

THE  STAR

SECTION 75W
MODIFICATION
APPLICATION
MP08_0098

ABORIGINAL AND
HISTORICAL
ARCHAEOLOGICAL
ASSESSMENT

13 FEBRUARY 2018
PREPARED BY



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EXECUTIVE SUMMARY

Star Entertainment Group Limited (SEGL) has engaged Urbis to prepare this Heritage Impact Statement to address the proposed works to The Star Sydney (The Star). This report accompanies a proposal to modify the Part 3A Project Approval (MP08_0098) under s75W of the Environmental Planning and Assessment Act 1979 (EP&A Act). This report is required to assess the potential archaeological impacts of the proposal, including both Aboriginal and historical archaeology.

The construction of The Star, including its basement levels, as well as previous use of the site as the former Pyrmont Power Station have resulted in severe disturbance across the entire site. In addition to this, geotechnical investigations undertaken for the site previously have demonstrated that the soil profiles comprise up to five metres of fill in the general location of the proposed new tower and car stacker (within the northeast corner of the site), with no residual natural soil profiles identified. It is noted, however, that these geotechnical investigations are outdated and are in the process of being revised via new borehole investigations relevant to the current proposal.

Basement levels extend across the entire site to a depth of 7 metres below established ground level. Partial basements, concentrated in the southwest corner of the overall site extent, extend to a depth of around 14 metres below the established ground level.

An historical archaeological assessment previously undertaken for the site in 1994 identified that it is possible, though unlikely, for evidence of historic structures which were there before the construction of Pyrmont 'A' to still exist on the site, particularly being deeper sub-surface features such as wells or cesspits.

However, given the extent of disturbance that has occurred at the site in association with the development of The Star and its associated, substantial basement levels, this is now considered highly unlikely. Again, basement levels range in depth across the site from 7 metres to 14 metres. In areas where former structures are known to have been located, particularly in the southern and western portions of the site, five basement levels are present.

This previous assessment also adequately investigated and documented the historical archaeological potential of the site prior to any major works associated with the development of The Star occurring. It is considered that the historical archaeological resource of the site has been adequately investigated.

For the reasons outlined above, the potential for any intact, Aboriginal archaeological sites or objects to have been retained in situ within the proposed impact area is assessed as very low to nil. Similarly, the historical archaeological potential across the subject site is also assessed as very low to nil. There are also no Aboriginal sites or places located in or within 200 metres of the subject site.

As the subject site is considered to have very low to nil archaeological potential, it is therefore assessed that the current proposal is highly unlikely to result in any further archaeological impacts within the site.

Based on this assessment, no further archaeological assessments or investigations are recommended to be undertaken for the site. As no impacts to Aboriginal cultural heritage have been identified, no further consultation with the identified Aboriginal community stakeholders is required.

Notes:

- It is understood that stormwater upgrade works are still being refined; the potential archaeological impacts of stormwater upgrade works located *outside of* the subject site as defined in Figure 2 (e.g. within roads) have not been assessed as part of this report.
- It should also be noted that intended geotechnical testing at the subject site may impact the assessment presented in this report, and the conclusions drawn.

1. INTRODUCTION

1.1. BACKGROUND

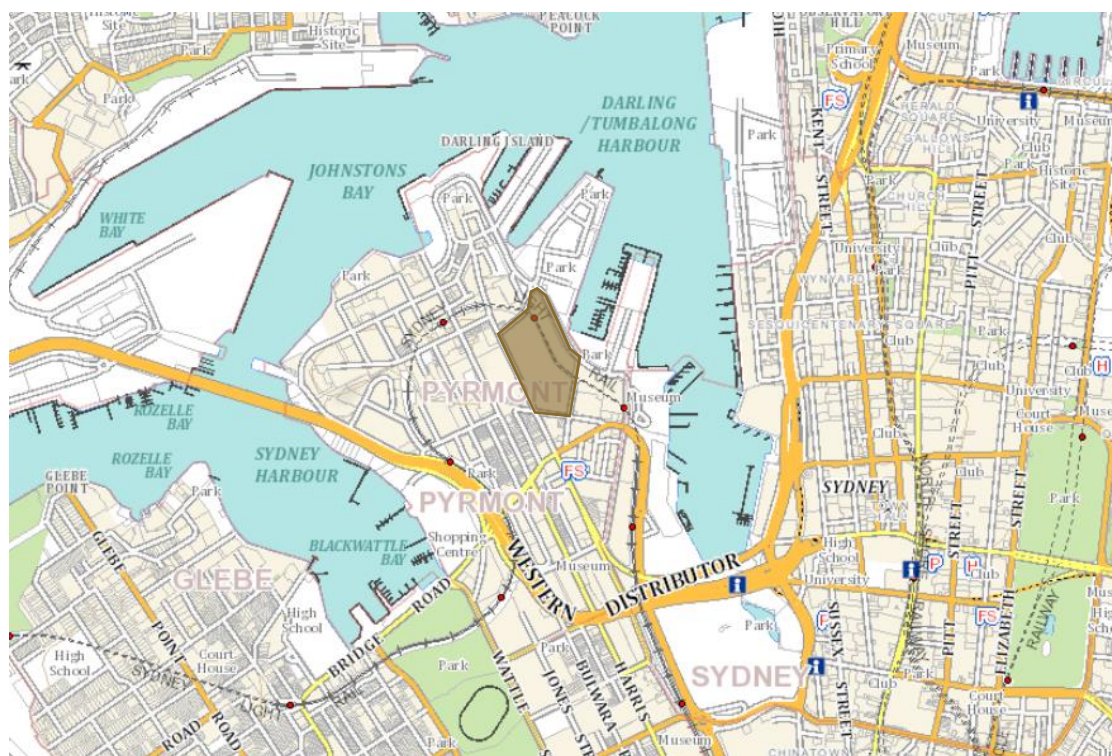
Star Entertainment Group Limited (SEGL) has engaged Urbis to prepare this Heritage Impact Statement to address the proposed works to The Star Sydney (The Star). This report accompanies a proposal to modify the Part 3A Project Approval (MP08_0098) under s75W of the Environmental Planning and Assessment Act 1979 (EP&A Act).

This report is required to assess the potential archaeological impacts of the proposal.

1.2. SITE LOCATION

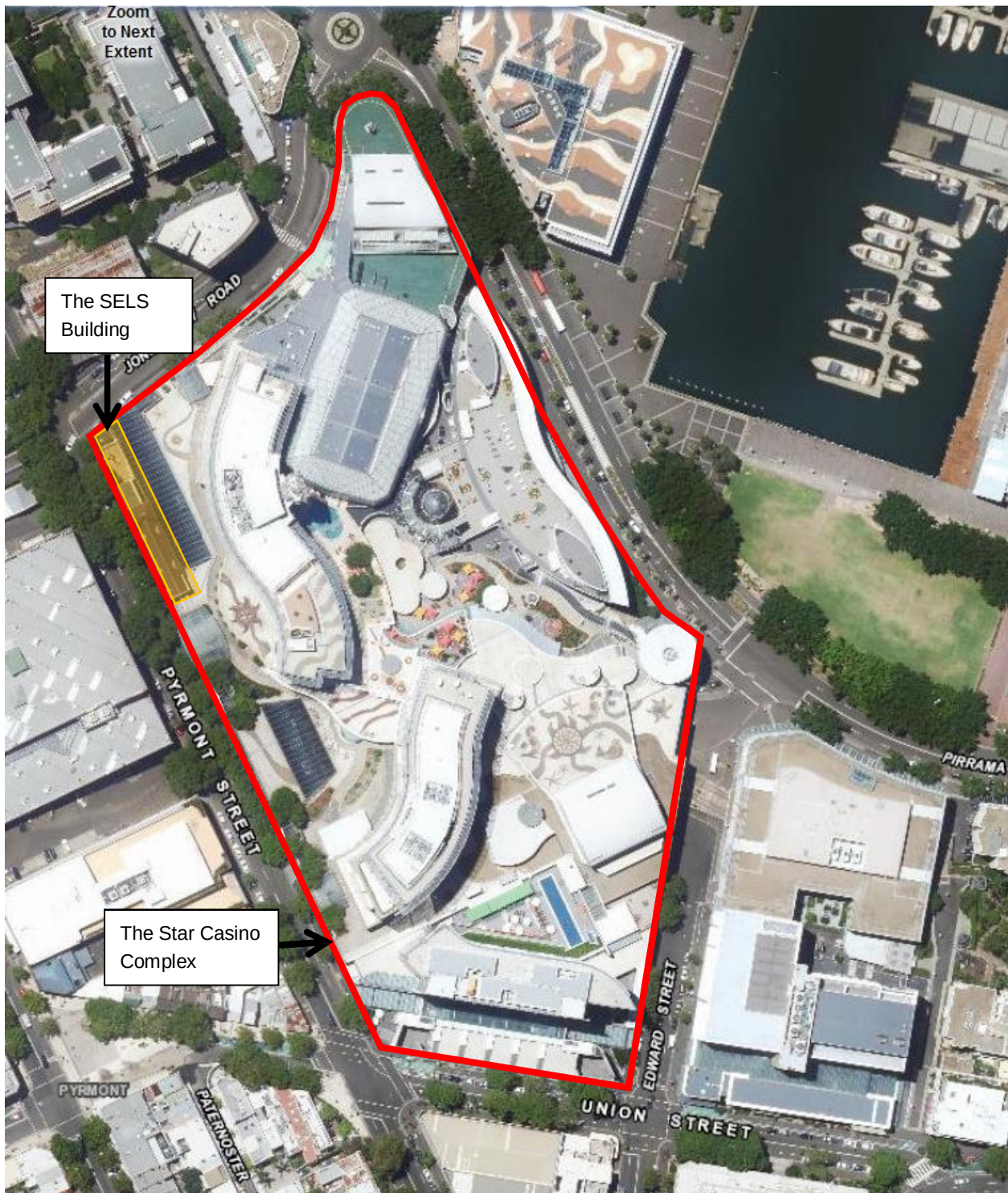
The subject site comprises the Star Sydney Casino Complex (The Star) located at 20-80 Pyrmont Street, Pyrmont (Lot 500, Deposited Plan 1161507).

Figure 1 i Site location plan (indicated)



Source: Six Maps with Urbis overlay

Figure 2 i Aerial view of the subject site, being the Star Casino complex (outlined in red)



Source: Six Maps with Urbis overlay

1.3. THE PROPOSAL

The subject application seeks approval for the modification of MP08_0098 under section 75W of the EP&A Act. The following works have been assessed in this report as those which are visible from the public domain and may have the potential to impact on the significance of the identified heritage items:

New Ritz-Carlton Hotel and Residential Tower

- Demolition of part of the existing building in the northern portion of the site, including part of the Pirrama Road façade and part of the Jones Bay Road façade.
- Construction of a new Tower, 237.0 metres AHD (approximate, 232.9 metres from Pirrama Road);
- Residential uses across 35 levels, comprising:
 - A residential vehicular drop off lobby on Level B2
 - A residential lobby on Level 00 to be accessed from Jones Bay Road;
 - Residential communal space on Level 07 to be accessed via Level 08; and
 - 204 residential apartments located from Levels 05 to 06 and from Levels 08 to 38, featuring one-bedroom, two-bedroom and three-bedroom unit types (*Note – no Level 13*)
- Hotel uses across 31 levels, comprising:
 - A hotel arrival lobby on Level B2 to be accessed from the new Ritz-Carlton porte-cochere along Pirrama Road;
 - A hotel Sky Lobby for guest check-in on Level 39 and 40, featuring a restaurant, bar and lounge;
 - 220 hotel rooms located from Level 42 to 58 and from Level 60 to 61
 - A hotel spa and gym on Level 07
 - A VIP link to the Sovereign Room on Level 04 and 04 Mezzanine
 - A Ritz-Carlton Club lounge and terrace on Level 59
 - Hotel staff end-of-trip facilities on Level B3
 - Hotel staff arrival point on Level 00
 - Hotel back-of-house and plant on Level 03, 05 and 41
- A Neighbourhood Centre consisting of a cafe, library, learning / innovation hub and function centre;
- A new car-parking stacker system below the new porte-cochere of the Ritz-Carlton Hotel, with a total capacity of 220 spaces, to serve the new hotel and apartments; and
- A new drop-off / pick up area (short-term parking) on Jones Bay Road for the proposed apartments.

Level 07

- A 'Ribbon' at Level 07 connecting the new Hotel and Residential Tower to the existing building along Pirrama Road, comprising:
 - Two pools and associated pool decks (one for the new Hotel, one for The Star); and
 - Two food and beverage premises with associated store rooms and facilities;
- Lift access from the Level 05 Terrace to Level 07;
- Residential communal open space associated with the new residential apartments, comprising pool and landscaped terrace at the base of the Tower adjacent to Jones Bay Road;
- Gym and associated change rooms and facilities for the residents;
- Gym and associated change rooms and facilities for hotel guests; and
- Landscaping treatments.

Level 05 Terrace

- Three food and beverage outlets with external areas;

- Completion of the Vertical Transportation drum to connect with Level 05 Terrace;
- Designated event spaces on the Terrace; and
- Landscaping treatment.

Level 05 Astral Hotel and Residences Recreational Facility Upgrade

- New pool deck, pool, spa, gym and amenities upgrade for Astral Hotel and Residences.

Level 03 Sovereign Column Façade Treatment along Pirrama Road

- New glazed detail to enclose exposed Level 03 Sovereign columns along the Pirrama Road façade.

Façade Integration Works

- Upgrades to the Pirrama Road and Jones Bay Road façades to integrate the new Ritz Carlton Hotel and Residential Tower with the existing building.

Transport Improvements – Other Locations

- Reconfiguration of existing median strips on Jones Bay Road and addition of new median strip on Pyrmont Street, with associated line-marking to enable a new right-hand turning lane into the Astral Hotel Porte-Cochere;
- New Pyrmont Street carpark entry and exit, associated line marking, changes to internal circulation, and reconstruction of the pedestrian footpath along Pyrmont Street; and
- Relocation of existing feeder taxi-rank from Jones Bay Road to the Level B2 transport interchange.

Site Wide Landscape and Public Domain Upgrades

- Upgrades to street frontages along Pirrama Road (for the Hotel Porte Cochere) and Jones Bay Road (for the residential entry);
- Upgrades to street frontage to Pyrmont Street, due to new car parking entry; and
- Entrance upgrade to the SELS building at the corner of Jones Bay Road and Pyrmont Street.

Darling Hotel Corners

- Upgrade of the corner plaza at the Union/Edward Street property entry:
 - A new Food and Beverage premises on Level 01 and 02;
 - A new entry foyer leading to the Food Court;
 - A relocated awning enclosure at street level;
- Upgrade of the corner plaza at the Union/Pyrmont Street property entry:
 - A new awning enclosure at for the existing café;
 - Eight (8) luxury display cases at Darling Hotel car park entry; and
 - Two car display areas at Darling Hotel car park entry.

Site-Wide Lighting Strategy

- A site-wide lighting strategy integrating and improving the existing lighting across the precinct, with new lighting the proposed Tower, Podium and Ribbon, including:
 - Internal lighting of Hotel and Residential spaces;
 - Illuminated highlights at the Sky Lobby and Club Lounge levels;
 - Integrated lighting on the eastern and western vertical façade slots and angled roof profile;

- Podium external illumination from awnings, and under retail and lobby colonnades;
- Landscape lighting on Level 07 open terraces and pool decks;
- Feature lighting accentuating the wing-like profile of the Ribbon and vertical element;
- Internal and external lighting to Food and Beverage outlet at Union/Edward Street corner;
- Façade LED lighting to the heritage SELS Building
- Permanent installation of moving projector lights on the rooftop of the Astral Hotel for ninety (90) special event nights per year.

Signage Upgrades

- Consolidation of existing signage approvals and new signage, including:
 - Building identification;
 - Business identification (including Food and Beverage premises); and
 - Signage on the Tower and Podium.

The following works are also proposed in this application. These works are internal/physically minor infrastructure upgrades and have no potential to impact on the significance of the identified items. They therefore have not been addressed in this report.

Level 04 Mezzanine / 04 / 03 Tower to Sovereign Link by Escalator and Lift

- Link from the Tower to the Sovereign Resort along the Level 04 Mezzanine, down by escalators to Level 04, and then down by lift to Level 03; and
- Extension of the latter lift above to service Level 00, 01, 03, 04 and 05.

Infrastructure Upgrades

- A new plant room located within the podium over Levels 03, 04, 05 and 06 of the proposed Hotel and Residential Tower;
- Relocation of the current Level 03 cooling towers (adjacent to the MUEF) to the Level 09 plant room above the Level 06 plantroom adjacent to the Astral Hotel;
- New capstone microturbine units and associated flues in the proposed plant room at Level 03 between the Darling Hotel and the Astral Residence Tower;
- New capstone microturbine units and associated flues in the new Level 03 plant room at the base of the Tower;
- Relocation of the existing main switch-room to the new plant room on Level 02, south of the demolition area;
- Relocation of the existing data recovery centre to the new plant room on Level B1 of the Darling Hotel;
- Relocation of diesel generator flues to the side of the new Level 09 plantroom, adjacent to Astral Hotel

Level B2 Transport Interchange

- Upgrades to the Event Centre Loading Dock;
- Entry into Basement car stacker for the Tower apartments and Ritz-Carlton Hotel;
- New commuter bike parking and hire bike system;
- Upgrade of finishes to light rail station surrounds and removal of existing wall barrier to the Pirrama Road frontage;
- Upgraded taxi-rank arrangements;
- New Star coach parking; and
- Realignment of kerbs and line-marking.

Note – no works to the Light Rail corridor

Level 00 - Restaurant Street

- Creation of a new destination Restaurant Street by:
 - Incorporating existing Food and Beverage premises on Level 00; and
 - Converting existing retail shops into new Food and Beverage tenancies, including the new Century tenancy at the Jones Bay Road end.

Pirrama Road and Jones Bay Road Food and Beverage

- A revised food and beverage tenancy at the existing Pizzaperta outlet along Pirrama Road;
- A new tenancy at the Marquee street entry; and
- A small café outlet adjacent to the residential lift lobby at Jones Bay Road.

Food and Beverage – Other Locations

- Reconfiguration of Harvest Buffet, including new escalators from Level 00 Food Court to Level 01; and
- Refurbishment of Bistro 88 into the interim Century tenancy

Special Lighting Events

- Approval for fifty-three (53) Special Lighting Event nights per year for the use of permanent installation of moving projector lights on the rooftop of the Astral Hotel.

Stormwater upgrades

- Stormwater upgrade works, including increased pit inlets and pipe capacities at the low points along Pyrmont Street and Edward Street to decrease the potential flood risk to the site, adjacent existing properties and public domain compared to the existing situation.
- It is understood that stormwater upgrade works are still being refined; the potential archaeological impacts of stormwater upgrade works located *outside of* the subject site as defined in Figure 2 (e.g. within roads) have not been assessed as part of this report.

It should also be noted that intended geotechnical testing at the subject site may impact the assessment presented in this report, and the conclusions drawn.

1.4. METHODOLOGY

The report has been prepared in accordance with the following documents:

- NSW Heritage Office of the Department of Planning, 1996, *Archaeological Assessments. NSW Heritage Manual*.
- *The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance*, 2013. *The Burra Charter and Archaeological Practice. Practice Note. 2013*.
- NSW Heritage Branch of the Department of Planning, 2009, *Assessing Significance for Historical Archaeological Sites and 'Relics'*.
- NSW Heritage Branch of the Department of Planning, 2009, *Guidelines for the Preparation of Archaeological Management Plans*.

The following documents, prepared by the NSW OEH (formerly NSW Department of Environment, Climate Change and Water [DECCW]), have also been referenced:

- *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW*
- *Due Diligence Code of Practice for Protection of Aboriginal Objects in NSW*
- *Aboriginal Cultural Heritage Consultation Requirements for Proponents*
- *Code of Practice for Archaeological Investigations of Aboriginal Objects in NSW*
- *Applying for an Aboriginal Heritage Impact Permit: Guide for Applicants 2010*

1.5. AUTHOR IDENTIFICATION

The following report has been prepared by Karyn Virgin (Senior Heritage Consultant/Archaeologist). Stephen Davies (Heritage Director) has reviewed and endorsed its content.

Unless otherwise stated, all drawings, illustrations and photographs are the work of Urbis.

2. LEGISLATIVE CONTEXT

2.1. ABORIGINAL CULTURAL HERITAGE

2.1.1. Major Projects under Part 3A EP&A Act

If your activity is a declared Part 3A project under s.75B of the EP&A Act you should refer to the 2005 (draft) Part 3A *EP&A Act Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation* (as amended from time to time). These guidelines are available from the Department of Planning.

As the current proposal is a Part 3A project, it is not required to comply with all relevant heritage legislation or permit requirements, including:

- The requirement for an Aboriginal Heritage Impact Permit under the National Parks and Wildlife Act. A permit is normally required from the Department of Environment, Climate Change and Water (DECCW) if a development is likely to impact on an Aboriginal object or place.
- Consents issued under *Heritage Act* 1977, including the consents normally required if a development is going to impact on a site registered on the State Heritage Register.
- Provisions in Local Environmental Plans (LEPs).
- Consents under the Threatened Species Conservation Act 1995, Native Vegetation Act 2003 and Fisheries Management Act 1994.
- Interim protection orders and stop work orders to protect threatened species cannot be issued against a critical infrastructure project.

However, some Part 3A projects are required to undertake heritage and environmental assessments similar to those required for other types of development and some may still be required to comply with the National Parks and Wildlife Act.

The Director-General of the Department of Planning can require a developer to undertake studies or consult with the community about a project as a condition of its approval. Requirements set out by the Director-General are published on the Department of Planning website as part of the Major Project Tracking System. They are called *Director-General's Requirements*. This assessment is required under the *Director-General's Requirements* for this project.

The Department of Planning has also developed guidelines for consultation with the Aboriginal community, and when a heritage assessment is to be undertaken, which are available on request from the Department.

These guidelines are currently under review by the Department.

2.1.2. The National Parks and Wildlife Act 1974 (NSW)

The National Parks and Wildlife Act 1974 (NSW) (the *NPW Act*) is the primary piece of legislation for the protection of Aboriginal cultural heritage in New South Wales. The Office of Environment and Heritage (OEH) administers the NPW Act. The NPW Act provides statutory protection for Aboriginal objects by making it illegal to harm Aboriginal objects and Aboriginal places, and by providing two tiers of offence against which individuals or corporations who harm Aboriginal objects or Aboriginal places can be prosecuted. The NPW Act defines Aboriginal objects and Aboriginal places:

Aboriginal object means any deposit, object or material evidence (not being a handicraft made for sale) relating to the Aboriginal habitation of the area that comprises New South Wales, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction, and includes Aboriginal remains.

Aboriginal place means any place declared to be an Aboriginal place under section 84. The highest tier offences are reserved for knowledgeable harm of Aboriginal objects or knowledgeable desecration of

Aboriginal places. Second tier offences are strict liability offences—that is, offences regardless of whether or not the offender knows they are harming an Aboriginal object or desecrating an Aboriginal place—against which defences may be established under the National Parks and Wildlife Regulation 2009 (NSW) (the ‘NPW Regulation’).

Section 87 of the NPW Act establishes defences against prosecution under s.86 (1), (2) or (4). The defences are as follows:

- An Aboriginal Heritage Impact Permit (AHIP) authorising the harm (s.87(1))
- Exercising due diligence to establish Aboriginal objects will not be harmed (s.87(2))

Due diligence may be achieved by compliance with requirements set out in the National Parks and Wildlife Regulation 2009 (the NPW Regulation) or a code of practice adopted or prescribed by the NPW Regulation (s.87(3))

Although not required as the project is a declared Part 3A project, this assessment report follows the Due Diligence Code and aims to establish whether Aboriginal objects would be harmed by the proposal in accordance with S.87(2) of the NWP Regulation.

2.1.3. The National Parks and Wildlife Regulation 2009 (NSW)

The NPW Regulation 2009 (cl.80A) assigns the Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW (NSW Department of Environment, Climate Change and Water 2010) (the Code) as one of the codes of practice that can be complied with pursuant to s.87 of the NPW Act.

Disturbed land is defined by cl.80B (4) as ‘disturbed if it has been the subject of a human activity that has changed the land’s surface, being changes that remain clear and observable’ Examples given in the notes to cl.80B (4) include ‘construction or installation of utilities and other similar services (such as above or below ground electrical infrastructure, water or sewerage pipelines, storm water drainage and other similar infrastructure)’

2.1.4. The Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales 2010

Although not required as the project is a declared Part 3A project, this assessment report follows the Due Diligence Code and aims to establish whether Aboriginal objects would be harmed by the proposal in accordance with S.87(2) of the NWP Regulation.

The Code describes the process that must be followed and the actions that must be taken by a proponent, and the site conditions that must be satisfied, to show due diligence in the consideration of potential harm to Aboriginal objects.

The Code sets out a basic framework with the following steps to be followed in order to make an assessment of whether or not proposed activities may impact Aboriginal objects:

- **Step 1.** Will the activity disturb the ground surface?
- **Step 2a.** Search the AHIMS database and use any other sources of information of which you are already aware
- **Step 2b.** Activities in areas where landscape features indicate the presence of Aboriginal objects
- **Step 3.** Can the harm or the activity be avoided?
- **Step 4.** Desktop assessment and visual inspection
- **Step 5.** Further investigations and impact assessment

The process set out in the Code involves consideration of harm to Aboriginal objects at increasing levels of detail, with additional information incorporated at each step and used to support the decisions being made. If the proposed activities

are not flow impact activities (a defence for which is provided under the Regulation) the considerations result in a determination of whether or not:

- Further approval (an AHIP) under the NPW Act is required, or;
- Due Diligence obligations for the protection of Aboriginal objects are discharged by the process under the Code.

A record of the due diligence procedure followed must be kept to ensure it can be used as a defence from prosecution (DECCW 2010:15). Following a due diligence assessment (where an AHIP application was not required), an activity must proceed with caution. If any Aboriginal objects are identified during the activity, then works should cease in that area and OEH notified (DECCW 2010:13). The due diligence defence does not authorise continuing harm.

It is noted that there is no formal requirement for consultation under the Due Diligence Code. However, informal consultation is required to be undertaken for the project under the Secretary's Environmental Assessment Requirements (SEARs) for this site issued by the Department of Planning and Environment (refer below).

2.1.5. National Native Title Register (NNTR)

The Commonwealth Native Title Act 1993 establishes the principles and mechanisms for the preservation of Native Title for Aboriginal people. Under Subdivision P of the Act, Right to Negotiate, Native Title claimants can negotiate over some proposed developments (known as the Future Acts) if they have the right to negotiate, which is granted only when the claimant's application satisfies the registration test conditions.

A search of the National Native Title Register showed that there are no registered Native Title claims that apply to the subject site.

2.1.6. Aboriginal Community Consultation

It is noted that at this stage of the project there is no formal requirement for consultation, as the *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (ACHCRs) have not been triggered. Informal consultation is, however, required to be undertaken for the project under the Secretary's Environmental Assessment Requirements (SEARs) for this site issued by the Department of Planning and Environment. The proponent has elected to pre-emptively engage in formal consultation for this project in accordance with recommendations received from Urbis Heritage, to ensure that all relevant stakeholders are provided with the opportunity to be involved in the project going forward, and to ensure that relevant cultural knowledge is adequately considered.

At the time of finalizing this report, the following consultation had been undertaken:

- Letters were sent to the relevant organizations identified in the ACHCRs 2010 on 22 June 2016;
- Notification was placed in the Koori Mail newspaper on 13 July 2016, inviting any Aboriginal people who hold cultural knowledge and wish to be consulted for the assessment to register an expression of interest;
- OEH identified a total of 34 relevant stakeholders, which were contact via email and/or post on 13 July 2016;
- As a result of the above, a total of ten stakeholders registered an interest in the project, as per the below list:

7-Jul-16	Kamilaroi-Yankuntjatjara Working Group
11-Jul-16	Darug Land Observations Pty Ltd
13-Jul-16	Metropolitan Local Aboriginal Land Council
18-Jul-16	Tocomwall Pty Ltd
18-Jul-16	Aboriginal Archaeology Services Inc

19-Jul-16	Darren John Duncan
25-Jul-16	Darug Aboriginal Cultural Heritage Assessments
25-Jul-16	Gundungurra Tribal Technical Services
25-Jul-16	Minnamunnung
28-Jul-16	Butucarbin Aboriginal Corporation

A copy of the consultation log is attached at the rear of this document.

As no impacts to Aboriginal cultural heritage have been identified, no further consultation with the identified Aboriginal community stakeholders is required.

2.2. HISTORICAL ARCHAEOLOGY

2.2.1. Heritage Act 1977

In New South Wales, historical archaeological sites are protected under the Heritage Act, 1977. It is noted that as the project is a declared Part 3A project, it is not required to comply strictly with the Heritage Act 1977.

The purpose of the NSW Heritage Act 1977 is to conserve the environmental heritage of the State. Environmental heritage is broadly defined under Section 4 of the Heritage Act as consisting of the following items: those places, buildings, works, relics, moveable objects, and precincts, of State or local heritage significance.

Amendments to the Heritage Act made in 2009 have changed the definition of an archaeological relic under the Act. A relic is now an archaeological deposit, resource or feature that has heritage significance at a local or State level. The definition is no longer based on age.

This significance based approach to identifying relics is consistent with the way other heritage items such as buildings, works, precincts or landscapes are identified and managed in NSW.

The Act requires that historical archaeological sites and relics are managed in accordance with permits issued by the Heritage Council of NSW. The consent of the Heritage Council is required before any archaeological relic is disturbed.

An archaeological site is an area which contains one or more archaeological relics.

2.2.1.1. PERMITS TO EXCAVATE OR DISTURB LAND

Under the Heritage Act 1977, an application needs to be made to the Heritage Council in the event that it is proposed to disturb or excavate any land in NSW that is likely to contain archaeological remains. There are two types of applications, depending on whether the site is listed on the State Heritage Register.

S60 Application

To disturb or excavate sites listed on the State Heritage Register or to which an interim heritage order (IHO) applies.

S140 Archaeological Permit and s144 Permit Variation

To disturb or excavate sites not listed on the State Heritage Register.

2.2.1.2. ARCHAEOLOGICAL EXCEPTIONS

In some circumstances an excavation permit may not be required when excavating land in NSW. Usually this is where works are only minor in nature, and will have minimal impact on the heritage significance of the place. Again, the particular form to be used (Exception/Exemption) will depend on whether the site is listed on the State Heritage Register or not.

S57 Exemption Notification Form

To notify the Executive Director of the Heritage Division of certain activities covered by the Additional Exceptions on a site NOT listed on the State Heritage Register.

S139 Exception and s146 Notification

S139 Exception Applications are used for sites that are not listed on the State Heritage Register and in instances where it can be demonstrated that:

s139 (1B) The excavation or disturbance of land will have a minor impact on archaeological relics including the testing of land to verify the existence of relics without destroying or removing them;

Exception 1(B) could apply where:

a site is suspected to exist, for example is identified and listed in an LEP or heritage study, but further assessment indicates it does not exist; exists at another location; or has been highly compromised/ disturbed; or

the scale or nature of the proposed excavation will not affect significant areas/deposits of a known archaeological site for example, the excavation would only affect peripheral areas of a significant archaeological site; or

s139 (1C) A brief written statement describing the proposed excavation demonstrates that evidence relating to the history or nature of the site, such as its level of disturbance, indicates that the site has little likelihood of Relics or no archaeological research potential.

A s146 Notification is required when a person has discovered or located a relic (in any circumstances and whether or not the person has been issued with a permit).

2.2.2. Central Sydney Archaeological Zoning Plan

The primary aim of the Archaeological Zoning Plan for Central Sydney is to identify and document the remaining below ground archaeological resource within Sydney to a basic but consistent level, enabling an overview of the survival and general nature of the resource in the Central Sydney Business District.

The Plan identifies areas within Central Sydney which contain archaeological potential, and assesses this according to criteria based on their perceived physical potential (dependent on the level of ground disturbance), resulting from site inspections.

The current subject site, as well as the surrounding suburb of Pyrmont, is not included within the geographical area covered by the Central Sydney Archaeological Zoning Plan.

3. SITE DESCRIPTION

The subject site is located in Pyrmont, an Inner City suburb of Sydney, approximately 2km south-west of the Sydney Central Business District (CBD), in the Local Government Area (LGA) of the City of Sydney. It also forms part of the Darling Harbour region and the locality of Pyrmont Point. Pyrmont is linked to the city by the Pyrmont Bridge and the Western Distributor passes through the suburb and provides a connection to the city.

Pyrmont grew in response to the growing development of Sydney City. It was heavily quarried to provide building materials and was a largely industrial neighbourhood and waterfront area which comprised of many wharves, shipping and timber yards, factories and woolstores, along with small workers dwellings throughout the suburb. Rapid population growth took place at the beginning of the 20th century and the area has experienced contemporary mix-use redevelopment, with industrial, entertainment and increasing residential areas.

The residential element of Pyrmont consists largely of terraced houses and blocks of self-contained flats or home units scattered among large industrial and commercial buildings. Traditionally, these have been the homes of those working in industry located in the Inner City and Harbour area. There are also some older houses and occasional impressive Edwardian terraces in Pyrmont Bridge Road. Most of the houses were built before 1890.

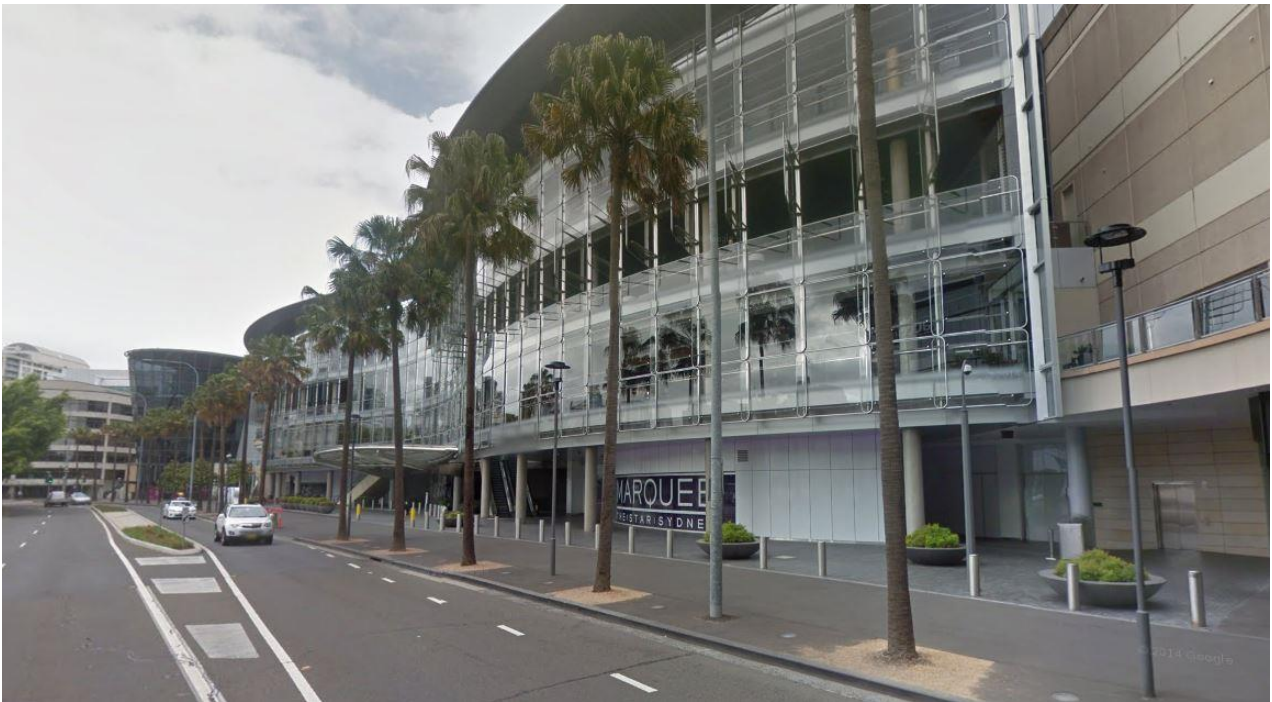
The Star is located at 20-80 Pyrmont Street, Pyrmont (Lot 500, Deposited Plan 1161507). It has an approximate area of 4-hectares, and is bounded by Jones Bay Road, Pirrama Road, Edward Street, Union Street and Pyrmont Street. The Star opened in November 1997 and is constructed predominantly of masonry panels with glazed balconies and a masonry podium. The complex is a dominant element in selected views from Cockle Bay and the Pyrmont Bridge, from parts of the Harbour around Barangaroo and Jones Bay, and when viewed from the western edge of the city. The scale of the existing buildings contrast with the fine grain of Pyrmont, Ultimo as it exists further to the west and north of the site. The Star relates more closely to the scale of the buildings in Darling Harbour.

The locally listed SELS building forms part of the larger Star Casino Complex (The Star). It is located in the north-western corner of the Star site fronting Pyrmont Road (corner Pyrmont Street and Jones Bay Road) and is currently used as administrative offices.

The immediate streetscape setting of the SELS building is essentially traditional. On the northern side of Jones Bay Road, opposite the site, are several residential terraces which comprise a local heritage item known as the Slades warehouse building and terrace group (I1258). On the western side of Pyrmont Street is a commercial building which is also a local heritage item, a former wool store (I1225). Directly opposite the site to the south is a commercial office building. On the western side of Pyrmont Street, properties fronting Union Street contain several local heritage items comprising the northern end of the Pyrmont heritage conservation area (C52).

There is a principal entrance to the SELS Building is from Pyrmont Street and also internally from the Star on the southern side of the SELS building.

Figure 3 ĩ Eastern elevation of The Star



Source: Googlemaps.com

Figure 4 ĩ External images of the subject site



Picture 1 ĩ Western principal façade of the SELS building (1904 portion)



Picture 2 ĩ Western principal façade of the SELS building (1922 portion)



Picture 3 ĩ Western façade showing the relationship between the southern façade and the contemporary building to the south of the SELS.



Picture 4 ĩ Part of the northern façade of the SELS Building.



Picture 5 Ĩ View north east up Jones Bay Road.



Picture 6 Ĩ View over the subject site towards the gable end of the SELS from the balcony of the Star.



Picture 7 Ĩ 1921. View west towards the eastern façade of The SELS under construction.



Picture 8 Ĩ Current view towards the eastern façade of the SELS.



Picture 9 Ĩ View east towards the contemporary building which obscures must of the southern façade.



Picture 10 Ĩ View of the junction between The SELS and the contemporary structure adjacent, which has externalised part of the southern façade of The SELS.

4. HISTORICAL OVERVIEW

4.1. AREA HISTORY

4.1.1. Aboriginal History

The original inhabitants of Pyrmont were part of the Gurangi people, the local band being the Gadigal and called the Pyrmont and Ultimo peninsula Pirrama. In 1789, approximately 50 percent of the Aboriginal population in and around Sydney Cove was killed by an epidemic, thought to be smallpox. This caused dislocation and eventually regrouping of the remnant bands of Aborigines. They appear to have remained living on the peninsula into the 1830s where Drinker's Well provided a constant fresh water supply and food sources were available from the shoreline and harbour.¹

It was not until Edward Macarthur began to subdivide and clear Pyrmont in 1836 that the Aborigines were forced further to the south into the area of Ultimo. The settlers' utilisation of Pyrmont has resulted in the destruction of most of the archaeological sites associated with Aboriginal occupation. The quarrying of rock faces, the burning of shell from middens for lime mortar, the clearing of the land and the levelling of ground for building have left little evidence of the Aboriginal occupation in either Pyrmont or Ultimo.²

The following description of Aboriginal occupation in Sydney Harbour is provided in The Pyrmont Bridge Conservation Management Plan, prepared for the Sydney Harbour Foreshore Area by Otto Cserhalmi & Partners Pty Ltd, in June 2006, which notes that:

"Several distinct indigenous groups occupied the Sydney Basin in 1788. The traditional owners of the Sydney City area are the Gadigal clan. The Gadigal clan used the foreshore of Port Jackson for hunting and gathering, for shelter and for ceremonial purposes. Though the Gadigal clan have had a long presence in the Sydney Harbour region, information in regards to their history pre-European arrival in 1788 is largely reliant on physical traces of their activities and documentation made by early European colonists. Other sources include the oral tradition handed down through Aboriginal elders and by modern archaeological investigation. Evidence of the pattern of use of the harbour does survive, primarily in the areas that now form the Sydney Harbour National Park.

*A variety of food resources were available to the Aboriginal people of the Sydney Harbour area, as evidenced in shell middens excavated at Balmoral Beach and Cammeray. Analysis of the shell species found has revealed that the Aboriginal people ate Rock Oysters (*Saccostrea glomerata*), Hairy Mussels (*Trichomya hirsuta*), Sydney Cockles (*Anadara trapezia*), Mud Oysters (*Ostrea angasi*) and Hercules Club (Whelks *Pyrasmus ebeninus*)."³*

4.1.2. Early History of Pyrmont

Pyrmont's colourful history dates back to 1799, when it was reputedly purchased by John Macarthur for £25 pounds of rum.⁴

Despite its proximity to the original settlement of Sydney, the development of Pyrmont was slow until the 1840s. Early European settlers recalled a distinct Aboriginal presence up to the 1830s. It has been suggested that the Aboriginal people living around Go-mo-ra (Darling Harbour) and the headwaters of the Blackwattle Creek may have formed a separate clan from the generally recognised Gadigal. Tentatively named the Gommerigal, this clan has yet to be officially recognized, but as late as 1830, Absalom West recorded the existence of a Darling Harbour 'tribe'.

¹ Casey & Lowe, Archaeological Program 50-72 Union Street, Pyrmont, available at: <http://www.caseyandlowe.com.au/pdf/leaflet5.pdf>, accessed September 2016.

² Ibid <http://www.caseyandlowe.com.au/pdf/leaflet5.pdf>

³ Otto Cserhalmi & Partners Pty Ltd, Conservation Management Plan prepared for Pyrmont Bridge, Darling Harbour, for Sydney Harbour Foreshore Authority (2006)

⁴ Shirley Fitzgerald and Hilary Golder, Pyrmont and Ultimo under Siege, Hale and Ironmonger, 1994 pg 14/ citing "Old and New Sydney SMH 19 July 1882.

Europeans visiting Pyrmont in the early years were likely to do so by boat. It was famously visited by Captain John Macarthur and his entourage in December 1806, when the presence of a spring of natural water at the chosen picnic spot inspired the naming of the place 'Pyrmont', after a spa town of that name in northern Germany. The spring later became known as Tinker's Well.

But it was sandstone that eventually came to define Pyrmont and the name became a byword for some of the best sandstone in the world, creating a highly profitable quarrying business. Some of Sydney's most reputable and well-known buildings were built using Pyrmont's yellow block sandstone, including Sydney Town Hall, the Art Gallery of NSW and the University of Sydney.⁵ There was also a thriving wool industry.

For the first half century of European occupation, minimal industrial uses did little to alter the timeless landscape of Pyrmont. Macarthur built a windmill that ground grain for a few years, but it could not compete with the mills in the centre of the city, and it soon slipped into folklore as 'haunted'. After the land was finally subdivided in 1839, some shipbuilding and an iron works took tenuous hold of the shoreline, and a smattering of rough-hewn stone cottages appeared. But there was no stampede to populate Pyrmont, and never a time when its residents did not share the space with industry and quarries.

In the late 1840s, Darling Island was levelled and joined to the mainland with the hewn rock. The 'island' became home to the shipbuilding yards of the Australian Steam Navigation Company. By 1855 a patent slip was in use, repairing ships of up to 2,000 tons. Nearby, associated industries began to congregate.

From the 1840s until the end of the nineteenth century, quarrymen hewed down the isolated western half of the peninsula for sandstone. Uncounted tons of Pyrmont 'yellowblock', as it was known, were carted into the city to build the great public buildings which remain the signature of Sydney's nineteenth-century built form. The quarries were known locally as 'Paradise', 'Purgatory' and 'Hellhole', in recognition of the difficulty of working the stone.

By 1850 there were 103 commercial enterprises in Pyrmont including a ship yard and quarries. It was these industrial activities, combined with flour milling and other light industries and the general development of mercantile wharfage that was mainly responsible for the high population density of the inner western suburbs.

In 1855 an incorporated company was permitted by Act of Parliament to build a wooden bridge across Darling Harbour from Market Street to Pyrmont. The Act stipulated that it was to have a moveable panel capable of admitting vessels to pass and repass through it. The bridge which opened in 1858, connecting Pyrmont directly with the City, linked to rural northwest to the city proper and with Glebe Island, Iron Cove, Gladesville and Figtree bridges and Victoria Road became known as 'the Five Bridge Road'. The First Pyrmont Bridge was replaced in 1902 by the present structure of the same name.⁶

Eventually much of the trade of the colony passed through the wharves that lined the peninsula: the wheat and timber and coal that came in on the coastal ships, and went out again to make bread, construct buildings and heat the houses of the city and beyond. After the opening of the Glebe Island abattoirs in 1859, the Pyrmont streets were also host to herds of cattle being driven to slaughter.

At the northern end of the peninsula, the Colonial Sugar Refinery (established in 1878) took in raw material from the Pacific, and turned it into sugar, rum, chemicals and building materials. For many decades, the company's Clydesdale horses hauled its products through the local streets and out to the rest of Sydney. A jumble of foundries, workshops and factories were distributed across the landscape, with lorries and timber jinkers hauling heavy loads through residential streets.

In 1891 the coal jetties along the shore of the peninsula on the northern side of Pyrmont Bridge were constructed. The area west of the Harbour Bridge was predominantly industrial by this time. This was facilitated by the construction of the

⁵ The Pyrmont Village: <http://pyrmontvillage.com.au/pyrmont-a-history/>, accessed November 2016.

⁶ Howard Tanner & Associates, Conservation Plan for the Offices of the Sydney Electric Lighting Station, August 1994. History.

railroads which, on the southern side of the Harbour, converged on the rail terminus at Redfern. Pyrmont was served by a branch line from this terminus.⁷

By the end of the nineteenth century the population had peaked. Then it began to decline, as the land was taken up for expanding industrial activities. A great powerhouse smokestack signalled the arrival of the new power of electricity, which lit up the land but covered Pyrmont in a fine coating of coal dust. Even the much-loved harbour pool gave way to maritime industrial expansion.

During WWII the cargo wharves at Pyrmont were used largely for the embarkation of troops going overseas on active service, and also for the shipment of large quantities of war materials. After the war had ended, the first modern passenger shipping terminal in Australia was developed at Berth No 13 Pyrmont.⁸

Then these same industries began to disappear and people moved out to the newer leafier suburbs and by the 1980s, the area was full of derelict sites, abandoned workplaces and a small population. Today the peninsula has been more or less reinvented as a pleasant place of residences and high-tech industries.

Figure 5 i Extract from the Plan of the Town and Suburbs of Sydney, 1822, showing the number 69 identified as Piermont with the symbol for a windmill (indicated).



Source: National library of Australia, MAP F 107.

⁷ Ibid.

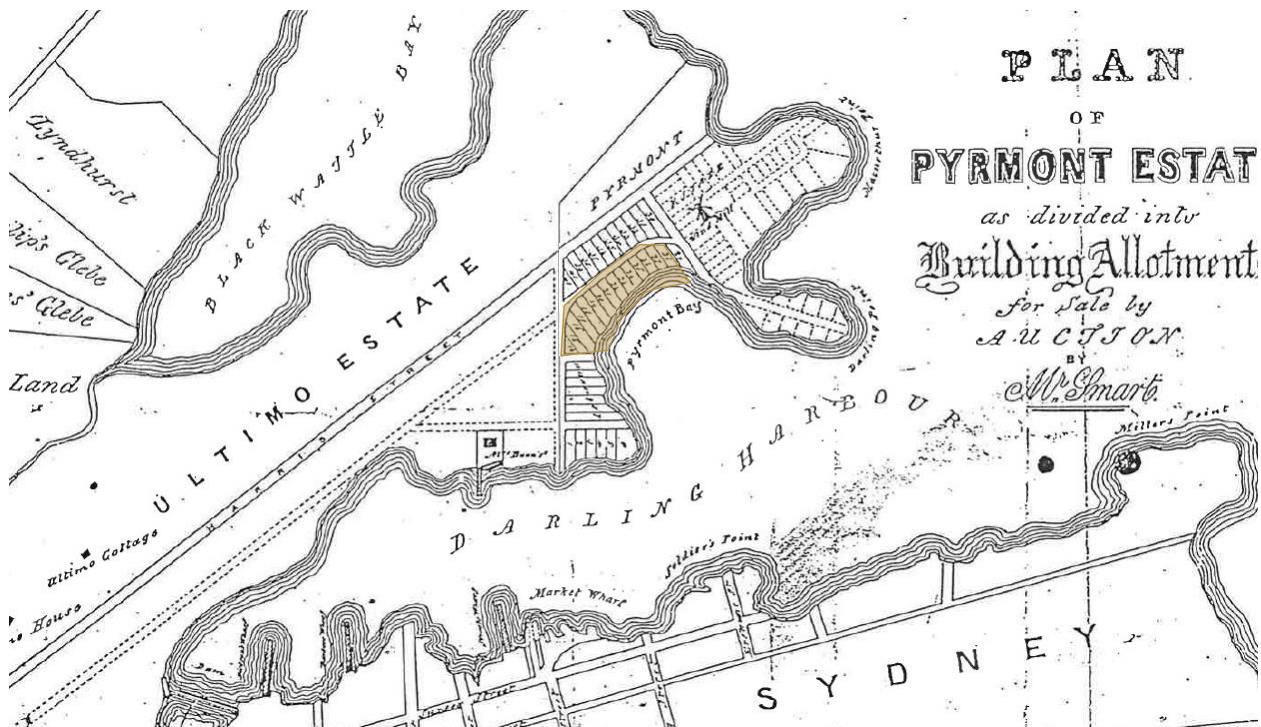
⁸ Ibid.

Figure 6 i View from Cockle bay (now Darling Harbour) showing windmill at Pyrmont, c1819-1820.



Source: State Library of NSW (Digital Order Number: a928747)

Figure 7 i Plan of the first portion of the Pyrmont Estate subdivided into building Allotments for sale, 1839. General location of subject site is indicated. Pyrmont and Union Street had been developed by this time. Subdivided lots are undeveloped



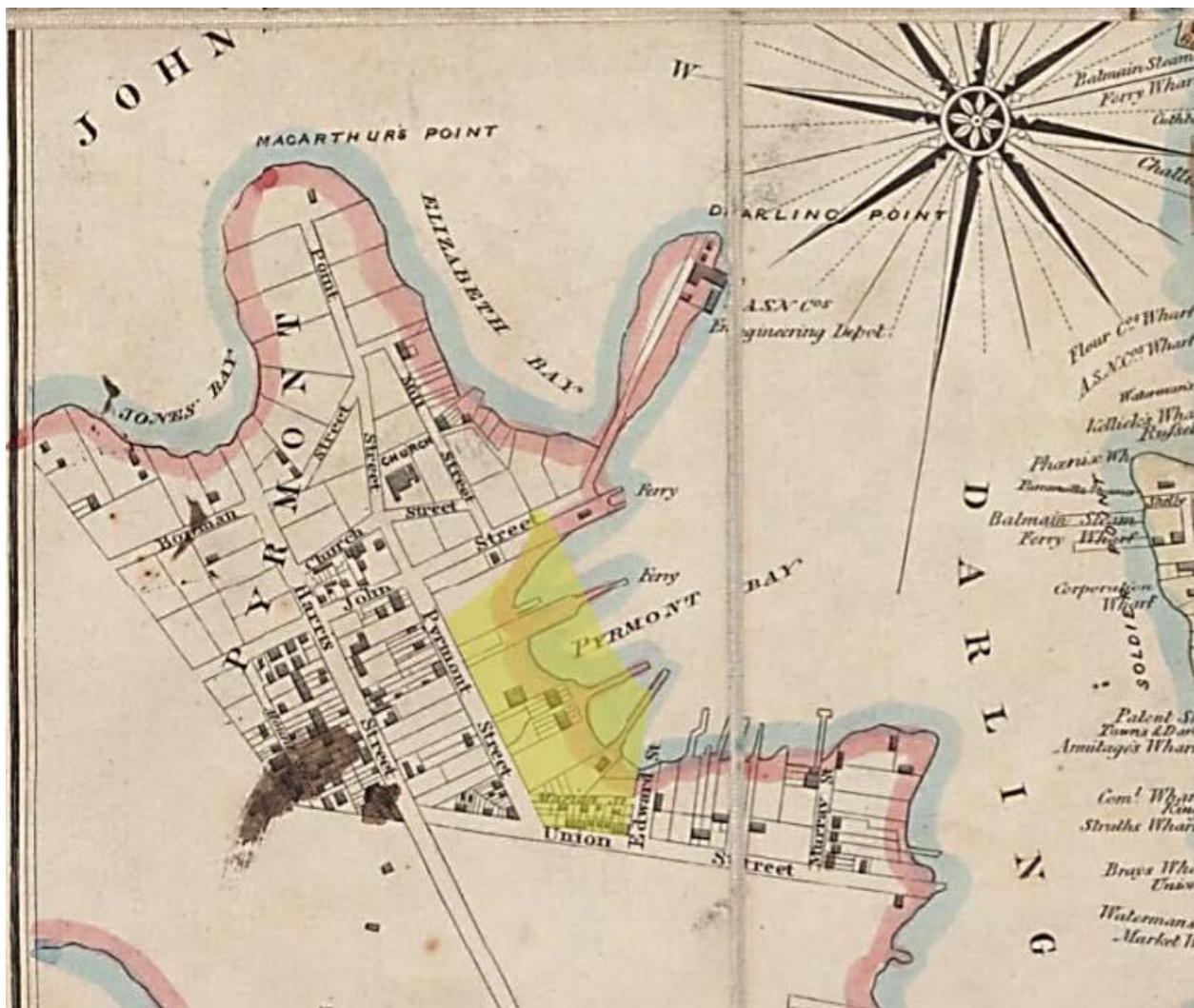
Source: Mitchell Library.

4.2. EARLY SITE HISTORY

Early maps and plans suggest that prior to the construction of the former Pyrmont Power Station, the overall present Star site comprised of Pyrmont Bay and by 1844, a few small structures (likely dwellings or shops), primarily located around the Union Street end of the site.

This is typical of the development of Pyrmont at the time, which was slow up until the 1840s and is consistent with an Archaeological Assessment prepared in 1994 of *the Remains of Pyrmont A Power Station*, by Anne Bickford and Associates, which notes that the old shoreline came roughly half way across the site, and that the rest of the land to the east, up to the current Darling Harbour shoreline, consisted of fill.⁹

Figure 8 i Woolcott & Clarke's Map of the City of Sydney, 1854, with general location of the subject site indicated, showing small scale housing/development within the footprint of The Star



Source: City of Sydney Archives

⁹ Anne Bickford & Associates, *Remains of Pyrmont 'A' Power Station*, February 1994, p14.

Figure 9 ĩ View of Pyrmont (towards Sydney), c1900. In the late 19th century/early 20th century, Pyrmont was flourishing with the railway, ports, industries and workers housing.



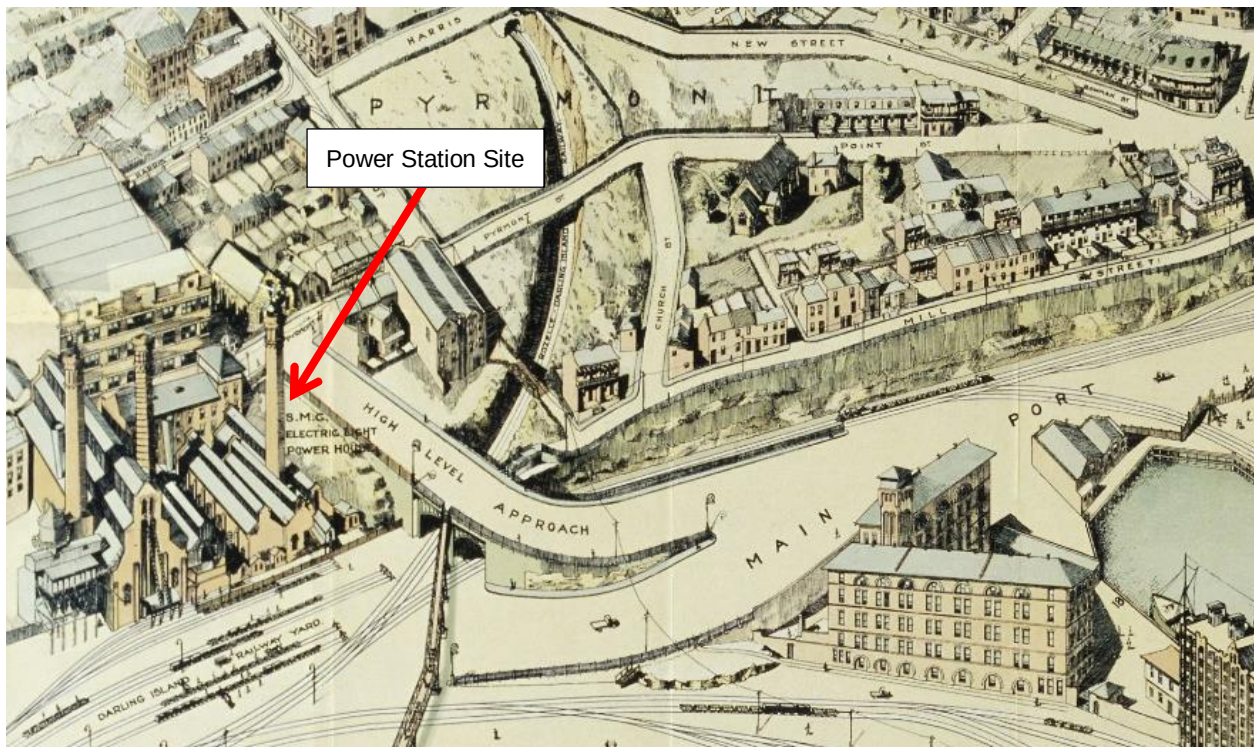
Source: Powerhouse Museum Collection, Kerry & Co, 1895-1917.

Figure 10 ĩ 1865 Trigonometrical Survey of Sydney, Block X1. Subject site indicated



Source: <http://www.photosau.com.au/CoSMaps/maps/pdf/TS/BlockX1.pdf>

Figure 11 i Birds Eye View showing new wharves and approaches, Jones Bay, Pyrmont, c1919. The location of the subject site is indicated



Source: Sydney Harbour Trust

Figure 12 i Pyrmont in 1943, showing still a predominately industrial area. The location of the subject site is indicated



Source: Six Viewer

4.3. FORMER PYRMONT POWER STATION

The former Pyrmont Power Station was an electricity generating plant built by the Electric Lighting Department of the Municipal Council of Sydney and began operation as the Sydney Electric Lighting Station in 1904. Prior to this, Sydney's streets were lit by gas and trains were steam powered. The opening of the Pyrmont Power Station marked the beginning of Electricity undertaking in Sydney by the Municipal Council of Sydney and its successors, and resulted in major development of Australia's industries and urbanisation.

The former Pyrmont Power Station site has had two distinctive phases of development, known as Pyrmont Power Station A (c1903-1925) and Pyrmont Power Station B (c1941-1955). The surviving SELS building (the original administration and office block), forms part of the first phase of development of the site. This building (the southern portion) was constructed by 1904 and was extended to the north in c1922.

The construction of The Star Casino was completed in 1997 and occupies the site of what was originally Pyrmont Power Station B. The SELS building had a major refurbishment at this time and forms part of the larger Star Casino development. It is presently used as administration offices for The Star.

The following historical outline provides a general overview only of the former Pyrmont Power Station site as a whole as well as the SELS building.

4.3.1. Construction and Opening of Pyrmont Power Station A

In 1896, the New South Wales Legislative Council passed the *Sydney Municipal Council's Electric Lighting Bill* which gave the City Council the authority to proceed with the design and construction of a power station, the object of which was to provide electricity to the City of Sydney for both public lighting and private use.

Among the first works undertaken by Council was to appoint an appropriate Engineer to visit Sydney and prepare the necessary plans and specifications for the installation. The Council subsequently appointed Welsh engineering pioneer Sir William Preece K.C.B and a well-known Board of Trade Expert Major Phillip Cardew, both of Westminster, for the works.¹⁰

In c1900, Cardew submitted a scheme which would enable the Council to supply electricity to districts up to a distance of about 8km from the Power Station, which was to be in Kent Street near the Observatory. However, the Kent Street site was abandoned for the present Pyrmont site due to its resumption by the Government. Shortly after this, in c1902, Preece and Cardew invited tenders for generating the required machinery and plant for the Power Station. Of those received, British firm Messrs. Dicky Kerr and Co. Ltd. was the lowest (at 49,072 pounds) and it was accepted.¹¹

Initial Construction and Opening

In 1903, Council purchased 1 ½ acres of land at Pyrmont, in close proximity to Darling Harbour Railway yards and wharfs, for 13,300 pounds. The site had sufficient area to accommodate the power station and was suitably located for easy delivery of coals from the railways, as well as advantageously placed for condensing water.¹²

The construction of the original Pyrmont Power Station A commenced in late c1903. The spoil excavations and first instalment of buildings and machinery foundations were carried out under the direction and superintendence of the City Building Surveyor. Over time, Pyrmont Power Station A became a rapidly expanding series of buildings, extensions and ancillary buildings which expanded to serve the increasing demand of Electricity in Sydney between c1903-1925.

In 1904, the first steam driven Power House came into operation with a network of five sub-stations, cables and arc lamps, which were erected in principal streets of the city.

¹⁰ In 1898, Sir William Preece & Major Phillip Cardew entered a partnership and they specialised in electricity and communications.

¹¹ Energy Australia (George Wilkenfeld and Peter Spearritt), *Electrifying Sydney*, p4.

¹² The Sydney Morning Herald, *Retrospect of a Century, Details of the Electric lighting Scheme*, by W.D Watt, Wednesday 6 July 1904, p5, available online on Trove.

The Power House site comprised of an engine room, boiler house, office block and stores. The engine room and boiler house were the principal buildings on the site and were designed with a steel framework and light (brick and cement) curtain walls. Temporary partition walls allowed for extensions when necessary. The steel framework also supported a twenty ton crane, coal bunkers and feed water storage tanks. The engine room contained five steam alternators with condensing plant and main switchboard. The Office block (present SELS building) fronted Pyrmont Street and provided accommodation and conveniences for employees.

Originally 240 volt direct current was produced and sold for 2 pence per kilowatt. In 1910, the change was made to alternating current and output. The station was extended in 1920 and voltage rose from 5,000 to 10,000 volts. Originally vertical reciprocating engines were used; these were replaced by reaction turbines in 1907 and impulse turbines in 1914.¹³

The chimney stack was circular and stood at 200 feet high, with an internal diameter of 11 feet. It was built in lime mortar with special pressed bricks. The top of the chimney was finished in a cast iron cap in 24 sections, weighing 7 and half tons.¹⁴

To provide circulating water for condensing purposes, the station utilised the waters from Darling Harbour. A double barrelled conduit from Darling Harbor to the machinery in the Power House was constructed, with one conduit used for inflow of water and one for outflow of waste water.¹⁵ This was one of the most difficult and costly pieces of water supply and drainage works ever undertaken in the State.

The official opening ceremony of the station, by Lord Mayor Lees, took place on the evening of 8 July 1904 and included illumination of 343 of the city's first electric street lights, supplying an area from Redfern Railway Station north to Circular Quay, and east to west from Hyde Park to Darling Harbour. Twenty-eight miles of underground cable carried power to the sub-stations through the city. The total construction cost was 183,000 pounds.

The sub-stations were built above ground level and were of ordinary brick and stone construction. These were located in strategic locations at Town Hall, Darlinghurst, Wilson Street (Newtown), Lang Park (York Street, Sydney) and Athlone Place (Ultimo), to supply power to individual customers and other electricity networks. Their specific use was to house machinery to convert high voltage electricity for industrial or domestic use.

Prior to the erection of the power station, the city had been lit by gas powered lamps. Due to Sydney City having narrow streets, overhead wires and awnings, a special arc light post was adopted which had a large overhang and placed on the kerb. The post was designed to keep the light as high as possible, but not exceed a certain height above the footway, to avoid alterations to the telephone wire system.

The following description of the power station was provided in the Sydney Morning Herald at the time:

"Upon this site a very fine power station has been erected, comprising generating station and offices, with a chimney stack probably the largest in the State. In addition to the work at the generating station there has also been erected four substations in different parts of the city, while the engine house at the Town Hall has been converted into the main sub-station. The underground cables are 73 miles in length and occupy 27 miles of roadway and footpaths. There are 343 open for street lamps.

*The Council did all the excavation works required at the powerhouse, and also in the opening and closing of the roadways for the cable by day labour. The machinery is equal to 3000 horse power, but the Council, in view of the large demand for electricity from the citizens, has ordered additional machinery, which, in 12 months time, will be in position, and then the power will have been increased to 5400 horse power. If the demand warrants it the buildings can be increased in size and the machinery augmented up to as high as 30,000 horse power".*¹⁶

¹³ Conservation Management Plan (1994), *The Offices of the Sydney Electric Lighting Station*, Howard tanner & Associates, August 1994.

¹⁴ Electricity Supply undertaking, p166.

¹⁵ The Sydney Morning Herald, *Building & Works*, Tuesday 17 may 1904, p8, available online on Trove.

¹⁶ Ibid.

Figure 13 ĩ The opening of the head Generating Station and Power House, Pyrmont. Note SELS Building fronting Pyrmont Street.



The Sydney Morning Herald (Wed 19th July 1904).

Figure 14 ĩ Standard new electronic lights in the city.



Development and expansion of Pyrmont Power Station 'A', c1907 onwards

From c1907 onwards, Pyrmont Power Station A expanded to meet the increasing demands of the city and power was generated for other municipalities including Annandale, Mascot, Randwick and Woollahra.

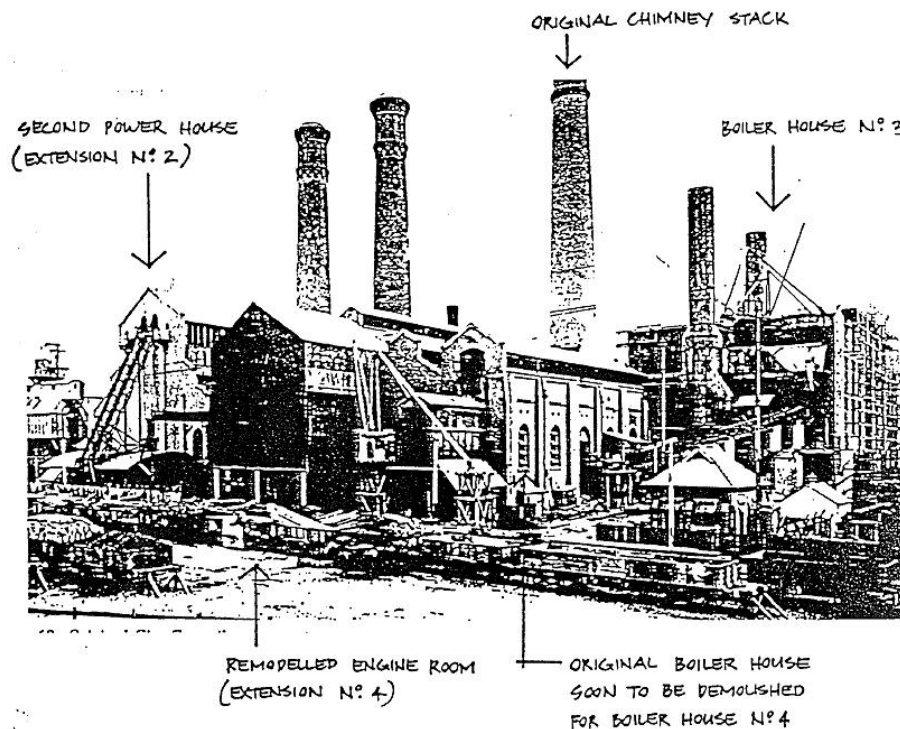
The development of Pyrmont Power Station A is shown in Figure 16 and Figure 17 below and was effectively three power stations which were built, together with ancillary buildings. As described in the Conservation Management Plan prepared in 1994, the following developments and expansions occurred:

The first (original) Power House on the site consisted of the original generating station and an extension to the east. The second Power House on the site was located to the south of the first and was completed with subsequent additions of a second chimney stack and small extensions to the west.

The construction of the third Power House involved the virtual demolition and resumption of the original generating power station (with exception of the front offices) and substantial extensions to the north, which was not part of the original site... Further, the offices on Pyrmont Street were extended to the north and two new boiler houses were added, resulting in the demolition and land resumption of the original boiler house and extension to the north...A number of ancillary buildings were also incorporated into the site, representing the expanding needs of the power station, including stores, workshops and switchgear houses.

Post-World War I increases in demand required rapid development in generation, transmission and distribution capacity, as well as undertaking commercial activities. A final expansion of Pyrmont Power Station planned for 1924, would increase the total installed rating to 75,5000 KW. However, the demand forecast for 1924 was in excess of 60,000 KW and it was realised that another source of supply would be necessary. The Sydney Municipal Council expanded its supply system with the construction of Bunnerong Station on Botany Bay in 1930, generating 150,000kw. Following this Pyrmont was wound down and only used when Bunnerong failed.¹⁷

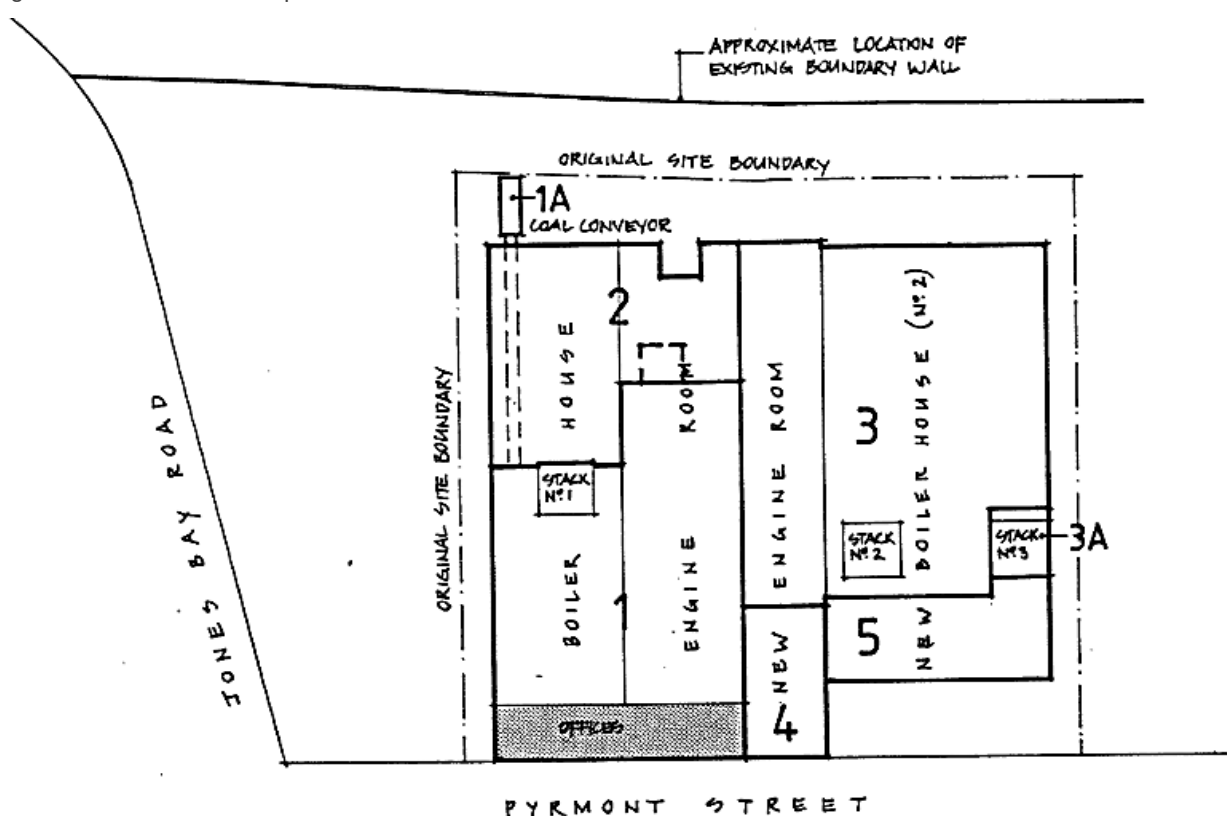
Figure 15 i Pyrmont Power Station A during construction of Boiler House No.3



Source: Howard Tanner and Associates CMP (originally source: Matthews M.R. "Pyrmont and Ultimo—A History", 1982.

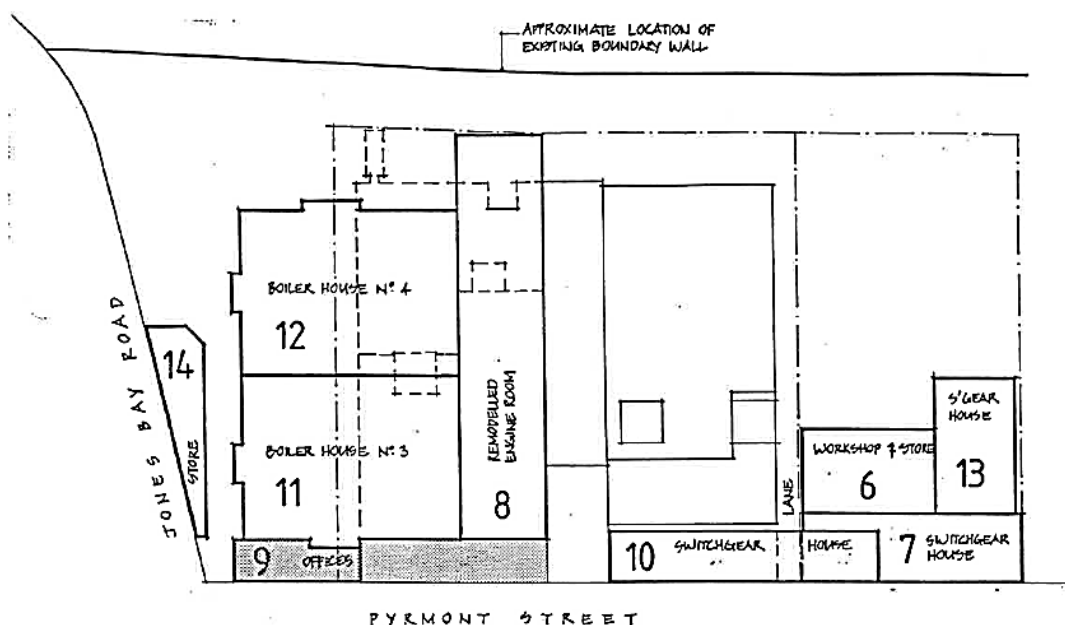
¹⁷ Ibid, CMP, p8.

Figure 16 i Phase 1 development of the Power Statin 1903-1914



Source: Anne Bickford and Associates Report, p11.

Figure 17 i Phase II development of the power station 1914-1925



Source: Anne Bickford and Associates Report p12.

4.3.2. Construction of Pyrmont Power Station B

By the late 1930s, the first turbo-alternators were nearing the end of their useful lives, and it was decided to redevelop the power station in 1938. In c1941, after around 40 years in operation, Sydney City Council approved a proposal for the progressive reconstruction of Pyrmont Power Station, known as Pyrmont Power Station B (controlled by the Electricity Commission of New South Wales), which was proposed to be the most efficient and economical of its kind in Australia.

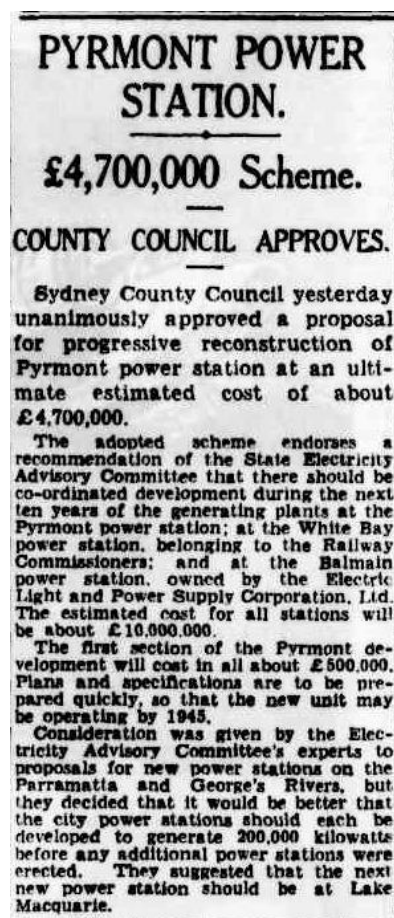
Although plans were drawn up as early as 1941, construction did not commence until 1951, due to delays as result of World War II, politics and industrial problems.

Council acquired seven acres of additional land from the Railways Department for the works and to make way for the new power station, the boiler and turbine buildings and three brick chimneys on the site were demolished to provide coal storage depots to the north west and immediately adjacent to Pyrmont B boiler house. The original SELS building survived these works.

In 1955, Pyrmont Power Station B came into full production. It comprises of a lightweight modern structure as shown in Figure 21 below. It consisted of four 50,000kw turbo alternator units supplied by Metropolitan-Vickers Electrical Co. Ltd, which were some of the largest in Australia and were a fine example of modern design and practice. In full production, 200,000 megawatts were generated from the power plant. There was an extensive coal handling plant and conveyor system which handled a large and constant supply of coal to the boilers.

Pyrmont Power Station B was a vital power plant that supplied power to some of the most important industries in the State. It was decommissioned in 1983 in the same period as the White Bay Power Station and remaining derelict for almost a decade.

Figure 18 i Pyrmont Power Station B



Source: Sydney Morning Herald,
Wednesday 14th May 1941



Source: Building, lighting & Engineer, 25 January, 1954 p21.

4.3.3. The SELS Building

The SELS building is the only surviving building of Power Station A. It was designed and constructed by Mr R.H.Broderick (City Building Surveyor) and his assistant Mr J.H.Merriman (Chief Architectural Draughtsman).

The offices on the corner of Pymont Street and Jones Bay Road are the only remnant buildings from the original power station. They were built to house engineers, clerks, draftsmen, testing laboratory, storage battery and a substation for the supply of low tension current to the Power House and neighbourhood.⁶ The image below dated c.1905 shows the completed earlier (southern) section of The SELS building.

The SELS building was designed as a four storey building with a main entrance from Pymont Street. The external walls of the office block were constructed in brickwork, with a rock-faced free-stone base course. The upper floors of the building were constructed of rolled steel joists and terracotta lumber and the lower floors of concrete and those to the sub-station and battery room were tiled and wood blocked in the laboratory.

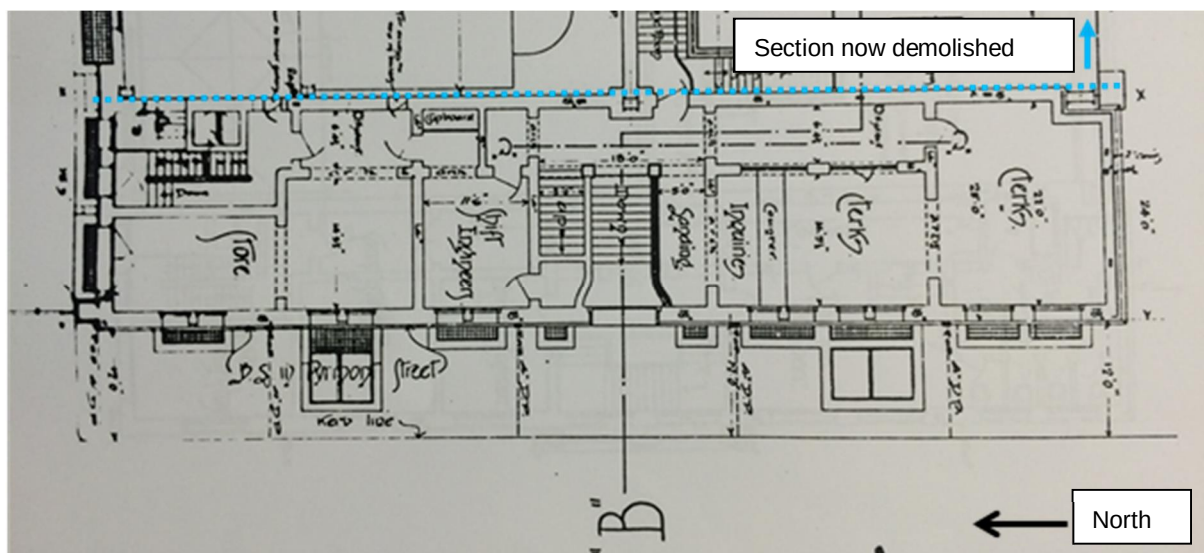
Construction of the northern portion began in 1920. There are a number of photographs from the construction of this building (refer below) which show the process. The area immediately to the east of the SELS was excavated at the same time that the SELS was being constructed. This area was excavated for the eventual construction of Boiler house No. 3.

As shown in Figure 14 the eastern wall originally extended to be three levels. The third level was to become the western external wall, which was built for the No 3. Boilerhouse that was to be constructed immediately adjacent to it. Between 1956 and 1970 Boilerhouse No. 3 had been removed from the rear of The SELS. The third storey wall extension was also removed from the SELS (Refer Figure 14).

During 1993-4 the majority of the 1955 Power Station was demolished to provide a suitable site for the proposed casino development. The SELS building was retained and integrated into this project. It appears that after the CMP for the site was prepared in 1994 the building was altered in various areas. Specifically, the fenestration pattern on the ground floor of the eastern wall of the building was altered.

The original door opening was blocked up and a new door and new window was introduced to create a more rationalised façade. Further, it appears that two previously block up window openings were reinstated. The subject area at the southern end of the ground floor was also reconfigured to create two bathrooms and to extend the hallway south.

Figure 19 - c1903. Plan of the original section of the building



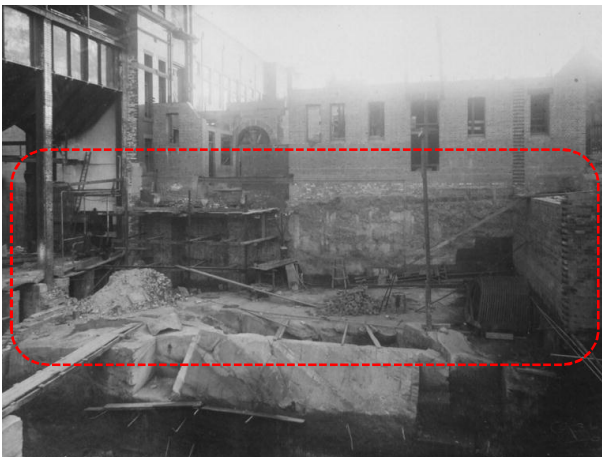
Source: State Records item D/3 series 01/01/1903 to 01/01/1906.

Figure 20 ĩ c1905. Northern extent of the original 1904 section of the Sydney Electric Lighting StationòPowerhouse ĩ Pyrmont



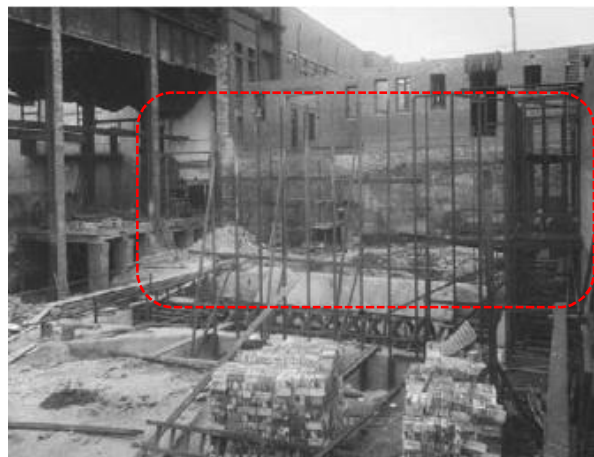
Source: *State Library of New South Wales.*

Figure 21 ĩ 1920. A view of work in progress shows the construction of the extension to the Boilerhouse. The eastern façade of The SELS building is visible.



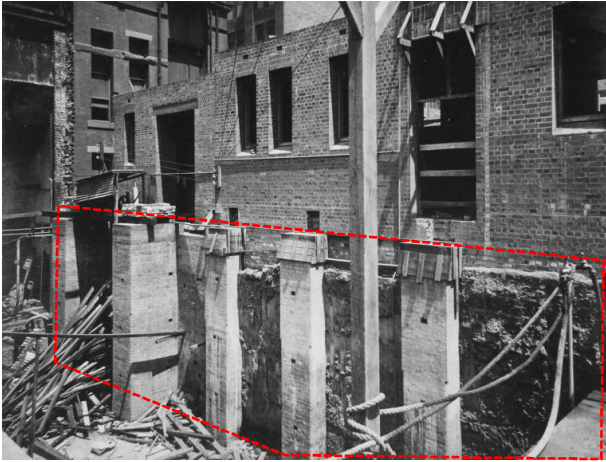
Picture 11 ĩ October 1920, visible bedrock outlined in red

Source: *CRS 51/4074*



Picture 12 ĩ October 1920, visible bedrock outlined in red

Source: *CRS 51/4078*



Picture 13 Ĩ December 1920, visible bedrock outlined in red

Source: CRS 51/4104



Picture 14 Ĩ April 1921.

Source: CRS 51/4114



Picture 15 Ĩ May 1921.

Source: CRS 51/4120



Picture 16 Ĩ August 1921.

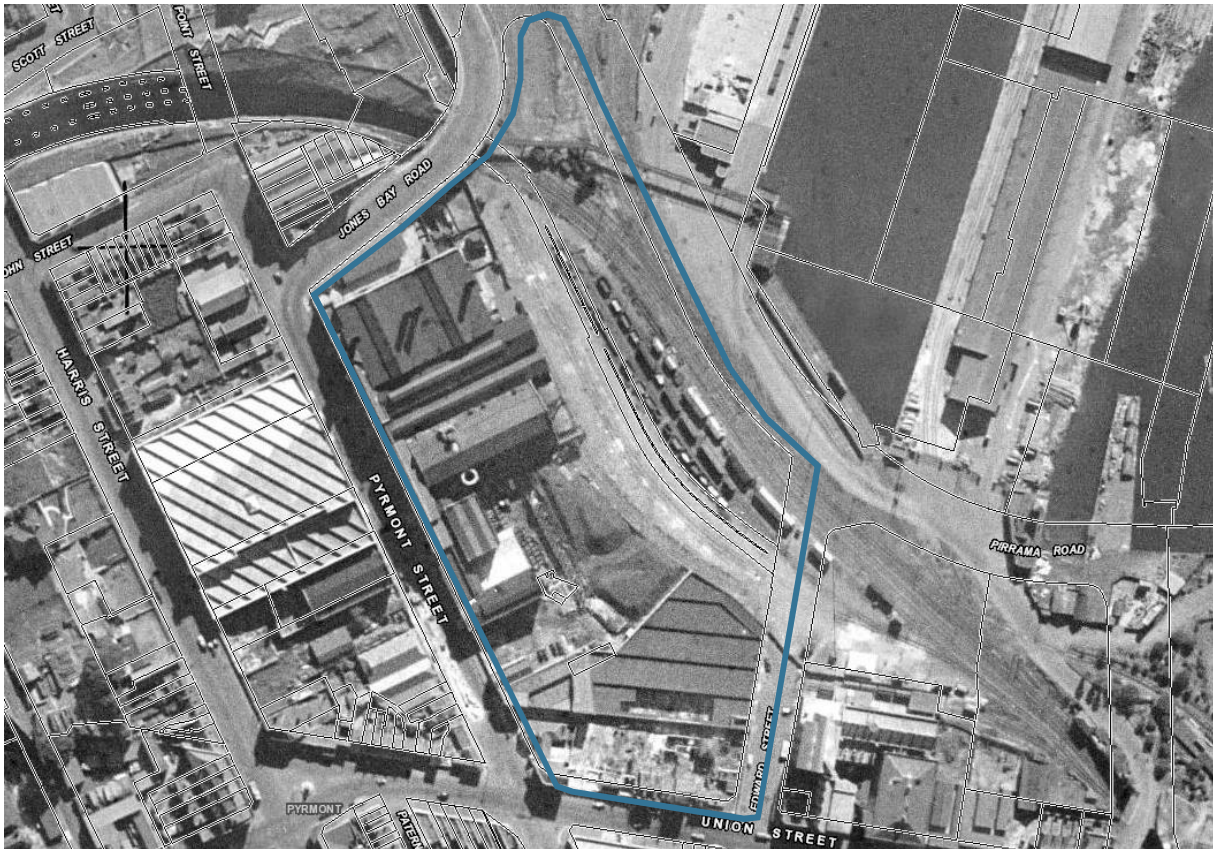
Source: CRS 51/4141



Picture 17 Ĩ October 1920. View towards the western façade.

Source: CRS 51/4075

Figure 22 - 1943. Aerial imagery showing the state of the site



Source: Six Maps

Figure 23 - 1949. Aerial imagery showing the state of the site



Source: City of Sydney Historical Atlas – Aerial Survey of the City of Sydney.

Figure 24 - 1956. City building surveyors detail sheets



Source: City of Sydney Historical Atlas – City Building Surveyors Detail Sheets – Sheet 5

Figure 25 i c.1970. Looking south east down Pyrmont Street from corner of John Street. The Boilerhouse to the east of The SELS (blue arrow) had been removed by this time



Source: City of Sydney Archives SRC 13403

Figure 26 ĩ c. 1990s. Western façade of the SELS building, retained on site



Source: City of Sydney archives SRC17548

4.3.4. The Star Casino Development

The Star now occupies the site of what was originally the Pyrmont B power station. It was previously referred to as Star City Casino and before that, Sydney Harbour Casino when it was located on the site of the former wharves 12/13. The Star at its current address was opened in November 1997 and included the retention of The SELS building in the north west corner.

4.3.5. Historical Archaeological Investigations in 1994

In 1994, an historical archaeological investigation of the subject site was undertaken by Anne Bickford and Associates. This archaeological report provided the following summary of archaeological works undertaken, and the findings of these investigations:

"In 1993 and early 1994 the Pyrmont 'B' Power Station was demolished. The demolition of the coal storage area revealed the remains of the Pyrmont 'A' Power Station. The construction of Pyrmont 'A' began in 1903 and changes to the Station were completed by 1925. It was demolished in 1949 to make way for Pyrmont 'B'.

The site was inspected and the remains recorded in black and white film. The approximately 400 construction drawings of the Power Station, held as aperture cards by Pacific Power, were examined. The most significant drawings were printed at A2 size, collated in chronological order, and bound into a folder. Research to compile a brief history of the site took place. A guide to the construction drawings and a brief analysis of them was prepared for this Report.

It is considered that the remains of the Pyrmont 'A' Power Station have been examined and recorded to a sufficient level to allow its total demolition. No further work is needed on Pyrmont 'A'. However, it is possible, though unlikely, that remains of historic structures which were there before the construction of Pyrmont 'A' could still exist on the site. For example, a well from a 19th century dwelling could have been dug into the

bedrock and now be obscured by the remaining concrete footings of the 'A' Station. Therefore it is advisable that during any future demolition or construction on the site provision is made for archaeological advice in case of unexpected archaeological finds."

This archaeological investigation was undertaken *prior* to the commencement of construction of The Star, and prior to the excavation for five basement levels. It is noted that in the areas of the site where the greatest density of 19th century residential and/or commercial development was concentrated, a full five levels of basement are now present.

As noted above, the historical archaeological assessment previously undertaken identified that it is possible, *though unlikely*, for evidence of historic structures which were there before the construction of Pyrmont 'A' to still exist on the site, particularly being deeper sub-surface features such as wells or cesspits.

However, given the extent of disturbance that has occurred at the site in association with the development of The Star and its associated, substantial basement levels, this is considered unlikely.

Figure 27 i Images of the subject property taken as part of the historical archaeological investigations, and prior to the further excavation of the site into bedrock for the existing buildings (dated July 1994)



Picture 18 i View of the site, facing northeast

Source: City of Sydney Archives, Sydney Reference Collection File: 088/088217, Citation: SRC25151



Picture 19 i View of the site

Source: City of Sydney Archives, Sydney Reference Collection File: 088/088219, Citation: SRC25152



Picture 20 i View of the site, facing east

Source: City of Sydney Archives, Sydney Reference Collection File: 088/088225, Citation: SRC25155

5. ENVIRONMENTAL CONTEXT

5.1. SOILS AND GEOLOGY

5.1.1. Geology

The 1:100,000 series geological map of Sydney indicates the site to be underlain by Hawkesbury Sandstone of the Wianamatta Group.¹⁸

The Hawkesbury Sandstone is described as medium to coarse-grained quartz sandstone, very minor shale and laminate lenses. In association with this geology and prior to disturbance, the subject site may have contained a limited amount of raw stone material, particularly sandstone, which is known to have been used by Aboriginal people in the past. For example, sandstone sheets were often used for sharpening hatchets; this process results in depressions in the sandstone identified as grinding grooves.¹⁹

However, materials such as shale and ironstone, also present in these areas, were not generally used as a resource by Aboriginal people in the past due to their relative fragility; preferred raw stone materials, such as quartz, silcrete, chert, tuff and mudstone, are generally fine-grained and siliceous.²⁰ This relative absence of preferred geological resources somewhat limits the potential for higher density artefact sites to have been deposited within or in the vicinity of the subject site.

However, and as has been noted at other Aboriginal sites found within and around the CBD, there is potential that raw stone material was sourced from elsewhere within the Cumberland Plain and brought to the area of working or use. This is in accordance with the subject site being situated in association with a landform (proximity to the Harbour) that may have been a preferred location for transient use or occupation, particularly due to its proximity to estuarine/marine resources and a generous water supply.

5.1.2. Soils

Soils associated with Hawkesbury Sandstone comprise GyMEA erosional soils, and within the Sydney CBD, are commonly characterized by disturbed terrain. The naturally occurring GyMEA erosional soils are described as shallow to moderately deep (30-100 centimetres) siliceous and leached sandy soils. Disturbed terrain within developed areas of the CBD are typically described as turfed fill areas commonly capped with sandy loam or compacted clay over fill or waste materials.

Erosional soils, particularly in association with estuarine environments, are, by their nature, susceptible to the effects of wind and water erosion as well as relatively unstable deposition processes. This reduces the potential for Aboriginal archaeological material to have been retained *in situ* within such an environment, particularly given the extent to which the subject site has been subsequently developed. This is particularly relevant to the eastern portion of the subject site which originally formed part of the Harbour and was later built up as reclaimed land. The western portion of the subject site, which is located further inland but still in proximity to the shoreline, is likely to have been a more suitable location for use as a camp site, resource processing site, or similar.

5.2. FLORA AND FAUNA

Prior to complete vegetation clearance within and around the subject site, the local area would have consisted primarily of dry sclerophyll or open woodland in association with sandy, well-drained soils, and open Sydney turpentine ironbark

¹⁸ Sydney 1:100,000 Geological Series Sheet, 9130 Edition, 1983) and Soil Landscape Series Sheet (9130 Edition, 1983).

¹⁹ Attenbrow, V, 2002, *Sydney's Aboriginal Past*, UNSW Press, Sydney: 120-122

²⁰ Attenbrow, V, 2002, *Sydney's Aboriginal Past*, UNSW Press, Sydney: 120

forests on slopes. In areas that are underlain by alluvial soils, like the subject site, vegetation would have been characterised by a river-flat forest community, dominated by eucalypt species and closely related angophora species.

Species likely to have been encountered in and around the subject site prior to clearance would have included silvertop ash, Sydney peppermint, scribbly gum, old man banksia, hairpin banksia, coast banksia, and various acacia species. Flowering shrubs including waratah and native rose would have also been present.

Prior to European settlement and the subsequent clearance of vegetation, this vegetation community would have provided habitats for a variety of animals, as well as potential food and raw material sources for Aboriginal people. Eucalyptus trees were a particularly important resource; leaves were crushed and soaked for medicinal purposes, bowls, dishes, and canoes were made from the bark, and spears, boomerangs and shields were crafted from the hard wood.²¹ Similarly, banksia trees would have provided nectar, while a dry cone can provide multiple resources including firebrands and the use of dry flowers from the cones to strain drinking water. Sharp tools (needles) used for weaving baskets and mats can also be made from banksia wood.²²

Typical animals which may have been harvested by Aboriginal people include kangaroos, wallabies, sugar gliders, possums, echidnas, a variety of lizards and snakes, birds, as well as rats and mice. The bones of such animals have been recovered from Aboriginal sites excavated in the Sydney region suggesting that they were sources of food,²³ although the hides, bones and teeth of some of the larger mammals may have been used for Aboriginal clothing, ornamentation, or other implements.

Cockle Bay (Darling Harbour) specifically would have provided abundant marine resources (such as shellfish and fish). Preferred shellfish species known to occur in the immediate area include rock oyster and hairy mussel.²⁴

It is reiterated, however, that extensive contemporary development within and around the subject site means that the landscape has been substantially altered, with the current environs no longer resembling the pre-contact landscape.

5.3. GEOTECHNICAL INVESTIGATIONS

Geotechnical investigations of the subject site were undertaken in the 1990s and summarised in 2016 by JK Geotechnics. These investigations, which included the drilling of five boreholes, revealed that:

- Soil profiles across the five boreholes (locations unknown) typically comprised sandy fill with sandstone gravel, cobbles and boulders;
- Sandstone bedrock was encountered between RL 100.1 and 103.0 metres;
- Fill layers therefore range in depth across the site from 1.6 to 5 metres;
- No natural soil profiles were encountered within the boreholes undertaken.

It is understood that borehole investigation specific to the current proposal will be undertaken in the coming months, and that the results of these new borehole investigations may reveal information that is pertinent to this assessment and its conclusions.

5.4. OVERVIEW OF DISTURBANCE

As has been noted above, The Star (casino) contains five basement levels, with a total depth of around 14 metres. The lower three levels of basement are partial only, and are concentrated in the southwest corner of the overall site extent.

The upper two levels of basement cover the entire site, extending to all allotment boundaries. The depth of these basement levels is around 7 metres.

²¹ Nash 2004: 4-8.

²² Nash 2004: 2.

²³ Attenbrow, V, 2002, *Sydney's Aboriginal Past*, UNSW Press, Sydney: 70-76.

²⁴ Attenbrow 1992: 19.

5.5. SUMMARY

A review of the environmental context suggests that resources, including food (flora and fauna) and raw material sources, would have been available in and around the subject site in the past. Topographically, the majority of the subject site would have been easily accessed and navigated on foot.

The subject site also would have been well sourced with subsistence resources, including flora, fauna and water, with the Tank Stream located in relative proximity. Both Cockle Bay (Darling Harbour) and the Tank Stream would have provided a major resource for Aboriginal people in the past, both in terms of a water supply as well as the provision of marine/estuarine resources generally, including food in the form of shellfish and fish.

Original vegetation and associated fauna would have also provided an abundance of natural resources for use as food, or for the manufacture of tools and general equipment. As discussed above, vegetation species present in the subject site, including various eucalypt and banksia species, are known to have been used by Aboriginal people in the past.

Raw stone material, particularly sandstone, would also have been available within the subject site in the past. Exposed sandstone beds/sheets have the potential to have been used as grinding groove sites. However, preferred raw stone materials such as chert, mudstone, quartz and silcrete do not naturally occur in the immediate area. This is not to say that such material may not have been brought to the immediate area from farther afield either for working or use.

An overview of the environmental context indicates that there would have been adequate naturally occurring resources in and around the subject site, which may have encouraged Aboriginal use and occupation of the area in the past. The Tank Stream particularly, as well as Warrane (Sydney) Cove is likely to have been a focus for resource procurement in the past and prior to European modification.

It is noted that basement levels extend across the entire site to a depth of 7 metres below established ground level. Partial basements, concentrated in the southwest corner of the overall site extent, extend to a depth of around 14 metres below the established ground level.

6. ARCHAEOLOGICAL CONTEXT

6.1. AHIMS: REGISTERED ABORIGINAL SITES OR PLACES IN OR WITHIN THE VICINITY OF THE STUDY AREA

A search of the AHIMS database undertaken on 13 April 2017 for the entire subject site, as well as a buffer of 200 metres. The search revealed that there are no Aboriginal sites or places located in or within 200 metres of the subject site. A copy of this search is attached at the rear of this document.

6.2. LITERATURE REVIEW (ARCHAEOLOGICAL ASSESSMENTS UNDERTAKEN IN THE LOCAL AREA)

Lampert, R.J, 1985, *Excavation Report on Mort's Bond Store*, unpublished report to the Department of Environment and Planning

In 1985 Lampert excavated a midden and camp site at Mort's Bond Store, (previously located at East Circular Quay). 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. Lampert hypothesised that the stone material was sourced from quarries on the Cumberland Plain.

Attenbrow, V, 1992, 'Shell Bed or Shell Midden', *Australian Archaeology* No. 34

Another midden was uncovered during building works near the historic building Lilyvale on the corner of Cumberland and Essex Streets, The Rocks, just to the north west of the present 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).

AHIMS 45-6-2580 (original reporting not available)

During historic excavations in relation to the construction of the eastern distributor at Woolloomooloo, 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 45-6-2651 (original reporting not available)

During historic excavations in respect of development works located at William Street (to the south of the present Study Area), 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).

GML Heritage, Angel Place Project 1997, *Archaeological Excavation Volume 3, Salvage Excavation of Site #45-6-2581*, report prepared for AMP Asset Management Australia, the NSW Heritage Council and NPWS (NSW)

GML conducted salvage excavations of site 45-6-2581 in Angel Place, situated between George and Pitt Streets in Sydney's CBD and located approximately 2 km to the northeast of the current project area. The site straddles the former alignment of the Tank Stream. Technological analysis of 54 flaked stone artefacts recovered during the excavations revealed that on-site reduction of various materials including silicified tuff, indurated mudstone, silcrete and quartz had taken place. The original size of the site could not be determined due to development impacts. However, the artefact distribution suggested that there was a contiguous distribution of lithics along the banks of the original creek, likely to have been deposited from repetitive or continuous Aboriginal occupation.

It was concluded that the site is likely to have been a point of first contact between the original Aboriginal occupants of the Tank Stream Valley and the European settlers arriving in Sydney Cove in 1788. However, no unequivocal physical evidence of contemporary Aboriginal contact and/or occupation was detected at the site.

Steele, D, 2002, *Aboriginal Archaeological Excavation: Quadrant Development Site, Broadway & Mountain Street, Sydney, NSW, containing DECC Site 45-6-2629, unpublished report to College Square Residential Pty Ltd*

In 2002 Steele undertook Aboriginal archaeological test excavation and monitoring at a block situated at Broadway and Mountain Streets, approximately 600 m to the southwest of the current project area. Testing in 1 x 1 metre squares was undertaken along the bank and upslope of Blackwattle Creek, which traverses the site.

One small remnant patch of original topsoil (measuring c. 5 x 15 metres) was tested and produced approximately 20 Aboriginal flaked stone artefacts. All items were less than 10 millimetres in maximum dimension, and the assemblage generally consisted of non-diagnostic pieces. Consent to destroy the site was subsequently granted, with the provision of monitoring of the works, but no further Aboriginal artefacts were recovered.

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 PA, unpublished report to Leighton Contractors Pty Ltd*

In 2006 excavations were undertaken at the KENS site, bounded by Kent, Erskine, Napoleon and Sussex Streets in the Sydney CBD. A total of 952 artefacts were excavated, with silcrete being the dominant raw material type. Tuff and quartz artefacts were also present.

The excavation report interpreted the site as being occupied between 2,800 BP to 1788.

Comber, J, 2012, *Darling Quarter (formerly Darling Walk), Darling Harbour, Aboriginal Archaeological Excavation Report, unpublished report to Casey & Lowe Pty Ltd on behalf of Lend Lease Bovis*

In 2012 Comber undertook an Aboriginal archaeological assessment and excavation at Darling Harbour, at a site which had previously been developed with a large commercial building that was demolished prior to excavation. The excavation was undertaken close to the former shoreline, with soils contained therein being silty alluvium.

A redeposited midden with ten stone artefacts (predominately chert) was identified. The ten artefacts comprised unretouched flakes and flaked pieces with no features that could be used to attribute the artefacts to the phases described by McCarthy or Gould.

Stening, T, 2015, (IN PREP), *Darling Harbour Live (formerly SICEEP PPP), Darling Harbour: Aboriginal Archaeological Excavation Report, unpublished report to Casey & Lowe on behalf of Lend Lease*

Comber Consultants were also engaged to undertake Aboriginal archaeological excavations at the former International Convention Centre on the western side of Darling Harbour. As part of these excavations, a total of 63 stone artefacts were identified; silcrete was the dominant material, and the artefacts were predominately flaked pieces (nine unretouched flakes and one retouched flake). Of these, 44 were identified as representing a discrete knapping floor on the edge of a midden.

Based on an analysis of the artefacts it was determined that the assemblage belonged to Gould's 'Australian small tool tradition' and the Bondaian phase of McCarthy's Eastern Regional Sequence. Radiocarbon dating and environmental information indicates the midden was deposited in the mid-1800s.

GML, Heritage, 2012, *200 George Street, Sydney, Aboriginal Archaeological Excavation, report prepared for Mirvac Property*

A Due Diligence Assessment prepared by GML in 2012 concluded that the 200 George Street project area had some potential for Aboriginal archaeological deposits. A Potential Archaeological Deposit (PAD) was registered on the AHIMS database as #45-6-3081.

Archaeological investigations of PAD #45-6-3081 did not positively identify any Aboriginal archaeological deposits; that is, the potential archaeological deposit was not realised. Natural soil profiles were identified in Area 4 and Area 8 during historical archaeological excavation, but Aboriginal objects were not identified in either area during consequential works.

GML concluded that the location of their Study Area on the banks of the intertidal zone of the Tank Steam resulted in extensive reclamation activity throughout the 1800s, preserving the pre-European landscape intact. However, the geomorphology of this area, with stepped sandstone and highly organic estuarine soils, appears to have made it unsuitable to Aboriginal people, or unsuitable for conserving an archaeological signature relating to any activity which did occur. Hence, unexcavated portions of the 200 George Street study area were assessed to hold very low to no archaeological potential for further in situ Aboriginal archaeological deposits.

In Area 4 the natural soil profiles were deemed to have no archaeological potential due to the nature of their deposition within marine environments. In Area 8 the geomorphology was similarly unlikely to result in the deposition of in situ archaeological deposits due to a highly irregular bedrock surface.

The AHIMS card for 45-6-3081 was updated following the excavations to reflect these findings, with the site status modified to ~~Not a Site~~

6.3. SUMMARY

The above literature review demonstrates that archaeological sites present within the vicinity more often than not found within sites/properties that have been subject to substantially less disturbance than the current subject site. Common site types uncovered within the CBD context/surrounding landscape include artefact sites and shell midden sites.

The literature review therefore suggests that the subject site is likely to have had the potential to contain similar site types *prior to disturbance*. No residual soil profiles have been identified as part of previous geotechnical investigations (to be updated), and the entirety of the site is known to be disturbed extensively.

7. ASSESSMENT OF ARCHAEOLOGICAL POTENTIAL

7.1. ABORIGINAL CULTURAL HERITAGE

There are no Aboriginal sites or places located in or within 200 metres of the subject site.

The construction of The Star, including its basement levels, as well as previous use of the site as the former Pymont Power Station have resulted in severe disturbance across the entire site.

In addition to this, geotechnical investigations undertaken for the site previously have demonstrated that the soil profiles comprise up to five metres of fill in the general location of the proposed new tower and car stacker (within the northeast corner of the site), with no residual natural soil profiles identified.

Again, it is noted that basement levels extend across the entire site to a depth of 7 metres below established ground level. Partial basements, concentrated in the southwest corner of the overall site extent, extend to a depth of around 14 metres below the established ground level.

The potential for any intact, Aboriginal archaeological sites or objects to have been retained *in situ* within the proposed impact area is therefore assessed as very low to nil.

7.2. HISTORICAL ARCHAEOLOGY

As noted at Section 4.3.5 above, the historical archaeological assessment previously undertaken identified that it is possible, *though unlikely*, for evidence of historic structures which were there before the construction of Pymont 'A' to still exist on the site, particularly being deeper sub-surface features such as wells or cesspits. This assessment was undertaken in 1994, and prior to the current basement levels being introduced.

This previous assessment also adequately investigated and documented the historical archaeological potential of the site prior to any major works associated with the development of The Star occurring. It is considered that the historical archaeological resource of the site has been adequately investigated.

However, given the extent of disturbance that has occurred at the site in association with the development of The Star and its associated, substantial basement levels, this is now considered highly unlikely. Again, basement levels range in depth across the site from 7 metres to 14 metres. In areas where former structures are known to have been located, particularly in the southern and western portions of the site, five basement levels are present.

Historical archaeological potential across the subject site is therefore assessed as very low to nil.

8. IMPACT ASSESSMENT

As identified above, the archaeological potential of the subject site, including both Aboriginal cultural heritage and historical archaeology, is assessed as very low to nil.

This is due to:

- The environmental context of the subject site, including the location of the former shoreline and nature of the landscape;
- The extensive and severe extent of disturbance that has occurred. This includes historic phases of development associated with the former Power Stations, as well as the more recent development of The Star which has introduced between 2 and 5 levels of basement across the entire site;
- The comprehensive archaeological investigations of the subject site previously undertaken in 1994, which adequately investigated, assessed and recorded the historical archaeological potential of the site in its entirety.

As the subject site is considered to have very low to nil archaeological potential, it is assessed that the current proposal is highly unlikely to result in any further archaeological impacts.

9. CONCLUSIONS AND RECOMMENDATIONS

As concluded above, the subject site is considered to have very low to nil archaeological potential. It is therefore assessed that the current proposal is highly unlikely to result in any further archaeological impacts within the site.

Based on this assessment, no further archaeological assessments or investigations are recommended to be undertaken for the site. As no impacts to Aboriginal cultural heritage have been identified, no further consultation with the identified Aboriginal community stakeholders is required.

Notes:

- It is understood that stormwater upgrade works are still being refined; the potential archaeological impacts of stormwater upgrade works located *outside of* the subject site as defined in Figure 2 (e.g. within roads) have not been assessed as part of this report.
- The plans received by Urbis in June 2017 have been referenced in the preparation of this report. It is understood that further refinements are being made to the overall proposal, which may involve sub-surface impacts – it should be noted that only works described above have been assessed in this report.
- It should also be noted that intended geotechnical testing at the subject site may impact the assessment presented in this report, and the conclusions drawn.

10. BIBLIOGRAPHY AND REFERENCES

10.1. BIBLIOGRAPHY

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- *Due Diligence Code of Practice for Protection of Aboriginal Objects in NSW*
- *Aboriginal Cultural Heritage Consultation Requirements for Proponents*
- *Code of Practice for Archaeological Investigations of Aboriginal Objects in NSW*
- *Applying for an Aboriginal Heritage Impact Permit: Guide for Applicants 2010*

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[Note: Some government departments have changed their names over time and the above publications state the name at the time of publication.]

THE  STAR

