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**PROPOSED DEMOLITION OF HARBOUR CONTROL TOWER,  
BARANGAROO HEADLAND PARK:  
ARCHAEOLOGICAL ASSESSMENT AND  
STATEMENT OF HERITAGE IMPACT**

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**Prepared by  
Austral Archaeology Pty Ltd  
Archaeological & Cultural Heritage Consultants  
For  
Barangaroo Delivery Authority  
19 November 2013  
Job No: 1323**

## EXECUTIVE SUMMARY

Barangaroo Delivery Authority (BDA) is intending to prepare a Modification to the Main Works approval for the potential demolition and removal of the Harbour Control Tower (HCT), located at Barangaroo. The HCT is located in the Headland Park precinct. Austral Archaeology Pty Ltd (Austral Archaeology) has been commissioned by BDA to produce an archaeological assessment and statement of heritage impact (SOHI) for the proposed demolition of the HCT.

The human history of East Darling Harbour and Millers Point includes thousands of years of Aboriginal occupation of this resource-rich maritime location and approximately 190 years of European modification. Quarrying and reclamation for the construction of buildings, wharfs and roads has been an ongoing process and the landscape is now dominated by the structural remains and large scale topographic alteration that reflect a long maritime industry.

The outbreak of bubonic plague in 1901 was the impetus for the Government to begin resumption of entire suburbs and the demolition of substandard housing and wharfage. The consolidation of freehold land allowed the Government to redevelop on a massive scale without the constraints of original property boundaries.

The first major work to be completed was the new Dalgety's wharf on the point. Construction of bond stores and warehouses at Walsh Bay were the next priority and in 1909 the major work of constructing Hickson Road began by extensive vertical cutting through the headland to create a 61m (200 foot) wide road. The western edge of the headland was terraced to accommodate the new Dalgety buildings.

The Dalgety buildings were subsequently removed in the 1970s when the headland was further extensively cut back. The 1970s also saw the construction of a concrete caisson sea wall that linked all the finger wharves and allowed filling between the wharves to create a massive deck suitable for container vessels. The Sydney Ports Harbour Control Tower was constructed at this time in an area where the cliff had been cut back. The tower was decommissioned in May 2011 when all vessel control services for Sydney Harbour were shifted to Port Botany.

### Conclusions and Recommendations

It is concluded that the impact zone beneath the HCT and its associated infrastructure at its base have no archaeological potential.

It is recommended that:

- no further archaeological investigation needs to be undertaken within the HCT footprint or its immediate surrounding area at its base as the area has been assessed to have no archaeological potential.
- if there are to be below-ground impacts around the HCT entrance on the Merriman Street level, the works be subject to monitoring by a suitably qualified archaeologist.
- in the event that historical archaeological relics not assessed or anticipated by this report are found during the works, all works that would affect the find in the immediate vicinity are to cease immediately and a qualified archaeologist be contacted to assess the situation and possibly consult with the Department of Planning and Infrastructure regarding the most appropriate course of action.
- in the event that Aboriginal archaeological material or deposits are encountered during earthworks, all works that would affect the find in the immediate vicinity must cease

immediately to allow an archaeologist to make an assessment of the find. The archaeologist may need to consult with the Office of Environment and Heritage (OEH) and the relevant Aboriginal stakeholders, regarding the find. Section 89A of the NPW Act 1974 requires that the OEH must be notified of any Aboriginal objects discovered within a reasonable time.

- should the proposed development be altered significantly from the proposed concept design, then a reassessment of the heritage/archaeological impact may be required.

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**Cover Illustration: The Harbour Control Tower viewed to the southwest from Victoria Terraces. (Photo: Austral Archaeology Pty Ltd)**

## **1.0 INTRODUCTION**

### **1.1 PROJECT BACKGROUND**

Barangaroo Delivery Authority (BDA) is intending to prepare a Modification to the Main Works approval for the potential demolition and removal of the Harbour Control Tower (HCT), located at Barangaroo. The Barangaroo site is divided into three redevelopment areas, Headland Park, Central Barangaroo and Barangaroo South. The HCT is located in the Headland Park precinct. Austral Archaeology Pty Ltd (Austral Archaeology) has been commissioned by BDA to produce an archaeological assessment and statement of heritage impact (SOHI) for the proposed demolition of the HCT (see Figure 1.1).

A request for Director General's Requirements (DGR's) was lodged in August for the demolition of the HCT in its entirety or the retention of either part of, or the whole of, the tower and adaptive reuse. DGR's were received on the 9 September 2013 and included a condition requesting:

An archaeological assessment of the likely impacts of the proposal on any Aboriginal cultural heritage, European cultural heritage and other archaeological items and outline proposed mitigation and conservation measures.

The Scope of Works for this project has been defined by BDA to only include the potential demolition and removal of the HCT.

This report documents the outcomes of the archaeological assessment of both European and Aboriginal potential values and a SOHI relating to the demolition of the HCT.

### **1.2 PROPOSED WORK**

The main component of the proposed work has been identified as:

- the demolition and removal of the HCT.

### **1.3 OBJECTIVES**

The objective of this report is to document the archaeological assessment process and make any necessary mitigation or conservation recommendations.

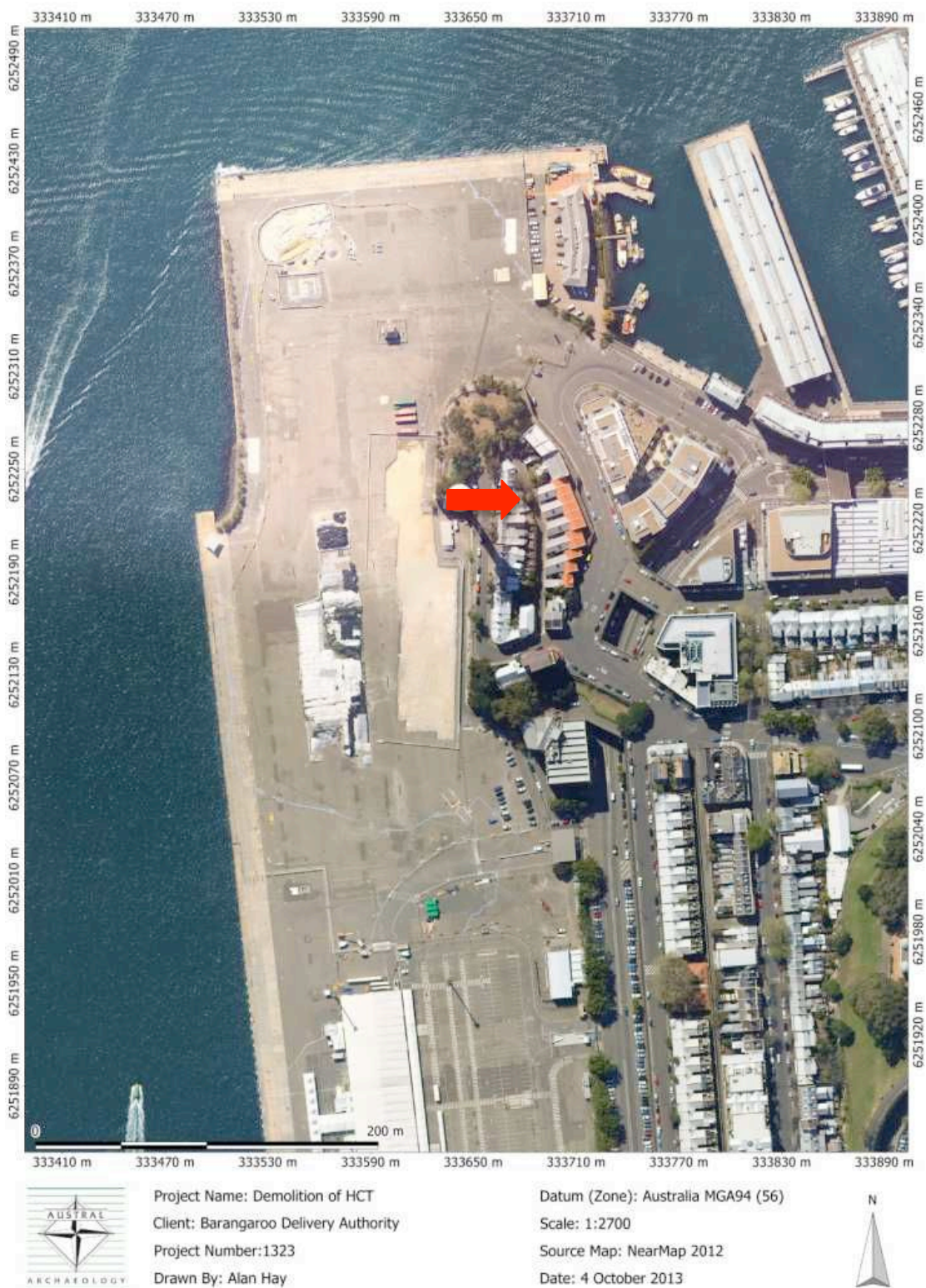


Figure 1.1. Location of the HCT on aerial image, indicated by the red arrow.

## 1.4 PROJECT TEAM AND ACKNOWLEDGEMENTS

This project was overseen by Justin McCarthy (Managing Director). The project was coordinated and managed by Alan Hay (Senior Archaeologist) who also prepared the Geographical Information Systems (GIS) mapping. David Marcus (Senior Archaeologist) proof-read the draft report and Justin McCarthy reviewed the draft report and management recommendations.

Austral Archaeology would like to acknowledge the participation of the following people and organisations that have contributed to the preparation of this report:

Rebecca Day – BDA

Fleur Mellor - BDA

Judith Rintoul – Heritage Consultant

## 1.5 METHODOLOGY

The methodology supporting this report involved review of existing historical accounts of the development of Barangaroo combined with the authors existing knowledge of the Barangaroo site. A wide range of secondary sources, most of them archaeological reports, have been used to buttress the conclusions made on the basis of the historical evidence and give shape to the assessment of archaeological potential. The general outline of the historical development noted within the study area has been covered extensively by a series of historical and archaeological reports.

The key Heritage Branch documents that provide the context for this report include the:

- Heritage Council of NSW, 1993, Historical Archaeological Sites: Investigation and Conservation Guidelines.
- NSW Heritage Office, 1996, Archaeological Assessments: Archaeological Assessment Guidelines.
- NSW Heritage Office, 2001, Assessing Heritage Significance.
- NSW Heritage Office, 2006, Historical Archaeology Code of Practice.
- Heritage Branch of the Department of Planning, 2009, Assessing Heritage Significance for Historical Archaeological Sites and 'Relics'.
- Draft Part 3A Guidelines For Aboriginal Cultural Heritage Impact Assessment and Community Consultation, DEC, July 2005.

This report is also underpinned by the philosophy of the ICOMOS *Burra Charter*.

## 1.6 LIMITATIONS OF THE REPORT

The statement of archaeological potential only applies to subsurface features or deposits of the site and not to any standing structural items currently on the site. The HCT itself is the subject of separate heritage assessment being prepared by other consultants.

The results, assessments and judgements contained in this report are constrained by the limitations of historical research and by the unpredictability inherent in archaeological zoning from the desktop. Whilst every effort has been made to gain insight to the archaeological profile of the subject site, Austral Archaeology Pty Ltd cannot be held accountable for errors or omissions arising from such constraining factors.

## 1.7 ABBREVIATIONS

The following abbreviations are used within this report:

AHC	Australian Heritage Council
AHIMS	Aboriginal Heritage Information Management System
BDA	Barangaroo Delivery Authority
Burra Charter	The Australia ICOMOS Charter for Places of Cultural Significance
CHL	Commonwealth Heritage List
CMP	Conservation Management Plan
DEC	Department of Environment and Conservation (now OEH)
DGR's	Director General's Requirements
DoP	NSW Department of Planning
EPA Act	Environmental Planning and Assessment Act, 1979
EPBC Act	Environment Protection and Biodiversity Conservation Act, 1999
EPI	Environmental Planning Instrument
GIS	Geographical Information Systems
Heritage Act	NSW Heritage Act, 1977
ICOMOS	International Council on Monuments and Sites
HCT	Harbour Control Tower
LEP	Local Environmental Plan
LGA	Local Government Area
MSB	Maritime Services Board
NHL	National Heritage List
NPW Act	National Parks and Wildlife Act, 1974
NT Register	Register of the National Trust (NSW)
OEH	Office of Environment and Heritage
SHI	State Heritage Inventory
SHR	State Heritage Register
SoHI	Statement of Heritage Impact

Refer also to the document *Heritage Terms and Abbreviations*, published by the Heritage Office and available on the website: [www.heritage.nsw.gov.au](http://www.heritage.nsw.gov.au)

## 2.0 STATUTORY CONTEXT

The following section summarises the relevant statutory context for all work at Barangaroo.

The Barangaroo development has been approved as a 'Major Project' under Part 3A of the *Environmental Planning and Assessment Act 1979* (EPA) Act. Part 3A Approval replaces the approval processes that would usually be required under Part 3 or other Parts of the EPA Act and the Minister for Planning becomes the consent authority for the project.

In relation to historical archaeological requirements, the Part 3A approval effectively 'turns off' the provisions of the *Heritage Act 1977* (the Heritage Act). While specific approval under the Heritage Act (eg excavation permit) is not required for this project, the terms of the Part 3A Approval still require appropriate management of the site's historical archaeological resources.

The Barangaroo project is approved under Part 3A of the EPA Act, but owing to conditions in the approval and a subsequent statement of commitments by BDA where it relates to the management of archaeological heritage, the approval process will in effect function in a similar way to that outlined in Section 139 of the Heritage Act and Research Design for any archaeological excavation work must be approved by the Heritage Branch. This is required in order to comply with the requirements of a Major Project Approval (MP06\_0162 Mod 3) No. 60A of the Statement of Commitments for the Concept Plan.

With respect to Aboriginal cultural heritage management, the only requirement of the approvals issued is that works are to cease in the vicinity of any unexpected objects found and that any finds are to be reported immediately to the Office of Environment and Heritage (OEH) in accordance with Section 91 of the National Parks and Wildlife Act 1974 (NSW).

The specific DGRs for the proposed demolition of the HCT require that an Aboriginal assessment be undertaken. The relevant guidelines for such assessments for Part 3A projects are: the *Draft Guidelines For Aboriginal Cultural Heritage Impact Assessment and Community Consultation*, DEC, July 2005. The guidelines (DEC 2005:3) state:

There will be situations where it could be anticipated that an Aboriginal cultural heritage assessment would not be necessary, for example:

- redevelopment of a site where objects are not previously found or have been removed or damaged;
- excavation of a site has previously occurred and there is little likelihood of objects remaining.

The latter point is relevant to the HCT site as it was excavated deep into bedrock during its construction.

An Aboriginal Heritage Information Management System (AHIMS) search was conducted to check for the presence of registered sites (see Appendix A). No sites are located within or close to the study area.

## 3.0 HISTORICAL BACKGROUND

The human history of East Darling Harbour and Millers Point includes thousands of years of Aboriginal occupation of this resource-rich maritime location and approximately 190 years of European modification. The potential of Cockle Bay was being realised by the 1820s as merchants and ship builders leased or took possession of large waterfront allotments and began to build private wharves and warehouses. The subsequent development of the surrounding neighbourhood included maritime associated industry, commercial premises and residential accommodation. Quarrying and reclamation for the construction of buildings, wharfs and roads has been an ongoing process and the landscape is now dominated by the structural remains and large scale topographic alteration that reflect a long maritime industry. The site is associated with numerous well known persons and is a place of important events in politics and history.

This historical background consists of two parts: the first is an historical sketch of Millers Point and Darling Harbour as a whole with a brief pre-contact and contextual Aboriginal history of the Darling Harbour area; the second is a targeted historical background of the study area as it relates to Millers Point. The local historical overview contextualises the site specific history and is comprised of an overview of the surrounding area and a brief summary of the area's growth and development. This is followed by the site specific historical background, which describes in detail the historical development of the site and discusses the various uses of the study area up until the present day.

The land between Dawes Point and Millers point was shaped by an outgrowth of practices grounded in the theory of mercantilism whereas the stretch of land along the eastern shores of Darling Harbour hosted a wide array of activities that could only have occurred after the development of industrialisation.

A series of archaeological and historical investigations have covered the Millers Point/Hickson Road Area, such as Higginbotham & Associates (1991) *The Rocks and Millers Point Archaeological Management Plan* and Paul Davies Heritage Architects (2006) *Millers Point and Walsh Bay Heritage Review*. However given the recent and comprehensive study of the area undertaken by Austral Archaeology, it should be noted that unless otherwise referenced this work is drawing on the information presented in Austral Archaeology's *Barangaroo Archaeological Assessment and Management Plan* (2010b), the *Barangaroo Headland Research Design* (2012b), *Proposed Services on Dalgety and Hickson Roads, Historical Archaeological Assessment, Statement of Heritage Impact and Research Design* (2013a) and *Integration Concept Barangaroo NSW, Archaeological Assessment, Statement of Heritage Impact and Research Design* (Austral Archaeology 2013b). This work assesses and combines the results of previous assessments and investigations into a comprehensive document of the Barangaroo area especially as it relates to the current development being undertaken in regards to the Barangaroo Headland Park project. All the above works will be critically reassessed in order to draw germane information relating to the current study areas.

### 3.1 MILLERS POINT AND DARLING HARBOUR HISTORICAL SKETCH

#### **3.1.1 Aboriginal Background and Post Contact History**

Prior to the European colonization of Sydney Harbour, the landscape was characterized by sandstone ridges and plateaus cut by streams that formed bays and estuaries. Eucalypt forest in the protected gullies gave way to open woodland on the slopes and coastal plains and inter-tidal rock platforms, beaches or mangrove mudflats on the shore (Attenbrow 2002: 40). This varied landscape, combined with a mild annual climate, provided an ideal environment for the Aboriginal people who lived in the area prior to European settlement.

Aboriginal people had occupied the Port Jackson harbour area and its islands for thousands of years. The traditional owners of the Sydney City region are the Cadigal (or Gadigal) people.



**Figure 3.1. View to the west of Cockle Bay by Major James Taylor c1820. Aboriginal people sharing the landscape with the European settlers. The native vegetation appears to be substantially removed and the steep and rocky topography is particularly well documented in this image. Millers Point headland can be seen in the background with two mills (Source ML 941).**

### **3.1.2 Early Millers Point**

The rugged topography initially discouraged settlement of Millers Point and Darling Harbour, however, the exposed promontory of Millers Point proved a suitable location for the establishment of windmills for the production of flour. Permanent settlement of the Millers Point area commenced well before the 1820s, although formal Crown grants were not issued in the area until the 1830s. The configuration, size and distribution of the grants recognized and reflected the existing land usage, with large grants on the water frontage and smaller town allotments behind fronting Argyle, Windmill and Kent Streets. The difficult terrain also necessitated measures to demarcate property boundaries including high retaining walls and quarrying (Davies 2007:55). Kent Street was no more than a steep and rugged track unsuitable for wheeled vehicles well into the late 1830s. In order to overcome the steep foreshore terrain, land owners filled and reclaimed the shallows of their waterfront allotments to create wharfs and building platforms.

From the 1830s, progressive development of the shoreline to accommodate the shipping industry including passenger transport, trade (import and export of primary produce), cargo storage and wharf construction, required land reclamation and cutting back of the sandstone cliffs at the base of Observatory Hill.

Millers Point was never an area associated with colonial industry but was predominantly developed by private enterprise. With the exception of the Australian Gas Light Company's works, established in 1843, practically all employers and employees in the area were

connected to the wharves, quarries or associated with the small local infrastructure of shops, hotels and boarding houses that supported them.

Maritime activity in the early 19<sup>th</sup> century was generally export-oriented specialising in timber, whaling and sealing products and the south sea island trade. The impetus for the rapid development of wharf and storage facilities at Millers Point/Walsh Bay came with the pastoral expansion of the colony and the wool export trade. Wharves and warehouses were constructed and expanded in size to accommodate the ever-increasing tonnage of wool and wheat which was displacing whale oil as the predominant cargo on the Millers Point wharves (Fitzgerald & Keating 1991:29). The wharves also serviced local harbour ferry services as well as coastal, interstate and international passenger routes.

In the second half of the 19<sup>th</sup> century, changes in trade goods, hydraulic lifting and shipping technology (sail to steam) resulted in new bulk capacity boats that required larger wharfs and storage facilities. From the 1870s, some of the older wharves were demolished to make way for larger more modern facilities. Apart from being unsuitable for modern shipping, most of the wharfs were old, dilapidated and constructed in a haphazard manner. The Government recognised that all of the wharfage from the head of Darling Harbour to Millers Point would need to be reconstructed but the enormity of the task and the cost to resume the land was seen as prohibitive.

### **3.1.3 Millers Point After 1900**

The outbreak of bubonic plague in 1901 was the impetus for the Government to begin resumption of entire suburbs and the demolition of substandard housing and wharfage. The consolidation of freehold land allowed the Government to redevelop on a massive scale without the constraints of original property boundaries (Davies 2007: 55).

The first major work to be completed was the new Dalgety's wharf on the point. The Sydney Harbour Trust constructed a large long-shore berth squaring off the headland and provided a wool store with modern mechanical handling devices for the company at the turn of the century (Walsh Bay Wharf 11 and Darling Harbour Wharves 1a, 1b & 2). Construction of bond stores and warehouses at Walsh Bay were the next priority and in 1909 the major work of constructing Hickson Road began with extensive vertical cutting through the headland to create the 61m (200 foot) wide road. High Lane and Lance Lane were cut out of the cliff to the east of Darling Harbour and the newly created High Street levelled to accommodate flats which were built by 1917. The fill from these excavations was used to construct new finger wharves that entirely changed the configuration of Millers Point and Darling Harbour. The western edge of the headland was terraced to accommodate the new Dalgety buildings.

In 1936 the Sydney Harbour Trust was dissolved after over thirty years of reconstruction and upgrading of the harbour's facilities. The Maritime Service Board (MSB) assumed its responsibilities for administering ports and port facilities. Road and rail began to replace coastal shipping in the post war period and large container shipping became more prevalent. The finger wharfs became redundant for modern shipping purposes and the MSB instigated an overall modernisation strategy which called for expanded port facilities. It was during this phase that the northern headland was dramatically cut back, buildings removed and long berths constructed by creating a new sea wall linking the ends of the finger wharfs and the infilling of the adjacent spaces.

By the 1950s the southern part of the site was in-filled creating a long berth to service container ships. Similarly, progressive infilling between the finger wharfs at the centre of the site and the creation of concrete decks provided larger berths for container vessels.

### **3.1.4 Millers Point in the 1970s**

The Dalgety buildings on the western edge of the headland were removed in the 1970s when the headland was further cut back. The 1970s also saw the construction of a concrete caisson sea wall that linked all the finger wharves and allowed further in-filling between the wharves creating a massive deck suitable for container vessels. The Sydney Ports HCT was also constructed at this time.

The addition of cranes, lighting and storage sheds met the needs of the new technology (Davies 2007:196). The Patrick Corporation held the stevedoring contract on the site from 1996 until 2006 when the site became no longer commercially viable for large super freighters.

The site is now administered and managed by the BDA, a NSW government agency. The Barangaroo port facilities have been progressively decommissioned since 2008. The NSW Government's objective for the Barangaroo project is to deliver a mixed use development consisting of commercial, residential, retail and recreational facilities. The site will be renewed as an extension of the Sydney CBD with a significant new foreshore park providing recreational areas and associated integration works to blend the park seamlessly into the surrounding urban streetscape.

### **3.1.5 Sydney Ports Harbour Control Tower**

The following description of the HCT is provided by Sydney Ports.

The Tower was officially opened in 1974 by The Hon L.A. Punch and was constructed in a position to provide maximum surveillance of the port area. This took the form of a three-level control centre on top of a reinforced concrete tower which is 87 metres high, the operations level being 82 metres.

The tower is constructed on a bedrock foundation. Rock anchors, 38 millimetres in diameter, are driven 7.9 metres down to provide adequate anchorage.

An external window cage, which travels the outside perimeter of the operations room was installed for easy, safe access to the windows for cleaning. Wind pressure loading was a critical factor in designing the tower. The structure was originally designed in prestressed concrete but was finally built in reinforced concrete to improve damping of wind generated vibration.

The tower was decommissioned in May 2011 when all vessel control services for Sydney Harbour were shifted to Port Botany.



**Figure 3.2. View of the HCT to the south from Moore's Cove with part of Clyne Reserve in the foreground. Victoria Terraces are situated at left. (Photo: Austral Archaeology Pty Ltd)**

## 4.0 ARCHAEOLOGICAL PREDICTIVE MODEL

### 4.1 INTRODUCTION

An assessment of archaeological potential usually considers the historic sequence of occupation in comparison to the structures which are currently extant, as well as the impact that the more recent constructions and works would have had on the earlier occupation phases and, as such, the likely intactness of the archaeological resource. This, in turn, is tied in with the extent to which a site may contribute knowledge not available from other sources to current themes in historical archaeology and related disciplines.

In regard to the assessment of the study area, the archaeological potential depends upon the anticipated likelihood for the survival of buried structural fabric and cultural deposits as well as an estimation of archaeological integrity. Structural fabric refers to what is generally regarded as building or civil engineering remnants. Cultural deposits refer to archaeological deposits, i.e. deposited sediments containing artefacts etc.

Having analysed the historical and physical evidence in the previous chapters, the following section presents a summary of the potential archaeological resource in the study area, that is, its archaeological sensitivity/potential.

#### **4.1.1 Results of the Site Inspection**

A site inspection was undertaken to examine the tower and determine its method of construction and physical layout. At the time of writing (mid October 2013), the HCT was surrounded by scaffolding associated with works being undertaken on the cliff as part of the Northern Headland Main Works and so access and views of the base of the tower were somewhat limited. These limitations however, have not compromised the validity of this report.

The tower is a circular reinforced concrete structure with a diameter of approximately 30m around the plinth at the base and a purported height of 87m. The plinth itself is approximately 2.5m in height and is somewhat wider than the main tower structure above (see Figures 4.2 – 4.4). It provides a walkway to the lower entrance of the tower (see Figures 4.2 – 4.4). The HCT is tucked into a right-angled corner of the cliff which was cut back to this base level in the early 1970s. There are two associated plant rooms incorporated into the base of the tower - these are the Switch Room and a Fire Room (see Figures 4.2 and 4.5). On the east side of the tower base against the northern cliff edge there is an unidentified demountable metal-clad shed/room with two split system airconditioning units mounted next to it (see Figure 4.4). To the west of the tower is a two level metal-clad demountable building encased in a galvanised frame. This appears to be a Telstra plant room associated with the mobile telephone antennae which are fixed to the outside of the tower (see Figure 4.6). The tower and these features are all founded on bedrock.

To the south of the tower entrance at the upper level on Merriman Street are the footpath and entries to former driveways of the houses that were removed when the cliff was cut back (see Figure 4.7).

The tower entrance (see Figure 4.8) is located on the west side of Merriman Street. To the north of the tower entrance at the upper level on Merriman Street is a cul-de-sac and the entry to Clyne Reserve (see Figures 4.9 – 4.10). Clyne Reserve is a relatively modern construct and was built over the remains of a number of historic domestic buildings including Victoria Cottage, Dalgety Terrace, Merrimans Terrace and the outbuildings and stables associated with Moorecliff and Victoria Cottage (see Figure 4.11).



**Figure 4.1. View of base of the tower and the cut back headland prior to works commencing at Barangaroo in 2010. (Photo Austral Archaeology Pty Ltd, June 2010)**



**Figure 4.2. Base of HCT viewed to northwest. Note the large base plinth with walkway and handrail above and main switch room door visible at left and lower main entrance door at right. (Photo Austral Archaeology Pty Ltd, October 2013)**



**Figure 4.3. Base of HCT viewed to west. Note the access stairway to the walkway on the large base plinth. (Photo Austral Archaeology Pty Ltd, October 2013)**



**Figure 4.4. Base of HCT viewed to north. Note the large base plinth with walkway and handrail and entrance door at left, the cliff face at right and rear, and a small external (plant?) room with two split system airconditioning units on its right. (Photo Austral Archaeology Pty Ltd, October 2013)**



**Figure 4.5. Base of HCT viewed to the east. Note the lower louvred doors provide access to the Fire Room and the upper louvred vent provides ventilation to the western end of the Switch Room. (Photo Austral Archaeology Pty Ltd, October 2013)**



**Figure 4.6. View to the north of the lower level of the freestanding Telstra plant room located on the west side of the tower base. (Photo Austral Archaeology Pty Ltd, October 2013)**



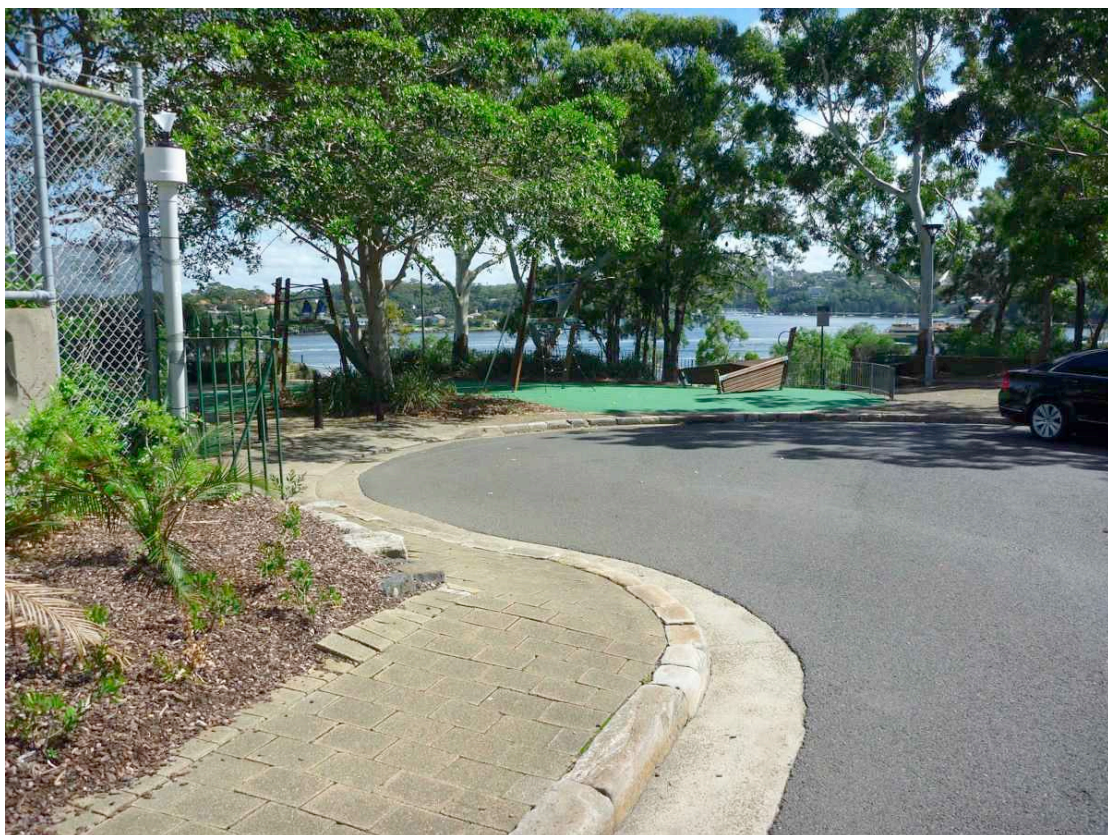
**Figure 4.7. View along west side of Merriman Street to south showing footpath and remnant driveway access points. (Photo Austral Archaeology Pty Ltd, March 2013)**



**Figure 4.8. Merriman Street entrance to HCT viewed to the west. (Photo Austral Archaeology Pty Ltd, October 2013)**



**Figure 4.9. Merriman Street entrance to HCT viewed to the northwest. (Photo Austral Archaeology Pty Ltd, October 2013)**



**Figure 4.10. View along west side of Merriman Street to north showing footpath and cul-de-sac. (Photo Austral Archaeology Pty Ltd, March 2013)**

## 4.2 DISCUSSION OF STRATIGRAPHY AND DISTURBANCE WITHIN THE STUDY AREA

The tower base is located on an area of the headland that was cut back to a depth of approximately 18m in the early 1970s.

The tower itself is founded on bedrock exposed at the base at that time.

Clyne Reserve has a sloping landscaped surface exhibiting exposures of natural stone as well as various introduced paving materials and planting treatments. There is visible evidence of structures and a rock cut drain associated with a former dwelling. The Reserve has the potential to contain archaeological relics which relate to domestic buildings date from the mid 19<sup>th</sup> century. Merrimans Terrace comprised a group of three terraces that were located on the western side of Merriman Street and if extant, any remains are likely to be located in the current Clyne Reserve, just to the north of the tower.

Merriman Street appears to be at approximately original levels but has modern finishes and treatments with modern subterranean services.

The narrow footpath on the west side of Merriman Street appears to be at approximately original levels. It features entries to former driveways of the houses that were removed when the cliff was cut back but the house locations have all been cut away when the cliff was removed.

### 4.2.1 Note Regarding Surrounding Areas (Outside Study Area)

It is assumed that demolition of the HCT will not affect the surrounding land on the upper level along Merriman Street. In case it does, the areas to the immediate northeast and south of the tower have been briefly assessed. These areas were previously assessed by Austral Archaeology Pty Ltd in a report for the Integration Works Zone entitled *Integration Concept Barangaroo NSW, Archaeological Assessment, SOHI and Research Design* (Austral Archaeology 2013b). The conclusions of the predictive statements of that report are cited below.

The footpath along the west side of Merriman Street to the south of the tower entrance was assessed in detail as Area C in the report (Austral May 2013b) and predicted to have no archaeological potential (Figure 4.4).

Clyne Reserve was assessed in detail as Area B in that report (Austral Archaeology 2013b). Amongst other things it was predicted to have potential to contain archaeological relics from the mid 19<sup>th</sup> century related to a group of three terraces (Merriman's Terraces). These were located in Merriman Street and it is predicted that any remains would lie to the west of the cul-de-sac, just to the north of the tower. Archaeological monitoring of any below-ground works was recommended for this area (Figure 4.4).



Figure 4.11. Excerpt from Fig 7.1 of the *Integration Concept Barangaroo NSW, Archaeological Assessment, SOHI and Research Design View* (Austral Archaeology 2013b:68) showing area of potential as a yellow rectangle (red arrow) where Merriman Terraces were located to immediate north of the HCT. The area outlined in green along the west side of Merriman Street (the footpath) was assessed to have no archaeological potential.

### 4.3 PREDICTIVE MODEL

Based on a review of previous archaeological models for the area and the available background historical information, the following predictive statement can be made:

There is no potential for historical or Aboriginal archaeological remains to exist below the base of the HCT as construction of the tower removed all archaeological material to a significant depth through the natural bedrock.

#### 4.3.1 Surrounding Areas (Outside Study Area)

There is moderate potential for evidence of Merrimans Terraces to be located to the immediate north of the HCT.

There is very low potential for Aboriginal relics to be situated beneath Merrimans Terraces.

There is very low potential for Aboriginal and/or historic remains or evidence to be located along the west side of Merriman Street beneath the current footpath.

## 5.0 ASSESSMENT OF SIGNIFICANCE

### 5.1 INTRODUCTION

An assessment of cultural significance seeks to establish the importance that a place has to the community. The concept of cultural significance is intrinsically tied to the fabric of the place, its history, setting and its relationship to other items in its surrounds and the response it evokes from the community.

The assessment of cultural significance with respect to archaeological sites can present difficulties because the nature and extent of the "relics" are often indeterminate and value judgements therefore need to be made on the basis of potential attributes. The element of judgement can be greatly reduced by historical or other research, as has been completed for the current study. Archaeological deposits and features provide important evidence of the history and settlement of New South Wales. These heritage items may include deposits containing material culture (artefacts) that can be analysed to yield information regarding early urban development that is unavailable from other sources. Archaeological investigations can reveal much about technology, industry, past economic and social conditions and people's lives.

Sites that contain these elements therefore have scientific value that may be of considerable significance when analysed in association with documentary evidence. It is through this potential to reveal information about the past use of a place that archaeological sites have heritage significance.

#### 5.1.1 Basis for Assessment

The Burra Charter of Australia ICOMOS was formulated in 1979 (revised 1999), based largely on the Venice Charter (for International Heritage) of 1966. The Burra Charter is the standard adopted by most heritage practitioners in Australia. The Charter divides significance into four categories for the purpose of assessment. The significance categories are: Aesthetic, Historical, Scientific/Technical, and Social significance.

The Heritage Council of New South Wales has established a set of seven criteria to be used in assessing cultural heritage significance in New South Wales, and specific guidelines have been produced to assist archaeologists in assessing significance for subsurface deposits. These are published in the Heritage Council's *Assessing Significance for Historical Archaeological Sites and 'Relics'* (2009). The Heritage Council's criteria incorporate those of the Burra Charter, but are expanded to include rarity, representative value, and associative value.

In order to determine the significance of a historical site, the Heritage Council have determined that the following seven criteria are to be considered (Heritage Branch 2009:3):

- **Criterion (a): an item is important in the course, or pattern, of NSW's cultural or natural history (or the local area);**
- **Criterion (b): an item has strong or special association with the life or works of a person, or group of persons, of importance in NSW's cultural or natural history (or the local area);**
- **Criterion (c): an item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in NSW (or the local area);**

- **Criterion (d): an item has strong or special association with a particular community or cultural group in NSW for social, cultural or spiritual reasons (or the local area);**
- **Criterion (e): an item has potential to yield information that will contribute to an understanding of NSW's cultural or natural history (or the local area);**
- **Criterion (f): an item possesses uncommon, rare or endangered aspects of NSW's cultural or natural history (or the local area); and**
- **Criterion (g): an item is important in demonstrating the principal characteristics of a class of NSW's cultural or natural places or cultural or natural environments (or the local area).**

These criteria were designed for use on known or upstanding heritage items, where above ground heritage is both tangible and easily identified. As the nature of archaeology is that it is invisible until disturbed, the presence and attributes of archaeological material must be assumed based on the recorded levels of disturbance, known site history and the creation of predictive statements. Ultimately, the actual presence of archaeological material can only ever be framed in terms of the potential for it to be present.

The Heritage Branch has assisted archaeologists by creating questions which are framed around the main NSW Heritage Criteria, and which can be used to assess the relative importance of any archaeology which is likely to be present. The questions to be asked of an archaeological deposit differ from the main criteria, but can be seen to be referential to them, in order to create a suitable framework for assessing archaeological sites.

## **5.2 SIGNIFICANCE ASSESSMENT**

### **5.2.1 Assessment Criteria**

The following section addresses the significance of the potential archaeological resource in accordance with the criteria adopted in the Heritage Council's significance guidelines for archaeological deposits (Heritage Council 2009:11-13).

#### ***Archaeological Research Potential (current NSW Heritage Criterion e)***

***What is the ability of the archaeological evidence to provide information about a site that could not be derived from any other source and which contributes to the archaeological significance of that site?***

There is no archaeological potential beneath the HCT and thus this criterion is not met.

#### ***Associations with individuals, events or groups of historical importance (NSW Heritage Criteria a, b and d)***

***Do the archaeological remains have particular associations with individuals, groups and events which may transform mundane places or objects into significant items through the association with important historical occurrences?***

There is no archaeological potential beneath the HCT and thus these criteria are not met.

#### ***Aesthetic or Technical Significance (NSW Heritage Criterion c)***

***Will an archaeological excavation reveal highly intact and legible remains in the form of aesthetically attractive artefacts, aged and worn fabric and remnant structures, which may allow both professionals and the community to connect with the past through tangible physical evidence?***

There is no archaeological potential beneath the HCT and thus this criterion is not met.

#### ***Ability to demonstrate the past through archaeological remains (NSW Heritage Criteria a, c, f, and g)***

***Do the archaeological remains have an ability to demonstrate how a site was used, what processes occurred, how work was undertaken and the scale of an industrial practice or other historic occupation.***

There is no archaeological potential beneath the HCT and thus these criteria are not met.

### **5.3 STATEMENT OF SIGNIFICANCE**

There is no archaeological potential beneath the HCT owing to the massive cutting back of the cliff face and the deep excavation into bedrock prior to its construction; the site has no archaeological significance.

## 6.0 IMPACT ASSESSMENT

Barangaroo Delivery Authority is intending to prepare a Modification to the Main Works approval for the potential demolition and removal of the Harbour Control Tower.

This impact assessment relates to the potential impact of those actions on any archaeology that may be resident beneath the actual base of the tower and its immediate associated infrastructure.

It has been assumed for the purposes of this assessment that the physical works required to achieve demolition and removal of the tower will not affect the Merriman Street level.

The potential heritage impact of the proposed development is considered below utilising the format recommended in the *NSW Heritage Manual* guidelines document 'Statements of Heritage Impact'.

### **What aspects of the proposal respect or enhance the heritage significance of the study area?**

The impact zone beneath the tower is not considered to have any archaeological heritage significance.

### **What aspects of the proposal could have a detrimental effect on the heritage significance of the study area?**

As there is no archaeological heritage potential within the tower footprint, no aspects of the proposal are likely to have a detrimental effect on the archaeological heritage significance.

### **Have more sympathetic options been considered and discounted?**

Neither the retention nor removal of the tower will have an impact as the impact zone beneath the tower is not considered to have archaeological heritage significance.

## **7.0 CONCLUSIONS AND RECOMMENDATIONS**

### **7.1 CONCLUSIONS**

It is concluded that the impact zone beneath the tower and its associated infrastructure at its base have no archaeological potential.

### **7.2 RECOMMENDATIONS**

It is recommended that:

- no further archaeological investigation needs to be undertaken within the HCT footprint or its immediate surrounding area at its base as the area has been assessed to have no archaeological potential.
- if there are to be below-ground impacts around the HCT entrance on the Merriman Street level, the works be subject to monitoring by a suitably qualified archaeologist.
- in the event that historical archaeological relics not assessed or anticipated by this report are found during the works, all works that would affect the find in the immediate vicinity are to cease immediately and a qualified archaeologist be contacted to assess the situation and possibly consult with the Department of Planning and Infrastructure regarding the most appropriate course of action.
- in the event that Aboriginal archaeological material or deposits are encountered during earthworks, all works that would affect the find in the immediate vicinity must cease immediately to allow an archaeologist to make an assessment of the find. The archaeologist may need to consult with the Office of Environment and Heritage (OEH) and the relevant Aboriginal stakeholders, regarding the find. Section 89A of the NPW Act 1974 requires that the OEH must be notified of any Aboriginal objects discovered within a reasonable time.
- should the proposed development be altered significantly from the proposed concept design, then a reassessment of the heritage/archaeological impact may be required.

## 8.0 REFERENCES

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## **APPENDIX A – ABORIGINAL AHIMS SEARCH**



**AHIMS Web Services (AWS)  
Search Result**

Your Ref Number : 1323  
Client Service ID : 113504

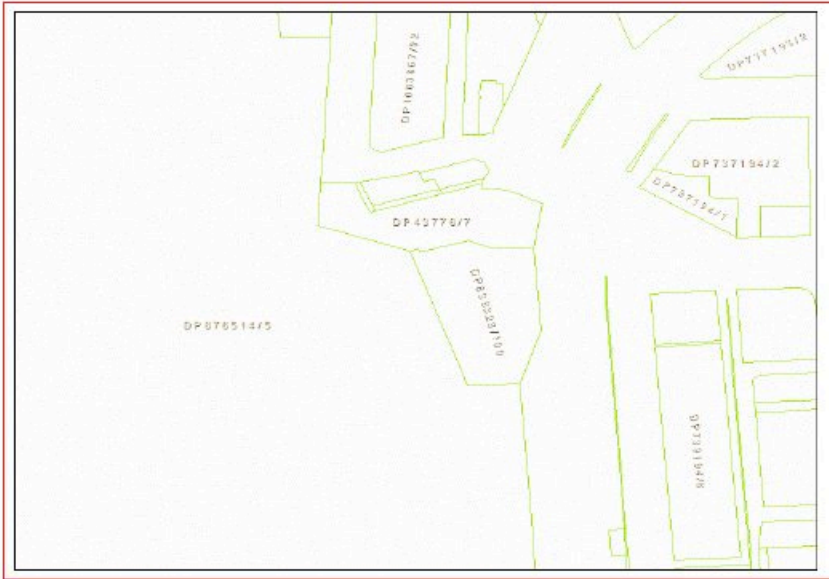
Austral Archaeology Pty Ltd  
92 Percival Road  
Stanmore New South Wales 2048  
Attention: David Marcus  
Email: davidm@australarchaeology.com.au

Date: 08 October 2013

Dear Sir or Madam:

**AHIMS Web Service search for the following area at Lat, Long From : -33.859, 151.2012 - Lat, Long To : -33.8579, 151.2029 with a Buffer of 50 meters, conducted by David Marcus on 08 October 2013.**

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of the Office of the Environment and Heritage AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

0	Aboriginal sites are recorded in or near the above location.
0	Aboriginal places have been declared in or near the above location. *

**If your search shows Aboriginal sites or places what should you do?**

- You must do an extensive search if AHIMS has shown that there are Aboriginal sites or places recorded in the search area.
- If you are checking AHIMS as a part of your due diligence, refer to the next steps of the Due Diligence Code of practice.
- You can get further information about Aboriginal places by looking at the gazettal notice that declared it. Aboriginal places gazetted after 2001 are available on the [NSW Government Gazette](http://www.nsw.gov.au/gazette) (<http://www.nsw.gov.au/gazette>) website. Gazettal notices published prior to 2001 can be obtained from Office of Environment and Heritage's Aboriginal Heritage Information Unit upon request

**Important information about your AHIMS search**

- The information derived from the AHIMS search is only to be used for the purpose for which it was requested. It is not to be made available to the public.
- AHIMS records information about Aboriginal sites that have been provided to Office of Environment and Heritage and Aboriginal places that have been declared by the Minister;
- Information recorded on AHIMS may vary in its accuracy and may not be up to date. Location details are recorded as grid references and it is important to note that there may be errors or omissions in these recordings,
- Some parts of New South Wales have not been investigated in detail and there may be fewer records of Aboriginal sites in those areas. These areas may contain Aboriginal sites which are not recorded on AHIMS.
- Aboriginal objects are protected under the National Parks and Wildlife Act 1974 even if they are not recorded as a site on AHIMS.
- This search can form part of your due diligence and remains valid for 12 months.

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