

ARCHAEOLOGY – HERITAGE – MEDIATION – ARBITRATION

SYDNEY INTERNATIONAL CONVENTION, EXHIBITION AND ENTERTAINMENT PRECINT (SICEEP)

Aboriginal Archaeological Assessment

PREPARED BY	JILLIAN COMBER
REPORT TO	CASEY & LOWE ON BEHALF OF DARLING HARBOUR LIVE
VERSION NO	G.2013
DATE	MARCH 2013

DOCUMENT CONTROL

PROJECT NO. CL194 **STATUS:** FINAL

REV	DATE	PREPARED	EDITED	APPROVED
A	31/01/2013	Jillian Comber	Mary Casey	Jillian Comber
B	11/02/2013	Jillian Comber	Jillian Comber	Jillian Comber
C	15/02/2013	Jillian Comber	David Nutley	Jillian Comber
D	20/02/2013	Jillian Comber	Jillian Comber	Jillian Comber
E	25/2/2013	Jillian Comber	Jillian Comber	Jillian Comber
F	25/2/2013	Jillian Comber	Jillian Comber	Jillian Comber
G	18/3/2013	Jillian Comber	Jillian Comber	Jillian Comber



Comber Consultants has a certified integrated management system to the requirements of ISO 9001:2008 (quality), ISO 14001:2004 (environmental), OHSAS 18001:2007 (health and safety) and AS/NZS 4801:2001 (health and safety). This is your assurance that Comber Consultants is committed to excellence, quality and best practice and that we are regularly subjected to rigorous, independent assessments to ensure that we comply with stringent Management System Standards.

EXECUTIVE SUMMARY

This report supports State Significant Development Applications (SSD 12_5752) to be submitted to the Minister for Planning and Infrastructure pursuant to Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). The Applications seek approval for construction of the Public Private Partnership (PPP) component of the Sydney International Convention, Exhibition and Entertainment Precinct (SICEEP) Project at Darling Harbour, The Haymarket Precinct and the Hotel.

To ensure that the significant Aboriginal archaeology and cultural heritage at Darling Harbour is not adversely impacted upon by the proposal, Casey + Lowe on behalf of Darling Harbour Live, commissioned this Aboriginal Archaeological Assessment. The aim of this report is to assess the impact of the proposal on the Aboriginal cultural heritage of the study area and to provide management recommendations taking into account Aboriginal concerns and interests. This assessment has been undertaken in association with the Metropolitan Local Aboriginal Land Council (MLALC) and is undertaken in accordance with the Office of Environment & Heritage's (OEH) *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales*.

This report demonstrates the potential for subsurface Aboriginal archaeological deposits to exist within the SICEEP development footprint. Therefore, it is recommended that subsurface testing and salvage be undertaken within Darling Central and The Haymarket prior to redevelopment of the site. Monitoring should occur in the area of Bayside. Such monitoring, testing and salvage should be undertaken in partnership with the Metropolitan Local Aboriginal Land Council.

As this project is a State significant development being undertaken pursuant to Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) a permit under s90 of the *National Parks & Wildlife Act 1974* will not be required.



CONTENTS

1.0	INTRODUCTION	2
1.1	PURPOSE	2
1.2	BACKGROUND	2
1.3	THE STUDY AREA	3
1.4	OVERVIEW OF PROPOSAL	6
1.5	PLANNING APPROVALS STRATEGY	7
2.0	METHODOLOGY	10
2.1	METHODOLOGY	10
2.2	EFFECTIVE SURVEY COVERAGE	10
3.0	ABORIGINAL CONSULTATION	12
4.0	ABORIGINAL HISTORY	14
5.0	ENVIRONMENTAL CONTEXT	16
5.1	TOPOGRAPHY	16
5.2	GEOLOGY AND SOILS	16
5.3	VEGETATION	17
5.4	CURRENT LAND USE AND DISBURBANCE	18
6.0	ARCHAEOLOGICAL CONTEXT	21
7.0	IMPACT OF PROPOSAL	25
8.0	LEGISLATION	30
9.0	RECOMMENDATIONS	32
	REFERENCES	34
	APPENDIX A: REPORT FROM MLALC	34

1.0 INTRODUCTION

BACKGROUND
THE STUDY AREA



1.0 INTRODUCTION

1.1 Purpose

This report supports State Significant Development Applications (SSD 12_5752) to be submitted to the Minister for Planning and Infrastructure pursuant to Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

The Applications seek approval for construction of the Public Private Partnership (PPP) component of the Sydney International Convention, Exhibition and Entertainment Precinct (SICEEP) Project at Darling Harbour, The Haymarket Precinct and the Hotel.

The project will develop The Haymarket into one of Sydney's most innovative residential and working districts. Through the delivery of the overall Project, Darling Harbour will also become home to Australia's largest convention and exhibition facilities, Sydney's largest red carpet entertainment venue and a hotel complex of up to 900 rooms.

The SICEEP Project importantly forms a critical element of the NSW Governments aspiration to "make NSW number one again".

To ensure that the significant Aboriginal archaeology and cultural heritage at Darling Harbour is not adversely impacted upon by the proposal, Casey + Lowe on behalf of Darling Harbour Live, commissioned this Aboriginal Archaeological Assessment. This report assesses the impact of the whole of the SICEEP project including redevelopment of Bayside and Darling Central (Private/Public Partnership), The Haymarket and the hotel development (see sections 1.3 and 1.4 of this report).

The aim of this report is to assess the impact of the proposal on the Aboriginal cultural heritage of the study area and to provide management recommendations taking into account Aboriginal concerns and interests. This assessment has been undertaken in association with the Metropolitan Local Aboriginal Land Council (MLALC) and is undertaken in accordance with the Office of Environment & Heritage's (OEH) *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales*.

1.2 Background

The existing convention, exhibition and entertainment centre facilities at Darling Harbour were constructed in the 1980s and have provided an excellent service for Sydney and NSW. The facilities however, have limitations in their ability to service the contemporary exhibition and convention industry which has led to a loss in events being held in Sydney.

The NSW Government considers that a precinct-wide renewal and expansion is necessary and is accordingly committed to Sydney reclaiming its position on centre stage for hosting world-class events with the creation of the SICEEP project.

Following an extensive and rigorous Expressions Interest and Request for Proposals process, Darling Harbour Live (formerly known as "Destination Sydney" – a consortium comprising AEG Ogden, Lend Lease, Capella Capital and Spotless) was announced by the NSW Government in December 2012 as the preferred proponent to transform Darling Harbour and create the new Sydney International Convention, Exhibition and Entertainment Precinct (SICEEP)

Key features of the Darling Harbour Live Preferred Master Plan include:

- Delivering world-class convention, exhibition and entertainment facilities, including:
 - Up to 40,000²m exhibition space
 - Over 8,000²m of meeting rooms space, across 40 rooms
 - Overall convention space capacity for more than 12,000 people
 - A ballroom capable of accommodating 2,000 people
 - A premium red-carpet entertainment facility with a capacity of 8,000 people.
- Providing up to 900 hotel rooms in a hotel complex at the northern end of the Precinct.
- A vibrant and authentic new neighbourhood at the southern end of the Precinct, called "The Haymarket", home to an IQ Hub focussed on the creative industries and high-tech business, apartments, student accommodation, shops, cafes and restaurants.



- Renewed and upgraded public domain, including an outdoor event space for up to 25,000 people at an expanded Tumbalong Park.
- Improved pedestrian connections linking to the proposed Ultimo Pedestrian Network drawing people between Central, Chinatown and Cockle Bay Wharf as well as east-west between Ultimo/Pymont and the City.

1.3 The Study Area

The SICEEP site is located within the Darling Harbour precinct. Darling Harbour is a 60 hectare waterfront precinct on the south-western edge of the Sydney Central Business District that provides a mix of functions including recreational, tourist, entertainment and business. Figure 1 shows the location of Darling Harbour.

With an area of approximately 20 hectares the SICEEP site is generally bound by the light rail line to the west, Harbourside shopping centre and Cockle Bay to the north, Darling Quarter, the Chinese Garden and Harbour Street to the east and Hay Street to the south. Figure 2 shows the location of the SICEEP site.

The SICEEP site has been divided into three distinct redevelopment areas. From north to south they are Bayside/Darling Central (PPP) The Haymarket (PDA) and the Hotel Complex. The PPP Application Site area is located within Bayside and Darling Central as shown in Figure 3 and the The Haymarket development (Private Development Agreement) is the southern portion of the site.

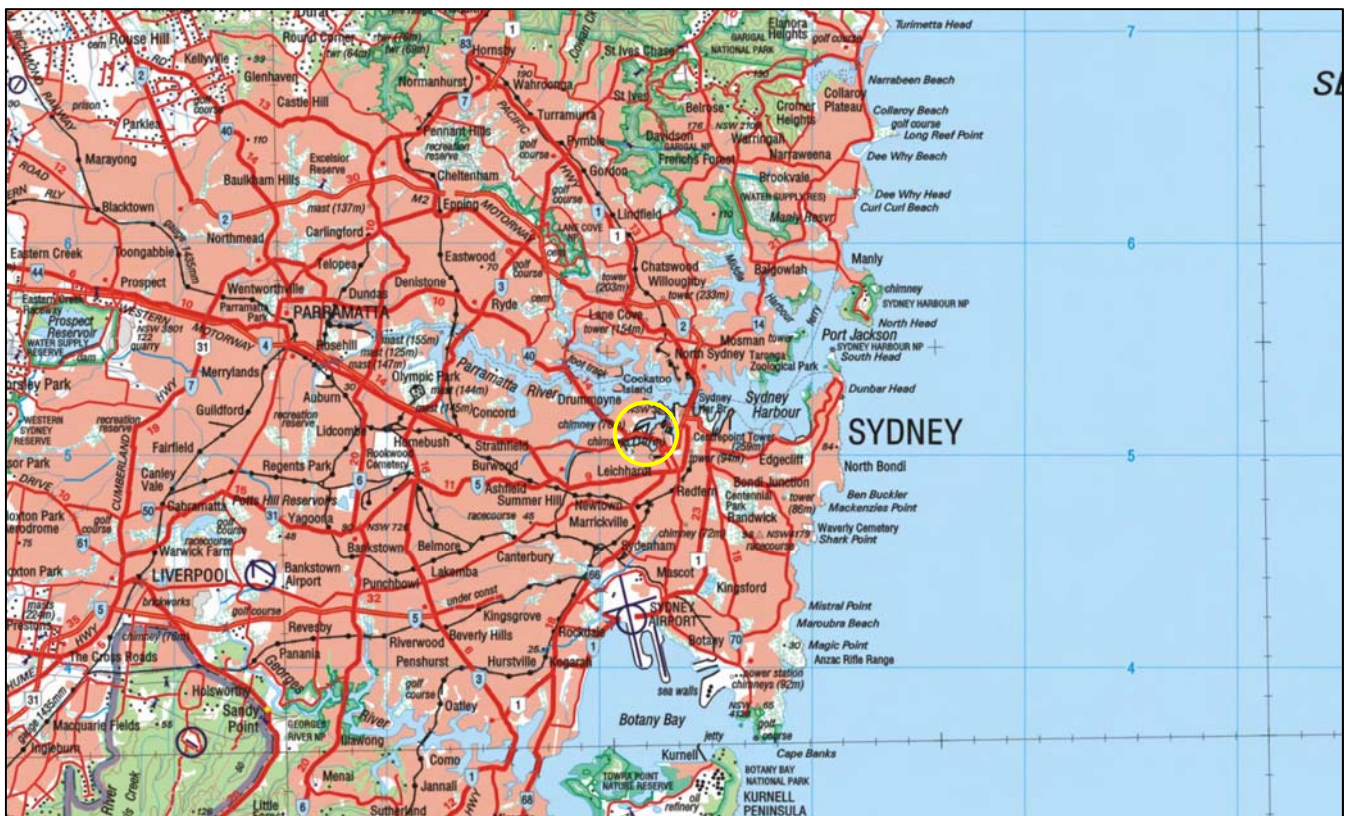


Figure 1: Location of Darling Harbour circled in yellow.
(1:250,000 Sydney Special ED2 – 1998 topographic map)

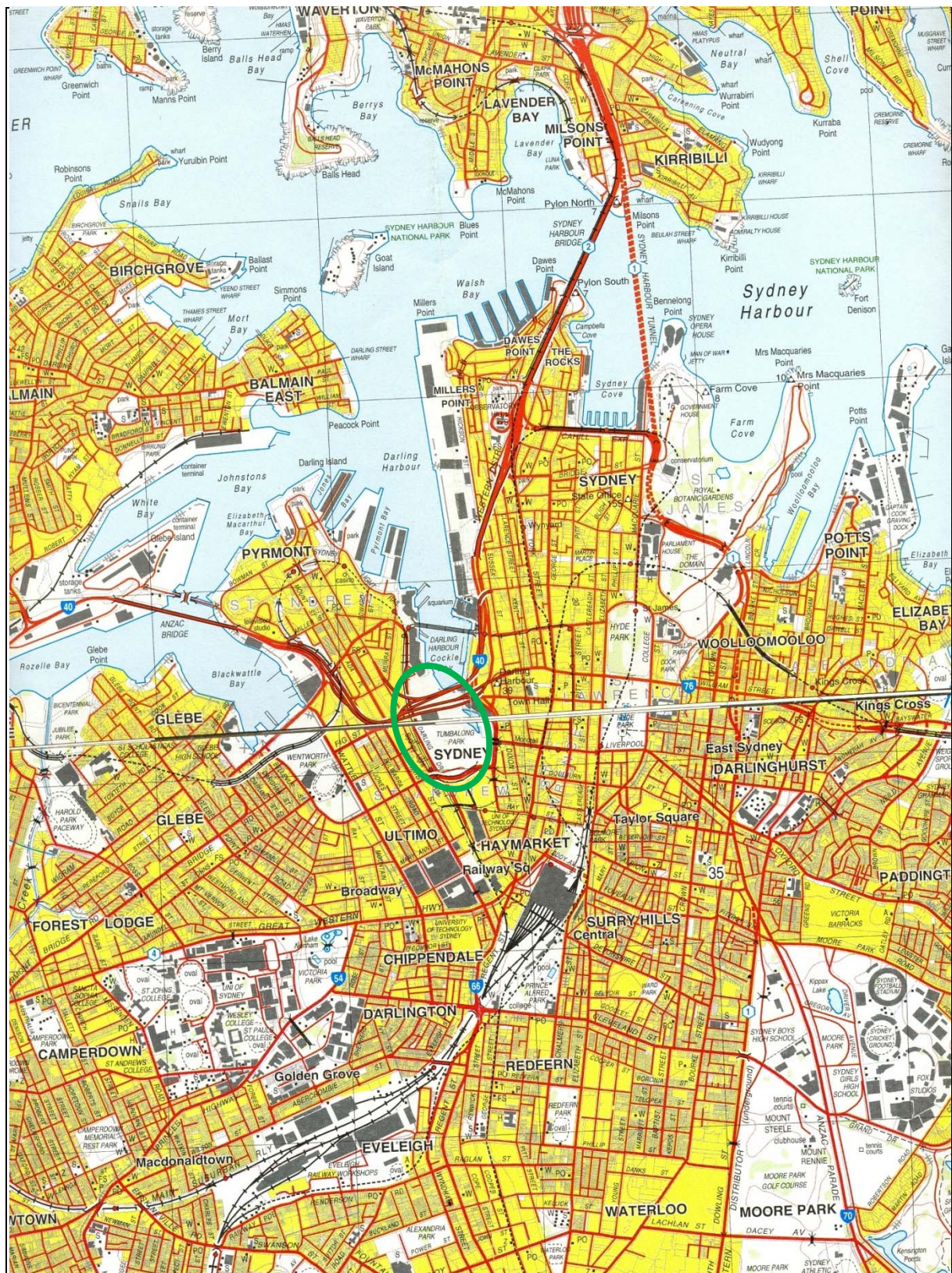


Figure 2: Study area circled in green

(Composite map of the Parramatta River 1:25,000 9130-3N Third Edition topographic map and the Botany Bay 9130-3S Third Edition topographic map)



Figure 3: The Study Area. Bayside and Darling Central comprise the PPP.



1.4 Overview of Proposal

The proposed development of the SICEEP site includes the following components:

1. PPP component

- Demolition of existing improvements on the site, including existing Sydney Convention Centre (part) and Sydney Exhibition Centre
- Associated tree removal and replanting
- Construction of a new, integrated and world class convention, exhibition and entertainment centre
- Public domain improvements including:
 - reinvigorating and expanding Tumbalong Park
 - provision (part) of a new active north-south pedestrian connection (known as The Boulevard)
 - provision of new east-west connections, including Harbourside Place and Tumbalong Place
 - provision of a pedestrian bridge link from Quarry Street
 - Retention of the tidal cascade water feature
 - reconfiguration and upgrade of Darling Drive (part)
 - provision of a new square adjoining the Chinese Garden
 - provision of a new open space "event deck" (connected with the Exhibition Centre)
 - integrated art, play zones, water play and recreation areas
 - provision of retail kiosks
- Provision of ground level parking within the Exhibition and Entertainment Centre facilities
- Ground and elevated loading docks (accessed off Darling Drive) for Convention, Exhibition and Entertainment Centre facilities
- Two vehicle drop off points along Darling Drive
- Provision of signage
- Extension and augmentation of physical infrastructure/utilities as required.

2. The Haymarket

The Haymarket will include student housing, public car parking, a commercial office building, and four mixed use development blocks (retail/commercial/residential podium with residential towers above) centred around a new public square to be named Haymarket Square.

More specifically concept approval is sought for the following:

- Demolition of existing site improvements, including the existing Sydney Entertainment Centre (SEC), Entertainment car park, and part of the pedestrian footbridge connected to the Entertainment car park and associated tree removal;
- North-west block – construction of a part public car park and part commercial/office building;
- North-east block – construction of a mixed use podium (comprising retail, commercial, above ground parking, and residential);
- South-east block - construction of a mixed use podium (comprising retail, commercial, above ground parking, and residential);
- South-west block - construction of a mixed use podium (comprising retail, commercial, above ground parking, and residential);



- North block – construction of a low rise mixed use building comprising retail, commercial and residential;
- Student housing – construction of two buildings providing for student accommodation;
- Public domain improvements including a new square, water features, new pedestrian streets and laneways, streetscape embellishments, and associated landscaping. (It is intended that a Stage 2 DA seeking approval for part of the public domain (The Boulevard and Haymarket Square) will be lodged with the first residential stage);
- Reconfiguration and upgrade of Darling Drive (part);
- Remediation strategy; and
- Car parking rates.

3. The Hotel

A hotel is to be incorporated within the precinct, to be located directly adjacent to the ICC Sydney. The hotel will provide up to 900 rooms within two buildings with shared core facilities.

1.5 Planning Approvals Strategy

In response to separate contractual agreements with the NSW Government and staging requirements, Darling Harbour Live is proposing to submit a number of separate development applications for key elements of the overall Project, as shown in Figure 4.

The first Application involves the PPP component of the SICEEP Project, comprising the convention centre, exhibition centre, entertainment facility and associated public domain upgrades.

Development of The Haymarket is to be staged and accordingly a staged development application is to be lodged. Detailed development applications will follow seeking approval for specific aspects of The Haymarket.

A separate development application will also be submitted for the Hotel Complex.

This report assesses all of the above development proposals and has been prepared to be submitted with all of the above development applications

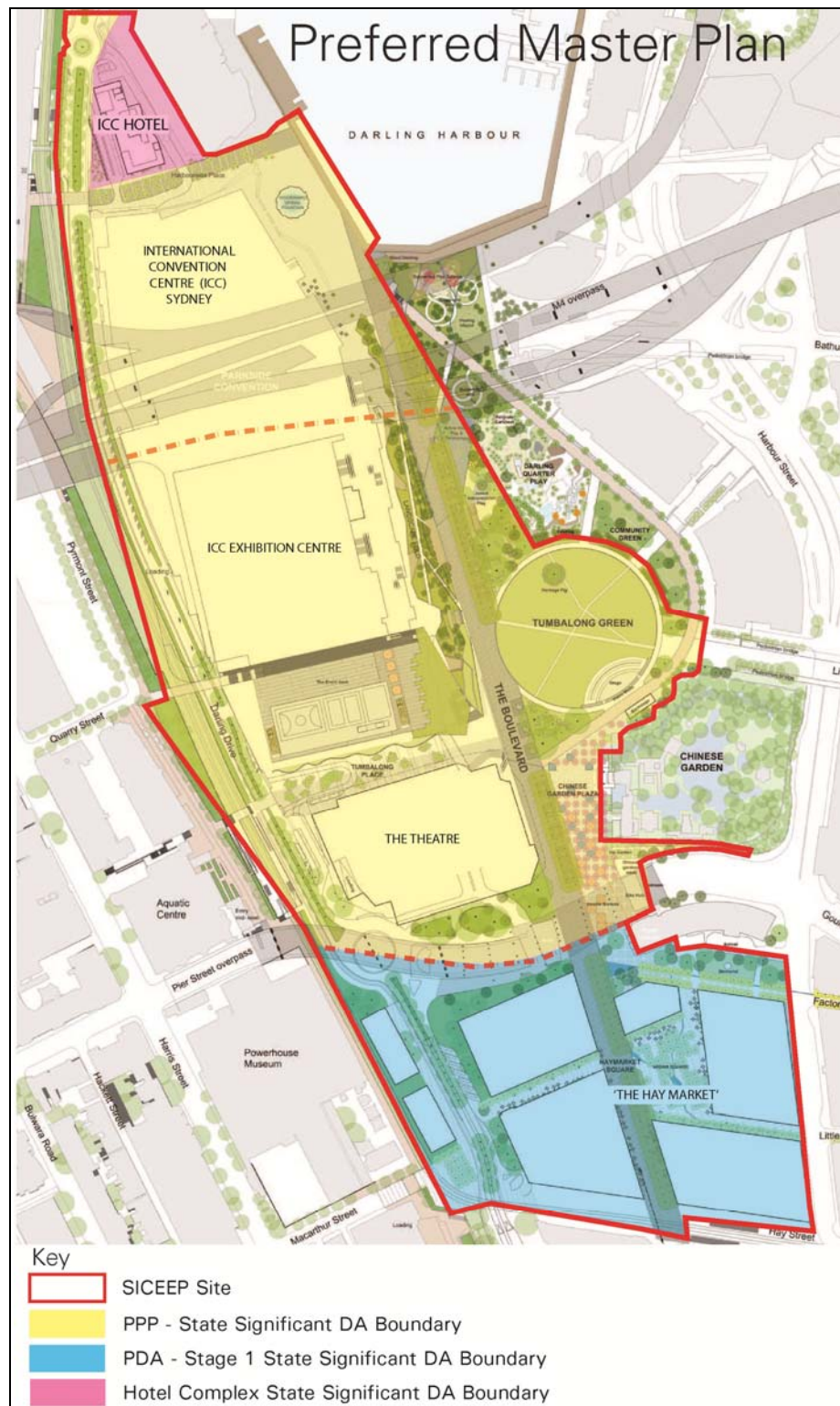


Figure 4: Planning Strategy

2.0 METHODOLOGY



2.0 METHODOLOGY

2.1 Methodology

This project was conducted in three stages, being background research, field survey and report preparation, as detailed below.

Stage 1: Background Research

Prior to the field component of this project, the Aboriginal Heritage Information Management System (AHIMS) of the Office of Environment and Heritage (OEHL) was searched on 20 December 2012. Site data, associated documents and archaeological survey reports held by them were reviewed. Environmental information relating to Aboriginal land use was also researched. Such research facilitated an understanding of the potential nature of the sites and site patterning in the region, which enabled the predictive statement to be made. It also provided an archaeological and environmental context within which a significance assessment could be made, if any Aboriginal sites were recorded.

Stage 2: Site Inspection

A site inspection was undertaken on Saturday 26 January, 2013 with the following people:

- Ms Jillian Comber, Archaeologist, Comber Consultants
- Mr David Nutley, Archaeologist, Comber Consultants

The aim of the inspection was to gain an understanding of the boundaries and nature of the study area and undertake a photographic study. All of the photographs included in this report were taken by David Nutley on 26 January 2013. At that time the entire study area was inspected on foot.

A further site inspection was undertaken on Thursday 14 February, 2013 by the following:

- Mr David Nutley, Archaeologist, Comber Consultants
- Mr Kevin Telford, Site Officer, Metropolitan Local Aboriginal Land Council (MLALC)

The aim of the second site inspection will be to allow the MLALC representative to inspect the study area and for discussions to be undertaken as to the MLALC's preferred management regime.

Stage 3: Report Preparation

Further archaeological research was conducted where necessary to clarify the results of the survey.

This report was then compiled and a draft copy provided to Casey + Lowe. A copy was also provided to the Metropolitan Local Aboriginal Land Council for their comment. After receiving their written comments the final report will be prepared with the MLALC's written comments attached at Appendix A.

2.2 Effective Survey Coverage

Ground surface visibility refers to the amount of bare ground visible during the field survey. The visibility of some site types, such as open artefact scatters, is dependent upon ground visibility and exposure. OEHL guidelines suggest that this information be presented in a table which quantifies and details the local detectability (OEHL Code of Practice 2010: 19). However, as the study area is a built up urban area with zero visibility, this table will not be used.

3.0 ABORIGINAL CONSULTATION



3.0 ABORIGINAL CONSULTATION

Aboriginal culture is dynamic and continuous. It includes the tangible and intangible and links people over time to their community and land. It is important to recognise that Aboriginal people have the right to protect, preserve and promote their cultural heritage.

In recognition of that right, the Metropolitan Local Aboriginal Land Council were invited to take part in the project and participated fully in this assessment. The MLALC's representative, Mr Kevin Telford, undertook a site inspection (field survey) with Mr David Nutley, Comber Consultants on Thursday 14th February 2013.

Prior to the field survey and assessment being undertaken, the MLALC was contacted to discuss the project and their participation. Maps were forwarded to the MLALC which clearly outlined the location of the proposed development and the aims of the project. During the site inspection further maps were provided and the project discussed in detail.

A copy of the draft report was forwarded to them for their comment. The response received from the MLALC is attached at Appendix A. A copy of this final report will be forwarded to the MLALC

4.0 ABORIGINAL HISTORY



4.0 ABORIGINAL HISTORY

The Cadi people are the traditional owners of the study area. The Cadi spoke a dialect of the Darug language (Kohen 1993:1; Attenbrow 2002:23). Dialects of the Darug language were spoken from Botany Bay to Port Jackson, north west to the Hawkesbury and west to the Blue Mountains (Kohen 1993:9). The Darug are bounded in the north by the Dharkinjung, in the south by the Dharawal, in the southwest by the Gundungurra and in the west by the Wiradjuri (Kohen 1993:9-10; Attenbrow 2002:23). The base of the Darug community is the band (sometimes referred to as a clan), a smaller kin based population group that occupied a region of land. The number of people within a band ranged from 25-60 (Attenbrow 2002:28-29). The band appeared to be governed by a headsman (Bradley 1969:77). The Cadi were one band of the Coastal Darug.

Cadi was the name recorded at contact for the people living in one area along the shores of Sydney Harbour. The territory the Cadi occupied runs along the southern shore of Port Jackson (Sydney Harbour) from South Head in the east to Darling Harbour in the west. The extent of the southern border is not fully known but does extend to at least Petersham (H.R. v.1:309; Turbet 1989:22; Attenbrow 2002:24). Cadigal means man of the Cadi. It is derived from the word *Cadi*, the indigenous name for what is now called Watson Bay and *gal* the suffix for man with *galleon* being the suffix for a woman. Whilst the band and its population are referred to as the Cadi, a man is Cadigal and a woman is referred to as Cadigalleon (Tench 1961:292). At the time of contact in 1788, Governor Phillip estimated some 1500 Aboriginal people lived around Port Jackson from Broken Bay to Botany Bay (H.R. v1: 133, Phillip 1968: 64). The Cadi were one band of 50–60 people of this population estimate. However, occupation of their land by Colonial settlers had a devastating effect. Not only were their food and water sources usurped by the invaders, making survival difficult, introduced diseases compounded the difficulties faced by the Cadi. By 1791 smallpox swept through the Aboriginal population and according to contemporary accounts, reduced the number of Cadi to three (H.R. v1: 308-309; Collins 1910: 52–53).

Much of Cadi life was observed and recorded by the First Fleet chroniclers before the impact of settlement and smallpox severely diminished their numbers. The earliest of records describe the Cadi, and all other Aboriginal people, not as nomadic but migratory within their own band territory (H.R. v2: 192; Phillip 1968:77). Protection from the elements was provided by what was described as simple bark huts consisting of a single piece of bark 11 feet in length and 4 feet wide and bent in the middle (Phillip 1968:57). Rock shelters were also used for occupation (Bradley 1969: 132-141). While clothing was minimal, if non-existent, the Cadi did adorn themselves with items of fashioned shell and bone and painted their bodies (Tench 1961:47; Bradley 1969:73-77, 140). Stone axes and blades, spears and wooden, bark or reed baskets and bowls were manufactured for everyday use (Phillip 1968:74-75; Attenbrow 2002:90-91). The dingo had been domesticated and was used in hunting (Tench 1961:47; King 1980:34).

The Cadi survived as hunter gathers. Their diet consisted of cockle, oysters, mussels and fish from the harbour. Fruits and roots were collected from the surrounding vegetation. Animals such as flying fox and possum were hunted or trapped for their meat and skin (H.R. v1: 790; H.R. v2: 135; Tench 1961:104, Bradley 1969: 132-135). Fire was a primary source in cooking their food as well as in hunting (Bradley 1969:128). Not all sources of food were exploited though. The Cadi, for reasons not recorded, refused to eat shark or sting ray that were in abundance in the Harbour (H.R. v2: 192). The Cadi manufactured bark canoes (Tench 1961:48; Phillip 1968: 74-75, King 1980: 32) for movement on the harbour and to fish from using spear and line.

The spiritual life of the Cadi was also recorded. Governor Phillip noted the plethora of rock shelters adorned with drawings of the Cadi people (Phillip 1968:58; Tench 1961:47). The burial practices of the Cadi were recorded (H.R. vol 1: 132; Bradley 1969: 187-188) with cremation and burial often witnessed. The concept of an afterlife was evident (H.R. vol 1: 309) with the belief that the soul of the deceased passed into the sky. Medical techniques (Tench 1961:279; Turbet 1989:78-81) were observed and recorded in the treatment of fractures, cuts, headaches, spear wounds and other injuries common in the process of daily life. These treatments included applying a tourniquet to inflamed injuries; covering wounds with sheets of paperbark and covering burns with a thin paste of kneaded clay (Turbet 1989:78). “Fern root” was chewed for diarrhoea and *Clematis microphylla* (headache vine) was boiled and inhaled or eaten to cure headaches. The Cadi also had names for stars, clouds and the winds (H.R. vol1: 310). The men of the Cadi partook in tooth evulsions as an initiation rite, while at birth the females had part of their little finger removed (Tench 1961: 230, 277-278) for a social purpose not fully recorded by early non-Aboriginal settlers.

Archaeological evidence indicates that the Aboriginal populations had occupied the Sydney region for no less than 6,000 years (Attenbrow 2002:3). In that time the Cadi band of the Darug had come to call part of this region their land and developed a very rich cultural heritage.

5.0 ENVIRONMENTAL CONTEXT

TOPOGRAPHY

GEOLOGY

VEGETATION

CURRENT LAND USE



5.0 ENVIRONMENTAL CONTEXT

5.1 Topography

Darling Harbour is located in the central portion of the Sydney Basin. The Sydney Basin is characterised by contrasting landscapes of rugged sandstone escarpments and gently undulating hills over shale (Herbert 1980:21; Sydney 1:100,000 geological map).

Darling Harbour is located at Cockle Bay in an area of low undulating topography on the Sydney Harbour Foreshore. Both the Parramatta River and Lane Cove River flow into the Harbour at this point. The land to the southeast and southwest of Darling Harbour once contained swampy foreshore and extensive mudflats which were inundated at high tide. Creeks flowed from the higher ground at Surry Hills on the eastern side and from the south from Broadway (Casey + Lowe 2012:8).

Today Darling Harbour is the result of European land management activities including Harbour reclamation. It is situated along a central valley that has been formed by infilling a significant part of the original Cockle Bay. The valley is open and flat, and runs on a north-south axis from Cockle Bay to Tumbalong Park. Ridges rise to the east towards the Sydney CBD and to the west towards Pyrmont from the valley floor (JBA 2007:6). Figure 5 shows the location of the original foreshore.

5.2 Geology and Soils

The geology of the Sydney Harbour consists of the Wianamatta Group of shales which overlies Hawkesbury Sandstone. The Wianamatta Group consists of a lower formation of Ashfield Shale which grades upwards into a fine sandstone-siltstone laminate culminating in the overlying Minchinbury Sandstone. The Minchinbury Sandstone separates the Ashfield Shales from the overlying Bringelly Shale. (Sydney 1:000,000 geological map). An igneous dyke known as “The Great Sydney Dyke” intrudes the Hawkesbury Sandstone in a northwest to southeast direction towards the southern boundary of the site (Coffey 2012:3). Geotechnical testing for the study area (Coffey 2012:7-9) provides the following information:

Unit	Depth to top of unit (m)	Thickness of unit (m)	Elevation at top of unit (mAHD)	Material Description
1	0	0.4 to 14.5	2.3 to 5.4	Fill – comprising heterogenous mixtures of sand, sandy gravel, clay and sandy clay/silt with cobbles and occasional boulder sized rock fragments. Concrete and asphalt materials.
2	0.4 to 14.5	1.5 to 14.3	0 to -10.6	Alluvium and Estuarine Deposits – comprising clayey sands and clays with occasional shell layers and organic matters.
3	1.4 to 14.7	0.4 to 5.3	1.4 to -11.7	Residual Soil – derived from weathering of the underlying sandstone rock and generally comprising clayey sand or sandy clay having stiff consistency.
4A	0.3 to 21.5	0.1 to >4	2.7 to -13.2	Bedrock – comprising Hawkesbury Sandstone ranging from extremely weathered to fresh with low to medium strength shale bands.
4B	4.3 to 20.8	1.6 to >9.6	-1.5 to -15.3	
4C	12.9 to 23.5	Not proven	-1.7 to -20.8	
5A				Clay – comprising high plasticity clay derived from completely weathered dyke material
5B				Dolerite – highly weathered to fresh dyke material.

Table 2: Geotechnical units
(From Coffey 2012:7-9)



Unit 2 is of relevance to this study. It is possible that the alluvium and estuarine deposits, particularly to the southwest where the original foreshore is located, which contain shell layers and organic material, could contain midden material. A previous excavation at Darling Harbour (Comber 2012) revealed a midden containing artefacts and charcoal at a depth of RL 0.98 to RL 1.40 (approximately 3m below the ground surface).

The geology is also important for information about the sources of material for stone tool manufacture. The Wianamatta Group does not provide a good variety of lithic material suitable for stone tool manufacture. Within the Bringelly Shales are claystones, siltstones and laminate. These thin shales are not strong enough for use in stone tool manufacture. However, the Bringelly Shale also comprises Tuff which is a highly siliceous fine grained material suitable for small tool manufacture. In addition the underlying Hawkesbury Sandstones provides materials suitable for the manufacture of ground edge axes and surfaces suitable for engraved art. Hawkesbury sandstone also weathers into overhangs and shelters suitable for habitation and protection from the elements. The quartz which weathers from the sandstone also provides material for artefact manufacture.

However, the tuff and quartz would only have been available in some locations and would not have been widespread. The sandstone may have occurred within the study area as outcrops around the shoreline, whilst the dolerite was buried too deeply to enable access. Other materials such as chert and silcrete which are valuable materials for the manufacture of small stone tools were not readily available. Such materials, which are highly siliceous and fine grained, can provide a very sharp hard edge suitable for cutting. Buried silcrete deposits are located at Newtown (Steele 2006:24). However, access to these buried deposits may have been limited. Other deposits of silcrete and chert are available from western Sydney at Plumpton, Penrith, St Clair and Prospect (Comber 2008:6), all a considerable distance from Cockle Bay. As a result, people of the Sydney region favoured shell, rather than stone, for tool manufacture (Bradley 1792:92). If stone was required it would have been necessary to travel great distances or trade with neighbouring clans to obtain chert or silcrete.

5.3 Vegetation

The vegetation of the Sydney Basin would once have consisted mainly of dry sclerophyll or open woodland on the higher sections where the soils are sandy and well drained, whilst the slopes would have supported an open Sydney Turpentine-Ironbark forest. The alluvial soils would have supported a river-flat forest, including various *Eucalypt* species and *Angophoras*. The open woodland species would have included *Eucalyptus siberi* (Silvertop Ash), *Eucalyptus piperita* (Sydney Peppermint), *Eucalyptus sclerophylla* (Scribbly Gum), plus *Corymbia* with an understorey of *Banksia serrata* (Old Man Banksia), *Banksia spinulosa* (Hairpin Banksia), *Banksia integrifolia* (Coast Banksia) and various *Acacia* spp., including *Acacia longifolia*. Flowering shrubs would have included *Telopea speciosissima* (Waratah) and *Boronia serrulate* (Native Rose), whilst groundcover species would have included *Grevillia laurifolia* and *Persoonia chamaepitys*. Clumps of *Lomandra longifolia* would also have grown on headland Areas. In addition, various heathland communities would have existed along coastal Areas (Baker et al 1986). Ferns and sclerophyll shrubs would have been growing in rocks along the foreshore and in natural seepage lines at the base of sandstone outcrops (Macphail 2010:8).

At the head of Cockle Bay (which is now under the Sydney Entertainment Centre) and extending around the foreshore as far north as King Street would have been swamp communities of *Casuarina glauca*/*Eucalyptus robusta* (Benson & Howell 1990). Samples of tree roots collected during a previous excavation at Darling Harbour (Comber 2012:11) confirms that *Casuarina glauca* was growing near the study area prior to reclamation. His report is attached at Appendix B. In addition pollen analyses from the the previous Darling Harbour excavation (Comber 2012:11) indicates that *Casuarina glauca*/*Eucalyptus robusta* swamp forest would have been growing on the foreshore or at the head of Cockle Bay prior to non-Aboriginal settlement (Macphail 2010:13).

Such vegetation would have provided a rich and varied food source. The needle like leaves of the *Casuarina* were chewed to quench the thirst whilst shields could be made from the bark. Flowers from the *Eucalyptus* and *Banksias* provided a rich nectar. Acacia pods can be eaten and the bark used medicinally. This vegetation also supports a variety of animal life associated with Aboriginal diet. This includes possums, various wallabies and other small marsupials as well as birds and lizards. Bark and wood suitable for spears, shields, water and/or food vessels (coolamons) and other implements would have been available from large trees (Comber 2012:11).

However the urbanisation and industrialisation of the Sydney Basin has ensured that the landscape and its vegetation has been dramatically altered and no longer resembles the pre-contact landscape.



5.4 Current Land Use and Disburbance

A detailed land use history of the study area is contained in Casey + Lowe (2012:7-14) and a history of the broader Darling Harbour area in Casey + Lowe (2008 & 2010). Following is a brief précis.

At the time of settlement of the Colony in 1788 the majority of the study area was the open water of Cockle Bay. The only foreshore was at Ultimo on the western side of Darling Harbour with reclamation being undertaken at later stages. Figure 3 shows a plan of the historic foreshore with the study area overlain.

Settlement at Cockle Bay began early in Sydney's Colonial history. Cockle Bay initially contained flour mills and became an important wharfage area. The first wharf was constructed in Market Street on the order of Governor Macquarie in 1810. This was to allow unloading of produce from outlying settlements and provide access to the new market square on George Street (Casey & Lowe 2010). Dickson's Mill, which included the first steam engine to be used in Australia, began operations in Cockle Bay in 1815, in the south eastern portion of the study area (Casey + Lowe 2012:9). From the 1830s development of the Cockle Bay shore line to accommodate the shipping industry began and included wharf construction, land reclamation and the quarrying of the sandstone cliffs at the base of Observatory Hill (Casey + Lowe 2010).

Between 1820 and 1850 land reclamation and wharf construction was underway. Initially long jetties were constructed into the tidal waters until land reclamation began to change the shape of the shoreline. By 1836 the town of Sydney had extended to the waterfront at Darling Harbour where warehouses and stores were constructed. The railway at Darling Harbour was opened in 1855 on the western side of the study area. Goods yards were included with the rail line making Darling Harbour the centre of Sydney's freight network. Industrial expansion continued on the eastern side of Darling Harbour with the construction of foundries, wharves, warehouses, bond stores and ship yards. Early residential development began around Darling Harbour to provide housing for the workers. In 1984 Premier Neville Wran announced the government's intention to redevelop Darling Harbour as the State's major contribution to the bicentennial program. This project saw the resumption of land and buildings at Darling Harbour and their demolition to allow for the new project (Casey + Lowe 2008:17). The redeveloped Darling Harbour precinct includes the Sydney Entertainment Centre, Sydney Convention and Exhibition Centre, Tumbalong Park, Chinese Garden of Friendship and underground parking.

The present study area includes the Sydney Entertainment Centre, Sydney Convention and Exhibition Centre, Tumbalong Park, and structures.

Whilst the precontact landscape has undergone major changes including land reclamation, industrialisation and major redevelopment, evidence from a previous excavation at Darling Harbour (Comber 2012) indicates that it is possible for evidence of Aboriginal occupation to remain in the study area.

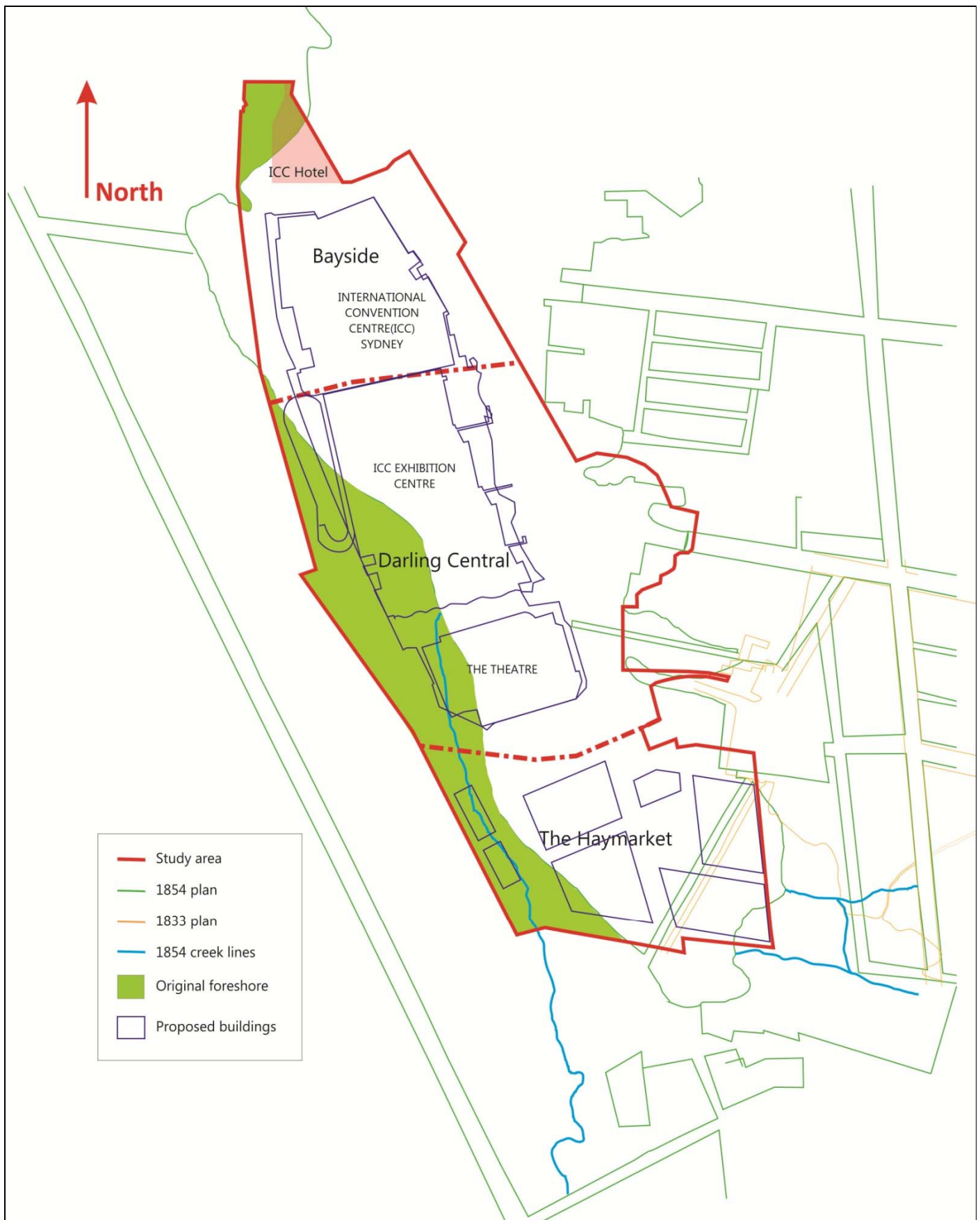


Figure 5: Study area edged in red. Original foreshore shown in green
(Provided by Casey + Lowe)

6.0 ARCHAEOLOGICAL CONTEXT



6.0 ARCHAEOLOGICAL CONTEXT

6.1 Sydney Region

Many surveys have been undertaken in the Sydney region which indicate the richness of the archaeological resources and which provide information about Aboriginal occupation. In particular, Attenbrow (2002) has excavated a range of sites within the Sydney Basin. The aim of her study was to identify local geographic variation and temporal changes in the subsistence patterns and material culture of the people of this area. She excavated sites at Balmoral Beach, Cammeray, Castle Cove, Sugarloaf Point (Lane Cove River), Darling Mills State Forest, Winston Hills, Vacluse and Cumberland Street in the Rocks. Dates for initial occupation vary from approximately 10,000 years BP at Darling Mills to approximately 450 years BP at Cumberland Street, The Rocks.

The oldest dated occupation for the Sydney region is 30,000 years BP from a site excavated by McDonald at Parramatta. She excavated an area known as the RTA site (McDonald 2005), located at George Street, Parramatta (McDonald 2005) on an alluvial sand terrace running parallel to the Parramatta River. This site provided a sequence of occupation dating from the late Pleistocene through to the mid-Holocene. Although the site had been heavily impacted by development, the sub-surface deposits revealed an “accumulation of evidence from multiple occupation episodes, no doubt occurring at many different times” (McDonald 2005:147). Radiocarbon dating provided a range of dates indicating continuous occupation of the site. The most important date showed that the alluvial sand terrace was possibly first occupied during the late Pleistocene period, about 30,000 years BP and then showed various phases of occupation (McDonald 2005c:107). The earliest date obtained from this site, 30,000 years BP, provides the oldest date for the Sydney Basin (McDonald 2005:4). However, it should be noted that the date was obtained from charcoal in the sieve and not in association with cultural deposits, therefore caution should be exercised when considering this date. The next oldest dated occupation is 15,000 years BP from the Shaws Creek K2 rock shelter on the Nepean River (Kohen 1984; Nanson et al 1987). However these dates must be considered in association with environmental data related to sea level rises. The Sydney region that we know today was vastly different to the landscape of 15,000-30,000 years ago.

The period of maximum glaciation was 15,000–18,000 years BP. Therefore the date of the K2 rock shelter, Attenbrow’s Darling Mills site and McDonald’s Pleistocene date, indicate that Aboriginal people lived throughout a period of extreme environmental change. During this period, sea levels were up to 130m below current levels (Nutley 2006:1). About 10,000 years ago as temperatures began rising at the end of the last ice age, the polar ice started melting and sea levels rose. The rising sea levels forced people to abandon coastal sites and move inland, with the result that the oldest coastal sites were inundated. By about 6,000 years ago rising water levels had flooded the coastal plain forming the Sydney landscape that we know today. The vast majority of sites in the Sydney region date to around 5,000 years BP, after sea levels had stabilised. Whilst research into submerged indigenous sites is now being undertaken (Nutley 2006), there are few sites in the Sydney area that are known to date beyond 10,000 years BP. Therefore research undertaken to date has focused on subsistence patterns and cultural change, e.g. Attenbrow (2003).

Attenbrow’s (2003) study of the “Sydney region” extended from the eastern coast to the Hawkesbury-Nepean River to the north and west and as far south as Picton (2002:xiii), which includes the present study area. At the time of publication (2002), Attenbrow noted that approximately 4,340 Aboriginal sites had been registered with OEH’s Aboriginal Heritage Information Management System (AHIMS) in the Sydney region (Attenbrow 2002:48). Middens and open campsites comprised just over half of the recorded sites (Attenbrow 2002:48-49). From both the archaeological evidence and historical records she noted that the main focus of occupation was “on the valley bottoms and shorelines” (Attenbrow 2002:47). In addition, the evidence indicates that occupation was greater on the coastal/estuarine environments rather than in the hinterland/freshwater environments and on the Hawkesbury sandstone areas rather than the Wianamatta shales (Attenbrow 2002:51). Her work produced a great deal of information in respect of the people of the Sydney region, their social organisation and land use patterns. Her (2002:152-155) analyses indicates that prior to 5,000 years ago occupation in the Sydney region was not intensive and was only by small groups of people. It was not until sea levels stabilised about 5,000 years ago that more intensive occupation began with many open sites being first occupied in the last 1,500 years.

6.2 Sydney Harbour

The 1883 publication *Aborigines of Australia* and the 1880 *Journal of the Royal Anthropological Institute* recorded a rock engraving at the area now known as Dawes Point Park, approximately 1.5km north of Darling Harbour. The engraving was either of a whale or a shark with the figure of a man at its head. This engraving has since been destroyed, probably during the construction of the Sydney Harbour Bridge (AHIMS 45-6-0030). Prior to construction of the Harbour Bridge Dawes Point would have been a high rocky point.



In 1985 Lampert excavated a midden and camp site at Mort's Bond Store, approximately 2km north of the study area. The site had been truncated by construction of the building and was in a highly disturbed condition. It contained shell and bone, as well as stone artefacts manufactured from red and grey silcretes, quartz, quartzite and chert. The artefacts were comprised of flakes, flaked pieces and cores. He hypothesised that the stone material was sourced from quarries on the Cumberland Plain (Lampert 1985).

An engraving was recorded "on upright surfaces in creek bed" at Goat Island (AHIMS 45-6-811). These engravings include a whale, kangaroo and fish. Three disturbed middens have also been recorded on Goat Island, (AHIMS 45-6-0811; 45-6-1957; 45-6-2382). Goat Island is situated at the mouth of Darling Harbour, approximately 2.5km north of the study area. Goat Island itself is extremely important, as it was recorded in 1798 as being owned by Bennelong, who played a significant role in early Aboriginal-European relations. It was also recorded as being used by Aboriginal people for imprisonment prior to European settlement. Deputy Judge Advocate David Collins, was required by the Colonial Government "...to observe, record and if possible reconcile the Aborigines...". In 1798 he published details of Bennelong's relationship to Goat Island. This is the first official, written account of ownership of land by an Aboriginal person (Gollan 1993).

A midden was recorded at Bennelong Point, approximately 2.5km north east of the study area. The shell from this midden had been collected by the convicts to burn into lime to provide building mortar (AHIMS 45-6-1615). Another midden was uncovered during building works near the historic building "Lilyvale" on the corner of Cumberland and Essex Streets, The Rocks, approximately 1.5km north east of the study area. It had been highly disturbed by the construction of terrace houses in the 1830s and was subsequently destroyed by the construction of a hotel (AHIMS 45-6-1853).

During historic excavations in relation to the construction of the eastern distributor at Woollomooloo, an artefact scatter was uncovered. This site was subsequently excavated by Brayshaw (AHIMS 45-6-2580). This site, which was located near a spring contained 4 silcrete, 4 chert, 2 quartz artefacts plus one quartzite and one chalcedonic silica artefact. They were found at a depth of about one metre in "disturbed topsoil, overlain by fill" (AHIMS 45-6-2580:2).

During historic excavations in respect of development works located approximately 500m east of the study area, at William Street, an artefact scatter was uncovered. This was subsequently excavated and the artefacts included fine quartz debitage and cores, silcrete flakes and tuff cores and flakes (AHIMS 45-6-2651).

At Angel Place, approximately 1.5km north east of the study area, during development works stone artefacts were uncovered. This site was subsequently excavated by Steele who retrieved three broken flaked pieces in "partially disturbed topsoil mixed with alluvial silts" (AHIMS 45-6-2581). Steele also recorded a potential archaeological deposit (PAD) at 589-593 George Street, (AHIMS 45-6-2637), which he subsequently excavated. This site is located approximately 250m north-east of the Entertainment Centre between George, Liverpool, Goulburn and Sussex Streets. Shell deposits were excavated and it was determined that the shell was most likely not of Aboriginal origin (Steele 2002). In 2002 Steele excavated a site on the corner of Broadway and Mountain Streets in relation to the Quadrant Development. He uncovered 7 quartz and 6 silcrete artefacts.

Steele (2006) also undertook an assessment and excavations at a development site bound by Kent, Erskine, Napoleon and Sussex Streets, which became known as the KENS site. He retrieved a large assemblage of 952 artefacts which were predominately manufactured from silcrete with some tuff and quartz artefacts (Steele 2006:97). He interpreted the site as being occupied between 2,800 BP to 1788. This site was located in a similar environmental context to the present study area, i.e., in a coastal environment near an original shoreline.

In 2008 Comber undertook an assessment of the Darling Walk site at Darling Harbour and predicted that it was possible for subsurface Aboriginal sites to exist on the site. In 2009 (Comber 2012) she excavated the site prior to redevelopment into the present Darling Quarter. She uncovered a midden with charcoal and 10 predominantly chert artefacts (eight chert, one silcrete, and one quartz artefact).

The majority of these sites have been uncovered during historical archaeological excavations in relation to development proposals. A few of the sites were recorded at contact. None have been recorded and analysed as a result of a systematic assessment. However, all of these sites are located in the coastline/estuarine environment on Hawkesbury Sandstone. These locations confirm Attenbrow's model of coastal occupation that occupation was greater in these environments and on the Hawkesbury Sandstone than in the hinterland/freshwater environments.

6.3 The Study Area

A search of the Aboriginal Heritage Information Management System (AHIMS) indicates that no known Aboriginal sites or places have previously been recorded within the study area, although the midden recorded by Comber (2009) was located immediately to the east of Tumbalong Park (which is part of the study area).



6.4 Site Prediction

On the basis of the above environmental and archaeological information, it could be expected that sub-surface archaeological deposits containing artefact scatters and or middens may be located within the south-western section of the study area, near the original shoreline. It is not expected that sites will be located in the northern or north-eastern section of the site, as these areas are reclaimed land.

As the study area is completely paved, it is not expected that any sites will be visible on the surface. Any remaining evidence of occupation is expected to be sub-surface. The excavation undertaken by Steele (2006) at the KENS site and by Comber (2008) at Darling Quarter provides relevant data to enable a comparative analyses to be made. Both excavations were located in a similar context to the present study area, i.e., a foreshore area which had been developed during the early European settlement of the Colony and which was later the subject of land reclamation and ongoing development.

The KENS site (Steele 2006) which was located in a tidal zone, contained a surprisingly complex archaeological deposit. Muddy tidal zones were not usually considered good camping areas. Camping would have occurred on higher ground overlooking the water. However, activities associated with fishing, gathering shellfish etc., may have occurred within the tidal zone. Stone artefacts would have been required for wooden tool manufacture and maintenance, fish hook manufacture and for gutting fish.

The Darling Quarter site (Comber 2012) provided evidence that Aboriginal people were fishing and gathering shellfish and then camping on the rock outcrop overlooking the harbor to cook and eat the seafood. This evidence, including the rock outcrop was only revealed after archaeological excavations were undertaken. The shoreline had been filled during reclamation works. A layer of crushed sandstone had been laid over the foreshore area, prior to filling, thus preserving the evidence of occupation.

Therefore, it is possible that sub-surface Aboriginal archaeological deposits may also remain within the present study area near the original foreshore, despite later reclamation. Such evidence will most likely be in the form of stone tools or remnant midden material. If sandstone outcrops exist in the area of the original shoreline, it is possible that they may contain axe grinding grooves or engravings. Scarred or carved trees are not expected, as the study area does not contain any remnant vegetation. Similarly rock shelters are not expected, as the combination of Colonial development, land reclamation and the later development of Darling Harbour would most likely have destroyed any rockshelters that may have existed.

The remainder of the site was originally harbour and has since been reclaimed. It is not expected that sites that may have existed prior to sea level rises would have survived the process of inundation (Nutley 2006) and later land reclamation activities.

7.0 IMPACT OF PROPOSAL



7.0 IMPACT OF PROPOSAL

7.1 Proposal

Table 2 below provides details of the proposed redevelopment for all phases, ie, the PPP, The Haymarket and the hotel complex.

AGREEMENT	SECTOR	USE	SCOPE
(Public Private Partnership)	Bayside	Convention Centre (Bayside / Parkside) Public Realm	- Demolish existing Bayside to grade - Remove existing ground slab, capping beams and in-ground services - Existing piles to remain in ground - Build new Bayside above ground – new piles - Complete internal refurbishment of Parkside (under freeway) - Minimal excavation of existing public realm levels – new paving / decking
	Darling Central	Exhibition Halls Entertainment Centre (MFEC) Public Realm Darling Drive	- Demolish existing exhibition building structure to existing slab level (RL6.0) - Retain undercroft carparking (RL2.5) - New piles through existing slabs (RL6 & 2.5) to support new exhibition / MFEC buildings above - Extreme south end of MFEC to be on new foundations / piles - Minimal excavation of existing public realm levels – remove existing praised planters - Realignment of Darling Drive
	Hotel complex	Hotels Retail	- Build new hotels and retail above ground – new piles - No intention for basements
	Darling Central	Retail	Likely to be built on existing slab levels (minor areas)
	The Haymarket	Commercial Residential Retail Other	- Demolish existing entertainment centre and carpark - Remove existing ground slab, capping beams and in-ground services - Existing piles to remain in ground - Build new buildings above ground – new piles - Structural bridging over dyke - Avoid heritage stormwater culverts - No intention for basements (at this stage)

Table 2: Scope of Work for all phases



As shown in Figure 5, the original shoreline prior to land reclamation activities was located in the Darling Central and The Haymarket sections of the SICEEP site. As detailed in section 4.4 of this report, it is possible that subsurface deposits will remain within the SICEEP site near the original foreshore. Therefore, it is possible that the proposed development on the western side of Darling Central and The Haymarket may impact upon subsurface archaeological deposits. To ensure that there are no adverse impact upon the potential Aboriginal archaeological deposits, subsurface testing and salvage in the area of the original shoreline is recommended. To undertake such testing a research design should be prepared which will outline the methodology required to guide such excavations. Specific impacts are:

7.2 Impact and Mitigation

7.2.1 PPP: Bayside and Darling Central

Impact for Bayside

Within Bayside the Convention Centre and Public Realm are to be redeveloped. The Convention Centre is within reclaimed land and outside the area of the original footprint, so no impact on Aboriginal heritage is anticipated.

The majority of the Public Realm is within reclaimed land. There will be minimal excavation of existing public realm levels for new paving and decking. A small portion of the public realm is on or very near to the original foreshore. This is within the south-western corner of Bayside. It is highly unlikely that this minor excavation will have any impact on Aboriginal heritage. It is expected that such excavation will be within existing fill levels.

Mitigation for Bayside

The impact on the original foreshore area will be minimal and it is not expected that Aboriginal archaeological deposits will be impacted upon. However, as the depths of alluvium and estuarine deposits are variable across the site, it is recommended that archaeological monitoring of the excavation near the original foreshore be undertaken.

Impact for Darling Central

With Darling Central the Exhibition Centre and Entertainment Centre will be demolished and redeveloped and the following undertaken:

Exhibition Centre:

- Reuse of the existing ground slab at RL2.6
- Extensive piling through the area with most piles being between 600mm to 900mm in diameter
- Series of strip footings, 1200mm wide and 1200mm deep (RL1.4)
- Pile caps 1.2m deep with four piles with each cap.
- Extensive piling within the rear loading dock which is further to the west of the building and therefore within the foreshore area.

As the alluvium and estuarine deposits occur at depths of from 0.4 to 14.5 across the SICEEP site, it is possible that the piling will impact upon Aboriginal archaeological deposits.

Entertainment Centre

- Reuse of the existing ground slab at RL2.6
- Some additional piling at the southern end beyond the ground slab:
 - Twelve new piles at southern end, most of these appear to be to the east of the foreshore
 - A few piles may be within the western foreshore intertidal zone
 - Five to eight piles possibly within the western foreshore

As the alluvium and estuarine deposits occur at depths of from 0.4 to 14.5 across the SICEEP site, it is possible that the piling will impact upon Aboriginal archaeological deposits.

Public Realm

Resurfacing of the public realm will be undertaken which should not have any impact on the Aboriginal archaeology.

**Mitigation for Darling Central**

Archaeological testing, recording and salvage should occur in areas where piling or any other ground disturbance that will penetrate the fill is to be undertaken, within or near the area of the original foreshore.

7.2.2 The Haymarket**Impact for The Haymarket**

The current design includes demolition of existing buildings, ground slab, capping beams and inground services with retention of existing piles. New buildings will be constructed on new piles. It is possible that these piling on the western side of The Haymarket could impact on Aboriginal archaeological deposits within the original foreshore area.

Mitigation for The Haymarket

Archaeological testing, recording and salvage should occur in areas where piling or any other ground disturbance that will penetrate the fill is to be undertaken, within the western side within or near the area of the original foreshore.

7.2.3 Hotel Complex**Impact for Hotel Complex**

The hotel complex will include construction of new hotels with construction of new piles. A small portion of the original foreshore extends into the northern section of the hotel complex area. However, a plan provided by Casey & Lowe dated 27/11/1891, indicates that this area was most likely quarried and railway lines constructed. The quarrying would most likely have removed any alluvial deposits and therefore any archaeological deposits. At this stage, detailed plans for construction of the new hotels have not been prepared, but from the information provided to date, it would appear that the hotel and retail complex will be constructed partially on the Colonial quarry and on reclaimed land. If this is correct, there will be no impact on Aboriginal archaeological deposits. However, this will need to be confirmed during the design phase and the finalised mitigations included in a management strategy/research design.

Mitigation for Hotel Complex

If the hotel/retail complex is constructed partially on the area which was previously quarried and partially on reclaimed land, no further archaeological assessment, recording or testing will be required. However, once design plans have been provided they should be reviewed and updated mitigation measures included in a management strategy/research design for the whole of the SICEEP site. If there is the potential for the hotel complex to impact on Aboriginal archaeological deposits monitoring or testing may be required.

7.2.4 Summary

Following is a table summarising the impacts and mitigations for each section. The location of the original foreshore for the following archaeological program is shown in Figure 5.

Sector	Impact on Aboriginal archaeology	Mitigation
PPP: Bayside	Excavation for resurfacing public realm. Unlikely impact, however, it is possible that excavation might impact upon alluvium and estuarine deposits which contain Aboriginal archaeological deposits.	Archaeological monitoring
PPP: Darling Central	Piling could impact upon Aboriginal archaeology in the area of the original foreshore, on the western side of Darling Central.	Archaeological testing, recording and salvage should occur in areas where piling or any other ground disturbance that will penetrate the fill is to be undertaken
The Haymarket	Piling could impact upon Aboriginal	Archaeological testing, recording and



Sector	Impact on Aboriginal archaeology	Mitigation
	archaeology in the area of the original foreshore, on the western side of The Haymarket.	salvage should occur in areas where piling or any other ground disturbance that will penetrate the fill is to be undertaken.
Hotel Complex	Design plans are presently not available for the hotel/retail complex. From the information provided to date, it does not appear that there will be any impact on Aboriginal archaeological deposits.	If the hotel/retail complex is constructed on a previous quarry and reclaimed land, no further archaeological assessment, testing or salvage will be required. However, once design plans have been prepared the impact of the hotel/retail complex should be reviewed and updated mitigation measures included in the management strategy/research design. If there is the potential for the hotel complex to impact on Aboriginal archaeological deposits monitoring or testing may be required.

8.0 LEGISLATION



8.0 LEGISLATION

8.1 National Parks & Wildlife Act 1974

The *National Parks & Wildlife Act 1974* (NPW Act) provides statutory protection for all Aboriginal “objects”. The NPW Act is administered by the Office of Environment & Heritage. Section 90 of the NPW Act details the provisions for the issue of a written consent to impact upon an Aboriginal object.

8.2 Environmental Planning & Assessment Act 1979

However, this project is being undertaken as a State Significant Development under Part 4, Division 4.1 of the *Environmental Planning & Assessment Act 1979* (EPA Act). Section 89J of the EPA Act (see below) does not require that a State significant development seek approval under the NPW Act as.

Section 89J of the EPA Act states the following:

89J Approvals etc legislation that does not apply

The following authorisations are not required for State significant development that is authorised by a development consent granted after the commencement of this Division (and accordingly the provisions of any Act that prohibit an activity without such as authority do not apply):

- (a) the concurrence under Part 3 of the *Coastal Protection Act 1979* of the Minister administering that Part of that Act,
 - (b) a permit under section 201, 205 or 219 of the *Fisheries Management Act 1994*
 - (c) an approval under Part 4, or an excavation permit under section 139, of the *Heritage Act 1977*
 - (d) an Aboriginal heritage impact permit under section 90 of the *National Parks and Wildlife Act 1974*
 - (e) an authorisation referred to in section 12 of the *Native Vegetation Act 2003* (or under any Act repealed by that Act) to clear native vegetation or State protected land,
 - (f) a bush fire safety authority under section 100B of the *Rural Fires Act 1997*,
 - (g) a water use approval under section 89, a water management work approval under section 90 or an activity approval (other than an aquifer interference approval) under section 91 of the *Water Management Act 2000*.
- (2) Division 8 of Part 6 of the *Heritage Act 1977* does not apply to prevent or interfere with the carrying out of State significant development that is authorised by a development consent granted after the commencement of this Division.
- (3) A reference in this section to State significant development that is authorised by a development consent granted after the commencement of this Division includes a reference to any investigative or other activities that are required to be carried out for the purpose of complying with any environmental assessment requirements under this Part in connection with a development application for any such development.

The EPA Act is administered by the Department of Planning and Infrastructure who will provide the consent for this project and for any impact on Aboriginal “objects”. Section 89J(d) does not require the consent of the the Office of Environment & Heritage.

The Director-General’s requirements were issued on 21 January 2013 and requires that an archaeological assessment for Indigenous archaeology be undertaken. This report satisfies that requirement.

9.0 RECOMMENDATIONS



9.0 RECOMMENDATIONS

The following recommendations are made on the basis of:

- Discussions with representatives of the Metropolitan Local Aboriginal Land Council.
- Research into the archaeological record for the Darling Harbour area in general and the study area in particular.
- Results of the assessment as outlined in this report.

IT IS THEREFORE RECOMMENDED that

1. Program of archaeological monitoring, recording, testing and salvage

PPP: Darling Central

A program of Aboriginal archaeological sub-surface testing should be undertaken prior to the redevelopment of the Darling Central. The testing should be undertaken on the western side of Darling Central within the area of the original foreshore in areas where piling or other ground disturbance which will penetrate below the fill is to be undertaken.

PPP: Bayside

Archaeological monitoring should occur in the south-western corner of Bayside in the area of the original foreshore.

The Haymarket

A program of Aboriginal archaeological sub-surface testing should be undertaken prior to the redevelopment of the Haymarket. The testing should be undertaken on the western side of The Haymarket within the area of the original foreshore in areas where piling or other ground disturbance which will penetrate below the fill is to be undertaken.

Hotel Complex

Design plans are presently not available for the hotel/retail complex. From the information provided to date, it does not appear that there will be any impact on Aboriginal archaeological deposits. If the hotel/retail complex is constructed partially on the area which was previously quarried and partially on reclaimed land, no further archaeological assessment, recording or testing will be required. However, once design plans have been provided they should be reviewed and updated mitigation measures included in a management strategy/research design for the whole of the SICEEP site. If there is the potential for the hotel complex to impact on Aboriginal archaeological deposits monitoring or testing may be required.

2. Research Design and Management Strategy

Prior to commencement of the monitoring and testing, a research design and management strategy should be prepared which clearly sets out the management strategy and the methodology to be followed.

3. Aboriginal partnership

The program of monitoring, recording and testing should be undertaken in partnership with the Metropolitan Local Aboriginal Land Council.

4. Care Agreement

If any Aboriginal “objects” (as defined under the *National Parks & Wildlife Act 1974*) are located during the course of the testing program, the Metropolitan Local Aboriginal Land Council should apply for a Care Agreement with the Department of Environment and Heritage to enable them keep the objects.

5. Coordination with Historical Archaeologist

The program of sub-surface testing should be coordinated with Casey & Lowe, the archaeologists undertaking testing/recording in respect of the historical archaeology.

6. Unexpected finds

If, during the course of the redevelopment, any previously undetected Aboriginal “objects”, artefacts or sites or uncovered, work must cease in the vicinity of that object, artefact or site and further advice sort from the archaeologist who undertook the program of sub-surface testing.

REFERENCES



REFERENCES

- Attenbrow, V 2002 *Sydney's Aboriginal Past*, UNSW Press, Sydney.
- Baker, Margaret 1986 *Native Plants of the Sydney Region*. Three Sisters Productions, Winmalee.
- Corringham, Robin
- Dark, Jill
- Benson & Howell 1990 *Taken for Granted: The Bushland of Sydney and its Suburbs*. Kangaroo Press, Royal Botanic Gardens, Sydney.
- Bradley W 1969 *The Journal of Lieutenant William Bradley RN of HMS Sirius 1786-1792*. The William Dixson Foundation Publication No. 11
- Casey + Lowe 2012 Sydney International Convention, Exhibition and Entertainment Precinct (SICEEP): Archaeology, Heritage Impact Statement
- Casey + Lowe 2008 Non-Indigenous Archaeological Assessment: Darling Walk, Darling Harbour. Unpublished report to Lend Lease Development
- Casey + Lowe 2010 Non-Indigenous Archaeological Assessment Barangaroo Stage 1. Unpublished report to Lend Lease.
- Comber, J 2008 Aboriginal archaeological and cultural heritage assessment, Darling Walk, Darling Harbour. Unpublished report to Casey + Lowe on behalf of the Sydney Harbour Foreshore Authority.
- Comber, J 2012 Darling Quarter (formerly Darling Walk), Aboriginal archaeological excavation report. Unpublished report to Lend Lease on behalf of Casey + Lowe
- Coffey Geotechnics 2012 Geotechnical Investigation: proposed Sydney International Convention, Exhibition and Entertainment Precinct (SICEEP). Unpublished report to Infrastructure NSW.
- Gollan, V 1993 Colonisation and the Law: the role of British law in the dispossession of Aborigines 1788-1840. Unpublished PhD Thesis, The University of Sydney.
- Herbert, C (ed) 1983 *Geology of the Sydney 1:100,000 Sheet*. New South Wales. Department of Mineral Resources, Sydney.
- JBA Urban Planning Consultants 2007 *Part 3A Concept Plan and Environmental Assessment Report*. Submitted to Department of Planning on behalf of Sydney Harbour Foreshore Authority
- Kohen, J, 1984 Shaw's Creek KII Rockshelter: a prehistoric occupation site in the Blue Mountains piedmont, eastern New South Wales. In *Archaeology in Oceania* 19 (2):57-73.
- Lampert, R. J 1985 Excavation Report on Mort's Bond Store. Unpublished Report to Department of Environment and Planning.
- McDonald JO CHM Pty Ltd 2005 Archaeological Salvage Excavation of Site RTA-GI 109 – 113 George Street Parramatta NSW. Report to Landcom.
- MacPhail, Mike 2010 Pollen Analysis of Samples from The Darling Walk Development Site, Cockle Bay, Darling Harbour, Sydney. Unpublished report to Casey + Lowe.
- Nanson, G. C, Young, R W & Stockton E 1987 Chronology and palaeoenvironment of the Cranebrook Terrace (near Sydney) containing artefacts more than 40,000 years old. In *Archaeology in Oceania* 22(2):72-8.
- Nutley D 2006 *The Last Global Warming? Archaeological Survival in Australian Waters*, Flinders University Maritime Archaeology Monograph Series, No. 10
- Ross A And Attenbrow V 1990 Aboriginal Site Survey: Bradley's Head. Report to NSW Government.



- Steele D 2002 Aboriginal Archaeological Excavation, Quadrant Development Site, Broadway & Mountain Streets, Sydney, NSW, containing NPWS Site 45-6-2629. Unpublished report to College Square Residential Pty Ltd.
- Steele D 2006 Final Aboriginal Archaeological Excavation Report. The KENS Site (Kent, Erskine, Napoleon and Sussex Streets), Sydney, NSW, containing DECC Site 45-6-2647 and associated areas of PAD. Unpublished report to Leighton Contractors Pty Ltd.
- Steele, D 2002 Salvage Excavation of a Potential Aboriginal Site NPWS 45-6-2637, 589-593 George Street, Sydney. Unpublished report to Moonfare Pty Ltd.
- Tench, W 1961 Sydney's First Four Years. A Narrative of the Expedition to Botany Bay and a Complete Account of the Settlement at Port Jackson 1788-1791. Library of Australian History, North Sydney.
- Turbet, P 1989 *The Aborigines of the Sydney District Before 1788*. Kangaroo Press, Kenthurst.

APPENDIX A

REPORT FROM METROPOLITAN LOCAL ABORIGINAL LAND COUNCIL



APPENDIX A



Metropolitan Local Aboriginal Land Council

36-38 George Street Redfern NSW 2016

PO Box 1103 Strawberry Hills NSW 2012

Telephone: (02) 8394 9666 Fax: (02) 8394 9733

Email: metrolalc@metrolalc.org.au

21st February 2013

Comber Consultants

David Nutley

99 Edwin North Street

CROYDON NSW 2132

Re: Aboriginal Heritage Site Assessment Sydney International Convention, Exhibition and Entertainment Centre

Dear David,

An Aboriginal Site Assessment was undertaken at Sydney International Convention, Exhibition and Entertainment Centre. The assessment was to identify any potential Aboriginal heritage constraints associated with the proposed construction of the Sydney International Convention, Exhibition and Entertainment Centre.

The site assessment was carried out on foot on the 14th February 2013 by Kevin Telford site officer of the Metropolitan Local Aboriginal Land Council (Metro LALC), and Comber Consultants personnel David Nutley (Senior Archaeologist).

The MLALC have reviewed the Aboriginal Archaeological and Cultural Heritage Assessment report and concur with Comber Consultants findings outlined on page 11, Table of Contents 3.0.

If there are any Aboriginal cultural materials discovered during any stage of the proposed construction, all work is to cease immediately and MLALC and NSW National Parks & Wildlife are to be notified immediately.

If you require any further information do not hesitate to contact me on 0412 733 157.


Kevin Telford

Metro LALC Aboriginal Site Officer



ARCHAEOLOGY - HERITAGE - MEDIATION - ARBITRATION

COMBER CONSULTANTS PTY LTD

ABN 96 109 670 573

76 EDWIN STREET NORTH

CROYDON, NSW, 2132

T 02 9799 6000

F 02 9799 6011

www.comber.net.au

DIRECTOR

JILLIAN COMBER

ASSOCIATE DIRECTOR, SYSTEMS

DAVID NUTLEY

ASSOCIATE DIRECTOR, PROJECTS

TORY STENING