





Aboriginal Cultural Heritage Assessment Report

Powerhouse Parramatta

Client: Infrastructure NSW

Final Report, 21 January 2021





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Curio acknowledge the Gadigal people of the Eora Nation, the Traditional Owners of the Country on which our Sydney office sits today. We recognise their continuing connection to the land, waters and culture, and pay our respects to Elders past, present and emerging.



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Relevant Abbreviations

ABBREVIATION/TERM	DEFINITION	
ACHAR	Aboriginal Cultural Heritage Assessment Report	
ATR	Archaeological Technical Report	
AHIMS	Aboriginal Heritage Information Management System	
AHIP	Aboriginal Heritage Impact Permit	
ASIRF	Aboriginal Site Impact Recording Form	
'Code of Practice'	DECCW 2010, Code of Practice for the Archaeological Investigation of Aboriginal Objects in New South Wales.	
'Consultation Guidelines'	DECCW 2010, Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010.	
'Due Diligence Code of Practice'	DECCW 2010, Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW.	
EP&A Act	Environmental Planning and Assessment Act 1979	
'Guide to Investigating'	OEH 2011, Guide to Investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW.	
Heritage Act	NSW Heritage Act 1977	
HNSW	Heritage NSW	
ICOMOS	International Council of Monuments and Sites	
LALC	Local Aboriginal Land Council	
LGA	Local Government Area	
NPW Act	NSW National Parks and Wildlife Act 1974	
OEH	NSW Office of Environment and Heritage (formerly DECCW, now part of Heritage NSW)	
PAD	Potential Archaeological Deposit	
RAPs	Registered Aboriginal Parties	
SHR	NSW State Heritage Register	
TU	Test Unit	



Executive Summary

Curio Projects Pty Ltd was commissioned by Infrastructure NSW (INSW) to prepare an Aboriginal Cultural Heritage Assessment Report (ACHAR) to support a State Significant Development (SSD) Development Application (DA) for the development of the Powerhouse Parramatta at 34-54 & 30B Phillip Street and 338 Church Street, Parramatta (the study area). The Powerhouse Parramatta is a museum (information and education facility) that has a capital investment value in excess of \$30 million and as such the DA is submitted to the Minister for Planning pursuant to Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). INSW is the proponent of the DA.

This ACHAR documents the process of investigation, consultation and assessment with regards to Aboriginal cultural heritage and Aboriginal archaeology, as undertaken for the Powerhouse Parramatta development project and study area, specific to the proposed development works. This includes background research and assessment of evidence and information about material traces of Aboriginal land use in the study area and surrounds, significance assessment of potential Aboriginal sites, places, landscapes and/or other values, as well as an impact assessment and management recommendations to assist Infrastructure NSW with their future responsibilities for Aboriginal cultural heritage within the study area.

The proposed activity is the redevelopment of the study area for the construction of the Powerhouse Parramatta, and comprises:

- site preparation works, including the termination or relocation of site services and infrastructure, tree removal and the erection of site protection hoardings and fencing;
- demolition of existing buildings including the existing Riverbank Car Park and 'Willow Grove', (with 'Willow Grove' to be located to another site);
- construction of the Powerhouse Parramatta—two main buildings (west and east);
- operation and use of the Powerhouse Parramatta including use of the public domain provided on the site to support programs and functions;
- maintenance of the existing vehicular access easement via Dirrabarri Lane, the removal of Oyster Lane and termination of George Khattar Lane, and the provision of a new vehicular access point to Wilde Avenue for loading;
- public domain within the site including new public open space areas, landscaping and tree planting across the site; and
- building identification signage.

The project does not involve any alterations to the existing edge of the formed concrete edge of the Parramatta River or to the waterway itself.

An SSD Application was submitted for the project to the NSW Department of Planning in May 2020. This package included a preliminary draft ACHAR report, detailing the process of Aboriginal community consultation that had been undertaken for the project to May 2020 (i.e. Stage 1 of



the consultation process in the OEH Consultation Guidelines had been completed- with project RAPs identified).

Following exhibition of the Environmental Impact Statement (EIS) for the SSDA, revisions were made to the proposed development, including design and scope of works. These design changes in turn lead to the revision of the proposed Aboriginal archaeological methodology for the project, reflected in the *Addendum Aboriginal Cultural Heritage Assessment Report*, prepared by Curio Projects in September 2020.

The current scope of works and proposed Aboriginal cultural heritage and archaeological methodologies, resulting from these development design revisions, are reflected in this revised and finalised ACHAR (January 2021). This revised ACHAR combines and consolidates the content from both the April 2020 ACHAR (as submitted with the SSDA), and the Addendum ACHAR (September 2020), superseding both these earlier reports, and incorporates project RAP comment and input from their review of the draft ACHAR.

Aboriginal Archaeological Potential

The summary and analysis of environmental and archaeological context as presented through Section 4 of this ACHAR, has led to the following predictions for Aboriginal archaeological potential within the Powerhouse Parramatta study area:

- The at-grade car park across in the southern parts of the study area retain high Aboriginal archaeological potential. These areas are also located across the northern mapped extent of the PSB, and therefore have high potential for the PSB to be retained in these locations, buried beneath the existing asphalt and concrete surfaces.
- The footprint of the multi-storey Riverside Car Park has nil to very low Aboriginal archaeological potential, due to the substantial levels of excavation undertaken for its construction, which would have removed all natural soil profiles in this location.
- The southern bank of the Parramatta River also has nil to very low Aboriginal archaeological potential due to flooding and scouring activities, as well as flood mitigation activities such as land reclamation and sea wall construction, and other significant landscaping management works along the southern foreshore.
- Portions of the site located on the southern edge of the Holocene floodplain (i.e. near the mapped boundary between the Pleistocene and Holocene deposits) where disturbance has not exceeded 2m below current ground, have low Aboriginal archaeological potential.

The predicted levels of Aboriginal archaeological sensitivity across the study area are shown in Figure 1.



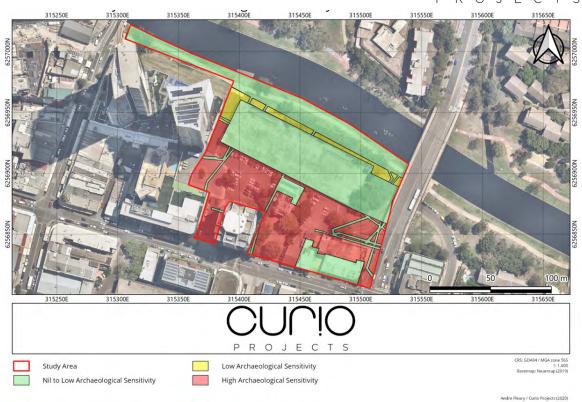


Figure 1: Aboriginal archaeological sensitivity within the study area (Source: Curio 2020)

Aboriginal Cultural Heritage Significance

The local Aboriginal community of Parramatta have stated that the Parramatta River is of high cultural and spiritual significance. The study area is located on the southern foreshore of the River and therefore included within this statement of significance. The study area has social significance both for its intangible values (such as Dharug connection to Country and use of space), as well as for its association with tangible archaeological evidence of continued Aboriginal occupation and connection to the area. Numerous sites are located in close proximity to the study area that provide physical evidence for the continued Dharug occupation of the River foreshore and immediate surrounds.

Should archaeological deposits be present within the study area, for the local Dharug community, this would represent a tangible and meaningful connection to their ancestors.

The study area is therefore considered to have **high social and spiritual significance** to the local Aboriginal community, including both Dharug people as well as Aboriginal people from other Nations who live in the area.

The study area may have **moderate historical significance** for the early interactions and connections between Aboriginal people and early white settlers in this area of Parramatta.

Should the PSB be present within the study area, and contain a remnant Aboriginal archaeological deposit, the study area may have **high scientific significance** for its ability to



contribute knowledge to the archaeological record about Aboriginal occupation of this area of Parramatta and across the PSB itself.

Development Impacts

While the design has aimed to reduce the necessary below ground impacts as much as possible (thereby reducing potential impact to the Parramatta Sand Body (PSB)), proposed works are still likely to present a significant impact to the PSB. The proposed impacts of the design that will disturb the ground surface include a large portion of bulk excavation for an undercroft along the southern boundary of the existing multi-storey carpark, foundation piling for both the eastern and western building footprints, and additional piles for structural support along the new façade in the north-eastern corner of the site.

Bulk excavation along the southern boundary of the existing multi-storey carpark area is required to accommodate the construction of the undercroft, plant, and required services for viability of the development. While an effort was made early in the design process to locate services on the roof and other parts of the site to avoid bulk excavation as much as possible, subsequent detailed and structural design identified the need for an undercroft area due to flood risks of the site, and additional basement space for services due to the structural limitations of the roof of the new buildings.

Piling is considered structurally necessary for the viability of the development in this location. However, impact can be reduced by reducing the number of piles where possible, and archaeologically, by avoiding opening the entire piling area (i.e. areas outside of those requiring bulk excavation works) with archaeological test trenches, and instead using a push tube excavation methodology (presented in detail in the ARD in Appendix C, summarised below).



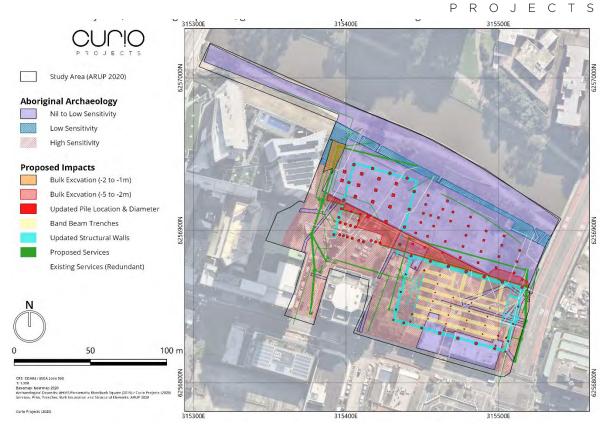


Figure 2: Proposed Development Impacts over Aboriginal archaeological sensitivity (Source: Curio 2020)

Archaeological Investigation

An Aboriginal archaeological excavation methodology and research design has been developed for the Powerhouse Parramatta study area, based on the archaeological predictive model and Aboriginal archaeological sensitivity mapping as presented through this ACHAR. The primary aim of the proposed archaeological works will be to investigate the nature and extent of any subsurface Aboriginal archaeological deposit (i.e. to the registered site located within the study area—AHIMS #45-6-3192), within the impact zones of the proposed development.

Locations for archaeological investigation have been defined with specific reference to the proposed location and nature of the development impacts (see Figure 3). Archaeological investigation of the site would include a combination of archaeological monitoring (particularly of historical archaeological investigations to investigate potential for contact period Aboriginal archaeology and Aboriginal archaeology displaced within historical contexts); test trenching; and push tube excavation of discrete piling locations.

The methodology generally entails a two stage approach to the investigation of Aboriginal archaeology within the study area, predicated on the locations of excavation impact areas as required by the development, as follows:

1. Initial testing of the Aboriginal archaeological potential of the main impact zones of the study area (Phase 1) with an aim to identify the presence or absence of intact



- subsurface profiles of the PSB and any associated Aboriginal archaeological deposit that may be present; and
- 2. Guided by the results of the initial testing (Phase 1), Phase 2 (salvage excavation) is proposed to be undertaken within development impact zones in order to recover the entirety of any Aboriginal archaeological deposit within the study area that requires impact through the proposed development works.

The full excavation methodology and archaeological research design developed for the study area is attached to this ACHAR as Appendix C.

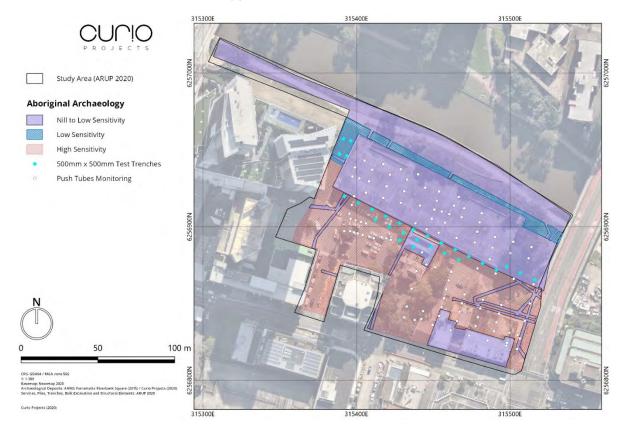


Figure 3: Proposed Aboriginal archaeological investigation areas over archaeological sensitivity (Source: Curio 2020)

Mitigation Measures and Recommendations

Potential impact of the Powerhouse Parramatta project to the Aboriginal archaeological potential and Aboriginal cultural heritage values of the study area are proposed to be managed and mitigated via two main strategies:

- Archaeological investigation; and
- Aboriginal Heritage Interpretation to facilitate a long term conservation outcome for Aboriginal cultural heritage values (tangible and intangible) within the proposed development.

It is believed that the application of these strategies through the Powerhouse Parramatta project will serve to minimise any harm posed by the development to Aboriginal cultural heritage values. The proposed mitigation measures and timing are summarised in the table below.



PROPOSED MEASURE	TIMING	
Aboriginal Archaeological Investigation	Prior to/in collaboration with development works	
Aboriginal Heritage Interpretation	Prior to completion of project	

The following recommendations are made for the Powerhouse Parramatta project, following from the Aboriginal cultural heritage assessment of the concept design and proposed development impacts, including Aboriginal community consultation, ethnohistorical and environmental context, predictive modelling, heritage significance assessment and impact assessment, in accordance with relevant NSW statutory guidelines. It is recommended that:

- As an SSD project, the Powerhouse Parramatta project is exempt from the requirement to seek an AHIP under Section 90 of the NPW Act, however appropriate management and mitigation measures should be applied to the site, namely in the form of: 1.

 Aboriginal archaeological excavation; and 2. Aboriginal heritage interpretation.
- Aboriginal archaeological excavation works within the study area should be undertaken in accordance with the excavation methodology and research design as developed for and included within this ACHAR (Appendix C).
- The program of Aboriginal archaeological excavation should be coordinated with the historical archaeological investigation works required for the development (as per the *Powerhouse Parramatta —Historical Archaeological Assessment & ARD*, Curio Projects 2020).
- Representatives from the recognised knowledge holder/Aboriginal stakeholders as identified through the Aboriginal community consultation process for the project, should be present for and participate in the archaeological investigation works within the Powerhouse Parramatta study area.
- Once archaeological investigation works have been completed within the study area, an Aboriginal Site Impact Recording Form should be submitted to the AHIMS Registrar, to update the AHIMS site card for the registered site AHIMS Site #45-6-3192 'Riverbank Square'.
- Following the completion of the Aboriginal archaeological investigation within the study area, a post-excavation report should be prepared detailing the findings and results of the investigation, to be submitted to the project RAPs, and Aboriginal Heritage Regulation Section of Heritage NSW for their information and records.
- With respect to Aboriginal intangible heritage values (social and cultural), the
 Powerhouse Parramatta project presents an opportunity for a positive impact, to be
 achieved via the installation of Aboriginal cultural heritage interpretation elements within
 the site, to celebrate and communicate the significance of the site and landscape to both
 Dharug people as well as the wider local Aboriginal community.
- Continuing consultation with the identified Aboriginal stakeholders should be undertaken throughout the project.



1. Introduction

Curio Projects Pty Ltd has been commissioned by Infrastructure NSW (INSW) to prepare an Aboriginal Cultural Heritage Assessment Report (ACHAR) to support a State Significant Development (SSD) Development Application (DA) for the development of the Powerhouse Parramatta at 34-54 & 30B Phillip Street and 338 Church Street, Parramatta (the study area). The Powerhouse Parramatta is a museum (information and education facility) that has a capital investment value in excess of \$30 million and as such the DA is submitted to the Minister for Planning pursuant to Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). INSW is the proponent of the DA.

This ACHAR documents the process of investigation, consultation and assessment with regards to Aboriginal cultural heritage and Aboriginal archaeology, as undertaken for the Powerhouse Parramatta development project and study area, specific to the proposed development works. This includes background research and assessment of evidence and information about material traces of Aboriginal land use in the study area and surrounds, significance assessment of potential Aboriginal sites, places, landscapes and/or other values, as well as an impact assessment and management recommendations to assist INSW with their future responsibilities for Aboriginal cultural heritage within the study area.

This ACHAR has also been prepared with reference to the following key relevant client plans and consultant documents, specific to the Powerhouse Parramatta project, including:

- Moreau Kusunoki/Genton 2020, Powerhouse Parramatta Architectural Drawings, October 2020
- Moreau Kusunoki/Genton 2020, Architectural Design Report, Powerhouse Parramatta, 4 May 2020.
- Moreau Kusunoki/Genton 2020, *Architectural Design Report, Powerhouse Parramatta-Addendum*, 8 October 2020.
- NSW Government, Museum of Applies Arts & Sciences 2020, Powerhouse Parramatta-Heritage Interpretation Strategy, September 2020
- Curio Projects 2020, Powerhouse Parramatta—Historical Archaeological Assessment Report and ARD, prepared for INSW
- Curio Projects 2020, Addendum Aboriginal Cultural Heritage Assessment Report— Powerhouse Parramatta, prepared for INSW (September 2020).
- AHMS 2015, Aboriginal Cultural Heritage Assessment: Riverbank Square, Phillip Street, Parramatta LGA, prepared for Parramatta City Council.

1.1. Background

The Powerhouse is Australia's contemporary museum for excellence and innovation in applied arts and sciences. The museum was established in 1879 in the Garden Palace which emerged from a history of 19th Century grand exhibition halls, including the Grand Palais. It currently



encompasses the Powerhouse in Ultimo, Sydney Observatory in The Rocks and the Museums Discovery Centre in Castle Hill. The Powerhouse has occupied the Ultimo site since 1988.

Parramatta, in the heart of Western Sydney, is entering a period of rapid growth. It was identified in 2014's *A Plan for Growing Sydney* as the metropolis' emerging second Central Business District, with the provision of supporting social and cultural infrastructure regarded as integral to its success. The strategic importance of Parramatta as an economic and social capital for Sydney has been subsequently reinforced and further emphasised through its designation as the metropolitan centre of the Central City under the *Greater Sydney Region Plan*.

Powerhouse Parramatta will be the first State cultural institution to be located in Western Sydney – the geographical heart of Sydney. In December 2019, the Government announced the winning design, by Moreau Kusunoki and Genton, for the Powerhouse Parramatta from an international design competition.

Powerhouse Parramatta will establish a new paradigm for museums through the creation of an institution that is innately flexible. It will become a national and international destination renowned for its distinctive programs driven by original research and inspired by its expansive collections. It will be a place of collaboration, a mirror of its communities forever embedded in the contemporary identity of Greater Sydney and NSW.

1.1.1 Approvals Context

An SSD Application was submitted for the project to the NSW Department of Planning in May 2020. This package included a preliminary draft ACHAR report, detailing the process of Aboriginal community consultation that had been undertaken for the project to May 2020 (i.e. Stage 1 of the consultation process in the OEH Consultation Guidelines had been completed- with project RAPs identified).

Following exhibition of the Environmental Impact Statement (EIS) for the SSDA, revisions were made to the proposed development, including design and scope of works. These design changes in turn lead to the revision of the proposed Aboriginal archaeological methodology for the project, reflected in the Addendum Aboriginal Cultural Heritage Assessment Report, prepared by Curio Projects in September 2020.

The current scope of works and proposed Aboriginal cultural heritage and archaeological methodologies, resulting from these development design revisions, are reflected in this revised draft ACHAR (December 2020). This revised ACHAR combines and consolidates the content from both the April 2020 ACHAR (as submitted with the SSDA), and the Addendum ACHAR (September 2020), superseding both these earlier reports.

1.2. Site Description

The site is located at the northern edge of the Parramatta CBD on the southern bank of the Parramatta River. It occupies an area of approximately 2.5 hectares and has extensive frontages to Phillip Street, Wilde Avenue and the Parramatta River. A small portion of the site extends along the foreshore of the Parramatta River to the west, close to the Lennox Street Bridge on



Church Street. The site boundary is identified in Figure 1.1 and Figure 1.2. The site excludes the GE Office Building at 32 Phillip Street.

The site is currently occupied by a number of buildings and structures, including:

- Riverbank Car Park a four-level public car park;
- Willow Grove a two-storey villa of Victorian Italianate style constructed in the 1870s;
- St George's Terrace a two-storey terrace of seven houses fronting Phillip Street constructed in the 1880s;
- 36 Phillip Street a two-storey building comprising retail and business premises;
- 40 Phillip Street a two-storey building comprising retail and business premises; and
- 42 Phillip Street a substation building set back from the street.

The immediate context of the site comprises a range of land uses including office premises, retail premises, hotel, serviced apartments and residential apartments. To the north is the Parramatta River and open space corridor, beyond which are predominately residential uses. The Riverside Theatre is located to the north-west across the Parramatta River.



Figure 1.1: Aerial photograph of the site and its context. (Source: Mark Merton Photography)





Figure 1.2: Site boundary, key existing features, and immediate local context. (Source: Ethos Urban 2020)

1.3. Overview of the Proposed Development

The Powerhouse was established in 1879, and Powerhouse Parramatta will radically return to its origins through the creation of seven presentation spaces of extraordinary scale that will enable the delivery of an ambitious constantly changing program that provides new levels of access to Powerhouse Collection. The Powerhouse will set a new international benchmark in experiential learning through the creation of an immensely scaled 360-degree digital space, unique to Australia.

Powerhouse Parramatta will reflect the communities and cultures of one of Australia's fastest growing regions. It will hold First Nations cultures at its core and set a new national benchmark in culturally diverse programming. The Powerhouse will be highly connected through multiple transport links, and integrate into the fine grain of the city.

Powerhouse Parramatta will be an active working precinct and include the Powerlab, which will enable researchers, scientists, artists and students from across regional NSW, Australia and around the world to collaborate and participate in Powerhouse programs. The Powerlab will feature digital studios to support music and screen industries alongside co-working spaces, lifelong learning and community spaces. Integrated into the Powerlab will be a research kitchen and library that will support a NSW industry development program including archives and oral histories.



This application will deliver an iconic cultural institution for Parramatta in the heart of Sydney's Central City. The SSD DA seeks consent for the delivery of the Powerhouse Parramatta as a single stage, comprising:

The proposed activity is the redevelopment of the study area for the construction of the Powerhouse Parramatta, and comprises:

- site preparation works, including the termination or relocation of site services and infrastructure, tree removal and the erection of site protection hoardings and fencing;
- demolition of existing buildings including the existing Riverbank Car Park and 'Willow Grove', (with 'Willow Grove' to be located to another site);
- construction of the Powerhouse Parramatta—two main buildings (west and east);
- operation and use of the Powerhouse Parramatta including use of the public domain provided on the site to support programs and functions;
- maintenance of the existing vehicular access easement via Dirrabarri Lane, the removal of Oyster Lane and termination of George Khattar Lane, and the provision of a new vehicular access point to Wilde Avenue for loading;
- public domain within the site including new public open space areas, landscaping and tree planting across the site; and
- building identification signage.

The project does not involve any alterations to the existing formed concrete edge of the Parramatta River or to the waterway itself.

1.4. Assessment Requirements

The Department of Planning, Industry and Environment (DPIE) have issued Secretary's Environmental Assessment Requirements (SEARs) to the applicant for the preparation of an Environmental Impact Statement (EIS) for the proposed development. This report has been prepared having regard to the SEARs as follows:

SEAR	WHERE ADDRESSED
 7. Aboriginal cultural heritage The EIS shall: identify and describe Aboriginal cultural heritage values that exist across the whole area that will be affected by the development and document these in an Aboriginal Cultural Heritage Assessment Report (ACHAR) 	This report (ACHAR)
 ensure consultation has taken place with Aboriginal people and is documented in accordance with the Aboriginal cultural heritage consultation requirements for proponents 2010 (DECCW) 	Section 3



SEAR	WHERE ADDRESSED
 assess impacts on Aboriginal cultural heritage values and document them in the ACHAR. This must demonstrate attempts to avoid impacts, identify any conservation outcomes and measures to mitigate impacts. 	Section 6.3

This report also addresses the following Strategic Policy and Technical Guidelines:

POLICY OR GUIDELINE	WHERE ADDRESSED
 Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW (DECCW, 2011) 	Entire report. See notes in Section 2.1.4
 Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 	Section 3
 Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW 2010 	Entire report. See notes in Section 2.1.4

1.5. Limitations and Constraints

This report has been prepared using the available historical data and documentation available for the study area and surrounds, including relevant archaeological reports and assessments.

This report does not include assessment of non-Aboriginal heritage values or archaeology, nor any non-heritage related planning controls or requirements.

1.6. Investigators, Contributors and Acknowledgements

This report has been prepared by Sam Cooling, Senior Archaeologist of Curio Projects, with review by Natalie Vinton, Director of Curio Projects. Table 1.1 presents a complete list of the project team, including qualifications, affiliation and role in the project. Details of all project RAPs are presented in Section 3.

Table 1.1: Investigators and Contributors

PERSON (QUALIFICATION)	AFFILIATION	ROLE
Sam Cooling, Senior Archaeologist (BA, M Archaeological Science)	Curio Projects	Report Author
Natalie Vinton, Director (BA (Hons) Archaeology and Palaeoanthropology)	Curio Projects	Report Reviewer
Andre Fleury, Archaeologist (B. Hist, M Archaeological Science)	Curio Projects	GIS and Mapping
Mikhaila Chaplin, Graduate Archaeologist (BA, Archaeology & Ancient History)	Curio Projects	Addendum ACHAR Co-author
Rebecca Agius, Graduate Archaeologist (BA Hons, Archaeology)	Curio Projects	Addendum ACHAR Co-author



2. Relevant Statutory Context

Aboriginal cultural heritage is governed in NSW by two principal pieces of legislation:

- National Parks and Wildlife Act 1974 (NSW) (NPW Act); and
- Environmental Planning and Assessment Act 1979 (NSW) (EPA Act);

2.1 National Parks and Wildlife Act 1974

The *National Parks and Wildlife Act 1974 (NSW)* (NPW Act), administered by the Aboriginal cultural heritage regulation section of Heritage NSW (HNSW) of the Department of Premier and Cabinet (formerly part of the Office of Environment and Heritage (OEH)), is the primary legislation that provides statutory protection for all 'Aboriginal objects' (Part 6, Section 90) and 'Aboriginal places' (Part 6, Section 84) within NSW.

An Aboriginal object is defined through the NPW Act as:

"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."

The NPW Act provides the definition of 'harm' to Aboriginal objects and places as:

- "...any act or omission that:
- (a) destroys, defaces or damages the object or place, or
- (b) in relation to an object-moves the object from the land on which it had been situated, or
- (c) is specified by the regulations, or
- (d) causes or permits the object or place to be harmed in a manner referred to in paragraph (a), (b) or (c), (NPW Act 1974).

The NPW Act also establishes penalties for 'harm' to Aboriginal objects and declared Aboriginal places, as well as defences and exemptions for harm. One of the main defences against the harming of Aboriginal objects and cultural material is to seek an Aboriginal Heritage Impact Permit (AHIP) under Section 90 of the NPW Act, under which disturbance to Aboriginal objects could be undertaken, in accordance with the requirements of an approved AHIP.

2.2 Environmental Planning and Assessment Act 1979

The EP&A Act is an 'Act to institute a system of environmental planning and assessment for the state of NSW'. Dependent upon which Part of the EP&A Act a project is to be assessed under, differing requirements and protocols for the assessment of associated Aboriginal cultural heritage may apply.

Part 4, Division 4.1 of the EP&A Act identifies and defines State Significant Development projects (SSD) as those declared under Section 89C of the EP&A Act. SSD and State Significant



Infrastructure projects (SSI), replace 'Concept Plan' project approvals, in accordance with Part 3A of this Act, which was repealed in 2011.

Where a project is assessed to be an SSD, the process of development approval differs, with certain approvals and legislation no longer applicable to the project. Of relevance to the assessment of Aboriginal heritage for a development, the requirement for an AHIP in accordance with Section 90 of the NPW Act is removed for SSD projects (EP&A Act, Section 89J).

The project will meet the criteria for SSDA, and therefore will not be subject to the provisions of the NPW Act.

2.3 Native Title Act 1993

The *Native Title Act 1993* provides the legislative framework to recognise and protect native title, which recognises the traditional rights and interests to land and waters of Aboriginal and Torres Strait Islander people. Under the Native Title Act, native title claimants can make an application to the Federal Court to have their native title recognised by Australian law.

There are currently no native title claims or determinations in place for the Powerhouse Parramatta study area.

2.4 OEH Statutory Guidelines

In order to best implement and administer the protection afforded to Aboriginal objects and places as through the NPW Act, and EP&A Act, the OEH (formerly known as OEH, now part of Heritage NSW) have prepared a series of best practice statutory guidelines with regards to Aboriginal heritage. These guidelines are designed to assist developers, landowners and archaeologists to better understand their statutory obligations with regards to Aboriginal heritage in NSW and implement best practice policies into their investigation of Aboriginal heritage values and archaeology in relation to their land and/or development. This report has been prepared in accordance with these guidelines, including:

- DECCW 2010a, Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW.
 (the Due Diligence Code of Practice)
- OEH 2011a, Guide to Investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW. (the Guide to Investigating)
- DECCW 2010b, Code of Practice for the Archaeological Investigation of Aboriginal Objects in New South Wales. (the Code of Practice)
- DECCW 2010c, Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010.
 (the Consultation Guidelines)
- OEH 2011b, Aboriginal Heritage Impact Permits, a Guide for Applicants.



2.5 Objectives of Aboriginal Heritage Assessment

The objectives of the Aboriginal cultural heritage assessment for the Powerhouse Parramatta project, were to:

- identify Aboriginal community members who can speak for the Country within which the project is located;
- involve the Aboriginal community in the cultural heritage assessment process, including consultation to determine their opinions with respect to the project and its potential 'harm' to their cultural heritage;
- understand the number, extent, type, condition, integrity and archaeological potential of any potential Aboriginal heritage sites and places that may be located within the study area;
- determine whether the potential Aboriginal sites and places are a component of a wider Aboriginal cultural landscape;
- understand how the any potential physical Aboriginal sites relate to Aboriginal tradition within the wider area;
- prepare a cultural and scientific values assessment for all identified aspects of Aboriginal cultural heritage associated with the study area;
- determine how the proposed project may impact any identified Aboriginal cultural heritage;
- determine where impacts are unavailable and develop a series of impact mitigation strategies that benefit Aboriginal cultural heritage and the proponent (in close consultation and discussion with the local Aboriginal community); and
- provide clear recommendations for the conservation for Aboriginal heritage and archaeological values and mitigation of any potential impacts to these values.



3. Aboriginal Community Consultation

Aboriginal community consultation is required for assessment of Aboriginal cultural heritage, and should be undertaken in the early stages of project planning in order to best guide the development process. This section documents the process of Aboriginal community consultation that has been undertaken for the Aboriginal cultural heritage assessment of the Powerhouse Parramatta project. Aboriginal community consultation in accordance with statutory guidelines *Aboriginal cultural heritage consultation requirements for proponents 2010*, (DECCW 2010) was initiated for the project in February 2020.

The objectives of Aboriginal Community Consultation, as stated in the Consultation guidelines are to:

'ensure that Aboriginal people have the opportunity to improve assessment outcomes by:

- Providing relevant information about the cultural significance and values of the Aboriginal object(s) and/or place(s)
- Influencing the design of the method to assess cultural and scientific significance of Aboriginal object(s) and/or place(s)
- Actively contributing to the development of cultural heritage management options and recommendations for any Aboriginal object(s) and/or place(s) within the proposed project area
- Commenting on draft assessment reports before they are submitted by the proponent to the OEH.' (DECCW 2010a)

Aboriginal people are recognised in the Consultation Guidelines as the determinants of their own heritage. Therefore, the ongoing process of Aboriginal community consultation for the Powerhouse Parramatta project seeks to identify social and cultural values of the study area and its surrounds to the local Aboriginal community, in order to identify appropriate and respectful mitigation strategies for any identified impacts to Aboriginal heritage presented by the project.

3.1 Powerhouse Consultation Process

Commencing in 2015, the Powerhouse Parramatta have been undertaking a parallel process of "Indigenous Engagement and Strategy" for the Powerhouse Parramatta project, separate to that of the statutory consultation process described through this ACHAR (as required and dictated by OEH Consultation Guidelines for a report to meet the criteria to be considered an 'ACHAR'). In order to both meet the statutory requirements of the OEH Consultation Guidelines, without dismissing or overlooking the presence and significance of the previous (and ongoing) Powerhouse consultation process, the Powerhouse Museum, INSW and Curio Projects made the decision to acknowledge and incorporate the outcomes of both these processes in the following ways:

 Stakeholders involved in the existing Powerhouse Museum consultation process were automatically registered as 'RAPs' for the project, to be included in all ACHAR



- consultation and correspondence in addition to the ongoing Powerhouse Museum process; and
- Information about the history, outcome, process and progress of the Powerhouse Museum consultation for the project was to be incorporated into that described in the ACHAR.

The Powerhouse consultation process includes the key stakeholder groups:

- Deerubbin LALC;
- Dharug Strategic Management Group (DSMG) (and through them to other members of the Dharug community); and
- City of Parramatta Aboriginal & Torres Strait Islander (ATSI) Advisory Committee.

3.2 OEH Consultation Guidelines Process

A complete log of all communications between Curio Projects and Registered Aboriginal Parties (RAPs) for the project has been maintained throughout the project. This log is appended to this final ACHAR as Appendix A, while copies of meeting minutes, written correspondence to and responses from RAPs etc area attached as Appendix B.

Cultural protocols with regards to RAP requests to censor, redact or omit sensitive cultural information from reports and correspondence have been observed throughout the consultation process. Therefore, some correspondence may be excluded from direct reproduction within this report where requested by project RAPs.

The Aboriginal Community Consultation process in accordance with OEH Guidelines consists of four main stages:

- **Stage 1**—Notification of project proposal and registration of interest
- Stage 2—Presentation of Information about the Proposal Project
- **Stage 3**—Gathering Information about Cultural Significance
- **Stage 4**—Review of Draft Cultural Heritage Assessment Report

3.3 Stage 1—Notification of project proposal and registration of interest

The first step in undertaking the Aboriginal Cultural Heritage Assessment process for the study area, is the identification of the Aboriginal community members who can speak for Country in the area of the project (Stage 1).

In March 2020, Curio Projects on behalf of INSW, initiated a new process of Aboriginal Community Consultation for the Powerhouse Parramatta study area in accordance with statutory consultation guidelines. Stage 1 notifications identified the nature and location of the Powerhouse Parramatta project. In accordance with Stage 1.2 of the consultation guidelines, letters were sent to the relevant statutory bodies on 3 March 2020 (Aboriginal Heritage Planning Section of NSW DPIE [former OEH], Deerubbin Local Aboriginal Land Council [DLALC], the



Registrar- Aboriginal Land Rights Act 1983, the National Native Title Tribunal [NNTT], Native Title Services Corporation Limited [NTS Corp], City of Parramatta Council [CoP], and the Greater Sydney Local Land Services [LLS]), requesting names of Aboriginal people who may have an interest in the proposed project area and hold knowledge relevant to determining the cultural significance of Aboriginal objects and places relevant to the study area.

A public notice advertising the project was also placed in Parramatta Advertiser on 11 March 2020 (consistent with Stage 1.3 of the Consultation Guidelines) (Figure 3.1), advising of the project location and proposed development, and inviting registration from local Aboriginal people.

All names compiled from Stage 1.2 of the process were then written to via email and/registered post in March 2020, inviting registration in the process of community consultation for the project. Response was requested within 14 days of the date of the letter.

3.1.1 Registered Aboriginal Parties

As a result of Stages 1.2 and 1.3, 27 Registered Aboriginal Parties (RAPs) were identified for the Powerhouse Parramatta project (in alphabetical order):

- A1 Indigenous Services;
- Amanda Hickey Cultural Services;
- Aragung;
- Barking Owl Aboriginal Corporation;
- Barraby Cultural Services;
- Bidjawong Aboriginal Corporation;
- Butucarbin Aboriginal Corporation;
- City of Parramatta Aboriginal & Torres Strait Islander (ATSI) Advisory Committee;
- Corroboree Aboriginal Corporation;
- Darug Aboriginal Cultural Heritage Assessments;
- Darug Aboriginal Land Care;
- Dharug Custodian Aboriginal Corporation (DCAC);
- Deerubbin LALC;
- Dharug Ngurra Aboriginal Corporation;
- Dharug Strategic Management Group (DSMG);
- Dhinawan Culture and Heritage;
- Didge Ngunawal Clan;
- Freeman and Marx;



- Ginninderra Aboriginal Corporation;
- Goodradigbee Cultural & Heritage Aboriginal Corporation;
- Kamilaroi Yankuntjatjara Working Group;
- Merrigarn;
- Muragadi Heritage Indigenous Corporation;
- Murra Bidgee Mullangari Aboriginal Corporation;
- Tocomwall;
- Widescope Indigenous Group; and
- Yurrandaali Pty Ltd.



Figure 3.1: Tear-sheet from Parramatta Advertiser 11.3.2020



3.4 Stage 2 and 3

Each project RAP was provided with written details of the proposed project and the draft proposed Aboriginal cultural heritage assessment methodology for the project (Stage 2 of the consultation guidelines). This letter was sent to all project RAPs on 11 November 2020. Request was made for comment and/or review within 28 days of provision of the methodology document. A copy of the methodology document is provided in Appendix B.

An online consultation session was held on Wednesday 25 November 2020 to discuss the proposed methodology, and provide an opportunity for project RAPs to ask questions and comment. A copy of the minutes of this session, as well as a copy of the powerpoint presentation, are included in Appendix B. A list of attendees at the 25 November consultation meeting is included in the following table.

ATTENDEE	ORGANISATION	ATTENDEE	ORGANISATION
Leanne Watson	DCAC	Lisa Havilah	Powerhouse Museum
Krystle Carroll-Elliot	Ginninderra AC	Tom Kennedy	INSW
Michelle Locke	DSMG	Natalie Vinton	Curio Projects
Jennifer Beale	Butucarbin	Sam Cooling	Curio Projects
Bo Field	Yurrandaali	Mikhaila Chaplin	Curio Projects
Phil Khan & Jenna	KYWG	Rebecca Agius	Curio Projects
Darleem Johnson	Murrabidgee Mullangari		

This consultation informed the development of the Archaeological Research Design (presented in Appendix C to this ACHAR), as well as informing the understanding of the social and cultural value and significance of the site to project RAPs. All feedback and discussion undertaken at this meeting was recorded, and is summarised in this ACHAR.

The key responses and comments received about the Stage 2 & 3 project methodology included:

- Significance of the Parramatta Sand Terrace which has a much higher potential for retaining intact Aboriginal archaeology
- Need to consider potential for post contact archaeology, given that there has been a high number of glass artefacts found in Parramatta- need to work with historical archaeology where post contact archaeology can be found closely associated with historical fill
- Interpretation of archaeological investigation and findings could be incorporated into the design of the new Powerhouse
- Consideration of long term management options for artefacts recovered- whether they would be returned to Country on site, or housed in a Keeping Place
- Potential for Aboriginal archaeology remaining beneath existing buildings, particularly older buildings such as Willow Grove. Need to make sure everything is properly investigated and recorded carefully with proper testing underneath buildings to be



demolished/relocated for Aboriginal archaeology. Need for historical and Aboriginal archaeology teams to work together.

- Parramatta as a highly sensitive area, significance of the River
- Significance of Parramatta to Dharug people, as well as to people from other Nations who live in the area
- Recognition of the spirit of the Museum's agreement with the Dharug yura (people) in the Statement of Recognition and Understanding, 'honouring and celebrating the continuing presence of the Dharug as the traditional owners of Dharug Nura.'
- With respect to ongoing consultation for project, it is important and necessary to establish baseline expectations in discussions of mutual respect between all participants and accountability of behaviour.
- Need for further consultation between INSW/Powerhouse Museum and Traditional Owners regarding future heritage interpretation at the site.
- 'Local land council is not considered a representation of the Traditional Owners.'
- Query about application of 50cm x 50cm test pits in archaeological testing. Clarification
 of excavation methodology allowing flexibility in test pit sizes to meet site conditions,
 nature of deposit and WHS requirements. Phase 2 salvage excavation of deposits.
 Reflected in excavation methodology in Appendix C.
- Recommendation for monitoring of push tube excavation for foundation piling, and historical archaeological excavations, by project RAP/Traditional Owner representatives.

The key comments above have been noted, and where relevant addressed in this final ACHAR, and the ARD in Appendix C.

3.5 Stage 4—Review of Draft Cultural Heritage Assessment Report

The draft ACHAR was provided to all project RAPs for review and comment on 11 December 2020. While statutory guidelines stipulate that a minimum of 28 days must be allowed for receipt of review and comment of the draft ACHAR (Stage 4 of the Consultation guidelines), this was extended to accommodate for the December-January holiday period at this time, and comment was requested by 20 January 2021. Following RAP review, this ACHAR was finalised to incorporate all RAP comment, feedback and discussion of cultural values provided.

Prior to ACHAR finalisation, on-site meeting and site visit was held over two sessions on Monday 18 January 2021, to give project RAPs an opportunity to visit the project site (unavailable earlier in the process due to COVID-19 restrictions) and to discuss and ask questions about any part of the project, methodology, or draft ACHAR. Attendees at the 18 January site visit/meeting is summarised in the following table.

ATTENDEE	ORGANISATION	ATTENDEE	ORGANISATION
Steven Randell	Deerubbin LALC	Lisa Havilah	Powerhouse Museum



ATTENDEE	ORGANISATION	ATTENDEE	ORGANISATION
Tylah Blunden	DCAC	James Rongen-Hall	Powerhouse Museum
Ryan Johnson	Murra Bidgee Mullangari	Tom Kennedy	INSW
Jamie Eastwood	Aragung	Sam Cooling	Curio Projects
Michelle Locke	DSMG	Mikhaila Chaplin	Curio Projects

All written responses received were replied to, directly addressing any comments, acknowledging how they had been addressed within the final ACHAR where relevant, or explanation if otherwise. Any verbal comments received either by phone, or at the on-site meeting, were also recorded and incorporated into the final ACHAR.

All RAP responses to review of the draft ACHAR have been summarised and addressed in the final ACHAR, with a summary of submissions and how these comments were responded to/addressed by Curio presented in Table 3.1. Full details of all comments, feedback and copies of written submissions received, including complete consultation log, throughout the consultation process for the Parramatta Powerhouse project are included in Appendices A and B.



Table 3.1: Summary of RAP Submissions/Comments to Draft ACHAR and Curio Response

RAP	DATE	FORMAT	COMMENT	RESPONSE/OUTCOME
Kamilaroi Yankuntjatatjara Working Group	10.12.2020	Email	" this whole area is highly significant to us Aboriginal people of the past & present. I support your methodology to investigate further in the way of test excavations."	Noted.
Murra Bidgee Mullangari Aboriginal Corporation	18.12.2020	Email	"I have read the project information and draft ACHAR for the above project, I endorse the recommendations made."	Noted.
Muragadi Heritage Indigenous Corporation	18.12.2020	Email	"I have read the project information and methodology for the above project, I agree with the recommendations made."	Noted.
Dharug Custodian Aboriginal Corporation	18.12.2020	Verbal (On-site Meeting)	 Preference for 1m x 1m archaeological testing over 50cm x 50cm units. Better sampling coverage and consideration of depth of sand deposit. Importance of historical and Aboriginal archaeological teams working together on site. Need for appropriate induction process for site contractors (e.g. early works, civil contractors), particularly for those who will be working after project RAPs and archaeologists have finished works at the site, to make sure that areas with no development impact proposed, remain unimpacted. Possibility of incorporating artefacts recovered into Council's Keeping Place for the Parramatta Square artefacts. 	 Archaeological methodology revised to initial 1m x 1m test units, (still to be excavated in 50cm x 50cm quadrants) Additional wording/clarification in ARD to specify need for monitoring/collaboration between historical and Aboriginal archaeological teams. Acknowledgement that historical and Aboriginal archaeology is not necessarily discrete and separate. Cohesive view of the site's history and potential archaeological resource. Recommendation to INSW that site contractors by inducted by project RAPs to communicate significance of site, deposits, and need to protect and conserve. Final decision of long term management for artefacts to be determined by project RAPs in



RAP	DATE	FORMAT	COMMENT	RESPONSE/OUTCOME
Aragung	18.01.2021	Email	Possible incorporation into Interpretative initiatives at the site. Consideration that the Powerhouse site does not exist in isolation in Parramatta.	 consultation/discussion with Infrastructure NSW, Powerhouse Museum, and Curio Projects. Recommendation for future stages of Heritage Interpretation Plan for the Powerhouse Parramatta to consider nd explore opportunities for incorporation of Aboriginal archaeology and cultural heritage. Final decision of long term management for artefacts to be determined by project RAPs in consultation/discussion with Infrastructure NSW, Powerhouse Museum, and Curio Projects prior to completion of archaeological site works.
Didge Ngunawal Clan	19.01.2021	Email	"DNC would like to thank you for having us participate in this project and DNC agrees to all proposals."	Noted.



4. Summary and Analysis of Background Information

This section summarises the environmental, historical and archaeological background and context for Powerhouse Parramatta, study area. This summary serves to place the study area and proposed development into an appropriate regional context. This background assessment has been undertaken in order to provide a holistic understanding of the cultural landscape within which the study area is located. This analysis has been prepared to focus on both the tangible, as well as intangible cultural heritage and Aboriginal history of the region, and will assist with the development of appropriate mitigation measures, prior to any non-reversible impact to the site, Aboriginal archaeology and cultural values and significance.

4.1 Aboriginal Ethnohistory

Prior to European occupation of the region Aboriginal people had inhabited the wider region of the Sydney basin for thousands of years. The Dharug, the traditional owners of the Parramatta area, are part of a language group that originally extended from the eastern suburbs of Sydney as far south as La Perouse, west as far as Bathurst and north as far as the Hawkesbury River. The wider Dharug language group comprised a number of sub-groups often referred to as 'clans'. The clan that occupied the area now known as Parramatta were the Burramattugal, from which Parramatta derives its name (Attenbrow 2002; Kohen 1986).

Much of the evidence of traditional Aboriginal lifestyle and economy was disturbed in the early years of European settlement and much of our information on the local people is based on ethnohistorical sources.

The wide range of natural environments and resources accessible from the Parramatta CBD region and locality supported a diverse ecosystem of plants and animals, creating an attractive and productive location for Aboriginal occupation and life. The surrounding grasslands supported game for hunting and the tree species in the area were important sources of bark for constructing shelters and canoes, while the Parramatta River provided both freshwater and estuarine species of fish, along with tortoise and waterfowl.

The Burramattagal people enjoyed an abundant and uniquely varied food resource created by the convergence of fresh water and salt water within the river. Fresh water species included mullet, crayfish, shell fish and turtles while the salt water species included eels, fish, shell fish and molluscs, creating large shell middens along the majority of the main waterways in the region (Attenbrow 2002). Post-1788, excavation of Aboriginal shell middens by Europeans for a myriad of uses, demonstrated the widespread availability and consumption of shellfish by Aboriginal people.

Early historical records account the importance and prevalence of fishing and connection to the River to the Burramattagal. For example, Lt. Collins wrote accounts about local people catching species such as bream and mullet (Collins, 1975, from Extent 2016), while the word Burramatta itself is said to translate as 'the place where eels lie down', reinforcing the significance of the river and its natural resources to the local Aboriginal people.



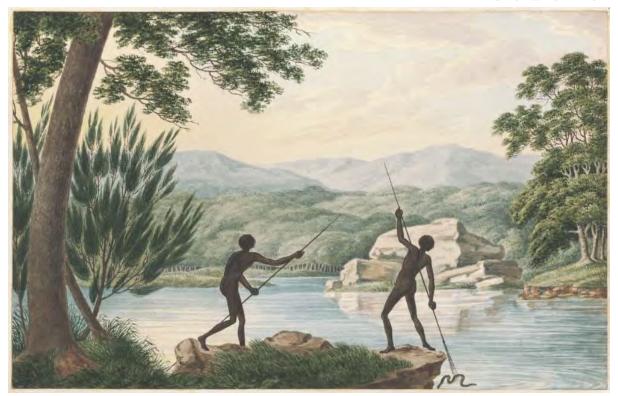


Figure 4.1: Two Aboriginal Australian men fishing for eels, ca. 1817, Joseph Lycett (Source: National Library of Australia, available from http://nla.gov.au/nla.obj-138499671)

4.2 Early Contact Period

The traditional lifestyle of Parramatta Aboriginal people was significantly impacted by the European colonial settlement, with the local people being some of Australia's first traditional owners to experience detrimental impacts, social dislocation and disturbance as a result of European arrival. The population in the area decreased as the community came into conflict with the settlers and were displaced and forced to move into territories of other Aboriginal clans to access resources (Attenbrow 2002).

Parramatta was the second settlement established in New South Wales intended to supply the Sydney settlement with agricultural resources. Soon after the First Fleet reached Sydney Cove in January 1788 it became apparent that the surrounding land was not suitable for Western agricultural approaches. In addition, the Colonial Marines and convicts were largely untrained in farming, which exacerbated the shortage of both necessary skills and supplies for maintaining the colony. As a result, explorations were made further inland to locate arable land.

In April 1788, the Parramatta area was identified by an exploration party as a suitable location for settlement and farming. By the end of the year a small party of twenty convicts and twenty marines was stationed at the settlement at Parramatta, originally named Rose Hill (Kass et al 1996: 16-17). Land clearance for farming began quickly and a Government Farm was established on the north side of the river.



The original layout of the Rose Hill settlement designed by Governor Phillip in 1790 consisted of two main streets, High Street (now George Street) and South Street (now Macquarie Street), and two north-south streets, Bridge Street (now O'Connell Street) and Church Street. The river was crossed at a bridge at what is now O'Connell Street while a ford crossed the river at what is now Smith Street.

The initial planning of Parramatta saw wide streets and large land allotments, with the early population of the city predominantly consisting of convicts. The first permanent European dwellings and structures in the city were generally focused along the main streets of George, Macquarie and Church Streets. Parramatta was renamed in 1791, after the Aboriginal name for the area (Burramatta, which is reported to loosely translate to 'the place where the eels lie down') (MDCA 2003).

Effects of European occupation of Parramatta would have been keenly felt by the local Parramatta population, including loss of access to traditional lands, disease, starvation, intertribal conflict and the breakdown of traditional cultural and social practices. Increasing conflict between the local Parramatta people and the new colonists in the early days of Parramatta lead to the establishment of a school for Aboriginal children, known as the Parramatta 'Native Institution', in 1814 (the public gazettal of the 'Rules and Regulations' for the Native Institution date to 10 December 1814), in an effort to extend British ideals of 'civilisation', commerce and Christianity to local Aboriginal people of the Sydney colony (Brook & Kohen, 1991). In reality, there was no intention of returning children to their parents or of maintaining any traditional cultural connections.

The Institute was originally conceptualized by William Shelley (together with his wife Elizabeth), a trader and former London Missionary Society member, who wrote a letter to Governor Macquarie in April 1814 proposing the establishment of the school. Shelley became the appointed superintendent of the Institution (which after his death in 1815, continued to be run by his wife Elizabeth Shelley).

The Parramatta Native Institute was officially opened with the first Aboriginal Annual Feast on 28 December 1814, at the marketplace in Parramatta (site of the current Parramatta Town Hall). While the establishment of the 'Annual Feast' at Parramatta was originally orchestrated with the intention of encouraging Aboriginal families to give their children over to the Institution, it became a significant annual gathering and event in Parramatta from 1814–1835. In its peak the Annual Feast attracted several hundred Aboriginal people from as far as beyond the Blue Mountains, Jervis Bay, Broken Bay and the Monaro district gathering in Parramatta for the annual distribution of food, blankets, clothes, and the feast (Brook & Kohen 1991: 72).

Records such as the 1828 census and blanket returns provide some information about Parramatta's Aboriginal population in the early 1800s- for example, the 1828 census records the 'Parramatta Tribe' as comprising of 49 people. However, this (already limited) information about the presence and activities of Parramatta people seems to be almost completely absent by the 1850s (Extent 2016).



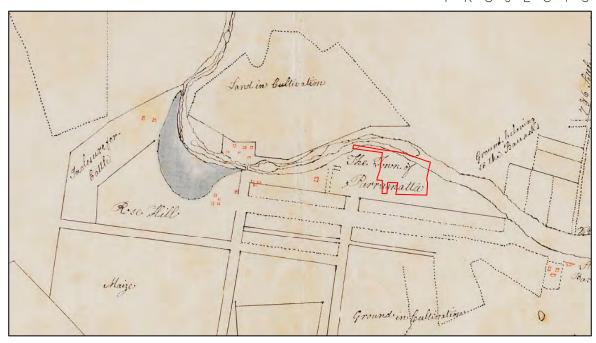


Figure 4.2: Detail of Plan of Parramatta, 1796 with the location of the site indicated. (Source: SLNSW BT 26/Series 1/map 17)



Figure 4.3: Annual Meeting Of Native Tribes At Parramatta', Augustus Earle, C. 1825–1827. (Source: NLA, available from http://Nla.Gov.Au/Nla.Obj-134502097)

4.3 Historical Summary

The study area formed part of the early section of the Rose Hill settlement, and by 1804 was covered by four lots fronting the river, and two lots fronting Smith Street. Creation of Phillip



Street in c.1811 resulted in the reconfiguration of these earlier allotments, creating a number of irregularly shaped allotments fronting both Smith and Phillip Streets. Most early buildings constructed within the study area were domestic residences. By 1880s, further subdivision of these allotments had occurred, including construction of the Oriental Hotel and St George's Terrace on Phillip Street. The extant heritage item 'Willow Grove' was constructed in the 1870s.

A small number of businesses were established along the Phillip Street frontage in the 1920s and 30s, and the river foreshore was reformed in concrete in the early 1940s as part of ongoing flood mitigation works. The extant multi-level and at-grade car parks were constructed in the 1950s.

An Historical Archaeological Assessment (AA) has been prepared for the Powerhouse site (Curio 2020), which includes a detailed history of the study area post-1788. A brief summary of this history is provided in the table below, with respect to the ability for historical activities to impact the ability for Aboriginal archaeological resources to remain at the site. For full detailed history of land use activities, refer to Curio 2020 AA, Section 3.

Figure 4.4 shows a composite image of the historical structures across the study area since 1804.

H	HISTORICAL PHASE	DATES	DESCRIPTION
1.	Aboriginal Settlement	Pre 1788	See Section 4.1 and 4.2 above
2.	Early Colonial Settlement	1788-1800	No evidence for occupation or other activities in the study area. Early activities at Parramatta sited nearby to the west. Possible associated activities such as vegetation clearance and small scale tillage within study area due to proximity to the early Parramatta settlement.
3.	Town Development	1800-1840	Definite evidence of development in study area by 1804. Ten large and fairly regular allotments, five occupied by whitewashed structures. Small scale gardening/tillage and/or cottage industries in conjunction with domestic residence. Phillip St constructed 1810, altering layout of allotments in study area.
4.	Municipal Development	1840-1870	Further subdivision and construction of buildings, mostly for domestic residences and shops etc.
5.	Late 19 th Century	1870-1900	Construction of 'Willow Grove' Construction of St George's Terrace (Oriental Hotel) on corner of Phillip and Smith Streets in 1881.
6.	Early to Mid 20 th Century	1900-1950	Church Street grows as retail district, many major retail chains open stores in Parramatta by 1937. Lennox Bridge widened on western side in 1935 to accommodate increased motor traffic. Southeast of study area primarily occupied by domestic households, businesses operating on Church St used centre of study area for storage purposes.



HISTORICAL PHASE	DATES	DESCRIPTION
		Industrial buildings and businesses established along Phillip St frontage. Northeast corner and northern boundary along river remain underdeveloped.
7. Mid 20th Century to Present	1950-2020	Major development Clearance for, and construction of, open carpark (1953), replaced by the existing multistorey carpark structure in the 1970s (originally named the 'David Frater Carpark'). Construction of David Jones store in Church Street in 1960s (adjacent to study area to west) demolished in 2000 and redeveloped by Meriton Apartments (330 Church St).



Figure 4.4: Composite overlay of historic plans and aerial photos on study area, representing historical use of the site since 1804 (Source: Curio 2020)

4.4 Physical Setting and Landscape Context

The physical setting of the study area, its natural resources, landforms, and wider landscape setting has a significant influence over the nature, location, and form of Aboriginal occupational and use patterns through their interactions with the land (tangible values and site), while also providing meaningful landscape context for intangible heritage and connection to Country.



4.4.1 Soils and Geology

Parramatta falls within the Cumberland Basin, which is a low-lying plain located in the west of the greater Sydney Basin. The land along the Parramatta River is mostly made up of Bringelly Shale of the Wianamatta Group- which is generally overlaid by alluvial materials derived from Bringelly Shale and other flood event deposits (Chapman & Murphy 1989). Chapman & Murphy map the study area as being disturbed terrain, located on the Birrong soil landscape-characterised by fluvial deposits marked by high clay content.

However, local soil mapping across the Parramatta CBD, undertaken by geomorphologist Peter Mitchell (Mitchell 2008), identified that soils across the region have generally been subjected to lower levels of disturbance than predicted by Chapman & Murphy. The study area is situated across the interface/approximate boundary between the Holocene (modern) floodplain of the Parramatta River on the northern part of the study area, and the Parramatta Sand Sheet (PSB) in the south (Figure 4.5 and Figure 4.6). The PSB is a Pleistocene era deposit that has been demonstrated to retain significant archaeological, environmental and geological evidence that contributes to the understanding of the Cumberland Basin pre-European settlement. The Holocene floodplain consists of alluvial deposits and is subject to flooding and scouring, which means any previous Aboriginal archaeological deposits along the floodplain are likely to have been moved by regular flood events and not be retained in situ.

No known sources for stone tool materials are located within the bounds of Parramatta. Therefore, it is assumed that raw materials used by local people for manufacture of stone tools would have been imported from the surrounding area or possibly from St Marys, Marsden Park, or other western areas where silcrete is known to be sourced. Other, less certain, sources of raw material for use in stone tool manufacture including basalt and other volcanic materials may have been sourced from the Toongabbie area.



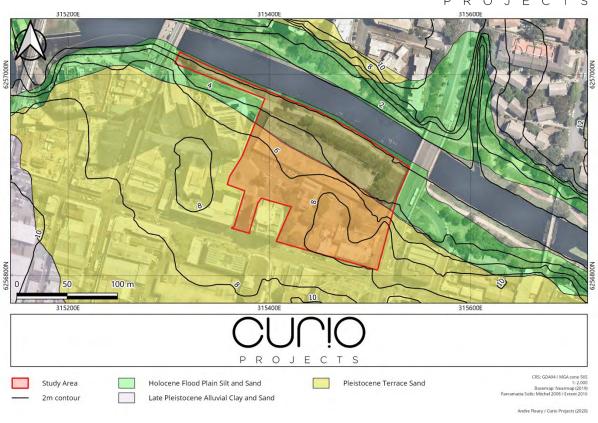


Figure 4.5: Indicative mapping of Parramatta Sand Body over Study Area, 2m contours (Source: Curio 2020, after Mitchell 2007)

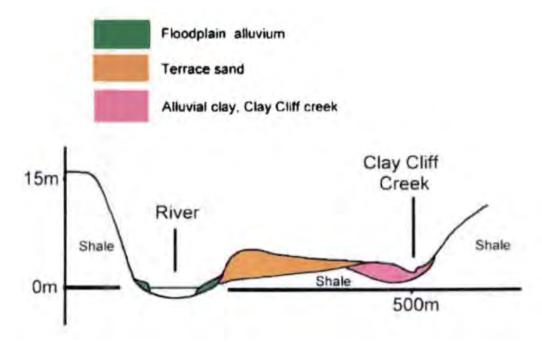


Figure 4.6: Section of Parramatta River and Clay Cliff Creek deposits in the vicinity of Harris St; visualising the interface between the floodplain alluvial (Holocene) deposits and the PSB sand deposits (Source: AHMS 2015, from Mitchell 2008)



Parramatta Sand Body (PSB)

The PSB is of significant archaeological, environmental and geological importance to understanding the Cumberland Basin pre-European settlement. As the name suggests, it is a fluvial sand profile that has been demonstrated to contain stratified Aboriginal archaeological materials (dating to the Pleistocene period, i.e. >10,000 years BP). The extent of the PSB is thought to be between George Street to the north, Harris Street to the west, 'Ellangowan' to the east, and Robin Thomas Reserve to the south. This means that the study area falls within the potential zone for finding this soil formation (Mitchell 2008), although indicative mapping developed for the extent of the Sheet suggests that the study area may be on the northern edge of the sand (Figure 4.5).

The PSB has been typically described through previous archaeological investigations as presenting as:

- c. 25-30cm of brown to brownish grey loamy sand A1 topsoil (this soil unit was often found to be missing/truncated through historical activities);
- Bleached A2-horizon of greyish yellow brown to light grey fine sand extending to a depth of c.50-60cm; and
- Compact reddish brown to dull orange fine sand B-horizon with well-developed porous earthy fabric to c.120cm.

Relatively little concrete information is actually known about the PSB except that it was formed through fluvial process and was later reworked by both aeolian and colluvial processes (DSCA 2017: 33). It is thought that the lower terraces of the PSB- those close to the river (Figure 4.7)-were deposited over the last 10,000 years. Older deposits would then be located at higher elevations and would be the most disturbed from development throughout Parramatta CBD (DSCA 2017: 34). Due to the aggrading nature of this deposit, it is thought that it was formed through multiple large events interspersed with smaller processes, although more research is required to understand exactly what the extent and formation process was. Previous archaeological investigations on the PSB have demonstrated that Aboriginal artefacts may occur within the sand body at depths of up to 2m.

Archaeological excavations undertaken on the PSB in recent years have constantly demonstrated that the uppermost levels have been mostly removed due to historical land use activities, truncating the PSB in most locations. This is discussed further in Section 4.5.3 below, with reference to the results of relevant archaeological investigations previously undertaken in Parramatta.



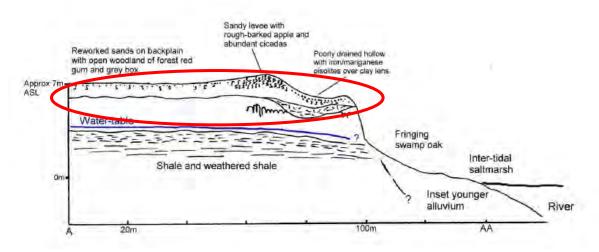


Figure 4.7: Sketch Section of interpreted pre-European geomorphology, sediments and vegetation along the Parramatta River. PSB terrace area indicated (Source: JMcDCHM 2005: 12)

4.4.2 Hydrology

The hydrology of an area plays an important role in identifying not only areas of occupational, environmental, and archaeological potential, but also in understanding how deposits at a site are formed and/or impacted by hydrology. The effects of hydrology range from the availability of water, to flooding, which impacts both occupation and deposition.

Located directly along the southern foreshore of the Parramatta River, the study area would have afforded access to significant natural resources of the river, however its proximity to the river also means it would have been (and remains so) to be susceptible to major flooding events. This would have caused significant soil erosion events, particularly prior to the 1970s when flood mitigation strategies were developed. The section of the Parramatta River adjacent to the study area is not tidal (the tidal influence, referred to as the Lower Parramatta River Catchment-commences just east of the study area at the Charles Street Bridge and Weir).

Council's flood mapping of the Parramatta River predicts that a significant portion of the study area is subject to inundation from flood waters (Figure 4.8), with the northern part of the study area located across 'high flood risk land' (Figure 4.9)- with much of the site falling within the one-in-20 and one-in-100 year flood levels. Despite introduction of flood mitigation strategies since the 1970s, the study area remains subject to sporadic and extensive flood events, see Figure 4.10 showing flooding in February 2020 (partially submerging the ground floor of the multistorey carpark, as well as the grassed area fronting the river).





Figure 4.8: Flooding map, study area in red (Source: TTW 2016: 6, Figure 4, after Council Flood Map)

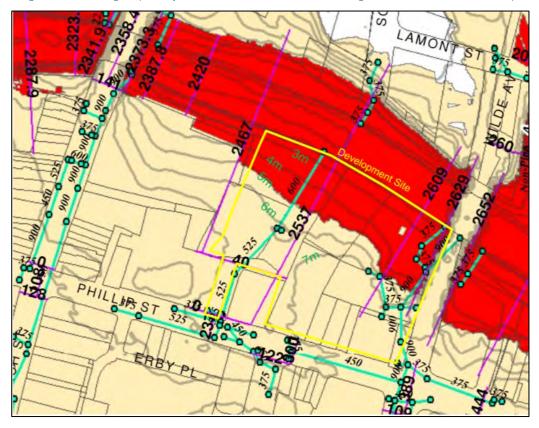


Figure 4.9: Flood Risk Map, study area in yellow. High flood risk in red. (Source: TTW 2016: 6, Figure 5, after Council Flood Map)





Figure 4.10: Flooding across the study area carpark, view south, February 2020. Existing multistorey carpark structure visible in background. (Source: Sydney Morning Herald, accessed 7.3.20 from https://www.smh.com.au/culture/art-and-design/parramatta-powerhouse-site-flooded-20200209-p53z6p.html)

4.4.3 Landscape and Landforms

The study area is located on the southern bank of the Parramatta River, across an elevated flat landform in the south (currently containing carparks and existing commercial developments/buildings), which then transitions to the north to a gentle slope extending down to the River (Figure 4.11). The construction of the multi-level carpark on the site has meant that the majority of the gentle slope has been benched. The shoreline of the river within the study area has been shored by concrete blocks and a retaining wall to mitigate against erosion and flooding, currently taking the form of a grassed park setting.

The elevated flat area is likely located across the fluvial sand body (PSB), while the northern slope adjacent to the riverbank is located on the Holocene Floodplain alluvial terrace.



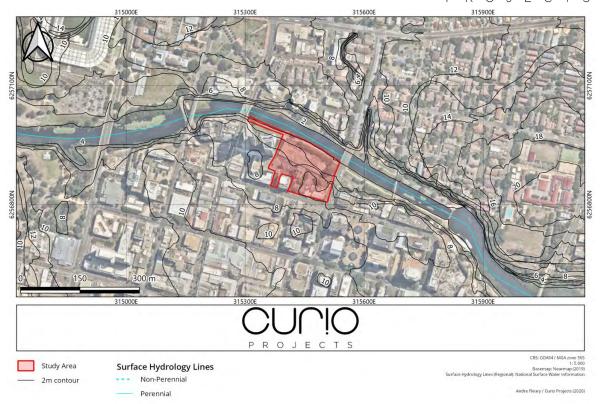


Figure 4.11: Landforms and Hydrology, 2m contour lines (Source: Curio 2020)

4.4.4 Vegetation

An understanding of the original vegetation of an area provides information about the resources that such vegetation would have provided to Aboriginal people in the area, and would have influenced how different locations were accessed, used and visited. Vegetation can itself be a direct resource- such as tree bark for canoes, shield etc, or edible plants- or it can be an indirect resource, creating habitats for different animals such as possums, birds etc, available for hunting.

The study area has been completely cleared of all original vegetation throughout the historic period of use, and no old growth/original trees remain. However, historical sources indicate that original vegetation along the foreshore of the Parramatta River would likely consisted of grey box and forest red gum trees on flats, mangroves along tidal zones, and species such as common reed and paperbark along freshwater reaches of the river (Benson & Howell 1990). An early historical account of the environment by Governor Phillip and Surgeon John White in 1788, described the area as being 'open and flat with immense trees quite a distance from each other' (Kass et al 1996:12).

The open nature of the area would have enabled Aboriginal people to camp along with easy access to the Parramatta River. The lack of underbrush (as described in early historical accounts) may also be an indication that Aboriginal people undertook intentional land management via burning along the banks of the Parramatta River, i.e. what is commonly referred to as 'fire-stick farming'.



4.4.5 Description of Project Area

The study area is located at the northern edge of the Parramatta CBD, on the southern bank of the Parramatta River across a gentle slope (sloping towards the north). The immediate context of the site comprises a range of land uses including office premises, retail premises, hotel, serviced apartments and residential apartments. To the north is the Parramatta River and open space corridor, beyond which are predominately residential uses. The Riverside Theatre is located to the north-west across the Parramatta River.

At the time of writing, the study area is occupied by several key buildings and features, including:

- Willow Grove including front garden set back from Phillip St (34 Phillip Street) (Figure 4.12);
- Retail and business properties at 36-40 Philip Street (two storey buildings);
- Substation building at 42 Phillip Street, set back from the street;
- St George's Terrace (44 Phillip Street) (Figure 4.12);
- Riverbank Car Park (formerly known as the David Frater Car Park)

 a four-level public car
 park structure (Figure 4.17); and
- At Grade Car Park to the rear of the Phillip St buildings (Figure 4.14 to Figure 4.16).

The northern part of the study area (adjacent to the River) is occupied by a grassed and landscaped foreshore area (known as the 'Riverside Walk') that extends along the foreshore between the Lennox Bridge in the west, and the Barry Wilde Bridge in the east (Figure 4.18 and Figure 4.19).

The open area/at grade car park across much of the south of the study area comprises bitumen and hard surfaces established at current ground level. The at-grade car park area has been subject to less below ground disturbance than that of the multi-storey car park structure, with cut, fill and regrading activities likely to extend to approximately 300-400mm below the ground surface.

The construction of the multi-storey Riverbank Car Park has clearly truncated the original slope across the northern half of the study area (Figure 4.20), including significant excavation for its construction. The river bank to the north of the study area has clear evidence of recent erosion and scouring (Figure 4.21).





Figure 4.12: Willow Grove from Phillip St (Source: Ethos Urban 2020)



Figure 4.13: St George's Terraces fronting Phillip St (Source: Ethos Urban 2020)



Figure 4.14: At grade car park to rear of 46-42 Phillip St (Source: Ethos Urban 2020)



Figure 4.15: At grade car park western side of study area, west of Willowgrove (visible in background) (Source: Ethos Urban 2020)



Figure 4.16: At grade carpark area to the rear of the Phillip Street buildings, view west (Source: Ethos Urban 2020)





Figure 4.17: Multi-storey carpark, view north from entry from Dirrabarri Lne (Source: Ethos Urban 2020)



Figure 4.18: Foreshore walk view east, carpark structure visible in right of image (Source: Ethos Urban 2020)



Figure 4.19: Foreshore walk view west along front of study area (carpark structure visible) (Source: Ethos Urban 2020)





Figure 4.20: View south across study area from foreshore. Construction of carpark has impacted/truncated natural slope (Source: Ethos Urban 2020)



Figure 4.21: View west along riverbank from in front of study area, erosion along foreshore (Source: Ethos Urban 2020)



4.4.6 Modern Land Use History and Disturbance

The Parramatta foreshore and surrounding areas have been heavily disturbed by both modern development as well as from historical flood events. While vegetation clearance is generally considered to only present a minor impact to archaeological potential, subsequent processes following vegetation removal such as sheet erosion of soils and increased flooding impacts increase the likely impact to archaeological potential of a site. Soil disturbance at a site directly influences Aboriginal archaeological potential, as intact Aboriginal archaeological deposits of high integrity are located within undisturbed topsoils.

Historical flood events would have caused major erosion and scouring of study area soil profiles. Further, the flood mitigation strategies would have caused additional ground disturbances through the introduction of sea walls and land reclamation.

In summary, the main historical activities specific to the study area that would have the greatest impact to and/or removed natural soil profiles include (Figure 4.22):

- Construction of multi-level carpark- including bulk excavation works for basement carparking that would have completely removed any natural soil profiles within the excavation footprint;
- Construction of the southern 'at-grade' bitumen carpark- which would have required some cut and fill to establish the carpark surface, including some cutting of the natural topsoil (likely disturbing soil profiles up to 400mm below ground surface within footprint);
- Installation of utilities and services across site (trenching for sewer and water mains, electric easements etc); and
- Flood mitigation works including: two small areas of reclamation along the foreshore; creation of the retaining wall; construction of pedestrian park; and associated landscaping works.

Other historical activities such as the construction of residential and commercial premises over time (as summarised and presented in Figure 4.4) would have disturbed the topsoil deposits across the study area, however are unlikely to have impacted the deeper soil profiles, which retain potential to Aboriginal archaeological deposits, regardless of the prior (or extant) existence of historical structures and buildings.



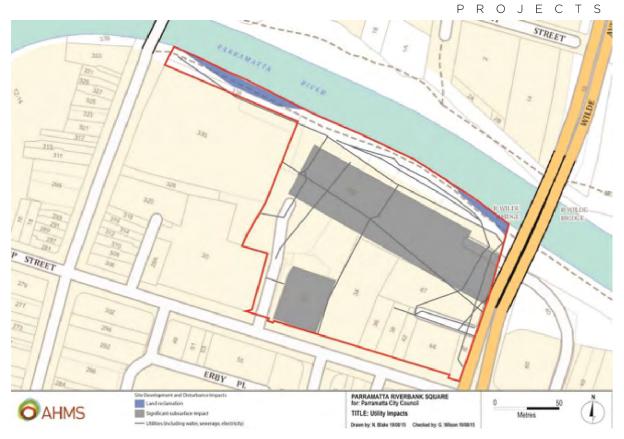


Figure 4.22: Significant sub-surface impacts within study area with high impact to Aboriginal archaeological potential (Source: AHMS 2015)

Geotechnical Investigation

Geotechnical investigations undertaken within the study area provides groundtruthing and further clarification of the nature of the sub-surface soil and disturbance provide at the site. Two investigations have been undertaken in recent years within the study area: four geotechnical boreholes in 2013 (JK Geotechnics); and an additional four boreholes in 2015 (PSM 2016). From these investigations, an inferred subsurface soil and geological profile has been developed for the site (Table 4.1). Generally, sandstone bedrock is located across the study area at depths between 3-5m below the current ground level. Investigation works also confirmed the high groundwater level across the site (due to proximity to the river)- i.e. 1-2m below ground level in northern areas of the site, adjacent to the River.

Geotechnical investigation at the site confirms that the study area retains localised remnant natural soil profiles, with description of alluvial soils encountered is generally consistent with that of the PSB Pleistocene deposit. Geotechnical results generally correlate with the soil mapping of the site, i.e. Holocene floodplain soil deposits along the river foreshore, and alluvial soils (PSB) across the southern area of the site (Figure 4.23)- outside of areas of high disturbance where all natural topsoils have been removed.



Table 4.1: Summary of inferred subsurface conditions encountered in PSM Boreholes (Source: PSM 2016: Table 2)

INFERRED UNIT	ENCOUNTERED DEPTH OF TOP OF INFERRED UNIT (m)	DESCRIPTION
TOPSOIL / EXISTING FILL	0.0	Existing pavement (asphalt and roadbase). Clayey Sandy GRAVEL to Gravelly SAND with some clay, SAND; medium grained, brown, sub angular gravel up to 20 mm, low plasticity clay. Some pieces of brick observed.
NATURAL SOIL	0.1 to 1.2	Clayey SAND to SAND; fine to medium grained, grey, inferred to be of variable density from loose to dense. Clay is medium to high plasticity.
SHALE	5.0	SHALE; brown to dark grey, extremely weathered, extremely low strength.
SANDSTONE	3.0 to 7.7	SANDSTONE; grey, fine to medium grained, moderately weathered to fresh, inferred high strength. The upper 1 m of the unit is inferred low to medium strength.

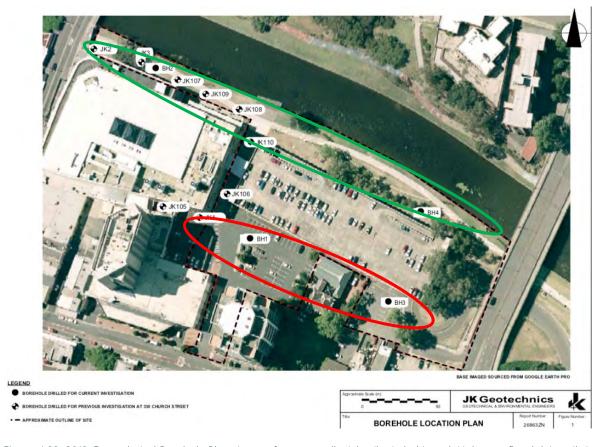


Figure 4.23: 2013 Geotechnical Borehole Plan. Areas of remnant alluvial soils circled in red, Holocene floodplain soils in green (Source: JK Geotechnics 2013: Figure 1)



4.5 Archaeological Context

Extensive archaeological excavations across the Parramatta CBD in recent years has served to confirm a pivotal trend of archaeology across the city: that the presence of modern development at a site is not sufficient to determine that all sub surface archaeological deposits have been disturbed or removed. In fact, if anything, previous archaeological excavations have constantly demonstrated that both historical and Aboriginal archaeological deposits (including natural soil profiles) remain intact at a large number of sites across the Parramatta CBD.

Numerous archaeological excavations have determined the potential for intact natural soil profiles to be present beneath layers of modern and historical development, and therefore it cannot be assumed that simply because the land in question has been developed, that this would have removed all Aboriginal archaeological deposits in this location. Aboriginal stone artefacts, in a pre-historic, post-contact, and in disturbed contexts are likely to be present across most areas of the Parramatta CBD.

The nature, location and extent of archaeological evidence of Aboriginal occupation as it presents in the Parramatta region is further described in the following subsections.

4.5.1 Archaeological Evidence of Aboriginal Occupation

The earliest accepted scientific dates recovered from archaeological sites on the Cumberland Plain are, like those across the rest of Australia, unlikely to accurately reflect earliest occupation of Aboriginal people. This discrepancy between scientific dating and likely occupation relates largely to changes in sea levels, which impacted both occupation patterns of Aboriginal people between the Last Glacial Maximum (LGM) and present, as well as inundating sites along the coast and rivers, making them inaccessible to today's archaeological investigations.

The most recent period of maximum glaciation in Sydney was 15,000-18,000 BP, at which time seal levels would have been up to 130m below current, pushing the coastline further to the east. Around 10,000 years ago at the end of the Pleistocene epoch (LGM), the polar ice caps melted and sea levels began to rise, which would have forced Aboriginal people to abandon coastal sites and move inland, causing significant impact both to physical occupation patterns, as well as to economic and social habits. By around 6,000 years ago, rising sea levels had flooded what was once a coastal plain along Sydney's east coast, forming the landscape of Sydney harbour and its river valleys that we recognise today. Therefore, the majority of archaeological sites in Sydney that have been scientifically dated, recover dates of 5,000BP and later, after sea levels had stabilised. Few archaeological sites in Sydney have been dated to before 10,000BP, with a few exceptions- summarised with relevance to the current study area as follows.

The oldest widely accepted date for Aboriginal occupation in the Sydney region is 25,000-30,000 years ago, recovered from the George & Charles St site in Parramatta (JMcDCHM 2005), a basal date of 30,735±407BP, recovered from the Pleistocene geomorphological formation known as the Parramatta Sand Body (PSB). This geomorphological formation has been encountered during several excavations in Parramatta, although it has not always been found to contain evidence of Aboriginal occupation. In instances of the presence of Aboriginal artefacts within the



PSB, they have generally been recovered from deposits at depths of 0.8 to 2 m below the modern surface.

4.5.2 AHIMS Search

An extensive search of the Aboriginal Heritage Information Management System (AHIMS) database was undertaken on March 2020 across the Parramatta CBD, centred on the study area (with a buffer of 1km), and returned 100 results. The extensive AHIMS search is attached as Appendix D.

Summary descriptions of Aboriginal site features registered on AHIMS, as relevant to the study area, are presented in Table 4.2. The 100 registered sites from the AHIMS search included 9 different site types, some located in combination with each other, as summarised in Table 4.3.

One registered site is located within the study area (AHIMS 45-6-3192-'Riverbank Square') which is a Potential Archaeological Deposit registered by AHMS in 2015 as a result of an earlier assessment of the Aboriginal archaeological potential and cultural assessment for the development area. This main reason for the registration of this PAD site was the location of the site across the PSB and the Aboriginal archaeological potential associated with this soil formation. A number of other registered sites are located in close proximity to the study area (i.e. approximately eight sites are within 200m).

The most common site types in the area are artefact sites (n=42), followed by Potential Archaeological Deposits (PADs) (n=33), and Potential Archaeological Deposits (PADs) in relation to a number of other site types (n=15). While one modified tree and two grinding grooves were located by this AHIMS search, neither of these sites are in close proximity to the current study area.

AHIMS search results always require a certain amount of scrutiny in order to acknowledge and accommodate for things such as inconsistencies in the coordinates (differing datums between years of recording), the existence of, and impact to, registered sites (impact to a registered site technically requires the submission of an Aboriginal Site Impact Recording form to be submitted to the OEH, however these forms are not always submitted), and other database related difficulties. It should also be noted that AHIMS database is a record of archaeological work that has been undertaken, and registered with OEH in the region.

The AHIMS database is therefore a reflection of recorded archaeological work, the need for which has likely been predominantly triggered by development, and not a representation of the actual archaeological potential of the search area. AHIMS searches should be used as a starting point for further research and not as a definitive, final set of data.

Table 4.2: Aboriginal site features referred to in this report

SITE FEATURE	DESCRIPTION/DEFINITION BY OEH 2012
Aboriginal Resource and	Related to everyday activities such as food gathering, hunting, or collection
Gathering	and manufacture of materials and goods for use or trade.



SITE FEATURE	DESCRIPTION/DEFINITION BY OEH 2012
Art Site	Art is found in shelters, overhangs and across rock formations. Techniques include painting, drawing, scratching, carving, engraving, pitting, conjoining, abrading and the use of a range of binding agents and natural pigments obtained from clays, charcoal and plants
Artefact Site (Open Camp Sites/artefact scatters/isolated finds)	Artefact sites consist of objects such as stone tools, and associated flaked material, spears, manuports, grindstones, discarded stone flakes, modified glass or shell demonstrating physical evidence of use of the area by Aboriginal people.
	Registered artefact sites can range from isolated finds, to large extensive open camp sites and artefact scatters. Artefacts can be located either on the ground surface or in a subsurface archaeological context.
Grinding Groove	Grinding grooves are a groove in a rock surface resulting from manufacture of stone tools such as ground edge hatchets and spears, may also include rounded depressions resulting from grinding of seeds and grains.
Modified Tree	Trees which show the marks of modification as a result of cutting of bark from the trunk for use in the production of shields, canoes, boomerangs, burials shrouds, for medicinal purposes, foot holds etc, or alternately intentional carving of the heartwood of the tree to form a permanent marker to indicate ceremonial use/significance of a nearby area, again these carvings may also act as territorial or burial markers.
Potential Archaeological Deposit (PAD)	An area where Aboriginal cultural material such as stone artefacts, hearths, middens etc, may be present in a subsurface capacity.

Table 4.3: AHIMS Sites in the Vicinity of the Study Area

SITE TYPE	NUMBER OF SITES	% OF SITES
Aboriginal Resource and Gathering	1	1
Art (Shelter with Art)	1	1
Artefact (Isolated)	3	3
Artefact (Open Camp Site)	42	42
Artefact and Hearth	1	1
Artefact and Modified Tree	1	1
Potential Archaeological Deposit (PAD)	33	33
PAD and Artefact	14	14
PAD, Artefact & Hearth	1	1
Modified Tree	1	1
Grinding Groove	2	2
TOTAL	100	100%



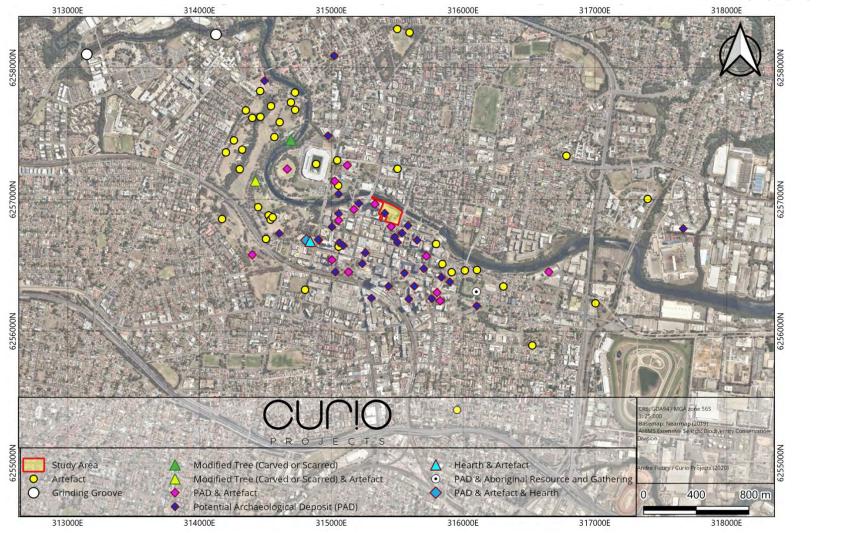


Figure 4.24: AHIMS Sites. Study Area in Red (Source: Curio 2020)

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4.5.3 Previous Archaeological Investigations and Assessment

Aboriginal archaeological excavations have often been undertaken in conjunction with historical archaeological excavations across Parramatta. Numerous Aboriginal archaeological excavations have successfully demonstrated that regardless of level of supposed development and ground impact at a site within Parramatta, there often remains the potential for Aboriginal archaeological deposits and stone artefact assemblages to remain intact within remnant natural soil profiles, as well as in a post-contact context.

The following section presents the results of a literature review of the NSW AHIMS library and other relevant reports, to better understand the broader archaeological patterning of the Parramatta region, with particular focus on investigations undertaken on the south bank of the Parramatta River. The location of sites discussed below are presented in Figure 4.26 below.

Parramatta Aboriginal Heritage Study and Review (MDCA, 2003; 2014 Review)

The Parramatta Aboriginal Heritage Study, prepared by Mary Dallas Consulting Archaeologists (MDCA), focused on the entire Parramatta LGA and developed an Aboriginal cultural heritage planning and management strategy. Notably, this study included the compilation of a database of known Aboriginal sites within the Parramatta LGA, which along with the mapping of areas of Aboriginal archaeology and cultural heritage sensitivity, which was the basis for the Aboriginal Sensitivity Map, which now functions as Appendix 11 of the Parramatta DCP.

The Aboriginal Sensitivity Map essentially predicts potential areas within the LGA to contain unrecorded and unregistered Aboriginal sites. It is not a rating of potential significance, but rather an indication of the potential for Aboriginal sites to be present. Aboriginal sensitivity was zoned across the Parramatta LGA as:

- High Sensitivity= known sites (within 50m radius +)/high archaeological potential/undisturbed natural landscape.
- Medium Sensitivity= some archaeological potential/partially disturbed landscape.
- Low Sensitivity= largely disturbed landscape.
- No Sensitivity= totally disturbed landscape/reclaimed land.
- Areas of Social/Historical Association= areas identified as having some degree of significant to present day Aboriginal people through current social or historical connections.

The current study area is included within an area of 'High Sensitivity' on the Parramatta Aboriginal Sensitivity map.

Parramatta CBD Foreshore Strategic Archaeological Management Strategy (Extent 2017)

The Powerhouse study area is included within 'Precinct 18- Southern Foreshore- Lennox Bridge to Barry Wilde Bridge' in the Archaeological Management Strategy (AMS) for the Parramatta River CBD Foreshore (Extent 2017). This precinct is assessed as having 'high Aboriginal sensitivity' due to:



- Moderate distribution of Parramatta Terrace sand sheet;
- Low disturbance evident;
- Located within 200m of a watercourse; and
- Precinct contains one known archaeological site AHIMS 45-6-3192. (Extent 2017: 110)

Riverbank Square, 30b-46 Phillip Street, 338 Church Street and 46/47 Smith Street, Parramatta (AHMS 2015)

In 2015, AHMS prepared an ACHAR, including test excavation methodology, for an area that is effectively consistent with the current study area (although the current study area excludes 32 Phillip St, which was included within the 2015 ACHAR). At the time, the project was referred to as 'Riverbank Square', for which Council was proposing the redevelopment of the whole site for mixed residential, commercial, and open space uses.

The ACHAR identified that the Riverbank Square site was located across the PSB, and had potential for Aboriginal archaeological material to be present in portions of the site where prior ground disturbance had not extended more than 2m below the ground surface. As a result of this assessment, a Potential Archaeological Deposit (PAD) site was registered with AHIMS (Site #45-6-3193), and AHMS developed an Aboriginal archaeological test excavation research design and methodology, specific to the nature of the proposed development at the time.

AHMS proposed a two-staged excavation methodology and research design for the site, that would require an AHIP to undertake due to the presence of the PSB, summarised as follows:

- Stage 1 test excavation via 1m² test pits at 15m intervals across areas of Aboriginal archaeological sensitivity, targeting least disturbed areas of the site (approx. 37 test pits);
- Stage 2 detailed salvage excavation of any key areas identified with significant material, consisting of a 100m² single large open area or a number of smaller open areas dug at a fine resolution.

Figure 4.25 shows AHMS' zoning of Aboriginal archaeological potential across the site, and the proposed test pit locations.

It is understood that while this ACHAR and an AHIP Application was prepared, that this AHIP, nor the test excavation it proposed, did not proceed at the site.





Figure 4.25: AHMS 2015 Riverbank Square Aboriginal Archaeological Sensitivity Mapping and Proposed Test Pits (Source: AHMS 2015, Fig 16, p. 59)

330 Church Street, Parramatta (AHMS 2011, 2014)

Following from an archaeological assessment prepared in 2011, in 2013 Aboriginal archaeological test excavation was undertaken at 330 Church Street, Parramatta (Meriton apartments adjacent to the current study area to the west, corner of Church St & Parramatta River). The excavation recovered 43 Aboriginal objects, and an additional 32 non-diagnostic fragments of stone suitable for working, with an overall artefact density of 2.4 artefacts/m2.

The excavation encountered some evidence for the presence of the Pleistocene PSB in this location, although the majority of soils were interpreted to likely be Holocene in origin, suggesting that the Holocene flood plain deposits in this location may extend further south than mapped (Mitchell 2008). Natural soils encountered during excavation were predominantly sand, with varying clay and silt components. The basal soil deposit of the excavation (120 cm below ground surface) was OSL dated to the terminal Pleistocene (~20-10,000 years BP). The stratigraphy encountered during this excavation suggested a regular process of alluvial deposition with indication for scouring and sheet wash.

The investigation found that historical excavation across the site had previously truncated the majority of the natural soil profile across the site, with Aboriginal objects only recovered from areas where historical disturbance had been minimal. Further, the inconsistency of distribution of artefacts across the site suggested potential that some of the artefacts may have been washed in with flood deposits, rather than representative of primary deposition events. The high levels of disturbance and the low number of Aboriginal objects recovered from the



excavation meant that test excavation was considered sufficient to understand the nature of the archaeology at the site, and no further archaeological work was considered necessary.

George St Sites (CG1, RTA-G1, & CG3) (Jo McDonald CHM 2004-2006)

Archaeological excavations in Parramatta between 2004 and 2006, initially identified and investigated the presence of the PSB. Three key excavations were undertaken during this time on the fluvial sand body along the south bank of the river, focused around the intersection of Charles and George Streets (i.e. c.400m southeast of the Powerhouse study area).

Aboriginal archaeological excavation of CG1 (corner of George & Charles Sts) was located on the PSB, and represented multiple periods of Aboriginal occupation of the area, from those of considerable antiquity, to more recent deposits. Excavation encountered several occupation/living floors at the site, containing both artefacts as well as hearth arrangements. Over 6,500 artefacts were recovered from CG1, with relative dating suggesting that the older assemblage could date to between 10,000 and 20,000 years BP.

Archaeological salvage excavation at RTA-G1 (109-113 George St) recovered >4,500 Aboriginal stone artefacts from within the PSB, a site identified to be a continuation of the archaeological landscape investigated at the nearby site of CG1. Radiocarbon dating of the site recovered some of the earliest dates recovered from the greater Sydney region for Aboriginal archaeological sites, indicating repeated occupation of the PSB in this location from c.30,000 years BP. At the time this date was recovered, this more than doubled the previously accepted scientifically dated timeframe for Aboriginal occupation of the Sydney region.

Archaeological test and salvage excavation of CG3 (101-110A George Street) in 2005 encountered further evidence of Aboriginal occupation of the PSB, identified as being a continuation of the archaeological landscape identified at CG-1 and RTA-G1. Archaeological excavation at CG3 recovered <1,000 artefacts, dominated by silcrete and silicified tuff, along with clear evidence for change in preferential use of raw material types and stone tool production technologies over time.

Geomorphological analysis, as well as archaeological excavation and scientific dating has determined this sand sheet to be likely of late Pleistocene age. Due to the general depth and antiquity of the PSB, Aboriginal archaeological excavations on the sand body have the potential to provide significant new information about timing and patterns of Aboriginal occupation of the Parramatta area.

184-188 George St (GSP 2013) (DMCA 2013, 2017)

Aboriginal excavations at 184-188 George St ('GSP 2013') recovered 114 stone artefacts primarily manufactured from silicified tuff and silcrete. The nature of this deposit was interpreted as likely reflecting the site's consistency as a river landscape on the periphery of more favourable terrace positions. Here, the low numbers of stone artefacts were likely to represent limited in situ knapping activities and the possibly that the use of non-durable tools was favoured. Aboriginal objects were also identified which could be dated to the late eighteenth and early nineteenth



century, firmly supporting historical records for the continued Aboriginal occupation of Parramatta.

While multiple building and demolition phases across the site had removed and truncated the upper archaeological levels, 'natural' soil profiles with potential to contain Aboriginal objects were still retained at the site. The preservation of these soil profiles, regardless of high levels of historical disturbance, was thought to be due to a drainage 'gully' through the centre of the site that emptied into the river, creating greater preservation of the PSB stratigraphic sequence in this location.

Palynological evidence from the gully indicated the presence of freshwater lagoons or ponds on the lower river terraces bordering the town, and that the surrounding vegetation was shrubfernland dominated by rainbow fern. Furthermore, there was evidence for previously unrecorded vegetation, and confirmation of the presence of she-oaks and/or river oaks on the lower terraces.

142-154 Macquarie St (Comber Consultants 2010)

Aboriginal archaeological test excavation of the former Cumberland Newspaper Site was undertaken by Comber Consultants in 2010 (located c.450m southwest of the current study area). These test excavations recovered 21 Aboriginal objects from two 3mx1, test pits. While the site was confirmed as being located on the PSB, soils were found to have been highly disturbed with mixed full and road base present to depths of 45-60cm, as well as presence of historical archaeological footings and relics etc.

95-101 George St (Austral 2007)

Aboriginal test excavations at 95-101 George Street (c. 300m southwest of the current study area) found that while historic development had removed most or all of the pre-1788 topsoil, the underlying Pleistocene PSB remained intact, from which 601 Aboriginal objects were recovered. The site demonstrated similar archaeological characteristics to the George Street Sites (RTA-G1 and CG1), such as dominance of silicified tuff artefacts at depth, however unlike the George Street sites, there was no evidence of technological change in preferred raw material over time. Located on the PSB, this site was assessed to be a part of the wider archaeological deposit of the George Street sites.

Parramatta Justice Precinct (Haglund & Associates 2007)

The Parramatta Justice Precinct, located c.250m west of the study area, was subject to Aboriginal archaeological salvage excavations in 2006. Aboriginal archaeological excavation was undertaken via a combination of 1m² test pits, as well as larger trenches where possible, and ultimately identified a shallow, generally disturbed, soil profile over-lying heavy clay. The northern part of the Justice Precinct site was located along a ridge and upper slopes that retained an Aboriginal archaeological deposit, despite disturbance from historical activities. A total of 807 Aboriginal objects were recovered from the site, however as the majority of these were recovered from within historical archaeological deposits or disturbed context, reliable analysis and chronological dating of the deposit was not possible.



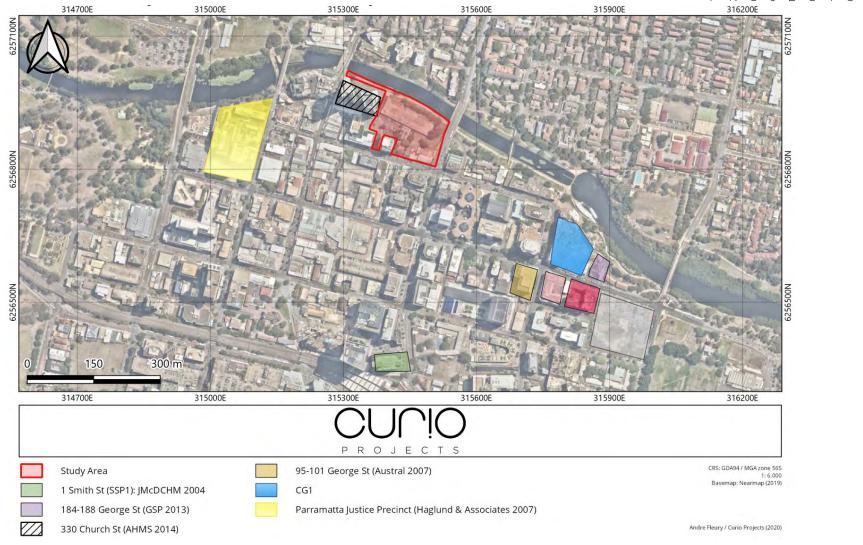


Figure 4.26: Location of Sites referenced above (Source: Curio 2020)

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4.5.4 Summary of Previous Archaeological Investigation

Previous Aboriginal archaeological excavations along the Parramatta River—particularly the southern bank—have consistently identified the presence of multiple phases of occupation and use of the PSB by Aboriginal people in the region- dating from the Pleistocene (c.30,000 BP) through until the mid to late Holocene (c.2,500 BP). Excavations have constantly demonstrated the ability for Aboriginal archaeological deposits to be retained within a site area, regardless of the presence of historical disturbance and development, particularly when located across the deeper soil profiles of the PSB-which often remain intact beneath previous development and existing structures.

4.6 Regional Character and Archaeological Predictive Model

Predictive modelling plays an important role in understanding the remnant archaeological potential of a site, and thus factors into development of appropriate management recommendations and mitigation strategies. Archaeological predictive modelling integrates information about environmental context, previous historical activities and ground disturbance, and known locations of surrounding sites (excavations and registered AHIMS sites), to assess and predict the nature of archaeology that may be present within the study area.

Regionally, Aboriginal people have occupied the Parramatta CBD area since at least the Pleistocene (i.e. 10,000-50,000 years ago), archaeological evidence of which remains within the Parramatta region, particularly focused within the geomorphological feature of the PSB. While the exact depth of the PSB across the study area is not accurately known at present, geotechnical investigations suggest it may be present across the southern parts of the study area around 1.5m below the current ground level. This is relatively consistent with the results of other nearby archaeological investigations undertaken on the PSB, which have found that the sand deposits of the PSB are typically present 1.5-2m below existing ground surfaces.

The Holocene floodplain along the northern boundary of the study area (i.e. along the southern bank of the Parramatta River) is considered to have low potential for an intact Aboriginal archaeological deposit due to the extent of periodic flooding and scouring in this location that would most likely have constantly moved and redeposited sediments within the floodplain. However, the floodplain still retains some potential for Aboriginal archaeological deposits-mainly in the form of isolated objects without context-due to local movement of soil materials in the area.

Aboriginal site types most likely to be located within the study area would be artefact and PAD sites, represented by the registered site AHIMS Site #45-6-3192 ('Riverbank Square'). Other site types such as art and shelter types, grinding grooves and modified trees, will not be present within the study area due to the absence of geological or environmental features required for such site types to exist (i.e. remnant mature vegetation, exposed sandstone platforms or rockshelter formations).

While the historical activities within the study area would have impacted the natural soil profiles within the study area to varying degrees (and therefore impacted the level of Aboriginal



archaeological potential accordingly), where previous development did not involve substantial excavation, potential for deeper sub-surface archaeological deposits remains.

Contact period Aboriginal archaeology has been found at multiple sites in Parramatta, however it is noted that the majority of other contact period archaeology identified within Parramatta has been located at a greater distance from the river (i.e. Parramatta Square, Parramatta North Female Factory) than the current study area. Regardless, the study area still has potential for contact period Aboriginal archaeological deposits such as Aboriginal glass artefacts, and/or Aboriginal stone artefacts deposited contemporary with historical period archaeological resources.

Overall, this ACHAR makes the following predictions for Aboriginal archaeological potential within the Powerhouse Parramatta site:

- The at-grade car park across in the southern parts of the study area retain high Aboriginal archaeological potential. These areas are also located across the northern mapped extent of the PSB, and therefore have high potential for the PSB to be retained in these locations, buried beneath the existing asphalt and concrete surfaces.
- The footprint of the multi-storey Riverside Car Park has nil to very low Aboriginal archaeological potential, due to the substantial levels of excavation undertaken for its construction, which would have removed all natural soil profiles in this location.
- The southern bank of the Parramatta River also has nil to very low Aboriginal
 archaeological potential due to flooding and scouring activities, as well as flood
 mitigation activities such as land reclamation and sea wall construction, and other
 significant landscaping management works along the southern foreshore.
- Portions of the site located on the southern edge of the Holocene floodplain (i.e. near the mapped boundary between the Pleistocene and Holocene deposits) where disturbance has not exceeded 2m below current ground, have low Aboriginal archaeological potential.

Figure 4.27 presents the predicted levels Aboriginal archaeological sensitivity across the study area.



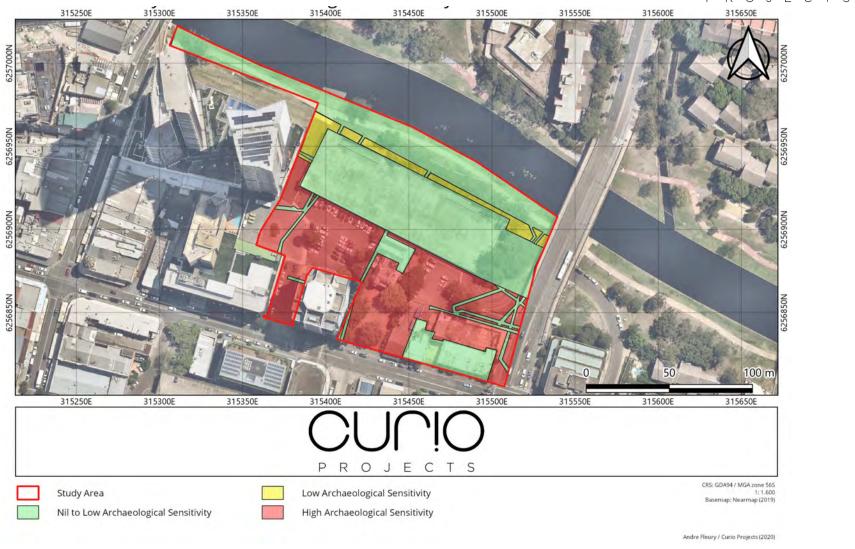


Figure 4.27: Aboriginal archaeological sensitivity within the study area (Source: Curio 2020)



5. Cultural Heritage Values and Significance Assessment

The Burra Charter (Australia ICOMOS 2013) defines cultural significance as:

...aesthetic, historic, scientific, social or spiritual value for past, present or future generations. Cultural significance is embodied in the place itself, its fabric, setting, use, associations, meanings, records, related places and related objects. Places may have a range of values for different individuals or groups. (Australia ICOMOS 2013: 2)

The five types of cultural heritage value, as presented in The Burra Charter (2013) form the basis of assessing the Aboriginal heritage values and significance of a site or area. Each of these cultural heritage values, as specifically relevant to Aboriginal cultural heritage, are summarised as follows (after OEH 2011a).

Social (Cultural) and Spiritual Value—spiritual, traditional, historical or contemporary associations and attachments the place or area has for Aboriginal people. Social or cultural value is how people express their connection with a place and the meaning that place has for them.

Historic Value—associations of a place with a historically important person, event, phase or activity in an Aboriginal community. Historic places do not always have physical evidence of their historical importance (such as structures, planted vegetation or landscape modifications). They may have 'shared' historic values with other (non-Aboriginal) communities.

Scientific Value—the importance of a landscape, area, place or object because of its rarity, representativeness and the extent to which it may contribute to further understanding and information.

- Assessment of Scientific Value also includes assessment in terms of Research Potential, Integrity, Condition, Complexity, Archaeological Potential, Connectedness, Representativeness, Rarity, Education Potential, and Archaeological Landscapes.

Aesthetic Value—sensory, scenic, architectural and creative aspects of the place. It is often closely linked with the social values. It may consider form, scale, colour, texture and material of the fabric or landscape, and the smell and sounds associated with the place and its use.

Assessment of each of the above criteria has been undertaken in consideration of the landscape and environmental context of the study area, Aboriginal history, previous archaeological work, and the field survey. The assessment of each criteria has then been graded (as per OEH 2011a *Guide to Investigating*) in terms of high, medium and low, in order to allow significance to be described and compared. The application of the cultural values criteria to the Aboriginal cultural heritage of the study area has also included consideration of: research potential; representativeness; rarity; and education potential for each criterion (as relevant).



5.1 Assessment of Aboriginal Cultural Heritage Values

5.1.1 Social (Cultural) and Spiritual Value

The local Aboriginal community of Parramatta have stated that the Parramatta River is of high cultural and spiritual significance. The study area is located on the southern foreshore of the River and therefore included within this statement of significance. The study area has social significance both for its intangible values (such as Dharug connection to Country and use of space), as well as for its association with tangible archaeological evidence of continued Aboriginal occupation of the area. Numerous sites are located in close proximity to the study area that provide physical evidence for the continued Dharug occupation of the River foreshore and immediate surrounds.

Comments received from project RAPs with respect to the social value of the study area include:

This area is significant to the Darug people due to the evidence of continued occupation, within close proximity to this project site there is a complex of significant sites

...Landscapes and landforms are significant to us for the information that they hold and the connection to Darug people. Aboriginal people (Darug) had a complex lifestyle that was based on respect and belonging to the land, all aspects of life and survival did not impact on the land but helped to care for and conserve land and the sustenance that the land provided. As Darug people moved through the land there were no impacts left, although there was evidence of movement and lifestyle, the people moved through areas with knowledge of their areas and followed signs that were left in the landscape. Darug people knew which areas were not to be entered and respected the areas that were sacred...

From an archaeological perspective the area is [of] very high importance with 8 registered sites surrounding, another mention here would-be important stating that these sites would be linked. These surrounding areas were only segregated and split up with the land was stolen and sold in lots during colonisation.

... it is especially important to mention Cultural importance and potential when speaking about archaeological importance and potential ¹

...this whole area is highly significant to us Aboriginal people of the past & present.²

Dharug people consider all their sites to be connected. Viewed as a whole, these sites form a complex that embodies all aspects of Dharug history and life. This complex of sites is of exceptional significance for its ability to provide evidence of ongoing occupation, land use and traditional lifestyle across Dharug Country, demonstrating the long-enduring and continuous Dharug occupation of, and connection to, the Parramatta area.

¹ DCAC Letter Response to Stage 2 & 3 Methodology, dated 10.11.2020

² KYWG Email 10.12.2020



Should archaeological deposits be present within the study area, for the local Dharug community, this would represent a tangible and meaningful connection to their ancestors.

The study area is therefore considered to have **high social and spiritual significance** to the local Aboriginal community, including both Dharug people as well as Aboriginal people from other Nations who live in the area.

5.1.2 Historical Value

The study area holds potential to be of historical value and significance to local Aboriginal people in connection with the wider area in this part of Parramatta associated with early contact period interactions between European colonists and Aboriginal people at the Parramatta settlement. Therefore, the study area may have **moderate historical significance** for the early interactions and connections between Aboriginal people and early white settlers in this area of Parramatta.

5.1.3 Scientific (Archaeological) Value

OEH states the scientific (archaeological) value of an Aboriginal site or place to:

Refer to the importance of a landscape, area, place or object because of its rarity, representativeness, and the extent to which it may contribute to further understanding and information. (OEH 2011: 9)

Following OEH guidelines for assessing scientific value (OEH 2011), five key criteria have been considered with regards to the scientific and archaeological context of the study area in order to determine its level of scientific significance. These criteria, as they have been applied to the study area, are defined below in Table 5.1. Following the criteria above, an assessment of the potential scientific significance of the Powerhouse Parramatta study area has been undertaken, identified as relevant to the five key criteria.

Table 5.1: Archaeological significance criteria

CRITERIA	DESCRIPTION
Research potential	Research potential describes how much potential a site has to contribute to a further scientific or archaeological understanding of a site/area/region. This should include consideration of factors such as: integrity and condition (the level of soil disturbance that a site has been subject to and the ability for the site to yield intact archaeological deposits); complexity (demonstrated or potential ability of a site to yield a complex archaeological deposit; archaeological potential (the potential for a site to yield an archaeological deposit or resource); and connectedness (the connection of a site to others in the
Rarity	Rarity refers to the frequency of similar site types in a local or regional area/landscape.
Representativeness	Representativeness refers to the level of variability between or within Aboriginal sites in an area or region, what is already conserved, how sites relate to each other, and the condition that a particular site type may be



CRITERIA	DESCRIPTION
	in that is able to better present or demonstrate more clearly that specific site type through the archaeological record.
Education Potential	Education potential refers to the ability of a site to contribute to the public record and provide teaching resources in order to further understanding of Aboriginal cultural heritage and archaeology. Is the site well preserved? Are there artefacts that would be good to use in teaching? Are there recognisable site features, artefacts types, records etc, that would be productive in teaching or use within public heritage interpretation strategies?
Archaeological Landscapes	The study of Aboriginal cultural heritage and archaeological study in the context of the wider landscape (geographical and cultural/social) in which they exist.

The Aboriginal archaeological (scientific) significance of the study area is not able to be accurately assessed until the results of Aboriginal archaeological investigations are available.

However, the study area has high research potential because of its location within the mapped PSB, which is an alluvial terrace formation which is significant on a State level due to its high potential for stratified Aboriginal archaeological material dating back to the Pleistocene (c.30,000 years BP). The study area has potential to contain a chrono-stratified archaeological deposit that would be both rare and representative in the context of Aboriginal occupation in this area of Parramatta.

Should the PSB be present within the study area, and contain a remnant Aboriginal archaeological deposit, the study area may have **high scientific significance** for its ability to contribute knowledge to the archaeological record about Aboriginal occupation of this area of Parramatta and across the PSB itself.

Scientific significance and values can only be further confirmed through a program of archaeological investigation.

5.1.4 Aesthetic Value

The study area may have aesthetic value to the local Aboriginal community, both for its landform positioning on the southern foreshore of the Parramatta River, as well as in the context of the wider Aboriginal landscape in which it is located. Should archaeological investigation within the study area recover Aboriginal stone tools, these may potentially have aesthetic value and significance.

5.2 Statement of Significance

The local Aboriginal community of Parramatta have stated that the Parramatta River is of high cultural and spiritual significance. The study area is located on the southern foreshore of the River and therefore included within this statement of significance. The study area has social



significance both for its intangible values (such as Dharug connection to Country and use of space), as well as for its association with tangible archaeological evidence of continued Aboriginal occupation and connection to the area. Numerous sites are located in close proximity to the study area that provide physical evidence for the continued Dharug occupation of the River foreshore and immediate surrounds.

Should archaeological deposits be present within the study area, for the local Dharug community, this would represent a tangible and meaningful connection to their ancestors.

The study area is therefore considered to have **high social and spiritual significance** to the local Aboriginal community, including both Dharug people as well as Aboriginal people from other Nations who live in the area.

The study area may have **moderate historical significance** for the early interactions and connections between Aboriginal people and early white settlers in this area of Parramatta.

Should the PSB be present within the study area, and contain a remnant Aboriginal archaeological deposit, the study area may have **high scientific significance** for its ability to contribute knowledge to the archaeological record about Aboriginal occupation of this area of Parramatta and across the PSB itself.



6. Conservation and Impact Assessment

As noted by the OEH, it is important that an impact assessment directly addresses the potential harm that an activity may pose, specific to an Aboriginal place, objects, site or archaeological deposit (OEH 2011: 12).

6.1 Ecologically Sustainable Development

One of the aims of the NPW Act is to 'conserve places, objects and features of significance to Aboriginal people' (NPW Act, Section 2A(1)(b)(i)). One of the ways in which this objective can be achieved, is via the consideration of the principles of Ecologically Sustainable Development (ESD). ESD is defined in Section 6 of the Protection of the Environmental Administration Act 1991 (NSW), as requiring the integration of both economic and environmental considerations (including cultural heritage) in the decision-making process for a development, with an aim to achieving, on balance, beneficial outcomes for both development, and Aboriginal cultural heritage.

ESD can be achieved by applying the precautionary principle and the principle of intergenerational equity to the nature of the proposed activity, in relation to the Aboriginal cultural heritage and archaeological values of a site.

6.1.1 Precautionary Principle

The precautionary principle states that if there are threats of serious or irreversible environmental damage, lack of scientific certainty should not be used as a reason for postponing cost-effective measures to prevent environmental degradation. In applying the precautionary principle, decisions should be guided by:

- a careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment; and
- an assessment of the risk-weighted consequences of various options.

The precautionary principle is relevant to DECC's [now OEH] consideration of potential impacts to Aboriginal cultural heritage where:

- the proposal involves a risk of serious or irreversible damage to Aboriginal objects or places or to the value of those objects or places; and
- there is uncertainty about the Aboriginal cultural heritage values or scientific or archaeological values, including in relation to the integrity, rarity, or representativeness of the Aboriginal objects or places proposed to be impacted.

Where this is the case, a precautionary approach should be taken and all cost-effective measures implemented to prevent or reduce damage to the objects/place. (DECC 2009: 26)

6.1.2 Intergenerational Equity

Intergenerational equity is the principle whereby the present generation should ensure the health, diversity and productivity of the environment for the benefit of future generations.



In terms of Aboriginal heritage, intergenerational equity can be considered in terms of the cumulative impacts to Aboriginal objects and places in a region. If few Aboriginal objects and places remain in a region (for example, because of impacts under previous AHIPs), fewer opportunities remain for future generations of Aboriginal people to enjoy the cultural benefits of those Aboriginal objects and places.

Information about the integrity, rarity or representativeness of the Aboriginal objects and places proposed to be impacted, and how they illustrate the occupation and use of land by Aboriginal people across the region, will be relevant to the consideration of intergenerational equity and the understanding of the cumulative impacts of a proposal.

Where there is uncertainty, the precautionary principle should also be followed. (DECC 2009: 26)

6.2 Proposed Activity

The proposed activity is the redevelopment of the study area for the construction of the Powerhouse Parramatta, and comprises:

- site preparation works, including the termination or relocation of site services and infrastructure, tree removal and the erection of site protection hoardings and fencing;
- demolition of existing buildings including the existing Riverbank Car Park and 'Willow Grove', (with 'Willow Grove' to be located to another site);
- construction of the Powerhouse Parramatta—two main buildings (west and east);
- operation and use of the Powerhouse Parramatta including use of the public domain provided on the site to support programs and functions;
- maintenance of the existing vehicular access easement via Dirrabarri Lane, the removal of Oyster Lane and termination of George Khattar Lane, and the provision of a new vehicular access point to Wilde Avenue for loading;
- public domain within the site including new public open space areas, landscaping and tree planting across the site; and
- building identification signage.

The project does not involve any alterations to the existing formed concrete edge of the Parramatta River or to the waterway itself.

Further detail is provided below about development activities that have potential to impact Aboriginal archaeological deposits and values. That is, activities that will disturb the ground surface.

Figure 6.1 to Figure 6.12 below present the relevant plans for the development, relevant to understanding below ground impacts that may present archaeological impact.



6.2.1 Demolition, Decommissioning & Decontamination

The structures currently on site include the Riverbank Car Park, 'Willow Grove' (1886), 'St George's Terrace' (1881), a small electricity substation, modern commercial structures at 36-40 Phillip St and hard surfaces such as pathways and roadways. The Riverbank Car Park, substation, and modern commercial structures will be demolished (in the case of the substation it will also be decommissioned) and removed for construction. 'Willow Grove' will be relocated to another site,³ while the St George's Terrace will be retained and adaptively reused as part of the Phillip Street frontage of Powerhouse Parramatta. It is anticipated that the above ground elements will be demolished to ground level, slabs and floors removed and subsurface footings pulled out of the ground. It is also possible that existing conduits and cables may be removed. Large amounts of asbestos conduits are present in the Parramatta CBD which are likely to be present in the area of the substation. The removal or existing cabling and asbestos conduits may necessitate extensive clearance and specialised handling.

The demolition, decommission and removal processes, in the vicinity of areas of archaeological potential, may therefore have physical impacts upon subsurface areas of the site with the potential to disturb or remove archaeological features and deposits.

6.2.2 Bulk Excavation Works

Bulk excavation works are proposed for beneath the new western and eastern buildings to accommodate the construction of an undercroft, plant and required services including grease arrestor, sewer and stormwater pumps, lift pits, foundation piles (see below), and rainwater/waste tank. ARUP (structural engineers) has advised that the majority of the site is "on grade", with some minor adjustments required according to computer modelling of the study area topography shown in dark yellow in Figure 6.3. More substantial excavations are shown as orange and red in the same figure. The red area shown in the same figure reflects the proposed undercroft to the Powerhouse.

6.2.3 Foundation Piling⁴

The structural foundation concept for the new development has been designed as necessary to comply with requirement to support long spans (>35m) and high floor loading capacities, as specified by the project brief. The two new buildings will be supported on large diameter piles drilled into sandstone bedrock, connected to the superstructure via pile caps supporting the main building columns, overlaid with a c.150mm concrete slab on grade (RL7.5m). Piles will extend between 4-10m into the bedrock (subject to geotechnical advice) with the total pile lengths varying from 14-20m. The concept for the piling foundations is the installation of approximately 22 and 20 perimeter piles (for the western and eastern buildings respectively), spanned by horizontal perimeter ground beams. The exact number and placement of piles will

³ The proposal for the relocation of Willow Grove is outlined in the Addendum Statement of Heritage Impact included within the Response to Submissions to the SSDA.

⁴ Description of foundation concept summarised from Arup, *Foundation- Preliminary Concept*, SSK-01, 12.2.2020

⁵ As per Architectural Design Brief



be confirmed and finalised by structural engineers. Perimeter piles are aligned to underlie the buildings perimeter support columns, with use of single piles, as well as paired piles, to support heavily loaded columns. Each perimeter pile would typically be 1800mm in diameter with a 2000mm x 2400mm x 2000mm deep pile cap (single piles), or 2000mm x 5700mm x 2000mm deep pile cap (paired piles).

Additional piles will be required across the footprints of the proposed east and west buildings to support architectural and design features that require additional sub-structural support (e.g. features such as educational floors and stairs in the eastern building, and support for concrete core walls and escalator in western building).

These piles will typically be 900mm in diameter with a 17m depth. There will also be additional piles along the north-eastern portion of the site supporting the façade of the building (Figure 6.3). The eastern building pile numbers have been reduced by 50%, but the piles will be connected by excavated band beams measuring 2400mm x 600mm deep. Excavations for these band beams are anticipated to require excavations larger than the finished dimensions to allow for formwork etc.

The concrete slab in both the western and eastern buildings will include subgrades which require the removal of all topsoil, grass roots etc and the additional depth for slabs and band beams with an additional 200mm worth of compressible layer and drainage layer. Piles across the study area would extend between 4-10m into the bedrock (subject to geotechnical advice) with the total pile lengths varying from 14-20m.

Other required structural support elements that will impact the ground surface are likely to include excavation of a trench along the northern wall of the western building to accommodate the movable door in this location (minimum 1m depth), and other smaller diameter piles (600mm-1200mm) for additional wall and door support, as well as foundational concrete pads.

6.2.4 Service Trenching

Existing service lines across the study area have been identified and located, of which the larger service lines are shown in Figure 6.10. The locations and dimensions of proposed service and utility trenching on the study area are shown in Figure 6.11 (green), which shows indicative locations and trenches that are likely to require excavation in the range of 1-7m depth and 600mm-3000mm (for each service) in width.

6.2.5 Landscaping and Other Minor Activities

Landscaping works at lower ground level will be mainly focused on the northern side of the new buildings, fronting the river foreshore. The existing strip of lawn and river path along the river foreshore will both be retained, while new lawn areas will be established fronting the undercroft of the new buildings. A new 'rain garden' is proposed to the west of the western building, integrated with the emergency vehicular access ramp to the river (Figure 6.12). Landscaping works will also include removal of some existing trees, and replacement with new native mature trees, as well as other native plantings.



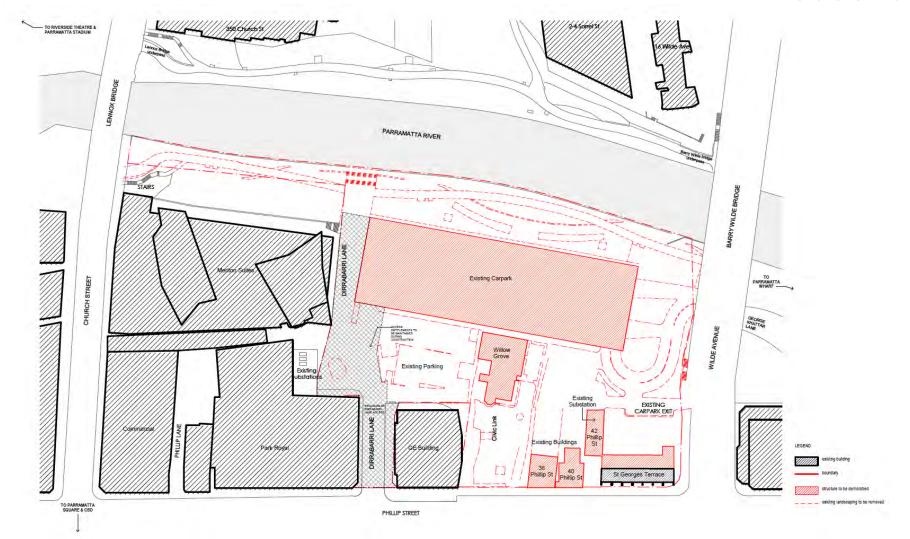


Figure 6.1: Site Demolition Plan (Moreau Kusunoki/Genton, DA061, Rev. 13, 19.10.2020)



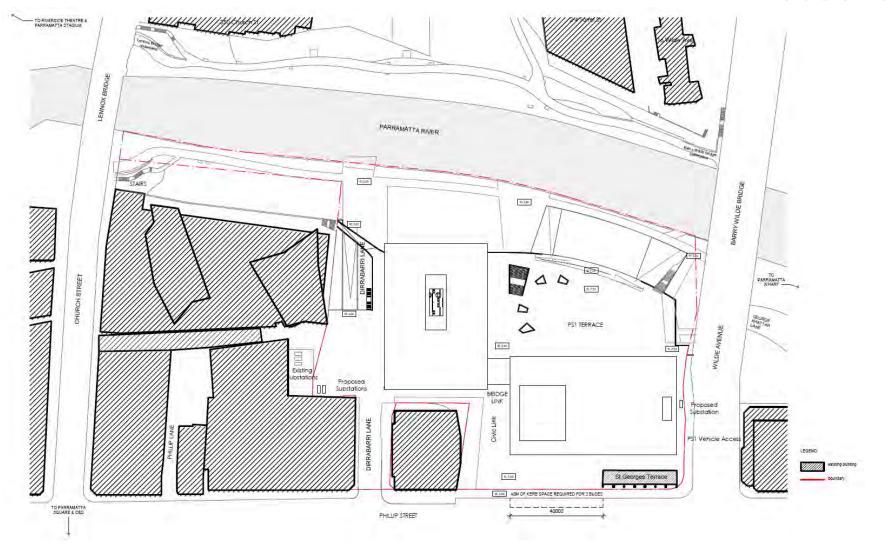


Figure 6.2: Proposed Site Master Plan (Moreau Kusunoki/Genton, DA062, Rev. 13, 19.10.2020)



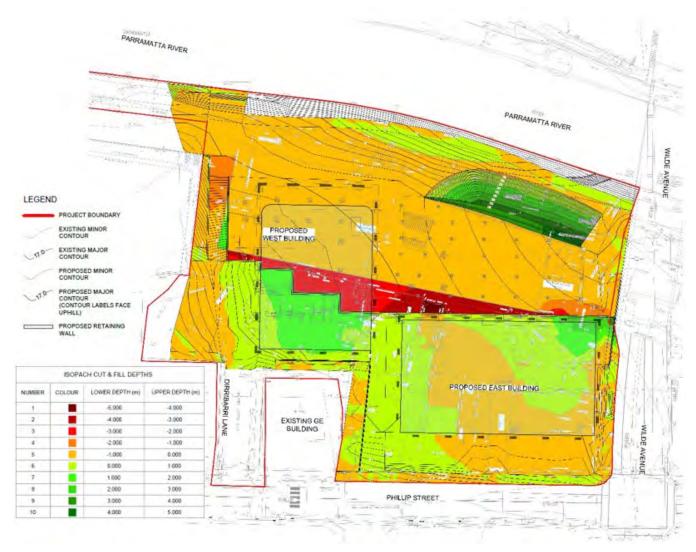


Figure 6.3: Plan of proposed cut and fill depths. Note the dark red bulk excavation area for the undercroft (Source: ARUP 2020)

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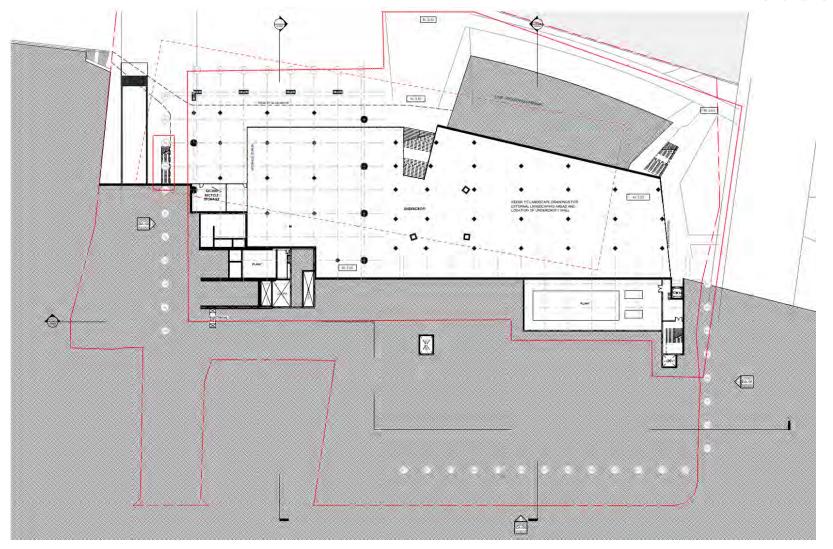


Figure 6.4: Lower Ground Level Floor Plan (Moreau Kusunoki/Genton, DA100, Rev. 12, 8.10.2020)



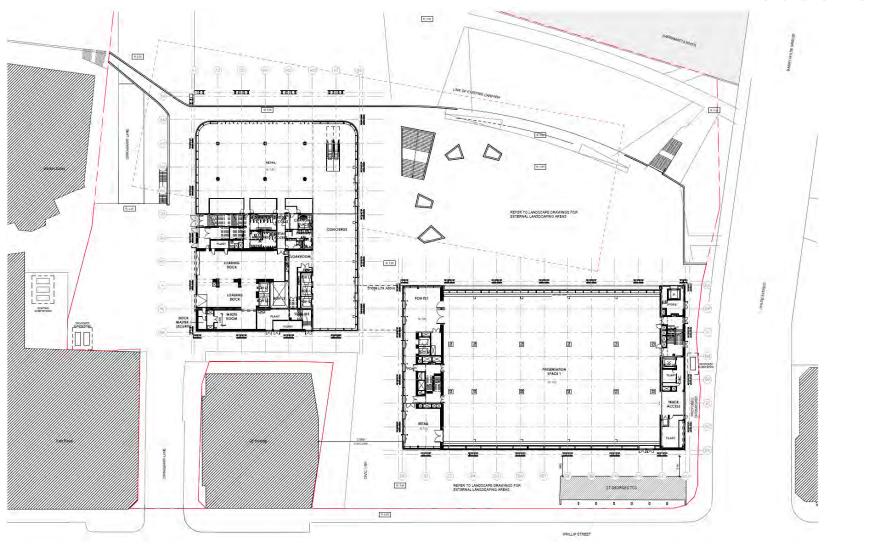


Figure 6.5: Ground Floor Plan (Moreau Kusunoki/Genton, DA101, Rev. 13, 19.10.2020)

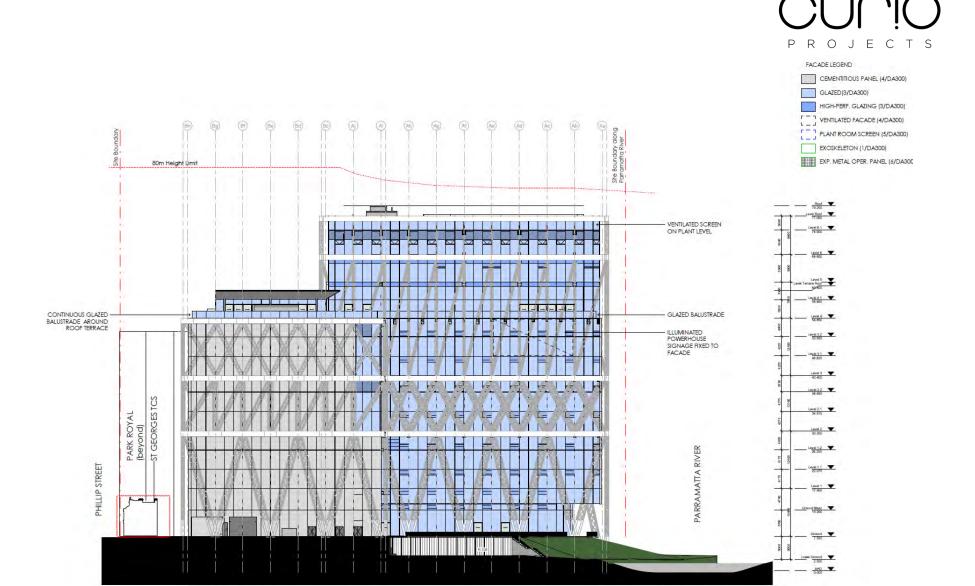


Figure 6.6: External Elevation East (Moreau Kusunoki/Genton, DA201, Rev. 13, 19.10.2020)



Figure 6.7: External Elevation South (Moreau Kusunoki/Genton, DA200, Rev. 12, 19.10.2020)



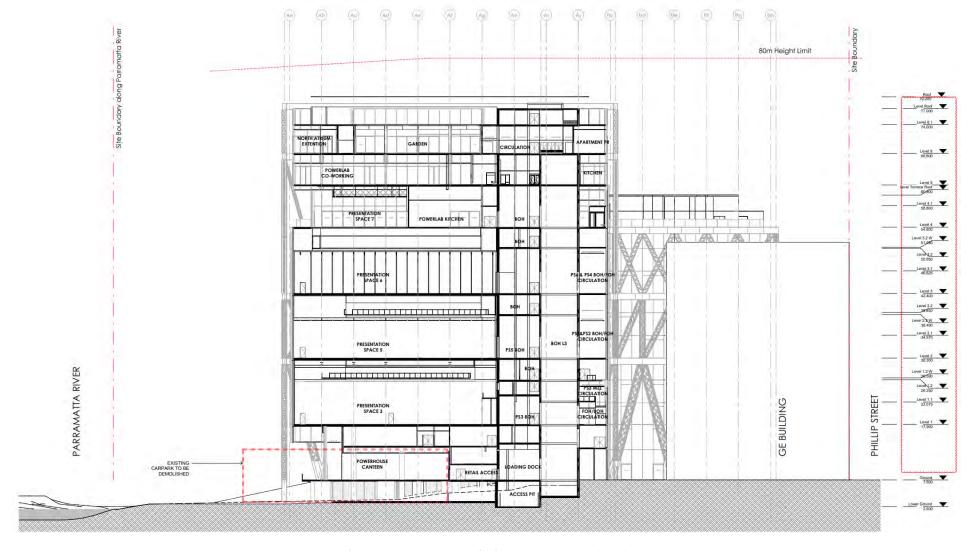


Figure 6.8: Section B (Moreau Kusunoki/Genton, DA251, Rev. 12, 8.10.2020)



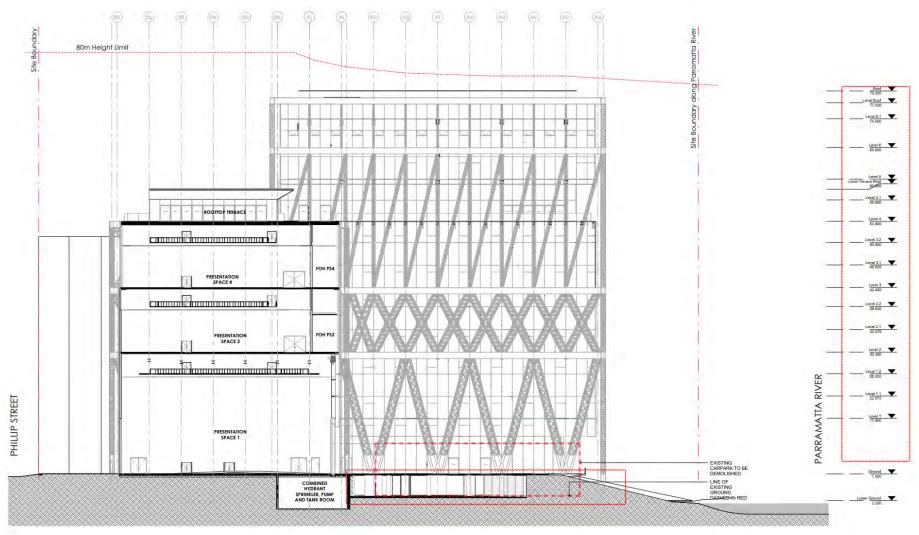


Figure 6.9: Section C (Moreau Kusunoki/Genton, DA252, Rev. 12, 8.10.2020)



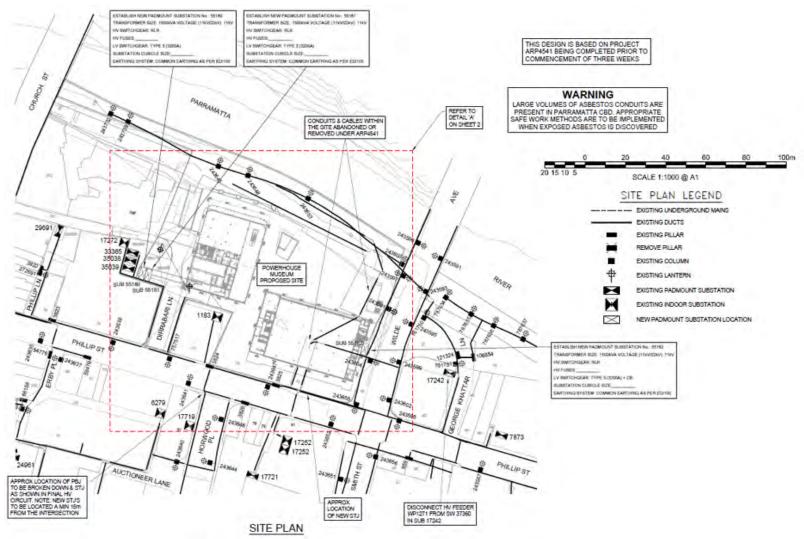


Figure 6.10: Plan of existing electrical services on the study area (Source: ARUP)

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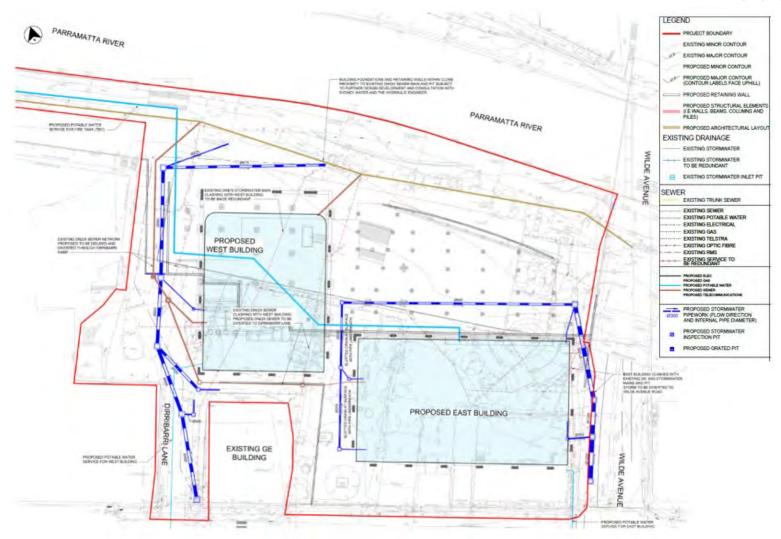


Figure 6.11: Stormwater, sewer, and portable water service strategy (Source: ARUP 2020)

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Figure 6.12: Landscape Plan, River Level (McGregor Coxall LD_DD-02, Rev. A, 14.9.2020)



6.3 Avoiding and Minimising Harm

While the provisions of the NPW Act hinge predominantly on the presence and protection of physical Aboriginal sites (i.e. and AHIP provides a defence against 'harm' to 'Aboriginal objects'), an effective and holistic assessment of potential impact to Aboriginal cultural heritage values as posed by a development is really two-fold:

- the physical and archaeological values of sites (tangible heritage); and
- the wider social and cultural impact of a development within a landscape (often relating to more intangible Aboriginal heritage values, lacking material evidence).

6.3.1 Potential Impact to Aboriginal Objects/Sites/Archaeology

Aboriginal archaeological potential within the Powerhouse study area is directly related to the possible presence of the PSB, and the Aboriginal archaeological potential associated with this feature. This is reflected by the location of the registered AHIMS PAD site (#45-6-3193) within the study area.

Development activities with the potential to impact Aboriginal sites and/or potential archaeology are those that extend below the ground surface within the zone of mapped Aboriginal archaeological potential.

Bulk excavation works located outside of the footprint of the existing multi-storey carpark in the south of the site have high potential to impact natural soils with the potential to retain Aboriginal archaeology (either partially or wholly). Foundation and structural piles will also have potential to impact soils with potential to retain an Aboriginal archaeological signature.

In addition, development works such as demolition of existing structures on site, landscaping, and excavation for new services, have potential to impact any contact period Aboriginal archaeology, should it be present at the site (see relevant section in Appendix C- ARD, regarding collaboration with historical archaeological investigations). Table 6.1 summarises these development activities with potential to impact Aboriginal sites and features, including assessment of the potential type, degree and consequence of these impacts. The main development activities with potential to impact Aboriginal archaeology are summarised and presented in Figure 6.13.

Table 6.1: Type and Degree of Impact and Harm that Development Activities may cause to Aboriginal sites

ACTIVITY	TYPE OF HARM	DEGREE OF HARM	CONSEQUENCE OF HARM
Bulk Excavation	Direct	Partial	Partial loss of value (dependent on nature of PAD present within the study area)
Foundation & Structural Piling	Direct	Partial	Partial loss of value (dependent on nature of PAD present within the study area)



ACTIVITY	TYPE OF HARM	DEGREE OF HARM	CONSEQUENCE OF HARM
Service Trenching	Direct	Partial	Partial loss of value (dependent on nature of PAD present within the study area)
Landscaping works	None	None	No loss of value (nil potential for Aboriginal archaeology within the footprint of the existing multi-storey carpark due to previous excavation works/along river foreshore)

6.3.2 Potential Impact to Aboriginal Cultural Heritage Values

As discussed in the introduction to this section above, intangible Aboriginal heritage values of a site or area are as important to the local Aboriginal community, if not more important, as the more tangible and physical evidence of Aboriginal life and culture that remains in the landscape. Therefore, it is appropriate to consider the potential impact the proposed development may have to wider intangible cultural heritage values, and, should potential impact be identified, appropriate management strategies should be developed to help mitigate this impact.

Aboriginal community consultation for other projects in the Parramatta CBD area has provided several relevant comments regarding potential impact to intangible heritage values associated with the study area and surrounds:

- The area is significant to the Dharug people due to the connection and proximity to the complex of significant sites in the Parramatta area and evidence of continued occupation
- Landscapes and landforms are significant for the information they hold, and connection to Dharug people. While physical evidence of the passage of Dharug people through the land may not necessarily remain evident today, people had intricate knowledge of their land and followed signs in the landscape–aware and respectful of restricted and sacred areas.

6.4 Proposed Conservation (Avoidance)

Curio Projects have worked closely with INSW through the design development for the Powerhouse Parramatta, in order to provide advice regarding the potential of the development to impact Aboriginal archaeology. Following from this advice, below ground development impacts were located as much as possible within areas of the study area that have already been excavated and/or highly disturbed (i.e. within the footprint of the multi-storey carpark), and therefore have low to no potential to contain Aboriginal archaeological deposits.

While the design has aimed to reduce the necessary below ground impacts as much as possible (thereby reducing potential impact to the Parramatta Sand Body (PSB)), proposed works are still likely to present a significant impact to the PSB. The proposed impacts of the design that will disturb the ground surface include a large portion of bulk excavation for an undercroft along the



southern boundary of the existing multi-storey carpark, foundation piling for both the eastern and western building footprints, and additional piles for structural support along the new façade in the north-eastern corner of the site.

Bulk excavation along the southern boundary of the existing multi-storey carpark area is required to accommodate the construction of the undercroft, plant, and required services for viability of the development. While an effort was made early in the design process to locate services on the roof and other parts of the site to avoid bulk excavation as much as possible, subsequent detailed and structural design identified the need for an undercroft area due to flood risks of the site, and additional basement space for services due to the structural limitations of the roof of the new buildings.

Piling is considered structurally necessary for the viability of the development in this location. However, impact can be reduced by reducing the number of piles where possible, and archaeologically, by avoiding opening the entire piling area (i.e. areas outside of those requiring bulk excavation works) with archaeological test trenches, and instead using a push tube excavation methodology (discussed further in the ARD in Appendix C).

6.5 Harm to Aboriginal Objects and Values

Table 6.2 presents a summary of the Aboriginal sites that have the potential to be harmed through the proposed development works, and summarises the type and degree of physical harm the proposed development may present. N.B. The potential harm proposed to this site is dependent on the results of Aboriginal archaeological investigation to confirm whether the PAD associated with the study area actually contains an intact Aboriginal archaeological deposit, or not.

Table 6.2: Physical Harm to Aboriginal Sites

SITE	TYPE OF HARM	DEGREE OF HARM	CONSEQUENCE OF HARM
#45-6-3193	Direct	Partial	Partial loss of value (dependent on nature of PAD present within the study area)



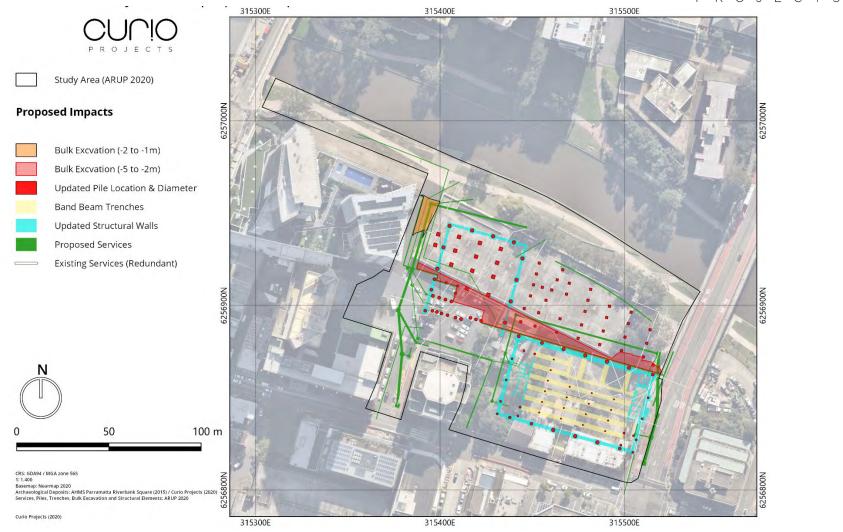


Figure 6.13: Proposed Development Impacts over study area (Source: Curio 2020)



7. Mitigation Measures, Conclusions and Recommendations

Proposed development works for the construction of the Powerhouse Parramatta have potential to impact Aboriginal objects and archaeology, and therefore require the development of mitigation measures to offset this potential impact.

The cultural heritage significance of the Powerhouse Parramatta study area to the local Aboriginal community has been readily communicated by both Dharug stakeholders, and Aboriginal people from other nations who live in the area, particularly with respect to the association of the study area with the exceptional cultural significance of the Parramatta River. Therefore, any potential impact to Aboriginal cultural heritage values is also proposed to be managed via the introduction of mitigation measures as detailed in the following section.

7.1 Mitigation Measures

The potential impact of the Powerhouse Parramatta project to the Aboriginal archaeological potential and Aboriginal cultural heritage values of the study area is proposed to be managed and mitigated via two main strategies:

- Archaeological investigation; and
- Aboriginal Heritage Interpretation to facilitate a long term conservation outcome for Aboriginal cultural heritage values (tangible and intangible) within the proposed development.

It is believed that the application of these strategies through the Powerhouse Parramatta project will serve to minimise harm posed by the development to Aboriginal cultural heritage values. The proposed mitigation measures are summarised in Table 7.1 and detailed further in the following subsections.

PROPOSED MEASURE	TIMING
Aboriginal Archaeological Investigation	Prior to/in collaboration with development works
Aboriginal Heritage Interpretation	Prior to completion of project

Table 7.1: Summary of Mitigation Measures

7.1.1 Strategy One—Aboriginal Archaeological Investigation

An Aboriginal archaeological excavation methodology and research design has been developed for the Powerhouse Parramatta study area, based on the archaeological predictive model and Aboriginal archaeological sensitivity mapping as presented through this ACHAR. The primary aim of the proposed archaeological works will be to investigate the nature and extent of any subsurface Aboriginal archaeological deposit (i.e. to the registered site located within the study area—AHIMS #45-6-3192), within the impact zones of the proposed development. This methodology and research design is attached to this ACHAR as Appendix C.



The methodology generally entails a two stage approach to the investigation of Aboriginal archaeology within the study area, predicated on the locations of excavation impact areas as required by the development, as follows:

- 7 Initial testing of the Aboriginal archaeological potential of the main impact zones of the study area (Phase 1) with an aim to identify the presence or absence of intact subsurface profiles of the PSB and any associated Aboriginal archaeological deposit that may be present; and
- 8 Guided by the results of the initial testing (Phase 1), Phase 2 (salvage excavation) is proposed to be undertaken within development impact zones in order to recover the entirety of any Aboriginal archaeological deposit within the study area that requires impact through the proposed development works.

7.1.2 Strategy Two—Aboriginal Heritage Interpretation

Appropriate heritage interpretation can contribute to the conservation and celebration of the history and cultural heritage of the local Dharug people and wider local Aboriginal community, preserving their culture, history and stories within the development for generations to come.

A Heritage Interpretation Strategy has been prepared for the Powerhouse Parramatta (NSW Government & MAAS, September 2020), submitted with the Response to Submissions for the SSDA in October 2020.

The Powerhouse approach to Heritage Interpretation for the Powerhouse Parramatta is summarised below, with respect to Aboriginal heritage specifically.

As an institution profoundly qualified in telling the stories that connect objects, people, and place, Powerhouse Parramatta is uniquely placed to undertake a consultative, innovative and multifaceted approach to heritage interpretation. Heritage interpretation will manifest as both permanent heritage interpretation alongside an ongoing programmatic and strategic commitment to heritage interpretation.

The Heritage Interpretation Strategy is underpinned by the Powerhouse Precinct Indigenous Perspectives Document2 and the Museum of Applied Arts and Sciences Australian Indigenous Cultural and Intellectual Property Protocol which recognise Aboriginal and Torres Strait Islander peoples as the 'primary guardians, interpreters and decision makers with deep cultural connections and authoritative values and perspectives.'3 These documents summarise processes and guidelines for the Display of Cultural Material, Engagement Methodology and Archaeology.

The Powerhouse Precinct Indigenous Perspectives Document states: 'Continuity for Aboriginal and Torres Strait Islander culture is built on enduring rights that relate to the ownership of context and interpretation; and the rights to protect, control, benefit from and maintain, revitalise and advance ongoing practice.' Aboriginal and Torres Strait Islander 'ownership of cultural material – both tangible and intangible – is acknowledged, honoured and upheld.' This Heritage Interpretation Strategy is based on



ongoing consultation (guided by Statements of Understanding) with Aboriginal and Torres Strait Traditional owner and custodian groups.⁶

The Interpretation Strategy proposes three key Interpretation Principles:

- Connecting Communities with the Parramatta River
- Connecting local histories with the Powerhouse Collection; and
- Community Collaboration

The Interpretation Strategy proposes five interpretation themes, that sit within the National and State Thematic Framework as the basis for future interpretive elements. These themes will support ongoing interpretive program opportunities whilst recognising the rich and diverse history of the site, place and its people, and include:

- Gathering
- Agriculture
- Time
- Family Relations; and
- Belongings.

Following from this Stage 1 Interpretation Strategy, a Stage 2 Interpretation Plan will be developed for the Powerhouse Parramatta, that will outline the interpretive elements to be include at the site. The Stage 2 Interpretation Plan will be informed by consultation with a range of stakeholders, including the Deerubbin Local Aboriginal Land Council, Dharug Strategic Management Group, and Traditional Owners.

The interpretive elements to be developed through the Stage 2 Interpretation Plan will also be informed by any archaeological discoveries on the site.

Powerhouse Parramatta has commenced an expansive community consultation process that will be ongoing throughout its development and continue to inform all elements of the institution.

Based on preliminary consultation to date, the following are feedback and ideas provided by community and stakeholders during consultation that will be considered by the in the development of the Heritage Interpretation Plan, specific to the discussion topic of *Aboriginal perspectives*:

- Listening and learning;
- Recognising and respecting associations with place;
- Recognising and respecting the substantial Aboriginal histories of Parramatta and the Parramatta River;
- Recognising the River as a living entity;

⁶ Powerhouse Parramatta Heritage Interpretation Strategy, 2020, p. 8



- Acknowledging the limitations of post settlement development methods that contradict Aboriginal cultural values;
- Allowing for the continuation of storytelling rathe rthan static elements that only represent a point in time;
- Providing a space for associations to be recognized and celebrated; and
- Not shying away from past atrocities.⁷

The Heritage Interpretation Strategy prepared for the study area also includes an analysis of current public art and existing interpretation installations within or in relative proximity to the study area in order to ensure that future interpretation initiatives will be relevant and meaningful in the locational context of the study area.

7.1.3 Management of Aboriginal Objects

There are several options when it comes to the long-term management and curation of Aboriginal stone objects, once recovered from excavations. The suitability of each option depends on a number of factors including the nature of the development, the significance and extent of the deposit, and the wishes of the Aboriginal community.

Long term management options for the management of Aboriginal objects recovered from the Powerhouse Parramatta study area, could include:

- reburial in accordance with Requirement 26 'Stone artefact deposition and storage' in the Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW';
- incorporation within future interpretive opportunities on site;
- integration with City of Parramatta Council managed Keeping Place established for Aboriginal artefacts recovered from Parramatta Square; or
- other strategies as suggested by project RAPs.

Discussion with project RAPs through the consultation process and review of the draft ACHAR has indicated that preferred long term management of any Aboriginal objects recovered from the Powerhouse Parramatta site would be either/or a combination of: integration within interpretative initiatives within he future Powerhouse site, and/or integration into the wider Keeping Place repository established by Council for Parramatta Square.

Final decision of long term management for artefacts should be determined and confirmed by project RAPs in consultation/discussion with Infrastructure NSW, Powerhouse Museum, and Curio Projects, prior to the conclusion of archaeological investigations within the study area.

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⁷ Powerhouse Parramatta Heritage Interpretation Strategy, 2020, p. 22



7.2 Unexpected Finds Policy

7.2.1 Unexpected Aboriginal Objects

Upon discovery of an archaeological feature that is suspected to be an Aboriginal Unexpected Find (excluding human remains- see Section 7.2.2 below), the following procedure should be followed:

- 1. Cease works in the immediate vicinity of the find.
- 2. Contact the project archaeologist to verify the nature of the find.
- 3. If Unexpected Find is confirmed as Aboriginal archaeology, project archaeologist will notify project RAPs and DPIE of the find. (If Unexpected Find is confirmed as not Aboriginal in origin, project archaeologist will provide advice for works to recommence).
- 4. Project Archaeologist/Project RAPs will undertake a preliminary assessment and recording of the find.
- 5. Formulate archaeological or heritage management plan- specific to nature of the find.
- 6. Implement archaeological/heritage management plan.
- 7. Works may commence once archaeological/heritage management plan has been successfully implemented and project archaeologist provides sign off to contractor for works to resume in vicinity of find.

7.2.2 Unexpected Skeletal Remains

While not anticipated to be encountered within the Powerhouse Parramatta study area, the unexpected discovery of any potential skeletal remains during development works would be managed in accordance with the approved Heritage NSW protocol for the discovery of human remains which is stated as:

If any suspected human remains are discovered and/or harmed the proponent must:

- a) Not further harm these remains;
- b) Immediately cease all work at the particular location;
- c) Secure the area so as to avoid further harm to the remains;
- d) Notify the local police and OEH's Environment Line on 131 555 as soon as practicable and provide any available details of the remains and their location; and
- e) Not recommence any work at the particular location unless authorised in writing by Heritage NSW.

7.3 Conclusions and Recommendations

This report relates specifically to the proposed development impacts of the Powerhouse Parramatta in relation to potential Aboriginal archaeological and cultural heritage impacts, and provides recommendations for management and mitigation of development impacts, both archaeologically (i.e. ground disturbing works), as well as culturally (i.e. opportunities for Aboriginal cultural heritage interpretation within the site redevelopment).

These following conclusions and recommendations are made on the basis of:



- Legislation as detailed and adhered to through this ACHAR, including the NPW Act, EP&A
 Act, and relevant statutory guidelines, protecting Aboriginal cultural and archaeological
 objects and places in NSW;
- Background research and archaeological analysis of the study area in its local and regional contexts;
- Consultation with the local Aboriginal community regarding the cultural significance of the study area and surrounding Parramatta CBD and River area, noting their concerns, views and requests; and
- The impact of the proposed development works within the Powerhouse Parramatta study area.

7.3.1 Conclusions

- This ACHAR documents the process of investigation, consultation and assessment with regards to Aboriginal cultural heritage and Aboriginal archaeology, as undertaken for the Powerhouse Parramatta study area and proposed development works.
- The study area is situated across the interface/approximate boundary between the Holocene (modern) floodplain of the Parramatta River on the northern part of the study area, and the Parramatta Sand Sheet (PSB) in the south; a fluvial sand profile dating to the Pleistocene epoch (i.e. >10,000 years BP) that has been demonstrated through previous archaeological excavations in the Parramatta CBD area to contain stratified Aboriginal archaeological materials.
- One registered Aboriginal site is located within the study area (AHIMS Site #45-6-3192 'Riverbank Square'), impact to which will require mitigation and further investigation (as identified and detailed through this ACHAR).
- Aboriginal site types most likely to be located within the study area would be artefact and PAD sites (as represented by the registered AHIMS site).
- In general, the study area has potential for Aboriginal archaeological deposits to be present in locations where previous historical disturbance would not have caused excavation/removal of all natural soil profiles, summarised as follows:
 - The at-grade car park across in the southern parts of the study area retain high Aboriginal archaeological potential. These areas are also located across the northern mapped extent of the PSB, and therefore have high potential for the PSB to be retained in these locations, buried beneath the existing asphalt and concrete surfaces.
 - The footprint of the multi-storey Riverside Car Park has nil to very low Aboriginal archaeological potential, due to the substantial levels of excavation undertaken for its construction, which would have removed all natural soil profiles in this location.



- o The southern bank of the Parramatta River also has nil to very low Aboriginal archaeological potential due to flooding and scouring activities, as well as flood mitigation activities such as land reclamation and sea wall construction, and other significant landscaping management works along the southern foreshore.
- o Portions of the site located on the southern edge of the Holocene floodplain (i.e. near the mapped boundary between the Pleistocene and Holocene deposits) where disturbance has not exceeded 2m below current ground, have low Aboriginal archaeological potential.
- The study area has **high social and spiritual significance** to the local Aboriginal community, including both Dharug people as well as Aboriginal people from other Nations who live in the area.
- The study area has high research potential because of its location within the mapped area of the PSB. Should the PSB be present within the study area, and contain a remnant Aboriginal archaeological deposit, the study area may have high scientific significance for its ability to contribute knowledge to the archaeological record about Aboriginal occupation of this area of Parramatta and across the PSB itself. (TBC following the results of Aboriginal archeological excavation).
- Development activities that have potential to impact Aboriginal archaeological deposits and values (i.e. activities that will disturb the ground surface) include bulk excavation works, structural foundation works (i.e. piling), and trenching for services/utilities.
- The design has made a concerted effort to reduce and avoid impacts within the mapped areas of the PSB and areas of high Aboriginal archaeological sensitivity, by locating below ground impacts within areas of the study area that have already been excavated and/or highly disturbed as much as possible (i.e. within the footprint of the multi-storey carpark), and therefore have low to no potential to contain Aboriginal archaeological deposits.
- Unavoidable development impacts located within areas of Aboriginal archaeological sensitivity will require mitigation via archaeological investigation.

7.3.2 Recommendations

The following recommendations are made in light of the conclusions above, following from the Aboriginal cultural heritage assessment of Powerhouse Parramatta concept design and proposed development impacts, including Aboriginal community consultation, ethnohistorical and environmental context, predictive modelling, heritage significance assessment and impact assessment, in accordance with relevant NSW statutory guidelines. It is recommended that:

- As an SSD project, the Powerhouse Parramatta project is exempt from the requirement to seek an AHIP under Section 90 of the NPW Act, however appropriate management and mitigation measures should be applied to the site, namely in the form of:
 - 1. Aboriginal archaeological excavation



2. Aboriginal heritage interpretation

- Aboriginal archaeological excavation works within the study area should be undertaken in accordance with the excavation methodology and research design as developed for and included within this ACHAR (Appendix C).
- The program of Aboriginal archaeological excavation should be coordinated with the historical archaeological investigation works required for the development (as per the Powerhouse Parramatta —Historical Archaeological Assessment & ARD, Curio Projects 2020).
- Representatives from the recognised knowledge holders/Aboriginal stakeholders as identified through the Aboriginal community consultation process for the project, should be present for and participate in the archaeological investigation works within the Powerhouse Parramatta study area.
- Prior to commencement of site works, site contractors should undergo an Aboriginal cultural heritage induction, to be lead/delivered by project RAPs, to communicate significance of site, deposits, and need to protect and conserve.
- Final decision of long term management for artefacts should be determined and confirmed by project RAPs in consultation/discussion with Infrastructure NSW, Powerhouse Museum, and Curio Projects, prior to the conclusion of archaeological investigations within the study area.
- Once archaeological investigation works have been completed within the study area, an Aboriginal Site Impact Recording Form should be submitted to the AHIMS Registrar, to update the AHIMS site card for the registered Aboriginal site #45-6-3192 'Riverbank Square'.
- Following the completion of the Aboriginal archaeological investigation within the study area, a post-excavation report should be prepared detailing the findings and results of the investigation, to be submitted to the project RAPs, and Aboriginal Heritage Regulation Section of Heritage NSW for their information and records.
- With respect to Aboriginal intangible heritage values (social and cultural), the
 Powerhouse Parramatta project presents an opportunity for a positive impact, to be
 achieved via the installation of Aboriginal cultural heritage interpretation elements within
 the site, to celebrate and communicate the significance of the site and landscape to both
 Dharug people as well as the wider local Aboriginal community.
- Continuing consultation with the identified Aboriginal stakeholders should be undertaken throughout the project.



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APPENDIX A—Aboriginal Community Consultation Log



APPENDIX A—Aboriginal Consultation Log—New Powerhouse Parramatta

Stage 1—Notification of project proposal and registration of interest

Stage 1.1—Compilation of a list of Aboriginal stakeholders

STATUTORY BODY	CONTACT	DATE SENT	DATE REPLY	COMMENT
NSW Aboriginal Planning Division (DPIE) Regional Office (now Aboriginal cultural heritage regulation of Heritage NSW, Department of Premier & Cabinet)	Susan Harrison	3.3.2020	3.3.2020	List of all registered groups Greater Sydney.
The Registrar, Aboriginal Land Rights Act		3.3.2020	26.3.20	A search of the RAO has shown that there are currently no Registered Aboriginal Owners in the project area. We suggest you contact the Deerubbin Local Aboriginal Land Council.
National Native Title Tribunal		3.3.2020		Search of NNTT site. No current native title claims or determinations.
Deerubbin Local Aboriginal Land Council (LALC)	Steve Randall	3.3.2020	5.3.2020	Deerubbin registration.
City of Parramatta Council	Steven Ross	3.3.2020	5.3.2020	List of relevant Aboriginal groups
Native Title Services Corp		3.3.2020		
Greater Sydney Local Land Services		3.3.2020		

Curio Projects Pty Ltd 5 Blackfriars Street, Chippendale NSW 2008 ABN 7913918403



Stage 1.2—Newspaper Advertisement

NEWSPAPER	DATE PUBLISHED
Parramatta Advertiser	Wed 11 March 2020

A minimum 14 days were allowed for Aboriginal people to respond to the newspaper advertisement (25 March 2020).

Stage 1.3 and 1.4—List of Aboriginal groups/people from Stage 1.1 and 1.2, Aboriginal notification of proposed project and offer to be involved in consultation

ORGANISATION/PERSON	CONTACT	NAME OBTAINED	DATE CONTACTED	DATE REGISTERED	COMMENT
Deerubbin LALC	Kevin Cavanagh	DPIE	19.3.20	5.3.20	
Gandangara LALC	Melissa Williams	DPIE	19.3.20		Reminder sent 3.4.20. 9.4.20 - Darren Duncan called to query if they were in the area. Darren will confirm.
Parramatta City Council Aboriginal Advisory Committee	Parramatta City Council	DPIE	13.3.20	2.4.20	Invitation posted. Registration was from Phil Russo.
Darug Custodian Aboriginal Corporation	Justine Coplin	DPIE	19.3.20	26.3.20	
Darug Tribal Aboriginal Corporation		DPIE	19.3.20		Invitation posted. Follow up call 3.4.20 and left message.
Darug Aboriginal Cultural heritage Assessments	Gordon Morton/Celestine Everingham	DPIE	19.3.20	2.4.20	Invitation posted.



ORGANISATION/PERSON	CONTACT	NAME OBTAINED	DATE CONTACTED	DATE REGISTERED	COMMENT
Darug Land Observations	Jamie and Anna Workman	DPIE	19.3.20		Reminder sent 3.4.20
Darug Aboriginal Land Care	Des Dyer	DPIE	19.3.20	15.4.20	Reminder sent 3.4.20
A1 Indigenous Services	Carolyn Hickey	DPIE	19.3.20	23.3.20	
Gunjeewong Cultural Heritage Aboriginal Corporation	Cherie Carroll Turrise/ Cheryl Carroll Lagerwey	DPIE	19.3.20		Reminder sent 3.4.20
Corroborree Aboriginal Corporation	Marilyn Carroll- Johnson	DPIE	19.3.20	20.3.20	
Murra Bidgee Mullangari Aboriginal Corporation	Darleen Johnson	DPIE	19.3.20	2.4.20	Invitation posted.
Muragadi Heritage Indigenous Corporation	Jesse Johnson	DPIE	19.3.20	2.4.20	
Bidjawong Aboriginal Corporation	James Carroll	DPIE	19.3.20	30.3.20	Invitation posted 19.3.20 and it was returned to sender. Spoke to James and he provided an email address so invitation was emailed 30.3.20 and he registered immediately.
Kamilaroi Yankuntjatjara Working Group	Phil Khan	DPIE	19.3.20	24.3.20	



ORGANISATION/PERSON	CONTACT	NAME OBTAINED	DATE CONTACTED	DATE REGISTERED	COMMENT
Wurrumay Pty Ltd	Kerrie and Vicky Slater	DPIE	19.3.20		Reminder sent 3.4.20
Warragil Cultural Services	Aaron Slater	DPIE	19.3.20		Invitation posted.
Tocomwall	Scott Franks	DPIE	19.3.20	2.4.20	Invitation posted. Follow up call 2.4.20 and it was not received. Sent by email given by Scott 2.4.20 and confirmed registration over the phone and by email.
Amanda Hickey Cultural Services	Amanda Hickey	DPIE	19.3.20	3.4.20	Reminder sent 3.4.20
Widescope Indigenous Group	Steven and Donna Hickey	DPIE	19.3.20	2.4.20	Invitation posted. Follow up call 2.4.20 – not received . Donna requested Steven be registered, and copy of invitation emailed to address provided by Donna.
Dhinawan Culture & Heritage Pty Ltd	Stephen Fields	DPIE	19.3.20	23.2.20	
HSB Consultants	Patricia Hampton	DPIE	19.3.20		Invitation posted. Follow up call 2.4.20 – not received as address has been changed. Sent by email provided by Patricia.
Rane Consulting	Tony Williams	DPIE	19.3.20		Reminder sent 3.4.20
Anthony Williams		DPIE	13.3.20		Invitation posted. Follow up call 2.4.20 – left voice message. Mail has been returned, Anthony moved out Dec 2019. Left voicemail 14.4.20



ORGANISATION/PERSON	CONTACT	NAME OBTAINED	DATE CONTACTED	DATE REGISTERED	COMMENT
					asking him for new address or confirmation if he would like to be registered.
Gunyu	Lylie Ann Bell	DPIE	19.3.20		Reminder sent 3.4.20
Walbunja	Hika Te Kowhai	DPIE	19.3.20		Reminder sent 3.4.20
Badu	Karia Lea bond	DPIE	19.3.20		Invitation posted. Follow up call 2.4.20 – number disconnected and searched google for another contact with no results.
Goobah Developments	Basil Smith	DPIE	19.3.20		Reminder sent 3.4.20
Wullung	Lee-Roy James Boota	DPIE	19.3.20		Invitation posted. Follow up call 2.4.20 – left voice message.
Yerramurra	Robert Parson	DPIE	19.3.20		Reminder sent 3.4.20
Nundagurri	Newton Carriage	DPIE	19.3.20		Reminder sent 3.4.20
Murrumbul	Mark Henry	DPIE	19.3.20		Reminder sent 3.4.20
Jerringong	Joanne Anne Stewart	DPIE	19.3.20		Reminder sent 3.4.20



ORGANISATION/PERSON	CONTACT	NAME OBTAINED	DATE CONTACTED	DATE REGISTERED	COMMENT
Pemulwuy CHTS	Pemulwuy Johnson	DPIE	19.3.20		Reminder sent 3.4.20
Bilinga	Simalene Carriage	DPIE	19.3.20		Reminder sent 3.4.20
Munyunga	Kaya Dawn Bell	DPIE	19.3.20		Reminder sent 3.4.20
Wingikara	Hayley Bell	DPIE	20.3.20		Reminder sent 3.4.20
Minnamunnung	Aaron Broad	DPIE	19.3.20		Invitation posted. Follow up call 2.4.20 – not received. Reposted 6.4.20 to same address as advised by Aaron.
Walgalu	Ronald Stewart	DPIE	20.3.20		Reminder sent 3.4.20
Thauaira	Shane Carriage	DPIE	20.3.20		Reminder sent 3.4.20
Dharug	Andrew Bond	DPIE	20.3.20		Reminder sent 3.4.20
Gulaga	Wendy Smith	DPIE	20.3.20		Reminder sent 3.4.20
Biamanga	Seli Storer	DPIE	20.3.20		Reminder sent 3.4.20



ORGANISATION/PERSON	CONTACT	NAME OBTAINED	DATE CONTACTED	DATE REGISTERED	COMMENT
Callendulla	Corey Smith	DPIE	20.3.20		Reminder sent 3.4.20
Murramarang	Roxanne Smith	DPIE	20.3.20		Reminder sent 3.4.20
DLMD Consultancy	Darren Duncan	DPIE	20.3.20		Reminder sent 3.4.20
Butucarbin Aboriginal Corporation	Jennifer Beale	DPIE	20.3.20		Reminder sent 3.4.20
Didge Ngunawal Clan	Lillie Carroll and Paul Boyd	DPIE	20.3.20	20.3.20	
Ginninderra Aboriginal Corporation	Steven Johnson and Krystle Carroll	DPIE	20.3.20	3.4.20	Reminder sent 3.4.20
Wailwan Aboriginal Group	Philip Boney	DPIE	20.3.20		Reminder sent 3.4.20
Barking Owl Aboriginal Corporation	Mrs Judy Kulakowski	DPIE	20.3.20	3.4.20	Reminder sent 3.4.20
Yulay Cultural Services	Arika Jalomaki	DPIE	20.3.20		Reminder sent 3.4.20
Thoorga Nura	John Carriage	DPIE	20.3.20		Reminder sent 3.4.20



ORGANISATION/PERSON	CONTACT	NAME OBTAINED	DATE CONTACTED	DATE REGISTERED	COMMENT
Barraby Cultural Services	Lee Field	DPIE	20.3.20	3.4.20	Reminder sent 3.4.20
Yurrandaali Cultural Services	Bo field	DPIE	20.3.20	3.4.20	Reminder sent 3.4.20
Darug Boorooberongal Elders Aborignal Corporation	Paul Hand	DPIE	20.3.20		Reminder sent 3.4.20
B.H. Heritage consultants	Ralph & Nola Hampton	DPIE	20.3.20		Reminder sent 3.4.20
Ngambaa Cultural Connections	Kaarina Slater	DPIE	20.3.20		Reminder sent 3.4.20
Goodradigbee Cultural & Heritage Aboriginal Corporation	Caine Carroll	DPIE	20.3.20	20.3.20	
Mura Indigenous Corporation	Phillip Carroll	DPIE	20.3.20		No delivery notice received, however confirmation of delivery was received later – 2.31pm. Reminder sent 3.4.20 – this has come back as undeliverable; and phone number provided is disconnected. Cannot locate on a Google search.
Aragung Aboriginal Cultural Heritage Site Assessments	Jamie Eastwood	DPIE	20.3.20	3.4.20	Reminder sent 3.4.20
Waawaar Awaa	Rodney Gunther	DPIE	20.3.20		Reminder sent 3.4.20



ORGANISATION/PERSON	CONTACT	NAME OBTAINED	DATE CONTACTED	DATE REGISTERED	COMMENT
Clive Freeman (Freeman and Marx)	Clive Freeman	DPIE	20.3.20	21.3.20	
Dharug Ngurra Aboriginal Corporation	Corina	PCC	20.3.20	3.4.20	Reminder sent 3.4.20
Dharug Custodians		PCC	20.3.20		Reminder sent 3.4.20
Burbaga Aboriginal Corporation		PCC	20.3.20		Email address undeliverable, tried to call and left messages on the 20.3.20, 23.3.20 and 31.3.20. Found a contact following google search and posted to Sandra Lee, 154 Hill End Rd Doonside on 31.3.20.
NSW State Aboriginal Land Council	David Lee	PCC	20.3.20		Reminder sent 3.4.20. Another reminder emailed 14.4.20 as David Lee had been on leave and no response has been received as yet. It is confirmed that email had been delivered on the 3.4.20. Received response 14.4. 20 – matter is being referred to Stephen Hynd, Executive Director of Land, Legal and Strategy. Query received from Sharon Close 15.4.20.
Parramatta Koori Interagency	Jayde Kelly	PCC	20.3.20		Reminder sent 3.4.20
Link Up		PCC	20.3.20		Reminder sent 3.4.20



ORGANISATION/PERSON	CONTACT	NAME OBTAINED	DATE CONTACTED	DATE REGISTERED	COMMENT
Dharug Strategic Management Group (DSMG)	Michelle Locke	MAAS	3.3.20	3.3.20	Automatic registration from MAAS process.

A minimum 14 days were allowed for Aboriginal people to register and interest to be consulted.

Stage 1.5—Registered Aboriginal Parties (In Alphabetical Order)

ORGANISATION/PERSON	CONTACT	METHOD REGISTERED	REGISTRATION DATE & COMMENT
A1 Indigenous Services	Carolyn Hickey	Email	22.3.20
Amanda Hickey Cultural Services	Amanda Dezwart	Email	3.4.20
Aragung	Jamie Eastwood	Email	3.4.20
Barking Owl Aboriginal Corporation	Mrs Judy Kulakowski	Email	3.4.20
Barraby Cultural Services	Lee Field	Email	3.4.20
Bidjawong Aboriginal Corporation	James Carroll	Phone	30.3.20 – post returned, follow up call 30.3.20 and invitation sent by email provided by James. Requested registration during phone call.
Butucarbin Aboriginal Corporation	Jennifer Beale	Email	3.4.20
Corroboree Aboriginal Corporation	Marilyn Carroll-Johnson	Email	20.3.20 - Request do not disclose details.
Darug Aboriginal Cultural Heritage Assessments	Celestine Everingham	Phone	2.4.20
Darug Aboriginal Land Care	Mark Dyer	Email	15.4.20
Darug Custodian Aboriginal Corporation	Justine Coplin	Email	26.3.20
Deerubbin LALC	Steve Randall	Email	5.3.2020. Also received email from Stephen Wright 1.4.20.



ORGANISATION/PERSON	CONTACT	METHOD REGISTERED	REGISTRATION DATE & COMMENT
Dharug Ngurra Aboriginal Corporation	Corina	Email	3.4.20
Dharug Strategic Management Group (DSMG)	Michelle Locke	Email-Automatic registration from MAAS process	3.3.2020
Dhinawan Culture and Heritage	Stephen Fields	Email	23.3.20
Didge Ngunawal Clan	Paul Boyd & Lilly Carroll	Email	20.3.20
Freeman and Marx	Clive Freeman	Email	21.3.20
Ginninderra Aboriginal Corporation	Krystle Carroll-Elliott	Email	3.4.20
Goodradigbee Cultural & Heritage Aboriginal Corporation	Caine Carroll	Email	20.3.20
Kamilaroi Yankuntjatjara Working Group	Phil Khan	Email	24.3.20
Merrigarn	Shaun Carroll	Email	2.4.20
Muragadi Heritage Indigenous Corporation	Jesse & Anthony Johnson	Email	30.3.20 & 2.4.20
Murra Bidgee Mullangari Aboriginal Corporation	Ryan Johnson	Email	2.4.20
NSW Aboriginal Land Council (NSWALC)	Councillor Abie Wright	Email	19.5.20 – All correspondence to be sent to Cr Wright's assistant Lisa Cavasin
PCC Aboriginal Advisory Committee	Paul Russo	Email	2.4.20 - if you need further information regarding my application to register I suggest you contact Ellen Ross.at PCC.
Tocomwall	Scott Franks	Phone and email	2.4.20 – registered during follow up call and invitation resent by email. Raised query regarding the NSW APIC policy.
Widescope Indigenous Group	Steven and Donna Hickey	Phone	2.4.20



ORGANISATION/PERSON	CONTACT	METHOD REGISTERED	REGISTRATION DATE & COMMENT	
Yurrandaali Pty Ltd	Bo Field	Email	3.4.20	

A copy of the registered Aboriginal parties was provided to Heritage NSW and LALC via email on 26th May 2020.

Stage 2—Presentation of information about proposed project

Stage 2.1—Presentation of proposed project information and provision of proposed assessment methodology to RAPs

All RAPs were provided a copy of a document presenting the project information and proposed cultural heritage assessment methodology on 11 November 2020.

RAP	DATE SENT	DATE REPLY	METHOD OF REPLY	COMMENTS, OUTCOME AND/OR ISSUES
Freeman & Marx	11.11.2020	12.11.2020	Email	"The methodology looks good and being connected to this area through family and being a registered member of the south coast people's native title claim with strong connections I look forward to working on this site."
Murra Bidgee Mullangari Aboriginal Corporation	11.11.2020	15.11.2020	Email	"I have read the project information and proposed methodology for the above project; I endorse the recommendations made."
Amanda Hickey Cultural Services	11.11.2020	15.11.2020	Email	"I have reviewed the document and support the project information and Methodology."
Goodradigbee Cultural & Heritage Aboriginal Corporation	11.11.2020	19.11.2020	Email	"Thanks for the email and phone call earlier. We don't have any comments at this stage, however would like to attend the meeting next week."
Aragung	11.11.2020	5.12.2020	Email	"Aragung Aboriginal Cultural Heritage Site Assessments Aboriginal organisation has review the above information



	and agree and support the Methodology and mitigation
	measures stated in the information provided by Curio
	Projects"
	"I would like to address some of the concern our member
	have Below.
	(1) Will the Parramatta Sand terrace if present be treated
	differently to other natural soils during test Excavations
	given that the Parramatta Sand terrace has a much
	Higher potential for renaming intact Aboriginal
	Archaeology.
	(2) Post Contact Aboriginal Archaeology , give that there
	has been a high number of glass artifacts found in
	Parramatta - how will historical fill or the potential finding
	of Glass Artifacts be investigated as they are some time
	found closely associated to Historical fill.
	(3) interpretation of Archaeological investigation and
	finding, be incorporated into the design of the New Power
	House museum - this has been done successfully in the
	past on other building sites were Archaeological
	investigations have remain intact and cover with glass use
	in the floor plan.

All RAPs were provided with a minimum of 28 days (from date of provision of methodology document) to provide feedback of the project information and proposed cultural heritage methodology document (i.e. comment was requested by 9 December 2020). Verbal comment was also accepted from RAPs during the online consultation session conducted on 25 November 2020. Attendees at this consultation session are noted in the table above, and minutes of this session are included in Appendix B.



Submissions to the project information and methodology were documented, addressed where appropriate, and included within the ACHAR. Submissions received are appended to this document below.

Stage 3—Gathering information about cultural significance

Stage 3.1—Gathering information from RAPs on presence of Aboriginal objects of cultural value, and places of cultural value

RAPs were provided the cultural heritage assessment methodology at the same time as the project information, with a minimum of 28 days to provide feedback of the project information and proposed cultural heritage methodology document. Details of, including submissions and responses are summarised above in Stage 2.1.

Stage 4—Review of draft cultural heritage assessment report

All RAPs were provided a copy of the draft ACHAR via email on 10 December 2020 and provided with 28 days from date of provision of draft ACHAR for review. Comments received are detailed below. Where verbal comment has been provided rather than written comment, Curio Projects has confirmed with the RAP that they are happy with this method of submission of feedback and comments. A reminder email for feedback/comment was sent to all RAPs on 19 January 2021, as well as follow up phone calls.

A copy of all written submissions received from project RAPs are attached to this appendix.

RAP	CONTACT	DATE SENT	DATE REPLY	METHOD	COMMENTS, OUTCOME AND/OR ISSUES	HOW COMMENTS WERE ADDRESSED (WHERE RELEVANT)
Kamilaroi Yankuntjatatjara Working Group	Phillip Khan	11.11.2020	10.12.2020	Email	"Thankyou for your report regarding The New Powerhouse Parramatta project, this whole area is highly significant to us	



Murra Bidgee Mullangari Aboriginal Corporation	Darleen Johnson	11.11.2020	18.11.2020	Email	Aboriginal people of the past & present. I support your methodology to investigate further in the way of test excavations." "I have read the project information and draft ACHAR for the above project, I endorse the recommendations made. We will be available from the 11th January onwards, we look	
		11.11.2022	10.10.000		forward to working with you on this project."	
Muragadi Heritage Indigenous Corporation	Jesse Johnson	11.11.2020	18.12.2020	Email	"I have read the project information and methodology for the above project, I agree with the recommendations made. We will be available after the 11th January."	
Dharug Custodian Aboriginal Corporation	Tylah Blunden	11.11.2020	18.01.2021	On-site Meeting	1)Changing the 50cm x 50cm squares to 1m x 1m 2)Importance of historical and Aboriginal archaeological teams working together on site.	Incoroporating comments into final ACHAR: 1) Minor revision of archaeological excavation methodology, increasing test pit excavation size from 50cm x 50cm squares to 1m x 1m squares



		induction process for site contractors (e.g. early works, civil contractors), particularly for those who will be working after project RAPs and archaeologists have finished works at the site, to make sure that areas with no development impact proposed, remain unimpacted. 4)Possibility of incorporating artefacts recovered into Council's Keeping Place for the Parramatta Square artefacts.	(excavated and recorded in 50cm x 50cm quadrants). Allow better access to and investigation of deeper sands. 2)Important that the excavation is addressed with full understanding that historical and Aboriginal archaeology is not necessarily discrete and separate. Cohesive view of the site's history and potential archaeological resource. 3)Ensure site contractors are inducted by project RAPs to communicate significance of site, deposits, and need to protect and conserve. 4)Final decision of long term management for artefacts to be determined by project RAPs in consultation/discussion with Infrastructure NSW,
			consultation/discussion



Aragung	James Eastwood	11.11.2020	18.01.2021	On-site Meeting	Possible incorporation into Interpretative initiatives at the site. Consideration that the Powerhouse site does not exist in isolation in Parramatta.	Possible incorporation into Interpretative initiatives at the site (to be addressed/discussed ongoing through project and future stages of the Heritage Interpretation Strategy for the site). Final decision of long term management for artefacts to be determined by project RAPs in consultation/discussion with Infrastructure NSW, Powerhouse Museum, and Curio Projects.
Didge Ngunawal Clan	Lilly Carroll	11.11.2020	19.01.2021	Email	"DNC would like to thank you for having us participate in this project and DNC agrees to all proposals."	



APPENDIX B—Aboriginal Consultation Correspondence



APPENDIX C—Aboriginal Archaeological Excavation Methodology

The following Aboriginal archaeological excavation methodology and research design has been developed to investigate the nature and extent of the Aboriginal archaeological potential within the impact zones of the proposed development.

Aims

The aims of archaeological test excavation within the Powerhouse Parramatta study area are to:

- Identify the presence/absence and condition (including boundary, extent and intactness)
 of the PSB within the study area.
- Determine the nature, depth, extent, and significance of any potential Aboriginal archaeological deposits (including both pre-contact and early contact period Aboriginal archaeological deposits) within the study area (should they be found to be present).
- Salvage a reasonable sample of any Aboriginal archaeological deposits that may be present within the footprint of the development impacts—to which impact via proposed works will be unavoidable—prior to commencement of development works.
- Provide data for the overall archaeological record to help refine future archaeological predictive modelling across the Parramatta region (if possible).

The proposed archaeological excavation methodology as outlined below, has been designed based on the following rationale.

Methodology Rationale

In the interest of best practice principles for archaeological investigation (i.e. the concept of archaeology as a finite resource which should be retained without disturbance where possible), the proposed locations of archaeological test trenches have been concentrated in bulk excavation areas where development activities are likely to encounter (and therefore impact) the PSB and the potential Aboriginal archaeology contained within it.

Bulk excavation along the southern boundary of the existing multi-storey carpark area is required to accommodate the construction of the undercroft, plant, and required services for viability of the development. While an effort was made early in the design process to locate services on the roof and other parts of the site to avoid bulk excavation as much as possible, subsequent detailed and structural design identified the need for an undercroft area due to flood risks of the site, and additional basement space for services due to the structural limitations of the roof of the new buildings.

Further, the Aboriginal archaeological investigation will be coordinated with a program of historical archaeological test excavation, the locations of which are also predicated on development impact locations. Therefore, unnecessary Aboriginal archaeological excavation in areas not proposed to be subject to development impact, would potentially cause impact to historical archaeological resources- which otherwise would be able to be retained without disturbance.



Piling is considered structurally necessary for the viability of the development in this location. However, impact can be reduced by reducing the number of piles where possible, and archaeologically, by avoiding opening the entire piling area (i.e. areas outside of those requiring bulk excavation works) with archaeological test trenches, and instead using a push tube excavation methodology (discussed further below). The remaining pile impacts can be mitigated via investigation on site and Optically-Stimulated Luminescence (OSL) dating stations to be set up and readily available during any below groundwork. This methodology is used with reference to other excavations using similar strategies to minimise impact on site. The approach to excavate using push tubes instead of open test trenches reduces the impact on the PSB as well as the risk of instability when working in excavation with sand (according to WHS limit of 1-2m maximum depth). This method may also aid in the further understanding of the sand body and its potential geomorphology without completely destroying its integrity.

Archaeological Sampling Strategy

Aboriginal archaeological investigation of the Powerhouse Parramatta study area is proposed to be undertaken in two main phases:

- Initial testing of the Aboriginal archaeological potential of the main impact zones of the study area (Phase 1) with an aim to identify the presence or absence of intact subsurface profiles of the PSB and any associated Aboriginal archaeological deposit that may be present; and
- 2. Guided by the results of the initial testing (Phase 1), Phase 2 (salvage excavation) is proposed to be undertaken within development impact zones in order to recover the entirety of any Aboriginal archaeological deposit within the study area that requires impact through the proposed development works.

Phase 1 investigation is to proceed as the excavation of a series of 1m x 1m test trenches (excavated and recorded in 50cm x 50cm quadrants)⁸ to be positioned across the footprint of the proposed bulk excavation in the central area of the site along the southern boundary of the current carpark. These trenches will be positioned in a staggered offset grid pattern at roughly 10m transect intervals (as best possible to fit the excavation area, allowing a degree of flexibility of trench placement to respond to site conditions and safety), with transects spaced c.5m apart. Phase 1 investigation within footprints of the new buildings (i.e. outside of the bulk excavation zone, in works zones requiring foundational piling) would be subject to push tube excavation (diameter to be determined by geotechnical advice), at the location of each foundation pile across the site.

-

⁸ The draft version of this excavation methodology sent to project RAPs for review as part of the draft ACHAR, proposed test excavation units of 50cm x 50cm. Following RAP recommendation and preference through review and comment on this methodology, initial test unit size has been revised for the final methodology to be in 1m x 1m test units (excavated and recorded in 50cm x 50cm quadrants) to widen archaeological sampling, and better facilitate access to potentially deeper sand deposits.



Phase 1 test excavation and push tube excavation will focus on investigating the nature and extent of the PSB within the study area, including investigation of the mapped boundary between the PSB and Holocene soils.

Natural soil profiles within the study area have potential to be unstable and of considerable depth, meaning that WHS conditions may require some allowance for flexibility of size and orientation of test trenches in some areas of the site. Therefore, the sampling strategy also makes an allowance for initial test unit sizes to be increased as necessary, to respond to site conditions encountered during excavation and ensure that deeper deposits (if encountered) can be logistically and safely investigated. For example, establishment of a 2m x 2m test trench would allow for safe excavation to depth of 1.2m below the ground surface. Additional test trenches may be added to the Phase 1 excavation program in locations nominated by the Excavation Director if determined to be warranted based upon the results of the excavation noted during the program.

Figure 1 below presents the proposed development impacts that are located within high and moderate areas of Aboriginal archaeological sensitivity, with indicative locations of the test trenches and push tube excavations proposed for Phase 1 shown in Figure 2. As shown in this figure, Phase 1 test trench excavation works have been focused in the centre of the study area along the southern boundary of the existing multi-storey carpark (i.e. the bulk excavation for the undercroft), with additional test trenches to the north-western boundary of the current carpark. Phase 1 will also include the push tube excavation works focused on the foundation piles located in the eastern and western building footprints and the north-eastern portion of the current carpark area.

The location of test trenches within the bulk excavation area and north-western portion of the site as shown in Figure 2 are *indicative* only, the exact trench locations and number of test pits would be finalised in the field, subject to some flexibility at the time of excavation as necessary in order to respond to local landscape features (i.e. stability of the soil profiles encountered, presence of previous disturbance within the study area such as existing services, location in combination with historical archaeological investigations etc). The location of push tubes will follow the locations of foundation piles as shown in Figure 2. Unlike the flexibility of the trenches, the push tubes would be excavated specifically at the specified locations of the foundation piles, as finalised for construction.

Phase 1 excavation aims to excavate approximately 28 test trenches and 105 x push tubes. However, should a lesser number of test trenches and push tubes be sufficient to adequately answer the research questions/adequately investigate the site area, Phase 1 investigative works would be considered complete without reaching the numbers proposed. Should excavation works find the number of test trenches and push tubes to be insufficient to meet research aims, additional test pits could be undertaken, relevant to the location of impact works, to be discussed and agreed upon in the field by the Excavation Director, project RAP representatives, and client/construction contractor.



Consideration of Historical Archaeology

The study area also has potential for historical archaeological deposits to be present (Curio Projects 2020, Historical Archaeology and Impact Assessment (HAIA) Addendum). The development impacts to historical archaeology are proposed to be mitigated via the excavation of historical archaeological test trenches, as depicted in Figure 3. As both historical and Aboriginal archaeological potential occurs in combination within the study area—particularly across the southern areas of the study area—any Aboriginal archaeological investigation should be undertaken in tandem and/or coordinated with the historical archaeological investigation.

It is acknowledged that contact period Aboriginal archaeology has been found at multiple sites in Parramatta, and therefore that the Parramatta Powerhouse study area also retains this potential for contact period Aboriginal archaeology (e.g. Aboriginal glass artefacts, Aboriginal stone artefacts deposited contemporary with historical period archaeological resources).

Historical archaeological trenches located in areas of nil to low Aboriginal archaeological potential (Figure 4) can proceed without direct Aboriginal archaeological monitoring or coordination, only requiring Aboriginal archaeological advice/supervision, should a suspected Aboriginal archaeological deposit (either natural soil profile or suspected early contact period deposits) be encountered within these trenches. Excavation of historical archaeological trenches located in areas of high Aboriginal sensitivity (Figure 4) should be monitored by an Aboriginal archaeologist and project RAP representative, both to monitor for the potential occurrence of contact period Aboriginal archaeology, and for Aboriginal artefacts in a disturbed context occurring within historical archaeology, as well as to facilitate the opportunity to initiate an Aboriginal archaeological test pit through the base of the historical test trench once completed, particularly in the case that natural soil profiles are encountered in the location of the historical trench.

Should historical archaeological excavation as guided by the HAIA Addendum encounter any displaced Aboriginal objects within historical archaeological deposits, or suspected contemporary (early contact period) Aboriginal archaeology in combination with historical archaeological deposits, this would be managed by the Aboriginal archaeological Excavation Director and project RAPs. Any displaced Aboriginal objects within historical contexts would be recorded in their location, and removed, to be catalogued and analysed in accordance with the Aboriginal archaeological methodology outlined below.





Figure 1: Proposed Development Impacts over Aboriginal archaeological sensitivity (Source: Curio 2020)



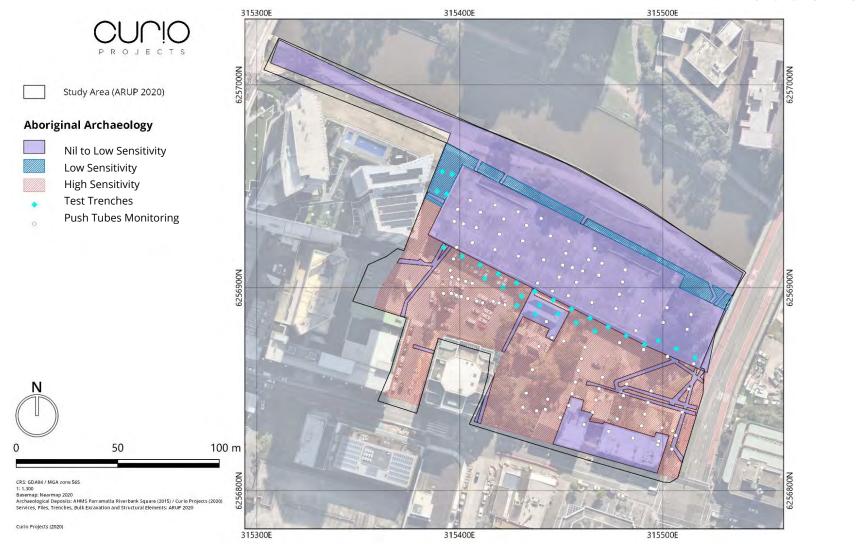


Figure 2: Proposed Aboriginal archaeological investigation areas over archaeological sensitivity (Source: Curio 2020)

POWERHOUSE PARRAMATTA|FINAL ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT|JAN 2021 Curio Projects Pty Ltd



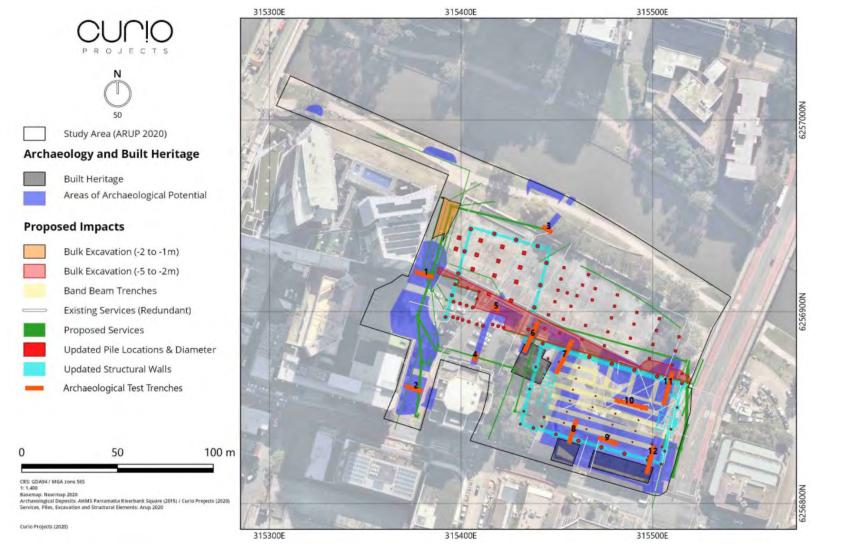


Figure 3: Proposed Historical Archaeological Test Trenches, potential and development impacts (Source: Curio 2020)



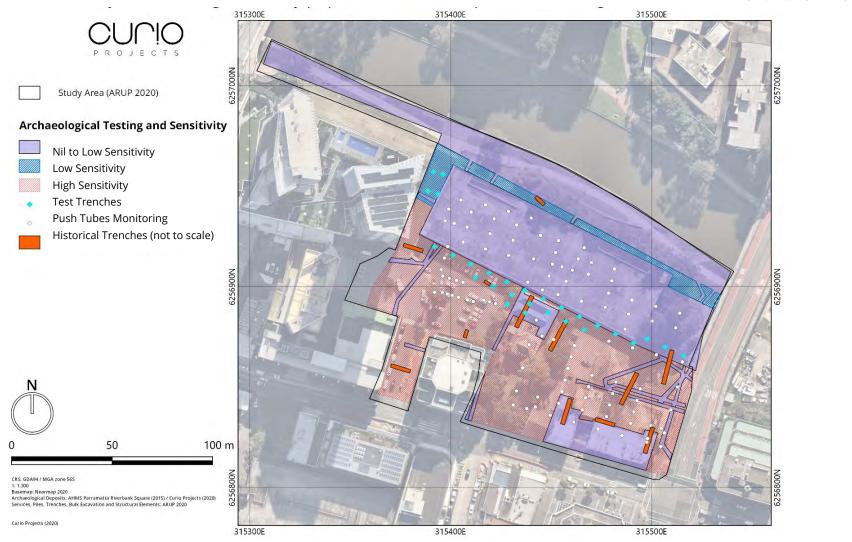


Figure 4: Proposed Historical Archaeological Test Trenches over Aboriginal archaeological sensitivity and test trenches (Source: Curio 2020)



Excavation Methodology

All Aboriginal archaeological works would be undertaken by a suitably qualified and experienced archaeologist as Excavation Director, to be assisted in the field by archaeologists and representatives from the project RAPs.

Phase 1 archaeological investigation will be split into two separate methodologies, one to accommodate the bulk excavation, and the other to accommodate for foundation piling. Each archaeological investigation technique will be undertaken as per the following methodologies:

Phase 1: Bulk Excavation Test Trenches Methodology

- Careful removal of any imported materials (e.g. gravel road base, concrete slab) or historical fill on top of the natural soil/sand deposits from the area of the excavation pit without disturbing the surface of the underlying natural deposits prior to the start of the excavation works. Removal of historical fill could be undertaken with the assistance of a small mechanical excavator, to be supervised by a suitably qualified archaeologist to avoid mechanical impact below the layer of historical fill.
- Following the removal of imported materials/fill, archaeological excavation of natural soil profiles within the parameters of each identified test trench would proceed using hand excavation techniques (hand tools only).
- Excavation of 1m² test trenches would proceed in 0.5m x 0.5m quadrants in 100mm spits, unless a shallower depth is defined by natural soil profiles or other stratigraphy/features identified.
- Where appropriate (as identified within this Methodology), excavation of contiguous test trenches would be undertaken as necessary to properly identify site features, and/or to meet WHS conditions, with maximum continuous surface area of Phase 1 test trenches to be no greater than 3m².
- Undertake shoring of pits as necessary to support trench walls and ensure safe conditions for archaeological team.
- Excavation of each test trench would continue until it is determined that the soil profile in the location is archaeologically sterile.

Phase 1: Foundation Piling Methodology

The methodology for the foundation piling was created with reference to other archaeological reports (GML Parramatta Leagues Club 2016 and D&C ALTRAC Light Rail 2015) that has utilised push tube excavation to minimise archaeological impact to the significant sand body on site, and to access deeper soil profiles for investigation and assessment.

 Careful removal of any imported materials (e.g. gravel road base, concrete slab) or historical fill on top of the natural soil/sand deposits from the area of the excavation without disturbing the surface of the underlying natural deposits prior to the start of the excavation works. Removal of historical fill could be undertaken with the assistance of a



- small mechanical excavator, to be supervised by a suitably qualified archaeologist and project RAP representative to avoid mechanical impact below the layer of historical fill.
- Following the removal of imported materials/fill, archaeological excavation using drill rigs to gather push tubes of natural soil profiles will commence prior to the creation of the foundation piles identified across the site. The size of the push tube will be determined with geotechnical advice. This will be undertaken by geotechnical engineers with archaeological monitoring of each push tube hole.
- On the removal of a push tube, the excavated sediment extracted will be archaeologically logged, sieved and recorded. The deposits will be photographed with a scale to record the nature and depth of the deposits.
- Each push tube will be subject to archaeological sampling. Inspections will determine whether any visible evidence is present within the deposits. Should there be any obvious stratigraphical layers or sequences present, they shall be recorded before preparing the deposits for stratigraphic separation and sieving. Due to the significance of the PSB, where practicable soils excavated via push tube may be subject to strategic OSL dating, with sampling stations to be set up and readily available during any below ground work.
- Geomorphological sampling and analysis of selected push tube samples may be conducted as appropriate to assist in describing and interpreting the site's stratigraphy and formation if deemed necessary.
- Push tube sampling works should be monitored by an archaeologist and at least one representative from project RAPs.

Phase 2: Salvage Excavation Methodology

Should Phase 1 excavation encounter a significant Aboriginal archaeological deposit in any location that requires impact through the proposed development works, archaeological works would progress to Phase 2 salvage excavation within the development impact footprint. Phase 2 expansion would proceed in accordance with current standardised Heritage NSW triggers and conditions applied to Parramatta excavations, as follows:

- The relative density of artefact frequencies. If higher numbers of artefacts are identified in one or more parts of the initial excavation, they will be further explored;
- Variations of raw materials that warrant further investigation;
- Unusual artefact types are found, e.g. complete flakes, tools, cores, other types such as ground edged implements etc;
- Evidence of artefact manufacture is found, e.g. conjoining artefacts, flaking debitage, micro-debitage, complete flakes, broken flakes; tool manufacture or maintenance;
- Evidence of different activities, indicated by different artefact types e.g. backed artefacts, partly made backed artefacts and backing debitage, tool retouching debitage, debitage with dorsal grinding and retouched and/or used tools, different raw materials and raw materials with distinctive banding or inclusions;



- Chronological material (any materials that can be used to date artefactual materials);
- Taphonomic/site formation indicators;
- Evidence of contact archaeology;
- Evidence of the Parramatta Sand Body;
- Any other relevant features appropriate for further investigations, e.g. archaeological features such as evidence of burning in a hearth; shell middens; stone features; clay features etc; and;
- Soils are deep enough that manual test excavation in a 1 metre by 1 metre area is not practical or safe, and a larger excavation area is required.

Phase 2 archaeological works would include the expansion of the Phase 1 test trenches via the excavation of one adjoining $1m \times 1m$ excavation pits in order to investigate and salvage the full extent of the feature encountered, to the extent of the footprint of the development impact zone. If a significant level of archaeology is found within the initial test trench expansion, it may be subject to further open excavation, depending on the nature of the deposit encountered in each location, to be determined via discussion between project archaeologists and project RAP representatives. Where possible, Phase 2 will also include the expansion of push tube excavations into $0.5 \times 0.5m$ test trenches to further investigate and salvage any potential archaeology—allowing for access to subsurface soils in these locations, dependent on development impact and construction method required.

All archaeological deposits recovered from either phase of the Aboriginal archaeological investigation would be subject to the following procedures:

- All deposits excavated will be individually sieved through a 3mm aperture wire-mesh sieve, and any archaeological material recovered, retained by provenance.
- The location of each test trench (or salvage area) will be recorded by GPS, and recorded in detail including stratigraphic/soil profile description and drawings, description of any relevant features, artefacts etc, and photographed using a DSLR camera and appropriate photo scale.
- If carbon or other features suitable for scientific dating are identified, these would be sampled for possible further analysis (e.g. C-14 dating or OSL dating).
- Sampling of representative soil horizons from each archaeological excavation location.
- Stone artefact analysis will be undertaken in accordance with OEH Code of Practice requirements, and current accepted academic texts for stone artefact analysis and recording in southeast Australia, i.e. Holdaway and Stern 2004.
- A post-excavation report detailing the results of the Aboriginal archaeological investigation works within the study area would be prepared and submitted to the Aboriginal cultural legislation section of Heritage NSW, consistent with best practice for



- preparation of post-excavation reporting. The report would be provided to all project RAPs for their information.
- Following completion of Aboriginal archaeological excavation within the Powerhouse Parramatta study area, an Aboriginal Site Impact Recording Form with the results of the excavation would be completed and submitted to the AHIMS Registrar for AHIMS 45-6-3192-'Riverbank Square'.

Aboriginal Artefact Analysis

Any Aboriginal artefactual material recovered from the excavation works would be subject to a descriptive and functional recording and analysis by appropriately qualified and experienced specialists (lithic and/or shell specialist, depending on the nature of any archaeological deposit encountered). Recorded attributes and features of all archaeological material would consider analysis methodologies from previous archaeological investigations on the PSB to allow comparative analysis of deposits (as much as possible).

Contact Period Archaeology

Any potential contact period archaeology (i.e. Aboriginal artefacts made from glass or other European materials such as flint, Aboriginal stone artefacts and/or cultural deposits located in situ/contemporary with a historical archaeological context) would be identified and assessed according to the following criteria.

<u>Aboriginal Glass Artefacts</u>. Any glass pieces recovered from the Aboriginal and/or historical archaeological excavation works considered to potentially be a contact period Aboriginal glass artefact, would be assessed by applying the criteria and methodology specified in Goward 2011, comparable with other excavations undertaken in Parramatta that have confirmed the presence of Aboriginal glass artefacts (e.g. Parramatta Square- PS3, PS5&6; Parramatta North Female Factory).

<u>Other Aboriginal contact period archaeology</u>: Other deposits potentially representative of contact period Aboriginal archaeology (e.g. Aboriginal stone artefacts, hearths etc), would be identified and confirmed based on their presentation and context within historical archaeological deposits and fills, to determine whether these features constitute in situ contact period archaeology.

Geomorphology

A suitably qualified geomorphologist and/or geo-archaeologist may be engaged as a specialist if necessary in order to examine and analyse the nature of the PSB soils (if encountered) and to report on site formation processes and any implications for potential age and integrity of archaeological deposits encountered.

Research Design

Several research questions have been developed in order to inform the primary aims of the Aboriginal archaeological investigation within the Powerhouse Parramatta study area, namely to:



- 1. investigate the presence of the PSB within the study area (and the boundary, extent and intactness if found to be present);
- 2. to identify any locations with Aboriginal stone objects (or other sites) within the study area;
- 3. to salvage a reasonable sample of any Aboriginal archaeological deposits that may be present within the footprint of the development impacts (particularly the bulk excavation area), prior to commencement of development works; and
- 4. to contribute to the archaeological record for Aboriginal occupation of the Parramatta Sand Body.

Key research questions for the proposed archaeological investigation of the study area include:

- What is the nature, extent, integrity and intactness of the PSB across the study area (if present)?
- Does the Powerhouse Parramatta study area represent an intact stratified Aboriginal archaeological deposit within the alluvial sand profiles of the PSB along the southern bank of the Parramatta River?
 - o If so, to what nature and extent is this deposit present? What is the condition and integrity of this deposit? Can this deposit be dated? How does it compare with other deposits recovered from previous nearby archaeological excavations?
 - o Is there any evidence for long term occupation of the PSB by Aboriginal people in this location (i.e. Pleistocene deposits)?
- Is any contact period Aboriginal archaeology present within the study area (e.g. Aboriginal artefacts made from glass or other European materials such as flint, in situ Aboriginal stone artefacts and/or other cultural features located contemporary with historical archaeological resources)?
- Can the natural soil profiles inform a geomorphological context of the study area? If so, how?
- How can the Aboriginal archaeological deposit (if recovered) be interpreted in a local and regional context?
- Is the archaeological deposit (if encountered) culturally and/or publicly significant? To what extent?



APPENDIX D—Extensive AHIMS Search Results



Extensive search - Site list report

Your Ref/PO Number: Parra Powerhouse

Client Service ID: 488285

<u>SiteID</u>	<u>SiteName</u>	Datum	Zone	Easting	Northing	<u>Context</u>	Site Status	<u>SiteFeatures</u>	<u>SiteTypes</u>	Reports
15-5-2465	Parramatta Regional Park (IF3)	GDA	56	314524	6256879	Open site	Partially Destroyed	Artefact : -	Isolated Find	102142,10219 6
	Contact	Recorders	s Ms.J	illian Combei	;J Steel			<u>Permits</u>	3822	
15-5-2463	Parramatta Regional Park (IF1)	GDA	56	314462	6257627	Open site	Valid	Artefact : -	Isolated Find	102142,10219 6
	Contact	Recorders	<u>I</u> J Ste	el				<u>Permits</u>	3994	
5-5-2464	Parramatta Regional Park (IF2)	GDA	56	314400	6257619	Open site	Valid	Artefact : -	Isolated Find	102196
	Contact	Recorders	S J Ste	el				<u>Permits</u>		
5-6-1523	George St Parramatta; Family Law Courts;	AGD	56	314950	6256450	Open site	Valid	Artefact : -	Open Camp Site	1809,102196,1 03782
	Contact	Recorders	<u>s</u> Val <i>I</i>	Attenbrow,Do	octor.Edward l	Higginbotham		<u>Permits</u>		
5-5-1065	Parra Park 3;PP 3;	AGD	56	314620	6257620	Open site	Valid	Artefact : -	Open Camp Site	102142,10219 6
	Contact	Recorders	Micl	nael Guider				<u>Permits</u>		
5-6-2553	Lake Parra R1;LP R1;	AGD	56	315640	6258780	Open site	Valid	Artefact : -	Open Camp Site	102196
	Contact	Recorders	Mich	nael Guider				<u>Permits</u>		
5-6-2554	Elizabeth Farmhouse	AGD	56	316420	6255700	Open site	Valid	Artefact : -	Open Camp Site	102196,10378 2
	Contact	Recorders	<u>Micl</u>	nael Guider				<u>Permits</u>	2928	
5-6-2559	Sydney Turf Club Carpark;STC Carpark;	AGD	56	316900	6256020	Open site	Valid	Artefact : -	Open Camp Site	102142,10219 6
	Contact	Recorders	Mich	nael Guider				<u>Permits</u>		
5-6-2560	Lake Parra R2;LP R2;	AGD	56	315500	6258780	Open site	Valid	Artefact : -	Open Camp Site	102196
	Contact	Recorders	Mich	nael Guider				<u>Permits</u>	2928	
5-6-2578	Collett Park;	AGD	56	316680	6257140	Open site	Valid	Artefact : -	Open Camp Site	102196
	Contact	Recorders	Mich	nael Guider				Permits Permits		
5-5-1110	Redbank;Northmead;	AGD	56	314020	6258060	Open site	Valid	Grinding Groove : -	Axe Grinding Groove	102196
	Contact	Recorders	Mich	nael Guider				<u>Permits</u>		
5-5-0843	Finalysons Creek;Wenthworthville;	AGD	56	313040	6257910	Open site	Valid	Grinding Groove : -	Axe Grinding Groove	102196
	Contact	Recorders	Mich	nael Guider				<u>Permits</u>		
5-5-0864	Governors Bathhouse;	AGD	56	314340	6256750	Open site	Partially Destroyed	Artefact : -	Open Camp Site	102142,10219 6
	Contact	Recorders	<u>Micl</u>	nael Guider				<u>Permits</u>	3822	
5-6-2036	Lake Parramatta 2	AGD	56	315710	6258920	Closed site	Valid	Art (Pigment or Engraved) : -	Shelter with Art	102196
	<u>Contact</u>	Recorders	Val A	Attenbrow				<u>Permits</u>		

Report generated by AHIMS Web Service on 03/03/2020 for Sam Cooling for the following area at Lat, Long From : -33.8247, 150.9864 - Lat, Long To : -33.8002, 151.0252 with a Buffer of 1000 meters. Additional Info : ACHAR. Number of Aboriginal sites and Aboriginal objects found is 100



Extensive search - Site list report

Your Ref/PO Number: Parra Powerhouse

Client Service ID: 488285

<u>SiteID</u>	<u>SiteName</u>	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	<u>SiteTypes</u>	Reports
45-5-0277	Cumberland Oval;Parramatta;	AGD	56	314588	6257260	Open site	Destroyed	Modified Tree (Carved or Scarred) :	Scarred Tree	223,260,1018,1 02142,102196
	Contact	Recorders	Cook	ζ.				Permits		
45-5-0762	Parramatta Park	AGD		314320	6256950	Open site	Partially Destroyed	Artefact : -, Modified Tree (Carved or Scarred) : -	Open Camp Site,Scarred Tree	102142,10219 6
	Contact	Recorders		Attenbrow			• •	<u>Permits</u>	3822	
15-6-2627	HP-1	AGD	56	315850	6255210	Open site	Valid	Artefact : -		102196
	Contact	Recorders		Leon				<u>Permits</u>		
15-6-2648	Charles/George 1	AGD	56	315690	6256470	Open site	Valid	Artefact : -		99538,102196
	Contact	Recorders	Doct	or.Jo McDon	ald			<u>Permits</u>	1433,1682,2176,2240,2	2353,3049,3509
15-5-2856	Parramatta Park Macquarie Entrance PAD	AGD	56	314500	6256550	Open site	Partially Destroyed	Potential Archaeological Deposit (PAD) : -		98738,103133
	Contact	Recorders	Dom	inic Steele A	rchaeological (Consulting		<u>Permits</u>	1647,3822	
15-6-2678	SSP1 (formerly Smith Street PAD)	AGD		315330	6256150	Open site	Destroyed	Potential Archaeological Deposit (PAD) : -		99518,102196, 103782
	Contact	Recorders		or.Jo McDon				<u>Permits</u>	1848,2561	
15-6-2668	Argyle St	AGD	56	315200	6256060	Open site	Valid	Potential Archaeological Deposit (PAD) : -		102196,10378 2
	Contact	Recorders	Doct	or.Jo McDon	ald			<u>Permits</u>	1764,2155	
15-6-2669	Kendall Street, Harris Park	AGD		315525	6256150	Open site	Valid	Potential Archaeological Deposit (PAD) : -		102196,10378 2
	Contact	Recorders	,	Vheeler			• •	<u>Permits</u>	1767	
5-6-2673	RTA-G1	GDA		315842	6256510	Open site	Valid	Artefact : -		100552,10219 6,103782
	Contact	Recorders		or.Jo McDon				<u>Permits</u>	1841,2176,3050,3509	
15-6-2679	Parramatta Children's Court	AGD		314900	6256600	Open site	Valid	Potential Archaeological Deposit (PAD) : -		102196,10378 2
	Contact	Recorders		aila Haglund				<u>Permits</u>	1850,1973,2117,3847	
15-6-2738	James Ruse Reserve Open Camp 1	AGD		316000	6256000	Open site	Valid	Potential Archaeological Deposit (PAD) : -		102196,10378 2
	<u>Contact</u>	Recorders	Iim V	Wheeler				<u>Permits</u>	2018,2187	

Report generated by AHIMS Web Service on 03/03/2020 for Sam Cooling for the following area at Lat, Long From : -33.8247, 150.9864 - Lat, Long To : -33.8002, 151.0252 with a Buffer of 1000 meters. Additional Info : ACHAR. Number of Aboriginal sites and Aboriginal objects found is 100



Extensive search - Site list report

Your Ref/PO Number: Parra Powerhouse

Client Service ID: 488285

<u>SiteID</u>	SiteName	<u>Datum</u>	<u>Zone</u>	Easting	Northing	<u>Context</u>	Site Status	<u>SiteFeatures</u>	<u>SiteTypes</u>	<u>Reports</u>
45-6-2686	Civic Place PAD	GDA	56	315130	6256450	Open site	Partially Destroyed	Potential Archaeological Deposit (PAD) : -, Artefact : -		99666,99791,1 03115,103782
	Contact	Recorder	<u>s</u> Doc	tor.Jo McDon	ald,Niche Envi	ronment and Her	ritage,Niche Environn	nent and Heri Permits	1960,3749,3890,3897,3	3983,3988,4044,414
45-6-2751	Marsden St Carpark	AGD	56	314900	6256350	Open site	Valid	Artefact : -, Potential Archaeological Deposit (PAD) : -		102196,10378 2
	Contact	<u>Recorder</u> :	<u>s</u> Ms.	Laila Haglund				<u>Permits</u>	2243	
45-6-2739	PADUNknown	AGD		314950	6256700	Open site	Valid	Potential Archaeological Deposit (PAD):		102196,10378 2
45-6-2746	Contact Old Hospital Site Parramatta Health Services Precinct	Recorder: AGD		lund and Ass	6256650	Open site	Valid	Potential Archaeological Deposit (PAD):-, Artefact:-		99798,100551, 100558,10219 6,103782
	Contact	Recorder	s Ms.	Laila Haglund				<u>Permits</u>	2160,2507	
45-6-2741	Parramatta Transport Interchange PAD	AGD	56	315450	6256250	Open site	Valid	Potential Archaeological Deposit (PAD) : -		99438,99497,1 02196,103782
	Contact	Recorder	<u>s</u> Doc	tor.Susan Mc	ntyre-Tamwo	y		<u>Permits</u>	2121	
45-5-3186	Marsden Street	GDA	56	314800	6256315	Open site	Valid	Artefact : 4		102196,10378 2
	Contact T Russell	Recorder	<u>s</u> Doc	tor.Edward H	igginbotham			<u>Permits</u>		
45-6-2756	Parramatta Rehabilitation Centre (formerly O'Connell St PAD)	AGD		314950	6256850	Open site	Valid	Potential Archaeological Deposit (PAD) : -		102196,10378 2
	Contact	Recorder		Laila Haglund				<u>Permits</u>	2317,2414,2511	
45-6-2795	150 Marsden Street Parramatta PAD	AGD	56	314955	6256480	Open site	Valid	Potential Archaeological Deposit (PAD) : 1		102196,10378 2
	<u>Contact</u> T Russell	Recorder	<u>s</u> Aus	tral Expert Se	rvices Pty Ltd			<u>Permits</u>	2404	
45-6-2805	Lake Parramatta Playground 1	GDA		315572	6259151	Open site	Valid	Artefact : -		102196,10377 4
	<u>Contact</u> Searle	Recorder	_ /	Wheeler				<u>Permits</u>	2525	
45-6-2863	Cumberland Press Site	GDA	56	315913	6256448	Open site	Valid	Artefact : 89		103782
	Contact	Recorder	s Ms.	Laila Haglund	Ms.Tory Steni	ng		<u>Permits</u>	2865,3307,3509,3816	

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AHIMS Web Services (AWS) Extensive search - Site list report

Your Ref/PO Number: Parra Powerhouse

Client Service ID: 488285

<u>SiteID</u>	SiteName	<u>Datum</u>	Zone	Easting	Northing	Context	Site Status	SiteFeature	<u></u>	<u>SiteTypes</u>	Reports
45-6-2893	95-101 George St (GSP AD)	GDA		315720	6256570	Open site	Valid	Potential Archaeologic Deposit (PAI Artefact : -			101078,10378 2
	Contact	Recorders	Mega	n Mebberso	n			<u> </u>	<u>Permits</u>	3509	
45-6-2931	Lake Parra R3	GDA	56	315820	6258820	Open site	Valid	Artefact : -			
	Contact	Recorders	Mich	ael Guider				j	<u>Permits</u>		
45-5-3695	Lake Parra R4	GDA	56	315856	6259227	Open site	Valid	Artefact : -			102742
	<u>Contact</u>	Recorders	Mich	ael Guider				<u>]</u>	Permits		
45-6-2932	Lake Parra R5	GDA	56	315700	6259050	Closed site	Valid	Artefact : -			
	Contact	Recorders	Mich	ael Guider				<u> I</u>	Permits		
45-6-2933	Belmore Park	GDA	56	315500	6258293	Open site	Valid	Artefact : -			
	Contact	Recorders	Mich	ael Guider,Ko	elleher Nightir	ngale Consulting Pty I	Ltd,Miss.Madeline	Harding <u>I</u>	Permits		
45-5-3630	Macquarie St PAD	AGD	56	314800	6256500	Open site	Destroyed	Potential Archaeologic Deposit (PAI			103782
	Contact	Recorders	Com	ber Consulta	nts Pty Limite	d,Comber Consultant	s Pty Limited		Permits Permits	3107,3302	
45-6-2950	Macquarie St PAD 2	GDA	56	315835	6256410	Open site	Destroyed	Potential Archaeologic Deposit (PAI			102144,10378 2
	Contact	Recorders	Ms.Ji	llian Comber	Comber Cons	ultants Pty Limited		1	Permits	3238,3366	
45-6-2976	George St PAD 1	GDA	56	315650	6256690	Open site	Valid	Potential Archaeologic Deposit (PAI			
	Contact	Recorders	Com	ber Consulta	nts Pty Limite	d,Mr.David Nutley]	Permits Permits	3509	
45-6-2977	Macquarie St PAD 3	GDA		315090	6256650	Open site	Valid	Potential Archaeologic Deposit (PAI			
	<u>Contact</u>	Recorders				d,Mr.David Nutley		_	<u>Permits</u>	3509	
45-5-4097	O'Connell St PAD1	GDA	56	314900	6256695	Open site	Valid	Potential Archaeologic Deposit (PAI			
	Contact	Recorders	Com	ber Consulta	nts Pty Limite	d,Mr.David Nutley		<u> </u>	<u>Permits</u>	3509	
45-6-2978	41 Hunter Street PAD	GDA		315030	6256450	Open site	Valid	Potential Archaeologic Deposit (PAI			
	Contact	Recorders	Mr.A	lexander Bel	en			l l	<u>Permits</u>	3419	

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AHIMS Web Services (AWS) Extensive search - Site list report

Your Ref/PO Number: Parra Powerhouse

Client Service ID: 488285

iteID	<u>SiteName</u>	Datum	Zone	Easting	Northing	<u>Context</u>	Site Status	<u>SiteFeatures</u>	<u>SiteTypes</u>	Reports
5-6-3108	42 Bridge Street Rydalmere PAD	GDA	56	317670	6256778	Open site	Valid	Potential Archaeological		
	Control	D	C)	11 11 12 De	I.I.C.	C IIII M C II	M I	Deposit (PAD) : 1		
F (2102	Contact PUBLIC CONTRACT	Recorders				- Surry Hills,Ms.Sally		Permits		
5-6-3102	Phillip Street PAD 1	GDA	56	315581	6256801	Open site	Valid	Potential Archaeological Deposit (PAD) : 1		
	<u>Contact</u>	Recorders	-	Dominic Steel	le			<u>Permits</u>	3755	
5-6-2988	7-9 Victoria Road Parramatta	GDA	56	315502	6257233	Open site	Valid	Artefact: 9		
	Contact	Recorders	GM	IL Heritage Pty	y Ltd + Context	- Surry Hills,Ms.Anit	a Yousif	Permits	3488	
5-6-3068	GS PAD 1 184-188 George Street	GDA		315899	6256375	Open site	Destroyed	Potential Archaeological Deposit (PAD) : 1		103962
	<u>Contact</u>	Recorders	-	Dominic Steel				<u>Permits</u>	3584	
5-6-3065	PHILLIP ST PAD 1	GDA	56	315500	6256675	Open site	Valid	Potential Archaeological Deposit (PAD) : 1		
	Contact	Recorders	Mr	Dominic Stee	le			<u>Permits</u>		
5-6-3124	330 Church St Artefact Scatter	GDA	56	315330	6256965	Open site	Valid	Artefact : -, Potential Archaeological Deposit (PAD) : -		
	<u>Contact</u>	Recorders	Do	ctor.Julie Dibd	len			<u>Permits</u>		
5-6-3151	UWS Rydalmere OS 1	GDA	56	317400	6257004	Open site	Valid	Artefact : -		
	Contact	Recorders	Mr	.Benjamin Stre	eat			<u>Permits</u>	3800	
5-6-3118	Clay Cliff Creek Levee	GDA		315801	6256294	Open site	Valid	Artefact : 1, Potential Archaeological Deposit (PAD) : 1		102992,10299 7,102998
	<u>Contact</u>	Recorders		.Fenella Atkin				<u>Permits</u>	3788	
5-6-3134	Lennox Bridge Car Park PAD	GDA	56	315209	6256970	Open site	Partially Destroyed	Potential Archaeological Deposit (PAD) : -		
	Contact	Recorders	Mi	ss.Felicity Bar	ry			<u>Permits</u>	3797,4094,4537	
5-6-3131	River Road West	GDA		316650	6256450	Open site	Valid	Potential Archaeological Deposit (PAD) : -, Artefact : -		
	<u>Contact</u>	Recorders		.Fenella Atkin				<u>Permits</u>	3734	
5-5-4630	Parramatta Leagues Club PAD	GDA	56	314974	6257483	Open site	Not a Site	Potential Archaeological Deposit (PAD) : -		103589

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Extensive search - Site list report

Your Ref/PO Number: Parra Powerhouse

Client Service ID: 488285

<u>SiteID</u>	<u>SiteName</u>	<u>Datum</u>	<u>Zone</u>	Easting	Northing	<u>Context</u>	Site Status	<u>SiteFeatur</u>	es	<u>SiteTypes</u>	Reports
	<u>Contact</u>	Recorders	GML	Heritage Pty	Ltd + Context	- Surry Hills,Doct	or.Tim Owen,Doctor	Tim Owen	Permits	3958	
45-5-4530	Parramatta RSL PAD	GDA	56	314810	6256690	Open site	Partially	Hearth : -, l			104179
							Destroyed	Archaeolog			
								Deposit (PA	AD) : -,		
								Artefact : -	<u>.</u> .		
45 6 0450	Contact	Recorders		0 .			Heritage Pty Ltd + C			3819,3853,3935,4364	404056
45-6-3159	Catholic Diocese Parramatta PAD	GDA	56	315120	6257259	Open site	Partially	Artefact : -,			104276
							Destroyed	Archaeolog Deposit (PA			
	Contact	Recorders	Evte	nt Heritage I	Pty Ltd - Pyrmo	nt - Individual us	ers,Miss.Diana Cowie		•	4300	
45-5-4533	Paddocks Playground Parra Park	GDA		314323	6257378	Open site	Partially	Artefact : -	<u>r crimito</u>	1300	
10 0 1000	radoono ray ground rarra rarra	gD11		011020	020.0.0	open one	Destroyed	THI COLUCCI.			
	Contact	Recorders	Ms.7	ory Stening					<u>Permits</u>	3822	
45-5-4534	Parramatta Park - Location C	GDA		314568	6257473	Open site	Valid	Artefact : -			
	Contact	Recorders	Ann	ie Bickford					Permits		
45-5-4535	Parramatta Park - Location E	GDA	56	314539	6256846	Open site	Valid	Artefact : -			
	Contact	Recorders	Val A	Attenbrow					<u>Permits</u>		
45-5-4536	Parramatta Park - Location G	GDA		314504	6256700	Open site	Valid	Artefact : -			
	Contact	Recorders	Val A	Attenbrow					<u>Permits</u>		
45-5-4537	Parramatta Park - Location H	GDA	56	314199	6257357	Open site	Partially	Artefact : -			
							Destroyed				
	Contact	<u>Recorders</u>	Val A	Attenbrow					Permits	3822	
45-5-4538	Parramatta Park - Location J	GDA	56	314351	6257676	Open site	Valid	Artefact : -			
	<u>Contact</u>	<u>Recorders</u>	Val A	Attenbrow					Permits	3994	
45-5-4539	Parramatta Park - Location K	GDA	56	314460	6257823	Open site	Valid	Artefact : -			
	<u>Contact</u>	Recorders	Val A	Attenbrow					<u>Permits</u>	3994	
45-5-4540	Parramatta Park - Location I	GDA	56	314260	6257448	Open site	Partially	Artefact : -			
							Destroyed				
	Contact	Recorders		Attenbrow					<u>Permits</u>	3822	
45-5-4542	Parramatta Park - Location L	GDA	56	314542	6257709	Open site	Valid	Artefact : -			
	<u>Contact</u>	<u>Recorders</u>	Val A	Attenbrow					Permits	3994	
45-5-4543	Parramatta Park - Location N	GDA	56	314693	6257737	Open site	Valid	Artefact : -			
	Contact	<u>Recorders</u>	Val A	Attenbrow					<u>Permits</u>		
45-5-4544	Parramatta Park - Location O	GDA	56	314725	6257680	Open site	Valid	Artefact : -			
	Contact	<u>Recorders</u>	Val A	Attenbrow					<u>Permits</u>		
45-5-4545	Parramatta Park - Location S	GDA	56	314170	6256851	Open site	Valid	Artefact : -			
	Contact	Recorders	Mr.I	Oominic Steel	e				Permits		

Report generated by AHIMS Web Service on 03/03/2020 for Sam Cooling for the following area at Lat, Long From : -33.8247, 150.9864 - Lat, Long To : -33.8002, 151.0252 with a Buffer of 1000 meters. Additional Info : ACHAR. Number of Aboriginal sites and Aboriginal objects found is 100



Extensive search - Site list report

Your Ref/PO Number : Parra Powerhouse

Client Service ID: 488285

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
45-5-4546	Parramatta Park - Location D	GDA		314555	6256864	Open site	Valid	Artefact : -		
	Contact	Recorders	Val A	ttenbrow				Permits		
5-5-4547	Parramatta Park - Location F	GDA		314304	6257230	Open site	Partially Destroyed	Artefact : -		
	Contact	Recorders	Val A	ttenbrow			•	<u>Permits</u>	3994	
5-5-4541	Parramatta Park - Location M	GDA	56	314608	6257586	Open site	Valid	Artefact : -		
	Contact	Recorders	Val A	ttenbrow				<u>Permits</u>		
5-6-3158	Robin Thomas Reserve	GDA	56	316100	6256300	Open site	Valid	Aboriginal Resource		
								and Gathering : -,		
								Potential		
								Archaeological Deposit (PAD) : -		
	Contact	Recorders	Ms.Ji	lian Comber	•			Permits	4439	
5-6-3157	Harris St Footpath	GDA		316013	6256461	Open site	Valid	Artefact : -		
	Contact	Recorders	Ms.T	ory Stening				<u>Permits</u>	4439	
5-6-3193	Riverbank Square PAD	GDA		315405	6256895	Open site	Valid	Potential		
								Archaeological		
								Deposit (PAD) : -		
	Contact	Recorders		gaire Richar				<u>Permits</u>		
5-6-3195	Cumberland Hospital East	GDA	56	315022	6258090	Open site	Valid	Potential		103863
								Archaeological Deposit (PAD) : -		
	Contact	Recorders	Ms.Ii	lian Comber	•			Permits	3932	
5-6-3180	21 Hassall Street	GDA		315761	6256247	Open site	Partially	Potential	0.02	103758
							Destroyed	Archaeological		
								Deposit (PAD): 1		
	Contact	Recorders		gaire Richar				<u>Permits</u>	3906,3975	
5-5-4895	Old Kings Oval Artefact Scatter 1	GDA	56	314665	6257231	Open site	Valid	Artefact : -, Potential		
								Archaeological Deposit (PAD) : -		
	<u>Contact</u>	Recorders	AECC	M Australia	Ptv Ltd - Svdn	ev Artefact - Cultur	al Heritage Manage	ment - Rose Permits	4307,4461	
5-6-3232	Test recording	GDA		315051	6257106	Open site	Deleted	Artefact : -	,	
	Contact	Recorders		Mr.Stewart		-		<u>Permits</u>		
5-6-3312	PLR AFT 1	GDA		316105	6256465	Open site	Valid	Artefact : -		
	Contact	Recorders				Pty Ltd,Ms.Cristan	v Milicich	<u>Permits</u>		
5-6-3313	PLR AFT 2	GDA		316305	6256340	Open site	Valid	Artefact : -		
	Contact	Recorders				Pty Ltd,Ms.Cristan		Permits		
	Contact	<u>Necoluers</u>	Keile	iici ivigiitillg	are consuming	; i ty Ltu,MS.GHStdH	y MINICICII	reimits		

Report generated by AHIMS Web Service on 03/03/2020 for Sam Cooling for the following area at Lat, Long From : -33.8247, 150.9864 - Lat, Long To : -33.8002, 151.0252 with a Buffer of 1000 meters. Additional Info : ACHAR. Number of Aboriginal sites and Aboriginal objects found is 100



AHIMS Web Services (AWS) Extensive search - Site list report

Your Ref/PO Number : Parra Powerhouse

Client Service ID: 488285

<u>SiteID</u>	<u>SiteName</u>	<u>Datum</u>	Zone	Easting	Northing	Context	Site Status	<u>SiteFeatures</u>	<u>SiteTypes</u>	<u>Reports</u>
5-6-3222	Old Kings School AS1	GDA	56	315026	6257139	Open site	Valid	Artefact : -, Potential Archaeological Deposit (PAD) : -		
	<u>Contact</u>	Recorders	Exte	nt Heritage l	Pty Ltd - Pyrmo	ont - Individual use	ers,Ms.Ngaire Richar	ds <u>Permits</u>		
15-6-3214	Wigram & Hassall St AS	GDA	56	315825	6256231	Open site	Valid	Artefact : 1, Potential Archaeological Deposit (PAD) : 1		
	<u>Contact</u>	Recorders	Exte	nt Heritage l	Pty Ltd - Pyrmo	ont - Individual us	ers,Mr.Alistair Hobbs	<u>Permits</u>	4043	
5-6-3503	32 Smith Street	GDA	56	315536	6256745	Open site	Partially Destroyed	Potential Archaeological Deposit (PAD) : 1		103963,10396 4,103965
	<u>Contact</u>	Recorders	AMA	C Group P/I	"Mr.Benjamin	Streat		<u>Permits</u>	4268,4347	
15-6-3360	Parramatta Riverside PAD 1	GDA	56	315172	6256924	Open site	Valid	Artefact : -, Potential Archaeological Deposit (PAD) : -		
	Contact	Recorders	Bios	is Pty Ltd - S	ydney,Biosis P	ty Ltd - Wollongor	ng,Mr.James Cole,Mrs	.Samantha K Permits	4250,4379	
5-6-3625	Granville MPC PAD	GDA	56	316175	6254420	Open site	Not a Site	Potential Archaeological Deposit (PAD) : -		104230
	<u>Contact</u>	Recorders	Exte	nt Heritage l	Pty Ltd - Pyrmo	ont - Individual us	ers,Ms.Fenella Atkins	son <u>Permits</u>	4352	
5-6-3692	VOC IF1	GDA	56	315044	6257297	Open site	Valid	Artefact : -		
	<u>Contact</u>	Recorders	Arte	fact - Cultura	al Heritage Mai	nagement - Rose B	ay,Ms.Jennifer Norfo	lk <u>Permits</u>		
5-6-3630	Hassall St PAD	GDA	56	315587	6256244	Open site	Valid	Potential Archaeological Deposit (PAD) : 1		
	<u>Contact</u>	Recorders	Com	ber Consulta	ants Pty Limite	d,Ms.Jillian Combe	er	<u>Permits</u>	4412,4527	
5-5-4942	Parramatta RSL Artefact Scatter 1 (PRSL AS-01)	GDA	56	314839	6256683	Open site	Destroyed	Artefact : -, Hearth : -		
	<u>Contact</u>	Recorders	Arte	fact - Cultura	al Heritage Mai	nagement - Rose B	ay,Artefact - Cultura	Heritage Ma Permits	4235	
5-6-3679	Stage One PAD	GDA	56	315454	6256795	Open site	Not a Site	Artefact : -, Potential Archaeological Deposit (PAD) : -		
	<u>Contact</u>	Recorders	Nich	e Environme	ent and Heritag	ge,Niche Environm	nent and Heritage,Ms	.Clare Anders Permits	4522	
5-6-3582	Macquarie Street PAD	GDA	56	315257	6256595	Open site	Valid	Potential Archaeological Deposit (PAD) : -		
	Contact	Recorders	Miss	.Alandra Tas	sire,Comber Co	nsultants Pty Limi	ited	<u>Permits</u>		
5-5-5126	Cumberland West	GDA	56	314493	6257901	Open site	Valid	Potential Archaeological		
	Contact					d,Ms.Jillian Combe		Deposit (PAD) : 1 Permits	4363,4468	

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Extensive search - Site list report

Your Ref/PO Number : Parra Powerhouse

Client Service ID: 488285

SiteID	SiteName	<u>Datum</u>	<u>Zone</u>	Easting	Northing	Context	Site Status	<u>SiteFeatures</u>	SiteTypes	<u>Reports</u>
45-6-3495	116 Macquarie St Parramatta	GDA	56	315700	6256475	Open site	Valid	Potential		103782
								Archaeological Deposit (PAD) : 1		
	Contact	Recorders	Com	her Consulta	nts Ptv Limited	d,Ms.Alandra Tasire		Permit	s	
45-5-5010	Parramatta Park PAD_1	GDA		314400	6256580	Open site	Valid	Potential	<u>~</u>	
	- · · · · · · · · · ·							Archaeological		
								Deposit (PAD) : -,		
								Artefact : -		
	<u>Contact</u>	Recorders	Nich	e Environme	nt and Heritag	e,Niche Environmen	t and Heritage,Mr.S	Samuel Rich: Permit	<u>s</u> 4256	
45-5-5251	Western Sydney Stadium	GDA	56	314884	6257269	Open site	Valid	Artefact : -		
	Contact	Recorders	Ms.J	illian Combe	,Comber Cons	ultants Pty Limited		Permit	2	
45-6-3767	85-97 Macquarie St	GDA	56	315235	6256513	Open site	Valid	Potential		
								Archaeological		
								Deposit (PAD) : -		
	<u>Contact</u>	Recorders	Com	ber Consulta	nts Pty Limited	d,Ms.Tory Stening		<u>Permit</u>	<u>s</u>	
45-6-3702	Smith St PAD1	GDA	56	315480	6256713	Open site	Valid	Potential		
								Archaeological		
								Deposit (PAD): 1		
	Contact	Recorders	Com	ber Consulta	nts Pty Limited	d,Ms.Jillian Comber		<u>Permit</u>	<u>s</u> 4513	
45-6-3764	Belmore Park ISO 1	GDA	56	315593	6258267	Open site	Valid	Artefact : -		
	Contact	Recorders	Arte	fact - Cultura	l Heritage Man	agement - Rose Bay,	Ms.Jennifer Norfoll	k <u>Permit</u>	<u>s</u>	



APPENDIX E—Glossary of Technical Terms

TERM	DEFINITION
Aboriginal Object	"Any deposit, object or material evidence (not being a handicraft made for sale) relating to the Aboriginal habitation of the area that comprises NSW, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction, and includes Aboriginal remains" (DECCW 2010:18).
Aboriginal Place	"A place declared under s.84 of the NPW Act that, in the opinion of the Minister, is or was of special significance to Aboriginal culture" (DECCW 2010:18). Aboriginal places are gazetted by the minister.
Archaeological survey	A method of data collection for Aboriginal heritage assessment. It involves a survey team walking over the land in a systematic way, recording information about how and where the survey is conducted, recording information about the landscape and recording any archaeological sites or materials that are visible on the land surface. The activities undertaken by a survey team do not involve invasive or destructive procedures, and are limited to note taking, photography and making other records of the landscape and archaeological sites (e.g. sketching maps or archaeological features). (From DECCW 2010: 37)
Exposure	Estimates area with a likelihood of revealing buried artefacts or deposits rather than just an observation of the amount of bare ground. The percentage of land for which erosion and exposure was sufficient to reveal archaeological evidence of the surface of the ground. (From DECCW 2010: 37)
In Situ	Anything in its natural or original position or place is said to be in situ.
Knapping	The process of manufacture of stone tools.
PAD	Potential Archaeological Deposit. Nature of potential site yet unknown, environmental, archaeological and cultural modelling suggests the location has potential for a subsurface archaeological deposit to be present.
Test Unit	Location identified for archaeological test excavation
Study Area	Development/project area to which this report, the information, discussion and assessment presented within, directly refers to.

