Bank Street Park
Blackwattle Bay / Tjerruing

SSD-53386706

Appendix T

Archaeological Technical Report (GML)

December 2023

Bank Street Park, Blackwattle Bay Precinct

Archaeological Technical Report

Report prepared for Infrastructure NSW, November 2023

GML HERITAGE

Acknowledgement of Country

We respect and acknowledge the First Nations of the lands and waterways on which we live and work, their rich cultural heritage and their deep connection to Country, and we acknowledge their Elders past and present. We are committed to truth-telling and to engaging with First Nations to support the protection of their culture and heritage. We strongly advocate social, cultural and political justice and support the Uluru Statement from the Heart.

Cultural warning

Aboriginal and Torres Strait Islander readers are advised that this report may contain images or names of First Nations people who have passed away.

GML HERITAGE

Report register

The following report register documents the development of this report, in accordance with GML's Quality Management System.

Job No.	Issue No.	Notes/Description	Issue Date
23-0126G	1	Draft Report to INSW	20 October 2023
23-0126G	2	Draft Report to project RAPs	25 October 2023
23-0126F	3	Final Draft to INSW	23 November 2023
23-0126F	4	Final Report	28 November 2023

Quality management

The report has been reviewed and approved for issue in accordance with the GML quality management policy and procedures.

It aligns with best-practice heritage conservation and management, *The Burra Charter: the Australia ICOMOS Charter for Places of Cultural Significance, 2013* and heritage and environmental legislation and guidelines relevant to the subject place.

Indigenous cultural and intellectual property

We acknowledge and respect the inherent rights and interests of the First Nations in Indigenous Cultural and Intellectual Property. We recognise that Aboriginal and Torres Strait Islander people have the right to be acknowledged and attributed for their contribution to knowledge but also respect their rights to confidentiality. We recognise our ongoing obligations to respect, protect and uphold the continuation of First Nations rights in the materials contributed as part of this project.

Cover image

Courtyard at 1A–3 Bank Street, with view to ANZAC Bridge. (Source: © GML Heritage)

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Executive summary

GML Heritage (GML) Pty Ltd was engaged by Infrastructure NSW (INSW) to prepare an Aboriginal Cultural Heritage Assessment Report (ACHAR) for the Bank Street Park site, Pyrmont. This report has been prepared in response to the relevant requirements outlined within the Planning Secretary's Environmental Assessments Requirements (SEARs) issued on 11 May 2023 for application number SSD-53386706.

This Aboriginal Archaeological Technical Report (ATR) is an appendix to the ACHAR for the Bank Street site. This archaeological report is a standalone technical report that provides evidence about the material traces of Aboriginal land use that is integrated with the other findings from the assessment of Aboriginal heritage to support the conclusions and management recommendations in the ACHAR.

The archaeological investigation of the site, as reported herein, has confirmed the identification of a single Aboriginal object (a flint flake) and has further defined the nature of previously identified areas of PAD (areas with archaeological potential to yield further Aboriginal heritage objects) within the site.

This report presents the results of a program of Aboriginal archaeological test excavation. The environmental and archaeological context of the site, an impact assessment relating to the proposed activity and recommendations regarding the ongoing heritage management of the site are presented within the project ACHAR.

Contents

Introduction

1 Introduction to the Project

1.1 Introduction

The purpose of this report is to identify whether the site possesses or has the potential to possess Aboriginal heritage archaeological sites, places, objects, landscapes and/or values, in accordance with the Heritage NSW guidelines for Aboriginal heritage assessment, to support a State Significant Development Application (SSDA) for a new waterfront public park within Blackwattle Bay, to be known as Bank Street Park (SSD-53386706). Bank Street Park is located at 1A–19 Bank Street, Pyrmont on the shoreline of Tjerruing Blackwattle Bay and adjacent areas of Blackwattle Bay.

This Aboriginal Archaeological Technical Report (ATR) is an appendix to the ACHAR for the Bank Street Park project. The Planning Secretary's Environmental Assessments Requirements (SEARs) issued on 11 May 2023 for the project includes the requirement for Aboriginal archaeological test excavation in proposed impacts areas (Item 6). This archaeological report is a standalone technical report which provides the results of a program of Aboriginal archaeological test excavation to satisfy the Item 6 of the SEARs. It provides evidence about the material traces of Aboriginal land use that is integrated with the other findings from the assessment of Aboriginal heritage to support the conclusions and management recommendations in the ACHAR.

1.2 Blackwattle Bay Precinct

Bank Street Park forms part of the Blackwattle Bay Precinct, which is an area of predominantly government owned land located on the western edge of the Pyrmont Peninsula and adjoining the waters of Blackwattle Bay (Figure 1.1).

Figure 1.1 Blackwattle Bay Precinct. (Source: INSW)

The precinct was rezoned in December 2022 to facilitate a new mixed-use community, providing for around 2,000 new residents and 5,600 new jobs and creating a vibrant 24/7 economy. Updated planning and land use controls were incorporated into the Sydney Local Environmental Plan 2012, along with site specific design guidance in the *Blackwattle Bay Design Guidelines.*

A critical part of the Blackwattle Bay Precinct is the high quality public domain which includes a series of parks and open spaces connected by a foreshore promenade. Bank Street Park will bring new active and passive recreation uses into a unique park environment, catering for both existing and future communities in the vicinity.

1.3 Site description

Bank Street Park is located at 1A–19 Bank Street, Pyrmont NSW within the City of Sydney local government area (LGA) and includes harbour development in Blackwattle Bay. The site area is 1.1 hectares. The relevant lot and deposited plans and the respective ownership for the site are detailed in Table 1.1 and shown in Figure 1.2.

Table 1.1 Summary of land title details of the site

Street address	Lot and Deposited Plan details	Ownership
1A Bank Street, Pyrmont NSW 2009	Lot 1 DP 85206 Lot 1 DP 188671	Transport for NSW
1–3 Bank Street, Pyrmont NSW 2009	Lots 1-2 DP 1089643 Lot 1 DP 439245	Infrastructure NSW
5 Bank Street, Pyrmont NSW 2009	Lot 20 DP 803159	Transport for NSW
7 Bank Street, Pyrmont NSW 2009	Lot 19 DP 803159	Transport for NSW
9 Bank Street, Pyrmont NSW 2009	Lot 21 DP 803159	Transport for NSW
11 Bank Street, Pyrmont NSW 2009	Lot 22 DP 803159	Transport for NSW
17–19 Bank Street, Pyrmont NSW 2009	Lots 5–6 DP 803160	Transport for NSW
Sydney Harbour	Lot 5 DP 1209992	Roads and Maritime Services (Transport for NSW)
Sydney Harbour	Lot 107 in DP 1076596	Transport for NSW
Part Bank Street Road reserve	N/A	City of Sydney Council

Bank Street Park is located on Gadigal Land, one of the twenty-nine clans of the great Eora Nation. It adjoins the foreshores of Glebe to the west and Pyrmont Bridge Road and Wentworth Park to the south.

Figure 1.2 Site context map. The indicative site location is outlined in red. (Source: SixMaps with Architectus edits, 2023)

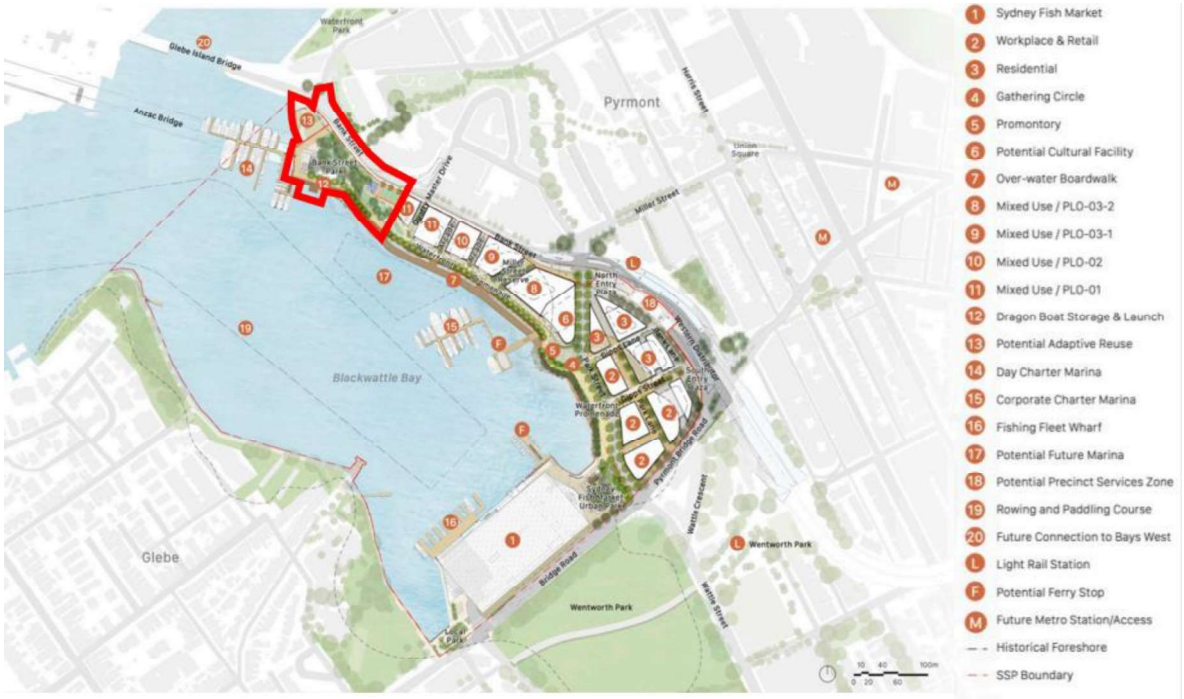

Figure 1.3 Bank Street Park site location within Blackwattle Bay State Significant Precinct. The indicative site location is outlined in red. (Source: Blackwattle Bay Design Guidelines with Architectus edits, 2023)

1.4 Proposed development

1.4.1 Overview

Development consent is being sought for a *recreation area* for the primary purpose of a *public park*, comprising:

- Site preparation works, including tree removal, earthworks and remediation to facilitate the proposed use;
- Demolition of three existing buildings at 1–3 Bank Street;
- New and adapted facilities for community use, including:
  - New single storey building to accommodate flexible community space, café, and marina office/store facilities, with green roof and photovoltaics;
  - Adaptive reuse of Building D for public amenities, bin and other storage;
  - Boat launching ramp and pontoon for passive watercraft, including dragon boats and kayaks; and
  - Boat storage building with change facilities for dragon boat users with publicly accessible rooftop deck.
- Public domain works, including:
  - 'Interpretation Garden' in existing building 'ruins' at 1–3 Bank Street;
  - Split level foreshore promenade;
  - Multi-purpose court with edge seating and partial fence;
  - Nature-based inclusive playspace for ages 2–12;
  - Fitness equipment;
  - Public plaza and grassed open space areas;
  - New tree plantings and planter beds; and
  - Public art, wayfinding and interpretative signage, lighting, bike parking and seating.
- Harbour works including:
  - Overwater boardwalk;
  - Land/water interface works, including sandstone terracing into water and support structure, to improve marine habitat;
  - Demolition and construction of a new timber launching ramp for dragon boats;
  - Kayak/passive craft pontoon; and
  - Restoration, repair and alterations to the existing seawall for new stormwater outlets.
- Works to Bank Street road reserve, including:
  - Road space reallocation to provide separated cycleway;
  - Cycleway transition to Bank Street to continue south as part of future works;

- Reinstatement of existing on-street parallel parking;
- Tree planting;
- Accessible parking space; and
- Loading zone adjacent 1–3 Bank Street.

1.5 Planning Secretary's Environmental Assessments Requirements

This report has been prepared in response to the relevant requirements outlined within the Planning Secretary's Environmental Assessments Requirements (SEARs) issued on 11 May 2023 for application SSD-53386706. Table 1.2 addresses the relevant SEARs requirements and provides a project response.

Table 1.2 Secretary's Environmental Assessments Requirements

Item	SEARs	Relevant report section(s)
Item 6	**6. Aboriginal Cultural Heritage** • Provide an Aboriginal Cultural Heritage Assessment Report prepared in accordance with relevant guidelines, identifying, describing and assessing any impacts on any Aboriginal cultural heritage values on the land prepared in accordance with the relevant Heritage NSW Guidelines: – Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW 2010) – Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in New South Wales (OEH 2011) – Code of Practice for Archaeological Investigation in NSW (DECCW 2010).	This report forms an appendix to the ACHAR. It has been prepared in accordance with the relevant Heritage NSW guidelines identified in the project SEARs. See ACHAR for further details.
	• Address how the development responds to the commitment and principles for action in the Connecting with Country Framework for Tjerruing Blackwattle Bay.	This information is presented in the project ACHAR (Section 4.6), to which this report forms an appendix.
	• Archaeological test excavation of any potential archaeological deposits (PAD) in the proposed impact area.	This report (Section 2) presents the outcomes of the archaeological test excavations of areas of PAD identified within the site.

1.6 Statutory context

The following statutory controls are relevant to the Bank Street site and therefore this report:

- *National Parks and Wildlife Act* 1974 (NPW Act); and
- *Environmental Planning and Assessment Act* 1979 (EP&A Act).

As the Bank Street Park development program is designated State Significant Development (SSD), application number SSD-53386706, the project is governed by project Secretary's Environmental Assessment Requirements (SEARs) (outlined in Section 1.5 above).

Heritage NSW requires the appropriate management of Aboriginal heritage social values, if connected with a project site. This project aims to determine if harm can be avoided to any Aboriginal sites across the site.

1.6.1 National Parks and Wildlife Act 1974

The NPW Act provides statutory protection for all Aboriginal 'objects' (consisting of any material evidence of the Indigenous occupation of New South Wales) under Section 90 of the NPW Act, and for 'Aboriginal Places' (areas of cultural significance to the Aboriginal community) under Section 84 of the NPW Act. Aboriginal objects and places are afforded automatic statutory protection in New South Wales, whereby it is an offence (without the Minister's consent) to harm an Aboriginal object or declared Aboriginal Place.

The NPW Act defines an Aboriginal object 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 protection provided to Aboriginal objects and places applies irrespective of the level of their significance or issues of land tenure. Sites of traditional significance that do not necessarily contain material remains may be gazetted as 'Aboriginal Places' and thereby be protected under the NPW Act. However, areas are only gazetted if the Minister is satisfied that sufficient evidence exists to demonstrate that the location was and/or is of special significance to Aboriginal culture.

A strict liability offence applies for harm to or desecration of an Aboriginal object or declared Aboriginal Place.[1] The definition of 'harm' includes destroying, defacing, damaging or moving an Aboriginal object or declared Aboriginal Place. Under the Act, applicants must seek approval prior to disturbance of sites with the potential to contain Aboriginal objects or cultural material.

The potential for Aboriginal objects, sites, places and/or values within the site, and for the proposed development to impact such objects, has been assessed and the results presented in this report.

1.6.2 Environmental Planning and Assessment *Act* 1979

Projects declared State Significant Development (SSD) under Part 4 of the EPA Act require heritage and archaeology to be managed in accordance with the project approval documents, including conditions of the Development Consent. Section 4.41(d) of the EPA Act provides an Aboriginal heritage impact permit (AHIP) under Section 90 of the NPW Act is not required for a SSD project that is authorised by a SSD development consent. As the Bank Street Park project has been declared SSD, the requirement to obtain an AHIP does not apply. Furthermore, Section 4.41(3) of the EPA Act provides that any reference to SSD under Section 4.41 that is authorised by a development consent extends to "any investigative or other activities that are required to be carried out for the purpose of complying with any environmental assessment requirements". The implication being, test excavation required under the SEARs, such as for the Bank Street Park project, can be carried out prior to SSD consent being issued without the need for an AHIP.

The EPA Act provides for the identification, protection and management of heritage items through inclusion in schedules to planning instruments such as State Environmental Planning Policies (SEPPs) and Local Environmental Plans (LEPs). Heritage items in planning instruments are usually historic sites but can include Aboriginal objects and places. The EPA Act requires that appropriate measures be taken for the management of the potential archaeological resource by means consistent with practices and standards adopted in meeting the requirements of the NPW Act.

The site is in the City of Sydney local government area and is therefore subject to the *Sydney Local Environmental Plan 2012*. There are no currently listed heritage items under the LEP that fall within the site that have identified Aboriginal heritage values.

1.7 Approach to Aboriginal heritage management

To administer the NPW Act and EPA Act, Heritage NSW has issued a series of best practice guidelines and policies. These guidelines and policies underpin Aboriginal heritage assessment and management in New South Wales. Our approach is based on the following guidelines:

- *Aboriginal cultural heritage consultation requirements for proponents* 2010;[2]

- *Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW* (the Due Diligence Code);[3]
- *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (the Code of Practice);[4]
- *Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW*;[5]
- *Guide to Determining and Issuing Aboriginal Heritage Impact Permits*;[6] and
- The Australia ICOMOS *Burra Charter* 2013 (the Burra Charter).[7]

1.8 Reporting approach

This Aboriginal ATR report is an appendix to the ACHAR. This archaeological report is a standalone technical report that provides evidence about the material traces of Aboriginal land use that is integrated with the other findings from the assessment of Aboriginal heritage to support the conclusions and management recommendations in the ACHAR.

This report has been prepared following the requirements for reporting as established in the Code of Practice.

Note that this report exclusively discusses the outcomes of the test excavation program. Environmental and archaeological background, values and significance assessments, and management recommendations are presented within the ACHAR.

1.9 Authors of the project

This project has been undertaken by the following people. Each person's role and affiliations are detailed in the below table.

Table 1.3 Investigators and contributors

Person	Affiliation	Role
Dr Tim Owen	GML	Project Director
Andie Coulson	GML	Project Manager and author
Sophie Jennings	GML	Technical review
Jacob Kiefel	GML	Archaeologist and author
Erica Brown	GML	Archaeologist and author
Jamie Currell	Kamilaroi-Yankjuntjatjara Working Group	Archaeological Assistant and RAP
Gary Dunn	Ngaamba Cultural Connections	Archaeological Assistant and RAP

Person	Affiliation	Role
Dr Beth White	GML	Lithics analysis
Rowena Welsh-Jarrett	Metropolitan Local Aboriginal Land Council	RAP
Guy Hazell	Guy Hazell Archaeological Surveying & Illustration	Surveyor

1.10 Acknowledgements

GML would like to acknowledge the assistance provided by Belinda Lewis, Louise Haran and Sophie Lovett (INSW), and Joanne Rosner, Milad Noujaim, and Christopher Dagger (JBS&G) during the project.

GML would also like to acknowledge Metropolitan Local Land Council representative Rowena Welsh-Jarrett for her time via phone and in person to discuss the project and methodology during the excavation program.

1.11 Endnotes

[1] Department of Environment, Climate Change and Water 2010, National Parks and Wildlife Act 1974 (NSW), 'Fact sheet 1', September 2010.

[2] Department of Environment, Climate Change and Water 2010, *Aboriginal cultural heritage consultation requirements for proponents 2010*, Sydney.

[3] Department of Environment, Climate Change and Water, *Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW*, September 2010.

[4] Department of Environment, Climate Change and Water, *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales*, September 2010.

[5] Office of Environment and Heritage, Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW, Sydney, April 2011.

[6] Department of Environment and Climate Change, *Guide to Determining and Issuing Aboriginal Heritage Impact Permits*, 2009, <http://www.environment.nsw.gov.au/resources/cultureheritage/09121AHIPGuide.pdf>.

[7] Australia ICOMOS Inc, *The Burra Charter: the Australia ICOMOS Charter for Places of Cultural Significance 2013,* Australia ICOMOS Inc, Burwood, VIC.

2 Archaeological investigation

2 Archaeological investigation

This chapter addresses the program of archaeological test excavation undertaken at the Bank Street Park site. The program was completed between 11 and 15 September 2023. Heritage NSW was notified in writing 14 days before test excavation commenced, meeting the Requirement 15c of the Code. Notification was delivered to the heritage mailbox inbox and to HNSW Senior Assessments Officer Corey O'Driscoll. This section provides an overview of the excavation methodology and presents the results of the test excavation.

2.1 Summary of excavation methodology

The full Aboriginal archaeological excavation methodology is outlined in the project's Aboriginal Archaeological and Cultural Assessment Methodology (AACAM)[1], which forms an appendix to the ACHAR. This section provides a summary of the excavation methodology employed during the archaeological excavation.

Aboriginal archaeological test excavation proposed for the site aimed to confirm the presence of intact soil landscapes and their archaeological content, and to archaeologically sample these soils. Prior archaeological assessments of the site (CityPlan 2023[2], see also Artefact 2021[3]) had identified four areas of potential archaeological deposit (PAD) within the site based on the results of geoarchaeological investigations. These are identified as PAD 02 (AHIMS ID 45-6-3338), PAD 2A, PAD 3 and PAD 4 (Figure 2.1). Test excavations aimed to sample these PADs to:

- identify whether the areas of PAD has an Aboriginal archaeological signature; and
- identify whether areas of the Bank Street Park site has archaeological potential that would be impacted by the proposed development.

The test excavation methodology was developed in accordance with the *Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW* to comply with the project SEARs.

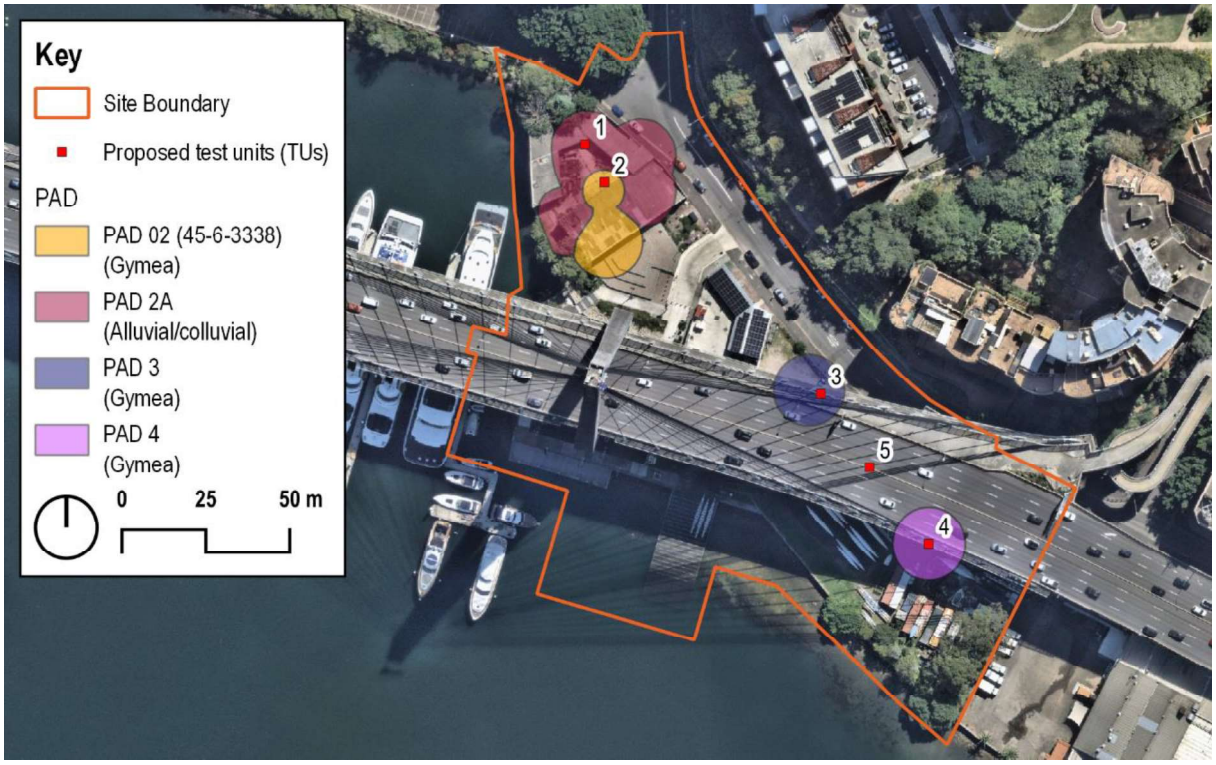

Figure 2.1 Plan showing areas of PAD identified with the Bank Street Park site and the location of the proposed project test units for archaeological test excavations. (Source: Nearmap with GML overlay, 2023)

2.1.1 Archaeological survey

No archaeological field survey was undertaken as the Bank Street site is a developed site without ground surface visibility and/or soil exposures. Due to the extensively developed nature of the site and the prior archaeological survey conducted by Artefact Heritage[4] as part of the initial ACHAR process for the Blackwattle Bay Precinct, which included the Bank Street site, additional archaeological survey was not deemed to be necessary.

A preliminary site inspection was undertaken by GML archaeologists Dr Kat McCrae and Andie Coulson on 6 June 2023 (Figure 2.2 to Figure 2.5) to inspect areas that had previously not been inspected as part of the Artefact Heritage survey. This included inspection of 1A Bank Street, a vegetated area within the north of the site, which had not been accessed via survey. This area was identified to be significantly disturbed, as evidenced by the presence of several services and soil buildup resulting from the construction of Glebe Island Bridge, immediately adjacent. All areas of the site were inspected, with the exception of the interiors of the 1–3 Bank Street existing buildings and the Blackwattle Bay Marina compound. Inspection was also undertaken of AHIMS site 45-6-2960, [redacted], located approximately [redacted] of the Bank Street site.

Figure 2.2 1A Bank Street, showing service access point.

Figure 2.3 1–3 Bank Street, showing concreted courtyard space.

Figure 2.4 4–19 Bank Street, Dragon Boat NSW (DBNSW) compound.

<FIGURE REDACTED>

Figure 2.5 [redacted]

2.1.2 Archaeological sampling strategy

Archaeological test excavations were conducted in accordance with the methodology developed in the AACAM. This methodology had received preliminary approval from Corey O'Driscoll, Senior Assessments Officer (archaeologist) Heritage NSW, via email (dated 8 August 2023). The test excavation program was developed in response to the proposed project impacts and in reference to areas of suspected intact soils with potential to contain Aboriginal objects. Access to areas of PAD beneath standing buildings at 1–3 Bank Street was not possible. As such, testing was restrained to open areas within the balance of the site.

A total of five test units were proposed in the AACAM (Figure 2.1). Four test units (TU 1, TU 2, TU 3 and TU 4) were proposed in areas of PAD adjacent to the geotechnical boreholes with identified intact remnant soils to test for the presence of Aboriginal objects (Figure 2.6). Due to the construction of a temporary sports court in the location of PAD 3 (Figure 2.7), TU 3 was located further east of the borehole location, outside the sports court footprint. An additional TU, TU 5, was proposed between PAD 3 and PAD 4, in an area that had not been sampled via geotechnical investigations. Testing in this location aimed to identify whether PAD was continuous between PAD 3 and PAD 4. Five

test trenches were excavated in the proposed locations of TUs 1–5, with the intent of exposing deposits with PAD that would subsequently be subject to hand excavation in the form of TUs. Test trench refers to the machine-excavated trench, and Test Unit refers to the 500 by 500 millimetre hand-excavated test square. The Historical Archaeological Assessment prepared for the project had identified that the site has potential for locally significant historical archaeological remains. A Work Method Statement (WMS) was prepared to manage historical archaeological remains during the test excavation program.[5]

Archaeological test excavation was completed in accordance with the following measures:

- All overlying modern and historical fills were machine excavated under supervision of an archaeologist. Machine excavation ceased when any actual or suspected natural soil layers were identified, or in the instance of any historical archaeological features until these had been adequately assessed and recorded.
- If natural soils were reached in the test trenches, a Test Unit (TU) was hand excavated.
- Each TU measured 0.5 by 0.5 metres and was excavated to a sterile soil horizon or bedrock.
- Archaeological test excavation was undertaken in 50-millimetre spits.
- A representative sample of TUs was sampled for soil, which may be used for future palynology, sedimentology and OSL dating.
- The nature of soils in each TU was recorded so that a pattern of changing soil landscapes across the site could be developed.
- All archaeologically excavated deposits were wet sieved through a three-millimetre mesh. Sieving occurred on site and was undertaken using a water cart into skip bins, which were emptied as required.

Each test trench and TU was recorded by the excavation team on a Trench or TU recording sheet during excavation and photographed after excavation was completed. Details recorded included Trench an/or TU number, soil texture, compaction, inclusions, evidence for bioturbation and stratigraphic profile. The locations of each test unit have been documented in

Table 2.2 and Figure 2.35.

The stratigraphic profile of each Trench and TU was recorded. This led to the classification of several historical fill layers, including redeposited soils and sediments, with small, isolated pockets of deposits with PAD, comprising colluvial sediments and B horizon Gymea soils observed in Trenches 2 and 5, respectively.

In the instances where potential natural soils were not observed, excavation instead ceased when bedrock was encountered, or when excavation reached 2.2 to 2.5 metres below ground level. This depth was chosen as it provided a minimum of a 1 metre buffer beneath the proposed project impact depths, and as excavation beyond this depth posed a hazard due to risk of trench wall collapse.

As no cultural features were observed during the test excavations, no samples of charcoal were collected. All stone objects were bagged and provenance recorded according to TU and spit, and were catalogued and analysed by Lithic Analyst Dr Beth White. Soil samples were taken from each stratigraphic unit in both TUs to facilitate further analysis as required.

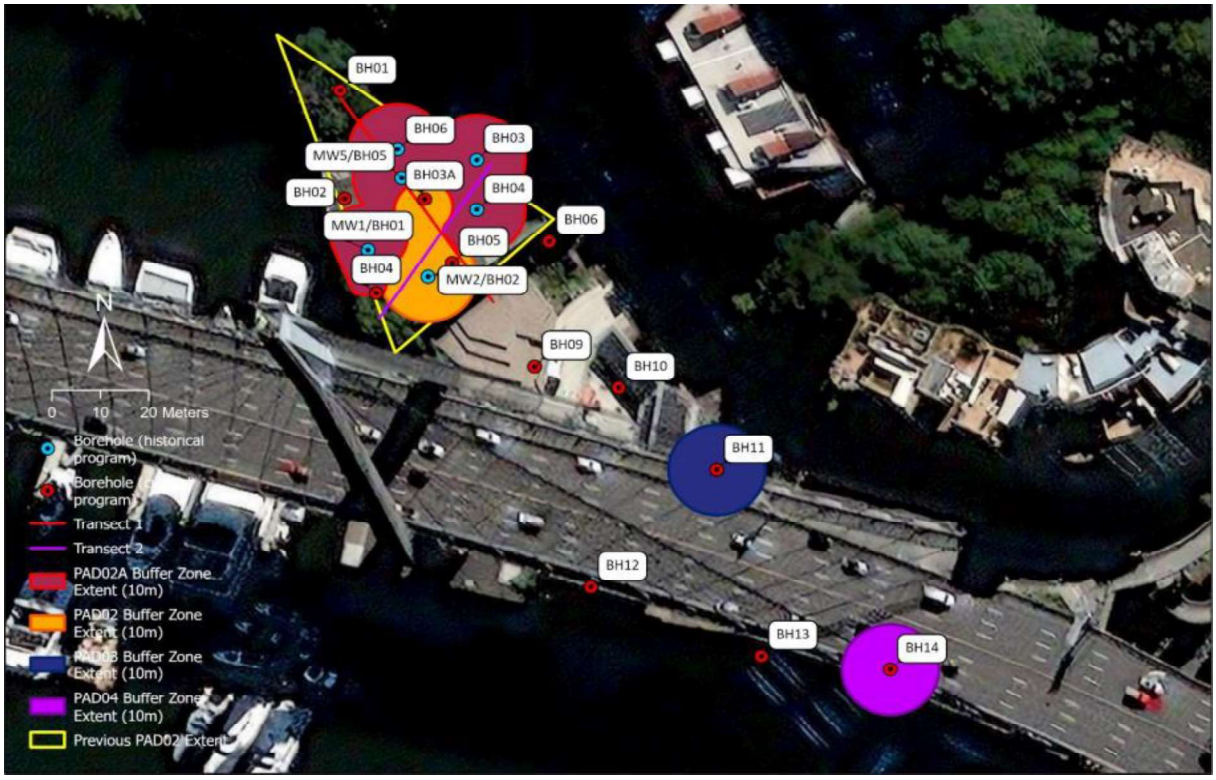

Figure 2.6 Map of 2012 and 2023 geotechnical testing within the site. (Source: CityPlan, 2023)

Figure 2.7 Proposed test units and identified constraints on site, including an electrical easement zone (green) and temporary sports court (red). (Source: Nearmap with GML overlay, 2023)

2.2 Test excavation results

Possible PAD deposits were identified in two locations—in Test Trench 2 and Test Trench 5. In these locations, overlying fill was removed and the locations made safe by JBS&G, allowing for hand excavation of test units as outlined in the project Aboriginal Archaeological and Cultural Assessment Methodology. Test units measured 500 by 500 millimetres in size, and were excavated in 50-millimetre spits. A total of two test units were excavated: TU 2 in the location of Test Trench 2, and TU 5 in the location of Test Trench 5, for a total of 0.5m^2 excavation.

A single Aboriginal artefact was identified during the excavation, within TU 2. The artefact is fully analysed in Section 2.2.5. The artefact is currently stored in a secure location in the GML offices and will be registered with AHIMS. After consulting with the RAPs on site, no expansion was undertaken due to the extremely low density of artefacts on site, and due to the spatially constrained nature of both the test trenches and deposits with PAD, which made expansion unfeasible.

Throughout the week, the team discussed Aboriginal cultural heritage in the region. It was concluded that while the region has significant cultural heritage values, no values were exclusive to the Bank Street location.

Following the conclusion of excavation and recording in each location, each trench was backfilled with the stockpiled fill material.

Table 2.1 Summary of test trenches excavated.

Test trench	PAD	Trench size (m)	Depth natural soils encountered (m)	Final depth (m)	Corresponding borehole	Corresponding Test Unit (TU)	Trench description
1	PAD 2A	3.1 x 6.4m	No natural soils encountered	2.2m	BH06 (2012)	N/A	Trench contained introduced reclamation and levelling fills. For full description, see HARDEM report (GML, 2023). Excavation ceased when maximum safe excavation depth in this location was reached. Bedrock was not reached at this location.
2	PAD 2 (AHIMS ID 45-6-3338)	1.5 x 2m	1.05m	2.1m	BH03A (2023)	TU 2	Trench contained introduced fills overlying colluvial deposit/s. TU 2 was then hand excavated to a sterile crushed sandstone layer.
3	PAD 3	2.5 x 2.2m	No natural soils encountered	2.2m	BH11 (2023)	N/A	Trench contained introduced levelling fills overlying sandstone bedrock. For full description, see HARDEM report (GML, 2023). Excavation ceased at bedrock.

Test trench	PAD	Trench size (m)	Depth natural soils encountered (m)	Final depth (m)	Corresponding borehole	Corresponding Test Unit (TU)	Trench description
4	PAD 4	5.8 x 2.9m	No natural soils encountered	2.5m	BH14 (2023)	N/A	Trench contained introduced reclamation and levelling fills. For full description, see HARDEM report (GML, 2023). Excavation ceased when maximum safe excavation depth in this location was reached. Bedrock was not reached in this trench.
5	N/A	4.7 x 4.1m	0.85m	1.4m	Untested area	TU 5	Trench contained introduced levelling fills overlying a reworked/truncated Gymea B horizon soil. TU 5 was then hand excavated into the suspected B horizon soils to bedrock.

Table 2.2 Summary of Test Units (TUs) excavated.

Test Unit (TU)	Location	Coordinates (Easting, Northing, GDA 94 MGA 56)	Area excavated (m^2)	Final depth (mm)	Number of spits	TU description	Aboriginal object count
TU 2	PAD 2 (AHIMS ID 45-6-3338)	332354; 6250888	0.25m^2	500mm	7	Colluvial deposits, likely post-1788, situated over a degraded bedrock, possibly a reclamation fill (post-1788).	1
TU 5	NHTA	332441; 6250799	0.25m^2	600mm	11	Layers of redeposited and/or reworked Gymea soils interrupted by an introduced sandstone crush layer, overlying sandstone bedrock.	0
						Total Aboriginal stone object count	**1**

2.2.1 Test trench excavation results

This section presents the excavation results for the five test trenches. Trenches were dug with the aim of intercepting deposits with PAD as identified in prior geotechnical testing. For a full discussion of the historical fill layers identified in each of the five test trenches, see the project joint Historical Archaeological Assessment and Historical Archaeological Research Design and Excavation Methodology (HAA/HARDEM) (GML, 2023).

Trench 1

Trench 1 was located within 1–3 Bank Street courtyard, and measured 3.1 by 6.4 metres (Figure 2.8–Figure 2.11). The trench was machine excavated to a 2.2-metre depth below ground level. Trench 1 aimed to intersect PAD 02A, described as alluvial or colluvial sediments, surrounding the northern edge of PAD 2. The trench was situated adjacent the location of BH06, which had identified intact colluvial or alluvial sediments at a depth of between 0.5 and 1.5 metres. Soils with PAD were described as being fine grained brown sands, with traces of clays, sand mottles and compressed sand plates throughout, overlying sandstone bedrock.[6]

No remnant PAD deposits were identified during archaeological excavation. The stratigraphy in Trench 1 comprised a series of historical fill layers overlying crushed or weathered sandstone. Fill layers were as follows:

- Layer 1: Grey-brown silty sand, interpreted as a levelling or demolition fill (c200mm thick). Likely 1932–1980s in date. Capped by concrete slab.
- Layer 2: Below layer 1. Comprises a lens of possible redeposited topsoil (c100mm thick), overlying dense industrial fill comprising black ashy crushed coal matrix (c200mm thick). Likely dated to 1895–c1932.
- Layer 3: Below layer 2. Crushed/weathered sandstone layer, identified as a likely reclamation fill (560mm), with lenses of black/grey sand (c100m) colluvium/alluvium. May potentially instead represent highly degraded natural weathered bedrock (C horizon) at depth of 1.1–2.2 metres. If reclamation, likely dated to 1803–1895.

Figure 2.8 Trench 01 mid-excavation, showing spatially constrained nature of 1–3 Bank Street courtyard.

Figure 2.9 Trench 01 at end of excavation, facing northwest. 1m scale.

Figure 2.10 Trench 01, southwest section mid-excavation showing historical fill layers. 1m scale.

Figure 2.11 Trench 01, southwest section at end of excavation showing historical fill layers.

Trench 2

Trench 2 was located within 1–3 Bank Street courtyard, to the immediate southeast of Trench 1. Trench 2 measured 1.5 by 2 metres. Trench 2 aimed to intersect PAD 02 (AHIMS ID 45-6-3338), described as B horizon Gymea soils, abutting PAD 02A. The trench was situated adjacent to the location of BH03A, which had identified Gymea soils at a depth of between 2.15 and 3.05 metres, although core loss was noted between a depth of 2.2 and 3 metres. Soils with PAD were described as sandy silty clay (with fine sand component), dark greyish brown mottled (25%) dark yellowish brown, with very occasional charcoal inclusions (potentially corresponding to gy2 of the Gymea soil landscape) between 2.15 and 2.2 metres in depth, overlying dark brown sandy silty clay with a fine sand component (potentially corresponding to gy2 of the Gymea soil landscape).[7]

Trench 2 had to be situated slightly further northwest of the location proposed in the AACAM to facilitate access for machine excavation due to the spatially constrained nature of the courtyard space. As such, the trench was situated adjacent the projected interface between PAD 02 (suspected Gymea) and PAD 02A (suspected alluvial or colluvial soils), providing the opportunity to investigate the potential transition between these two areas of PAD.

Trench 2 was machine excavated to a depth of approximately 1.05 metres, at which point remnant PAD deposits were identified. Test Unit 2 (TU 2) was subsequently hand excavated. TU 2 is discussed in further detail below.

The profile of Trench 2 comprised:

- Layer 1: Grey-brown silty sand interpreted as a levelling or demolition fill (c200mm thick). Likely 1932–1980s in date. Capped by concrete slab.
- Layer 2: Below layer 1. Comprises dense industrial fill comprising a black ashy crushed coal matrix (c200mm thick). Likely dated to 1895–c1932.
- Layer 3: Colluvium (PAD). Encountered at a depth of approximately 1.05 metres. Test unit excavation indicated that the colluvium layer extended approximately 300 to 500 millimetres in depth (1.3 to 1.5 metres below surface of trench). Discussed in further detail in Section 2.2.2 below.
- Layer 4: Below layer 2. Crushed/weathered sandstone layer, sloping sharply to southwest. Identified as either reclamation fill comprising crushed/weathered sandstone, or potentially highly degraded natural weathered bedrock (C horizon). If reclamation, likely dated to 1803–1895.

Figure 2.12 Trench 02 mid-excavation, showing spatially constrained nature of 1–3 Bank Street Courtyard. 1m scale.

Figure 2.13 Dark grey-brown colluvial soils (indicated by arrow) identified within Trench 02. 1m scale.

Figure 2.14 Northeast section in Trench 02, showing layers of historical fills. 1m scale.

Figure 2.15 Location of TU 2 within the northeast portion of Trench 02.

Trench 3

Trench 3 was located within the Dragon Boats NSW (DBNSW) compound (4–19 Bank Street), and measured 2.5 by 2.2 metres. The trench was machine excavated to a depth of 0.9 metres. Trench 3 aimed to intersect PAD 03, B horizon Gymea soils. The trench was situated adjacent the location of BH11, which had identified intact Gymea soils at a depth of between 2.0 and 2.95 metres. Note that due to the construction of a temporary sports court in the location of PAD 3, TU 3 was located further east of the borehole location, outside the sports court footprint. Soils with PAD were described as clayey sand, dark greyish brown with sandstone gravels (potentially corresponding to gy2 of the Gymea soil landscape).[8]

No remnant PAD deposits were identified during the archaeological excavation. The excavation identified a series of historical fill layers overlying sandstone bedrock as follows:

- Layer 1: Grey/brown gravels (400–430mm deep) interpreted as levelling fill for construction of Anzac Bridge. Likely dated to between 1980s and present.
- Layer 2: Below Layer 1. Comprises a sequence of historical fills, including a chalky layer (c100mm), a sandy construction/demolition fill with brick inclusions (c200mm) and an industrial ash/slag deposit (130–200mm). Likely dated to 1895–1980s.
- Layer 3: Crushed sandstone reclamation/levelling fill (100–220mm). Likely dated to 1803–1895.
- Sandstone bedrock: Observed at a depth of 750mm below surface of trench.

Figure 2.16 Location of Trench 3, pre-excavation, showing spatially constrained nature of location.

Figure 2.17 Bedrock within Trench 3, facing north, showing steeply sloping bedded sandstone layers.

Figure 2.18 Section, facing north, within Trench 3, showing historical fill layers overlying bedrock.

Figure 2.19 Trench 3, immediately adjacent the pop-up sports court (background of image).

Trench 4

Trench 4 was located within the DBNSW compound (4-19 Bank Street) and measured 5.8 by 2.9 metres. The trench was machine excavated to a depth of 2.5 metres. Trench 4 aimed to intersect PAD 04, comprised of B horizon Gymea soils. The trench was situated adjacent the location of BH14, which had identified intact soils at a depth of between 1.8 and 2.5 metres. Soils with PAD were described as light brown/grey silty sandy clay (potentially corresponding to gy2 of the Gymea soil landscape).[9]

No remnant PAD deposits were identified during the archaeological test excavation. The excavation found a series of historical fill layers. Bedrock was not reached and excavation ceased at a depth of 2.5 metres. Trench 4 contained potential historical features, including a potential robbed out wall and a sandstone surface (see HARDEM for further details). Fill layers were described as follows:

- Layer 1: Pale grey/brown gravel levelling fill (400–430mm deep). Likely dated to between 1980s and present.
- Layer 2: Beneath Layer 1. Sequence of historical fills, including an industrial ash deposit and sandy layers (130–200mm). Several features observed including a possible robbed out wall, a sandstone surface, a metal service pipe, and a large pit or channel cut through reclamation. Likely dated to 1895–1980s.
- Layer 3: Beneath Layer 2. Crushed sandstone reclamation/levelling fill. Likely dated to 1803–1895.

Figure 2.20 Trench 4, facing west, showing stepped nature of the trench due to deep excavation.

Figure 2.21 Crushed sandstone reclamation/levelling fill and service pipe, demonstrating depth of impact in location of Trench 4. 1m scale.

Figure 2.22 Possible surface (historical feature) in Trench 4. 1m scale.

Figure 2.23 Possible robbed out wall (historical feature, indicated by arrow) in Trench 4.

Figure 2.24 Trench 4, end of excavation. 1m scale.

Figure 2.25 Trench 4 section, end of excavation, showing layers of historical reclamation fills. 1m scale.

Trench 5

Trench 5 was located within the DBNSW compound (4–19 Bank Street), and measured 4.7 by 4.1 metres. Most of the trench was machine excavated to a depth of 0.65 metres, but a deeper central sondage measuring 3.5 by 0.75 metres was excavated to a depth of 1.4 metres. Trench 5 was situated in an area that had not been subject to previous geotechnical testing, and aimed to determine whether PAD was continuous between PADs 03 and 04.

Remnant PAD were identified in the southern extent of the sondage trench, at a depth of approximately 0.85 metres. The PAD exposed within Trench 5 measured approximately 1.1 by 1.1 metres, and was cut to the northwest by a potential historical feature comprising a wall trench with remnant timber beam (see HARDEM for further details). The deposit appeared to have been truncated to the northeast by historical fill layers. Test Unit 2 (TU 2) was placed in the centre of the exposed deposit and was subsequently hand excavated. TU 2 is discussed in further detail below. Trench 5 was also found to contain a possible channel cut into the sandstone bedrock in the centre of the sondage trench.

The profile of Trench 5 comprised:

- Layer 1: Pale grey/brown to yellowish grey/brown gravel levelling fill (650mm deep). Likely dated to between 1980s and present.
- Layer 2: Sequence of historical fills, including a sandy historical topsoil and various construction/levelling fills. Possible wall trench with remnant timber beam (depth of c800mm) and possible channel in bedrock. Likely dated to 1895–1980s.
- Layer 3: Crushed sandstone reclamation/levelling fill, likely dated to 1803–1895. In the north of trench, this directly overlay bedrock, and was approximately 100-millimetres thick. In the south of trench (ie overlying location of TU 5), sandstone

layer overlay deposit with PAD (Layer 4), and was approximately 50–75 millimetres thick.

- Layer 4: Deposits with PAD (within south of trench only, in location of TU 5), comprising layers interpreted as reworked and/or redeposited Gymea B soils, interrupted by a layer of crushed sandstone. This is discussed in further detail in Section 2.2.2 below.
- Sandstone bedrock: Identified at a depth of 1.1 metres north of the trench, and tended to comprise large slabs of bedrock. At the location of TU 5, bedrock was encountered at a dept of approximately 1.31 metres below ground level, and comprised sandstone bedrock chunks interspersed with degraded clayey-sand material (degraded bedrock).

Figure 2.26 Trench 5, start of excavation, showing position within DBNSW compound, facing south.

Figure 2.27 Sondage trench dug within Trench 5, exposing sandstone bedrock, facing north. 0.5m scale.

Figure 2.28 Location of soils identified for testing within the southern portion of Trench 5, showing TU 5 pre-excavation. Note adjacent historical wall slot feature. 0.5m scale.

Figure 2.29 Section in south extent of Trench 5, showing layers of historical fill. 0.5m scale.

Figure 2.30 Potential linear channel (historical feature), delineated in white dashed lines, in bedrock within Trench 5, facing north. 0.5m scale.

Figure 2.31 Potential wall slot (historical feature) within south extent of Trench 5.

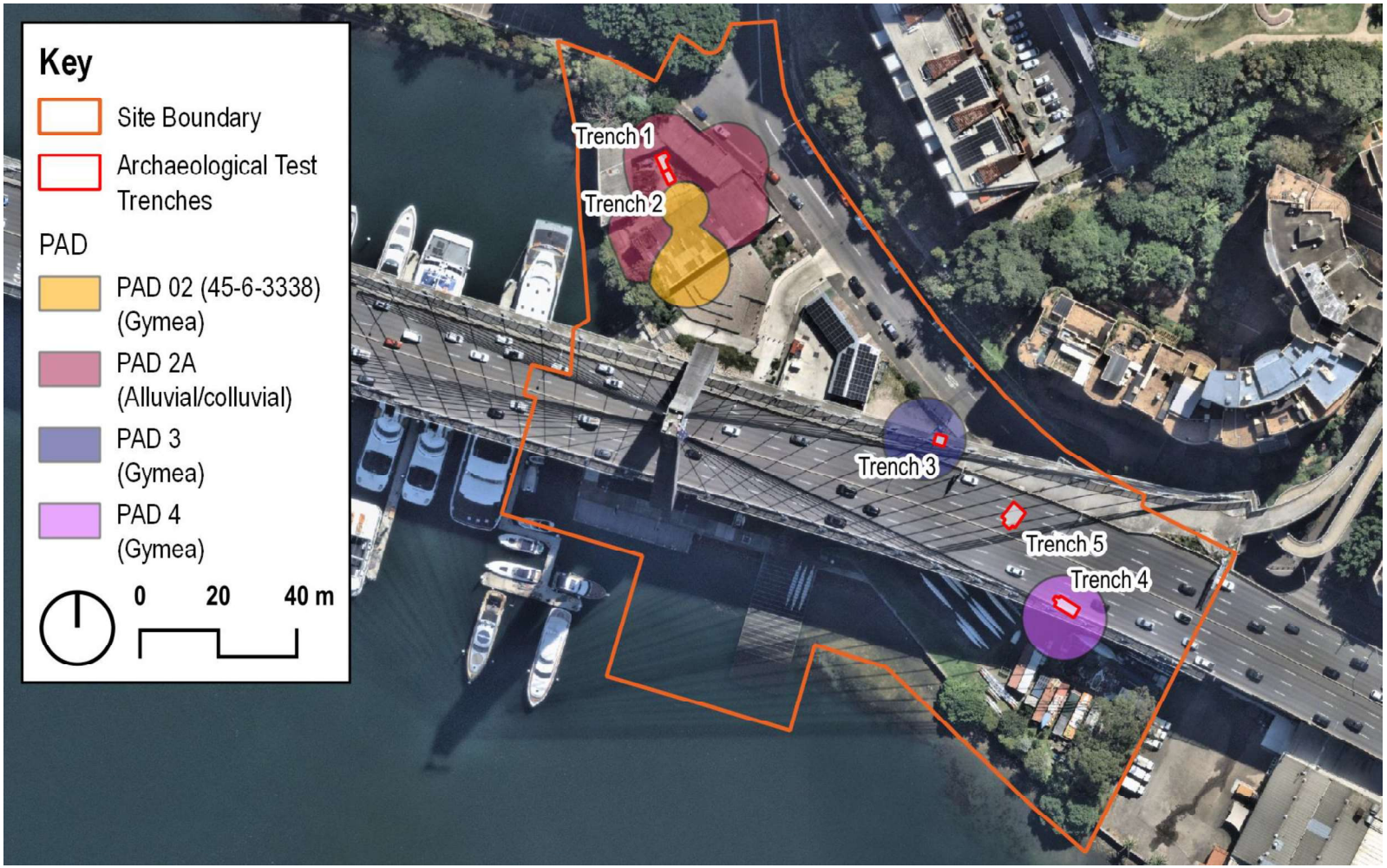

Figure 2.32 Locations of archaeological test trenches within the Bank Street site. (Source: Nearmap with GML overlay, 2023)

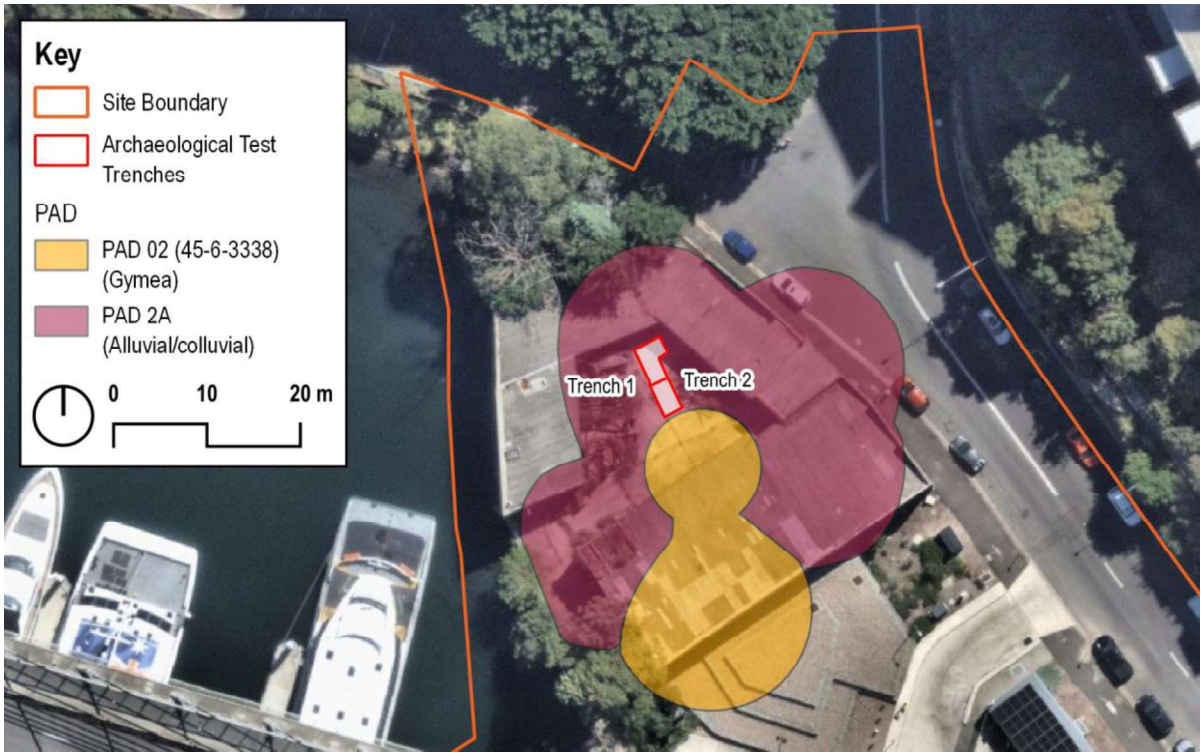

Figure 2.33 Detail of location of Trenches 1 and 2 within 1–3 Bank Street. (Source: Nearmap with GML overlay, 2023)

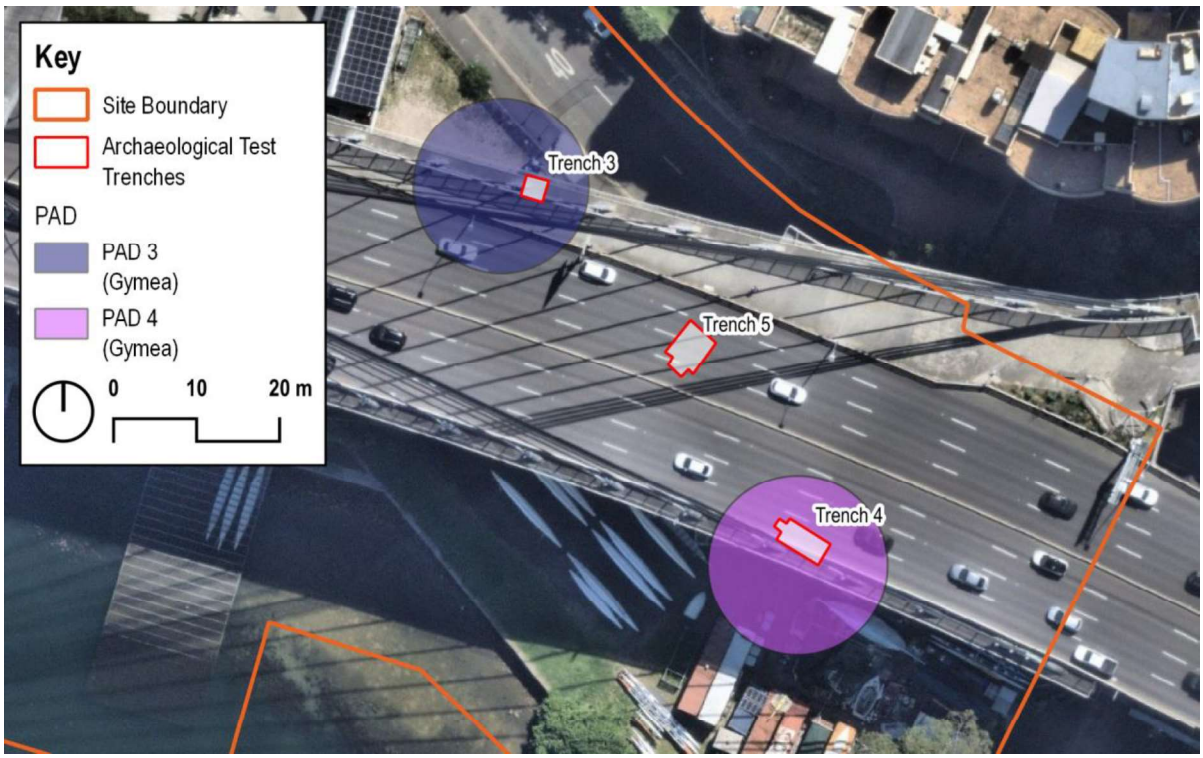

Figure 2.34 Detail of location of Test Trenches 3, 4 and 5 within the southeast of the Bank Street site. (Source: Nearmap with GML overlay, 2023)

2.2.2 Aboriginal archaeological test unit excavation results

A total of two of the five test unit locations (TU 2 and TU 5) proposed in the AACAM (Figure 2.1) were found to contain a natural soil profile with the potential to contain Aboriginal objects (Figure 2.35). At the locations proposed for TUs 1, 3 and 4, no natural soil profiles with the potential to contain Aboriginal objects were encountered.

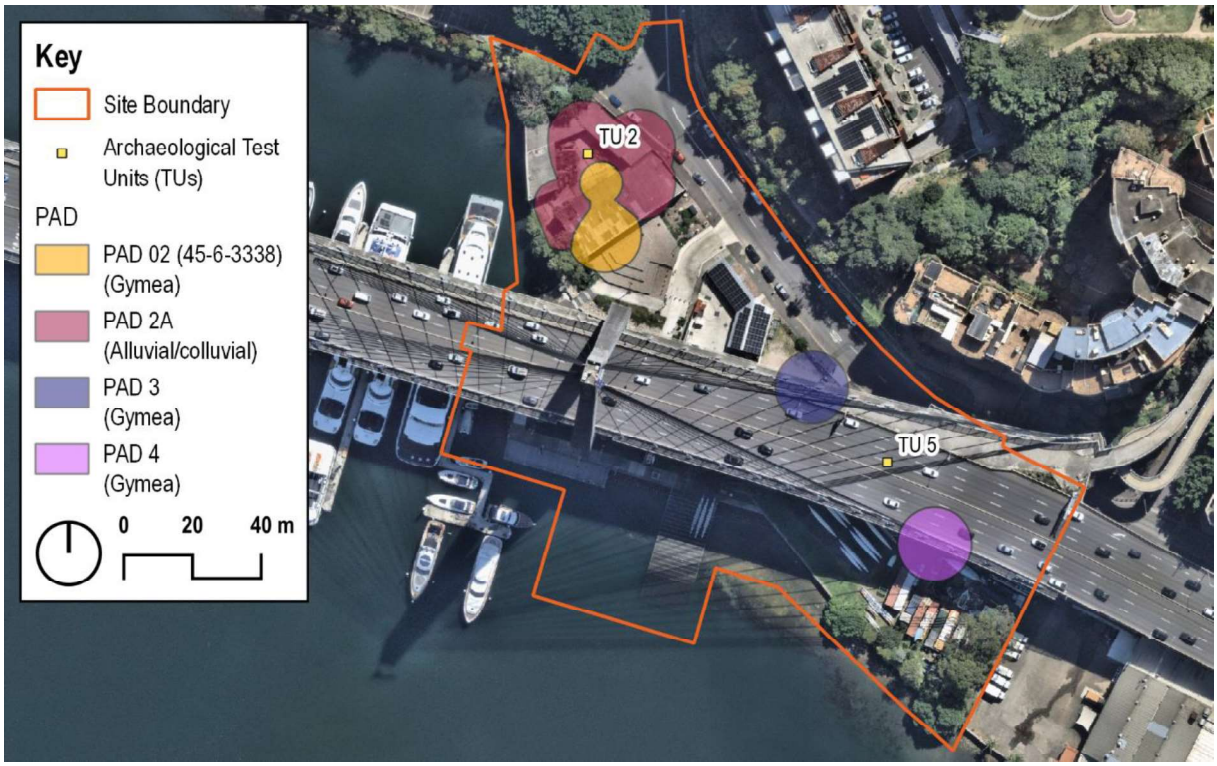

Figure 2.35 Locations of archaeologically excavated test units within the Bank Street site. (Source: Nearmap with GML overlay, 2023)

TU 2

TU 2 was placed in the northeast corner of Trench 02, where a colluvial sediment measuring approximately 0.75 by 1 metre was exposed, at a depth of approximately 1.05 metres. Trench 2 had to be situated slightly further northwest of the location proposed in the AACAM to facilitate access for machine excavation due to the spatially constrained nature of the courtyard space. As such, the trench was situated adjacent the projected interface between PAD 02 (suspected Gymea) and PAD 02A (suspected alluvial or colluvial soils), providing the opportunity to investigate the potential transition between these two areas of PAD. As a result, the closest borehole to the Trench was BHO5/MW05 (2012), which identified brown sandy alluvial or colluvial soils at a depth of 1.1 to 4.2 metres.

The colluvial sediment identified in TU 2 had been truncated by historical fills to the southwest. Seven spits were dug, noting that spit 7 was extended to account for the steeply sloping nature of the base of the pit and was 200 millimetres. Stratigraphically, the test unit consisted of three distinct soil units sloping southwest towards the shoreline. The soil profile in TU 2 comprised (Figure 2.36):

- Upper unit: Dark grey-brown silty sand with frequent slag and sandstone fragment inclusions. Present only in southwest of test unit. Maximum unit thickness of approximately 270 millimetres.
- Middle unit: Grey-brown silty sand colluvial sedimentary layer. Brown mottling evident. Present in southwest portion of test unit. Approximately 50–70 millimetres thick.
- Lower unit: Dark grey sand colluvial sedimentary layer, no brown mottling, with root bioturbation. The presence of ceramic and Aboriginal worked flint within this deposit demonstrates some degree of historical disturbance. Maximum unit thickness of approximately 300 millimetres.
- Base: Pale yellow crushed sandstone layer, comprising unconsolidated sandstone chunks interspersed with a friable brownish yellow sand. Interpreted as a reclamation fill, or, less likely, a degraded natural weathered bedrock (C horizon).

One flint lithic was identified from the lower soil unit within spit 7 (see section 2.2.5 below). Due to the low density of artefacts identified and after consultation with the RAPs on site, no expansion was undertaken. Potential for expansion was also limited by the spatially constrained nature of 1–3 Bank Street, the location where the artefact was identified.

Three ceramic fragments (unworked) were also identified within this spit. The presence of post-1788 material within the lower layers of the test unit (ie flint, ceramic) suggests either historical disturbance (ie churning or mixing of soils) or, more likely, post-1788 deposition of the material. The soils of TU 2 likely represent layers of post-1788 colluvium, potentially introduced to the site because of increased soil movement from upslope on the peninsula, triggered by land clearance following colonisation.

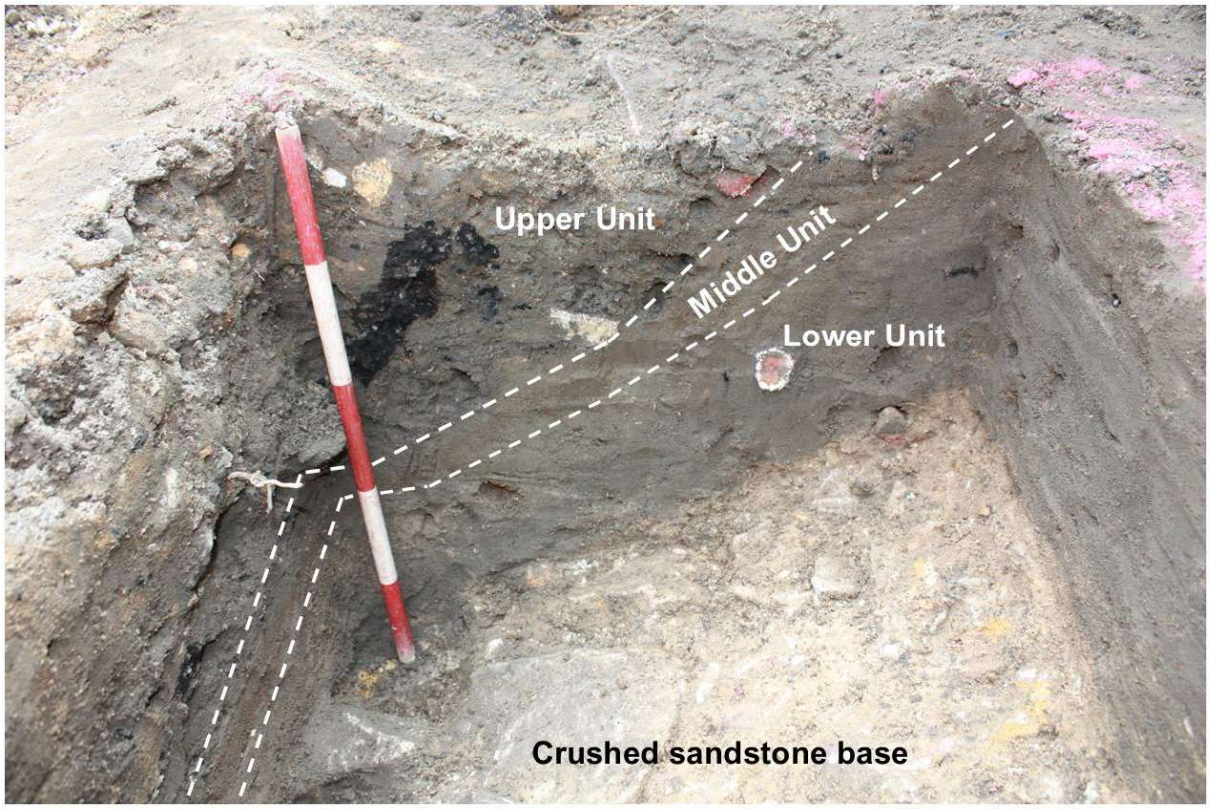

Figure 2.36 Annotated northwest section of TU 2, showing all three sloping soil units overlying the crushed sandstone base.

Figure 2.37 TU 2 pre-excavation, within the north end of Trench 5. Facing west. 0.5m scale.

Figure 2.38 TU 2 at the end of excavation, facing northwest. 0.5m scale.

Figure 2.39 TU 2 at the end of excavation, northeast section. Due to the slope of the deposits, this section exclusively comprises the colluvial sediment units. 0.5m scale.

Figure 2.40 TU 2 at the end of excavation, showing position within Trench 2, facing west. 0.5m scale.

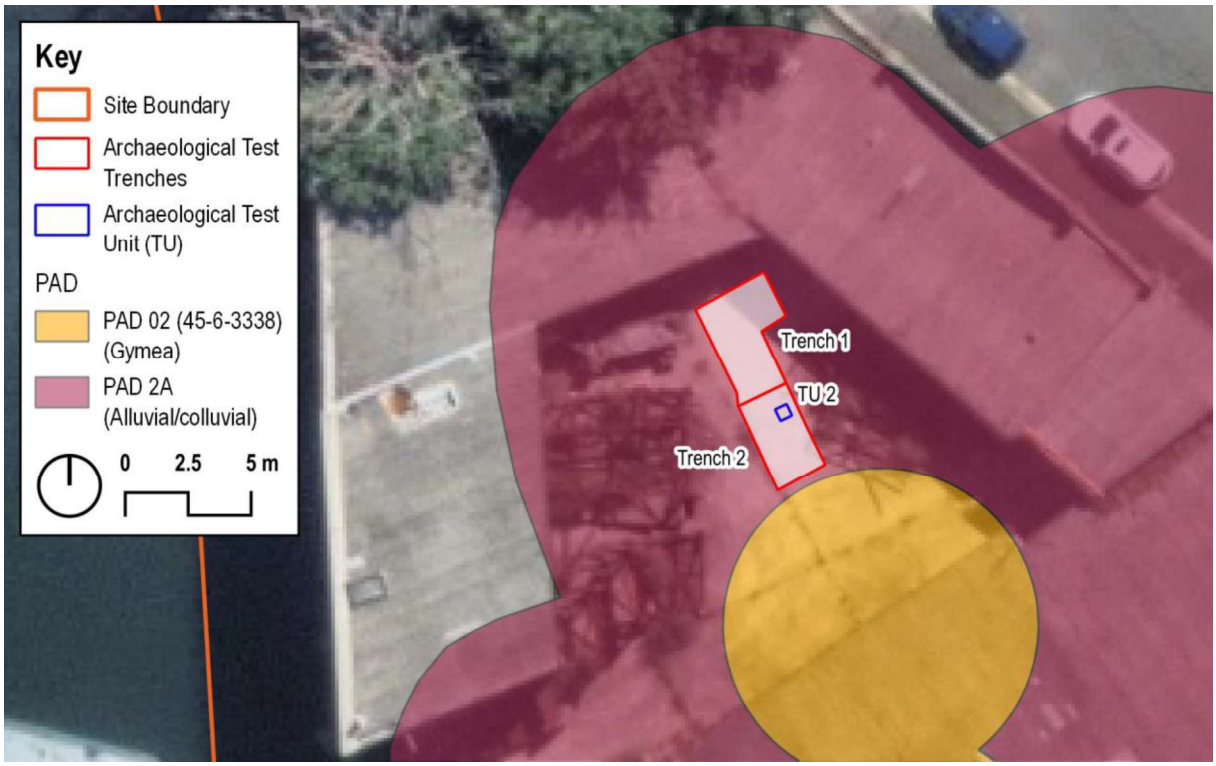

Figure 2.41 Detail of location of TU 2 within 1–3 Bank Street. (Source: Nearmap with GML overlay, 2023)

TU 5

TU 5 was a 500 by 500 millimetres trench excavated in 50-millimetre spits. The TU was placed in the southeastern corner of Trench 05 after 0.83 metres of historical fills were machine excavated, exposing an isolated deposit with suspected PAD, measuring approximately 1.1 by 1.1 metres. The deposit had been truncated by historical fills to the

northeast and northwest. The deposit may extend to the southwest and southeast of Trench 5. Eleven spits were excavated, noting spit 11 was extended to account for the uneven depth of the base of the pit. The test unit was excavated to a maximum depth of 600 millimetres. Stratigraphically, this test unit consisted of three distinct soil units overlying an uneven sandstone base. The soil profile of TU 5 comprised (Figure 2.42):

- Upper unit: Brown sandy silt with occasional red-brown mottles. Rare sandstone rubble inclusions. Due to its similarity in colour and texture to the lower unit, this soil was interpreted as a redeposited soil/sediment, potentially a Gymea soil, in a post-1788 context. Maximum unit thickness of 240 millimetres.
- Middle unit: Layer of reddish-yellow crushed friable sandstone. Interpreted as an introduced layer, in a post-1788 context. Unit approximately 110-millimetres thick.
- Lower unit (predominantly visible in southwest of test unit): Brown sandy silt with noticeable clay content, similar in colour and texture to the upper unit, but with a higher clay content. Interpreted as a Gymea B horizon, subject to disturbance due to the presence of glass and introduced gravels. In the northeast portion of test unit, this layer has a diffuse boundary to the underlying degraded sandstone bedrock, with mixing of the layers evident. The boundary between the layers was cleaner and more delineated to the southwest. Unit was approximately 120-millimetres thick (maximum).
- Base: Degraded sandstone bedrock with an uneven surface. Comprised blocks of reddish-yellow sandstone interspersed with deeper pockets of friable sandy material, interpreted as degraded bedrock (C horizon).

No Aboriginal artefacts were identified within TU 5. However, the presence of post-1788 materials, namely flint gravels (unworked), glass fragments, and a metal bolt incorporated throughout the depth of the test unit (ie within spits 1–10 inclusive, no materials identified in spit 11) indicates that the soils within TU 5 have been subject to disturbance. This is likely in the form of truncation and mixing of soils, resulting in a soil profile with low condition and low integrity.

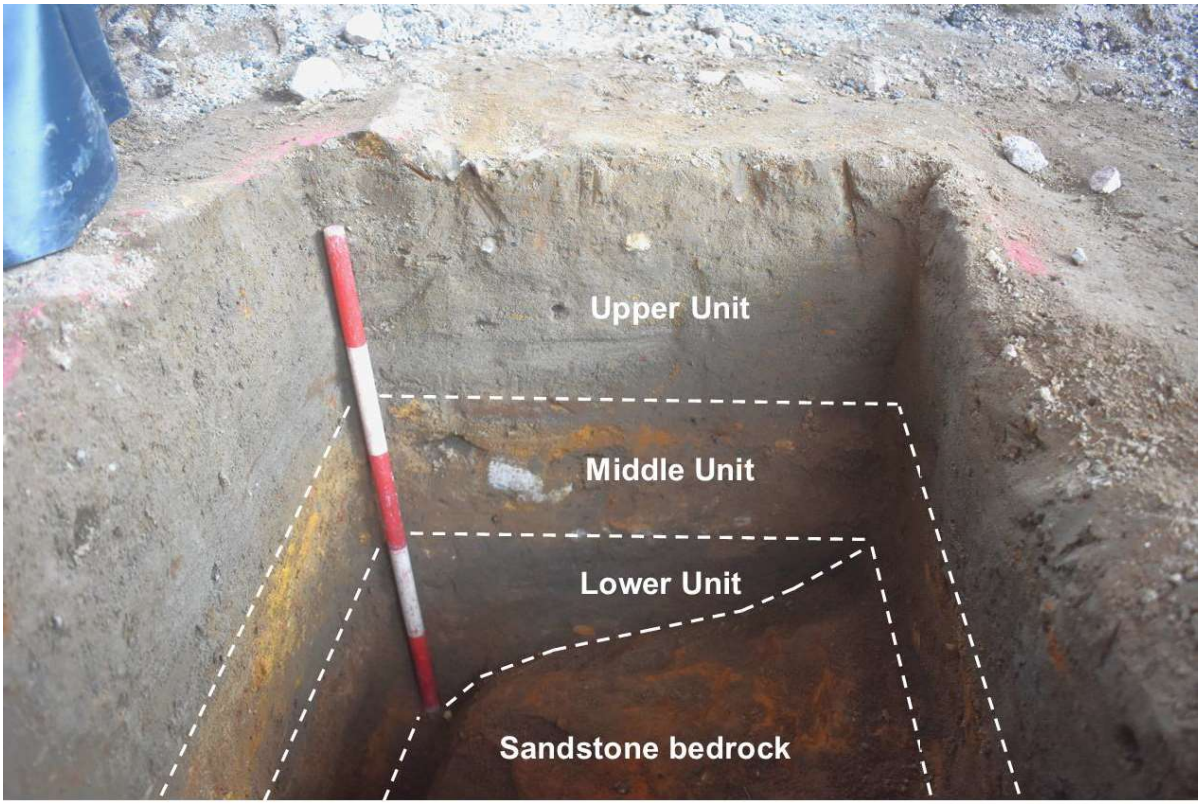

Figure 2.42 Annotated southwest section of TU 5, showing soil units overlying degraded sandstone bedrock.

Figure 2.43 TU 5 pre-excavation, within the southern end of Trench 5. Facing southwest.

Figure 2.44 TU 5 mid-excavation (upper unit), facing northeast. 0.5m scale.

Figure 2.45 TU 5 mid-excavation, facing southeast, showing transition to crushed sandstone layer (middle unit) in section. 0.5m scale.

Figure 2.46 TU 5 at the end of excavation, facing southeast. 0.5m scale.

Figure 2.47 TU 5 at the end of excavation, southeast section. 0.5m scale.

Figure 2.48 TU 5 at the end of excavation, southwest section. Note continued grey-brown silty clay below crushed sandstone layer. 0.5m scale.

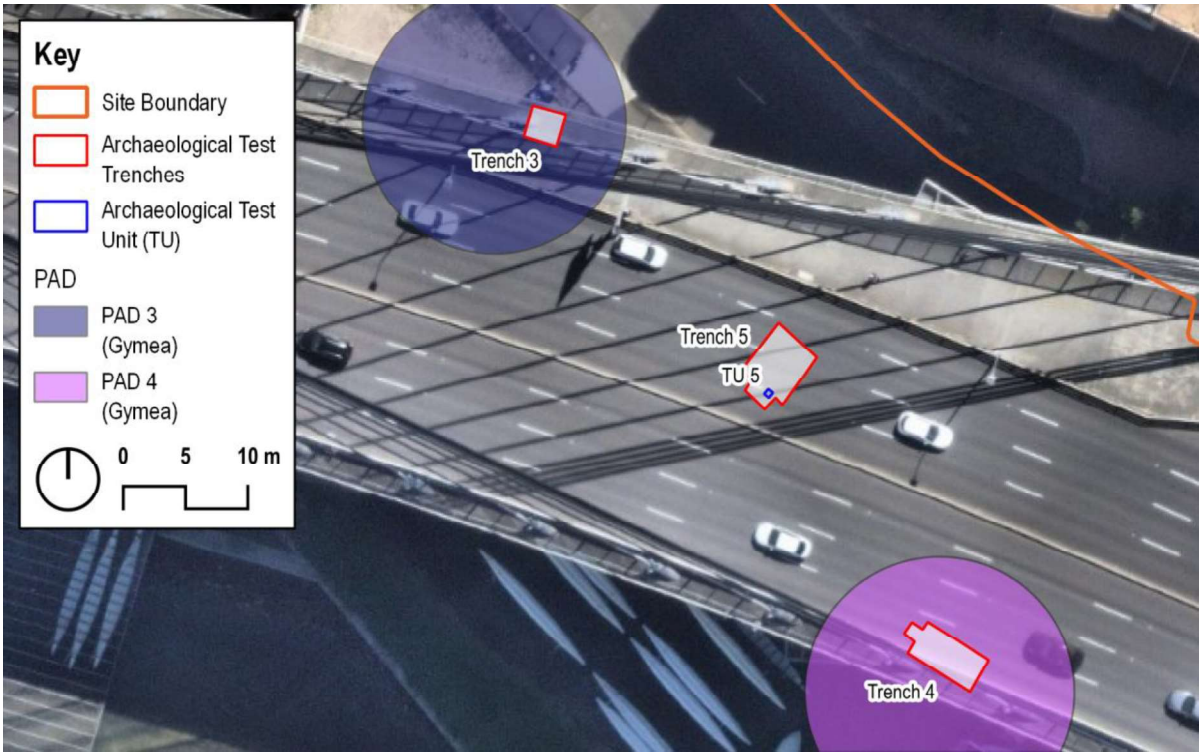

Figure 2.49 Detail of location of TU 2 within 1–3 Bank Street. (Source: Nearmap with GML overlay, 2023)

2.2.3 Soil conditions (integrity and condition)

Test excavations confirmed that the integrity of PAD deposits has been significantly compromised by previous construction and development within the site. Several metres of imported material were observed in all trenches, with small, isolated pockets of PAD deposits only identified in Trenches 02 and 05. Where PAD deposits were identified, they were highly disturbed, as demonstrated by the presence of post-1788 material, such as flint (worked and unworked), glass, ceramic and metal, and had been truncated by historical activities. As such, deposits across the site held low condition and low integrity. The extent of historical disturbance significantly reduces the potential for intact Aboriginal archaeological material across the site.

TU 2 was situated adjacent to the projected interface between PAD 02 (Gymea B horizon soils) and PAD 02A (alluvial or colluvial deposits). Suspected Gymea soils identified in geotechnical testing were described as being dark greyish brown mottled dark yellowish brown sandy silty clay (potentially corresponding to gy2 of the Gymea soil landscape), while deposits described as alluvial or colluvial in nature were described as being fine grained sands, brown, traces of clays, sand mottles and compressed sand plates throughout, overlying sandstone bedrock.[10] Observed soils in TU 2 during the 2023 archaeological excavation comprised layers of dark grey brown to dark grey silty sand to

sand. This description appears to be more aligned to the description of the alluvial or colluvial soils identified in geotechnical testing, as opposed to Gymea soils. This is consistent with the borehole results within this area, particularly with reference to BH05/MW5, noting that due to the sharply southwest sloping nature of the deposit, the deposit extends significantly deeper in the location of BH05/MW5 than in TU 2. The presence of post-1788 material within these deposits suggests that the colluvium is likely post-1788 in date, or less likely, was reworked/churned post-1788, introducing post-1788 material deep into the soil profile.

TU 5 was situated in a previously untested area. Deposits observed in the 2023 archaeological excavation comprised layers of brown sandy silt, which were identified as being reworked Gymea B horizon soils, interspersed by an introduced crushed sandstone layer. This was based on descriptions of deposits interpreted as Gymea B horizon soils identified across the Bank Street site during geotechnical investigations,[11] and due to the presence of the introduced sandstone layer and post-1788 material throughout the soil profile of the test unit, suggesting extensive reworking in the form of churning or redeposition of soils.

2.2.4 Observed Aboriginal sites

A single artefact was identified during test excavations, comprising a flint flake located in spit 7 of TU 2, in the location of PAD 2 (1-3 Bank Street). This artefact has been registered to AHIMS as a component of the existing AHIMS site 45-6-3338 (The Bays Precinct PAD02). This has updated the site features of 45-6-3338 to artefact and PAD.

Further analysis of the artefact and the remainder of the assemblage is outlined in Section 2.2.5 below. The assemblage is currently being stored in a secure location in the GML offices. Long-term management of the artefact will be determined with the project RAPs.

Table 2.3 Stone artefacts recovered during excavation.

TU number	Spit	Raw material	Colour	Description	Post-depositional taphonomic modification	Cortex	Figure(s)
TU 2	7	Flint	Pale greyish-yellow	Flake; 11mm long by 16mm wide, 3.5mm thick.	Damage to lateral margins and platform	None	Figure 2.50
					Total Aboriginal objects:		**1**

2.2.5 Artefact and assemblage analysis

A singular Aboriginal object was recovered during the test excavations, comprising a flint flake artefact. All other stone (gravel) and glass material identified (ie the balance of the assemblage) was analysed and did not show any evidence of working or use by First Nations people. No shell was identified in the assemblage.

Artefact

A flake of pale flint was recovered from TU 2 spit 7 (Figure 2.50). The flake measures 11-millimetres long by 16-millimetres wide at midpoint of length, and 3.5-millimetres thick at the intersection of length and width. It is a maximum of 19 millimetres in size and weighs 0.9 grams. It has a step termination. The platform is damaged, but was probably a smooth plain surface. A fracture on the bulb of the ventral surface is probably an undetached eraillure flake. Damage to the platform extends onto the proximal end of the dorsal surface. Both lateral margins show minor damage. Damage appears to be post-discard.

Figure 2.50 Flint flake from TU 2 spit 7. Left image shows ventral surface, right image shows dorsal surface. The scale is 5mm long in 1 mm increments. (Source: GML Heritage 2023)

Gravels

Gravels were recovered from TU 5. These are mostly of flint, but include some glass and ceramic fragments. Most are fairly small (<30mm in length) (Figure 2.51). While some pieces show signs of conchoidal fracture—curving surfaces, ripple marks—they differ in several respects from the flake in TU 2. They tend to be thick blocky pieces, often with irregular crushing along margins. Where conchoidal partial scars are present, they tend to be small and show haphazard placement. A piece of dark glass (lower right of Figure 2.51) shows similar crushing that is unlikely to be related to tool use.

Figure 2.51 Gravels from TU 5 spit 1 (left image) and gravels and glass TU 5 spit 2 (right image). The scale is 30mm long in 10mm increments. (Source: GML Heritage 2023)

A larger block of flint was recovered from Spit 7, together with smaller gravels, a piece of igneous mechanically-fractured rock and a piece of metal. This block is described briefly here, but analysis has identified that this is not an Aboriginal core (object).

It measures 61 millimetres in maximum size, with block measures of 57 millimetres by 35 millimetres and 31 millimetres. It weighs 83.6 grams. It appears to have multiple unifacial platforms with series of impacts along the edges of surfaces. However, these are high-angle to obtuse, with numerous step terminations, and scars terminating at flaws. Numerous impact points and crushing also occur along other angular margins (some obtuse), indicating repeated battering in a manner not suitable for the detachment of functional flakes. Some surfaces also appear less weathered than others, indicating more than one episode of breakage. Mechanical breakage and/or breakage during construction work is the most likely explanation for fractures on this rock.

Figure 2.52 Blocky flint piece from TU 5 spit 7 (left image). The scale is 30mm long in 10mm increments. (Source: GML Heritage 2023)

2.2.6 Constraints

Several constraints were identified both prior to and during test excavations. These constraints were navigated in the field. Constraints included:

- Inaccessible areas of PAD—as identified within the AACAM, the standing buildings at 1–3 Bank Street overlie areas classified as PAD. As these buildings remained extant at the time of excavation, excavation of areas of PAD beneath the buildings was not possible.
- Depth of the deposits—geotechnical testing identified potential remnant soils with PAD in several locations, at depths of between 0.5 metres and 3.05 metres. However, PAD within the locations of testing commonly commenced at a depth of 1.8 metres or below, with only one location, Trench 1, expected to intersect PAD at depths of less than 1 metre. Deep excavation posed hazards associated with trench collapse, which

was mitigated by benching the excavation where depths of excavation exceeded 1.5 metres. This did, however, create demands on the available space, due to the required trench width to bench safely.

- Shared and spatially constrained workspace—the site was significantly spatially constrained. Within 1–3 Bank Street, testing was only feasible within the courtyard space. However, this space was limited due to the presence of heritage objects, including former coal loader infrastructure stored within the courtyard space. 4–19 Bank Street was a shared zone, and remained in operational use by DBNSW and the Blackwattle Bay Marina. Furthermore, a pop-up sports court was being established within this area during excavations, meaning the location of Trench 3 was shared with Regal Constructions. As a result of constrained or shared space, the size and positioning of trenches was limited to ensure all parties maintained operational use of the site.
- Pop-up sports court—as identified in the AACAM, a pop-up (temporary) sports court was proposed within the south of the DBNSW compound. This court partially overlays the location of PAD 3. The court was in construction during the archaeological excavations. As such, Trench 3 had to be offset to the east of the location of BH11 to avoid impacts to the court.
- Relocating borehole locations—the archaeological testing locations were based on the locations of geotechnical boreholes dug in 2012 and 2023. However, these locations had been recorded by hand-held GPS, which involves an inherent margin of error. A surveyor was engaged to relocate the location of the boreholes based on coordinates derived from prior reporting, but the margin of error associated with hand-held GPS recording may explain why natural soils were not encountered in Trenches 1, 3 and 4, despite natural soils being identified in the bore logs.
- Potential contaminants—several potential contaminants had been identified during contamination testing.[12] A JBS&G representative was onsite for the duration of excavation to monitor for the presence of potential contaminants, and to make trenches safe for hand excavation in the suspected or actual presence of contaminated material.

2.3 Analysis and discussion

The present-day landform within the site comprises a flat to very gently inclined southwards slope. However, this landform is the result of extensive land modifications to flatten and reclaim the shoreline. The original landform of the site likely comprised a moderately to steeply inclined benched slope dominated by outcropping Hawkesbury Sandstone bedrock descending the peninsula towards the shoreline, forming a rocky foreshore.

As a result of the extensive landform modifications due to sandstone quarrying, industrial usage of the site, and land reclamation, deposits with PAD were observed to exist only in spatially discrete and isolated pockets within the Bank Street site. Depths of these deposits varied, likely reflecting the stepped nature of the original landform as it descended to meet Blackwattle Bay.

Only TU 2 returned an Aboriginal archaeological signature in the form of a single worked flint flake, and as such, only the colluvial deposit in the location of this TU may be confirmed to be an archaeological deposit. However, the testing program has demonstrated that deposits with PAD (ie truncated and/or reworked remnant Gymea soils, and/or colluvium) are spatially isolated to small pockets capped by historical fills, which may be present across the site. This has been demonstrated by TU 5. The presence of reworked Gymea soils in this location may be taken to suggest that small, localised deposits with remnant natural soils may occur across the wider site. Additionally, the difficulties in relocating deposits with PAD in the locations of Trench 1 (BH06), Trench 3 (BH11), and Trench 4 (BH14) further reflect the spatially constrained nature of the deposits with PAD. The soils intercepted by geotechnical testing may remain within the Bank Street site as, due to their highly spatially constrained nature, they may not have been intercepted by the testing program. However, the absence of deposits with PAD in these locations may be used to refine the boundaries of the PADs in these locations. PADs 3 and 4 comprise an arbitrary 10-metre buffer centred on borehole locations that intercepted deposits with PAD. The testing program indicates that, on the basis that these soils could not be accurately relocated, these deposits are likely to be significantly smaller in size, and not extend to the entire proposed footprint of each PAD.

Inferring human behaviour activities on the site is difficult due to the limited archaeological evidence. As outlined above, the landscape was found to be heavily disturbed, which has affected the presence of stone artefacts. The sole artefact find was a flint flake. Flint is not a naturally occurring material within Sydney,[13] and should be understood to be a contact-period (ie post-1788) artefact. Flint was transported to Sydney from Britain as ballast in ships, before being discarded on arrival in the colony.[14] First Nations people recognised that flint was a workable material, and opportunistically adopted its use for manufacturing stone artefacts using traditional manufacture techniques. Due to the extensive amount of flint material (predominantly unworked, ie not artefactual and frequently small in size) within the Bank Street assemblage, the flint material may have been discarded on site by European colonists and was subsequently used by First Nations people.

Due to the level of disturbance found across the site and the presence of the single artefact, the remainder of the Bank Street site has a low potential to contain Aboriginal objects. Artefacts present would likely comprise background scatter resulting from random and unpredictable discard or loss of artefacts. These artefacts would likely be

restricted to discrete pockets of shallow remnant soils preserved in locations across the site beneath capping layers of introduced historical and modern fills. Artefactual material may include stone artefacts; contact period artefacts such as worked flint, glass, or metal; and may include shell material (ie shell middens).

2.3.1 Research questions

The first objective of the archaeological test excavation within the site was to undertake excavation that helps clarify, characterise and describe the archaeological potential of soil horizons across the site. The second objective was to determine whether these soil profiles contain archaeological materials and to assess them within a regional context.

To achieve these two objectives, research questions were established to guide the archaeological process and provide the basis for questioning the data collected. Research questions included:

1 What are the characteristics of soil horizons across the site?

   a. How has the land use history impacted the site and survival of soils, and thus archaeological material?

   b. How do areas of remnant Gymea soils interface with alluvial/colluvial soils identified during geotechnical investigations? What do these differing deposits tell of different depositional or formation events?

2 Is an archaeological deposit present?

   a. What is the nature of the archaeological deposit?

   b. Is there archaeological evidence that can be dated (by carbon dating, optically stimulated luminescence and/or relative dating)?

      i. If so, how old is the deposit? Does this correspond to assumptions regarding land use/inundation in relation to sea level fluctuations?

   c. Other than stone artefacts, what evidence—if any—is present for Aboriginal occupation and/or use of the site? Is midden material present and, if so, what may be understood of food resources used and subsistence practices?

3 What is the general nature of stone artefacts recovered from the site? How can the stone artefact assemblage be characterised?

   a. What raw materials are represented in the stone artefact assemblage?

   b. Can any information be ascertained from the stone artefact assemblage regarding the intensity of stone artefact reduction and discard?

   c. Can a difference between stone artefact deposits be identified by different strata in the assemblage over time? If so, what is the nature of that difference?

4 How can the deposit be interpreted?

   a. Does the archaeological deposit vary spatially or in nature between Gymea and alluvial/colluvial soils? How?

   b. What does the archaeological deposit tell us about Aboriginal use of this specific landscape?

5 Can the archaeology be interpreted in a regional context?

   a. Can the deposit be related to a wider cultural landscape?

      i. How does the archaeological deposit relate to comparable sites in the surrounding region, eg the KENS[15] site?

   b. What is the source of the artefactual stone? How does this correlate with current regional research and knowledge of stone resources?

6 Can the presence of Aboriginal archaeological evidence dating to the 'contact' period (post-1788) be distinguished or confirmed by examining the archaeological resource present within the site? Is there evidence of post-contact Aboriginal use of the site?

7 Is the archaeological deposit culturally significant?

   a. What is the heritage value of the deposit, both scientifically and culturally?

   b. How does the Aboriginal community view and value the deposit identified?

2.3.2 Addressing the research questions

Research question 1: soil horizons across the site

The archaeological test excavation supports previous interpretations of the Bank Street Park site's soils and sediments. In 1788, the site would have been characterised by a series of bedrock ledges and benches leading down to the eastern shoreline of Blackwattle Bay. Between bedrock outcrops, small discontinuous pockets of shallow to moderately deep Gymea soils would have been found with alluvial sediments deposited along the foreshores during flood events or high tide. Colluvial deposits would have been deposited at the base of slopes by gravity. The natural formation processes that form these deposits continued after colonisation. For example, land clearing in the surrounds would have resulted in increased erosion and thus increased depositional rates of colluvium. In any case, these types of deposits (ie post-1788 deposits) have proven Aboriginal archaeological sensitivity.

The physical character of the Bank Street Park site has been modified to the point that deposits associated with the original shoreline, including any Aboriginal archaeological signatures, are confined to small areas and buried beneath metres of historical fills. These developments have significantly compromised the integrity of PAD deposits. PAD

deposits (Gymea soils, or natural colluvial and/or alluvial sediments) have only been identified within seven of the eighteen geotechnical and contamination borehole investigations within the site (Figure 2.6). During our investigations, PAD deposits were only identified in Trenches 2/TU 2 and Trench 5/TU 5. In both cases, these deposits had been truncated by historical fills and had been clearly altered by historical activities prior to truncation, evidenced by the presence of introduced material such as slag or sandstone fragments.

However, the identification of PAD deposits and the recovery of a flint artefact from TU 2 does support previous interpretations of the Bank Street Park site's soils and sediments.[16] These interpretations have concluded that low densities of Aboriginal archaeological material may be retained within small, discontinuous pockets of buried Gymea soils, alluvium or colluvium. It was also noted that, should these pockets be identified, the high levels of historical disturbance significantly reduce the potential for intact Aboriginal archaeological material. Our findings support these interpretations of the soils and sediments across the site.

Research question 2: nature of the archaeological deposit

Four areas of PAD were ascribed to the Bank Street site on the basis of geotechnical testing.[17] Archaeological test trenches were placed to correspond to these locations, with an additional trench placed in a previously untested area to investigate for the potential for remnant natural soils.

An archaeological deposit was confirmed to be present within the location of Trench 2/TU 2 (corresponding to PAD 2) on the basis of the presence of the flint artefact. Additionally, one area of reworked remnant Gymea soil was identified in the location of Trench 5/TU 5 (previously untested area). However, no artefacts were identified in this location. All other areas of archaeological investigation did not encounter intact soils. While the presence of an archaeological deposit could be confirmed only in the location of Trench 2/TU 2, the presence of additional areas of remnant soils across the site with the potential to contain subsurface Aboriginal artefact deposits cannot be ruled out. The nature of the remnant soils within the Bank Street site are highly spatially constrained due to the stepped nature of the sandstone bedrock, resulting in naturally discontinuous pockets of Gymea soils, and due to the varying extents and depths of historical disturbance across the site, resulting in truncation and mixing of soil profiles.

The nature of the archaeological deposit in the location of Trench 2/TU 2 is highly spatially constrained. The deposit is moderately deep (maximum depth of 500 millimetres), and is interpreted to comprise post-1788 colluvium. This is understood via the presence of the flint artefact in Spit 7 (approximately 350 millimetres in depth), suggesting either post-1788 deposition of the deposit, or churning or mixing post-deposition to incorporate the post-1788 artefact relatively deep within the soil profile.

This is not unexpected due to the intensity of historical use and associated disturbance of the site, and parallels may be drawn to the KENS site,[18] which similarly displayed extensive mixing and truncation of remnant Gymea soils due to historical disturbance, and the introduction of post-1788 colluvium to the site from deposition of massive sheet erosion originating upslope. As no carbon material was identified in the location of TU 2, the deposit cannot be scientifically dated. However, the deposit may be relatively dated on the basis of the presence of the flint artefact, which can only be post-1788 in age. As such, the archaeological deposit in the location of TU 2 may be taken to date between 1788 and the 1830s, following which the industrialisation and subdivision of the peninsula increased, likely resulting in the displacement of First Nations people from the area. In addition, the introduction of historical capping reclamation fills from the nineteenth century onwards, which overlie the colluvium, also constrains the age range for this deposit, suggesting it is likely late eighteenth to mid-nineteenth century in age.

No midden material (ie, shell, bone) was identified within the Bank Street site.

Research question 3: nature of the artefact assemblage

The artefact assemblage from the Bank Street site comprises a single worked flint artefact. As a result, any conclusions regarding the nature of First Nations use of the site are minimal. The presence of an isolated artefact find may be indicative of background scatter (ie, artefact discard or loss associated with infrequent or transitory use of the site). However, as the artefact is situated within colluvium, it is also possible that the artefact may have been moved downslope from an original discard point higher on the peninsula, along with the soil material the artefact is deposited within.

Research question 4: interpreting the archaeological deposit

The limited nature of the recovered archaeological deposit makes interpretation difficult. The flint artefact was identified within a colluvial deposit and, as such, may have been introduced to the site via colluvial processes, such as slope wash, and may not represent cultural activities that occurred within the site. However, the artefact is evidence of the continuity of traditional cultural practices by First Nations people on the Pyrmont Peninsula into the early to mid-nineteenth century.

Research question 5: regional context

The archaeological resource of the Bank Street site may be interpreted within the local context of the Sydney Harbour foreshore, particularly in association with the KENS site, and in a regional context across the wider Sydney region using the lens of the distribution of First Nations worked flint artefacts.

In terms of the local context, Bank Street may be compared to the KENS[19] archaeological site in the Sydney CBD, which was subject to Aboriginal and historical archaeological excavation in 2003. Similarly to the Bank Street site, the KENS site was situated on the

mid- to foot-slope of a ridgeline, extending to a rocky bay foreshore, with the western portion of the KENS site situated within the reclaimed tidal mudflat zone. Like at Bank Street, pockets of disturbed remnant Gymea soils were retained in pockets across the KENS site, truncated by historical disturbance. Remnant soils were frequently mixed, partially removed or capped by fill layers, as is also noted in the Bank Street excavation (see discussion of TUs 2 and 5). In addition, late eighteenth-century colluvium was identified at KENS, resulting from deposition of massive sheet erosion originating upslope. A significant volume of artefacts (n=952) was recovered from the KENS site in both remnant soils and overlying colluvium. No flint artefacts were recovered, but contact archaeology in the form of flaked glass artefacts was identified. Artefacts identified in truncated in situ soils showed chipping and heat damage, suspected to be from trampling and burning post-deposition in the early historical period. Similarly, the flint artefact from Bank Street showed signs of likely post-deposition damage, which did not appear recent (ie, not caused during archaeological excavation). This may be indicative of historical disturbance on the site.

Comparison should also be drawn between the Bank Street site and archaeological sites within Sydney, which also contain worked flint artefacts. While flint is not a stone type found in the geology of Sydney, and thus is comparatively uncommon in the archaeological record, flint is recorded in the artefact assemblages of several archaeological sites within the wider Sydney region, either in worked or unworked form. Where worked, the flint is sometimes attributed to being either British or First Nations in origin. British-worked flint is connected with gun flints or strike-a-lights, both of which present distinct forms and modes of manufacture, which are very different to flints attributed to being of First Nations worked origin. Relevant sites with flint in First Nations archaeological contexts include:

- Randwick Stabling Yard (RSY1), Randwick;[20]
- First Government House, Sydney CBD;[21]
- Arthur Phillip High School (AHPS) and Parramatta Public School (PPS), Parramatta;[22] and
- Former Defence Aerodrome at Schofields, Western Sydney.[23]

The Randwick Stabling Yard (RSY1) site in Randwick was archaeologically investigated by GML as part of the Sydney Light Rail development. The site is situated within the Botany Sand Dunes. Excavations resulted in the recovery of 2,400 flaked stone artefacts and five flaked glass artefacts. Most of the stone artefacts were composed of flint, which was identified via portable X-ray fluorescence analysis as originating from the tidal banks of the river Thames in London, England. Nodules and pebbles of flint were understood to have been transported to Sydney as ship's ballast, then were collected by First Nations people, who transported the material to Randwick, beyond the fringes of the early colony at Sydney Cove. The material was then worked using a bi-polar flaking manufacture process. The site was interpreted as a primary stone reduction and working space, and

was used for flint artefact manufacture between 1788 and 1830, prior to formalised use of site as an early racecourse.

Historical archaeological excavations conducted at the site of the first Government House within the Sydney CBD uncovered stone, bone and glass Aboriginal artefacts that were subject to analysis in 1993 and 2016. The assemblage comprised eighteen stone artefacts, seven worked glass artefacts and two potential bone points. Of the stone artefacts, fourteen were of flint. Flint pieces included flaked artefacts, possible flakes and unworked nodules. Some flint featured potential use-wear, indicating usage of the artefacts. The source of the flint material was understood to have been imported from Britian, potentially in the form of military gunflint[24] or as ship's ballast that was subsequently reworked by First Nations people.

The AHPS and PPS sites in the Parramatta CBD were archaeologically excavated by GML between 2017 and 2020. The sites were situated across Blacktown and Birrong soils, and the Parramatta Sand Body. Several contact period artefacts were identified during archaeological investigations, including worked 'black' glass artefacts and two flaked (worked) flint artefacts. The worked flint comprised one flint nodule flaked as a core and a small broken flake of flint. The flint core material was suggested to have originated from Brandon, England, while the flint source of the broken flake was suspected to be the Thames River flints.

The Schofields Aerodrome site in Quakers Hill, within the Blacktown LGA, was archaeologically excavated by GML in 2017. Contact period artefacts were identified in one location within the investigation area and comprised worked 'black glass', and ceramic and flint artefacts. The flint artefacts comprised two worked flint lithics and an additional third unworked flint piece. The two worked flint artefacts were intentionally knapped and displayed evidence of use-wear. Portable X-ray fluorescence analysis established that the flint was introduced to Sydney from England. It was understood that the material arrived at the investigation area via trade and exchange by First Nations people after the flint was imported as ship's ballast.

The presence of First Nations worked flint at these sites indicates that flint material was recognised by First Nations people as having properties suitable for traditional use, while the presence of the artefacts within the assemblages of the above sites provided the ability to recognise and understand post-1788 archaeological contexts. All flint artefacts identified within the above sites were identified as having a British origin (ie, the flint used and worked by First Nations people was imported from Britain). Due to the absence of naturally-occurring flint resources within the Sydney region, the flint identified at the Bank Street site is likely to similarly originate from Britain, and was transported to Sydney as ship's ballast post-1788, before being collected and worked by First Nations people. Further analysis would be required to identify the precise source of the flint material.

In terms of the wider cultural landscape of the Pyrmont (*Pirrama*) peninsula, drawing conclusions regarding the Bank Street site is challenging due to the sparse nature of the archaeological resource recovered during testing. Pyrmont was not intensively developed by Europeans until the 1830s to 1840s, with the peninsula retaining a strong First Nations presence up to 1830s.[25] The presence of a definitive post-1788 artefact, namely the worked flint flake, may attest to the ongoing presence of First Nations people on the Pyrmont peninsula following European invasion and colonisation, and the continued use of traditional artefact manufacture processes, albeit on an imported material.

Research question 6: 'contact' period archaeology

The presence of the flint artefact recovered from the Bank Street site, showing distinct evidence of First Nations manufacture, provides evidence of post-contact Aboriginal use of the Pyrmont Peninsula area. As outlined above, First Nations people maintained their presence in the Pyrmont/*Pirrama* peninsula into the 1830s. The presence of the flint artefact may indicate First Nations use of the Bank Street site during the contact period. The flint artefact is, however, an isolated find in a disturbed or potentially displaced soil context. As such, definitive conclusions regarding the nature of First Nations use of the Bank Street site cannot be made.

Research question 7: significance

Scientifically, as an isolated find, the flint artefact recovered has limited research potential, as site-wide patterns cannot be derived from a sole data point. However, further research could be undertaken into the origin of the flint material within Britain.

Discussion with representatives of the RAPs indicated that the site holds significance, particularly in the context of the comparative rarity of retained potential Aboriginal sites in foreshore contexts within the Sydney CBD, due to extensive disturbance and land reclamation.

Extensive consultation with the First Nations community has also occurred as a component of the park design. Outcomes are summarised in the Bank Street Park Phase 1 Community Engagement Outcomes Report (Cred Consulting) and Bank Street Park (Tjerruing Park) Designing for/of/with Country First Nations Consultation Summary (Greenshoot Consulting and Greenaway Architects).[26] Discussion of the cultural context of Blackwattle Bay is also detailed in the Connecting with Country Framework for Tjerruing Blackwattle Bay (Bangawarra).[27] These reports have identified key themes and values relating to the site both pre- and post-colonisation. Some key values and themes connected with the Bank Street site include:

- Gadigal womens' mastery of fishing;
- pre-colonisation environment—meeting of salt (harbour) and freshwater (Parramatta River, Blackwattle Creek) waters, and native flora and fauna; and

- connection to the Blak Diggers in association with the ANZAC Bridge, which is situated above the site.

The cultural values of the artefact and the views of the community regarding the significance of the site are discussed further within the project ACHAR (see Section 5).

The artefact should be appropriately stored and managed until it can be repatriated. The method for repatriation should be determined in consultation with and in accordance with the wishes of the RAPs.

2.3.3 Summary

Archaeological test excavations at the Bank Street site aimed to investigate four areas of PAD ascribed on the basis of geotechnical testing. Five test trenches, four corresponding to the locations with PAD and an additional untested location, were machine excavated, with the intent of intercepting deposits with PAD. Deposits with PAD were only identified in two locations, Trenches 2 and 5. Test units measuring 500 by 500 millimetres were subsequently hand excavated in these locations, for a total of two test units, or 0.5m^2 hand excavation. Deposits were then wet-sieved and all potential cultural material retained for analysis.

Following test excavation, all recovered stone materials were subject to analysis by one of GML's stone artefact specialists, leading to the identification of a single Aboriginal stone object (artefact), a flint flake. The artefact was recovered from TU 2. Recording of all relevant attributes was undertaken in a comparable manner to other studies from the region in accordance with Requirement 19 of the Code of Practice and widely used Australian stone object analysis techniques.[28] This technical report was prepared to address the research questions presented above.

On the basis of the identified Aboriginal object (flint flake), the presence of an archaeological deposit has been confirmed, comprising a colluvial, likely post-1788, deposit within 1–3 Bank Street. Further (likely spatially constrained) deposits with PAD may be retained beneath introduced historical fill layers across the site. The Bank Street site should be considered to hold low potential for low density artefact deposits or isolated stone artefact finds. There is also a low potential for midden material due to the foreshore context, although no shell material was identified during test excavations.

GML undertook landscape analysis and all other reporting. All results were analysed with the assistance of GIS, and consequential mapping of sites, places, landscapes and heritage values was GIS-based.

Heritage management recommendations and further values assessment are provided in the project ACHAR, to which this report forms an appendix.

In accordance with the project SEARs and Heritage NSW requirements, this report was provided to the RAPs for a period of 28 days between 25 October 2023 and 22 November 2023 for review and comment. Comments received on the ACHAR and ATR are presented in Section 3 of the ACHAR.

2.4 Endnotes

[1] GML Heritage, Aboriginal Archaeological and Cultural Heritage Assessment Methodology, report prepared for Infrastructure NSW, August 2023.

[2] City Plan Heritage, Draft Archaeological Monitoring of Site Contamination Assessment of 1–19 Bank Street, Pyrmont, NSW, report prepared for Infrastructure NSW, May 2023.

[3] Artefact Heritage, Blackwattle Bay State Significant Precinct Study Aboriginal Cultural Heritage Assessment Report, report prepared for Infrastructure NSW, January 2021.

[4] Artefact Heritage, Blackwattle Bay State Significant Precinct Study Aboriginal Cultural Heritage Assessment Report, report prepared for Infrastructure NSW, January 2021.

[5] GML Heritage, Historical Archaeology Work Method Statement, report prepared for Infrastructure NSW, September 2023.

[6] City Plan Heritage, Draft Archaeological Monitoring of Site Contamination Assessment of 1–19 Bank Street, Pyrmont, NSW, report prepared for Infrastructure NSW, May 2023.

[7] City Plan Heritage, Draft Archaeological Monitoring of Site Contamination Assessment of 1–19 Bank Street, Pyrmont, NSW, report prepared for Infrastructure NSW, May 2023.

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[9] City Plan Heritage, Draft Archaeological Monitoring of Site Contamination Assessment of 1–19 Bank Street, Pyrmont, NSW, report prepared for Infrastructure NSW, May 2023.

[10] City Plan Heritage, Draft Archaeological Monitoring of Site Contamination Assessment of 1–19 Bank Street, Pyrmont, NSW, report prepared for Infrastructure NSW, May 2023.

[11] City Plan Heritage, Draft Archaeological Monitoring of Site Contamination Assessment of 1–19 Bank Street, Pyrmont, NSW, report prepared for Infrastructure NSW, May 2023.

[12] JBS&G, Detailed Site Investigation 1–19 Bank Street Pyrmont, report prepared for Infrastructure NSW, May 2023.

[13] Herbert, C 1983, Sydney 1:100 000 Geological Sheet 9130, 1st edition, Geological Survey of New South Wales, Sydney.

[14] GML Heritage, Investigations of Aboriginal Site RSY1 Randwick Post Excavation Report, report prepared for Acciona & Transport for NSW, April 2020, pp 166–167;

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[15] Dominic Steele Consulting Archaeology 2006, 'Aboriginal Archaeological Excavation Report—The KENS Site (Kent, Erskine, Napoleon and Sussex Streets), Sydney, NSW', prepared for Leighton Contractors Pty Limited

[16] See Artefact Heritage 2021 and City Plan 2023.

[17] City Plan Heritage, Draft Archaeological Monitoring of Site Contamination Assessment of 1–19 Bank Street, Pyrmont, NSW, report prepared for Infrastructure NSW, May 2023.

[18] City Plan Heritage, Draft Archaeological Monitoring of Site Contamination Assessment of 1–19 Bank Street, Pyrmont, NSW, report prepared for Infrastructure NSW, May 2023.

[19] Dominic Steele Consulting Archaeology 2006, 'Aboriginal Archaeological Excavation Report—The KENS Site (Kent, Erskine, Napoleon and Sussex Streets), Sydney, NSW', prepared for Leighton Contractors Pty Limited.

[20] GML Heritage, Investigations of Aboriginal Site RSY1 Randwick Post Excavation Report, report prepared for Acciona & Transport for NSW, April 2020.

[21] GML Heritage, Site of First Government House Conservation Management Plan, volume 2, report prepared for Sydney Living Museums, February 2017.

[22] GML Heritage, Arthur Phillip High School and Parramatta Public School, Parramatta, Aboriginal Post-Excavation Report, report prepared for Schools Infrastructure NSW, July 2021.

[23] GML Heritage, Former Schofields Aerodrome Aboriginal Heritage Poset excavation Archaeological Report, draft report prepared for Defense Housing Australia, February 2023.

[24] Attenbrow, V and Fullager, R 1993, First Government House Aboriginal Lithics Analysis of Stone and Glass Artefacts, Anthropology Department, Australian Museum, Sydney.

[25] Fitzgerald, S 2008, Pyrmont, Dictionary of Sydney, viewed 6 October 2023, available from <https://dictionaryofsydney.org/entry/pyrmont>.

[26] Cred Consulting, Bank Street Park Phase 1 Community Engagement Outcomes Report, report prepared for Infrastructure NSW, October 2022.

Greenshoot Consulting and Greenaway Architects, Bank Street Park (Tjerruing Park) Designing for/of/with Country First Nations Consultation Summary, report prepared for Infrastructure NSW, July 2023.

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[28] Holdaway, S and N Stern 2004, *A Record in Stone: The Study of Australia's Flaked Stone Artefacts,* Museum of Victoria and Aboriginal Studies Press, Melbourne.