

Historical Archaeological Research Design and Excavation Methodology

*13–17 Oxford Street & 2 Verona
Street, Paddington*

November 2025

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Acknowledgment of Country

Urbis acknowledges the Traditional Custodians of the lands we operate on. We recognise that First Nations sovereignty was never ceded and respect First Nations peoples continuing connection to these lands, waterways and ecosystems for over 60,000 years. We pay our respects to First Nations Elders, past and present.

Urbis is committed to incorporating our respect for First Nations cultures, peoples and storytelling in our work across the Country. We are proud to have partnered with Darug Nation artist, **Hayley Pigram**, and to profile her artwork – **Sacred River Dreaming**.



The river is the symbol of the Dreaming and the journey of life. The circles and lines represent people meeting and connections across time and space. When we are working in different places, we can still be connected and work towards the same goal.

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1

Introduction

1 Introduction

Urbis has been engaged by 17 Oxford Street Pty Ltd ('the proponent') to prepare a Historical Archaeological Research Design and Excavation Methodology (HARDEM) for the proposed redevelopment of 13–17 Oxford Street and 2 Verona Street, Paddington. The subject area is legally referred to as 13–15 Oxford Street (SP 22113), 17 Oxford Street (Lot 1 DP 137013) and 2 Verona Street, (Lot 1 DP 75105) Paddington. This HARDEM forms part of the State Significant Development Application (SSD-87245208).

1.1 Background

Urbis are tying together a series of studies done for a previous discontinued development proposal and uniting them under a new the new proposal for SSD-87245208. Prior studies include a Baseline Archaeological Assessment (BAA) by AMAC Group in 2022 and an Archaeological Research Design and Excavation Methodology (ARD) in 2024 for 17 Oxford Street, which was prepared to support an application under s140 Excavation Permit and s60 *Heritage Act 1977* for a local Development Application for City of Sydney Council.

The proposed development is now under a State Significant Development Application (SSD-87245208). The scope of works has changed and now encompasses 13–15 Oxford Street, 17 Oxford Street and 2 Verona Street. A separate Historical Archaeological Assessment (Urbis 2025) has been prepared for 13–15 Oxford Street and 2 Verona Street. Urbis has also prepared an Addendum to include 13–17 Oxford Street and 2 Verona Street which accompanies the HAA (Urbis 2025) and should be read in conjunction with the BAA (AMAC 2022).

The HAA (Urbis 2025) and BAA (AMAC 2022) both recommended a HARDEM in accordance with Heritage NSW guidelines should be prepared prior to development to guide and mitigate those impacts with a program of archaeological monitoring and salvage (if required) of locally significant relics. This HARDEM supplements all of these reports and has been prepared as supporting documentation to the State Significant Development Application (SSD-87245208). It fulfils Condition 22 of the Secretary's Environmental Assessment Requirement (SEARs):

- 22. Environmental Heritage

Where there is potential for direct or indirect impacts on environmental heritage, provide a Statement of Heritage Impact and Archaeological Assessment (where required), in accordance with the relevant guidelines.

This HARDEM does not propose the removal of state significant relics should they exist at the site. Further liaison with Heritage would be required for such finds.

1.2 Scope and Limitations

This HARDEM is tailored to the scope of the proposed works within the subject area, the significance of the potential archaeological resource and the requirements of the *Heritage Act 1977* (NSW).

This HARDEM accords with the following guidelines:

- *Historical Archaeology Code of Practice* (Heritage Office of the Department of Planning 2006)
- *Archaeological Assessment Guidelines* (Heritage Office, Department of Urban Affairs and Planning 1996)
- *Assessing Significance for Historical Archaeological Sites and 'Relics'* (Heritage Branch of the Department of Planning 2009)
- *Criteria for Assessing Excavation Directors* (Heritage Council of NSW 2019)

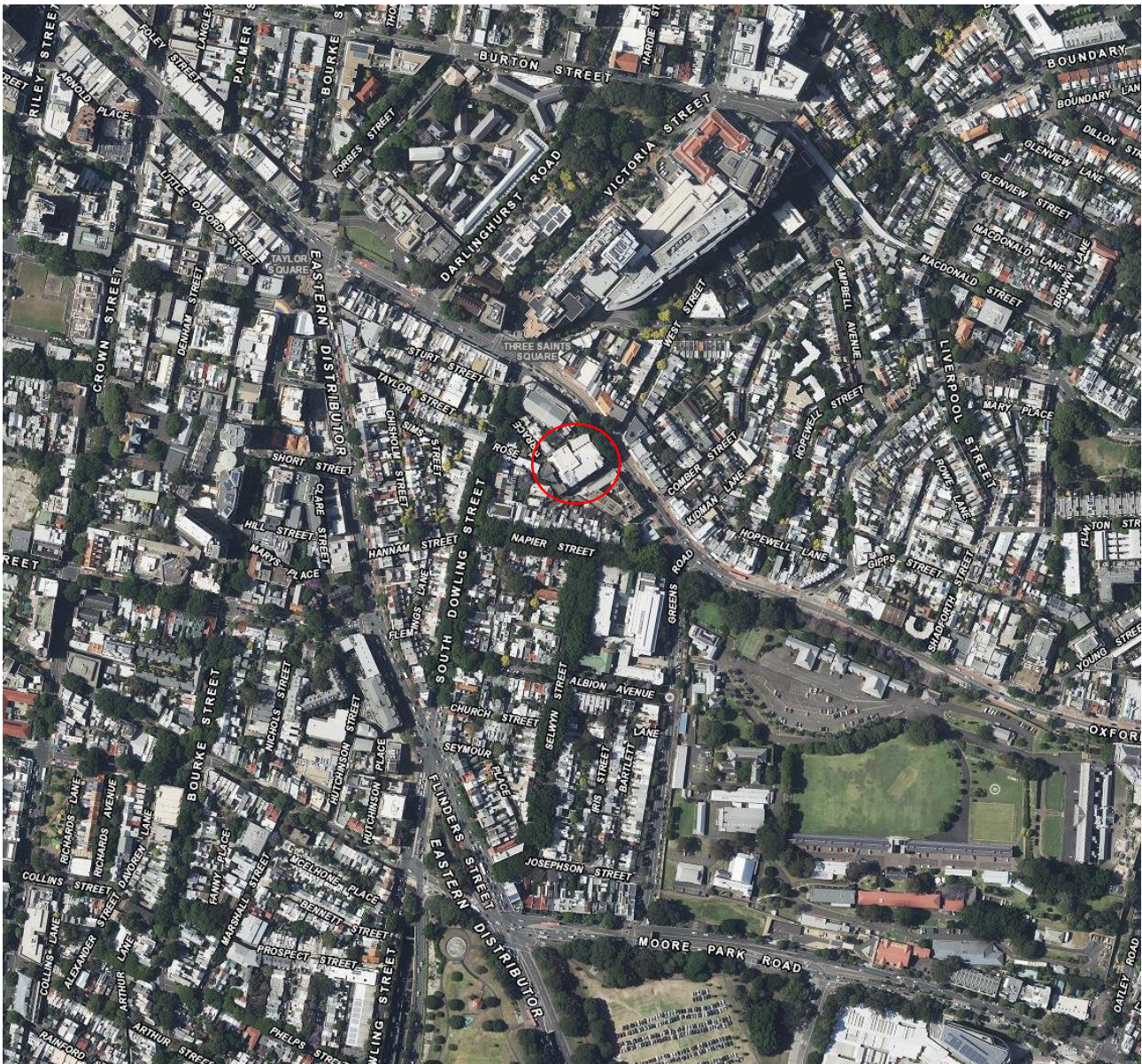


Figure 1 Regional location of the subject site circled in red.

Source: NSW Spatial Services – SIX Maps



Figure 2 – Map of the subject site, with different properties indicated (2 Verona Street outlined in blue, 13–15 Oxford Street in green, and 17 Oxford Street in red).

Source: NSW Spatial Services – SIX Maps

1.3 Project History

This section provides an overview of the project history based on the findings of the HAA (Urbis 2025) and BAA (2022) which should be read in conjunction with this HARDEM. It summarises the site's archaeological potential, assessed heritage significance, and the likely impacts on archaeological resources.

1.3.1 Summary of Archaeological Potential

The site has undergone significant disturbance from multiple construction phases, including a 1940s service station, an 1980s apartment complex with a basement, and early 20th-century developments, which likely removed most remains of the 1850s Brewery buildings, Oxford Street rear yards, and later structures. The 1911 Olympia Theatre excavation likely destroyed Marshalls' 1880s cottage, while the 1930–1943 building on Lot 9 removed earlier stables and timber structures. The early 20th-century factory at 17 Oxford Street, which included a small half-basement, may have further impacted earlier remains, leaving only low to moderate potential for surviving 1840s cottages, privies, and outbuildings. The site lies within the Blacktown soil landscape but contains sandy Tuggerah soils that erode ephemeral deposits but preserve deeper features. Overall, the potential for intact 19th-century remains is low to moderate, but there is high potential for deep, robust, undocumented features, including the SHR-listed Busby Bore several metres below the site.

1.3.2 Statement of Significance

The site is significant for its potential to reveal the industrial, domestic, and commercial history of Paddington and the broader transition of land use from Sydney Common to Richard Brooks' estate and later industrial development. In the 1840s, Morris Castle established several domestic and commercial buildings that remained occupied until the early 20th century on 17 Oxford Street. The later expansion of Marshall's Brewery introduced substantial industrial infrastructure, with possible surviving footings, subterranean features, and services offering insights into brewery construction and organisation. The site also includes the rear yards of 1840s Oxford Street buildings, with potential for outbuildings and features reflecting the brewery's growth. Additionally, Busby's Bore, an early 19th-century government water supply tunnel survives several metres below ground and is of State significance, illustrating a rare intersection of private industrial development with early public utilities. Overall, the combination of industrial remains, rear yard features, and early infrastructure provides a rare and representative record of Sydney's urban-industrial heritage, with brewery-related remains of local significance and Busby's Bore contributing to a broader understanding of early Sydney water infrastructure and engineering practice.

1.3.3 Statement of Archaeological Heritage Impact

The proposed mixed-use housing development on the subject site will involve the demolition of existing structures, with the exception of the two-storey masonry façade at 17 Oxford Street, which will be retained. The development includes construction of mixed-use buildings with a three-level basement covering the majority of the site. This will require bulk excavation, which is likely to wholesale remove or heavily impact surviving locally significant relics. As the existing building on 13–15 Oxford Street contains a basement, the likelihood of intact relics is considered low within this footprint and can be managed under an unexpected finds procedure. At 17 Oxford Street there is low to moderate archaeological potential for locally significant 19th-century relics.

The development layout has been designed to avoid Busby's Bore, an item of State significance. Its extrapolated location has been marked on the plans. The basement excavation required for 13–15 Oxford Street will not exceed the depth previously approved for the previous 17 Oxford Street proposal¹ and has been designed to avoid inferred location of the bore.

Minor excavation works will be required for the construction of terraces at 2 Verona Street, mainly related to footing and services, and for landscaping and infrastructure associated with a communal open space at the rear of 13–15 Oxford Street. There is low potential for locally significant remains within this area which undergo minor impact by such excavation. The proposed excavation works are unlikely to exceed depths that would impact Busby's Bore.

In order to mitigate the archaeological impact of the proposed works a program of archaeological monitoring is proposed for excavation within areas of low-moderate potential and for any piling or deep impacts required within the vicinity of Busby's Bore. An unexpected finds procedure is proposed for areas of low archaeological potential.

¹ This was approved through local DA and a Section 60 Approval from Heritage NSW and is now superseded by the current design.

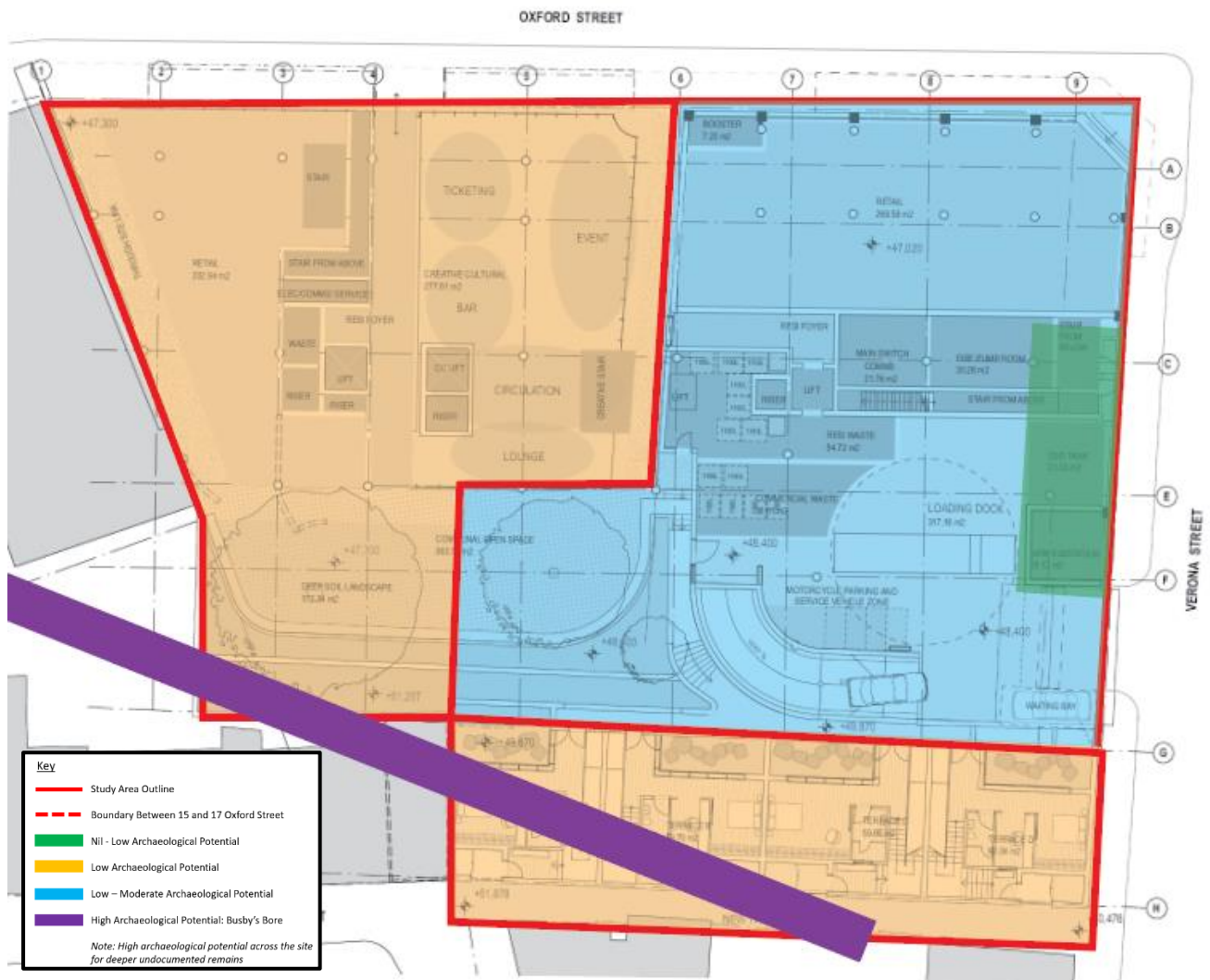


Figure 3 Overlay of proposed ground floor impacts to areas of archaeological potential.

Source: Urbis. Tonkin Zulaikha Greer (TZG), No Date (received 2025) Drawing No. A103.

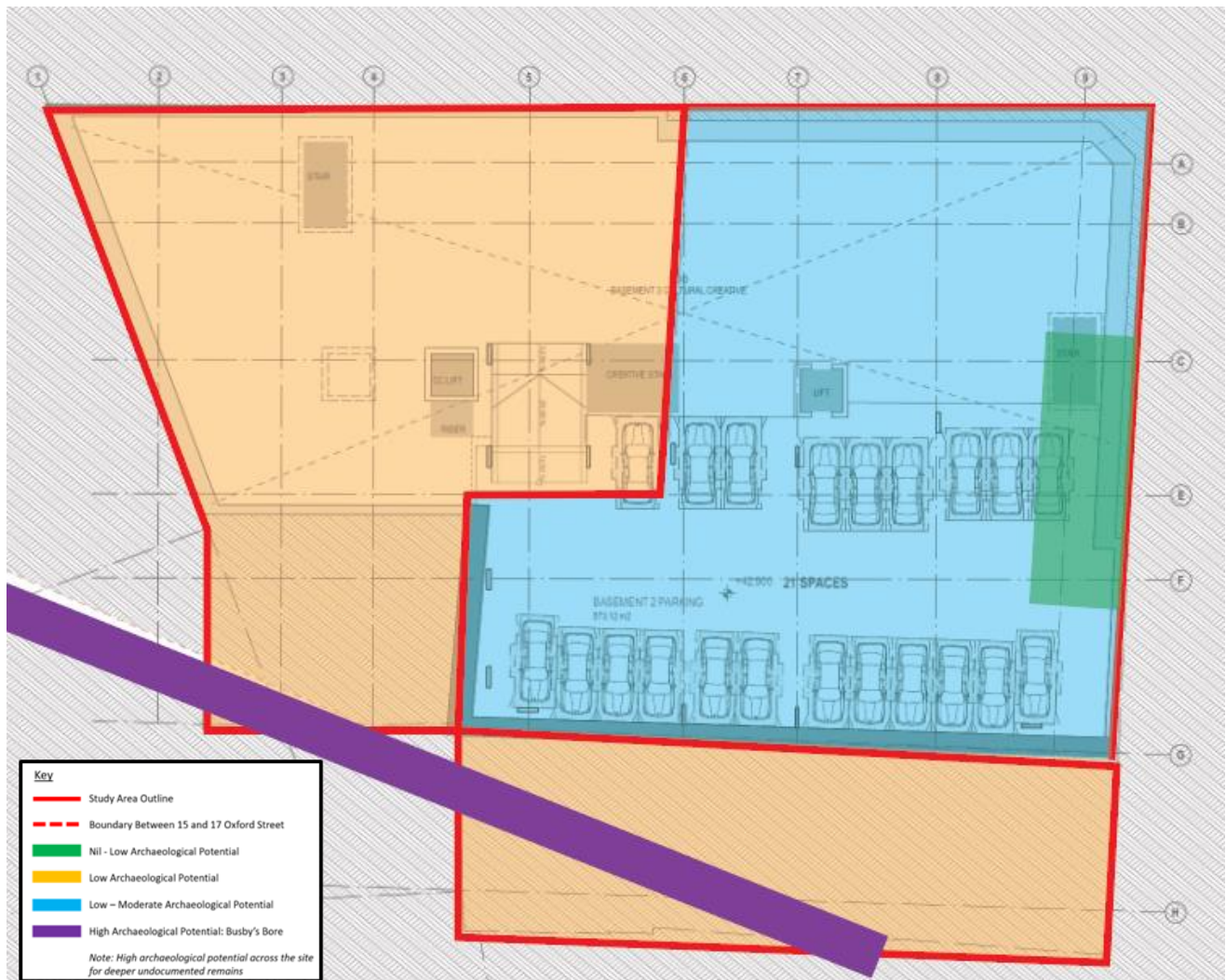


Figure 4 Overlay of proposed basement 2 impacts to areas of archaeological potential.

Source: Urbis. Tonkin Zulaikha Greer (TZG), No Date (received 2025) Drawing No. A101.

2

Archaeological Research Design

2 Archaeological Research Design

The proposed redevelopment of the subject area includes the construction of a multi-storey development with basement parking at 13-17 Oxford Street and a series of terraces at 2 Verona Street. Given these impacts, it is likely that the proposed works have the potential to expose archaeological relics of local and State significance, therefore a program of monitoring and salvage (if required) has been proposed.

The following research design was developed based on the Heritage Council of NSW's historical themes and will guide the methodology for the proposed archaeological excavation of the subject area.

2.1 NSW Historical Themes

The Heritage Council of NSW provides historical themes to consider the research values of heritage in New South Wales.² Historical themes relevant for the study site are presented in Table 1 below.

Table 1 – Historical Themes concerning the subject area

Australian Theme	NSW State Theme	Study Site
Tracing the natural evolution of Australia	Environment – naturally evolved	Fragmentary or remnant natural topsoils that predate the colony or associated with Sydney Common.
Developing local, regional and national economies	Environment – cultural landscape. Commerce	Fragmentary topsoils associated with Sydney Common; Evidence of vegetation clearing and truncation of natural topography. Late 19th century shops: saddler, draper, furniture shop, stables
Developing local, regional and national economies	Industry	Marshall's Brewery
Building settlements, towns and cities	Utilities	Busby's Bore
Developing Australia's	Domestic life	1840s terraces and cottages along with the later 19th century additions.

2.2 Research Questions

The following research questions relate to the historical development and use of the site generally. They have been formulated based on the survival or evidence of relics on the subject area.

Research Questions
What evidence is there of previously unknown features?

² Assessing Historical Importance, a Guide to State Heritage Register Criterion A, Heritage Office, Department of Planning, 2006

What archaeological evidence is there of the features which are known to have existed on the site?

How has the process of development affected earlier remains on the site?

How has the natural geology and topography of the site affected the survival of relics?

As part of its guidance on archaeological monitoring and test excavation under Section 139 of the *Heritage Act 1977*, Heritage NSW has developed a set of standard research questions. These questions focus on the overall nature of the archaeological record and serve as the framework for the research design.³

Research Questions

What was identified at the site? What kinds of features and deposits?

When were these features or deposits created? How are they phased against the site historical analysis?

What site formation processes have occurred?

What happened at the site?

How does this site compare to others?

What contexts, phases, and activity areas are evident, and how are these demonstrated by the various excavation units (trench/square/context/feature)?

Where were the relics located?

Compare the results with other relevant sites, related projects, and current research; how does the project fit into broader, regional frameworks and theoretical models if they exist?

Indicate how and/or why the subject site differs from other sites.

The following research questions relate to the historical development and use of the site generally. They have been formulated in view of the themes discussed in the preceding Section.

▪ **Tracing the natural evolution of Australia. Environment – naturally evolved.**

Archaeological Resources – Fragmentary or remnant natural topsoils that predate the colony or associated with Sydney Common (considered highly unlikely).

Research Questions

Is there any evidence of agricultural development of Brook's grant? Is there any evidence for the spatial organisation of the land grant and its functions?

Can the archaeology provide more detailed phasing for the land use or illustrate continuity over time?

What does the stratigraphy tell us about the relationship between the earliest development phases of the site in response to its natural topography and geography?

Can any 19th century remains be associated with the phases of occupation for Brook's grant identified by the historic research?

³ Heritage NSW, Department of Premier and Cabinet 2022, 4.

- **Developing local, regional and national economies. Environment – cultural landscape**

Archaeological Resources – Fragmentary topsoils associated with Sydney Common (considered highly unlikely); Evidence of vegetation clearing and truncation of natural topography.

Research Questions

Is there evidence of cultural use of Sydney Common and what does this mean for the role of the Common in Sydney society?

- **Developing local, regional and national economies. Industry**

Archaeological Resources – remains associated with the occupation of Marshall's Brewery.

Research Questions

Is there any evidence for Marshalls Brewery operating on the site? Can this use industrial use be distinguished from the residential use of the site?

Are there remains of machinery, kilns, vats, or other production equipment that indicate the type of brewing technology used?

Is there evidence of industrial decline, adaptation, or repurposing of structures?

Is there evidence for different functional areas (production, storage, waste management) within the brewery?

- **Developing local, regional and national economies. Commerce**

Archaeological Resources – Late 19th century shops: furniture store, possible saddler and draper.

Research Questions

Is there any evidence for commercial enterprises conducting business on the site during the mid-late 19th century? Can this use be distinguished from the residential use of the site?

What other trades may have occupied the site? What information does this provide about the economic landscape of Oxford Street during this period?

- **Building Settlements, Towns and Cities. Utilities**

Archaeological Resource – Busby's Bore: this State significant relic is expected to run to north-south along the east of the site and is not anticipated to be impacted by the proposed development as its outside of the footprint of the basement level and subject to minor excavation works for landscaping and infrastructure for a communal open space which are unlikely to exceed depths that will impact on Busby's Bore. The following question is only posed in the case of the unexpected discovery of the bore should the alignment be found to encroach in areas of proposed deep excavation; this is considered highly unlikely.

Research Questions

What additional information is provided about the location and trajectory of Busby's bore through this part of Paddington?

Is there any further evidence for how the bore was constructed?

Do any deposits survive within the bore?

Is there any evidence from the site to indicate the illegal drilling into the bore by the later occupants of the site?

- **Developing Australia's cultural life – Domestic Life**

Archaeological Resource – 1840s terraces and cottages along with the later 19th century additions.

Research Questions

Do any occupation deposits survive from the domestic use of the site? Can they be dated to the original terrace phase or the later additions?

Is it possible to comment on living standards? How does this site compare with other domestic sites of a similar age or context in Paddington, Sydney or other towns?

What is the condition, nature and extent of structural remains?

Is there any evidence for occupation material within the yard area such as cesspits and rubbish pits?

Is there any evidence of the fire that damaged portions of the site in the early 20th century? What affect did this fire have on the archaeology of the site?

3

Excavation Methodology

3 Excavation Methodology

This section provides a site-specific excavation methodology to gather information from targeted archaeological investigation to respond to the Research Design and gain a more informed understanding of the archaeological resource that survives on site.

3.1 Approval Pathway

The proposed development is being assessed under State Significant Development Application (SSD-87245208), as the site is listed on the NSW State Heritage Register as Item 00568 for Busby's Bore. In accordance with SEARs Condition 22, a Historical Archaeological Assessment and Research Design and Excavation Methodology (if required) must be submitted as part of the SSD Application. It is recommended that an Excavation Director is nominated to oversee any proposed excavation or salvage program prior to works.

This HARDEM supplements the HAA (Urbis 2025) for 13-15 Oxford Street and 2 Verona Street and BAA (AMAC 2022) for 17 Oxford Street with Addendum Letter (Urbis 2025) assessing the new scope of proposed development and archaeological heritage impact to 13-17 Oxford Street and 2 Verona Street, as supporting documentation for the SSDA-87245208 under the *Heritage Act 1977* (NSW). These reports will need to be submitted as part of the SSDA and endorsed by Heritage NSW, through the NSW Department of Planning, Housing and Infrastructure.

3.2 Justification of Proposed Excavation Program

The following excavation methodology is proposed; with the development area divided into three zones based on their archaeological potential. The archaeological resource will be managed accordingly within these zones:

- **Zone 1:** Archaeological Monitoring and Salvage (if required)
- **Zone 2:** Unexpected Finds Procedure
- **Zone 3:** Busby Bore (State Significant)

An archaeological program is required due to the archaeological sensitivity of the subject area. The HAA (Urbis 2025) and BAA (AMAC 2022) has identified areas of nil, low, moderate and high archaeological potential for 19th century local and state significant relics.

As the proposed development involves bulk excavation for a three-level basement across most of the site, as well as deep excavation for piling to construct the mixed-use buildings, it is likely that any surviving relics will be largely removed. Accordingly, the archaeological resource will be managed within three zones. **Zone 1:** Archaeological Monitoring and Salvage (if required) applies to areas with low to moderate archaeological potential outside existing basements. Monitoring will take place at the start of ground disturbance, and any locally significant relics uncovered will be recorded and salvaged as appropriate. **Zone 2:** Unexpected Finds Procedure will apply to areas assessed as having nil to low archaeological potential, either due to prior disturbance or the presence of existing basements. If unexpected archaeological material is encountered during construction a qualified archaeologist will be contacted to assess the finds.

In addition, while deep excavation is not anticipated, should any excavation occur in the vicinity of **Zone 3:** Busby Bore, a relic of State significance, this area will be subject to archaeological monitoring of any deep impacts to ensure appropriate management and compliance with heritage requirements. The extent of the location of Busby Bore has been studied as thoroughly as physically possible, and the location is well mapped below 13-15 Oxford Street to the boundary with 17 Oxford Street however its location below 2 Verona Street is still somewhat uncertain. Basements and piling are not proposed below 2 Verona Street in order to ensure the bore is not impacted. Piling is the only activity that is within the vicinity of the bore though has also been designed to avoid the known location while bulk excavation is unlikely to impact the bore based on the known depths; a deep soil zone within the rear of 13-15 Oxford Street has also been designed as a buffer to avoid potential impact. Archaeological monitoring is proposed to ensure that no harm is accidentally caused

to the bore. Should, during this process, the bore be exposed in any way, or any other potential state significant archaeology related to the Bore, excavation works will cease and Heritage NSW will be notified and works in the vicinity of the Bore cannot recommence without advice from Heritage NSW.

State significant archaeology cannot be removed as part of this excavation methodology and mitigation measures such as in situ conservation or minor redesign to avoid impacts in that location are considerations that would be discussed with the client and Heritage NSW. Liaison with Heritage NSW would be undertaken regarding management of state significant archaeology.

This site-specific excavation methodology is designed to address the archaeological research questions outlined in Chapter 2. All excavation will follow current best practices, the methodology detailed here, and any conditions set by Heritage NSW.

3.3 Program Commencement

The archaeological program is proposed to be implemented at the commencement of foundation or slab removal and during any ground-disturbing excavation within Zone 1 and 3, which is subject to archaeological monitoring and salvage (if required). An Unexpected Finds Procedure will be maintained for the duration of the proposed development, applying not only to Zone 2 but across the entire site, as there remains a high potential for deeper, undocumented features.

3.4 Archaeological Team

The excavation must be guided by a suitably qualified Excavation Director that meets the 2009 Heritage Council of NSW Criteria for Assessing Excavation Directors. The nominated archaeological team for the archaeological program will include:

- Primary Excavation Director (Jaki Kennedy)
- Secondary Excavation Director (John Sokalik)
- Archaeologists (Pedro Silva, Emma Williams, Natalie Taylor)

3.5 Heritage Induction

Prior to the commencement of any archaeological field program, a heritage induction would be delivered by the nominated Excavation Director to all relevant construction personnel for the purpose of establishing:

- Heritage obligations of all project personnel.
- Why the subject site is archaeologically significant and how it is protected under legislation.
- What kind of relics may occur within the subject site and where.
- What the current archaeological program is seeking to undertake (e.g. – test excavation, monitoring, salvage) and how that fits into any other site activities presently being undertaken.
- How to work with monitoring or supervising archaeologists, including any stop works procedures for archaeological finds.

Heritage induction material should be provided to all site personnel as part of the induction. Induction materials can include copies of the archaeological reports, approvals, Safe Work Method Statements (SWMS), and digital materials such as PowerPoint slides for integration into other contractor's site induction for large scale works programs.

3.6 Zone 1: Monitoring and Salvage

There is low to moderate archaeological potential for relics to survive in the location of 17 Oxford Street, where basements have not impacted. Any excavation required for the proposed development including the excavation for the basement and piling will be monitored by a qualified archaeologist. This will allow for the

identification of locally significant relics within this zone and allow for the archaeological recording and salvage of relics in accordance the Standard Excavation Practices detailed in Section 3.7.

Should potential state significant archaeology be exposed at any point during the archaeological program, excavation works will cease in that location while the remains are investigated. State significant archaeology cannot be removed as part of this excavation methodology.

Monitoring involves a suitably qualified archaeologists working alongside an experienced mechanical excavator driver (potentially manual excavation at this site) and directing the location, depth and method of excavation. Any machines must be of an appropriate size to the task, work backwards from hardstand or areas of no archaeological potential so as not to disturb any exposed archaeology, have rubber tracks, use a mud bucket, and remove one stratigraphic layer at a time as defined by the archaeologist.

3.7 Zone 2: Unexpected Finds Procedure

Within this zone, there is nil to low archaeological potential for relics to survive due to prior disturbances, and the presence of existing basements. More specifically in majority of the areas occupied by 13-15 Oxford Street and 2 Verona Street. However, it is recognised that across the broader subject area there is high potential for deeper, undocumented archaeological features to survive. These may include features including wells or shafts that may be associated with Busby Bore, cesspits, and infrastructure such as tanks associated with Marshall's Brewery.

Protocol for Unexpected Finds Procedure

- Should any archaeological material, including structural remains, artefacts, or other archaeological features, be uncovered during works, activities in the immediate area must cease immediately.
- The archaeological team must be notified promptly to assess the finds. Work in the area may only resume once an archaeologist has completed their assessment and provided clearance or guidance.
- The heritage induction (Section 3.10) will detail the types of unexpected archaeological material that may be encountered on-site and outline the appropriate method for reporting these discoveries to the archaeological team.

If locally significant relics are uncovered within this zone that have previously been assessed by the HAA (Urbis 2025) or BAA (AMAC 2022) but are found outside the mapped areas of archaeological potential (this may occur due to inaccuracies in historical overlays or limitations in prior investigations), these relics will still be treated as significant. They will be archaeologically, recorded, and salvaged in accordance with the methodology outlined for Zone 1, ensuring consistency in heritage management and compliance with relevant statutory obligations.

This approach ensures that all archaeological material, whether within or outside previously identified areas of potential, is managed systematically, minimising the risk of inadvertent damage and ensuring that the cultural heritage values of the site are preserved.

3.8 Zone 3: Busby Bore

While deep excavation is not anticipated, should any excavation, such as piling, occur in the vicinity of Zone 3: Busby Bore, a State significant heritage item, especially excavation for the foundations for the town houses on 2 Verona Street, this area will be subject to inspection and archaeological monitoring to ensure appropriate management and compliance with heritage requirements. The extent of the location of Busby Bore is still uncertain, despite extensive physical testing. Should it or any potential state significant archaeology relate to it, be exposed at any point during the archaeological program, excavation works will cease in that location and Heritage NSW will be notified, works cannot recommence in the vicinity of the Bore unless with advice from Heritage NSW.

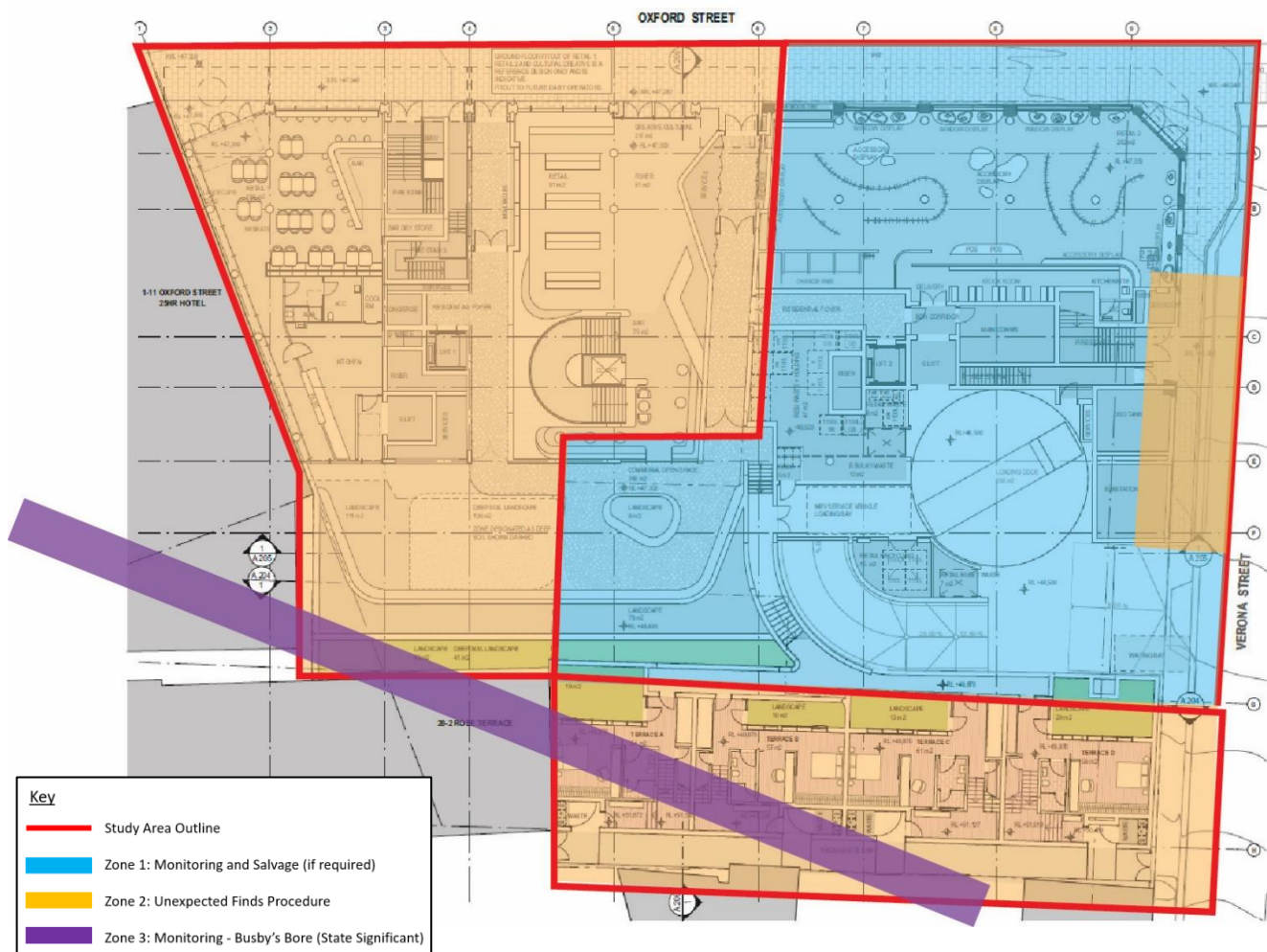


Figure 5 Archaeological Zones.

Source: Urbis 2025.

3.9 Standard Excavation Practices

3.9.1 Demolition and Services

Consult with the archaeologist when deciding the methodology for demolition or planning temporary or permanent service connections. In general, structures may be demolished to slab level without supervision but an archaeologist must be present when slabs are lifted. Footings and services must be left in-ground until archaeologists confirm removal will not impact archaeology – this may be after the completion of archaeological fieldwork. Demolition plans that require in-ground impacts, such as temporary piling or shoring when buildings are partly retained or the construction of ramps and haul roads, must consult with the archaeologist during the planning stages as this may affect the archaeological methodology and approvals. In general, existing service routes may be re-used but if new excavation is required to extend, repair or replace services, or if there is a proposal to use non-destructive digging, consult the archaeologist in the planning stages as this may affect the archaeological methodology and approvals.

3.9.2 Archaeological Monitoring

Monitoring involves a suitably qualified archaeologists working alongside an experienced mechanical excavator driver and directing the location, depth and method of excavation. The machine must be of an appropriate size to the task, work backwards from hardstand or areas of no archaeological potential so as not to disturb any exposed archaeology, have rubber tracks, use a mud bucket, and remove one stratigraphic layer at a time as defined by the archaeologist.

3.9.3 Manual Investigation

As defined by the archaeologist monitoring mechanical excavation, machine excavation ceases at the point at which potential archaeological relics are exposed. This is typically after the removal of modern fills and surfaces and the appearance of historic soil profiles or structures. Manual investigation can involve a team of archaeologists using small hand tools to expose and clean in detail archaeological structures, features and deposits. Manual investigation proceeds by identifying individual units or 'contexts,' usually a stratigraphic layer, cut, fill, deposit or structure, and excavating those units in a controlled manner. This can take place during either testing, monitoring or salvage excavation scenarios. The scale of manual investigation is related to the Research Design, the nature, extent, complexity, significance and condition of the archaeological resource and its research potential.

Occupation Deposits

If discovered, deposits require spatially controlled manual investigation by first identifying the levels and full extent of the deposit and establishing a grid of that area suitable to the size of the deposit, typically 1m x 1m squares if the deposit is within a room or yard space. A grid will not be necessary for deposits within wells, cisterns or privies. With small hand tools archaeologists manually excavate deposits in stratigraphic order to retrieve the artefacts in a controlled manner. Deposits are sieved through a 3–5mm mesh to ensure a high percentage or all artefacts are retrieved. The sample size for artefact collection can range up to 100% of those identified in the deposit, depending on the significance, Research Design and parameters of the site-specific excavation methodology. During this process, the Excavation Director reviews the artefacts recovered along with the stratigraphy to confirm the dating and significance of the deposit is within the range anticipated by the Research Design and the approvals in place for excavation.

3.9.4 Conservation In-Situ

Conservation in-situ can be achieved by avoiding disturbing an archaeological site, exposure and reburial of a site or exposure and conservation for public display, these options depend on the most appropriate strategy for the archaeological resource, its significance and the site conditions. Reburial includes, at a minimum, physical separation with stable and permeable materials such as geofabric and then 100mm of clean sand to avoid contact with introduced materials and disperse loads. Conservation areas should be

avoided with deep plantings when areas are landscaped. Guides for conservation by display would be determined in a Heritage Interpretation Plan or Heritage Interpretation Strategy.

Assessing and planning for conservation is done with reference to *Archaeological Assessments Guidelines*, Heritage Office, Department of Urban Affairs and Planning, 1996. Those guidelines also reference the *Burra Charter*, Article 9 of which states that ‘the physical location of a place is part of its cultural significance’. Archaeologists should always consider the in-situ retention of archaeological features for future generations, however, in many cases this is not possible. When conservation is not possible, the archaeological site should be comprehensively documented before its disturbance, including the details of its location and relationships (Article 27). In some cases, the removal and reconstruction of archaeological features at another place (for example, a museum) may be appropriate, especially where the original location is under threat of destruction.⁴

3.9.5 Archaeological Recording

Archaeological sites are recorded in several ways: Context Sheets, Harris Matrix, Photography, Diary, Scaled Site Drawings and Levels. Scaled Site Drawings are made to archaeological drawing conventions and are produced either by hand-drawing them on site or with data collected from photogrammetry. Scaled plans must be correlated with spatial survey information and the collection of Australian Height Datum (AHD) levels. Context Sheets are standardised forms that record descriptive and interpretive details for each individual unit that makes up the archaeological site (e.g. stratigraphic layers, structures, deposits). A Harris Matrix is used to define the relationships between those individual units. The site diary tracks daily progress and interpretations of stratigraphy, phasing, site taphonomy and identification of individual units. Photography includes the use of a labelled photo board, north arrow and scales, archival photos must shoot in a RAW format and comply with the *Photographic Recording of Heritage Items Using Film Or Digital Capture*. Records are accompanied by registers that track the creation of archaeological data. must fulfil the expectations of any approvals for excavation, best practice and government guidelines.

3.9.6 Artefact Analysis and Storage

Historical artefacts recovered during archaeological test excavation, salvage and monitoring would be catalogued and analysed for presentation and inclusion in an excavation report. All artefact bags would be processed as soon as possible after recovery.

Post-excavation analysis of materials recovered during excavation would be undertaken in a suitable secure location by the Urbis Archaeology Team under the supervision of the Excavation Director. Artefact processing would be undertaken off-site, as follows:

- Artefacts would be cleaned and dried
- Artefacts would then be divided into categories according to their type and fabric and, in the case of glass and ceramics, by colour
- Categorised artefacts would then be further divided into diagnostic and non-diagnostic artefacts (with further consideration given to the diagnostic artefacts)
- Bulk-find items (e.g. non-diagnostic glass, shells, wooden fragments, non-diagnostic metal, etc.) would be weighed and recorded and retained for future research purposes
- The remaining artefacts would be retained for further analysis and research
- Diagnostic artefacts suitable for display would be identified and labelled

⁴ Burra Charter and Archaeological Practice 2013 p 4

Processing would involve cleaning and photographing each artefact and entering it into a database with all relevant information, as indicated on the bag, as well as additional interpretation, photograph numbers and potential relationships. Artefact bags should then be stored in archive boxes which are clearly labelled by context and returned to the Proponent for long-term storage and curation.

Following processing and stabilisation of artefacts, cataloguing of artefacts will be based on the following three-tier priority system.

Priority 1 – Single event fills/deposits which have the potential to have direct links to occupants and may have the ability to respond to Research Design questions. Contexts may include occupation deposits and fills from cesspits and wells, underfloor deposits and intact rubbish pit fills.

Priority 2 – Deposits or fills important for dating purposes but unlikely to contribute to the responses to Research Design questions or form useful comparative analysis. These contexts may include demolition fills (including within cesspits and wells), postholes/postpipes, yard deposits and disturbed rubbish pit fills.

Priority 3 – Levelling fills and unstratified artefacts.

These three priorities will form the basis of the standard cataloguing that will be undertaken:

Table 2 Catalogue standard by priority

Priority	Standard Catalogue
1	Best practice for comparative assemblage analysis: all fields + MV counts + conjoin checks + additional research
2	Best practice for dating: all fields; undiagnostic sherds will be bulk bagged
3	Bulk processing: raw counts only + overall estimate of date range; some significant/datable artefacts may be recorded independently as per Priority 2 if appropriate

Source: Adapted from Mountains Heritage and Dr Penny Crook (December 2024)

3.9.7 Artefact Discard Policy and Procedure

This discard policy is divided into two main stages, on-site discard and post-excavation discard.

3.9.7.1 On Site Discard Policy

Non- Significant Fills

Artefacts from non-significant fills will be sampled on site. If present, a collection of 19th century artefacts will be sampled on site. Photographs will first be taken of all artefacts within their fill context, followed by selection of only diagnostically datable artefacts for retention and off-site cataloguing. Remaining artefacts from non-significant fills will be discarded on site. Soil samples are not required to be collected from non-significant fills.

Building Material Samples

A building material sample, such as bricks or mortar, may be taken from each structure recorded as a physical sample for reference during post-excavation analysis and production of the final excavation report. Bricks which contain frogs or makers marks are to be prioritised for sampling. Typically, only a single brick needs to be sampled from each structure.

Soil Samples

In a historical archaeological context, soil samples should only be collected from significant occupation deposits (fills from cesspits and wells, underfloor deposits and intact rubbish pit fills), postholes/postpipes or slot trenches, drain deposits, or evidence of early agricultural activities (hoe marks).

3.9.7.2 Post Excavation Discard Policy

While sampling strategies can be employed on site, it may also be necessary, in the case where excessive numbers of artefacts are collected from the site, to establish a retention policy for which artefacts warrant ongoing storage post-cataloguing and which can be discarded. While there are no specific guidelines available in NSW regarding artefact retention or discard, it is generally understood that the only artefacts that retain cultural heritage significance or have the potential for future research and comparative analysis are essential to retain, in particular for large assemblages.⁵

More broadly, much of the discussion about discarding archaeological artefacts is led by museum curators and archivists responsible for managing them (e.g. Merriman 2011, among others). All agree that only artefacts of high cultural significance or potential for future research, should be retained for long-term preservation. Several factors need to be considered to determine the cultural significance and future research potential including stratigraphic context, diagnostic capacity and integrity.

As established in Section 3.8.6 above, stratigraphic context plays a major role in the significance of an individual artefact and thus for this site, a cataloguing priority system has been established to categorise the significance of these artefacts within their stratigraphic context. This process will establish the artefacts which are considered of high research value and significance which will be catalogued as Priority 1. These artefacts should all be retained for long-term storage.

Artefacts from Priority 2 and 3 should be largely considered for their diagnostic capacity as a tool for understanding the research potential for the object. Diagnostic capacity largely relates to the ability for an artefact to provide unique information which can complement or even change what is understood about the historical context for the archaeology of the site. More complex artefact classes, such as ceramics and miscellaneous, are more likely to yield unique research data compared to other material classes such as faunal, metal or glass which may be represented by larger quantities of undiagnostic fragments or repeat types. Artefacts of higher integrity (completeness) may also offer more research value and thus may also warrant retention.

Artefacts from Priority 2 contexts are mainly valued for dating purposes, as such, significant artefacts, or those with research potential and diagnostic capacity, from these contexts should be retained while artefacts with minimal research potential may be discarded along while those represented by repeat types may be sampled. As Priority 3 artefacts will largely be from non-significant stratigraphic contexts or are unstratified, only rare artefacts, or those of significant research potential, should be retained.

Table 3 Artefact discard matrix

<i>Diagnostic capacity</i>	<i>P1 Contexts</i>	<i>P2 Contexts</i>	<i>P3 Contexts</i>
High	Retain	Retain	Retain
Moderate	Retain	Sample	Discard
Low or Limited	Retain	Discard	Discard

Retain	Artefact will be retained in the nominated artefact repository
Sample	A representative example of the artefact will be retained and the remainder discarded
Discard	The artefact will be disposed of following recording appropriate to its type.

Source: Mountains Heritage and Dr Penny Crook (December 2024)

Based on these principles, the following process will be undertaken for the study site:

⁵ Heritage Victoria (2015), p.12; Merriman 2011; Swain 2007, p.139

1. Artefacts with high research potential will be retained – this includes consideration of stratigraphic context, diagnostic capacity, significance and integrity.
2. Artefacts with no or limited research potential will be discarded, however, as a minimum all artefacts will be counted, weighed and photographed.
3. Prior to discard, an artefact specialist should physically inspect artefacts nominated for discard.
4. Any discarded artefacts should be considered for donation for educational purposes or safely disposed of.
5. Retained artefacts must be securely stored.

The following process will be undertaken:

1. Artefacts will be catalogued based on the stratigraphic priority system.
2. All artefacts from Priority 1 contexts will be retained.
3. During cataloguing of Priority 2 and Priority 3 assemblages, an artefact specialist will identify those with limited or low potential nominated for discard.
4. During cataloguing, the research potential of contexts may be revised and any additional artefacts with low or limited research potential will be identified.
5. Artefacts to be discarded will be inspected by an artefact specialist.
6. A final list of artefacts to be discarded will be subject to approval by the artefact specialist and Primary Excavation Director.
7. Any artefacts, due to be discarded, will be offered for donation if suitable.
8. Discarded artefacts will be safely disposed of and will not be sold.

3.9.8 Final Archaeological Report

A Final Report must be prepared at the completion of archaeological fieldwork, the reporting must meet government guidelines and the conditions of the relevant excavation approval. Reporting is required under Section 146 of the *Heritage Act 1977*. Reports are submitted to the Heritage Council of NSW or its delegate and copies are lodged with local libraries or appropriate local repositories. Final Reports include at a minimum:

- Executive Summary
- On the title page, due credit to the client paying for the excavation
- Accurate site location and site plan with scale and north arrow and geo-reference data
- Historical research, references and bibliography
- Detailed information on the excavation including the aims, context for excavation, treatment of artefacts and analysis of information retrieved
- Nominated repository for artefacts
- Detailed response to research questions (at a minimum those stated in the Heritage Council approved Research Design).
- Conclusions from the archaeological programme including a re-assessment of the site's significance; how archaeological investigation have contributed to community understanding, comparison with other sites, recommendations for future management and how much of the site remains undisturbed.
- Details of how information about the excavation was made publicly available.

The scale and timing of the Final Report is based on the complexity and significance of the finds and can be determined at the completion of archaeological fieldwork

3.9.9 Interpretation and Public Information

Archaeological sites may be subject to excavation permit conditions that require heritage interpretation strategies and plans that connect the redevelopment of a site with the information and significance gathered from archaeological excavation. Interpretation is a best practice method of connecting place, people, history and meaning. Interpretation strategies may recommend physical and/or digital means of public information such as signage, paving, displays, material selection, design details, landscaping and adapting design to allow for conservation in-situ.

4 Recommendations

4 Recommendations

- This Historical Archaeology Research Design and Excavation Methodology (HARDEM) should be read with the HAA (Urbis 2025) for 13-15 Oxford Street and 2 Verona Street and BAA (AMAC 2022) for 17 Oxford Street with Addendum Letter (Urbis 2025).
- This HARDEM and HAA should be submitted as supporting documentation for the State Significant Development Application (SSD-87245208), to the NSW Department of Planning, Housing and Infrastructure for the proposed redevelopment of 13-17 Oxford Street and 2 Verona Street, Paddington.
- A response to the Criteria for Assessing Excavation Directors (Heritage Council of NSW 2019) has been prepared by the nominated Primary Excavation Director, Ivana Vetta, and nominated Secondary Excavation Director, Jaki Kennedy. This response also needs to be submitted as supporting documentation for review and endorsement by Heritage NSW, through the NSW Department of Planning, Housing and Infrastructure.
- The proposed works cannot commence on site until the HARDEM has been endorsed by Heritage NSW. The archaeological program will commence during the removal of foundations or slabs and during any ground-disturbing excavation within Zone 1, 2 and 3.

5

References

5 References

Heritage Act 1977 (NSW).

Heritage Branch of the Department of Planning (2009). *Assessing Significance for Historical Archaeological Sites and 'Relics'.*

Heritage Council of NSW (2001). *New South Wales Historical Themes*

Heritage NSW (2019). *Criteria for Assessing Excavation Directors.*

Heritage Office of the Department of Planning (2006), *Historical Archaeology Code of Practice.*

Heritage Office, Department of Urban Affairs and Planning (1996), *Archaeological Assessment Guidelines.*

Heritage Victoria (2015). *Guidelines for investigating historical archaeological artefacts.*

National Parks and Wildlife Act 1974 (NSW).

Mountains Heritage and Penny Crook, 2024. 60-80 Oxford Street & 2A James Street, Woollahra – Artefact Discard Policy and Procedure

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