

3.0 PHYSICAL ANALYSIS

3.1 GENERAL DESCRIPTION OF GOAT ISLAND

Goat Island forms an outstanding visual landscape, being one of several prominent Sydney Harbour islands that contribute to the overall beauty and pattern of the harbour. The island, located 1.2 km west of the Sydney Harbour Bridge, is visually prominent in the inner harbour at the confluence of Port Jackson, Darling Harbour and the Parramatta River.

The island comprises a natural land area of approximately 5.4 hectares, with a further 1.1 hectares of landfill and wharfage built over areas originally below high tide level. The island is notable for its steep cliffs, central ridgeline, rocky shoreline, remnant sandstone outcrops and areas of vegetation regrowth. Whilst the island's central position in the inner harbour provides spectacular and varied views from its elevated areas, it is viewed in a number of ways from different parts of the harbour, varying from a vegetated outcrop as seen from the city and Darling Harbour areas to a working shipyard when viewed from the west.

The character of the island has also changed over the last 170 years since it was first developed after settlement. These changes are outlined in detail in both Section 2.4 of this report - an examination of historical photographs, paintings, and engravings - and in Appendix 1 - which contains a series of historic overlay maps - both showing Goat Island at different stages through the mid to late 19th century and through the 20th century.

Modifications to the pre-European landscape of Goat Island have been extensive and substantial, seen in both the landform and the locally indigenous vegetation.

Initially a vegetated knoll with rock escarpments to the water, the island underwent quarrying, benching and cutting in the 1830s and then over the ensuing years had most, but not all, of the natural vegetation removed. The areas of the island that were not completely cleared were around the steep edges to the unaltered escarpments on the western and northwestern edges of the island, that had little functional value for magazine, water police or maritime activities, and were difficult to access or use. The 19th century clearing of vegetation was probably driven by a need for firewood, both for building activities (such as blacksmithing and lime kilns) and for residential fires for warmth and cooking by those residing on the island at various times, as well as by the need to provide cleared areas around the magazine to reduce fire risk.

Similarly the edges of the island that were more easily accessible to the water were developed for access through, initially, stone wharves and jetties and a single timber jetty (1891) and then from 1901 through extensive timber wharves. The addition of wharves around the island has had a significant impact on its shape and form with a recent aerial photograph at Figure 3.2 indicating the contrast between the natural rocky edge and the defined and straight edges of the wharves and sea walls, noting that a number of wharves have since been removed.

Areas of reclaimed land, particularly on the eastern edge of the island, where it is not contained by sea walls, are now eroding, exposing fill material and in some locations exposing the earlier foreshore line.

The island has a central ridge that extends roughly north-south and the landscape is now a combination of dense vegetation and open grassed areas with rocky outcrops looking out both to the east and west. Plantings and regrowth gives the island the appearance, particularly from the water, of being densely vegetated. The vegetation now conceals much of the built development that is remaining on the ridge. A key feature of the island is the Magazine Walk skirting around the southern and eastern edges of the island, providing an outlook extending from Balmain to North Sydney.

The historical aerial and other historic photographs of the island in Section 2.4 show it in various states of clearing or openness, but with consistent retention of planting along the north-western escarpment extending around to the shipyard, and at the southern edge of the

island behind the colonial period buildings. The last twelve years has seen the island substantially re-vegetated, particularly when compared to its appearance in 1961.

Aerial photos in Figures 3.1 and 3.2 show how vegetated the appearance of the island in 2007 (Figure 3.2) compared even to the less vegetated form in 1980 (Figure 3.1).



Figure 3.1 Aerial photo of Goat Island in 1980 (DECC)



Figure 3.2 2007 aerial photo of Goat Island (DECC)

3.2 TOPOGRAPHY

Goat Island is a vegetated Hawkesbury sandstone formation rising to 20m above sea level, approximately 300m wide in a north/ south direction and 180m long in an east/ west direction. The topography is defined by a central relatively flat ridgeline, running north/south, surrounded by embankments, rock outcrops, cliffs and sandstone walls to the waters edge. The overall form and elevational variations of the island are still discernable though it has been substantially altered through quarrying on the south western and eastern aspects of the island, the creation of a sandstone cut to separate the eastern knoll from the rest of the island, and the reclamation of foreshore land. The quarrying and benching for the construction of the Magazine complex has left an area, defined by the fortified wall, with an altered landform and devoid of vegetation.

Approximately two thirds of the original Goat Island shoreline remains in substantially intact form. The main areas of relatively intact shoreline are shown in Figure 3.3 and include the south east, eastern and north western shorelines. The remaining sections of shoreline have been modified to a greater or lesser extent. The modifications tend to fall into two main categories, sections where the original shoreline has been cut back and 'hardened' through the construction of a retaining wall, and those where the land surface has been expanded by the introduction of landfill. This latter category is usually also subject to some form of seawall construction, although in several areas this has subsequently failed, exposing the fill to shoreline erosion. The different types of modified shoreline are also shown in Figure 3.3.

Large areas of both the intact and modified shorelines are obscured by the placement of wharves. The relationship between the current extent of wharfage and the various types of shoreline is also shown in Figure 3.3. The location of wharves is important in relation to modified shorelines, as the wharf structures have arguably played a role in protecting the seawalls from wave action and erosion.

3.3 SOILS

The extent of unmodified soils is an important aspect of the natural heritage of the island. Unmodified soils have the greatest potential to hold remnants of the seedbank of the original vegetation. In many Australian contexts elements of early seedbanks have survived for more than a century. In addition, the structure and nutrient profile of unmodified soils has the greatest potential to successfully propagate and support native species irrespective of the seed source.

There are five processes by which the original soils have been modified on Goat Island, each of which has different implications for the potential for these areas to support native vegetation. The different soil groups on Goat Island are categorised as follows:

1. Unmodified soils. Soils that have not been disturbed.
2. Mildly disturbed soils. Soils where there is evidence of past disturbance which will have altered the soil structure however, there remains some potential for seedbanks and the basic soil characteristics remain suitable for the propagation of locally endemic species.
3. Heavily modified soils. Soils where there is substantial evidence of disturbance and there is a strong likelihood for elevated nutrient status through the addition of fertilisers or seabird nesting. The potential for the successful propagation of locally endemic species is limited.
4. Areas of Fill. These are areas where 'new' soils of uncertain provenance have been introduced. The potential for the successful propagation of locally endemic species is generally limited.
5. No soil. Areas where the bedrock is exposed or the surface has been hardened and covered by concrete, asphalt etc.



Figure 3.3 Plan of Goat Island showing the extent of modified and non-modified shoreline, areas of fill and excavation around the shoreline and the wharfs. This plan indicates that most of the shoreline remains intact or with only very minor modifications to the natural edge. This plan is based on the 2007 aerial photograph and it is noted that sections of wharfs 4a, 4b, 5 and 51 and wharves 52b, 54c, 55a and 55b have collapsed and been removed.

Figure 3.4 shows the areas of the site that have undergone the most modification in terms of cut and fill and where there are substantial changes to the soil class. While all of the soil classes (except class 5) have some potential for the growth of certain native species (eg. *Ficus* sp.), the logical focus for attempts to replicate the original vegetation communities of Goat Island would be in areas with Class 1 or 2 soils which are outside the areas indicated in figure 3.4.



Figure 3.4 Plan of Goat island showing Areas of landform modification. The areas shaded green on the plan are the sections of the island that have undergone substantial landform modification through either quarrying and excavation and or fill including foreshore reclamation and cut and fill to create building platforms. Minor landform changes are not indicated. This plan is based on the 2007 aerial photograph and it is noted that sections of wharfs 4a, 4b, 5 and 51 and wharves 52b, 54c, 55a and 55b have collapsed and been removed.

3.4 FLORA

Before the major phases of European intervention Goat Island is likely to have had a typical vegetation profile similar to the other islands and foreshore areas adjoining the harbour. This would have included Sydney Sandstone Gully Forest and Coastal Sandstone Heath, across the main part of the Island, with species such as Bangalay (*Eucalyptus botryoides*), Smooth-barked Apple (*Angophora costata*) and the Coastal Banksia (*Banksia integrifolia*). In more protected areas the local Port Jackson Fig Tree (*Ficus rubiginosa*), Blueberry Ash (*Elaeocarpus reticulatus*), the vine *Pandorea pandorana* and the ubiquitous *Pittosporum undulatum* would have been present.

Many other species are likely to have been found on the Island, however an extensive list would be conjectural. At least the species mentioned above, as well as a few other locally indigenous species, are still found on Goat Island and are probably the progeny of plants that have survived despite concerted efforts from the 1830s and later in the 19th century to clear this vegetation.

Notable introduced vegetation from the late 19th century and early 20th century include the magnificent Moreton Bay (*Ficus macrophylla*) and Small-leafed Fig Trees (*F. obliqua*) as well as the unusual Ombu (*Phytolacca dioica*) at the southern side of the Island, various date palms including a less common *Phoenix dactylifera*, a large *Bougainvillea spectabilis* once associated with an earlier residence (now demolished) and Coral Trees (*Erythrina x sykesii*) that were planted by the 1910s. There is even a Prickly Pear (*Opuntia* sp.) attempting to cling tenaciously to the northern cliff line as a reminder of an interesting experimental biological control phase during the 1920s.

It is now difficult to appreciate how bare the Island was even as recently as two decades ago as it is now more heavily vegetated, though certainly not entirely with locally indigenous flora.

Aerial photographs in Figures 3.1 and 3.2 illustrate the radical change in vegetation cover on the island since 1980. Various well-meaning, though less than desirable, phases of new planting have left many species across the Island that, collectively with other regenerating and self-propagating species, have begun to fill the hitherto distinctive open spaces on the island as well as colonise refuge areas of locally indigenous species.

Though many acknowledged weeds - such as Camphor laurel (*Cinnamomum camphora*), Hackberry (*Celtis* spp.), Mickey Mouse Plant (*Ochna serrulata*), Privet (*Ligustrum* spp.) and African Olive (*Olea europaea* var. *Africana*) - were popular in the Colonial period, not all earlier planting endeavours may necessarily be responsible for the various weed species on the Island, as seed dispersal by birds may have introduced some of these species.

Other species with the propensity to become a nuisance are likely to have been used as feature plants within garden bedding or otherwise innocently introduced as feature trees - eg. Giant Bird-of-Paradise (*Strelitzia nicolai*), *Furcraea foetida* and *Lantana*. The latter include many of the trees and palms that have become associated with various precincts. These species include the non-indigenous fig trees, Kaffir Plum (*Harpephyllum caffrum*), Brush Box (*Lophostemon confertus*), Canary Island date Palm (*Phoenix canariensis*) and the non-indigenous Wattles (*Acacia* spp.). Other species currently becoming a nuisance include *Convolvulus*, *Cestrum* and *Cassia*.



Figure 3.5 *Furcraea foetida*. This plant is to the north of the Harbour Master's residence, others to the east of the Recreation hall site are under tree canopies and are much darker green



Figure 3.6 *Nerium oleander*. This plant at right is one of many oleanders near the southern part of the Island's upper central area



Figure 3.7 *Yucca* sp.



Figure 3.8 *Cordyline australis*

3.5 FAUNA

Goat Island may once have hosted a diversity of fauna species due to the varying vegetation and habitat types. The fauna assemblages would quickly have become depleted following clearing of the native vegetation and habitat types and the introduction of exotic predators (eg. feral cats and black rats). The current status of the Island's fauna is outlined below.

MAMMALS

The only remaining native land mammal species recorded recently on the Island (2000) is the Eastern Water Rat (*Hydromys chrysogaster*). The Grey-headed Flying Fox (*Pteropus poliocephalus*) regularly visits the Island at night to forage from food trees but utilises day roosting sites in other areas, such as the Royal Botanic Gardens. Several insectivorous bat species have been recorded, including the Eastern Bent Wing bat (*Miniopterus schreibersii oceanensis*), Large Forest Bat (*Vespadelus darlingtoni*) and Gould's Wattled Bat (*Chalinolobus gouldii*), but it is not known if any of these species breed on the Island.

The Island now has only one introduced vertebrate, the Black Rat (*Rattus rattus*). The Rat is probably partially responsible for the decline in reptiles and ground nesting birds. Feral cats (*Felis catus*) were recorded on the Island following the departure of the Maritime Services Board, however the last cat appears to have died in 2003.

REPTILES

Only two reptiles have been recorded on the Island, the skinks *Eulamprus tenuis* and *Lampropholis delicata*.

AMPHIBIANS

The Striped Marsh Frog (*Limnodynastes peronii*) has been recorded breeding in a pond.

BIRDS

The following table lists common bird species recorded on the Island:

Table 3.1 Bird breeding on Goat Island

Birds recorded breeding on the Island	Birds not recorded as breeding on the Island
Silver Gulls	Little Pied Cormorant
Masked Lapwing	Pied Cormorant
Noisy Miner	Great Cormorant
Tawny Frogmouth	Little Black Cormorant
Australian Magpie	Feral Pigeon*
Grey Butcherbird	Spotted Turtle Dove*
	Rainbow Lorikeet
	Laughing Kookaburra
	Welcome Swallow
	Willie Wagtail
	Australian Magpie-Lark
	Pied Currawong
	Common Myna*
* introduced	Australian Raven

Migratory, transitory or irregular bird species include:

Table 3.2 Birds recorded on Goat Island

Birds recorded breeding in Park	Birds not recorded as breeding
Brown Quail	White-necked Heron
	White-faced Heron
	Maned Duck
	Crimson Rosella
	Black-faced Cuckoo-shrike
	Golden Whistler
	Yellow-faced Honeyeater
	White-naped Honeyeater
	Silvereve

A Silver Gull colony commenced breeding on the Island in 2004. The concentration of birds, their faeces and nesting is impacting on the ground vegetation of the Island, which will, in turn, continue to reduce available habitat for other native birds. There is no historical evidence of the Gulls ever having previously established on Goat Island.

THREATENED SPECIES

Only two threatened species classified under the Threatened Species Conservation Act 1995 have been recorded on Goat Island: the Eastern Bent-wing Bat (vulnerable) and the Grey-headed Flying Fox (endangered).

3.6 THE ARCHAEOLOGY OF GOAT ISLAND

PRE CONTACT PERIOD

The only identified site remaining from this period is a remnant shell midden now overgrown with vegetation (62). Earlier discussion (Section 2.2) and Appendix 4 provide a fuller discussion of this period of the archaeology of Goat Island in the Port Jackson context, outlining the likely types of Aboriginal sites which may have been present on the Island prior to disturbance through early Colonial activities such as quarrying and lime burning.

COLONIAL PERIOD

The Colonial Government's decision to utilise the Island for construction of a magazine complex influenced the development and subsequent archaeological landscape of the Island. Although currently overgrown with vegetation in many locations, there is evidence of quarrying in a number of locations. The extraction of sandstone, particularly in the south western part of the Island, had a two-fold purpose: that of supplying building material for construction on the island and other locations in Sydney and benching - the preparation of platforms clear of vegetation to construct the magazine complex and other structures on the island. The magazine quarry wall (72), where the bulk of the sandstone was sourced, has been finished in a way that conceals its initial function and now forms the substantial base of the fortified wall (71) surrounding the Colonial magazine structures. Excavation in combination with removal of much of the vegetation on the Island during the 19th century resulted in soil movement down slope and the necessity to construct retaining walls around the barrack (25), barracks kitchen (26) and various parts of the shoreline. Modifications associated with the early preparation of the Island and the construction of ancillary structures were not necessarily recorded by the authorities and were probably considered insignificant events in the overall scheme of the Island's operations.

LIME KILNS

Some of the features that do not appear in the contemporary documentary sources include the lime kiln (63) identified by Kerr (1987) and the partial remains of another (95) that was identified during the recent field survey for this project. It is possible that other lime kilns existed on the Island. The newly identified lime kiln, constructed of sandstone blocks, is built into a low rock face, which appears to be a mixture of natural and cut stone. It is beneath the southernmost *Ficus* of the pair in the south west corner of the island and directly behind the boat shed (23a) near a rock overhang. No evidence of a midden was noted beneath or around the overhang but shell fragments were noted eroding from between the roots of the *Ficus* directly above. This has been identified as a possible remnant shell midden (68). It should be noted however that when the boat shed was constructed in the 1940s the rock face to the south was cut back to accommodate it and the shed was built within 600 mm of the west facing rock face. Any midden in the vicinity is likely to have been removed by this period but it is possible that a midden (and therefore evidence of one) was located in this area, prompting the construction of the kiln.

Although using the same general design of cylindrical shaft kilns, the two lime kiln structures on Goat Island display different construction methods. The larger kiln (63) is built similarly to a "D" shaped kiln in that a large part of the structure has been cut out of the bedrock to form a cylinder, which is closed off by a flat masonry wall. This larger kiln however, does not fall into the accepted size range of a "D" shaped kiln being of smaller dimensions and the presence of multiple ash boxes cannot be determined as the base of the kiln is now obscured by vegetation.

The partial kiln (95) located in front of the Barrack building (25) is constructed of sandstone blocks built into the bank, of which approximately 120 degrees of the original circumference survives. The simpler construction of the partial kiln may be an indication that it was one of the earliest built, as it was close to the shore and a potentially abundant source of shells.

The presence of lime kilns may well account for the general lack of shell middens on the Island, as the shells would have been utilised in the production of lime.

BLACKSMITH'S SHOP

Another archaeological feature on the Island that is not identified in the contemporary sources is the blacksmith's shop archaeological site (67). Cuts into the bedrock and the remnants of an ashlar block wall have been attributed by Kerr to a "presumed blacksmith's shop" based on a number of hand forged iron artefacts scattered in the area¹. Kerr also dates it to the 1830s, prior to the construction and use of the Queen's Magazine. The date that Kerr proposes is credible and would suggest a sequence that places the kilns and the blacksmith's shop (if this is what the site represents) in the very earliest phase of Colonial use: quarrying to extract building material and to prepare the area for the magazine complex as well as construct stone jetties for access; a blacksmith's shop to produce and maintain quarrying equipment; and the kilns to begin stockpiling lime in preparation for the early building phase.

At the completion of the quarrying operations and the magazine complex construction, a blacksmith's shop so close to explosives would not have been prudent and the shop would most likely have been decommissioned. The artifacts noted by Kerr were not visible on the surface during the last field survey, nor has there been any further historical research or survey to determine the layout, however cuts into the bedrock and the ashlar wall are still present. The item retains high archaeological sensitivity and clarification of the nature of the structure would enhance an understanding of activities carried out on the Island.

The kilns were temporary structures abandoned when no longer needed but, unlike the blacksmith's shop, they have survived in partial form through a combination of their robust construction and their inconspicuous locations.

ANDERSON'S COUCH

Another early feature on the Island referred to as "Anderson's Couch" (61), is where the convict Charles Anderson is reputed to have been chained to a bench cut into the face of a rock outcrop. Whilst weight is given to anecdotal evidence and oral history, little substantive evidence has been found to confirm this use. The feature's proximity to the lime kiln (63) should also be considered in an explanation for its existence. The ground at the foot of Anderson's Couch has been built up with deposit and the site retains high archaeological potential for future clarification of its function.

STOCKADE, BARRACKS AND GUNNER DAVIS COTTAGE

In the earliest phases of the Island's Colonial use, a temporary timber barrack was erected on the ridge. Later, Gunner Davis' cottage was constructed on the ridge.

Possible archaeological sites from this phase, which are supported by documentary evidence but not by visible archaeological evidence, include the temporary convict stockade, the temporary barrack (also known as the house on the hill), privies and Gunner Davis' cottage. Despite images, plans and descriptions of the buildings, no archaeological investigation has been undertaken. A number of archaeological sites have been identified on the hill which may (or may not) relate to the above buildings: Sandstone footings (91), Artefact scatter (93) and Quarrying sites on ridge (77).

The Sandstone footings (91) disappearing beneath the western side of the former tennis court (15b) have been attributed to Gunner Davis' cottage although the most likely location of his cottage is where the Artefact scatter (93) has been located approximately 30 m to the north east and upslope.

Despite recommendations made by the Storage of Gunpowder Board in 1875 to remove the merchant's powder, clear all the underbrush from the Island, and remove Gunner Davis' cottage, the powder was still there ten years laterⁱⁱ and it is unclear how much longer the cottage survived demolition. A photograph taken by John Degotardi dated to between 1875 and 1879 shows a building on the ridge of the Island that cannot be represented by the sandstone footing adjacent to the tennis court as the building would not be visible from the angle that the photograph is taken.

An 1857 painting by Rebecca Martens shows a building on the ridge at a time when Gunner Davis' cottage was still standing. It is interesting to note that the artefact scatter (93) is eroding out of the side of the ridge, in the location depicted in the image. Although it can be argued that Martens' illustration is not a wholly truthful representation of what she saw (refer discussion Figure 3.10), another photograph (not Degotardi's) dated prior to 1885 shows a single-storey cottage on the ridge, which confirms the existence of a building at this location after the demolition of the timber barrack and long before the erection of the recreation hall (73) in the 1940s.

The probable location of Gunner Davis' cottage is on the ridge rather than by the tennis court. This assertion is based on several factors - the presence of a cottage-like building on the ridge (as shown in Martens' 1857 illustrations Figures 3.9 and 3.10, and after the temporary barracks were dismantled in 1842), the 1870s Degotardi photograph, and the presence of the artefact scatter. Whilst Kerr appears to be confident that the footings by the tennis court belonged to Gunner Davis' houseⁱⁱⁱ, the photographic evidence does not support this. Identification of the archaeological sites may be possible through physical investigation but for the present, neither site can be positively identified as Gunner Davis' cottage.

WATER POLICE BUILDING

The Water Police building located on the separated eastern tip of the Island is constructed on a modified building platform and retaining wall. Several phases of additions to the building were undertaken during the Colonial period and a mound that appears to be the building platform of an undocumented structure is visible on the western side. The underfloor deposit in the Water Police building is largely intact and represents an archaeological resource of high

sensitivity. Evidence of the wharf and stone steps serving the Water Police Station has survived (87, 101) and there may be evidence of the original Water Police stone jetty (98) beneath later timber wharves. The location of the earliest privies is not known.

ARTILLERY SERGEANT'S COTTAGE

The 1865 Artillery Sergeant's cottage would also retain intact underfloor deposits, and there are several locations around the cottage where the sites of earlier outbuildings including a privy are recorded. These sites are likely to have archaeological potential.

OTHER SITES

Documented archaeological sites from the later colonial period include the sites of two 1870s explosives magazines (117 and 131). Both sites are likely to be archaeologically sensitive.

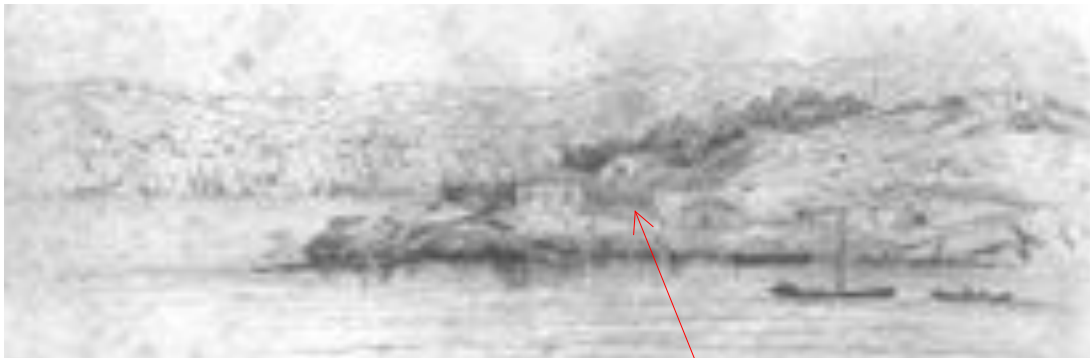


Figure 3.9 Mitchell Library, image No: Pic Ac 5864. Rebecca Martens produced at least two artistic renditions of Goat Island in 1857 - a sketch as well as a watercolour. In the above sketch, the Barracks, Queen's Magazine, Kitchen Cottage, Gunner Davis' cottage on the hill and at least one building in the privy area beside the Kitchen Cottage are all visible. A wall beside the kitchen shows a darkened area (doorway?) to the left. This may be the Kitchen Cottage Alcove (26a) (red arrow), but it does not appear in the watercolour. The view in both images is to the north west with the Barracks Building (25) the largest visible structure. It is clear that Martens has embellished the landscape around the Island to a degree, and all the buildings in the watercolour do not appear in the sketch.



Figure 3.10 Rebecca Martens, a watercolour rendition of the same view, 1857. Note in this image, three outbuildings appear to the east of the Kitchen Cottage (which is likely to be artistic license: only one outbuilding is evident in this location in later photographic evidence). Note also the high cliffs in the background, which do not exist in reality, in the location of Balls Head.

It is not possible to accurately predict the existence and survival of smaller, undocumented sites on the island, however consideration should be given to the presence of features that would be associated with the settlement of the island.

Features likely to have been present during this phase include privies, wells, tanks or cisterns for supply or storage of water, sheds and outbuildings for storage of materials such as fuel, gardens, retaining walls and rubbish dumps. Archaeological fieldwork undertaken for this CMP has identified features such as: a stone structure on the shore (92), which is a possible privy remnant and footings of former outbuildings to the Barracks Kitchen (94).

MARITIME PERIOD

Sydney Harbour Trust: 1901-1936

During the SHT phase a range of buildings were erected and works carried out that now have potential archaeological value.

In the centre of the island the Harbour Master's house erected between 1901–1903, fire brigade barracks (the 1912 one extant) and nine residences, completed by 1923, for the firefighters and their families. Six of these weatherboard residences were demolished by 1970 and are now archaeological sites on either side of the Magazine Walk at the eastern side of the Island (sites 81a, 81b, 81c, 81d, 81e, and 81f). These sites have high archaeological sensitivity.

During this phase, changes to earlier buildings and features were also made including extensive changes to the Colonial Magazine including the removal of sandstone walls and replacement with corrugated iron walls.

In the magazine and shipyard precincts, the addition of sheds, amenities, the ship yards and a 150 ton slip, new sea walls and wharves was undertaken. The kitchen and barrack buildings were converted for use as residences with the removal of internal walls and addition of a laundry, WC and bathroom. The additions were removed in 1970 and archaeological testing has confirmed their remains have survived.

The Water Police precinct underwent modification to the shoreline, which included land reclamation and the construction of various buildings and the addition of timber wharves.

Other undocumented features include a possible drainage cut oriented north-east south west in the bedrock behind the Harbour Master's residence and continuing down slope past the existing cottages (111). Numerous engravings are also found in this area. A mound to the west of the Harbour Master's house may be related to a previously unrecorded building. The Residential, Water Police and Magazine precincts were supplied with septic systems at an unknown date, but these have been superseded by sewage connection to the mainland. Terracing and excavation for the addition of services appears to have been common during this phase (evidence at site 102).

The Maritime Services Board: 1936-1993

The SHT was absorbed into the Maritime Services Board (MSB) in 1936. The archaeological resource for this period reflects the change in use of the Island to the residence of the MSB fire brigade staff and their families and a focus on repair and construction of MSB vessels. Recreational facilities and their associated amenities as well as pathways were provided for the entertainment of the residents and by 1941 the Island boasted a tennis court (15b) and pavilion (15c) and a Recreation Hall (73), all of which appear to have been constructed either near or on top of the remains of Colonial period buildings. The construction of the tennis court required fairly extensive modification of the landscape including blasting and removal of rock outcrops at the northern corner in order to prepare a flat surface. A swimming enclosure was also installed on the western side of the Island further modifying the shoreline.

The expansion of the Shipyard precinct required cutting into the original shoreline on the western side of the Island impacting on the wharf and buildings serving the magazine. In the magazine area, tramways were installed along with cranes, further wharves, foreshore buildings such as the Ship Repair Workshop (1) and seawalls, either removing the original shoreline or filling and building over it.

Most of these sites have archaeological potential.

NATIONAL PARK PERIOD: 1993 ON

Under the management of the National Parks and Wildlife Service (NPWS), few changes have been made that impact on the level of preservation of the potential archaeological sites.

Management of the archaeological resources of the Island will become increasingly important in this last, ongoing phase. While a large part of the attraction of the Island for visitors is its history, some of that history is now in archaeological form, and increasingly obscured or overgrown by a range of vegetation. The impact of weeds and other vegetation on the archaeological resource will require ongoing management. Revealing select sites has the potential to enhance the interpretive capabilities of the Island.

CONCLUSION

The heritage of Goat Island is the combination of its various parts, including extant structures, archaeological features and the landscape. The archaeological resource on the Island possesses high scientific value and a high level of interpretation potential. Known and potential sites have the ability to add to our knowledge of the Island's development and clarify outstanding issues of identification.

While some of the items on the Island would benefit from archaeological excavation for conservation, maintenance or interpretation purposes, retention of the archaeological resource *in situ* is generally the most appropriate management option. Archaeological excavation must add substantially to the body of knowledge for that item or place to be justified. In the case of Goat Island, a number of items are not well understood or deteriorating and excavation may enhance their cultural significance.

3.7 WHARVES

IDENTIFICATION OF THE WHARVES

The following table is a complete list of all the wharves identified on the island.

Table 3.3 Wharves UPDATE THIS SECTION TO REFLECT CURRENT SITUATION

Item No	Date of construction	Description and Status
STONE JETTIES		
64	1835	Stone jetty - intact
66	1835	Stone jetty remains - ruin
97	1835	Stone jetty remains - within reclaimed area
98	1835	Stone jetty remains - within reclaimed area
TIMBER WHARVES AND PILES		
56	1941	Steps and walkway - steps collapsed
54b	1941-43	Boat Pens and walkways - intact
55a	1942	Northern broadside wharf - demolished 2008
55b	1942	Northern broadside wharf - demolished in part 2008, western end remains intact and repaired 2010
52a	1942-43	Eastern broadside wharf - poor condition
52b	1942-43	Eastern broadside wharf - demolished 2008
54a	1942-43	Ferry wharf and steps - poor condition
54a	1944	Ferry wharf extension - poor condition
4a	1946-1949	Shipyard broadside wharf - partially rebuilt
4b	1946-1949	Shipyard broadside wharf - poor condition, grids 32-37 collapsed. Wharf scheduled for removal.
5	1946	Coal bunker wharf – collapsed, piles remaining, scheduled for removal
5a	1963c	Line of fenders - intact
51	1969	Finger wharf - decking demolished 2009, steel piles remain



Figure 3.11 Site plan of Goat Island showing location and identification of wharf structures. Wharves that are assessed in this report are coloured orange and identified by existing numbering systems. Plan based on JS Kerr plan of Goat Island contained in the 1987 Goat Island Investigation.

3.8 PRECINCTS

For convenience, and not based on any operational or historic basis, the island in earlier studies was divided into seven precincts. This study has retained this approach for consistency and this section provides a short description of each precinct. Detailed descriptions of some significant elements within each precinct are located in Volume 3 Inventory Sheets. The overall map of the Island showing all significant sites and with precincts shown is at Figure 1.5, earlier in this report.

MAGAZINE PRECINCT



Fig 3.12 The magazine precinct is the remaining area occupied by the colonial magazines and their related infrastructure but does not include the shipyard precinct, which was overlaid on the waterfront from 1924. It includes both extant buildings and the sites of buildings and early features.

This is a core area of the island that contains the majority of the colonial period buildings centred around the extensive quarried cut bench for the construction of the powder magazines and their enclosing fortified stone wall. The area was significantly altered by the overlaid maritime shipyard use which reclaimed the foreshore, placed buildings and wharves into the forecourt of the magazine and saw some significant changes to the colonial period buildings.

While the western edge of the site is the most modified part of the island, its location facing away from the city and the magazines sheltered, in case of explosion, by the island itself, the southern and eastern edge of the precinct retains much of its natural form and edge to the harbour. This has been modified immediately to the south of the barracks and kitchen where a stone jetty was located but further east there is little modification to the shoreline. Above the escarpment line there is evidence of minor quarrying extending back through the area to create the route for the path that has traversed the island since first development and possibly earlier, for the construction of the blacksmith's shop and around the lime kiln. There are also potential archaeological sites related to the colonial period in this area possibly related to privies and outbuildings.

Within the Magazine Precinct exists a group of plantings of historical and aesthetic significance located near the south-east and southern part of Island including:

- 2 x *Ficus macrophylla* near SE landing area (Item No.132)
- 2 x *F. macrophylla* and 1 x *F. obliqua* east of 1838 kitchen block (Item No. 133)
- 1 x *Phytolacca dioica* to the NE of same (rare at this age in Sydney with only two others known of this size at the eastern entry to Centennial Park and one at Babworth House, Darling Point) (Item No. 134)
- 1 x *Phoenix canariensis* south of curved 1838 defensive wall (an older palm planted in the 1930s within the Maritime Period: SHT phase) (Item No. 136)
- Surviving *Erythrina sykesii* along southern shore (probably interwar plantings associated with the Maritime Period: SHT phase) (Item No 141)

The Magazine precinct effectively falls into three separate areas, the area enclosed by the fortified wall, the area around the barracks and kitchen extending down to the west and the area to the east of the kitchen which retains a more natural character even though the landscape is dominated by exotic plantings.

This area of the island has been heavily modified from earliest colonial use and retains almost no indigenous vegetation.



The elements of the precinct are set out in table 3.4.











Figure 3.13 Plan of Magazine Precinct indicating the various elements with their date of (generally) first or major construction within the precinct.




Table 3.4 Elements of the Magazine Precinct





Note items for which detailed inventory sheets have been prepared (contained in Volume 3: Heritage Inventory) are marked with an * next to the item number in the table below.




Item No	Date	Name	Level of intactness	Condition
Aboriginal Use and Contact				
-	-	-	-	-
Colonial Period				
15*	1836	The Queen's Magazine	Largely intact	Good/fair
			<p>The Queen's Magazine is a rectangular shaped building of block sandstone construction with a gabled slate roof. An interior stone vault is supported by massive buttresses along the side walls. The main entrance doors, located on the north elevation, are original timber, sheeted over with copper on the outside. Directly above the entrance is a hood mould integral with the stone lintel. Above the hood mould are two sloping chases with two rectangular sockets at their outer ends. A broad sandstone block protrudes from the adjacent stonework directly above the pediment forming the sill of the upper level opening. The upper level shutters are screened by a grill of fine copper wires within a weathered timber frame and the opening has a hood mould above similar to that over the entry doors. Above this is a rectangular date plaque toward the apex of the gable. Two ventilation assemblies consisting of a hexagonal and single vertical slit, each with hood mould, are located symmetrically either side of the main doors. There are two rectangular openings in the wall close to ground level. Conduiting runs across the face of the north elevation, and on the west corner are a series of corroded metal fixings.</p> <p>The east and west elevations consist of a series of sandstone buttresses forming evenly spaced bays. At the centre of each bay are hexagonal and vertical slit with hood moulds over, matching those on the gabled elevations. Toward the base of the wall within each bay is an opening in the stonework. On the south wall (inside the corrugated iron shed one of these openings has a bronze grill). An upper opening and ventilation motifs similar to the north elevation are evident on the south elevation, above the roof the shed.</p> <p>The roof to the magazine is covered with weathered Welsh slates which are randomly scarred, quite extensively toward the ridge. The lower portion of the eastern roof of the gable is a darker colour than the rest of that roof. The ridge capping is lead and appears to be in good order. Copings to the gable ends and buttresses are broad stone cappings, some of which are weathered.</p>	
19*	1836	The Cooperage	Largely intact	Good/fair
			<p>Originally the Cooperage the building was quickly adapted for other uses and has principally served a storage function over its life. It is constructed of coursed dressed stone blocks with small corner buttresses, stone gable ends and stone copings to the parapets. The roof is slate to match the magazine. The building has timber joinery windows and doors, a timber framed roof and floor. Symmetrically designed it was connected with covered ways that are since removed. A door to the rear elevation has been infilled. It is currently fitted out with storage racks as part of the shipyard use.</p>	




Item No	Date	Name	Level of intactness	Condition	
20*	1839	The Stores Building	Largely intact	Fair	
			A dressed and coursed stone shed built adjacent to the quarry wall to house a new cooperage with a simple skillion roof with skylights now clad in corrugated iron. It was built by a contingent of 27 prisoners on commuted sentences from the Moreton Bay Penal settlement. Similar to the design of the barracks the building has a recessed verandah with two squared stone columns and a timber floor, a single room at each end of the building, the eastern room with a later window cut in and the western room having an early timber framed double hung multi-paned window.		
21*	1852-1859	The Colonial Magazine	Extensively altered	Fair/poor	
			Originally a single bay gable roofed sandstone powder magazine designed by Government Architect Edmund Blacket, it was extended in 1859 by Government Architect Alexander Dawson with 2 additional sandstone bays to form a 3-bay building. In 1925-1931 under SHT control, most of the stone walls were removed leaving only some stone piers. At a later period at the southern end even the stone piers were removed, and the building was reclad in corrugated iron. It has a later corrugated iron skillion roofed addition to the north end and is now completely clad in corrugated iron with a concrete floor to most of the building. A small section of floor has been removed in one corner revealing the original stone foundations.		
25*	1838	The Barracks	Largely intact, early form largely recovered in restoration works	Good/fair	
			Built as the barracks for the garrison it is of sandstone construction with a hipped slate roof and loggia supported on pairs of Ionic stone columns. The building underwent conversion in the late 1850s/60s to accommodate 16 men comprising a Foreman of Magazine, two labourers and a military detachment of 13 who had previously been housed in a 'barrack room' at the southeast end. Works included removal of the wall between the barrack room and Foremans Office (creating a larger living space for the detachment at the southern end of the structure), refurbishment of the central four rooms occupied by the Magazines Foreman which featured three chimneys, use of the northernmost two rooms to accommodate the two labourers. During 1924 the Sydney Harbour Trust converted the building into two residences with various timber additions and new openings in the walls, and removal of two internal walls. Much of this work was reversed by the Maritime Services Board in 1978, when the building was altered for museum use, returning it to its approximate 1850s form. SHT alterations which remain include the blocking up of the rear doorway that formerly connected to the kitchen beyond (which remains blocked), pressed metal ceilings and fireplaces added to the interior in 1924.		
26*	1838, 1857, 1887	The former Barracks Kitchen, now known as the Kitchen Cottage	Extensively altered and extended	Fair	
			Originally a 2 room sandstone kitchen building located symmetrically behind the barracks building of sandstone with a hipped roof, it was converted and extended to 4 rooms in sandstone c1857 with a skillion roofed addition to the north side; again extended c1887 with rendered brick laundry/wc extension to northern end of west elevation; prior to 1924 the SHT undertook a rendered brick extension to the east and alterations to change use to a cottage; 1956 MSB sunroom extension and removal of sandstone walls to north.		




				
26a*	1838	Kitchen Cottage Alcove	Partially intact	Fair/poor
		<p>At the rear of the kitchen is an alcove partially cut into the rock face on the western side and constructed of 8 courses of stone on the eastern side. The roof consists of at least 4 large lintel stones 150 mm thick x 1250 mm wide x 680 mm long. The interior has been painted or lined in the past and measures 2.4 m in depth x 1.9m in height. This may have acted as a food or wood store although it is particularly well constructed and in good condition.</p>		
61*	1836	Andersons couch	Intact	Good
		<p>A large rock outcrop adjacent to the path on the southern side of the Island contains a cut shelf measuring 1.5m long and 300mm-500mm wide and 600mm above the ground surface. Evidence of three attachments to the rock and a number of sandstone blocks in the ground in front of the shelf.</p> <p>A recalcitrant convict, Charles "Bony" Anderson, was chained to a rock in Sydney Harbour for several weeks before being transported to Norfolk Island. This place has been associated with his incarceration, although no descriptions of the exact location are known.</p>		
64*	1833c	Stone jetty	Largely intact but partially covered by later works	Fair/poor
		<p>The first jetty was built of stone quarried from the island and completed in 1833 prior to the construction of the magazine. Remains of this are likely to be the oldest surviving built structure on the island. The jetty located at the western side of the island in front of the barracks and adjacent to the boat shed is in the same location as the original jetty but is likely to be rebuilt. It consists of at least four courses of massive ashlar blocks and a set of narrow stairs.</p> <p>The jetty was extensively modified in 1862 although the lower courses appear to be original. A more recent sandstone sea wall (1925) has been partially built over the northern edge of the jetty on a slightly different alignment.</p>		





Item No	Date	Name	Level of intactness	Condition
66	1835c	Stone jetty remains	A ruin below high water mark	Ruin
			<p>Located on the south western end of the Island, the jetty is almost completely destroyed although still well defined at both high and low tide. The 1985 survey identified at least three courses still standing while it appears that only one course now survives intact, the rest is rubble. It measures 16m x 2.5m and blocks have been robbed to create the swimming pool on the western side.</p> <p>Several authors suggest a range of dates for construction between 1840-1899. Hosty (HLA: 17) states the stone jetty dates between 1839-42 but it is not on plans dating to 1844. The HLA phasing plan places it post 1860 and Thorp dates it to phase three 1840-1899 and it does not occur on plan in Kerr's report until 1891.</p> <p>There is no evidence of access to the jetty.</p>	
67*	1830s	Remains of Blacksmith's Shop	Archaeological site, markings on rock face remaining	Good/fair
			<p>Located on a rocky outcrop to the south east of the magazine wall, the site consists of a number of channels and slots cut into the rock face and a partially intact sandstone ashlar wall. The cut rock face appears to form the eastern wall of several structures including an 'L' shaped cutting indicating a structure built against the rock face and a wall consisting of six courses of ashlar sandstone extending from the cut rock face approximately 20 m to the north. The blacksmiths shop is not described in documentation nor is it located on any plan, so interpretation is speculative. No artifacts have been observed or recovered during any studies in the past. The retaining wall of the tennis court sits above the rock platform directly behind the rock face.</p>	
68	Pre 1830	Shell deposit	Remnant, covered by grasses	Poor
			<p>A small deposit of shells found within the root system of the southernmost fig tree by the path. The deposit may be a shell midden, but is more likely to be related to the operation of the kiln (item 95) directly below.</p>	
69*	1836	Magazine Walk	Alignment intact, reworked	Good
			<p>It is likely that this alignment operated from the first development of the island as it connects the outbuildings (94), Anderson's couch and the lime kiln all from the 1830s and would have been the easiest and most level route between the ends of the island. Later the 1870 magazines were built on its alignment.</p>	




Item No	Date	Name	Level of intactness	Condition
70	1838	Magazine precinct Stone retaining walls	Largely intact	Good/fair
			A series of coursed stone retaining walls behind the barracks and kitchen block to provide a levelled platform for the construction of these buildings. These walls are more rustic in construction than the fortified wall but are well laid and remain in sound condition.	
71*	1838	Fortified wall and sentry box	Largely intact	Good/poor
		 	A coursed stone perimeter wall to the north, east and south of the magazine built on the edge of the quarry with a gateway, loop-holes and single sentry box on the southern alignment. The wall is finely dressed with even courses and the main gate is carefully detailed. The wall itself is plain coursed sandstone with a curved projecting coping. The wall is of considerable height at its western end and lower where it tops the quarry face. It is a compound wall rather than a blast wall (for security rather than for the containment of explosions), consistent with the standard British Imperial plans for early to mid 19 th century powder magazine complexes. However, the wall's construction by convicts in locally quarried sandstone gives it unique links to Goat Island and the early 19 th century history of the colony of NSW and of Sydney. British Imperial Infantry and artillery units sent to Goat Island on Garrison duty to guard the magazine between the 1830s and 1870 left a record of their presence by carving their regimental numbers on the sandstone sentry wall. The 'graffiti' records the almost continuous occupation by Imperial infantry regiments till 1870 and indicates which units spent time on the Island. The sentry box and a small section of wall to the immediate east of the sentry box appears to have been added to the wall slightly after the completion of the remainder of the wall and is of a different sandstone (possibly sandstone quarried from Barney's Cut in 1837-1838) (petrographic analysis by D. Young, 2007).	
72*	1830s	Magazine precinct quarry face	Largely intact quarry faces remain	Good/fair
			A quarried rock face up to approximately 7 m in height and related to the construction of the Queens Magazine, underlies almost the full extent of the Magazine Wall (no. 17). In 1833 ironed gangs were reported to be employed quarrying at the western end of the Island to level the ground and to provide stone for the magazine and a wharf. Apart from the obvious flat picked surface of the rock face, there is very little evidence of quarrying techniques. Several vertical and horizontal slots are cut into the rock face around the cooperage shed roof suggesting the roof may have been replaced. The Queens magazine and the cooperage are constructed from the same stone as that excavated from the magazine precinct quarry (Dr. R. Franklin.). The quarry produced high quality sandstone in substantial dimensions. A considerable amount of the stone was also cut for public building construction in Sydney. The large quarry into which the magazine complex was placed was cut by convicts to provide the stone for the buildings and the fill to create the edge of the levelled (or benched) platform on which the buildings are located. The quarry face remains largely in the form that it was cut with evidence of excavation, the quarry floor is up to a metre below the current ground level, allowing for foundation areas and drainage. It appears that the quarry has not been reworked or enlarged after the magazine was complete.	






Item No	Date	Name	Level of intactness	Condition
92	1830s	Stone structure on shore	Archaeological site	Poor
			Located on the water's edge to the south of the kitchen and outbuildings. Consists of two stone walls 7 courses high (approx 1.2m) which meet at right angles at the base of the retaining wall and adjacent to the submarine cable. Large pieces of slate and numerous artifacts are located here as well. No documented evidence for its function.	
94*	1838-1891	Privy and outbuildings site	Archaeological site, no visible remains	n/a
			Located to the east of the kitchen building, the rock face that runs around the southern edge of the island is extensively quarried. Historic plans and documents locate privies and other out buildings in this position. The site consists of an 'L' shaped cut and several square and 'V' shaped channels likely to relate to the 1860s privy and drainage for the kitchen gardens above and to the north of the area, or simply as a source for quarried stone. Two courses of brick channeling that were identified in 1985, were not visible.	
95	1830s	Remnant lime kiln	Archaeological site, kiln altered by later construction	Poor
			In the rock face to the rear of the boatshed the partial remains of a circular stone structure consisting of 9 courses of ashlar stone 2.5m high which would have had a diameter of approximately 1.5m. The retaining wall to the north on which the fig tree is growing was constructed later and on a different alignment to the circular structure. The construction of the retaining wall or the boat shed may have resulted in the disassembly of the structure and incorporation of the stone elsewhere.	



Item No	Date	Name	Level of intactness	Condition
99	Colonial period to Maritime Period	Gardens and garden features	Site of Garden and garden features related to Barracks (25). This is also the location of the Canary island date palm (136)	n/a
			Remnant garden plantings in the Barracks area, including Canary Island Date palm (Maritime period) .	
109	1838c	Site of former building	Archaeological site, grassed over	n/a
			Adjacent and to the north of the barrack building a raised rectangular mound over which a later stone retaining wall is constructed. Gardens and a possible outbuilding were located here.	
115	1838c	Stone retaining wall and steps	Remains of pathway	Deteriorated
			Between the barracks and the fortified wall a low stone wall and remnant steps indicating a path leading around the wall.	
119	1890s c	Foreshore fill site	Unknown	Eroding
		An area along the southern foreshore above the rock escarpment that has been filled to create a levelled platform around the colonial and later buildings. The extent of fill is not known however it can be partially ascertained by inspection of the eroding edge that has revealed fill and artifacts.		

Item No	Date	Name	Level of intactness	Condition	
132	mid 1880s	2 Moreton Bay Fig Trees (<i>Ficus macrophylla</i>)	Mature	n/a	
			Two mature Moreton Bay Fig trees (<i>Ficus macrophylla</i>) remain either side of the ascending pathway near the southwestern slipway and appear to have been planted about the mid-1880s. Safety reports have been completed for the trees by Naturally Trees Arboricultural Consulting (Items 5 and 6) in 2005 and recommended actions carried out. The surface roots of the southern-most tree have enveloped a loose sandstone retaining wall such that, together, they form an interesting sculptural feature. The other tree has large areas of decay around its base and its southern buttresses have formed a wall along an old path alignment with the eastern-most root almost pointing the way to the Barracks front door. The trees have been a major feature of the southern side of the Island for about 100 years and represent one of the few tangible elements remaining on Goat Island of the late imperial period.		
133	mid 1880s	2 Moreton Bay Fig Trees (<i>Ficus macrophylla</i>) and 1 <i>Ficus obliqua</i>	Mature	n/a	
			Line of three mature fig trees (2 x <i>Ficus macrophylla</i> and 1 x <i>F. obliqua</i>) to the east of the 1838 barracks mess. The form of these trees is different to the western fig trees as a result of numerous Coral Trees (now removed) in the vicinity forcing the fig trees to grow more vertically. As with the other fig trees these have been a major feature of the character of the southern shoreline for about 100 years and may have been part of a longer line of fig trees as there is photographic evidence of another fig tree to the west of the mess. The trees have been assessed by Naturally Trees Arboricultural Consulting (Items 19, 26 and 27) in 2005.		
134	1890s- 1910	Ombu (<i>Phytolacca dioica</i>)	Date unknown but probably late 19 th to early 20 th century planting		
			Mature <i>Phytolacca dioica</i> above and to the northeast of the 1838 barracks mess. Although common in its native South America, Ombu of this age are rare in Sydney – others of a similar size include an example at the Centennial Park eastern entry and one at Babworth House, Darling Point. This tree has oleanders growing around its base as well as much <i>Cestrum</i> . It is Item 13 in the 2005 arboricultural assessment of Naturally Trees Arboricultural Consulting.		

Item No	Date	Name	Level of intactness	Condition
Maritime Period: Sydney Harbour Trust Phase				
16*	1925-1928	The Scow shed	Largely intact, recent removal of parts of roof and drainage	Fair/poor
		<p>The Scow Shed is a galvanised iron roofed timber framed structure between the Queens Magazine and the quarry face. It is an elongated single storey open structure with an overhead moveable crane supported on a steel girder track. It is constructed with a timber post and trussed roof. The ground finish has a bituminous coating over fill. The rear wall is clad in corrugated iron over a light timber frame. Recently the west side has been excavated and the roof removed to improve drainage to the magazine building.</p>		
22*	1930c	Amenities building	Reasonably intact	Fair/poor
		<p>This building is a weatherboard single storey building, with a "tower" at the south end (to house a water tank to supply water to the showers below). The building was built as an amenities building for the workers of the Shipyard. Workers would have a shower in the south lean-to addition and then go into the main area to get changed, where locker facilities were located. Hot water was gravity fed to the showers from a tank in the tower above the south addition. The larger room was a mess room. After 1948 when the new amenities building was constructed, the building was used for small fibreglass work.</p> <p>The building is a rectangular, single storey building of timber framed construction with weatherboard cladding. It has a hipped roof of corrugated iron. The building has lean-to weatherboard additions on either end with corrugated iron skillion roofs. A timber tower is located on the south addition. The building has timber framed double hung windows with horizontal glazing bars. There are small louvred windows in the lean to additions, located in the ends of the building. The southern wall has metal louvres. The doors are timber, framed and ledged.</p>		
25a	1924	Sites of Privy and laundry attached to Barracks	Archaeological sites (2 locations to southwest and northeast corners of Barracks), grassed over	n/a
		<p>These areas are now grassed and paved areas under which are likely to remain evidence of the additions made to the barracks building by the Sydney Harbour Trust in 1924, related to the conversion of the Barracks building into two residences (SHT residences 15 and 16) at the time.</p>		
65	1830s, 1925c	Stone jetty	Largely intact over earlier slipway	Fair
		<p>Constructed c. 1926 as part of the first shipyard works to the area, this structure overlies the earlier 1830s wharf visible to the right in the photograph. It is on the site of a slipway and shed from the 1830s.</p>		

Item No	Date	Name	Level of intactness	Condition	
96	1925	Winch House	Largely intact	Fair/poor	
			A simple timber framed corrugated iron clad skillion roofed shed located immediately north of the Scow Shed (16), housing the winch mechanism that powered the rope line, moving vehicles on the rail tracks from the wharf up the gentle slope to the magazine area. While the tracks have been removed or covered over, the winch and its housing and shed remain.		
136	c.1930s	Canary Island Date Palm (<i>Phoenix canariensis</i>)	Mature	n/a	
			In various locations on the Island there are mature plantings of date palms most of which are the common Canary Island Date Palm (<i>Phoenix canariensis</i>). This mature palm is located south of curved 1838 defensive wall north of the barracks. As can be expected the progeny of these palms are evident in various parts of the Island.		
141	Interwar period	Coral Tree (<i>Erythrina x sykesii</i>)	Mature	n/a	
			Once common around the southern part of the Island and around the Harbour Master's residence, only a few mature trees remain. The species is susceptible to major limb failure and can be a risk to public safety. It is also prodigious at self-propagation. The remaining mature trees are along the southern shoreline and it is likely that these were planted by the 1910s through the SHT. Other large trees are north of the Harbour Master's residence with younger plants spreading into other areas of the island (eg. east of upper central area).		

Item No	Date	Name	Level of intactness	Condition
Maritime Period: MSB Phase				
13	1964	Amenities Building	Reasonably intact	Fair
		A large two storey amenities block was built to replace a number of redundant and overcrowded structures and featured a large downstairs change room with locker accommodation and ablutions, with an upstairs dining area seating 150 with wet weather gear storage. The structure featured concrete masonry (bessa) blocks, with the eastern and western walls fabricated of aluminum curtain walls with panels of exposed aggregate with fire resistant sound insulating fabric called 'vermicite plaster'		
14*	1948	Amenities Building	Reasonably intact	Good
		Built by the Maritime Services board as a amenity block for shipwrights and fitters it is a typical building from the period with a hipped tiled roof, mid brown face brick walls and classically proportioned with a recessed verandah to the south. The siting of the building is practical but intrudes into the forecourt of the magazine. The building features limited decoration and austerity in overall design.		
15a*	1942	Addition to Queen's Magazine	Largely intact	Fair/poor
		A timber framed skillion roofed addition built on the end of the magazine as a store with a door cut through the end wall of the magazine to connect it. Like the workshop buildings it has a simple parapet to provide a squared front rather than reveal the skillion roof. It has no linings, is of very basic construction and is attached to the stonework of the magazine.		
23a*	1943	Boatshed	Reasonably intact, slipways removed, erosion to seafront	Fair/poor
		This is a utilitarian and simple rectangular brick building with a gabled corrugated iron roof, and three pairs of timber doors facing south opening onto the water's edge. The sliprails have been removed and are stacked nearby. The building is cut into the shoreline which involved the partial demolition of an early lime kiln. The foundations are washing away at the southeast corner and the front edge of the building is becoming undermined by wave action.		
24*	1943	Substation	Intact	Good
		An inter-war Georgian style building that was designed carefully in relation to the adjacent barracks building reflecting design elements such as the use of segmental arch and label mold features of the earlier building. It is a simple rectangular rendered brick building with a gabled corrugated iron roof and symmetrically placed openings. The end walls feature the recessed arched form. The guttering returns around the ends of the building.		

Item No	Date	Name	Level of intactness	Condition
90	1960c	Incinerator	Intact	Poor
		<p>A standard c1960 prefabricated incinerator inserted between the rear of the stores building and the perimeter wall on a convenient rock outcrop. It is utilitarian in nature.</p>		
107	1955-1962	Remains former mess room slab	Archaeological site, slab remains visible	Fair
		<p>A concrete slab that remains after demolition of an addition to the amenities building. The addition appears to date to the early 1960s and was a meal room attached to the change rooms. It had a garden behind which had a small fish pond that survives.</p>		
National Park Period				
-	-	-	-	

SHIPYARD PRECINCT



Figure 3.14 Aerial view of shipyard precinct on the lower right of the photo, note a number of wharves are no longer extant.



Figure 3.15 View of the shipyard precinct from wharf 4b

The shipyard precinct is the area fronting the waterfront excised from the Magazine precinct in 1925 when the major shipyard construction, including filling to extend the foreshore and further quarrying for slipways, took place. This work, along with the 1940s and 1960s additions and reconstruction of the area, form the current presentation of the precinct. From the water the area is now completely overlaid by operating maritime and shipyard use. The precinct comprises three related components:

- 1 The slipways both above and below high water mark with their leveled platform cut into the rock of the island, excavation of the cliff face and the operational infrastructure (including the Hammerhead Crane) noting that a large part of the precinct is below high water mark.
- 2 The wharves.
- 3 The Ship Repair workshop buildings, located largely on the reclaimed and filled land.

- _____
- i Kerr, James Semple, *Goat Island MSB & National Trust*, 1987, p. 13
- ii Kerr, James Semple, *Goat Island MSB & National Trust*, 1987, p. 30
- iii Kerr, James Semple, *Goat Island MSB & National Trust*, 1987, p. 28

This is an industrial precinct, virtually devoid of natural or introduced landscaping, that has been in operation since the mid 1920s. It is the most modified section of the island and has no relationship to the former natural edge or landscaping on the island.

Finishes are either cut rock for the slipways, formed concrete to access routes and wharves and some areas covered with asphalt or gravel.

It is likely that earlier remnant features such as the colonial jetties and footings of colonial foreshore buildings remain under the current finishes. Rail track remnants from the Sydney Harbour Trust period of the shipyard are also evident.

The Shipyard Precinct has one identified cultural planting:

- Frangipani (*Plumeria rubra*) north of building 14 and is probably contemporary with it (1948), identified as Item 143

The current form of the precinct is principally the 1940s construction overlaid on the 1925 site works that created the slipways. Some later construction is overlaid adding facilities, minor additions and amenities to the site. The precinct remains in use for slipping and boat repair and maintenance.





The elements of the precinct are outlined in Table 3.5










Figure 3.16 Plan of Shipyard Precinct indicating the various elements within the precinct.






Table 3.5 Elements of the Shipyard Precinct




Note items for which detailed inventory sheets have been prepared (contained in Volume 3: Heritage Inventory) are marked with an * next to the item number in the table below.


Item No	Date	Name	Level of intactness	Condition
Pre Contact Period				
-	-	-	-	-
Colonial Period				
-	-	-	-	
Maritime Period: Sydney Harbour Trust Phase				
113*	1926	Slipway	Reasonably intact	Fair
		The first slipway to be constructed by the SHT remains adjacent to the broadside wharf and now partially covered by workshop buildings. Cut into the base rock along the shoreline it did not require excavation of the cliff face as the later slips required. It comprises 2 sets of iron rails fixed to the sloping rock base.		
122	1926	Remains of railway	Archaeological Site	Poor
		Remains of the Harbour Trust rail system that operated on the wharves and within the magazine precinct, sections of rail and possibly turntables remain under the asphaltic finish. The alignment of the former tracks and the winch house are strong visual reminders of this phase of use. The tracks on the wharves were removed with reconstruction and other sections appear to have been removed for other construction.		
Maritime Period: MSB Phase				
1*	1946-1949	Ship Repair workshop	Reasonably intact, some alteration	Fair
		A saw tooth roofed corrugated iron clad building with corrugated iron parapet to south, built from 1946-1949. Timber framing to south wall, timber framed windows with horizontal glazing bars, steel trusses to roof, and steel structural posts to interior, which are also used for equipment. Concrete floor. Rear (north) wall is concrete to lower section, with corrugated iron cladding and timber framed windows above. Corrugated iron clad timber partitions dividing the building's interior into bays. Built onto eastern end of the Broadside Wharf. Roller shutters to south (waterfront) wall.		
1a*	1962-3	Ship Repair Workshop addition	Reasonably intact	Fair
		A simple skillion addition to the main workshop building of timber framing clad in corrugated iron. It has roller doors and was sited to avoid the rail system which closely abuts it.		

Item No	Date	Name	Level of intactness	Condition
2*	1945	Repair Workshop	Reasonably intact	Fair
			<p>The first section of this shed to be built was the southern section with a floor level located at wharf height and apparently built over the earlier slip rails. Originally with central timber columns, they were removed and a steel support structure added to provide for clear spanning. A small mezzanine is located at the south end.</p>	
2a*	Post 1945	Repair Workshop Addition	Reasonably intact	Fair
			<p>A separate building built onto the end of the workshop building retaining the former external wall within the building. Used for stores its construction suggests the 1950s period but it does not appear on plans from the period.</p>	
3*	Post 1945	Slipway Workshop	Reasonably intact	Fair/poor
			<p>An addition to the workshop building that provided cover over the upper part of the 1926 slipway for working on vessels, this is the only covered section of slipway. It is a timber framed building with timber trusses with a perimeter walkway.</p>	
4, 4a,*	1946	Broadside Wharf	Reasonably intact	Good
			<p>The Broadside Wharf is a single wharf, however for convenience described in two sections: 4a being the part of the wharf fronting the Ship Repair Workshop, 4b being the part of the wharf north of Ship Repair Workshop.</p> <p>4a is a timber framed wharf on hardwood piles (350x350) with timber headstocks (350x350) and girders (350x250), a concrete deck (120-150 thick) and painted timber handrail to the southern end, set in front of and attached to a stone sea wall and providing access to the sea side of the shipwright's shop. The wharf extends and connects to wharf 4b and also extends around the southern end of the Ship Repair Workshop (1) as a narrow walkway linking to the shore. A set of access stairs is located at the south-west corner to provide small boat and ferry passenger access. The wharf is partially concrete decked but was originally timber decked. The core construction that remains dates from the mid 1940s reconstruction of the area when adjacent buildings were also constructed on an area of reclaimed land. The construction is standard, uses a regular pile grid and is similar to the other 1940s (and later) period wharf construction, all of which had a common designer and construction period. A number of fenders are located along its length these are 200 - 300mm squared timber with a splayed top. The wharf has</p>	

Item No	Date	Name	Level of intactness	Condition
			<p>undergone extensive repairs during 2007, using new hardwood piles and headstocks, and concrete decking. It is used in conjunction with the commercial use of the shipyard in contrast to general mooring as seen on the north side of the island</p> <p>The wharf is used to provide access between vessels to the shore buildings containing stores and workshops. Use of the wharf is currently shared between the shipyard lease (northern part) as the main access point to the island for staff and public (southern end).</p>	
4, 4b*	1946	Broadside Wharf	Partial collapse	Very Poor
			<p>Wharf 4b is a long timber framed wharf extending from the Ship Repair Workshop (1) alongside the slipways as a freestanding wharf set on hardwood piles (350 x 350mm) with raking piles at every second grid. It connects to the coal loader wharf at its northern edge. The wharf is partially covered in a concrete topping. The construction is standard with timber decking (under the concrete in places), a concrete deck of approximately 120-150mm thick, headstocks (350 x 350mm), girders (300 x 300mm) and evenly spaced cast iron bollards. The wharf featured a small hand operated crane and several light standards. It has several timber ladders extending into the tidal zone and several fenders.</p> <p>The wharf was used for berthing of vessels under repair or construction with rail access to the workshops.</p> <p>The wharf is in very poor condition with most piles missing or failed. In 2010 a section of the wharf collapsed including the hand-operated crane that is now under debris on the harbour floor. Due to its condition, the wharf is currently disused and it is proposed to remove the wharf as it is not recoverable.</p>	
5*	1946	Coal loading Wharf	Partial collapse	Very poor
			<p>Located at the end of the Broadside wharf, only the wharf structure remained from the former wharf and coal stage, the latter being removed as the wharf became unstable. It had the same construction as the adjacent wharves with the addition of a cluster of piles at the corner to protect the structure from shipping. It had a concrete deck through which the former superstructure framing extended, this was all removed to deck level. The superstructure required bracing and inclined structural members survive in part immediately below the deck level. The wharf was used to hold coal reserves in timber framed and lined bins for fueling vessels used by the MSB. The structure is in very poor condition with most piles failed and the decking has collapsed leaving only a small number of piles. Access is not available due to its condition.</p>	
5a	1965	Dolphins + line of fenders	Intact	Fair/poor
			<p>This structure comprises a series of steel circular piles (approx 300mm diameter) linked by steel channels at the upper level and timber beams at the lower levels bolted to fixing plates welded onto the piles. It was constructed at the time of the construction of the 500 ton slip to prevent ships entering the slipway from drifting onto the shore. It runs parallel to the Broadside wharf and turns away following the shore to ensure that wayward vessels are guided onto and off the slip.</p> <p>It is in fair condition but the timberwork requires repair and maintenance.</p>	

Item No	Date	Name	Level of intactness	Condition
7	1949	Winch House	Reasonably intact	Fair
			<p>The corrugated iron clad and timber framed shed housing the winch mechanism for the 1949 slip and a stores area. It is gabled roof.</p>	
8	1965	Winch House 500 ton	Reasonably intact	Fair
			<p>A utilitarian brick shed with open section housing the winch and a secure area housing the winch motor. The shed has a flat roof. Built in conjunction with the 500 ton slip, it accommodates the winch mechanism.</p>	
9*	1963	Hammerhead Crane	Not operational	Fair/poor
			<p>The Hammerhead Crane is a large, visually dominating, industrial landmark on Goat Island. Built in 1924 in Glasgow, Scotland, it was originally sited at Mort's Dock at Balmain before re-erection by the MSB at Goat Island in 1963. It has been in use until late 2010 but is no longer operational. The crane is currently being assessed to determine future actions.</p>	
29*	1949	150 ton slipway	Reasonably intact	Fair
			<p>The 150 ton slipway retains its original formation near the water with the use of timber logs to support the rails and stone infill, the higher levels have been upgraded with concrete construction.</p>	
30*	1965	500 ton slipway	Reasonably intact	Good
			<p>The 500 ton slipway required further excavation of the cliff edge and the magazine area to accommodate the rails, overhang and the winch house. This was the last major work to be undertaken in the shipyard.</p>	

Item No	Date	Name	Level of intactness	Condition
114	1963c	Shed	Reasonably intact	Fair/poor
			<p>A simple steel clad shed built within the frame of the hammerhead crane probably around the same time as the crane was installed.</p>	
120	1945c	Jib crane	Condition unknown	Assumed poor
			<p>An early hand operated jib crane apparently added to the 1945 wharf. Its former location and use (it is significantly older than the wharf on which it was located) and history are not known. The crane is now beneath wharf debris on the floor of the harbour after the collapse of this section of the broadside wharf.</p>	
121	1945c	Jib Crane	Reasonably intact	Poor
			<p>A jib crane with braces located on a small section of wharf near the repair workshop. The crane appears to date from the 1945 period.</p>	

Item No	Date	Name	Level of intactness	Condition
143	1948c	Frangipani (<i>Plumeria rubra</i>)		
			The Frangipani is planted near the northwest corner of the 1948 Office & Amenities Building (14) and likely to be associated with this building. This is the only significant planting in the Shipyard Precinct.	
National Park Period				
-	-	-	-	

CENTRAL PRECINCT



Fig 3.17 The central precinct is marked by the dense landscape cover around the eastern edge of the island (foreground) and the open ridge overlooking the shipyard.



Fig 3.18 General internal view of the precinct looking towards the shipyard and Balmain in the background.

The central precinct is the largest precinct and contains landscape, both natural and introduced but no extant structures. It contains a number of archaeological sites, evidence of quarrying, modifications to the landscape to create leveled platforms that contained buildings

and the tennis court, remains of former paths, the current main access paths across the island and smaller scale elements such as seats and memorial plaques.

The landscape varies across the precinct from the natural both remnant and re-vegetated edge to the north-west with relatively little landscape change, to the cleared ridge line, to areas of substantial regrowth and introduced plantings, including weeds, along the ridge and to the natural escarpment edge to the south-east.

The Central Precinct became progressively a cleared grassed and lightly tree covered area from the 1830s until the 1980s (150 years), but with surviving and regenerated native vegetation along its northwestern edge (135). Older palms planted in the 1930s within the Sydney Harbour Trust period within this area include:

- 1 x *Phoenix canariensis* (137)
- 1 x *Phoenix dactylifera* south of the Recreation Hall site (and pre-dating *Phoenix canariensis* above) (137).

Over the last twenty years this precinct has had substantial regrowth of native and introduced species and has also suffered from extensive weed growth.

It is a section of the island that has not had an industrial, residential (apart from an early convict barracks which appears to have been ephemeral in impact and Gunner Davis' cottage, also no longer extant) or other uses apart from early quarrying, recreation and access. This is largely due to this being a part of the island that was used during the colonial period to provide physical separation between the magazine area and the water police station. This area was later used for open space for the workers and residents of the maritime authorities, as the central spine was not easily accessed from the water or useful for other purposes. This recreation use was reinforced during the 1940s by the construction of the community hall on the ridge line and the tennis court benched in below it to the south-west. These elements added by the MSB shortly after their occupation of the island reinforced the zoning of the island into waterfront activity along the north-eastern and south-western edges and residential and recreational use along the central ridge.



The elements of the precinct are outlined in Table 3.6










Figure 3.19 Plan of Central Precinct indicating the various elements within the precinct.





Table 3.6 Elements of the Central Precinct





Note items for which detailed inventory sheets have been prepared (contained in Volume 3: Heritage Inventory) are marked with an * next to the item number in the table below.

Item No	Date	Name	Level of intactness	Condition
Pre-Contact Period				
135	Ongoing	Remnant indigenous Sydney Harbour vegetation community along north-western edges of island		Good
		<p>Persistent representatives of the earlier vegetation community have remained around the northwestern edges of the island and include <i>Ficus rubiginosa</i>, <i>Eucalyptus botryoides</i>, <i>Angophora costata</i>, <i>Elaeocarpus reticulatus</i>, <i>Ceratopetalum gummiferum</i>, <i>Pandorea pandorana</i> (very large vine suggesting some age), <i>Banksia integrifolia</i> and <i>Pittosporum undulatum</i>.</p>		
Colonial Period				
63*	1830c	Lime kiln	Partially intact and infilled	Fair
		<p>The lime kiln is located just to the east of Anderson's couch. It is cylindrical, overgrown and silted up, measuring 2 m diameter and is 2.2 m deep. While it is constructed partly of ashlar blocks and brick, much of the structure is cut into the natural contours of the rock outcrop. Slag is used in the mortar and the kiln contains associated ash and lime deposits and evidence of high temperature burning.</p> <p>Lime kilns are generally temporary structures, built near the site where lime was required. This example would have been oriented over the water to the south east to ensure that the opening in its base provided an accelerated updraft to guarantee that the shell was well burnt. While the lime kiln is small and primitive, it is consistent with penal establishments of the 1830s (Kerr 1987).</p> <p>Mortar on the top stones suggest several courses may be missing and several slots cut into the top of the upper-most stones suggest a roof or platform was built over the top.</p> <p>Much of the surrounding stone has been quarried or shaped and four metal pins have been mortared into small holes cut into the southern face of the rock.</p>		

Item No	Date	Name	Level of intactness	Condition
69*	1836+	Magazine Walk	Alignment intact, later changes to finishes and levels	Good
		This section of Magazine Walk is located between rocky outcrops and runs along the edge of the escarpment. It was separated by a white fence that has been replaced with an inappropriately designed but OH+S compliant fence. The route provides views to the city.		
77	1836c	Evidence of quarrying on the edges of the ridge	Visible but difficult to access	n/a
		Remnant cut areas of rock along the ridge and extending down the western slopes from former quarrying.		
91*	1857c	Archaeological site 1	Archaeological site, sandstone footings	n/a
		Sandstone footings directly adjacent to and west of the tennis court. The site is overgrown and the footings are aligned in such a way that they veer towards the tennis court. View south.		
93*	1830s	Artefact scatter	Archaeological site	n/a
		Artefact scatter – possible site of early building/"House on hill" - site of former 3 room weather board cottage (now demolished) on elevated ground in Residential Precinct. The artefacts in the scatter appear to date from between 1845 and 1900, and include a pipe stem, flint and ceramic sherds.		

Item No	Date	Name	Level of intactness	Condition
110c	1840s c	Rock cut	Archaeological site	n/a
			Function unknown. Likely evidence of early quarrying or related to a structure, now removed. Visual inspection limited due to vegetation overgrowth.	
112	1836	Quarry face	Archaeological site along cliff edge	Fair
			A distinctive area of quarrying on the western escarpment that is difficult to access. Part of the evidence of the extensive quarrying around the island.	
Maritime Period: Sydney Harbour Trust Phase				
60	1925	Path from shipyard to residences	Archaeological site, remnant path, poles and fencing	Poor
			Remains of the former access path linking the shipyard to the residential precinct. Extending along the edge of the cut for the slipway and originally accessed from a timber stair at the base, it had a concrete kerb, stone steps (now dislodged) timber rails along the cliff edge and extended to the rear of the residences. It is now overgrown and difficult to access.	

Item No	Date	Name	Level of intactness	Condition
Maritime Period: MSB Phase				
15b	1941	Tennis court foundation	Foundation intact, no longer in use	Deteriorated Poor
15c	1941	Tennis court pavilion site	Archaeological site, no extant evidence	n/a
			Constructed in 1941 on what was probably a reasonably flat area to the south of the magazine precinct, the tennis court was the first of a number of recreational facilities constructed for the inhabitants of the Island. The court is assembled on fill and cut into the bedrock on the north eastern side, retaining evidence of modern explosives to remove the rock. A dry stone retaining wall supports the southern and part of the western side of the court. The bitumen surface is almost completely overgrown with only patchy evidence of the white lines intact. The 1985 survey identified a single net post still standing, however this no longer survives. The site of the pavilion was to the west of the tennis court, but apart from stone stairs cut in the rock platform, nothing of this building survives. 8 metres of sandstone block footings from an earlier structure (91) are visible on the western side of the court running under the tennis court at a different alignment.	
73	1941	Recreation hall archaeological site	Archaeological site, footings remain visible	Fair
			The remains of the Recreation hall (17.08m x 7.9m) are located on the highest point of the island's ridgeline, between the tennis court and the rear of the cottages. Named 'Victory Hall', it was constructed in 1941 around the same time as the swimming pool and the tennis court in order to foster community spirit and provide entertainment for the 26 men and a number of family members living on the Island. Constructed of wood on brick footings with an iron roof, the building was considered handsome and could accommodate 250 persons. The building was rectangular in shape with small additions to the rear. The Hall was rebuilt after fire damage and demolished in 1960. Dry pressed double brick foundations, evidence of ancillary buildings and associated pathways still survive.	
74	1937c	Stone retaining walls creating platforms	Largely intact with some failure of loose laid walls	Fair/poor
			A series of low dry stone walls built from stone collected on the island and presumably from part of the quarrying activity used to bench the site to create leveled areas for recreational use. The illustration is the wall below the tennis court, other walls created a leveled area on the ridge line for the recreation hall building.	
103	1943	Seat on the ridge line	Intact	Good
			A rustic stone seat set between a grove of trees on the ridge line adjacent to the plaque (76).	

Item No	Date	Name	Level of intactness	Condition
104	1941	Memorial plaque on the ridge line	Intact	Good
			A plaque in memory of Mrs Bennett, first secretary of the Goat Island social club noting that the trees in the grove were planted in her memory.	
105	1946	Memorial Brigademan J Burgesson	Inscription	Good
			An inscription in memory of one of the MSB fire brigade crew whose ashes were placed under a tree in the vicinity.	
106	1945	Memorial	Inscription	Good
			Inscription marking the planting of a grove of trees by the Royal Historical Society in 1945.	
116	1937c	Path		
		Circa 1937 path through central precinct which runs off the Magazine walk to the southwest across the central precinct to the Residential Precinct. This path has been recently resurfaced.		
National Park Period				
108	1999c	Access paths	Paths intact	Good/fair
			There are several access paths through the area, this stone flagged path connecting to magazine walk being a recent addition on the alignment of an earlier track. It skirts around the hall remains and aligns roughly with the ridge.	

WATER POLICE PRECINCT



Figure 3.20 Aerial photo of the Water Police Precinct from the east with the marine precincts surrounding it.



Figure 3.21 Overview of the precinct and the Cut.

This small precinct occupies the knoll at the eastern end of the island separated from the rest of the island by Barney's Cut. The precinct includes the rock escarpments and cut rock faces with their steps and other features extending around the knoll as well as the access bridge, the three extant buildings and various slabs and remains of demolished structures. The 1838 Water Police Station is the earliest element at this end of the island and features in several early illustrations, marked through its starkness and remoteness.

Once largely inaccessible up the steep rock faces, it is now surrounded by reclaimed foreshore in the adjoining precincts and the knoll has in part lost its dramatic setting as seen in the historic illustrations.

The landscape is modest, comprising mostly grassed areas with several small trees and some planting on the slopes but also weed growth around the edges of the precinct. Paths extend across the precinct linking the three buildings and the access points. The edge of the rock escarpment is fenced for part of its length with tube framed and mesh infilled low fencing and also features a range of stone and some brick retaining walls and embankments. It is now difficult to determine the original rock edges from the modified landscape. The precinct includes the rock face but not the filled foreshore areas below.

A key feature of the landscape is the dramatic cut rock face of Barney's Cut, which remains largely unmodified on its northern face.

The Water Police Precinct includes the following cultural planting:

- 1 x Phoenix canariensis south of the 1838 Water Police building (Item No.138).

There is some archaeological potential through known sites of demolished structures and additions to the buildings, however most of these appear to date to the twentieth century with little evidence of earlier structures.




Features of the precinct are outlined in Table 3.7.











Figure 3.22 Plan of Water Police Precinct indicating the various elements within the precinct.





Table 3.7 Elements of the Water Police Precinct

Note items for which detailed inventory sheets have been prepared (contained in Volume 3: Heritage Inventory) are marked with an * next to the item number in the table below.

Item No	Date	Name	Level of intactness	Condition
Pre-Contact Period				
-	-	-	-	-
Colonial Period				
46a*	1865	Cottage (aka Artillery Sergeant's cottage)	Altered but reasonably intact externally	Fair
			<p>A sandstone two-room building with a hipped roof and central chimney, associated with cartridge laboratory use of the Former Water Police Station, the cottage was built as accommodation for a Sergeant of Artillery. From 1912 when the adjacent Fire Brigade Barracks (46b) was built, the cottage was used as a Fire Brigade mess room. From 1963 the cottage was used as a wet-weather gear store for MSB Dredge staff (south room) and as a paint shop (north room). This involved installation of a pipe partition and coat racks to the south room (still evident). The north room appears to have later been used as a tea room for MSB staff (see kitchen fitout). The roof is now clad with corrugated iron (replacing slate) and the building's exterior has been painted over the sandstone. The verandah to the east elevation appears to be an early Sydney Harbour Trust addition, and does not appear on the 1891 survey of the Island. There are areas of archaeological potential in the vicinity of the cottage, being the sites of earlier structures including former additions, laundry and privy.</p>	
47*	1838	Water Police Station	Reasonably intact, additions removed	Fair/poor
			<p>An ashlar sandstone walled Water Police Station designed by Government Architect Mortimer Lewis to an adapted design from Loudon's "Villa and Cottage Architecture". It was altered in 1865 after eviction of the Water Police for conversion to a cartridge laboratory. From evidence in documentary sources, the verandah to the east elevation appears to have been added during the 1880s. The building had a range of later alterations for SHT use, including the weatherboard addition remaining on the south elevation.</p> <p>The building has a hipped roof clad in slate, a simple front verandah and blind windows to complete the symmetry of the design. The side windows are set in arched recesses. Much of the joinery has been replaced. The building is unoccupied and requires considerable conservation work.</p>	
86*	1837	Barney's Cut	Reasonably intact but partially infilled	Good/fair
			<p>Barney's Cut severs the eastern tip from the main part of Goat Island by a convict-excavated wet ditch approximately five meters wide. It was constructed to separate the Water Police from the western part of the island as a security measure, also providing a source of stone. The good quality stone excavated from the site was used to construct the Water Police Station completed in 1838. The Cut may also have provided a safe place for the storage of small boats. The cut has since been modified on the western side by excavation for the site of the Port Emergencies Services building. The Cut has featured a number of footbridges since at least 1865, the current footbridge being of relatively modern construction. Several slots and cuts within the flat well-finished walls suggest some type of attachments to the rock face.</p>	

Item No	Date	Name	Level of intactness	Condition
87	Pre 1900	Stone steps	Largely intact	Fair
		Set of steps partially cut into the rock and partially constructed connecting the knoll to the waterfront. Now fitted with a steel pipe hand rail.		
88	1865c	Access path	Intact	Fair
		The early alignment of the access to the bridge over the cut which has been indicated in all plans as an access area. The current finish is asphalt, possibly overlaying earlier finishes.		
89	1865 and later	Access bridge	Current bridge intact, evidence of earlier bridges extant	Fair
		The first bridge over the cut was constructed in 1865 after the removal of the Water Police from the Island. The Water police station building was converted to a laboratory and a new store was constructed which required the cut to be bridged to provide access. Hand carts were used to transport materials from one end of the island to another. The current bridge is approximately 2.5 m wide and constructed of hardwood planks on steel beams with a metal and wire handrail. The original bridge was approximately 1.5 m lower than at present and was probably raised to its current height when it was rebuilt some time in the early 20th century as suggested by the English Bond brickwork. The metal and wire railings replaced earlier wooden palings sometime after 1945 (based on aerial photography).		
100	nd	Remains of timber stair	Archaeological site, remnant elements remain	Poor
		Remains of the stairs leading down from the Water police precinct to the wharf/jetty constructed in 1836 on the northern side of the Island. Photographic evidence shows the wooden hand rail and stairs still in place in 1945. Only 4 rectangular slots for rails now remain cut into the rock face and a cut 1m wide ramp where the wooden stairs were likely to be located. View south.		

Item No	Date	Name	Level of intactness	Condition
101	nd	Stone steps and walls	Archaeological site, remnant elements remain	Poor
			An early set of stone steps, probably dating from the time of construction of the water police station leading down to the point. The edge of the escarpment has been built up with dry stone walling to retain the upper level area in front of the building. The lower edge of the photo shows further excavation.	
Maritime Period: Sydney Harbour Trust Phase				
46b*	1912	Barracks	Altered but reasonably intact	Fair
			A rectangular facebrick building with a gabled slate roof with lead ridge capping, exposed timber rafter ends, and colorbond guttering. The building has a small wing facing the 1865 cottage with a later verandah. It has timber framed double hung windows with 4-pane top sashes, however a number of window openings have been altered, some with glass louvres inserted. The barracks was converted to an amenities building for Dredge workers by the MSB in 1963, resulting in extensive alteration to the interior.	
126	Post 1912	Amenities slab	Archaeological site	Ruin
			The remains of a former outbuilding described as an amenities building with evidence of toilets and drainage extant. This location has been occupied with a structure of some form from the Trust period, although the exact nature of the building is not known. This is one of the few remaining visible slabs of buildings that were located throughout the area.	
138	SHT phase	Canary Island Date Palm (Phoenix canariensis)	Mature	
			A mature palm near the southeast of the Water Police Station, likely to be a planting from the Maritime Period: SHT phase (1901-1936)	

Item No	Date	Name	Level of intactness	Condition
Maritime Period: MSB Phase				
88	Post 1945	Access path	Altered	Fair
			<p>Remains of concrete path extending from buildings to the waters edge, originally two strips and later infilled. A navigation marker has been constructed on the path and undergrowth has encroached.</p>	
-	Post 1945	Fences	Altered	Fair
			<p>Fencing surrounds the precinct and now comprises low steel tube framing with steel mesh infill. The fencing now principally protects the escarpment edge and the moat around the barracks, earlier fencing in the area, which appears to be timber picket was used to define yards, the access path and service areas.</p>	
129	1970s-1980s	Maritime markers	Intact	Good/fair
			<p>This is the rear lead beacon for commercial vessels approaching from Darling Harbour. Steel framed structure with lights. Date not known but believed to be circa 1970s-1980s.</p>	
			<p>Day marker for commercial shipping vessels approaching from the east. Steel framed structure, built over a former accessway to the water. Date not known but believed to be circa 1970s-1980s.</p>	
National Park Period				
-	-	-	-	-

RESIDENTIAL PRECINCT



Figure 3.23 The residential precinct with the five remaining residences, the open lawn areas to the east and west and the dense vegetation cover to the north and west. Much of the precinct features its natural rock edge.



Figure 3.24 An overview of the open lawn areas to the east of the residences with the background of vegetation.

The residential precinct occupies the balance of the ridge of the island (not occupied by the Central Precinct) and is integrally linked to the Central Precinct. The area contains five extant houses, arranged in a line all facing east, and the sites of six demolished houses arranged either side of the central access path (Magazine Walk) through the area. Benching of the site involving quarrying the rock formation and provision of retaining walls as well as other features remain from the construction of these buildings and the earlier magazine store buildings.

The area is bounded and defined in part by the alignment of the rear fences (or former fences) to the residences, the escarpment edges to north and south and the top of the quarry cut behind the Port Emergency Services Building and the edge of Barney's Cut to the east. The area is generally grassed with remnant gardens and site features related to the residential uses. Most of the surviving garden elements date from the post 1950 period although plantings are identified back to c1900. Parts of the site around the extant houses are benched and leveled and there are remains of paths and stairs extending from the Harbour Master's house to its former wharf to the north. The remnants of a concrete reservoir are also in this location now surrounded by overgrown garden areas that appear to step down over the edge of the escarpment with rockeries and introduced plantings.

The area contains both natural vegetation, regrowth and introduced plantings.

The precinct includes the following cultural plantings:

- *Pinus radiata* behind Harbour Master's residence (probably 1930s) (Item No 140)
- *Bougainvillea spectabilis* near site of building 81a (appears in 1943 aerial but is possibly much older) (Item No. 139)

There are other plantings within this precinct such as the older *Harpephyllum caffrum* (though definitely post WW11), a second *Ficus obliqua* (probably seeded from the earlier one), a Cypress near the former eastern cottages and possibly other, younger *Ficus rubiginosa* but with developing form, however they are likely to be self-seeded.

Overall the Island also has some smaller exotic species that appear to have been used from the Colonial period onwards that may be the progeny of earlier garden plants. These include *Furcraea foetida* (south of 'Victory Parade' walk and north of Harbour Master's residence), *Nerium oleander* (around the *Phytolacca*, within the Magazine Precinct), *Yucca* sp. and *Cordyline australis* (both near *Furcraea* and south of Island).

The only gazetted Aboriginal site is within this precinct. Given the high level of disturbance to much of the island edge it is likely that other sites were on the island but have been removed over the long quarrying and development history of the site.

Two of the residences have been occupied by NPWS staff and the other buildings are vacant. All of the buildings require maintenance but are in generally sound condition.

This precinct retains its Sydney Harbour Trust period character with most extant elements surviving from that period and almost no later MSB structures or features with the exception of garden plantings and paths which were progressively upgraded over their occupancy. This is overlaid on the small amount of development that was in place prior to 1901, namely the two small magazines and Magazine Walk. There are also a number of potential archaeological sites from temporary buildings that are referred to in documentary evidence but are not identified.

Much of this precinct, particularly the eastern edge on the former building sites is now a park landscape with benches and seats with extensive views to the city and the Harbour Bridge. In contrast the northern edge is heavily overgrown with weed and invasive plantings making access difficult.




The elements of the precinct are outlined in Table 3.8.










Figure 3.25 Plan of Residential Precinct indicating the various elements within the precinct.





Table 3.8 Elements of the Residential Precinct






Note items for which detailed inventory sheets have been prepared (contained in Volume 3: Heritage Inventory) are marked with an * next to the item number in the table below.






Item No	Date	Name	Level of intactness	Condition
Pre-Contact Period				
62*		Shell midden	reasonably intact, covered by grasses	Fair
		<p>The shell midden was not visible during the survey conducted for this report. It was identified in 1985 but is now overgrown and has not been visible since.</p> <p>A small shell midden was located by Rich (1985) on a rock platform on the north eastern side of the island, in the forecourt of the residential precinct. According to the report, it measures 1200 mm x 400 mm and 150 mm deep and consisted of predominantly (c.75%) <i>Anadara trapezia</i>, or cockle, the remainder being made up of Hairy Mussel and a small number of inedible univalves. The deposit did not contain charcoal, bone, or stone artefacts and was considered to be highly disturbed, 'mixed around' and no part of the deposit was considered to be in situ (Rich 1985). Given the inedible nature of some of the shellfish species, the lack of artefacts and other food remnants as well as its proximity to the nearby buildings, a question as to the identification of this feature is raised, however the midden may also be exceptionally old.</p>		
135	Ongoing	Remnant indigenous Sydney Harbour vegetation community		
		<p>Indigenous vegetation on the northwest shore are persistent representatives of the earlier vegetation community and include <i>Ficus rubiginosa</i>, <i>Eucalyptus botryoides</i>, <i>Angophora costata</i>, <i>Elaeocarpus reticulatus</i>, <i>Ceratopetalum gummiferum</i>, <i>Pandorea pandorana</i> (very large vine suggesting some age), <i>Banksia integrifolia</i> and <i>Pittosporum undulatum</i>.</p> <p><i>Pandorea pandorana</i> near northern shore</p>		
				





Item No	Date	Name	Level of intactness	Condition
				<i>Ceratopetalum gummiferum</i> at northern shoreline
Colonial Period				
69*	1836+	Magazine Walk	alignment intact, later changes	Good
				This section of the walk connected the lower group of residences and earlier the magazines to both ends of the island. The edge of the path is marked by retaining walls, rock cuts, stairs and various features providing access to the house platforms and yards.
117	1875	Site of former magazine	archaeological site	Ruin
				Site of first dynamite store built in 1875, just to the west of the cut. The building was later the site of a Sydney Harbour Trust cottage, later demolished and there are only ephemeral remains of a building platform surviving. The magazine was originally a wooden structure with an iron roof. Documentary evidence indicates the former magazine functioned as a Sydney Harbour Trust residence 1901-1913, when it was vacated. Documentary evidence implies the building may have been converted to a weatherboard and tile residence in 1913, however on 1920s survey plans the 1913 Sydney Harbour Trust residence in this location has both a different footprint and different orientation to the 1875 magazine.
131	1878	Site of former magazine	archaeological site	Ruin
				Site of former magazine built in 1878, south of site 117. The building was later demolished and there are only ephemeral remains of the building platform surviving. Originally a wooden structure with an iron roof.





Item No	Date	Name	Level of intactness	Condition
Maritime Period: Sydney Harbour Trust Phase				
38a*	1916	Cottage No 1	Reasonably intact	Fair
		<p>A group of three face brick Federation Queen Anne style cottages with hipped and gabled unglazed terracotta tile roofs with brick roughcast stuccoed chimneys. All three cottages are elevated, with timber steps up to front verandahs facing views east to Sydney Harbour. The cottages each have symmetrical front elevations, with a central front door with fanlight and sidelight and a pair of timber-framed double-hung windows to each side of the front door. Each cottage features simple timber framed double hung windows, plaster ceilings with ceiling roses but without cornices (some modern replacement ceilings), and fireplaces, generally retaining original timber surrounds. All three cottages have corrugated iron skillion roofs to the rear (west) over a laundry and toilet and are bounded by paling fencing to the rear and sides, with picket fences to the front (east).</p> <p>The front verandah and steps of no 38a have been replaced and a modern front door inserted. It has a small weatherboard addition to the rear (west).</p>		
38b*	1916	Cottage No 2	Reasonably intact	Poor
		<p>See 38a for general description.</p> <p>Features 4 panel interior doors, ceiling roses, no cornices to ceilings, picture rails, carpeted floors to front rooms. Front verandah partially enclosed with weatherboard and windows.</p>		
38c*	1916	Cottage No 3	Reasonably intact	Poor
		<p>See 38a for general description.</p> <p>Interior doors are timber 4-panel. Features plaster skirting boards, picture rails. Masonite ceiling to lounge room installed below original fibrous plaster ceiling. Rear weatherboard addition. This is the cottage in the worst repair, having been unoccupied for some time.</p>		
38d*	1922	Cottage No 4	Reasonably intact	Fair
		<p>A Former Fire Brigade face brick cottage built 1922 to a different design to the earlier remaining cottages reflecting the change in styles from federation to interwar periods, with hipped roof and unglazed terracotta tile roof. The cottage is elevated on brick piers and has extensive views to the harbour to the east. The front verandah on the northeast end of the front (east) elevation has been enclosed. Windows are timber-framed multi-paned double-hung. The timber front steps are deteriorated.</p>		


Item No	Date	Name	Level of intactness	Condition	
39*	1901	Harbour Master's Residence	Reasonably intact	Fair/poor	
			The Harbour Masters Residence is a substantial face brick, asymmetrical residence with a complex hipped and gabled unglazed terracotta tile roof featuring an east-facing eyelid dormer, roughcast stuccoed gablet, prominent viewing tower roofed in unglazed terracotta shingles and four tapered roughcast stuccoed chimneys. The residence is Federation Bungalow style, with some Federation Arts & Crafts detailing (use of roughcast stucco, tapered chimneys). The principal elevation of the residence has extensive views east to the main harbour. The ground floor exterior features a return verandah with timber balustrade to the main east elevation and part of the north and south elevations. French doors open onto the verandah. The ground floor accommodates 7 main rooms, plus servant's quarters, kitchen and laundry to the rear (west) with south facing (now enclosed) verandah, plus bathrooms, halls, pantry and storage rooms. The large roof form contains a first floor level with two bedrooms and a stair hall, including stairs to the viewing tower. The square, hipped roofed viewing tower has multipaned casement windows on all four elevations. All major interior rooms to the ground floor feature marble surrounds to fireplaces, minor bedrooms (except to first floor where fireplaces have been removed) have timber surrounds to fireplaces. Ceilings are plaster on metal lath, generally with ceiling roses. Interior doors are timber 4-panel except where replaced with modern flush doors.		
76	1903+	Paths	Largely intact	Good/fair	
			A number of paths have been cut into bedrock and in some cases, such as the path leading to the Harbour Masters Residence, have been asphalted.		
78	1916+	Fencing to rear yards	Intact but in poor condition	Fair/poor	
			Paling fences, replaced over time, remain in location around the four fire brigade residences similar to fencing around the precinct from its first construction.		
79	1908	Reservoir	Ruin	Fair	
			Located on the north of the island near the ferry wharf (former fresh water service wharf) the remains of the 20,000 gallon (90,000 liter) circular water reservoir constructed in 1908 is highly overgrown and appears to be in a poor condition. The remains stand no higher than 1 m with a circumference of 6.65 m and constructed of sandstone with a concrete skin, which is delaminating. Water was brought from the mainland and stored here for the use of the occupants. Iron tanks were also used on the island to service the cottages.		

Item No	Date	Name	Level of intactness	Condition
80	1903-1905	Timber stairs to waterfront	Collapsed	Ruin
			<p>The stair dates from around 1901 and the lower walkway (item 54b) from 1941 although it is probable that it has all been reconstructed. The stair has collapsed and the end of the walkway is in poor condition. It was the first connection to the wharf for the new harbour master's residence and connects to a series of paths on the cliff top.</p>	
81a*	1875/1916	Site of residence	Archaeological site	Fair
			<p>Site of first dynamite store built in 1875, just to the west of the cut. The building was demolished in 1970 and there is only ephemeral remains of the building platform surviving. Originally a wooden structure with an iron roof, the building also functioned as an ammunition shed and the most easterly of all the residences.</p>	
81b*	1913-15	Sites of residence	Archaeological site	Fair
			<p>The site of the former duplex constructed in 1913 is the most indicative of all the residential sites. The area has been terraced and a stone retaining wall faces the path on the northern side. Concrete stairs lead up to the building platform which retains the concrete front veranda and evidence of the wooden railing at the front.</p> <p>At the rear, the green painted concrete remains of the laundry floor are visible as well as several slots and cuts in the quarried rock face and iron attachments suggesting the position of a lean-to outbuilding.</p>	
81c*	1913-15	Sites of residence	Archaeological site	Fair
			<p>Same as 81b site of the former duplex constructed in 1913 is the most indicative of all the residential sites. The area has been terraced and a stone retaining wall faces the path on the northern side. Concrete stairs lead up to the building platform which retains the concrete front veranda and evidence of the wooden railing at the front.</p> <p>At the rear, the green painted remains of the laundry floor are visible as well as several slots and cuts in the quarried rock face suggesting the position of a lean-to outbuilding.</p>	
81d*	1901-03	Sites of residence	Archaeological site	Fair
			<p>A grassed flat area that is more distinct as a building platform than the site to the west (81e). Demolished in 1970, there is no evidence of building material and there are no visible artefacts. Originally constructed of weatherboard and tile.</p>	

Item No	Date	Name	Level of intactness	Condition
81e*	1901-03	Sites of residence	Archaeological site	Fair
		A modified grassed area with dips and humps on the southern side of the path. The land form slopes down to the water and the former weatherboard and tile building may have been supported by piers on the southern side. Demolished in 1970, no structural remains from the cottage are visible.		
81f*	1913-15	Sites of residence	Archaeological site	Fair
		A modified flat grassed area on the southern side of the path for a cottage that was constructed of wood with brick and concrete footings in 1913. A concrete slab remains between the site of the house and the path and up to 5 courses of stone form a retaining wall at the front (south) of the house.		
99	1916+	Gardens and garden features	Varied intactness	Generally poor
				
102	1901	Benching of lawn areas	Largely intact	Fair
		The area around the harbour masters house was benched with the construction of a low drystone retaining wall including steps to the northern lower lawn area. The whole area was fenced early in its use but there is no remaining evidence of fencing. The level change is minor but clearly defines the extensive garden and lawn area around the house.		
110a	nd	Archaeological site rock cut	Archaeological site	n/a
		Stair cut into bedrock in front of Residential Cottage No. 3.		

Item No	Date	Name	Level of intactness	Condition
110b	nd	Archaeological site rock cut	Archaeological site	n/a
111	1901-03	Possible drainage cuts	Archaeological site	n/a
			Located close to the corner of the Harbour master's Residence (39) and Residential Cottage No. 38a.	
123	1901	Signal Mast remains	Fixings only	Fair
			The signal mast set in a prominent location with clear views down the harbour comprised a steel post, now cut down, two sets of three guy points for signal ropes and four corner fixing points for stays. All of the fixings remain.	
140	1930s c	Monterey Pine (<i>Pinus radiata</i>)		
			Associated with the Harbour Master's Residence	
142	1920s c	Prickly Pear (<i>Opuntia</i> species)		
			An interesting remnant of the interwar phase of biological control experiment with <i>Cactoblastis</i> moths and Prickly Pear	

Item No	Date	Name	Level of intactness	Condition
Maritime Period: MSB Phase				
75	1941	Timber stairs to waterfront	Recently rebuilt	Good
		Timber access stair dating from the 1940 development but recently replaced to a modified design but in the same location. These stairs provided access to the bathing enclosure and the small boats area from the residences and to the waterfront when the Cut was infilled.		
76	various	Paths and retaining walls	Paths to public areas	Fair
		A network of paths extends through the precinct with a number of stone flagged paths, now in poor condition, dating from the later period of occupation. The paths along the northern edge are related to gardens that extended onto the rock edge and include stone retaining walls, steps and various decorative features.		
-	Post 1940s	Fences	Fences to public areas	Poor
		A range of fences from steel tube and mesh to painted timber post and rail are located throughout the precinct at stairs and to protect edges alongside access paths. Most fences are deteriorated and the paths overgrown.		
129	1970s-1980s	Navigation markers	Intact	Good
		Day marker for commercial shipping vessels approaching from the east. Steel support structure with painted triangular marker. Date not known but believed to be circa 1970s-1980s.		

Item No	Date	Name	Level of intactness	Condition
139	1940s c	Bougainvillea spectabilis		
		<p>This <i>Bougainvillea</i> plant appears in a 1943 photograph, but could be earlier. Flowering.</p>		
National Park Period				
-	-	Seats	Intact	Good

NORTH DEPOT PRECINCT



Fig 3.26 The north depot precinct is the narrow strip of land and the wharves that extend across the northern and eastern face of the island with the distinctive boat pens at the western edge of the area.

The North Depot area is defined by the area below the escarpment and quarried face along the northern edge of the island extending around the eastern tip. It comprises the remaining wharves, a section of the sea wall and areas of reclamation that now contain a series of maritime buildings built during the Maritime Period: MSB phase of occupation. The area was first reclaimed in 1901 and has had progressive reclamation and excavation through to the late 1940's.

Much of the precinct is outside the original edge of the island and has a history solely related to the post Colonial Period development. The exception is the possible and likely remains of the first wharf built for the water police which is located directly behind the current sea wall and a wharf built in the first quarry and used as part of the 1875 magazine. The land area is generally flat grassed or paved and is faced with a part stone and part concrete sea wall built in a number of stages commencing in 1901.

The precinct has several eucalypt trees of recent origin, areas of grass but no other plantings or landscape elements.




The elements of the precinct are outlined in Table 3.9.







Figure 3.27 Plan of North Depot Precinct indicating the various elements within the precinct.





Table 3.9 Elements of the North Depot Precinct




Note items for which detailed inventory sheets have been prepared (contained in Volume 3: Heritage Inventory) are marked with an * next to the item number in the table below.

Item No	Date	Name	Level of intactness	Condition
Pre-Contact Period				
-	-	-	-	-
Colonial Period				
98	1835c	Stone jetty	Archaeological site, partially intact	n/a
		<p>Wharf constructed of stone blocks partially visible extending from under the partially demolished timber wharf (55b). This area has been filled but originally served as the water police wharf from 1836.</p> <p>North at top. The edge of the early wharf now forms part of the sea wall.</p>		
Maritime Period: Sydney Harbour Trust Phase				
82	1901	Stone block sea wall	Largely intact	Fair
		<p>Built as an extension of the Cut wall, this appears to be the first stone wall built by the Harbour Trust as they set up their wharves and infrastructure in 1901. Now built over it remains in reasonable condition.</p>		
83	1901+	Quarry and quarry face	Largely intact	Fair
		<p>The north-eastern edge of the island was originally in natural form but was gradually reclaimed and reworked from 1901. The rock faces appear to be quarried to "square-up" the end of the island related to reclamation works. A dry stone retaining wall is constructed directly above to provide a small grassed area in front of the water police building.</p>		
128	1920s	Light bracket	Largely intact	Fair/poor
		<p>A decorative steel light bracket fitted to a timber power pole on the ferry wharf that predates the present wharf construction and appears to date from the Maritime Period: SHT phase. It has a new light fitted directly above it.</p>		

Item No	Date	Name	Level of intactness	Condition
Maritime Period: MSB Phase				
48*	1952	Dredge office	Intact	Fair
			<p>The dredge office is one of the last structures to be erected on this part of the island and had a specific use in relation to the operation of harbour dredges which were moored adjacent. It is of the same basic construction as the earlier Gear Shed with timber frame, timber floor, AC sheet and timber cladding and hipped corrugated iron roof. It has a small porch and has a better fitout than the other buildings in the area due to its office use.</p>	
49*	1930-1946	Gear Shed	Largely intact	Fair
			<p>The Gear Shed replaced the earlier workshop building that was built to the shoreline. Built as part of the wharf upgrade and enlarged at each end around 1945-46 and following the relocation of the workshops to the shipyard precinct it is a lightweight building of timber framing with AC sheet and timber cladding with a hipped corrugated iron roof and multiple pairs of doors opening onto the wharf area, some with rail tracks to move heavy equipment. It is likely to have been reclad when altered.</p>	
50*	1930-1939	Fire Fighting Building	Largely intact	Poor
			<p>This building replaced a series of earlier buildings on the site also related to fire brigade use. It is timber framed clad with corrugated iron with a corrugated iron skillion roof. It is partially open with several secure rooms and appears to have been built in several stages containing storage areas, secure stores, small workshops and later staff areas. It is a basic industrial structure with timber and steel framed windows, metal clad doors and fitout comprising workbenches.</p>	
54a*	1942-44	Ferry Wharf	Largely intact	Fair/poor
			<p>The Ferry Wharf was being partially reconstructed at the time of inspection for this report. The work follows the design of the previous wharf. It comprises pairs of piles (300 x 300mm), fenders with 350 x 350mm headstock, 300 x 300mm girders and 100mm thick timber boarding. The wharf has a painted timber handrail to the end, two sets of timber steps for boat access, timber ladders and bollards. A waiting shed is located adjacent to the access stairs. This structure has been the major arrival point at the island for visitors for over 60 years. The structure has pedestrian access stairs at its end and a small timber waiting shed. Upon completion the wharf will be in good condition.</p>	

Item No	Date	Name	Level of intactness	Condition
54b	1941-43	Small Boat Enclosure	Largely intact	Good
			<p>The boat pens are located behind the ferry wharf and have been reconstructed a number of times, more recently in 1995 and again around 2005. The walkway and pens are in sound condition and are used to moor NPWS operational vessels. The remaining structures comprise a walkway supported on pairs of 350mm diameter piles with 350 x 350mm headstocks and 300 x 300 girders, 100mm deep timber decking with a painted timber handrail to the shore side (and Harbour side of the outer section), timber ladders providing access to small vessels that may be moored alongside and a series of pens with sloped access ramps, reconstructed as originally constructed. Various additions to this area have collapsed or been removed over time. A corner pile is missing from the walkway.</p> <p>A small shed remains at the western end of the pens supported on four detached piles and framing. It is a movable structure.</p> <p>An attached walkway and stair connecting to the top of the rock escarpment is known as the Harbour Master's Stair. It now forms part of the boat pen area but formerly, before the construction of the boat pens, connected to a separate wharf. The stair has collapsed and the walkway is in poor condition.</p>	
55a	1942	North-east Broadside Wharf	Demolished	NA
			<p>A standard hardwood pile wharf, two bays wide with timber superstructure attached to a stone seawall. The wharf extended for the full length of the reclaimed foreshore on the northern face of the precinct. This wharf featured round timber fenders located on each grid with metal-banded tops. Several additional square fenders were located at key locations, this detail is not found on the other broadside wharves on the island. A set of access stairs was located on the northern corner. Piles were 350mm diameter, headstocks 350 x 350mm, girders 300 x 300 laid out on a 3 metre grid.</p> <p>The wharf has been demolished.</p>	
55b	1942	Northern Broadside Wharf	Demolished eastern end - west end reconstructed 2008,	Good
			<p>A standard hardwood pile wharf (350mm diameter), two bays wide with timber superstructure of headstocks (350 x 350mm) and girders (300 x 300) attached to a stone seawall. The wharf extended for the full length of the reclaimed foreshore on the eastern face of the precinct and projected past this point to connect via a ramp to the eastern wharf. This was the last section of wharf to be built around this end of the island. The western end, providing access to the ferry wharf has been repaired, the remainder of the wharf has been demolished.</p>	
58	1970c	Amenities Block	Intact	Poor
			<p>A small concrete block 1970s toilet and shower block wedged between the Gear Store and the cliff face. It has a flat roof and is of basic construction on a concrete slab.</p>	

Item No	Date	Name	Level of intactness	Condition
59	1990c	Metal Demountable	Removed from site	NA
			A demountable building that was set on concrete blocks dating from the last period of maritime use. The use of the building is not known. It was a temporary structure that did not belong to the infrastructure of the island. The structure was removed during the preparation of this plan.	
56	1950c	Shed MSB B456	Demolished	
			A movable building with an MSB number over the door indicating it was moved a number of times. It appears in several photos in different locations on the island. It is timber framed and clad with weatherboards with a gabled iron roof and windows to all sides. The structure was removed from the island during the preparation of this plan.	
57		Corrugated iron shed	Largely intact	Fair/poor
			A simple timber framed galvanised iron clad shed with gabled roof and access door but no windows. Built as part of the fire brigade precinct it was used for storage related to the brigade.	
125	1940s	Fire brigade gallows	Partial remains	Poor
			The fire brigade gallows remains only in part, missing its cross rails and braces. Used to hang drying hoses it also had pulleys and ropes. It was an essential part of the fire brigade infrastructure. It was braced back to the rock face and was adjacent to a timber access stair.	

Item No	Date	Name	Level of intactness	Condition
130	1945c	Shed	Largely intact	Fair/poor
		 <p>A small timber shed that has been relocated a number of times around the wharves and has had a range of uses. It is a basic and simple structure of timber framing and timber cladding.</p>		
127	1945c	Waiting Shed	Largely intact	Fair/poor
		 <p>A timber framed, waiting shed with vertical timber external boarding, a gabled tiled roof with projecting eaves, coloured glass window and seats built into the interior. It has an opening onto the wharf. It appears to have survived several wharf rebuilds and may date to the harbour trust period.</p>		
129	1987	Navigation markers	Intact	Good
		 <p>Front and rear tanker leads for tankers entering Gore Cove (day and night). One is on the ferry wharf and one on the corner of the filled area of the island. They replace earlier markers in similar locations. Date known from an MSB plan.</p>		
National Park Period				
-	-	-	-	-

SOUTH DEPOT PRECINCT



Fig 3.28 The south precinct is the small area to the south east of the former water police station including the Port Emergency building and the finger wharf that extends a considerable distance along the eastern shore. Most of this precinct is on land that has been reclaimed for maritime use.

The South Depot Precinct is defined by the face of the escarpment around the eastern tip of the island, the quarry face adjacent to Barney's Cut, includes the southern end of Barney's Cut and extends along the escarpment edge to include the whole of the finger wharf and the former locations of skeleton wharves. Apart from the escarpment face adjacent to the remaining structure of wharf 51, the precinct comprises either filled or excavated land benched to a common level most of which fronts the remaining section of broadside wharf. The sea edge of much of the reclaimed area is severely eroded. The area of fill includes filling part of the Barney's Cut which early in its history was a passage for water.

The precinct contains only one building, the relatively recent Port Emergency Services Building, but several wharves from the 1940 and 1960 period.

This precinct has been severely modified from its original form and relates exclusively now to maritime uses as completed by the MSB, even though the early quarry (later extended to building the Port Emergency Building) is part of the early development of the site.

The filled areas around the building and into the cut are flat and grassed or paved with very recent and inappropriate landscaping that relates to the use of the site as a film set.




The elements of the precinct are outlined in Table 3.10.








Figure 3.29 Plan of South Depot Precinct indicating the various elements within the precinct.

Table 3.10 Elements of the South Depot Precinct

Note items for which detailed inventory sheets have been prepared (contained in Volume 3: Heritage Inventory) are marked with an * next to the item number in the table below.

Item No	Date	Name	Level of intactness	Condition
Pre-Contact Period				
-	-	-	-	-
Colonial Period				
85	1831/1968	Quarry face	Altered	Fair
		Northeastern tip of the Island (later the site of the Water Police Station) was established as a quarry. The quarry was opened and overseen by Captain Charles Wilson of the Department of Public Works and the principle purpose of the quarry was to supply high quality sandstone for public buildings in Sydney. The stone was cut by convicts and shipped the short distance (1.4 km) to Sydney Cove where it was utilized. The quarry ceased in 1832 but during its short period of operation was intensely used.		
97	1831 c.	Stone jetty	Archaeological site under jib crane	n/a
		The remains of the first stone jetty on the island related to the first quarry remain under later fill for the infilling of the area for the 1914 wharf and crane construction. Comprising large stone blocks it is likely that most of the early structure remains under the current fill.		
Maritime Period: Sydney Harbour Trust Phase				
-	-	-	-	-
Maritime Period: MSB Phase				
45*	1960-62	Port Emergency Services Building	Reasonably intact	Fair
		The Port Emergency Services Building is a modern steel framed structure with lightweight infill walls, concrete decks and a membrane covered flat roof used as an observation deck. It was the last building to be constructed for maritime use. It contains toilets, change rooms, kitchen and office spaces as well as storage and works area.		
51*	1969	Wharf Mooring Floating Plant	Partially demolished	Poor
		A narrow wharf, the last to be constructed on the island, using concrete filled steel octagonal piles in a narrow alignment to which a range of vessels were moored. The piles project above the former decking level by 1200mm forming the mooring fixings. Square timber fenders are fixed to each pile of approximately 200 x 200mm size. Access was via a narrow plywood over timber boarding walkway that may have been added over the skeleton timber framing. The framing unlike trafficable wharves runs along the line of the piles with a single structural layer and boarding mounted directly to it. Vessels were moored on each side of the structure. It was an efficient structure for mooring large numbers of vessels. The wharf		

			has a series of light poles and steel ladders extending to water level. There are remains of former access ramps to pontoons that have been removed. The walkway is approximately 1 metre wide. The decking has been removed. The piles appear in sound condition.	
52a	1943	Broadside Wharf	Extant,	N/A
52b	1943	Broadside Wharf	Demolished	NA
			<p>The eastern wharf (more correctly the southern wharf) contrasted to the northern wharf structure in that it was freestanding from the shore with connecting access ramps. The wharf was constructed of 350 mm diameter piles, 350 x 350mm headstocks, 300 x 250 girders, raking piles, a 250 x 300mm kerb, bollards, square timber fenders on every second pile, all laid out on a 3 metre square grid with an overall width of 6 metres.</p> <p>The area between the wharf and the shore was backfilled over time with debris that now encroaches well under the former structure and which has eroded. The wharf is in very poor condition and the later concrete decking has been removed over much of the wharf to reduce the risk of collapse. The western end of the structure retains its concrete decking and houses a stiff leg crane (mounted on the shore); this area is in sounder condition than the eastern end. The finger wharf extends from the western end of the structure.</p> <p>The wharf was braced back to the shore using a combination of round timber posts (approx 300x300mm)(used as beams) and unusual steel tie rods that may predate the present structure. The tie rods have a hinge (now rusted) that probably allowed for some movement in the wharf with its free standing form. The wharf was used for materials handling from ship to shore and for berthing of vessels that required access from a wharf in contrast to berthing on skeleton and finger wharfs.</p> <p>The southern end of the wharf is in deteriorated but fair condition, the northern end of the wharf has been demolished.</p>	
84	1943	Jib crane	Intact	Fair
			<p>A 1940s jib crane mounted on the 1945 wharf with stiff legs on a concrete base. The crane is typical of small cranes from the period.</p>	
118	Post 1914	Eroding shoreline	Deteriorating	Poor
			<p>The eastern shoreline behind the eastern wharf has been progressively filled with building materials and debris probably for the last 90+ years. Unlike the northern wharves sea walls were not used to contain material. The shoreline is severely eroding and will in time return to the original rock shoreline.</p>	

Item No	Date	Name	Level of intactness	Condition
124	1945c	Jib Crane Base	Reasonably intact	Fair
		<p>The mass concrete mounting blocks for the 1914 period crane set over the first wharf and quarry base. Only two of the three bases remain, one being removed for the Port Services Building construction. They have holding down bolts for the steel superstructure still in place.</p>		
129	c.1970s-1980s	Navigation maker	Reasonably intact	Fair
		<p>Front lead beacon for commercial vessels approaching from the east. Steel structure with lights. Date not known but believed to be circa 1970s-1980s.</p>		
National Park Period				
-	-	-	-	-

3.9 VIEWS TO AND FROM THE ISLAND

CURRENT VIEWS TO THE ISLAND

Located at the confluence of Port Jackson, Parramatta River and Darling Harbour, Goat Island is visible from a number of vantage points around the harbour. Goat Island is a component of the headlands and islands that characterize the harbour and is an evocative reminder of the Harbour's industrial past. Located in close proximity to Balls Head Reserve, Goat Island and Balls Head create a striking vegetated entrance to/from the Parramatta River.



Fig 3.30 Location of vantage points offering views to Goat Island (DECCW, 2007).

The island is viewed from many prominent locations and with its vegetated higher ground is a striking feature within the Harbour setting. It is viewed at water level from passing boats, from the eastern foreshores of Darling Harbour and the soon to be created Barangaroo area, Balmain East, Birchgrove, the north shore, particularly Balls Head, and from Dawes Point. It is viewed from higher locations such as the Harbour Bridge, Balls Head Reserve and a range of taller buildings around that part of the Harbour. The views juxtapose built and natural features.

The Island is circumnavigated by busy ferry and harbour-cruising routes supplying picturesque views to passers-by. The differing landscape character around the Island creates a range of different views to the Island and can be broadly described as bushland, colonial, parkland, maritime and industrial.

The most prominent views of the island are from vantage points to the east, south, west, north and north-east, in summary they are;

1. To the east, Miller's Point, Walsh Bay and Observatory Hill provide views that highlight the bushland character of the Island's south-eastern aspect, the more formal parkland character of the Residential Precinct, the maritime character of the South Depot and Water Police Precincts and glimpses only of the Magazine Precinct. The cottages and Harbour Masters Residence are partially obscured by trees. The natural shoreline of the south-western aspect is readily apparent. The Port Emergency Services Building is the dominant built structure viewed from these locations.



Fig 3.31: View of Goat Island from Millers Point (DECCW, 2009)

2. To the south, Balmain East provides a view of the colonial character of the Magazine Precinct and parkland character of the archaeological sites within the Magazine precinct (ie east of the Kitchen Cottage). The southern elevation of the Ship Repair Workshop and the Hammerhead Crane adjoin but do not obscure these views.



Fig 3.32: View of Goat Island from Balmain East (R Newton, 2008).

3. Vantage points to the west, including Mort Bay, Ballast Point and Yurulbin Point, provide views of an industrial character on the water's edge surrounded by a vegetated canopy. The shoreline is almost completely obscured by buildings and wharfage. Subject to its position (the crane can rotate 350 degrees), the Hammerhead Crane can be a striking landmark feature, or blend almost completely into the Island, CBD or Harbour Bridge background.



Fig 3.33: View of Goat Island from Ballast Point (DECCW, 2009)

4. Balls Head, to the North provides an excellent elevated view of the bushland character of the north-western side of the Island and the maritime character of the Northern Depot and Water Police Precincts. The Residential precinct is almost completely obscured by vegetation.



Fog 3.34: View of Goat Island from Balls Head (DECCW, 2008).

5. To the north-east, Blues Point provides a lower view of the maritime character of the Depot Precincts, Water Police and Residential Precincts, however from this vantage point vegetation is the dominant feature of the landscape.



Fig 3.35: View of Goat Island from Blues Point (DECCW, 2008)

Following is a pictorial analysis of landscape elements as viewed from the water.



Figure 3.36 A close view from the Harbour of the north-east corner of the island. The immediate view was dominated by the wharves and later buildings around the foreshore. As the viewer moves east, the form of the island with its ridge and the Water Police Station (47) take more prominence. The close view reinforces the industrial character of the island, with the Maritime Services Board's Dredge Office (48) and Gear Shed (49) being obvious.



Figure 3.37 A close view from the north of the former eastern wharf (52) with the Wharf Mooring Floating Plant (51) visible on the far left. From this view position the wharves dominate the scene with the Port Emergency Services Building (45) being the most visually dominating element on the northern part of the island through its mass and light colouring, with the Harbour Master's Residence (39) visible behind.



Figure 3.38 A close view of the ferry wharf (54a) and end of the northern wharf (55). This photograph illustrates the changes in visual setting of the wharves with the northern wharf closely related to built development along its edge and stepping up the hill where to the right the ferry wharf is set against the natural escarpment and the vegetated headland. MSB firefighting building (50), various sheds (56, 57) western end of Gear Shed (49) visible, with north elevation of the SHT Fire Brigade Barracks (46b) visible on the promontory behind. Note that the Harbour Master's Residence (39) is virtually invisible from this angle, whereas in the early 20th century it was prominent from this direction.



Figure 3.39 A close up view of the ferry wharf (54a) and former northern wharf (55) looking towards the east and the Harbour Bridge. This is an important view as it is taken from the main channel of the Harbour. The Water Police Station (47) is prominent centre left.



Figure 3.40 The distant view from the west where the vegetation frames the Harbour Bridge with Balls Head (not in the picture) to the left. The dominant elements of this view are the vegetation canopy and the intensity of development in the shipyard and magazine precincts (to right) with the broadside wharf (4) forming a strong edge to the base of the island. The northern wharf area can be seen on the left but plays a minor role in the view until the viewer moves to the location of the illustration above. The cleared grassy hill above and east of the magazine complex is also visible in this view.



Figure 3.41 A more distant view from the north where the wharves provide the edge of the island with buildings seen inside the landscape canopy. The reason the wharves are defined is the deep shadowing under the decking that gives depth to the wharf edge. The main buildings visible on the Island are the Harbour Master's Residence (39), centre, and the Water Police Station (47), left.



Figure 3.42 A longer view of the island from the north with the edge of Balls head on the right. The dominant form of the island is the rise and the rock escarpment. The ferry wharf (54a) and small boat enclosure (54b) are a minor element in the view plane, while the built development to the east forms a more solid visual element. From this distance the northern wharf plays a relatively minor role in the view. The Harbour Master's Residence (39) and at least one of the adjacent cottages (38a) appears to be visible among the foliage, centre, and the Water Police Station (47) can be seen to the left. However most buildings on the ridge cannot be seen.



Figure 3.43 A view from mid-channel from the north-east where the northern edge development, while visible, takes a minor role in the view in relation to the vegetated form of the island. The Harbour Master's Residence (39) and the roofs of some of the adjacent cottages (probably 38b and 38c) are visible, centre, amongst the foliage, while the Water Police Station (47) retains some prominence, with various mid 20th century MSB buildings below it (Dredge Office (48), Gear Shed (49), Fire fighting building (50)).



Figure 3.44 A more distant view of the island from the east. From this distance the northern built elements, particularly the Water Police Station (47) retain some visual dominance but the vegetated form dominates the view. The Harbour Master's Residence and adjacent cottages are virtually hidden by vegetation.



Figure 3.45 The view of the island from near the Harbour Bridge. This is an important view that frames the island between the Walsh Bay finger wharves and Balls head in the background and Blues Point and Blues Point Tower in the mid ground. From this location the island is a vegetated outcrop contrasting with the heavily developed Balmain Peninsula behind. Buildings and wharves play almost no part from this distance in the viewscape. The roof of the Harbour Master's Residence (39) is just visible.

HISTORICAL VIEWS TO THE ISLAND

The various nineteenth and very early twentieth century historical images of the island, a number of which include the island as part of a broader view (but which for the purpose of detail have been cropped in this report focusing on the island) are taken from Balls Head, East Balmain, Birchgrove or Observatory Hill where there are vantage points to look out over the harbour. The known historic views of the island are generally not specifically of the island but of the harbour setting which includes the island, the exceptions being the 1850s paintings of Rebecca Martens and the photographs of the government photographer J. Degotardi.

The paintings of Rebecca Martens and later photographs taken from either Balmain or Observatory Hill show the island with the eastern end of the Magazine complex: the fortified wall, the Barracks, Barracks kitchen and outbuildings at the southern end, and the Water Police Station at the northern end, with varying levels of vegetation over time, dramatically thinning in the late 19th century (presumably as a result of the November 1875 recommendations of the *Report of the Storage of Gunpowder Board* recommending the clearing of the island as a safety measure, an activity which does not appear to have been undertaken until around 1882 according to photographic evidence). Rebecca Martens' 1850s paintings also show a "house on the hill" at the southern end of the island. An 1860s photograph of the island (Figure 2.36 in Section 2.4) shows a building at the southern end of the hill that is likely to be Gunner Davis' cottage (demolished as a recommendation of the 1875 *Report of the Storage of Gunpowder Board* mentioned above). By the early 1880s photographs evidence that there were no buildings on the hill of the island.

Photographs from Balmain and Observatory Hill in the 1880s and 1890s clearly show the Magazine Walk and the two 1870s magazines, as well as Barney's Cut, the Water Police Station and the 1865 Artillery Sergeant's cottage. At the southern end of the island, while change to this view has occurred over time - including disappearance of an outbuilding behind the Barracks Kitchen, conversion of the Barracks Kitchen to the Kitchen Cottage (26) by the Sydney Harbour Trust, addition of the Substation (24), the 3-door boatshed (23a) and the southern end of the Ship Repair Workshop (1), the eastern elevation of the Barracks and what is now the Kitchen Cottage are still viewed from this direction. From Balmain, the changes outlined have had the same effect. The fig trees (*Ficus Macrophylla*) flanking the path from the stone jetty up to the Barracks (25) which appear to be mid 1880s plantings, have gradually become larger and are now dominating elements of the southern end of the island in the view from Balmain and Observatory Hill.

The Water Police Station (47) when built in 1838 sat prominent and alone on a rocky outcrop surrounded by natural shoreline altered only by the addition of a stone jetty and Barney's Cut. In 1865, with the conversion of the Water Police Station to a cartridge laboratory, a bridge was built over Barney's Cut, the Artillery Sergeant's Cottage (46a) and a privy were built, and the Magazine Walk (69) was "made good". In 1875 and 1878 the two additional weatherboard magazines built south of the Cut and vegetation clearing made the north east Water Police area less isolated from other activities on the island. From 1901 the Water Police Precinct and

its surrounds were utilized heavily by the Sydney Harbour Trust, with the conversion of existing buildings to new uses, and the addition of buildings (such as the Barracks 46b) and wharves and the filling of foreshore areas. All this activity ended the view of the Water Police Station as an isolated structure with few surrounding buildings, which had largely remained throughout the 19th century.

An invaluable c.1898 photo taken from Birchgrove, showing the Magazine complex in its final phase shows one of the most important lost views of the island. The shore, the shore buildings, and this view of the Magazine complex changed from the 1925 takeover of the complex for a Sydney Harbour Trust shipyard until this view from the water and from Birchgrove was virtually completely lost with the construction of the Ship Repair Workshop (1) and the Broadside Wharf (4a and 4b) in 1943.

In the 20th century the activities of the Sydney Harbour Trust from 1901 followed by the Maritime Services Board profoundly changed the island. The construction of the Harbour Master's Residence (39) in 1901-1903 in a prominent location at the northern end of the island's hill, a deliberate siting of the building to both be seen (as an advertisement for the SHT) and to encompass views east down the Harbour, was followed by the construction of various residences on the eastern and central part of the island (those south of the Harbour Master's Residence still remaining), as well as the activities mentioned above within and around the Water Police Precinct. A photo taken 1903-1911 from the north shows a large timber building on the shore below and west of the Water Police Station, testifying to the extent of early SHT activity.

During the 1940s the Recreation Hall, tennis court and Tennis Court pavilion were added to the southern end of the island's hill, along with numerous operational buildings both in the shipyard (1, 2, 3, 14 and 7) and below the Water Police Station (48,49, and 50).

The 1960s amenities building within the Magazine Complex and the 1963 Port Emergency Services building (originally built for the MSB fire brigade) were the last major structures built on the island. By the end of the 1960s the island had its maximum extent of structures, with 16 occupied residences, a working MSB shipyard, MSB water fire brigade and dredging operation, and recreational facilities. This crowded island is evident in the 1968 aerial photo at Figure 3.30.

The various SHT residences were prominent on the hill of the island throughout most of the 20th century. With the lower residences demolished in the 1970s, the upper residences and the Harbour Master's Residence remained prominent even as late as the early 1980s. In the late 20th century the regrowth of vegetation on the island has obscured (though not completely) the view of the residences, including the Harbour Master's, from the east.

Early photos and plans of the Island show that prior to 1902, the Island was without timber wharves and had only very modest stone (and timber) jetties. The period to 1929 saw construction of long wharves at the north-eastern end of the island, the straggle of berthing or skeleton wharves along the south-eastern shore and the commencement of the shipyard activities with wharves attached. However, it was not until 1946-49 that the current extent of wharves was established, wrapping around a large part of the island.

The view of the island from the east and the Harbour Bridge (since 1932) and the northeast until the MSB left the island in 1993, was a view of an island surrounded by moored vessels with little wharfage or the edge of the island actually visible.



Figure 3.46 1968 aerial photograph of Goat Island, showing the maximum extent of wharves and buildings on the island

CURRENT VIEWS FROM THE ISLAND

The views that are now experienced from the island, apart from the specific views noted above, are impressive and provide panoramas of large sections of the harbour and the surrounding foreshores. In particular the views to the south and east to the city and Darling Harbour from the Magazine Walk as it winds along the eastern shoreline are spectacular. Similarly the views from the ridgeline, although now less panoramic due to revegetation, provide panoramas particularly to the west. These views have been available since the 1830s and while they are generally not recognised or recorded by paintings or photographsⁱ, provide continuity with the history of the island.

There are views available from and also to many of the built structures on Goat Island. Most of these views are incidental and most buildings were not designed to have views, as discussed above, however a number of significant buildings can be seen from various vantage points, which is of significance in the presentation and potential interpretation of the island and its history.

The more important views are:

- Views from the Water Police Station (47) as discussed above,

- Views from the Harbour Master's Residence (39) also as noted above
- The narrow vista from the Fortified wall (71) and particularly the sentry box, to the harbour to the south, is all that remains of the colonial magazine's original connection with the harbour and, while now a modest view, is of historical significance.

The wharves also have a visual value to the island that is separate to the broader discussion of views to and from the place. They are a distinctive feature of the island covering more than half of the perimeter and their various forms create visual interest as well as demonstrating a significant phase of historic use of the island.

The Port Emergency Services Building (\$) has extensive views of the main harbour to the east, and can be seen, partially through its lighter contrasting paint scheme, against the ore subdued backdrop of the island.

The visual value of the wharves lies in the following areas:

- Their relationship to the shipyard with the defining horizontal alignment of the Broadside Wharf that separates the slipways from the Harbour proper and sets the waterfront buildings on a solid plinth that is a traditional relationship between stores/workshops and the Harbour.
- The ferry wharf and boat pens are the most visually interesting wharf elements with their narrow and winding forms and the capacity to moor a range of boats.

It is noted that a separate study of the wharvesⁱⁱ addresses these issues in greater detail and that the very poor condition of a number of the wharves does not allow access to take advantage of views either from or to the island.

The following photos illustrate the principal views from the island from key locations, specifically the Magazine Walk (69) sections of the wharves and the foreshore, the front verandahs of the Harbour Master's residence (39) and the Water Police Station (47) and from the cleared ridge line looking to the west. There are many views available from all around the island, all of which have interest due to the location of Goat Island and its potential to view in many directions. Historically it is the views directly down the harbour (to the east) that are of particular importance as they are linked to the use of the island for maritime management.



Figure 3.47 View from Magazine Walk (69) adjacent to barracks building (25) looking to Balmain east. This is the closest shoreline to the island and shows the prominence of the southern buildings in this area (25, 24, 23a) to Balmain.



Figure 3.48 The view from Magazine Walk (69) towards the city taken adjacent to the Barracks Building (25). Expansive views are available to the city along the walk as evidenced in the following sequence of photographs.



Figure 3.49 The view from the Magazine Walk (69) towards the city, taken from the Central Precinct and looking back towards Darling Harbour.



Figure 3.50 The view from the Magazine Walk (69) towards the city taken from the northern edge of the Central Precinct and looking back towards Darling Harbour.



Figure 3.51 The view from the roof of the Port Emergency Services Building (45) looking south along the shoreline of the island towards the city and Darling Harbour. The flat roof of the building provides a large viewing platform with uninterrupted panoramic views.



Figure 3.52 A more elevated view to the city looking over vegetation in the foreground from the Central Precinct.



Figure 3.53 The view from the edge of the northern wharf (55) towards Millers Point. Note the wharf is no longer accessible.



Figure 3.54 The view from the edge of the Magazine Walk looking north to Blues Point Tower. Wharf Mooring Floating Plant (51) visible in foreground.



Figure 3.55 The view from the front verandah of the Harbour Master's residence (39) showing the orientation of the dwelling directly down the harbour (but slightly obliquely to the bridge which was constructed later). The importance of the location of the residence, its direct views and its prominence were part of the initial design of the facilities on the island by the SHT.



Figure 3.56 A similar view to above but from the front verandah of the Water Police Station (47). Both buildings share the same orientation directly east looking down the harbour in elevated and prominent locations that could both see out and be seen from a wide range of aspects.



Figure 3.57 The view from the northern wharf looking towards Balls Head with its densely vegetated form. Views to the island are available from the headland.



Figure 3.58 The view from the rear of the residences looking through tree cover towards the western harbour including Long Nose Point.



Figure 3.59 The view from the ridge line in the Central Precinct looking south-west over the magazine complex towards Balmain. The view is open in part, framed by tree plantings and is modified by the hammerhead crane (9) and buildings in the foreground.



Figure 3.60 The view from the edge of the Magazine wall looking over the shipyard to the north-western end of the harbour. The view in this direction is less dramatic but provides excellent views into the western part of the harbour.



Figure 3.61 The view from the edge of the Magazine wall looking over the shipyard to the western end of the harbour. The view in this direction is less dramatic but provides excellent views into the western part of the harbour.



Figure 3.62 This plan identifies that the main views are elevated and look past the features on the island. The wharves play little role in views out from the island. (DECCW, 2007).



Figure 3.63 This plan identifies specific views. It is important to note the views from the wharves and that only the northern and eastern wharves are identified. It is also significant to note that the views from these wharfs are equally available from the shoreline immediately behind the wharves and that due to the removal of decking most of these wharves are now not accessible.

While the wharves frame the foreground for some of the views from the island it is the distant views that are identified as significant. (DECCW, 2007)

HISTORICAL VIEWS FROM THE ISLAND AND WITHIN THE ISLAND

The first recognition of views from the island is indicated by the island's Aboriginal name "Memel", the translation of which means "place from which you can see far."

Views from the island and down the harbour were recognised as important from the first stages of colonial development with the Water Police Station located in the most prominent location on the northeastern promontory looking directly east down the harbour.

This was a practical view providing clear sightlines for the police stationed there and their flag signals, rather than an aesthetic view. However the 'cottage ornee' design of the Station suggests careful consideration of the building's form and placement in relation to how it would be seen from both the water and the adjacent shorelines. The views to and from the water police building are of high significance in understanding the functioning of the island during the Colonial phase of occupation. Mid 19th century photographs of the Island from the north shore and Observatory Hill show the Water Police Station and Barney's Cut as prominent landmark structures.

The view from the island was again of importance with the location and siting of the Harbour Master's residence, again oriented to look east down the harbour, with the building located on the highest point of the island with the most commanding views. This was further reinforced with the design of the viewing tower which provided for 360 degree viewing of the harbour. The view from the Harbour Master's residence to the east is another view of high significance in understanding the maritime use of the island in the early 20th century.

In contrast, while the other Sydney Harbour Trust cottages have some views, these appear to be more incidental.

Design to incorporate views or aspect did not appear to feature in the development of the magazine complex. Views both to and from the area were available due to the proximity of the Island's shore but there is no indication that the building layouts were developed with views in mind. Views also generally did not figure in the twentieth century maritime authority developments where buildings were placed without regard for views either to or from the island, resulting in the separation of the magazine complex from the water, and the surrounding of the Water Police Station with a range of different buildings and structures, some of considerable scale, over time. For example the reclaiming of the foreshore and construction of the Dredge Office (48), Gear Shed (49) and Fire fighting building (50) during the 20th century, while contributing to the maritime aesthetic of the island, interferes with the historic view of the 1838 Water Police Station (47) which was originally seen as an isolated building on a promontory.

The exception to the general disregard of views by the maritime authorities on the island in the 20th century is the Harbour Master's residence, specifically designed to take advantage of views to the east down the harbour.

Historical views within the island, which are now lost, are:

- Views between the Water Police Station (47) and the Artillery Sergeants Cottage (46a), now obscured by the Fire Brigade Barracks (46b)
- Uncluttered views within the Magazine complex obscured by later structures such as the Queen's Magazine southern addition (15a); the two amenities blocks (13 and 14), and the winch house (96).
- Views of the Queen's magazine north through the Fortified Wall (71) gateway, now obscured by the Queen's Magazine southern addition (15a)
- Views of the Fortified wall and sentry box (71) from the north. This view of the wall was somewhat obscured from 1885 by construction of a single storey 1885 magazine on north side of the wall, but completely obscured from 1964 by construction of the 1964 Amenities block.

CONCLUSION

Goat Island is an attractive island when viewed from many locations and is an important visual component of the western end of the harbour. Its proximity to the northern shore and Balls Head reserve allows the Island to be seen and viewed unlike any of the other harbour islands. The Island is visually a combination of historic features, some built to take advantage of the island setting; the aspect east down and around the harbour; and the more recent vegetation particularly in the north eastern corner.

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 - i While there are many 20th century photographs taken on the island, these are of buildings, structures such as wharves or wharf construction activity, or vessels either under construction or being launched. Exceptions are views taken from the Island looking over the Water Police area, of the Harbour Bridge (one view by Ted Hood, c. 1930 of a nearly complete Harbour Bridge arch, Mitchell Library image No. DG ON4/2170; and another view taken in 1943 from the same location looking to the Harbour Bridge, Mitchell Library image No. GPO 1-10043).
 - ii Paul Davies Pty Ltd *Conservation Management Strategy for the Wharves of Goat Island*, DECC, 2007