building or work has been irreparably damaged or destabilised and poses a safety risk to its users or the public.
  
2. A person proposing to undertake development of the kind described in paragraph 1 must write to the Director-General and describe the development and, if it is of the kind set out in 1(b), provide certification from a structural engineer having experience with heritage items confirming the necessity for the development with regard to the criteria set out in 1(b) and any adverse impact on significant fabric. If the Director-General is satisfied that the proposed development meets the criteria set out in paragraph 1(a) or (b), the Director-General shall notify the applicant.

**Guidelines**

Development exempt under this standard exemption must be for the temporary or emergency securing of safety for users or the public. Permanent upgrading of site or building security may be exempt under other standard exemptions such as #7 (Minor Activities with little or no Adverse Impact on Heritage Significance) or #8 (Non-significant Fabric). Development described in 1(b) of this



exemption is intended to apply in circumstances where there has been damage caused by a sudden change in circumstances of the building such as a catastrophic event, rather than safety risks which may arise from ongoing neglect of maintenance.

Emergency maintenance and repairs such as required following a storm event may be exempt under other standard exemptions such as #1 (Maintenance and Cleaning) and #2 (Repairs). More intrusive means of upgrading security which may damage significant fabric will require the submission of an application under section 60 of the Heritage Act.

Development in accordance with this exemption must be undertaken with minimal intervention to significant fabric.

### **Standard Exemption 17: Moveable Heritage Items**

1. The temporary relocation of movable heritage items, including contents, fixtures and objects, to ensure their security, maintenance and preservation, for conservation or exhibition, to ensure health or safety, the need for a controlled environment for those heritage items, or to protect the place, and which are to be returned to their present location within six months, does not require approval under subsection 57(1) of the Act.
2. A person proposing to relocate a movable heritage item as set out in paragraph 1 must advise the Director-General in writing of the proposed location and the reasons for its relocation. If the Director-General is satisfied that the temporary relocation meets the criteria set out in paragraph 1 the Director-General shall notify the applicant.

### **Guidelines**

Movable heritage items or objects which are listed on the State Heritage Register must be specifically referred to in the gazetted listing. Unless specifically listed, the movable content of buildings such as furniture, paintings and other decoration is not movable heritage for the purposes of the Heritage Act which triggers approval requirements to “move, damage or destroy it”.

The permanent relocation of an item of movable heritage such as listed ships or railway rolling stock will require the submission of an application under section 60 of the Heritage Act.

Additional advice regarding movable heritage is provided by:

- Objects in Their Place: An Introduction to Movable Heritage, NSW Heritage Council, 1999; and
- Movable Heritage Principles, NSW Heritage Council and Ministry for the Arts, 1999.

### **8.4.2 Site Specific Exemptions**

The following Site Specific Exemptions have been extracted from Schedule C of the State Heritage Register Inventory Listing for the Newington Armament Depot and Nature Reserve:

#### **Exemptions**

- a. Minor building alterations and additions to and uses of items of environmental heritage provided that the development does not impact on the heritage significance of the building, structure or landscape and as described in the following table:

#### **Building Type**

- Small and medium sized timber framed administration support and operational buildings generally dating from the late interwar years until the end of the Second World War;
- Large volume former explosives storehouses, dating from the interwar period until the end of the Second World War. Both brick and timber framed buildings are included in this category;
- Former residential buildings, including those currently used for office accommodation. Both brick and timber framed buildings are included in this category. Installation of new external security doors and screens to existing door openings.

#### **Extent of Alterations and Additions**

- Installation of surface mounted internal and external communications cabling or upgraded power supply and fittings (including CCTV);
  - Installation of new floor finishes such as carpet or vinyl over existing floor finishes;
  - Upgrading of internal light fittings where these do not have heritage significance and the installation of additional internal light fittings and external lighting for security purposes;
  - Installation of new internal furniture, where such installation does not require the removal of significant fittings;
  - Infill or treatment of rail track to minimise trip hazards where the work is completely reversible;
  - Upgrading of, and connection to, services such as sewer and water where no impact on significant archaeology will result;
  - Minor penetrations to accommodate ventilation and fire safety (including air conditioning);
  - Installation of fire safety features such as hose reels, hydrants.
- b. Routine maintenance and renewal of existing landscaping, including garden beds and general landscaping.
- c. Landscaping which is included in a Conservation Management Plan that has been endorsed by the Heritage Council.
- d. Temporary uses, buildings and structures (being for a period of two months or less) associated with festivals, minor and major events, markets, carnivals, outdoor cinemas, interactive video screens, street performers, entertainment, recreation and leisure activities, information booths, merchandising, food and beverage outlets, trade shows, exhibitions, public meetings and the like.
- e. Signage for the purposes of events promotions, directional and identification signage, building identification signage and visitor wayfinding.
- f. Demolition of exempt development that is defined as exempt under these Site Specific Exemptions.
- g. Ecological works including minor habitat management and installation of fittings in bushland and wetland areas including bush regeneration, planting, vegetation removal, ecological burning, modification to existing weirs and weir settings, maintenance of tidal flushing channels and drainage systems, installation of bird hides and environmental monitoring

devices and pest management activities, including mosquito larvae treatment within Newington Nature Reserve wetland.

h. Filming and photography provided that it does not involve:

- Changes that are not merely superficial and temporary;
- Mounting or fixing of any object or article on any heritage item;
- The movement or parking of any vehicle or equipment on areas not designated for that use; or
- Any permanent changes to vegetation or other natural or physical features of the item.

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## **10 ATTACHMENTS**

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Attachment 1 Relative Heritage Significance – Buildings

Attachment 2 Appropriate Zones for New Buildings

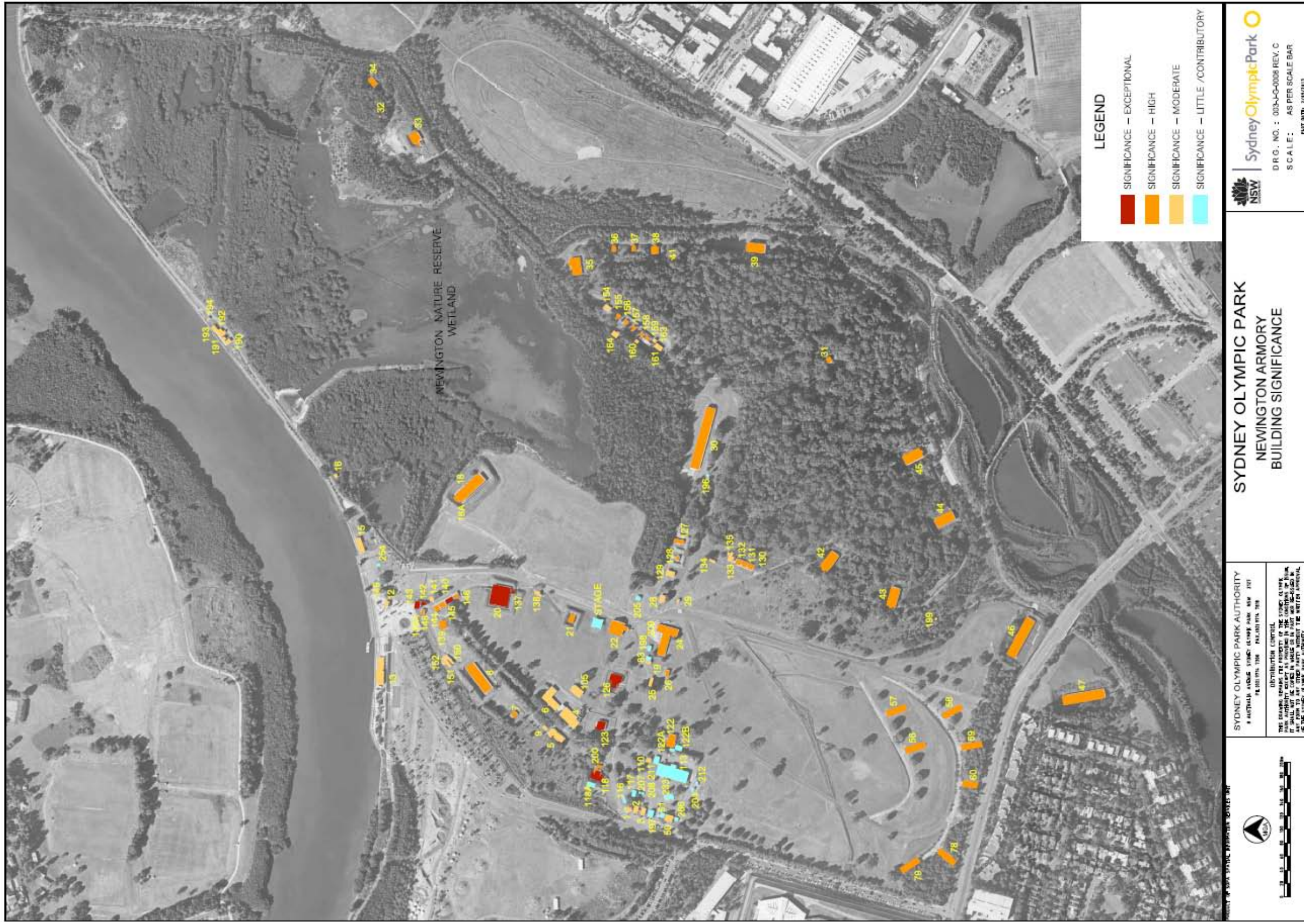
Attachment 3 Landscape Concept Plan

Attachment 4 Visitor Facilities Plan





RELATIVE HERITAGE SIGNIFICANCE - BUILDINGS







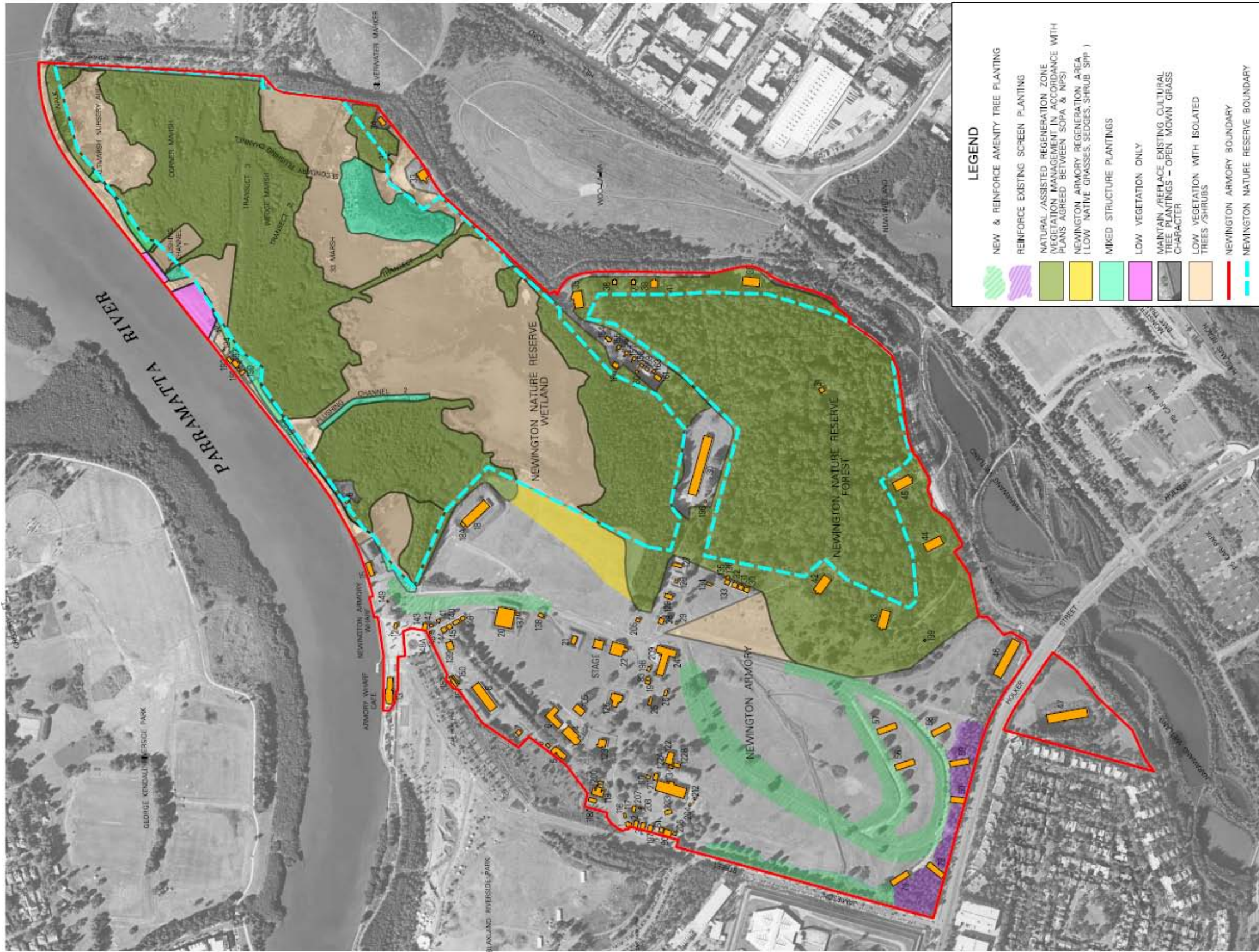
ATTACHMENT 2  
 APPROPRIATE ZONES FOR NEW BUILDINGS







LANDSCAPE CONCEPT PLAN  
ATTACHMENT 3









ATTACHMENT 4  
ACCESS AND VISITOR FACILITIES PLAN

