
Sydney Harbour Federation Trust

Management Plan – Cockatoo Island

23 June 2010

Part 1



Australian Government

Sydney Harbour Federation Trust

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Introduction

On 21st August 2003 the Minister for the Environment and Heritage approved a Comprehensive Plan for the harbour sites managed by the Sydney Harbour Federation Trust (the Trust). The plan, which was prepared in accordance with the requirements of the *Sydney Harbour Federation Trust Act 2001*, sets out the Trust's vision for the sites under its control.

A requirement of the Trust's Comprehensive Plan is that more detailed management plans are prepared for specific precincts, places or buildings. In addition to this the *Environment Protection and Biodiversity Conservation (EPBC) Act 1999* requires the Trust to make plans to protect and manage the National Heritage values and Commonwealth Heritage values of National and Commonwealth Heritage Places. Cockatoo Island is identified on both the National and the Commonwealth Heritage Lists. Cockatoo Island is also one of eleven sites that will form a proposed serial nomination of Australian Convict Sites for World Heritage listing. This plan includes measures to protect the potential World Heritage values of Cockatoo Island.

Accordingly, the purpose of this Management Plan is to guide the outcomes proposed in the Trust's Comprehensive Plan, to satisfy the requirements of Schedules 5A and 7A of the EPBC Act Regulations, 2000 and to be consistent with the National and Commonwealth Heritage management principles.

The Comprehensive Plan proposes the revival of Cockatoo Island as a working maritime site and as a functioning, active part of Sydney's cultural life. Its heritage values are to be protected and the island is to be freely accessible to the general public. The island's rich history will be recognised and will inspire its revival.

The island will become home to an array of complementary uses and activities, ranging from those which tap into the island's past, such as maritime and related industries, to entirely new uses such as cultural events, short-stay accommodation and restaurants.

In keeping with tradition, existing buildings and structures will be adaptively reused. Significant heritage artefacts will be conserved and will form an important aspect of the island's attractions as well as facilitating people's understanding of its past. Parkland and vantage points will provide opportunities for people to enjoy the island and the harbour.

The island's future has generated great public interest and passion. However, its planning is also recognised by many as challenging. This is due to the:

- Difficulties of transporting materials and passengers to and from it;
- Number, variety and condition of the buildings;
- Complex heritage overlays;
- Size of the island;
- Contamination; and
- Hazardous conditions (public safety).



Having regard for these complexities and the length of time during which this plan will be implemented, the Trust concluded that it is not desirable to attempt to identify detailed outcomes for the whole island. Accordingly, this plan aims to provide a long-term vision and a framework for decision making that is sufficiently flexible to accommodate new ideas and change and that is consistent with and does not adversely impact on the statutory heritage values of the place. The Sydney Harbour Federation Trust is committed to the conservation of the National and Commonwealth Heritage values of its places, and this commitment is reflected in its Act, its corporate planning documents and processes. This Management Plan, which satisfies sections 341V and 341S and of the *EPBC Act 1999*, provides the framework and basis for the conservation and management of Cockatoo Island in recognition of its heritage values.

The Trusts' Heritage Strategy, which details the Trusts' objectives and strategic approach for the conservation of heritage values, was prepared under section 341ZA of the *EPBC Act 1999* and accepted by the Minister. The policies in this plan support the directions of the Heritage Strategy, and indicate the objectives for identification, protection, conservation, presentation and transmission to all generations of the Commonwealth and National Heritage values of the place.

Commencement Date

This plan was developed by the Trust in 2008 and reviewed by the Australian Heritage Council in December 2008. Revisions were made and the Plan is now considered to be consistent with the National and Commonwealth Heritage management principles. Notice of this Plan was published in the Government Gazette on 23 June 2010 and the Plan takes effect from that date.

Land to which the Management Plan Applies

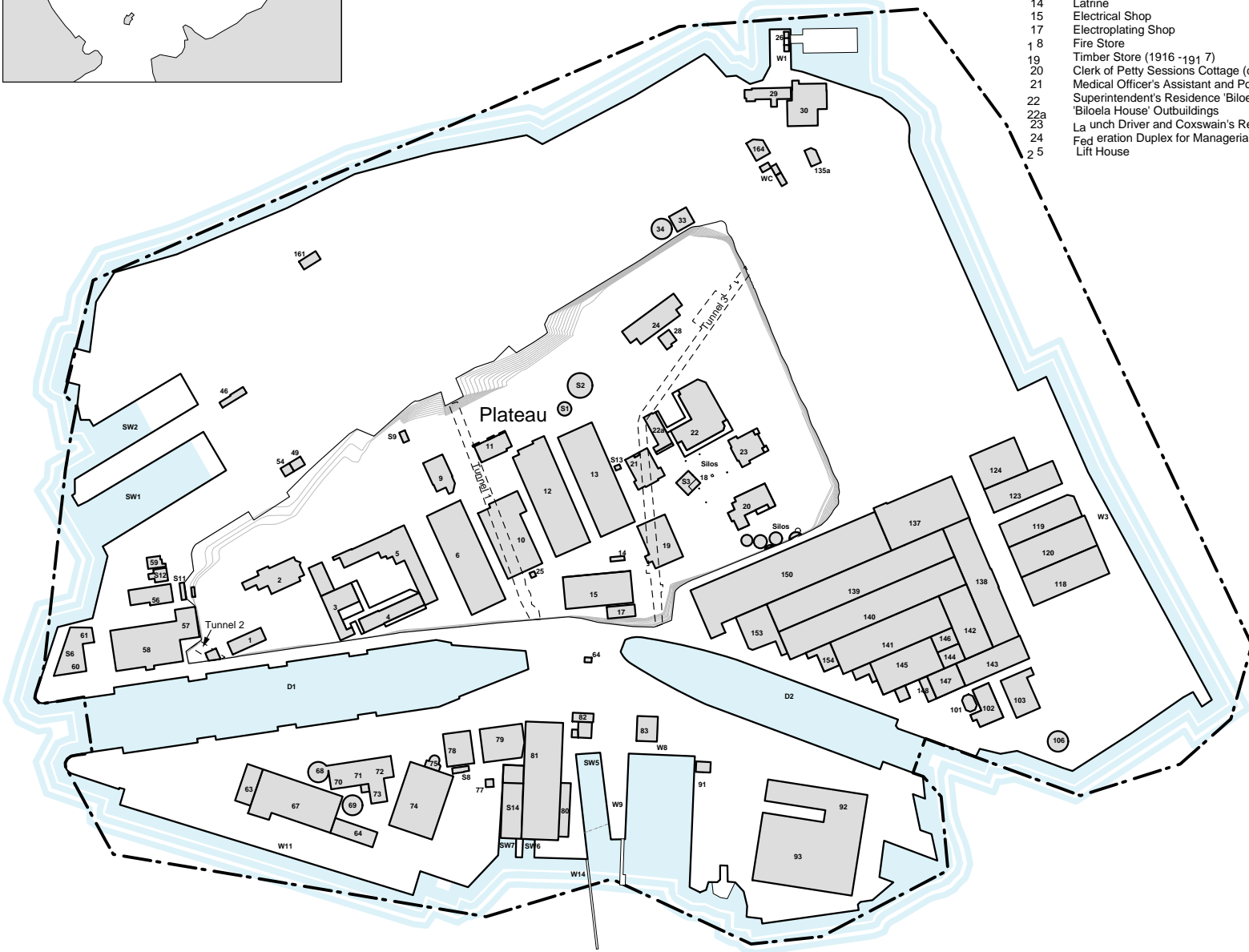
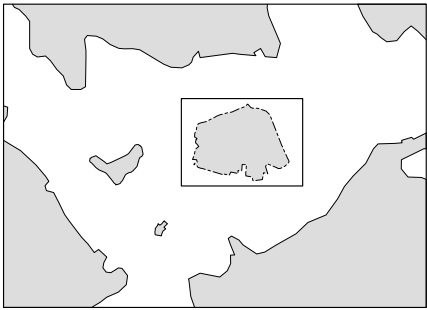
The land covered by the Management Plan is shown by broken black edging on the plan at *Figure 1*. All of the land including the bed of the harbour is within Lot 1 DP 549630 and is in the ownership of the Sydney Harbour Federation Trust.

Aims of this Plan

To achieve the Trust's vision for the island this Management Plan aims to:

- Conserve, protect and manage the National, Commonwealth, and potential World Heritage values of the island as an historic place within Sydney Harbour and facilitate its interpretation, appreciation and adaptive reuse;
- Be consistent with the National and Commonwealth Heritage management principles;
- Provide general public access to the island;
- Facilitate the transport of people and goods to and from the island by providing appropriate waterfront infrastructure;
- Revive the island by reintroducing maritime and related industry as well as a range of complementary uses including cultural, entertainment, dining, education, recreation, retail, offices and studios;
- Establish Cockatoo Island as a place of public enjoyment by providing public open space and the creation of venues for cultural events; and
- Apply the principles of Ecologically Sustainable Development to the revitalisation of the island.





No	Name	No	Name
1	Military Guardhouse (1842)	26	Parramatta Wharf Turnstile Shelter
2	Military Officer's Quarters (c.1845-57)	28	Outbuildings for Federation Duplex
3	Mess Hall (c.1847-51)	29	Muster Station
4	Prisoners' Barracks (c.1839-42)	30	Administrative Building 'Brindabella' (1930)
5	Prisoners' Barracks (c.1839-42)	33	Pipe Sealing Plant
6	Mould Loft	34	Air Raid Shelter
9	Free Overseer's Quarters (c.1850-57)	46	Substation 'N'
10	Estimating & Drawing Offices (1915-1918)	49	Latrine
11	Free Overseer's Quarters (c.1850-57)	54	Substation 'J'
12	Pattern Storage/Joiners Shop (1912)	56	Sewerage Treatment Plant
13	Pattern Shop/Polishing Shop (1911)	57	Rectifier Room
14	Latrine	58	Powerhouse (1918)
15	Electrical Shop	59	Powerhouse Chimney & Base (1918)
17	Electroplating Shop	60	Portable Rope & Sling Store
18	Fire Store	61	Coal Store
19	Timber Store (1916-1917)	63	Rigging & Lifting Gear Store
20	Clerk of Petty Sessions Cottage (c.1845-50)	64	Workshop
21	Medical Officer's Assistant and Police Residence	67	General Store / Naval Store 1
22	Superintendent's Residence 'Biloela House' (c.1841)	68	Air Raid Shelter / Rigging Store
22a	'Biloela House' Outbuildings	69	Paint Store
23	Launch Driver and Coxswain's Residence	70	Substation 'L'
24	Federation Duplex for Managerial Staff (c.1913-1916)	71	Naval Store 3 / Fibreglass Workshop
25	Lift House	72	Latrine
		73	Latrine
		74	Naval Store 2
		75	Decomamination Building/Paint Store
		77	Winch House
		78	Dock Master's Office
		79	Painters and Dockers Workshop
		80	Patrol Vessel Workshop
		81	Shipwright's Shed (1909)
		82	Substation
		83	Amenities
		91	Oxygen House
		92	Substation 'S' & Amenities
		93	Weapons Workshop for O Class Submarines (c.1968-71)
		101	Pay Office (1914)
		102	Offices
		103	Offices
		106	Air Raid Shelter
		118	Electrical Assembly Shop
		119	Tool Store Annex / Canteen
		120	Tool Room and Store
		123	General Offices and Storage
		124	Naval Store and General Office / Pattern Shop
		135a	Administrative Office
		137	Iron & Steel Foundry (c.1856)
		138	Engineers' & Blacksmiths' Shop (c.1853)
		139	Heavy Machine Shop (c.1896)
		140	Heavy Machine Shop (c.1896)
		141	Machine Shop
		142	Milling Shop
		143	Boilers, Pumping Engines & Offices (c.1845-57)
		144	Boiler House
		145	Machine Shop
		146	Engine House
		147	Coppersmith's Shop
		148	Latrine
		150	Turbine Shop (c.1942)
		153	Blade Room
		154	Shop Test Boiler Room
		161	Substation 'P'
		164	Fire Station
		S1	Water Tower Elevated
		S2	Water Tower Ground Level
		S3	Search Light Tower
		S6	Coal Bunker South
		S8	Incinerator
		S9	Sheep Shelter
		S11	Main Air Receiver
		S12	Power House Chimney
		S13	Gasden Store
		S14	Gasden House Roof
		SW1	Shipbuilding Slipway No.1
		SW2	Shipbuilding Slipway No.2
		SW5	Patent Slipway, 250 Ton
		SW6	Boatshed Slipway
		SW7	Boatshed Slipway
		W1	Parramatta Wharf
		W3	Bolt Shop Wharf
		W8	Timber Bay Wharf
		W9	Patrol Boat Wharf
		W11	Putherland Wharf
		W14	Submarine Boat Jetty
		D1	Putherland Dock
		D2	Fireproof Dock
		WC	Temporary Toilets

--- Plan Area Boundary

Fig. 5 Park Design Concept

Casino Creek



In doing this, it also aims to:

- Provide opportunities for visitors to understand and appreciate the rich and varied history of the island by providing for site interpretation, education and appropriate uses;
- Provide visitor facilities and amenities including safe pedestrian paths, viewing areas, lookouts and access to the convict precinct, the docks, tunnels, cranes and other historic structures;
- Realise the potential for easy access including access for the disabled;
- Enhance views to and from the island;
- Manage the flora and fauna remaining on the site and interpret the original harbour landscape;
- Improve the quality of stormwater runoff in order to reverse adverse impacts on the harbour; and
- Apply remediation strategies consistent with the range of proposed land uses while reducing any adverse environmental impact on the harbour.

Planning Framework

Relationship with the Trust's Comprehensive Plan

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

The other levels are:

- The Trust's Comprehensive Plan - this is an overarching plan that provides a process for the preparation of Management Plans; and
- Specific projects or *actions* - *actions* are defined in the *EPBC Act 1999* and are similar to the concept of *development* in NSW planning legislation.

This Management Plan has to be interpreted in conjunction with the Trust's Comprehensive Plan, in particular the *Outcomes* identified in *Part 5* of the Trust's Comprehensive Plan and the *Objectives and Policies* in *Part 3*.

The *Outcomes* diagram in *Part 5* of the Trust's Comprehensive Plan for Cockatoo Island is reproduced at *Figure 2*. Conservation policies in this plan provide guidance on how these outcomes can be managed in a way that protects, conserves, presents and transmits to all generations the National and Commonwealth Heritage values.

The *Objectives and Policies* most relevant to this Management Plan are those relating to working harbour, tourism, contamination, water quality and catchment protection, cultural heritage, adaptive re-use of places and buildings, access, open space and recreation, and education. These *Objectives and Policies* were addressed during the assessment of the site and are discussed in more detail in the relevant sections of this plan.

Related Trust Policies and Guidelines

There are a number of overarching Policies and Guidelines foreshadowed in the Trust's Comprehensive Plan that will be developed over the lifetime of the Trust and that will also guide the conservation and adaptive reuse of the island. Current relevant policies are:



-
- The Trust's *Leasing of Land and Buildings Policy*;
 - The Trust's policy for the *Leasing of Land and Buildings to Community Users*;
 - The Trust Event Policy;
 - The Trust's Heritage Strategy; and
 - The Trust Interpretation Strategy for Cockatoo Island

This Management Plan has regard for these existing policies. If or when other Trust Policies and Guidelines are developed this plan will be reviewed to ensure that they do not impact adversely on the National and Commonwealth heritage values.

Statutory Planning Context

Commonwealth Legislation

All 'actions' on Trust land, undertaken by either the Trust or on behalf of the Trust, are controlled by the EPBC Act.

Section 26 of the *EPBC Act 1999* protects Commonwealth land from actions taken on or outside it that may have a significant impact on the environment. Section 28 protects the environment from actions taken by the Commonwealth or a Commonwealth agency that may have a significant impact.

The environment is defined to include:

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

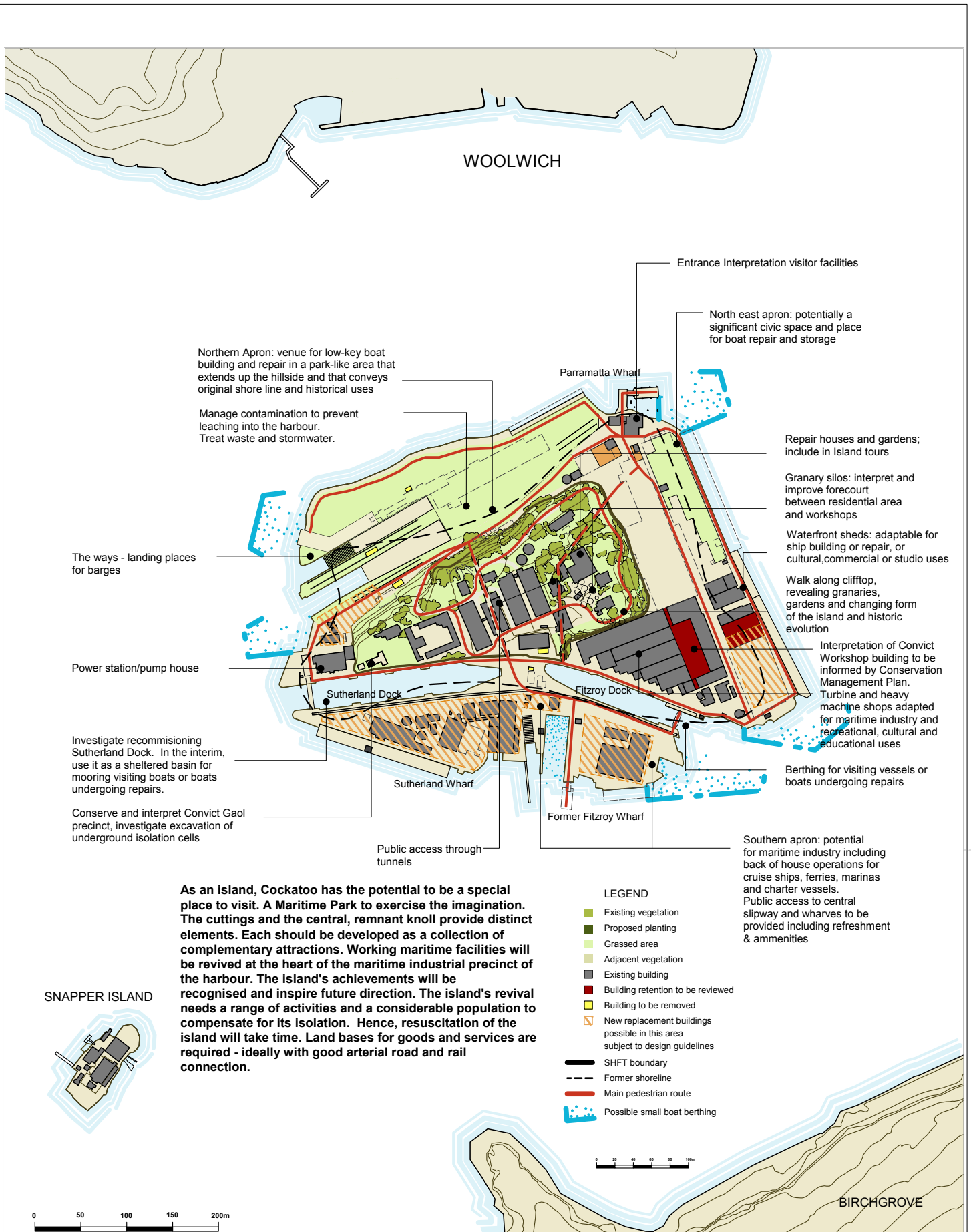
Section 341ZC of the Act requires the Trust to have regard for the National and Commonwealth Heritage values of a place before it takes an action, and to minimise the impact that the action might have on those values. This plan includes the *Commonwealth and National Heritage values* taken from the statutory heritage listings of the island.

State Legislation

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

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





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, Cockatoo Island is included in the catchment area of Sydney Harbour, as a foreshores and waterways area and is also listed as a strategic foreshore site. The planning principles of the SREP relevant to the island include:

- Development that is visible from the waterways or foreshores is to maintain, protect and enhance the unique visual qualities of Sydney Harbour;
- Development is to protect and, if practicable, rehabilitate watercourses, wetlands, riparian corridors, remnant native vegetation and ecological connectivity within the catchment;
- The number of publicly accessible vantage points for viewing Sydney Harbour should be increased;
- Public access to and along the foreshore and waterways should be increased, maintained and improved;
- Public access along foreshore land should be provided on land used for industrial or commercial maritime purposes where such access does not interfere with the use of the land for those purposes;
- The use of foreshore land adjacent to land used for industrial or commercial maritime purposes should be compatible with those purposes;
- Water-based public transport (such as ferries) should be encouraged to link with land-based public transport (such as buses and trains) at appropriate public spaces along the waterfront;
- The provision and use of public boating facilities along the waterfront should be encouraged;
- Sydney Harbour and its islands and foreshores should be recognised and protected as places of exceptional heritage significance;
- An appreciation of the role of Sydney Harbour in the history of the Aboriginal and European settlement should be encouraged;
- The natural, scenic, environmental and cultural qualities of the Foreshores and Waterways Area should be protected;
- Significant fabric, settings, relics and views associated with the heritage significance of heritage items should be conserved; and
- Archaeological sites and places of Aboriginal heritage significance should be conserved.

Local Government

Cockatoo Island does not fall within any Local Government Area (LGA). However, it has an obvious relationship with the neighbouring LGAs of Leichhardt, Canada Bay and Hunters Hill. Most of these areas are zoned for residential purposes and these zones are described in *Section 12 – Background Material*, of the Trust's Comprehensive Plan. The characteristics of these areas and the nature of the relationship they have with the island are described in the section of this plan dealing with "Surrounding Lands".



Non Statutory Planning Strategies

Sharing Sydney Harbour Access Plan

In addition to its statutory plans, the State Government has prepared the Sharing Sydney Harbour Access Plan (SSHAP). This Plan identifies a network of new and improved public access ways for pedestrians and cyclists, and waterway facilities for recreational watercraft.

Cockatoo Island is identified as a site of cultural interest, which presents new opportunities for public access.

Plans Prepared for Neighbouring Lands

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

New South Wales Maritime Authority

The NSW Maritime Authority is responsible for the bed of the harbour and its tributaries, including the conservation and protection of the marine environment. The Authority is also responsible for approving (or requiring the demolition of) wharves or other structures that extend beyond the boundary of the Trust land. To assist in these processes it has prepared a number of policies that it considers when deciding whether to grant approval or not. These include:

- Obtaining permission to lodge a development application;
- Engineering Standards and Guidelines for Maritime Structures; and
- Marine Habitat Survey Guidelines.

Site Description

Cockatoo Island is the largest island in Sydney Harbour at the confluence of the Lane Cove and Parramatta Rivers. In its original state, it was a heavily timbered sandstone knoll, rising to 18 metres above sea level. Originally it was only 12.9 hectares in size, however, its land area has been expanded to 17.9 hectares through extensive cutting, reclamation and filling. Almost all of the original land area of the island has been removed, and the current vegetation includes plants growing on the cliff faces and plantings of exotic species in the garden areas.

The island is characterised by a diversity derived from its incremental development over a long period of time. This diversity, combined with the topography make it difficult to perceive the island as a unified entity.

The island has been vacant since 1992 and many of the buildings have deteriorated during this time. Some areas also contain contamination and industrial hazards resulting from over a century of shipbuilding. The lower area of the island still accommodates a range of industrial buildings, concrete pads from demolished buildings, cranes, dry docks and wharf related structures. However, many buildings and wharves were demolished after the closure of the dockyard, and this has resulted in large open areas on the northern and eastern foreshores.



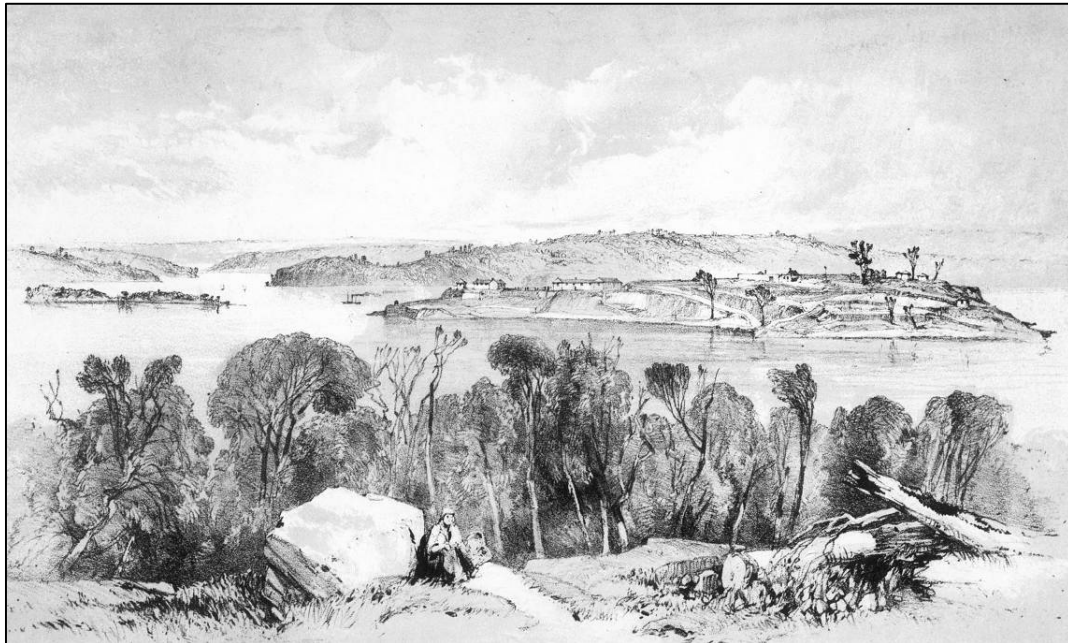


Figure 3: This 1843 drawing by J.S Prout shows the southern side of Cockatoo Island with Spectacle Island to the left. It was drawn 4 years after the first convicts arrived but already the effectiveness with which they cleared the vegetation is apparent. It also shows the original topography of the island before large parts of it were quarried away and the extensive land reclamations undertaken.

Figure 4 - Precinct Areas identifies the areas referred to in this management plan as the Southern, Northern and Eastern aprons and the Plateau. Appendix 1 identifies all of the locations and building numbers of existing and previous buildings and their uses.

The buildings on the Southern Apron are the most intact of the maritime aprons. These include the two dry docks, a number of robust industrial buildings, wharves, slipways, cranes and other maritime related infrastructure. There is no clear order in the layout of these buildings, however, many are built of similar materials and are similar in scale and this gives the area a cohesive built character.

The Northern Apron faces Woolwich peninsular. It is a large open area with only a few structures remaining. From the water it appears as a grassed open space with a vegetated backdrop. At its western end there are two large slipways and associated cranes that were previously used for shipbuilding and repairs. Adjacent to the slipways are the Powerhouse, brick chimney and sewage treatment plant. An extensive rock shoreline that replaced wharves that were demolished when the island was vacated provides an edge to this precinct and has become a nesting area for Silver Gulls.

The Eastern Apron has two distinct areas – the entry area and a group of workshops further to the south. The entry area includes the Parramatta ferry wharf, the former Administration Building, remnants of a memorial garden and a large, east facing open area with a stone cliff as a backdrop. The second area includes a series of waterfront workshops arranged so that they create a street between them. These buildings include



the stone, convict-built workshops, the Turbine Shop, the Pattern Shop, Tool Store, Canteen as well as several other industrial buildings and the Bolt Wharf.

The Plateau or upper area of the Island includes three distinct areas. At its western end there is the convict gaol and associated sandstone buildings and walls. The central area includes a row of multi-storey workshops that were built on the sites of the former convict water tanks and quarry yard. The eastern end is characterised by a group of houses whose backyards meet, forming an arrangement of lawns, garden beds, and exotic trees. Also included in this area are the convict grain silos, the WW II searchlight tower and the landmark water tower

Surrounding Lands

Cockatoo Island is the largest of the three islands that were known in the 1820s as the '*Hen and Chickens*'. The other two are Snapper which is also a Trust site, and Spectacle, which is occupied by the Australian Navy. See *Figure 5- Local Area Context*.

Cockatoo also shares a convict and maritime heritage with Goat Island, located 2km to the east. This presents opportunities for future joint interpretation and public visitation.

The island also has a relationship with the surrounding mainland areas, including Woolwich, Birchgrove, Balmain, Rozelle, Drummoyne and Birkenhead.

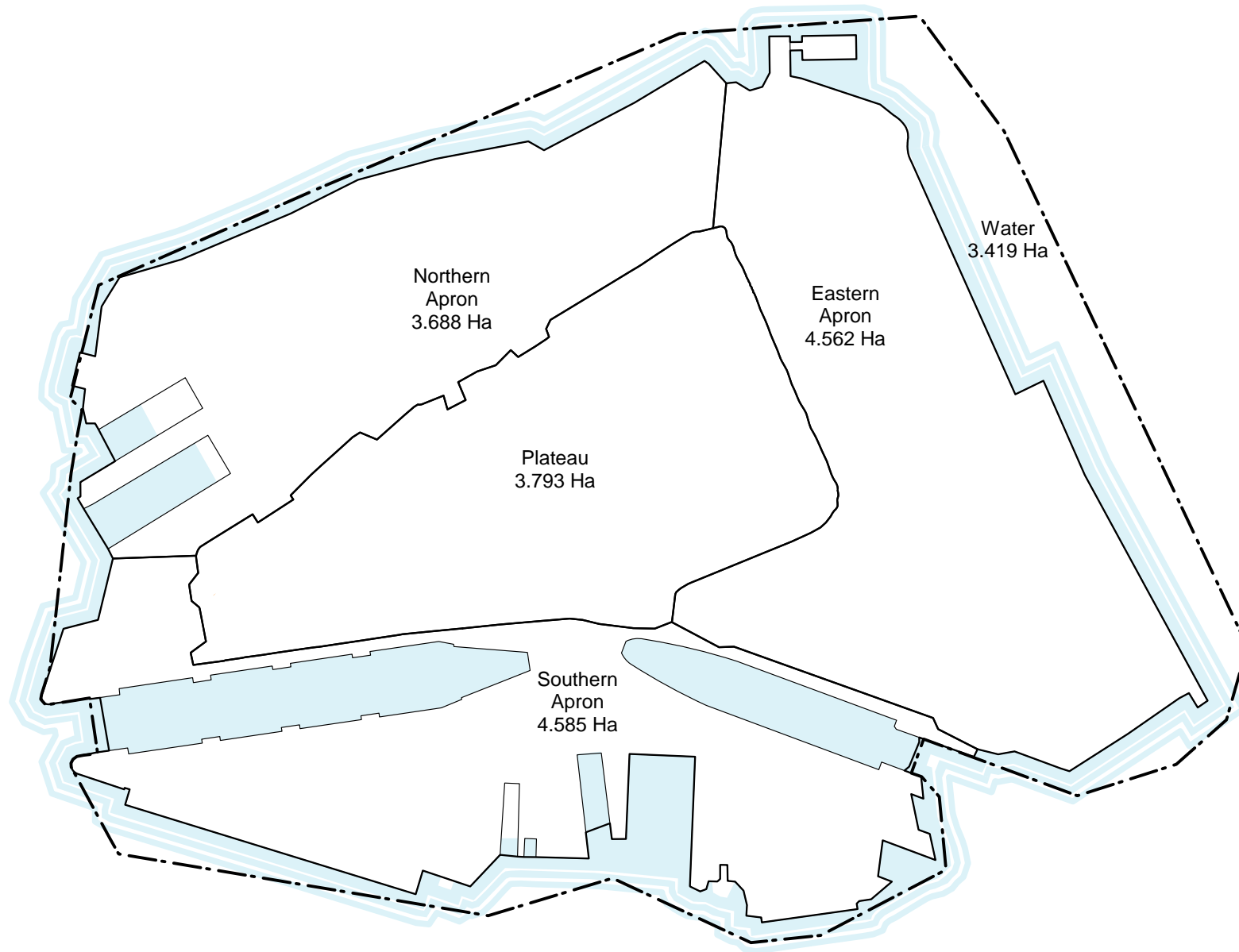
The Parramatta River foreshores of Woolwich face directly onto the Island. This includes the recreational areas of Clarkes Point Reserve and the Horse Paddock, the Hunters Hill Sailing Club and Woolwich Marina. Further up the slope the land is zoned for residential purposes and is characterised by low to medium density housing. There are also a number of restaurants and cafes and the Woolwich Pier Hotel located at the top of the ridge.

To the south of the island the foreshores of Leichhardt Local Government Area (LGA) face onto the island and include the suburbs of Birchgrove, Rozelle and Balmain. These areas are characterised by late 19th century terrace and semi-detached residences with some higher density residential redevelopment on former industrial sites - most notably the Balmain Cove development on the site of the former Balmain Power Station. These areas are mainly zoned for residential purposes and there is unlikely to be any significant change.

The eastern foreshore of Canada Bay LGA includes the suburbs of Drummoyne and Birkenhead Point and these also face the island. These areas are mostly developed with medium to high-density residential development with some free standing and semi-detached housing. There is also a large marina and associated retail development at Birkenhead Point and nearby the Drummoyne Sailing Club and adjoining parklands.

For all of these residential areas, the impacts on amenity of noise, light, traffic and parking are important. Accordingly the Trust has been careful to address these issues during the preparation of this Management Plan. See the Analysis and Assessment and the Outcomes sections of this plan.

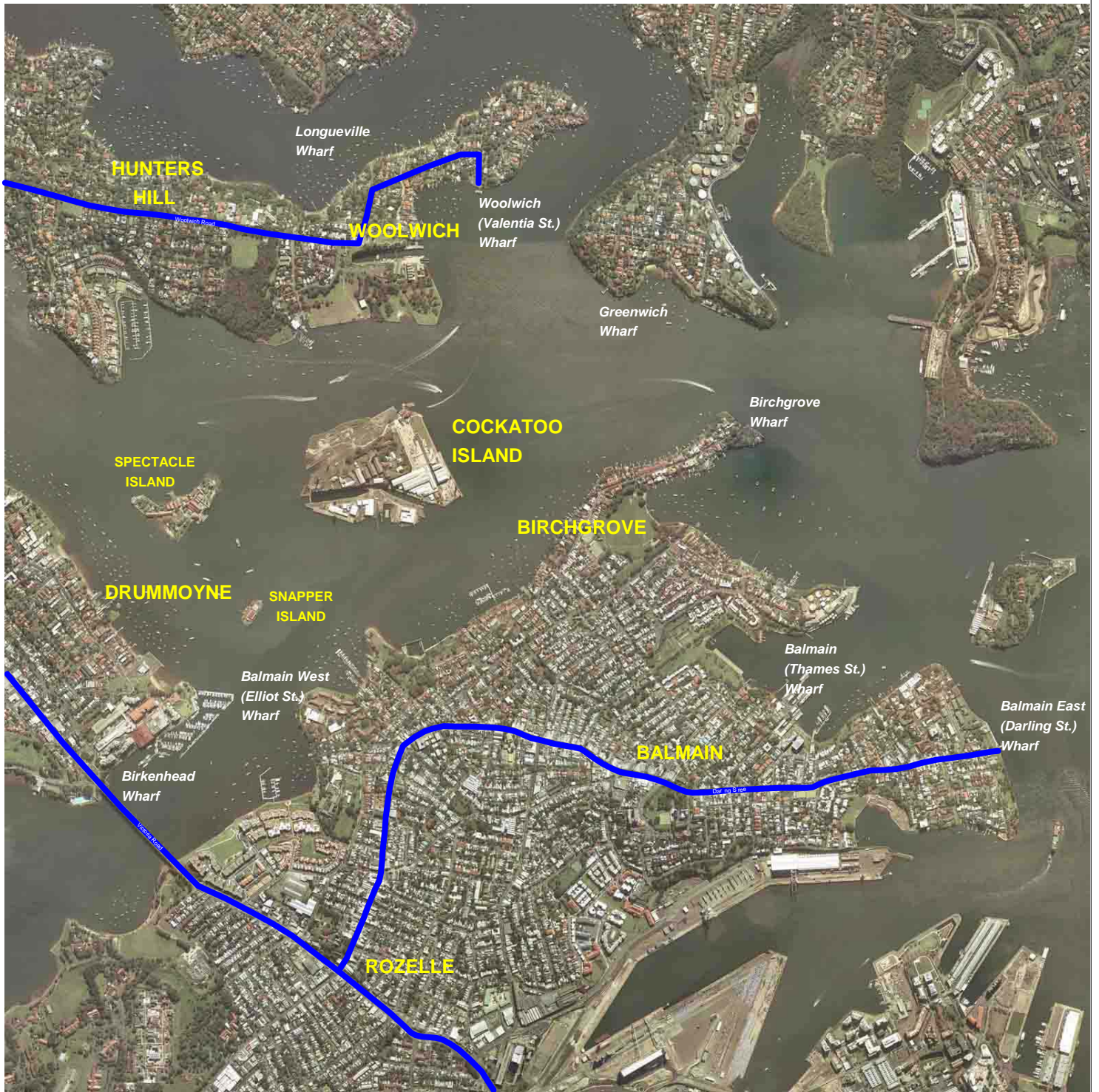




ig. 4 Precinct Areas

Cockatoo Island





LEGEND


-  Main Roads
- SNAPPER ISLAND** Suburbs and place names
- Birchgrove Wharf* Public wharfs

Fig. 5 Local Area Context

Site History

Aboriginal Heritage

It was recorded by early colonists that Aboriginal people of the Sydney region called Cockatoo Island *Wa-rea-mah*. Aboriginal people inhabited the area for thousands of years prior to European settlement and the island may have been used as a fishing base.

No physical evidence of Aboriginal heritage has been found on the island, and the activities that have taken place and the alteration of the physical landscape make it unlikely that any evidence of Aboriginal use or occupation remains intact.

European Heritage

European occupation of Cockatoo Island began in 1839 when the first prisoners were transferred there. Since then it has been used to accommodate a girls' reformatory and industrial school, boys' training schemes and shipbuilding and repairs.

The buildings and artefacts that remain on Cockatoo Island represent all these phases of its occupation and development, from the convict gaol to the last structures built to carry out the Oberon Class submarine refits. Traditionally, buildings on Cockatoo Island have been retained, re-used and adapted to suit current needs. Periods of use overlapped and buildings were put to many different uses. Buildings, gardens, artefacts, ephemera, and most importantly the patina and historic layout are all still represented. Convict grain silos can be found side by side with a WW II search light tower, a steam powered crane with the convict constructed dock, and dockyard graffiti with the mercury arc glass rectifiers in the powerhouse. As a consequence, the island is a rich mosaic of all these things and is of exceptional heritage value.

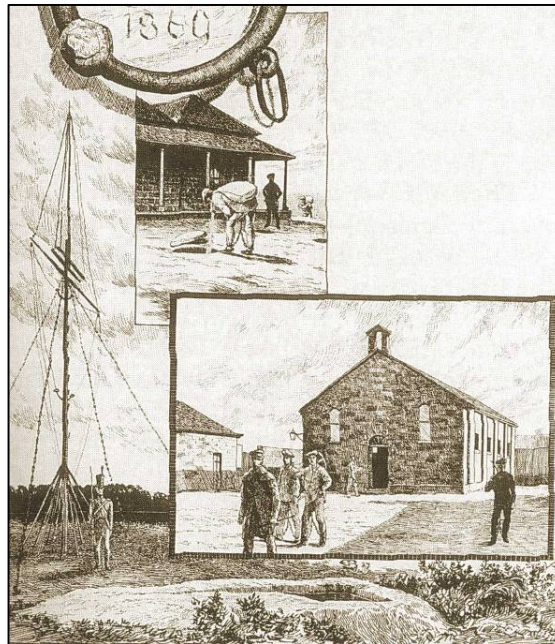
The buildings remaining from these different phases of development are shown on *Figure 7*.



Arrival of the Convicts

In February 1839 sixty convicts were relocated to Cockatoo Island to alleviate overcrowding at Norfolk Island. Cockatoo Island was chosen because its isolation by water offered security for the people of Sydney while allowing easy supervision by the colonial administration. The island was to soon gain a justifiable reputation as a grim and brutalising place.

Figure 6: 1869 engraving depicting convict life on Cockatoo Island. The first prisoners to arrive from Norfolk Island were accommodated in tents, prison boxes and portable houses borrowed from Goat Island. However, by the time this engraving was made the convicts had constructed an array of permanent buildings. The top image shows a convict pouring grain into one of the underground silos that Governor Gipps had excavated to store the colony's surplus grain. The central image shows the Prisoners' Barracks (Building 3).



The newly arrived convicts were put to work quarrying the stone for the prison buildings that were to become their accommodation. The island had no naturally occurring supply of drinking water and so they also manually excavated large water tanks and, in what was a controversial attempt to ensure a reliable supply of grain for the colony, they were dragooned into excavating large bottle shaped silos to store surplus wheat (see *Figures 6 and 8*). The colony had suffered chronic grain shortages and in an attempt to prevent this reoccurring Governor Gipps proposed storing grain for use during times when the harvest was poor. On Cockatoo he had a supply of free labour to undertake the excavation and the security of the island to ensure the safety of the stored grain. However, the Colonial administration in London saw this as unnecessary interference in the free market and ordered that the grain be released for sale.

Many of the buildings constructed during this phase of the island's development, including the barracks, guard house, grain silos, engine house workshop, some residences and the Fitzroy Dock, are still extant and although some have been adapted for new uses they none-the-less tell a coherent story of early, colonial prison life. See the 1857 plan of the island reproduced at *Figure 9*.





Major Phases of Development

- Phase 1 - Prison Dockyard (1839 - 1864)
- Phase 2 - NSW Department of Public Works (1864 - 1913)
- Phase 3 - Commonwealth Dockyard (1913 - 1933)
- Phase 4 - Cockatoo Docks & Engineering (1933 - 1948)
- Phase 5 - Vickers Cockatoo (1948 - 1986)

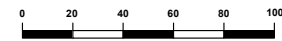
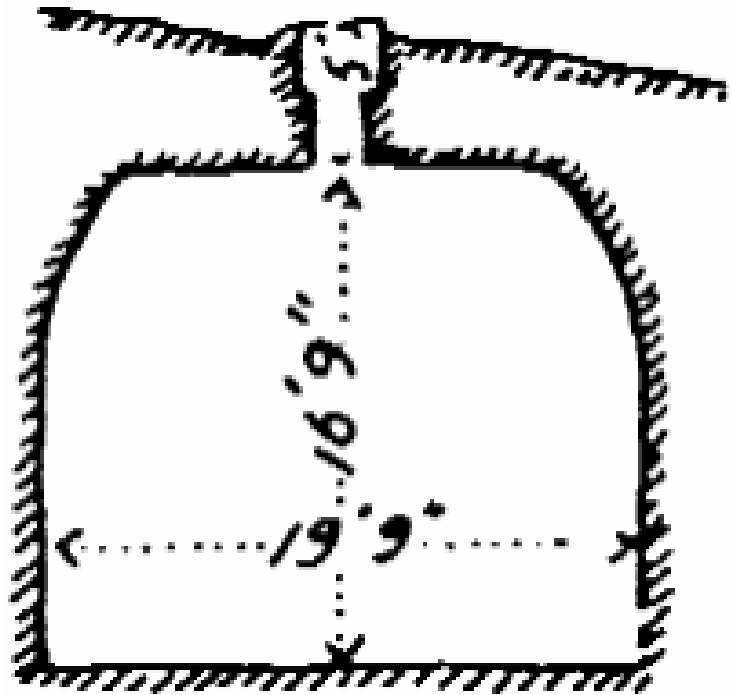


Fig. 7 Phases of Development



Figure 8: One of the earliest tasks undertaken by the convicts on Cockatoo Island was to excavate large underground silos. This drawing is of a typical section through No.5 silo. The only access to the silos was via a manhole about 2 feet in diameter. Convicts working to carve the silos were forced to remain underground until they had hewn the required daily quota of stone. It is believed that there were originally 20 silos on the island. However, the exact number still extant is not known because several are believed to be hidden under asphalt paving near Biloela House. Others were destroyed during the excavation undertaken to accommodate the workshops built during WW II.



A Dockyard and Prison

Convict labour facilitated the beginning of shipbuilding and repair on the island.

The island was strategically placed to support the development of Port Jackson as a trading centre and this potential was identified early in the life of the colony. The construction of a dry dock was considered crucial to this outcome and as a consequence Governor Gipps sought approval from the Imperial Administration in London to construct a dock using convict labour. In preparation, he instructed that the convicts begin preparing the site for the dock.

In 1845 the inmates commenced their most ambitious undertaking, the construction of the Fitzroy Dock. This work was the first of its kind in the Australian colonies and unlike most other dry docks in other parts of the world, was excavated from solid rock. The site chosen for the dock required the removal of large sandstone cliffs with an average height of 45 feet just to clear a shore level space large enough to accommodate the dock. The dock was named in honour of the NSW Governor Sir Charles Augustus Fitz Roy and took nine years to construct. It commenced operations in December 1857 when convict labour was used to overhaul the British naval brig, *HMS Herald*. In the years that followed the Fitzroy Dock was predominately occupied with the repair and servicing of Royal Navy ships.

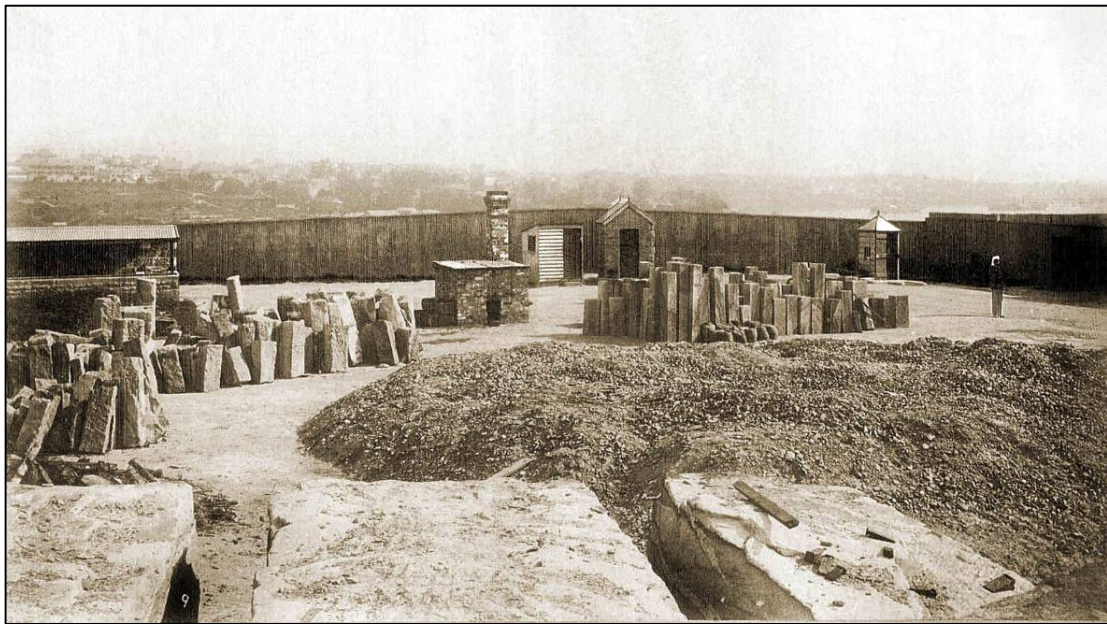


Figure 10: Sandstone quarried by the convicts was used to build many of the buildings on the island. It was also used for building works in Sydney, including the construction of Semi-Circular Quay. This photograph was taken in the 1890s during the second, or Biloela Gaol phase when prisoners who were capable of heavy work quarried and dressed stone in the paddock between the men's and women's sections.

Convict labour was also used to build the fine sandstone Engineers' and Blacksmiths' Shop (Building 138), which still stands near the dock. This is one of the first buildings



associated with the operation of the Fitzroy Dock and was built to a Royal Engineers' design, with the Portsmouth Steam Factory in England used as the prototype. The machinery in the workshop was operated by steam until 1901 and some evidence of the original equipment remains.

During this time the island was both a prison and a dockyard, with the convicts providing the labour needed to run the dock. However, these two uses resulted in management conflict, which was partly overcome with the appointment of Gother Kerr Mann as Superintendent of the Prison as well as Engineer of the Dockyard.

Conditions for the convicts were extremely harsh. Their accommodation was overcrowded and sickness was common. As a result, a Select Committee appointed in 1861 to enquire into public prisons criticised the management of Cockatoo, declaring that the *"moral axioms of the present age"* had obviously exerted no influence upon its running. Although only a few small changes were made after the Select Committee enquiry, the Island continued to operate as a prison for another eight years. By this time all but one of the prisoners had been sentenced in the colony and in 1869 the Cockatoo Island prison closed and the inmates were moved to Darlinghurst Goal.

Reformatory and Training

Shortly before the closure of the prison the government passed two Acts that aimed to provide care, education and training for neglected and abandoned children and to establish institutions for girls under the age of 16 who would otherwise have been placed in an ordinary prison.



Figure 11: 1871 an old ship, the 'Vernon', was anchored off the northeast corner of the island as a nautical training ship for homeless or orphaned boys. In addition to nautical skills, the boys were taught trades such as tailoring, carpentry, shoe and sail making. They also undertook the formidable task of getting the island's vegetable gardens in order, planting fruit and ornamental trees and levelling and sowing the recreation and drill ground. For this later task 250 tons of soil was transported from Woolwich by punt. This photograph shows a small group of the boys working in a vegetable garden on the island.



The abandoned prison buildings on Cockatoo Island presented an opportunity to implement these Acts and in 1871 the prison buildings were adapted as an industrial training school and reformatory for girls. The island was also renamed *Biloela*, a North Queensland Aboriginal word for Cockatoo. This was an attempt to distance the island from the stigma attached to the former prison.

The reformatory was located away from the industrial school in one of the free overseers' cottages (probably Building 9) while the industrial school was accommodated in the former prison barracks and mess hall. A ten-foot high fence was built to separate the reformatory and school from the dockyard.

For the younger girls the industrial school was essentially a boarding school, while the older ones were taught skills to equip them for domestic service once they left the island.

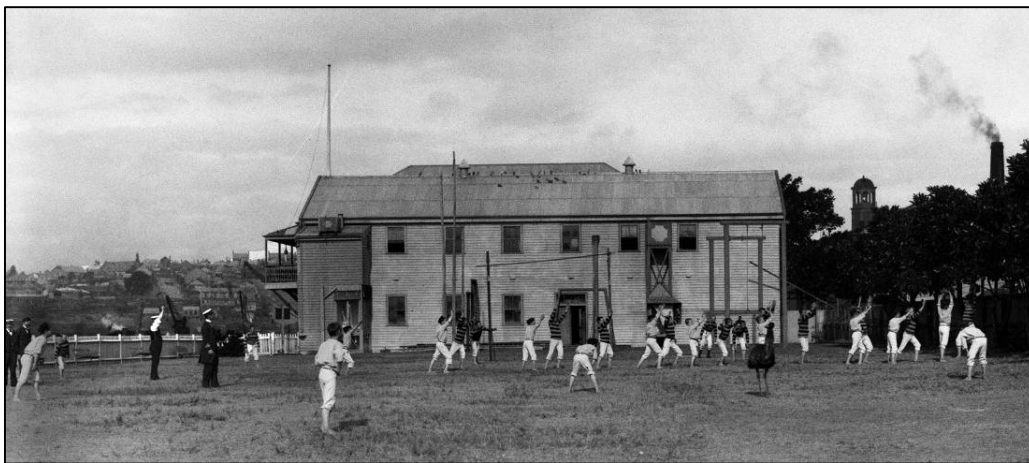


Figure 12: This photograph was taken in 1898. It shows a group of boys from the second of the training ships, the 'Sobraon,' with their pet emu on the island's recreation ground where they played cricket, rounders, football and other games. In the background is the boathouse, which was associated with the 'Sobraon'. The chimney and belltower of the convict built Engineers' and Blacksmiths' Shop (Building 138) are also visible.

Conditions for the girls were overcrowded, particularly cold in winter, and the buildings still bore too close a resemblance to a prison to be in any way comfortable. During the first few years their treatment was appallingly harsh and in November 1873 the school was reported to be in a state of insurrection.

In 1879 the reformatory was closed and this freed up buildings for the industrial school but the extra accommodation was soon compromised by the construction of the Sutherland Dock. The industrial school remained until 1888 when it was moved to the former Roman Catholic Orphanage at Parramatta.

At the same time as the reformatory and industrial school were accommodated on the island, an old ship, the *Vernon*, was anchored off its northeast corner and was used to house delinquent and orphaned boys. In 1890 the *Vernon* was replaced by the *Sobraon*, which remained there until 1911. The *Sobraon* was a much larger ship and was able to accommodate 500 boys.



The boys were segregated from the girls, and, later, from the prisoners at Biloela Gaol. They were taught trades such as tailoring, carpentry, shoe and sail making and space was made available on the island for them to grow vegetables. A patch of land on the apron east of *Biloela House* (Building 22) was used as their recreation area (see *Figure 12*) and a swimming enclosure was later added. However, subsequent development on the island has removed all visible evidence of their existence.

A Gaol Again

In 1888 Cockatoo Island was once again used as a prison. This time it was to ease overcrowding at Darlinghurst Gaol and for the first time it accommodated both male and female prisoners who were considered to be habitual offenders, incapable of reform.

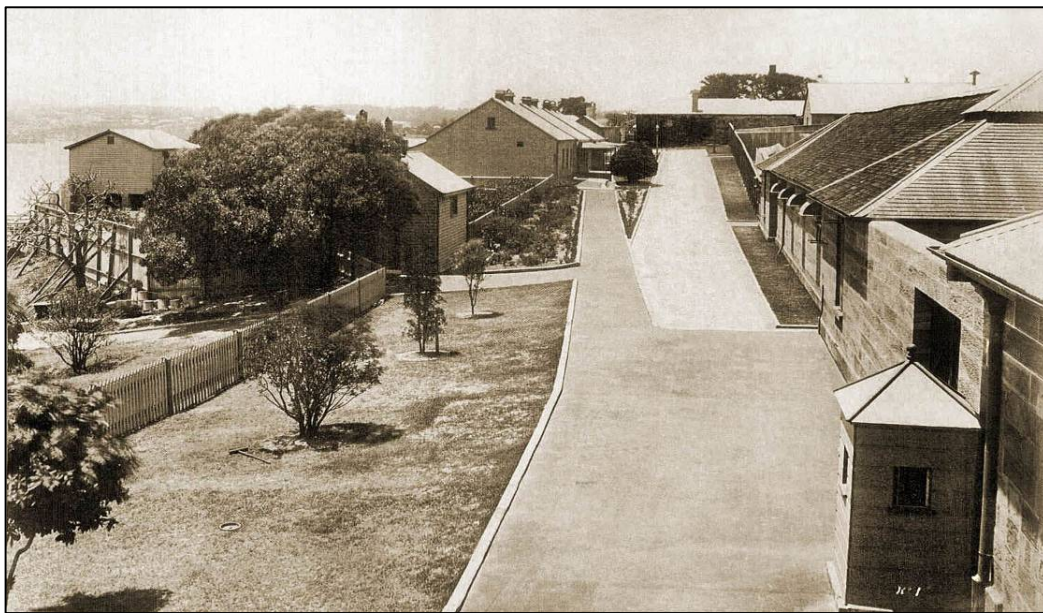


Figure 13: This photo, taken during the Biloela Gaol period (c.1890s) shows the main walkway along the plateau of the island from the Military Officers' Quarters (Building 2). It illustrates how the prison precinct was designed to maximise surveillance, with a clear line of sight from the sentry box on the right up to the female gaol precinct in the distance. On the left of the path is a row of cottages originally built in 1850 as accommodation for the Free Overseers (extant today are Buildings 9 & 11). At the time this photograph was taken the cottages were used as warders' accommodation.

The women occupied a compound in the centre of the island (now replaced by Buildings 12 and 13) while the men were housed in the barracks to the west. This accommodation was recognised as inadequate but few alterations or improvements took place because it was always intended to be temporary.

Prisoners still quarried stone but any building work that took place was executed under contract. The turnover of prisoners was high, with as many as 70 admissions a week. See *Figures 13* and *14* for photos from this period.

In its final years the gaol only housed female prisoners and in 1908 those that remained were relocated to Little Bay.



This ended the island's long role as a prison and dockyard and facilitated its emergence as the State Dockyard.



Figure 14: A weatherboard workroom in the female gaol precinct, c.1890s. Female prisoners carried out needlework for the Government Stores and this photo shows lengths of cloth and the sewing machinery used by the women.

Dockyard and Shipbuilding

Throughout the time that the island was used for institutional purposes the dockyard continued to operate and expand. However, with the closure of the prison in 1869 it could no longer rely on convict labour and its administration was split between the Department of Prisons and the Public Works Department.

Shipbuilding, mostly small scale, began in 1870 and by the beginning of WW I over 150 dredges, barges and tugs had been built. Most of this early shipbuilding activity took place on the slipways located to the east of the Engineers' and Blacksmiths' Shop (Building 138) on the eastern apron.





Figure 15: HMS Galatea in the Fitzroy Dock, 1870. The Galatea was visiting Australia as part of an around the world tour undertaken by Prince Alfred, Duke of Edinburgh. The elegant stone building to the right of the dock is the Engineers' and Blacksmiths' Shop (Building 138), which was built by convict labour in various stages. This photograph shows the first two stages including the bell tower. The building was subsequently altered in the early 20th century by the addition of a second floor to accommodate the brass finishing shop and is now obscured by new buildings that have been erected in front of it.

As early as 1870 the increase in dockyard activity and in the size of the ships created a need for a second, larger dock at Cockatoo. The engineer Louis Samuel won the contract to build a new dock, the Sutherland Dock, which was constructed by free labour between 1882-1890. By world standards the design and construction of the new dock were outstanding.

The construction of the new dock required the excavation of a massive amount of rock and soil and this was used to reclaim land south of the dock, expanding the southern apron and allowing the expansion of dockyard facilities. The northern cut saw the demolition of the isolation cell block next to the Guardhouse. The first structure to be built as part of the dockyard's expansion into the former prison area on the crown of the island was the Mould Loft (Building 6), which was completed in 1911. The new dock also generated building activity on the eastern apron, where the General Store (Building 123) was built between 1901 and 1908. This is one of the most architecturally elaborate workshops and is also associated with the final phase of New South Wales Government control over the island.

