

PART 8: MANAGE SIGNIFICANCE

8.1 INTRODUCTION

The previous section has established that the School of Artillery has considerable historic, aesthetic, social and scientific/technological significance. It is important in the formulation of conservation policy to ensure that future use and/or development of the site has minimal impact on its heritage values.

Viable ongoing functions would offer the greatest opportunity for long-term conservation, would minimise vandalism, and (through controlled access) would improve the level of security for the site.

The development of an appropriate set of Conservation Policies must include consideration of factors including opportunities and constraints arising from:

1. The heritage significance of the building (The Statement of Significance)
2. Current use of the building and the requirements of the site users, owners and the community, and the available resources
3. The physical condition of the place
4. Requirements imposed by external factors
5. Statutory constraints.

8.2 ISSUES ARISING FROM THE STATEMENT OF SIGNIFICANCE

The site is significant for a variety of reasons as described in Part 6, therefore the site must be protected and exploited in an appropriate manner.

To maintain the unique character of the complex of buildings and the visual quality of the setting and to ensure that both the integrity and legibility of the fabric is not lost through inappropriate development, the following constraints should apply to any future intervention:

- Usage which may affect the significance of the site or buildings within the complex should be prohibited.
- Alterations or new development should be strictly limited and controlled to ensure that there is no loss of significant fabric.
- Significant fabric should be appropriately conserved.
- Surrounding development should be controlled to limit physical and visual impact.
- Specialist consultants and tradesmen should be used for the conservation and/or redevelopment of the site.

- Opportunities arising from the significance of the building should be considered in determining future use, and specifically:
- Management policies must ensure that the School of Artillery and its curtilage are protected from inappropriate development. In cases where the significance of the some component parts of the site are not immediately evident to the visitor, concise informative interpretive systems should be included.

8.3 OWNERSHIP AND USE

The SHFT Sanctuary Proposal

The SHFT Plan of Management proposes that the former SoA site become a Sanctuary.

North Head, a tied island with a relatively intact ecosystem, provides an opportunity for the creation of a sanctuary in a metropolis of 4 million people.

The location and attributes of North Head generate opportunities that go beyond those of a traditional nature reserve or wildlife sanctuary. These opportunities include the:

- *Undertaking of research into issues such as the way the North Head ecosystem works and the impact of humans on urban ecosystems, wildlife monitoring and protection and sustainable energy technologies;*
- *Provision of sanctuary for people as well as wildlife;*
- *Protection of creativity in environmental science, well being, education and the arts using the natural heritage of North head as inspiration;*
- *Provision of a place of relaxation and enjoyment for city people;*
- *Exploration of new ways of sustainable living in urban environments; and*
- *Promotion of integrated management of natural heritage across traditional geographical management boundaries.*

Although the implementation of the Sanctuary concept would ideally include all landowners at North Head, the Trust is only responsible for the management of the former School of Artillery site. The SHFT aims to initiate the implementation of the Sanctuary at the former School of Artillery site. It is proposed that buildings and facilities will be adaptively re-used in ways that will complement the proposed Sanctuary.

Opportunities for Future Use

Acceptable intervention may include upgrading of amenities, services and occupational health and safety standards, consistent with improving access or safety. Alterations arising from future use should be carried out strictly in accordance with the guidelines of this Conservation Management Plan.

Future Ownership

The property has always remained in public ownership and should remain in public ownership as this offers the most effective possibility for its ongoing management and protection in the public interest. Any change in ownership should be accompanied by mandatory conditions for adherence to the policies of this Plan.

8.4 PHYSICAL CONDITION

A balance must be achieved in the conservation and upgrading of the site and building fabric to retain as much evidence as possible of its former functions. Wear and tear of the fabric and the patina of time should remain visible, provided that safety and operational standards are not compromised.

The physical condition of significant structures and building fabric within the core group of buildings is generally sound. The opportunity remains for conservation without major reconstruction. Sufficient evidence in the form of surviving fabric and early drawings is available to determine correct detailing and selection of finishes during the conservation process.

Issues which have potential to affect significant elements include the following:

- Installation of services, concealment of conduits, ventilation ducting
- Egress provisions for Building Code of Australia compliance
- Fire protection provisions
- Upgrade of toilets and amenities
- Disabled access.

Removal of Intrusive Elements

The decision for or against removal of any part of the fabric of the building or fittings within, should be based on the relative significance of individual elements (as per Table, Section 7), and the opportunity to retain the integrity of the original fabric.

Services, Conduits, Switchboards:

Redundant services should be removed. New installations should minimise impacts on the original fabric, without imposing constraints on reticulation, effectiveness or safety.

Building Code of Australia Compliance

In the future, when options for change in function or adaptive reuse are being considered, Building Code of Australia compliance for egress and fire provisions should be assessed. Many aspects of the buildings at North Head have a range of features that do not comply with the current Building Code of Australia (BCA). The primary compliance issues are stairs, handrails and balustrades in addition to issues of access and mobility for people with disabilities and the provision of appropriate amenities. The existing buildings and structures on the site are to be upgraded or refurbished to enable occupation.

Preliminary BCA compliance reports have been undertaken to facilitate public access for specific events such as the short term use of the Gymnasium and the three day Sanctuary Conference in 2002 [Building B1]. BCA reports have also been undertaken for the Sergeants' Mess, Officers' Mess and Roden Cutler Buildings. HACCP reports have been completed for food handling facilities within the Officers' Mess, Other Ranks Mess and the Sergeants' Mess²³. The BCA and HACCP compliance reports recommend minor works to be carried out to those buildings listed above such as modifications to the doors, stairs and repair works to the floors, walls and ceilings.

The larger buildings such as the Barracks [B1] require extensive fire compliance works such as sprinklers, fire stairs and fire doors. There are issues arising from the use of lead based paint systems and non-compliant glazing. The residences predate the BCA, but the

²³ Trevor Howse & Associates. BCA reports for Barracks, Sergeants' Mess, Officers' Mess and Roden Cutler Buildings. 2004 & 2005.

essential safety actions would be the installation of smoke alarms, electrical safety switches and an assessment of non-compliant glazing. The use of lead based paint poses a risk that requires management.

Identification of more specific building compliance issues will be carried out once individual building uses have been determined. The heritage values of the site will need consideration in the development of appropriate solutions.

8.5 ENVIRONMENTAL CONDITIONS

Site Contamination & Hazardous Building Materials Constraints

The North Head School of Artillery has a long history of military use dating back to the 1920s. As such, the site may reasonably be expected to have a degree of contamination arising from military activities or facilities, or related uses. Following its vacation of the School of Artillery, the Department of Defence carried out a program of contamination assessment, remediation and validation of the site to address potential contamination. Contaminant sources identified by these site assessments include those associated with building hazardous materials such as lead paint and asbestos, storage of petroleum fuels and chemicals, fuel spillage, filling and dumping, storm-water sediments, radioactive materials and the storage and use of military materials.

The Trust notes that no contaminated land audit of this work has been carried out, and that Defence continues to occupy and manage a portion of the site [the North Fort complex]. The following assessment and recommendations is summarised from the Department of Defence work:

Hazardous Building Materials

Significant quantities of hazardous materials remain as part of the site building fabric. However, no information is available regarding the nature of these materials, location, quantity, condition or requirement for remediation. To the Trust's knowledge, no remediation of these materials has been carried out. Asbestos building materials are evident in a number of buildings across the site, including asbestos sheeting and friable asbestos insulation, such as in the plotting room [building B74]. Building rubble has also been identified in a number of bushland areas where previous structures have been removed. Lead based painted surfaces were identified throughout the site structures. However, no information was presented regarding location, condition or requirement for remediation. To the Trust's knowledge, no lead paint abatement work has been carried out [apart from that carried out by the Trust for refurbishment of buildings to date. No information was reported regarding the potential presence of other types of hazardous materials, such as polychlorinated biphenyls in light capacitors or other electrical equipment and synthetic mineral fibre materials.

Radioactive Materials

Two buildings in the outer non-core area were identified where radioactive sources were known or thought to have been stored. These buildings were the ARMCO facility (building B34) and building B213 [outside the CMP area]. A radioactivity survey was undertaken which did not identify any radioactive residues or sources in these buildings.

Underground Storage Tanks

At least four underground storage tanks (USTs) were located on the site. A petroleum UST was located to the east of building 1 (barracks), one large diesel UST was located east of the oil store (building B48), and two small diesel USTs were located in front of the workshops (building B20). Although it is unknown when this occurred, the two small USTs at the workshops are thought to have been removed when the large UST at building B48 was installed. The petroleum and diesel USTs were decommissioned, removed and remediated by the Department of Defence in 2001. The assessment identified that the petroleum UST at building 1 had leaked due to the presence of petroleum hydrocarbons in the groundwater immediately down-gradient of the tanks. When this tank was removed, gross petroleum contamination was encountered in sandy soils beneath the tank and in the vicinity of the main mess building. It was reported that most of this contamination had been removed, but due to structural constraints some contamination was left beneath the building. Petroleum hydrocarbon exceeding relevant criteria has been identified in groundwater down-gradient of the tank at various stages following remediation.

It has been recommended that groundwater monitoring be carried out at wells down-gradient of the building 1 UST at six monthly intervals to confirm that contaminant levels decline to below the relevant criteria.

It was reported that no residual contamination remained in soils following removal of the diesel UST, and that no hydrocarbon contamination was found in down-gradient groundwater.

MILITARY MATERIALS

Various artillery weapons, both full calibre and sub-calibre, have been fired at North Head since the 1920s, with all full calibre firings being conducted seawards. Therefore, the Department of Defence lists the site on its unexploded ordnance (UXO) register, however it assess it as having no significant residual UXO contamination.

An investigation and survey of residual military materials was carried out as part of the assessment. This indicated that there was a minimal risk to human health or the environment associated with military materials that may have arisen from the above activity. However, it is considered that a 'reasonable quantity' of ordnance waste is likely to remain on the site.

It was recommended that no further investigation or clearance were warranted at the site while it remained inaccessible to the public. However, mainly due to the perceived public risk, it was recommended that should public access or tracks be created in certain areas of the site, then an additional search and clearance of materials should be conducted. These areas are the former ranges to the east of the stone wall not previously adequately investigated due to vegetation density.

Stormwater Sediments

Storm-water sediments in 24 pits located in the School of Artillery area were identified to contain either heavy metal or asbestos contamination. This sediment was removed offsite to licensed landfill as part of the remediation program carried out by the Department of Defence.

Dumped Waste Materials. A number of potentially contaminated waste material stockpiles were identified in the assessment. These were reportedly removed to licensed landfill as part of the remediation program carried out by the Department of Defence.

Services

In December 2001, PPK Consulting undertook a detailed survey in order to establish the extent and condition of site services. The study looked at water and fire services, sewerage, electricity, telecommunications, gas and fuel services.

SEWERAGE SYSTEM

The sewerage system at the North Head site consists of a network of gravity pipes falling to a sewer main on the western side of North Head Scenic Drive in land controlled by National Parks and Wildlife Service. The sewer pipe network is in poor condition with a high percentage of the pipes blocked and showing signs of structural failure. The Trust has programmed repairs and to date has renewed sewerage lines and manholes along St. Barbara's Ave and upgraded connections to buildings on the western side of the Parade Ground. Sewerage fixtures and services within buildings are acceptable.

WATER

The water system consists of a pump station at the end of Artillery Drive, two reservoirs and a gravity reticulation system. The site is connected to the Sydney Water supply main at the corner of Bluefish and Artillery Drives. The main water supply and hydrant network on the site is in poor condition with ongoing problems involving breakages and leaking mains. A major upgrade is necessary. Water fixtures and services within buildings are acceptable.

FIRE

The fire hydrant system is part of the water network described above. Minor work has been undertaken including installation of a fire booster system on Artillery Drive, however a major upgrade is necessary.

ELECTRICITY

An overhead 11kv high voltage main runs through the site supplying North Fort, Quarantine Station and the National Park. Energy Australia has advised that the site substation is in poor condition and is in need of a major overhaul. Electrical distribution boards will also require upgrading to increase capacity and additional wiring will be needed. Some rewiring may also be necessary.

STORMWATER

The storm water reticulation network suffers from the same problem as the sewers-structural failure of pits and pipes, tree root invasion and siltation. The system has uncontrolled discharge to the surrounding bush land which will need to be rectified.

Building Condition

There are over 80 buildings on the School of Artillery site at North Head, including the outer non-core areas.

Of these, approximately 20 are located in the core precinct and include the major buildings of more permanent construction. The original major buildings are of full masonry construction, while there are also a number of smaller ancillary structures most of which are also masonry construction in the core precinct. The outer non-core precinct contains many large industrial buildings of steel construction.

The main problem facing the full masonry buildings, particularly the ones that have remained unoccupied, is the corrosion and failure of the steel cavity ties and poor quality mortar mix and porous concrete causing extensive spalling or concrete cancer. Conservation and maintenance will involve significant repairs and re-pointing of brickwork. There are also problems with water ingress through roofing and flashings. The site is predominantly sandy foundation material that has contributed to footing failure and structural damage.

Refer inventories, Volume 1 part 2

8.6 PLANNING & HERITAGE STATUTORY CONSTRAINTS²⁴

Commonwealth Legislation

All ‘actions’ on Trust land, undertaken by either the Trust, or on behalf of the Trust, are controlled by the Environment Protection and Biodiversity Conservation [EPBC] Act, 1999 as amended. Section 26 of the EPBC Act protects all aspects of the environment on Trust land from actions taken either on the Trust’s land or on adjoining land that may have a significant impact on it, while Section 28 protects the environment from any actions of the Trust, that may have a significant impact.

Section 341ZC of the Act requires the Trust to have regard for the **Commonwealth Heritage values** of a place before it takes an action and to minimise the impact that the action might have on those values. The Commonwealth Heritage Values section of this dCMP [refer **Section 5** above] describes the values of the site. Section 341ZD of the Act requires the Trust to seek the advice of the Minister for Environment and Heritage before it takes an action that has, will have or is likely to have a significant impact on a Commonwealth Heritage Place.

State Legislation

The *Sydney Harbour Federation Trust Act 2001* specifically excludes any land owned by the Trust from the operations of State planning law. This includes State Policies [SEPPs] and Regional Environmental Plans [REPs] prepared by the State Government and Local Environmental Plans [LEPs] prepared by Local Govt. authorities. Notwithstanding this, the SHFT draft PoM 2005 has been prepared that it is consistent with both State and local plans. The relevant statutory plans are:

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

SEPP 56 applies to the foreshores and tributaries of Sydney Harbour and includes a set of ‘guiding principles’ for the development of all land on the foreshores. The guiding principles relevant to the site include: the provision and enhancement of open space and public access links to open spaces; conservation of significant bushland and other natural features; and conservation of items of heritage significance.

Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005

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

The appreciation of the role of Sydney Harbour in the history of the Aboriginal and European settlement,

The recognition and conservation of the heritage significance of particular heritage items in and around Sydney Harbour,

The conservation of the significant fabric, settings, relics and views associated with the heritage significance of heritage items, and

The conservation of archaeological sites and places of Aboriginal heritage significance.

Manly Local Environmental Plan (LEP) 1988

North Head School of Artillery is located within Manly Local Government Area and is zoned special uses 5(a) School of Artillery under Manly LEP 1988. The surrounding Sydney Harbour National Park is zoned 8(a) National Park with other special use zonings on the headland including Hospital and the Sewerage Treatment Works.

²⁴ This section informed by SHFT draft PoM 2005. Environmental constraints and recommendations set out within the SHFT draft PoM 2005 are not further discussed here.