

St Philip's Christian College

Archaeological Test Excavation Report

LGA: Cessnock

Report to St Philip's Christian Education Foundation Ltd

October 2025



 artefact

Artefact Heritage and Environment

ABN 73 144 973 526

Suite 56, Jones Bay Wharf

26-32 Pirrama Road

Pymont NSW 2009

Australia

+61 2 9518 8411

office@artefact.net.au

Document history and status

Revision	Date issued	Reviewed by	Approved by	Date approved	Review type	Revision type
1	7/08/2025	Josh Symons	Josh Symons	14/08/2025	Internal	Draft
2	14/8/25	Erin Beattie (Barr Planning)	Erin Beattie (Barr Planning)	18/08/2025	Client	Draft
3	29/08/2025	Josh Symons	Josh Symons	02/09/2025	Internal	Final

Printed:	N/A
Last saved:	15 October 2025
File name:	ATER-250185 - St Phillips Christian School, Cessnock Final 03.09.2025
Author:	Kristen Tola, Lily Hackett
Project manager:	Kristen Tola
Name of organisation:	Artefact Heritage and Environment Pty Ltd
Name of project:	St Philip's Christian College
Name of document:	St Philip's Christian College – Archaeological Test Excavation Report
Document version:	Final

© Artefact Heritage and Environment

This document is and shall remain the property of Artefact Heritage and Environment. This document may only be used for the purposes for which it was commissioned and in accordance with the Terms of the Engagement for the commission. Unauthorised use of this document in any form whatsoever is prohibited.

Disclaimer: Artefact Heritage and Environment has completed this document in accordance with the relevant federal, state and local legislation and current industry best practice. The company accepts no liability for any damages or loss incurred as a result of reliance placed upon the document content or for any purpose other than that for which it was intended.

EXECUTIVE SUMMARY

St Philip's Christian Education Foundation Ltd (the proponent) is seeking approval for alterations and additions to St Philip's Christian Collage Cessnock campus at 10 Lomas Lane (including Lot 1 DP126765, Lot 1 DP744377 and Lot 518 DP837571). In January 2022, the proponent submitted a State Significant Development (SSD-10360337) under Division 4.7 of the Environmental Planning and Assessment Act 1979.

Artefact Heritage and Environment Pty Ltd (Artefact) have been engaged by Barr Planning on behalf of St Philip's Christian Education Foundation Ltd to undertake an Aboriginal archaeological test excavation to support the Aboriginal Cultural Heritage Assessment (ACHA) for the proposed works at St Philip's Christian College, located in Nulkaba NSW.

An Aboriginal Cultural Heritage Assessment (ACHA) prepared by McCardle Cultural Heritage (McCardle Cultural Heritage 2024a) identified that part of a Potential Archaeological Deposit (PAD) identified as AHIMS ID 37-6-2101 (St Philip's PAD 1) is located within the project area and will be impacted by the proposed development. The Planning Secretary (DPHI, 17 April 2025) has determined that test excavation must be undertaken in accordance with the *Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW* (hereafter, the Code of Practice) to assess impacts on Aboriginal cultural heritage values and inform the SSD application.

Artefact have been engaged to undertake an Aboriginal archaeological test excavation to assess AHIMS ID 37-6-2101 (St Philip's PAD 1) and determine the nature and extent of any Aboriginal objects, that may be present. A Test Excavation Methodology (TEM) was prepared in May 2025 and test excavations were undertaken between 15th-18th July 2025.

A total of 72 artefacts of varying material types were recovered as part of test excavations. This assemblage comprised a total of three sites which included:

- AHIMS ID 37-6-4590, St Philip's College Artefact scatter 11 (23 artefacts). This site was located within the lower slope and adjacent the flat bank of Black Creek. This site was assessed as having moderate archaeological significance.
- AHIMS ID 37-6-4591, St Philip's College Artefact scatter 12 (48 artefacts). This site was located on the mid slope and was assessed as having moderate archaeological significance.
- AHIMS ID 37-6-4592, St Philip's College Isolated Artefact 13 comprised a single isolated find within a disturbed context adjacent Black creek. It was assessed as having low archaeological significance.

All three identified archaeological sites will be directly and totally impacted by the proposed works.

1.1 Recommendations

Based on the above, the following recommendations are made:

- The proponent should determine if avoidance of any of the AHIMS registered sites is possible.
- Where avoidance is not possible SSD conditions of consent is required to harm the identified sites:
 - St Philip's College Artefact scatter 11 (AHIMS ID 37-6-4590)

- St Philip's College Artefact scatter 12 (AHIMS ID 37-6-4591)
- St Philip's college Isolated artefact 13 (AHIMS ID 37-6-4592)
- Due to St Philip's College Artefact scatter 11 and St Philip's College Artefact scatter 12 assessed as being of moderate significance, archaeological salvage is recommended. This would include the preparation of an archaeological salvage excavation methodology. The methodology could be prepared as a condition of SSD approval.
- Due to the presence of a surface artefact in association with the moderately significant St Philip's College Artefact scatter 12, it is recommended surface collection of the surface artefact take place. This would include the preparation of a surface collection methodology. The surface collection may take place during the salvage excavations.
- A heritage induction including an Unexpected Finds Procedure must be prepared and all workers must be inducted prior to the commencement of works.
- Any changes that may impact on Aboriginal sites not assessed as part of the project may warrant further investigation and result in changes to the recommended management and mitigation measures.

CONTENTS

1.1	Recommendations.....	iii
2.0	Introduction.....	1
2.1	Project brief.....	1
2.2	Description of the study area.....	1
2.3	Aims and objectives.....	1
2.4	Limitations and constraints	2
2.5	Authors and contributors	2
3.0	Project framework	5
3.1	Commonwealth legislation.....	5
3.1.1	Environment Protection and Biodiversity Conservation Act 1999	5
3.1.2	Aboriginal and Torres Strait Islander Heritage Protection Act 1984.....	5
3.1.3	Native Title Act 1993	5
3.2	State legislation	6
3.2.1	National Parks and Wildlife Act 1974	6
3.2.2	Environmental Planning and Assessment Act 1979.....	7
3.2.3	Heritage Act 1977	7
3.2.4	NSW Native Title Act 1994	7
3.2.5	Aboriginal Lands Right Act 1983	7
4.0	Archaeological context	9
4.1	AHIMS summary	9
4.2	Archaeological context and literature	14
4.2.1	Previous assessment within the project area	14
4.2.2	Previous geotechnical assessment within the project area.....	17
4.3	Historic records of Aboriginal material cultural	19
5.0	Landscape context	22
5.1	Soils, geology and landforms	22
5.2	Hydrology.....	22
6.0	Summary and predictions	23
6.1	Regional and local archaeological character.....	23
6.2	Predictive model	24
7.0	Test Excavation Methodology	25
7.1	Aims and Objectives.....	25
7.2	Test excavation personnel.....	25
7.3	Sample strategy.....	26
7.4	Excavation procedure.....	26
7.5	Radiometric dating.....	26

8.0	Excavation Results	28
8.1	Landforms, soils and disturbance	28
8.1.1	Mid slope	28
8.1.2	Lower slope	30
8.1.3	Creek flat	32
8.2	Aboriginal objects	36
8.2.1	Preamble	36
8.3	Revised and newly identified Aboriginal sites	40
8.3.1	St Phillips College Artefact Scatter 11 (SPC AS 11)	40
8.3.2	St Phillips College Artefact Scatter 12 (SPC AS 12)	41
8.3.3	St Phillips College Isolated Find (SPC ISO 13)	42
9.0	Discussion and analysis	44
9.1	Discussion	44
9.1.1	Site interpretation and integrity	44
9.1.2	Assessment of predictive model	45
9.1.3	Response to TEM research questions	45
10.0	Significance assessment	47
10.1	Significance assessment criteria	47
10.2	Statement of scientific value	47
10.2.1	AHIMS ID 37-6-4590, St Philip's College Artefact scatter 11	47
10.2.2	AHIMS ID 37-6-4591, St Philip's College Artefact scatter 12	47
10.2.3	AHIMS ID 37-6-4592, St Philip's college Isolated artefact 13	48
11.0	Impact assessment.....	49
11.1	Description of likely impacts	49
11.2	Potential impacts to Aboriginal heritage	49
11.2.1	AHIMS ID 37-6-4590, St Philip's College Artefact Scatter 11	49
11.2.2	AHIMS ID 37-6-4591, St Philip's College Artefact Scatter 12	49
11.2.3	AHIMS ID 37-6-4592, St Philip's College Isolated Artefact 13	50
12.0	Management and mitigation measures	53
12.1	Guiding principles	53
12.2	Site avoidance	53
12.3	Archaeological salvage excavations	54
12.4	Heritage Induction	54
12.5	Changes to the project area	54
13.0	Conclusion	55
13.1	Summary of findings	55
13.2	Recommendations	55
14.0	References	56

Appendix A – AHIMS records	58
Appendix B – Site cards	62

FIGURES

Figure 1: Study area.	4
Figure 2: AHIMS extensive search.	12
Figure 3: AHIMS detail.	13
Figure 4: Borehole locations (Douglas and Partners 2009; RCA Australia 2024).	18
Figure 5: Location of excavated test pits.	27
Figure 6: North wall of TP 26 prior to clay removal	29
Figure 7: Base of test pit 26.	29
Figure 8: Base of TP 26 post-clay removal	29
Figure 9: Stratigraphic drawing of TP 26.	30
Figure 10: Base of TP 5.	31
Figure 11: North wall of TP 5.	31
Figure 12: Proposed location TP 2, abandoned due to disturbance levels in that area. View northwest	31
Figure 13: Surface artefact.	31
Figure 14: Location of surface artefact. View southwest.	31
Figure 15: Stratigraphic drawing of TP 5.	32
Figure 16: Base of TP 9.	33
Figure 17: North wall of TP 9.	33
Figure 18: In situ rock in base of spit 3 in TP 9	33
Figure 19: Stratigraphic drawing of TP 9.	34
Figure 20: Base of TP 12.	34
Figure 21: North wall of TP 12.	34
Figure 22: Proposed location TP 13, abandoned due to disturbance levels in that area. View northeast.	35
Figure 23: Stratigraphic drawing of TP 12.	35
Figure 24: Visual representation of the number of artefacts per spit.	37
Figure 25: Visual representation of raw material types.	37
Figure 26: Visual representation of typologies.	38
Figure 27: Excavation results.	39
Figure 28: Eastern edge of SPC AS 11. View southeast.	40
Figure 29: northern extent of SPC AS 11 in proximity to the drainage line to the left. View west.	40
Figure 30: SPC AS 12. View towards edge of northern boundary of scatter.	41
Figure 31: View of SPC AS 12 from test pit 1. View south.	41
Figure 32: Disturbed context of SPC ISO 13. View southwest.	42
Figure 33: Artefact scatter boundaries and isolated find.	43

Figure 34: Identified sites overlaid onto proposed works.	51
Figure 35: Identified sites overlaid onto detailed drawings of the proposed works.	52

TABLES

Table 1: Summary of authors and contributors.	2
Table 2: Summary of AHIMS sites.	9
Table 3: Summary of PADs.	11
Table 4: Test excavation personnel.	25
Table 5: Summary of sample area	26
Table 6: Stratigraphic description of Test Pit 26 (representative of upper slopes)	28
Table 7: Stratigraphic description of test pit 5 (representative of upper slopes).	30
Table 8: Stratigraphic description of test pit 9 (representative of natural deposits of creek flat).	32
Table 9: Stratigraphic description of test pit 12 (representative of disturbance)	34
Table 10: Significance assessment.....	48
Table 11: Impact assessment	50

2.0 INTRODUCTION

2.1 Project brief

St Philip's Christian Education Foundation Ltd (the proponent) is seeking approval for alterations and additions to St Philip's Christian Collage Cessnock campus at 10 Lomas Lane (including Lot 1 DP126765, Lot 1 DP744377 and Lot 518 DP837571). In January 2022, the proponent submitted a State Significant Development (SSD-10360337) under Division 4.7 of the Environmental Planning and Assessment Act 1979.

Artefact Heritage and Environment Pty Ltd (Artefact) have been engaged by Barr Planning on behalf of St Philip's Christian Education Foundation Ltd to undertake an Aboriginal archaeological test excavation to support the Aboriginal Cultural Heritage Assessment (ACHA) for proposed works at St Philip's Christian College, located in Nulkaba NSW.

An Aboriginal Cultural Heritage Assessment (ACHA) prepared by McCardle Cultural Heritage (McCardle Cultural Heritage 2024a) identified that part of a Potential Archaeological Deposit (PAD) identified as AHIMS ID 37-6-2101 (St Philip's PAD 1) is located within the project area and will be impacted by the proposed development. The Planning Secretary (DPHI, 17 April 2025) has determined that test excavation must be undertaken in accordance with the *Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW* (hereafter, the Code of Practice) to assess impacts on Aboriginal cultural heritage values and inform the SSD application.

Artefact have been engaged to undertake an Aboriginal archaeological test excavation to assess AHIMS ID 37-6-2101 (St Philip's PAD 1) and determine the nature and extent of any Aboriginal objects, that may be present. A Test Excavation Methodology (TEM) was prepared in May 2025 and test excavations were undertaken between 15th-18th July 2025.

2.2 Description of the study area

The study area (Figure 1) is located at St Philip's Christian Collage Cessnock campus on the corner of Lomas Lane and Wine Country Drive, in Nulkaba NSW (Lot 1 DP126765, Lot 1 DP744377 and Lot 518 DP837571) which is situated within the Cessnock City Council Local Government Area (LGA) and within the boundaries of the Mindaribba Local Aboriginal Land Council (LALC). Only portions of PAD 1 that overlapped with the proposed work footprint was subject to test excavations.

2.3 Aims and objectives

The aim of archaeological test excavation is to confirm the presence of sub-surface Aboriginal objects and gather enough information to assess significance. Test excavation was carried out to ascertain this information, inform an assessment of impacts and the development of appropriate management and mitigation measures.

This report has been prepared in accordance with the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (Department of Environment, Climate Change & Water 2010); hereafter the Code of Practice, and includes:

- A quantification and interpretation of the excavation results;
- An assessment of the scientific values and significance of what was found;
- An impact assessment;

- Determination of appropriate management and mitigation measures, including consideration of requirements for further assessment.

Subsurface testing was underpinned by the research questions outlined in section 3.1 of the TEM as outlined below:

- Does AHIMS 37-6-2101 (St Philip's PAD 1) contain Aboriginal objects?
- How are artefacts connected to the landform, and in what ways does the character of the site reflect its position within the broader landscape?
- Are there stratified deposits present?
- How does the archaeological resource of the site compare to other known sites in the region?
- Are materials suitable for dating present?

2.4 Limitations and constraints

Background research completed to inform the development of this report was limited to existing and publicly accessible sources of information. The findings of archaeological assessments cited in the report were not independently verified except where inconsistencies within the documents were identifiable. This report does not consider intangible Aboriginal heritage values.

The scope of this report is based on information provided by the proponent to date. This report excludes historical heritage assessment and excludes provision of any advice under the NSW *Heritage Act 1977*.

2.5 Authors and contributors

This report was prepared by Lily Hackett (Heritage Consultant, Artefact), Kristen Tola (Heritage Consultant/Project Manager, Artefact), Anthony Barham (Geomorphologist/Principal, Artefact), and Dr Stephen Gapps (Historian, Artefact). Management and review were provided by Dr Samantha Higgs (Archaeology Team Leader, Artefact), and Josh Symons (Technical Executive, Artefact). Mapping was provided by Mike Douglas (Geographic Information System Officer, Artefact). A summary of the authors, contributors and their role are provided in Table 1: below.

Table 1: Summary of authors and contributors.

Authors and Contributors	Qualifications	Experience	Tasks
Josh Symons (Technical Executive)	Bachelor of Arts (Hons), Prehistoric and Historical Archaeology	20+ years	• Quality control • Technical support
Dr Samnatha Higgs (Archaeology Team Leader)	Bachelor of Arts (Hons), Archaeology PhD (Archaeology & Anthropology)	20+ years	• Quality control • Technical support

Authors and Contributors	Qualifications	Experience	Tasks
Mike Douglas (GIS Officer)	Bachelor of Arts North American Archaeology Master of Science Geology Master's Certificate in GIS Science	20+ years	• Preparation of mapping • GIS support
Dr Stephen Gapps (Historian)	Bachelor of Arts (Hons)., History Master of Applied History PhD History	20+ years	• Background Histories
Kristen Tola (Heritage Consultant)	Bachelor of Arts (Hons) Graduate Certificate of Archaeology Master of Cultural Heritage and Museum Studies (Heritage Practice)	15+ years	• Project Management • Test excavation • Report writing
Lily Hackett (Heritage Consultant)	Bachelor of Arts (Archaeology and Ancient History) Master of Museum and Heritage Studies	2.5+ years	• Report writing • Test excavation

Figure 1: Study area.



3.0 PROJECT FRAMEWORK

3.1 Commonwealth legislation

3.1.1 Environment Protection and Biodiversity Conservation Act 1999

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) provides a legal framework for the protection and management of Australia's unique environment, including biodiversity and culturally significant places. The EPBC Act also includes provisions to identify places for addition to the National Heritage List (NHL) and Commonwealth Heritage List (CHL) to enhance the protection, conservation and presentation of those places. A search of the NHL and CHL was completed on 25 July 2025 that resulted in no heritage items located within the excavation area.

3.1.2 Aboriginal and Torres Strait Islander Heritage Protection Act 1984

The Commonwealth *Aboriginal and Torres Strait Islander Heritage Protection Act 1984* (ATSIHP Act), deals with Aboriginal cultural property (intangible heritage) in a wider sense. Such intangible heritage includes any places, objects and folklore that 'are of particular significance to Aboriginals in accordance with Aboriginal tradition'. These values are not currently protected under the NPW Act.

There is no cut-off date and the ATSIHP Act may apply to contemporary Aboriginal cultural property as well as ancient sites. The ATSIHP Act takes precedence over state cultural heritage legislation where there is conflict. The Commonwealth Minister who is responsible for administering the ATSIHP Act can make declarations to protect these areas and objects from specific threats of injury or desecration. The responsible Minister may make a declaration under Section 10 of the Commonwealth Act in situations where state or territory laws do not provide adequate protection of intangible heritage.

Where an Aboriginal individual or organisation is concerned that intangible values within the proposal are not being adequately protected, they can apply to the Minister for a declaration over a place.

A Search the Federal Gazette for declarations under the ATSIHP Act resulted in no heritage items within or in proximity to the test excavation area.

3.1.3 Native Title Act 1993

The main purpose of the *Native Title Act 1993* is to recognise and protect native title. Native title is the rights and interests in land and waters that Aboriginal and Torres Strait Islanders have under their traditional laws and customs. Under the *Native Title Act 1993* the National Native Title Tribunal has a number of functions including maintaining the Register of Native Title Claims, the National Native Title Register and the Register of Indigenous Land Use Agreements and mediating native title claims.

Proponents are not required to comply with the requirements of steps 4.1.2 to 4.1.7 of the Consultation Requirements where there is an approved determination that native title exists in relation to the entire study area. In this circumstance, proponents need only consult with the native title holders. However, steps 4.1.2 to 4.1.7 are applicable for any portion of the study area not covered by a native title determination. A search of the National Native Title Tribunal database was completed on 25 July 2025 that resulted in no Native Title claims overlapping with the test excavation area.

The Native Title Services Corporation (NTSCorp) performs functions under section 203B-BK of the *Native Title Act 1993 (Cth)* which include:

- Facilitation and assistance;
- Dispute resolution;
- Agreement making;
- Internal review; and
- Other functions.

Both the National Native Title Tribunal and NTSCorp should be consulted under Requirement 4.1.2 of the Consultation Requirements to ascertain the names of Aboriginal people who may hold cultural knowledge relevant to determining the significance of Aboriginal objects or places.

3.2 State legislation

3.2.1 National Parks and Wildlife Act 1974

The *National Parks and Wildlife Act 1974* (NPW Act), administered by Heritage NSW provides statutory protection for all Aboriginal 'objects' (consisting of any material evidence of the Aboriginal occupation of NSW), and for 'Aboriginal Places' (areas of cultural significance to the Aboriginal community).

The protection provided to Aboriginal objects applies irrespective of the level of their significance or issues of land tenure. However, areas are only gazetted as Aboriginal places if the Minister is satisfied that sufficient evidence exists to demonstrate that the location was and/or is of special significance to Aboriginal culture.

There are no gazetted Aboriginal places in the study area. All Aboriginal objects, whether recorded or not, are protected under the NPW Act.

Section 86 of the NPW Act identifies that it is an offence to harm or desecrate an Aboriginal object and/or an Aboriginal place. Section 86 outlines penalty units applicable where it is identified that a person or corporation is in breach of Section 86.

The NPW Act defines harm to an object or place as any act or omission that:

- (a) destroys, defaces or damages the object or place, or
- (b) in relation to an object moves the object from the land on which it had been situated, or
- (c) is specified by the regulations, or
- (d) causes or permits the object or place to be harmed in a manner referred to in paragraph (a), (b) or (c)

A section 90 permit is the only Aboriginal Heritage Impact Permit (AHIP) available under the *National Parks and Wildlife Act 1974* and is granted by Heritage NSW. Various factors are considered by Heritage NSW in the AHIP application process, such as site significance, Aboriginal consultation requirements, Ecological Sustainable Development (ESD) principles, project justification and consideration of alternatives. The penalties and fines for damaging or defacing an Aboriginal object were increased in 2010.

As this project is being assessed under Part 4 Division 4.1 of the EP&A Act, permits issued under the NPW Act are not required for impacts approved under the SSD provisions. Impacts to Aboriginal objects will be authorised by the Conditions of Approval for the project issued under the EP&A Act.

3.2.2 Environmental Planning and Assessment Act 1979

The EP&A Act establishes the framework for cultural heritage values to be formally assessed in the land use planning, development assessment and environmental impact assessment processes. Part 3, Division 3.4 deals with the development of Local Environmental Plans (LEPs). Planning decisions within Local Government Areas (LGAs) are guided by LEPs. Each LGA is required to develop and maintain an LEP that includes Aboriginal and historical heritage items which are protected under the *EP&A Act* and in some cases also protected under the *Heritage Act 1977*. The study area is located within the boundaries of the Cessnock LGA and is covered by the Cessnock LEP (2011). No listed heritage items are located within or in proximity to the test excavation area.

The proposal will be assessed under Part 4, Division 4.1 of the EP&A Act, which establishes an assessment and approval regime for SSD. Part 4, Division 4.1 applies to development that is declared to be an SSD by a State Environmental Planning Policy (SEPP). Section 4.41 (previously section 89J(c)) of the EP&A Act specifies that approvals or permits under section 90 of the NPW Act 1974 are not required for approved SSD.

3.2.3 Heritage Act 1977

The Heritage Act 1977 protects protection to heritage items (natural and cultural) in NSW. Under the *Heritage Act 1977*, 'items of environmental heritage' include places, buildings, works, relics, moveable objects and precincts identified as significant. While Aboriginal heritage is primarily protected under the *National Parks and Wildlife Act 1974* but may also be subject to the provisions of the *Heritage Act 1977* if an item listed on the State Heritage Register or subject to an interim heritage order. In such cases, Aboriginal objects and places are protected under Section 60 of the *Heritage Act 1977* and approval from the Heritage Council of NSW may also be required in addition to an AHIP. Section 60 approvals are not required for an approved SSD project.

3.2.4 NSW Native Title Act 1994

The *Native Title Act 1994* was introduced to ensure that the laws of NSW are consistent with the Commonwealth *Native Title Act 1993*. Native Title claims, registers and Indigenous Land Use Agreements are administered under the Act.

3.2.5 Aboriginal Lands Right Act 1983

The *Aboriginal Land Rights Act 1983* (ALR Act) established Aboriginal Land Councils (at State and Local levels). The study area is within the boundary of the Mindaribba LALC which has a statutory obligation under the ALR Act to:

(a) take action to protect the culture and heritage of Aboriginal persons in the council's area, subject to any other law, and

(b) promote awareness in the community of the culture and heritage of Aboriginal persons in the council's area.

The ALR Act also establishes the Registrar whose functions include maintaining the Register of Aboriginal Land Claims and the Register of Aboriginal Owners. Registration as an Aboriginal owner does not confer land title rights but acknowledges the person's cultural association with the land. Under the ALR Act, the Registrar is to give priority to the entry in the Register of the names of Aboriginal persons who have a cultural association with:

- Lands listed in Schedule 14 to the *National Parks and Wildlife Act 1974*
- Lands to which Section 36A of the *Aboriginal Land Rights Act 1983* applies.

Requirement 4.1.2 of the Consultation Requirements stipulates that the Mindaribba LALC and the Registrar should be contacted to ascertain the names of Aboriginal people who may hold cultural knowledge relevant to determining the significance of Aboriginal objects or places.

4.0 ARCHAEOLOGICAL CONTEXT

4.1 AHIMS summary

NOTE: The location of Aboriginal sites is considered culturally sensitive information. It is advised that this information, including the AHIMS data appearing on the heritage map for the proposal be removed from this report if it is to enter the public domain.

A search of the Aboriginal Heritage Information Management System (AHIMS) database (Client ID 603445) was completed on 03/07/2021 by Penny McCardle for the ACHAR. Because this search is over 12 months old, a new AHIMS search was conducted. A new search was conducted on 5/08/2025 (Client ID 1030340). The search area measured approximately 3 km x 3 km surrounding the study area. The parameters of this search were:

GDA 1994 MGA 56 342700.0 - 348700.0 m E
6366500.0 - 6372500.0 m N

No additional AHIMS sites were identified within the new extensive search (Figure 2 and Figure 3). The majority of the AHISM sites are concentrated within the grounds of St Phillips Christian College and the Calvary Cessnock Aged Care facility to the south. Many of these recorded artefact scatters contain similar raw material types and are located along the Banks of Black Creek. Several of these artefact scatters are located within disturbed contexts of eroded areas and vehicle tracks. As such these artefact sites are reflective of past activities of Aboriginal people who utilised and inhabited the creeks and surrounding land for resources but also reflective of past historical ground disturbances. Areas not previously subject to significant ground disturbances or archaeological test excavations adjacent to the creek have the potential to contain similar archaeological material. See Appendix B for full AHIMS discussion.

The following is as summarised in the Aboriginal Cultural Heritage Construction Management Plan (ACHCMP) (McCardle 2024). Ten archaeological sites (Table 2), four PADs were previously identified within the larger project area (Table 3) as shown in Figure 2 below.

Table 2: Summary of AHIMS sites.

AHIMS ID	Summary
AHIMS ID 37-6-2096 - SPC 1	Site SPC 1 consists of a single mudstone proximal flake. The site was located on a 20 m ² exposure on the western bank of Black Creek. Along this section, the bank was near vertical and 2 metres in depth and a slight lip (levee) was evident on the bank edge. The artefact was approximately 3 m from the bank edge.
AHIMS 37-6-2097	This artefact scatter (16 artefacts) was located on the western side of a billabong within a first-order drainage line that enters the project area adjacent to Black Creek in the southeastern corner of the project area. The site was located on a slight rise that runs roughly parallel to the drainage line and consists of an exposure (20 x 5 m with). The site consists of two concentrations, the largest containing 14 artefacts adjacent to the billabong, and the second containing two artefacts approximately 20 m south on the vehicle track that crossed the drainage line immediately south of the billabong. Site SPC 2 consisted of 16 stone artefacts consisting of three complete flakes, 12 broken flakes (including proximal and distal flakes) and one core. Artefact raw materials included silcrete and indurated mudstone in roughly equal numbers, with one artefact manufactured from quartzite.

AHIMS ID	Summary
AHIMS 37-6-2098 – SPC 3	Site SPC 3 was an isolated indurated mudstone broken flake measuring 25 x 13 x 3 mm located within a small exposure (25 m ²) on the western side of the same drainage line as SPC 2 (approximately 50 metres west of SPC 1 and 70 metres north of SPC 2).
AHIMS 37-6-2099 - SPC 4	Site SPC 4 consists of two red silcrete broken flakes located on top of a large dam wall in the central southern section of the project area. The dam is located on a minor first order drainage line that enters the study area from the southern boundary and flows northwards to the Black Creek oxbow. Visible within an exposure of approximately 30 x 2 m on the northeastern corner of the dam wall, this site was considered to be part of the same archaeological distribution as site SPC8.
AHIMS 37-6-2100 - SPC 5	This artefact scatter consisted of 10 artefacts including two flakes, a core and seven broken flakes located in the southwestern corner of the project area on the flats and adjacent to a 1st order drainage line at the base of the foot-slope where the farm buildings were located. Located on a 200m ² area of sheetwash erosion, the artefacts were distributed across an area of approximately 20 x 10 metres. Raw materials included mostly silcrete, followed by indurated mudstone.
AHIMS 37-6-2102 - SPC 6	This isolated find, a small mudstone broken core, was located on a raised soil embankment running parallel to, and alongside the inner edge of the "totting track" on the west side of the remnant vegetation patch. This area had been heavily disturbed by the construction of the track and it was considered unlikely that the object is associated with any insitu subsurface deposit. The AHIMS results show that this is not a site.
AHIMS 37-6-2103 - SPC 7	This small mudstone broken flake, (measuring 32 x 27 x 10 mm) was located on a small 0.5 m ² exposure next to a vehicle track on a gentle lower slope on the western side of two minor drainage line confluences.
AHIMS 37-6-2104 - SPC 8	This artefact scatter, consisting of 15 artefacts eroding out of the bank of two small first-order watercourses, extended approximately 30 metres along the creek bank, straddling the confluence below the dam wall located approximately 20-50 metres northeast of the dam wall associated with SPC4 and was considered to be part of the same archaeological distribution as SPC4. The artefacts were eroding out of the western bank, which was slightly higher than the bank on the eastern side and a few artefacts also occurred in the creek bed, but were likely to have eroded from the creek bank. Artefacts included flaked pieces, flakes and two cores manufactured predominantly from silcrete, followed by mudstone artefacts.
AHIMS 37-6-2105 - SPC 9	Consisting of 18 stone artefacts, this site was located on a raised soil levee bank (approximately 5 metres wide) running parallel to, and alongside Black Creek, inside the loop formed by the oxbow. It was situated immediately north of the southern arm of the oxbow. The site included two clusters, the main within a 20 x 5 metre exposure and a single artefact located approximately 10-15 metres south on a vehicle track amongst riparian vegetation. The majority of artefacts were made from mudstone and included one flake, one distal flake, two medial flakes and 12 flaked pieces. Silcrete artefacts included two proximal flakes.

AHIMS ID	Summary
AHIMS 37-6-2106 - SPC 10	Site SPC 10 consisted of three silcrete artefacts (a medial flake, a proximal flake and a flaked piece) and was located approximately 60 metres north of SPC9 on the same raised soil levee alongside Black Creek. At this location there was a three-metre-wide middle terrace between the upper creek flats and the creek channel and one of the artefacts was on a soil exposure on top of the levee, whilst the other two artefacts were eroding out of the creek bank (approximately 0.2 to 0.5 metres below the lip of the bank suggesting there is archaeological deposit in the alluvial topsoils at this location to a depth of around 0.5 metres). This site was considered to be part of the same archaeological distribution as SPC9.

Table 3: Summary of PADs.

PADS	Summary
AHIMS 37-6-2101 – St Philip's PAD1	PAD 1 encompassed the western bank of Black Creek (in the northern section), the western and northern banks of the oxbow to a width of 50 metres, and included the adjacent lower slope. Thick vegetation hampered ground surface visibility along Black Creek during the initial survey by AECOM, but the gentle banks suggested a high potential for archaeological deposit to occur. Additionally, the lower slope along Wine Country Drive adjacent to the oxbow offered an elevated position in close proximity to an ephemeral water source.
AHIMS 37-6-2107 - St Philip's PAD 2	PAD 2 consisted of the banks of the oxbow inside the loop to a width of 50 metres. Although access to ephemeral water is available, the natural levee associated with the Black Creek archaeological deposit was considered to offer a better location for occupation.
AHIMS 37-6-2108 - St Philip's PAD 3	PAD 3 included the southern side of the oxbow and part of the western bank of Black Creek to a width of 50 metres. In this area, Black creek was deeply entrenched with near vertical sides, inhibiting access to the water below during the initial survey by AECOM. Very few artefacts were found in the many exposures along the creek bank, however, the presence of the artefact at SPC 1 suggested that there was still some potential for artefactual material. For this reason, the potential for archaeological deposit was considered to be low-moderate.
AHIMS 37-6-2109 - St Philip's PAD4	PAD 4 included the section of middle drainage line upstream (south) of the dam to a width of 50 metres either side. Archaeological sites were identified downstream of the dam (SPC8) and on the dam wall (SPC4), indicating that middle drainage line had a moderate to high potential for containing in situ archaeological deposit, albeit probably at a very low density.

Figure 2: AHIMS extensive search.

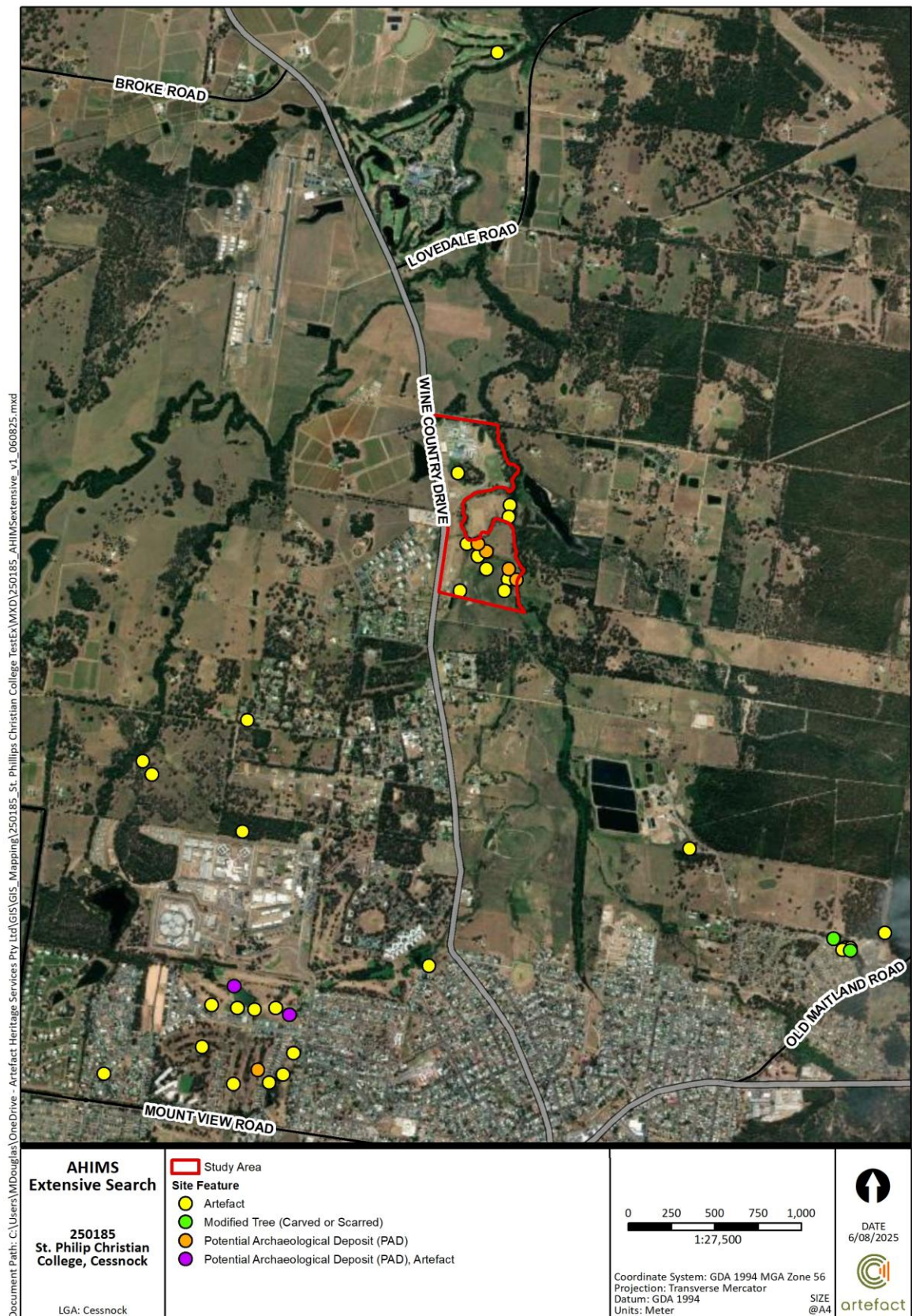
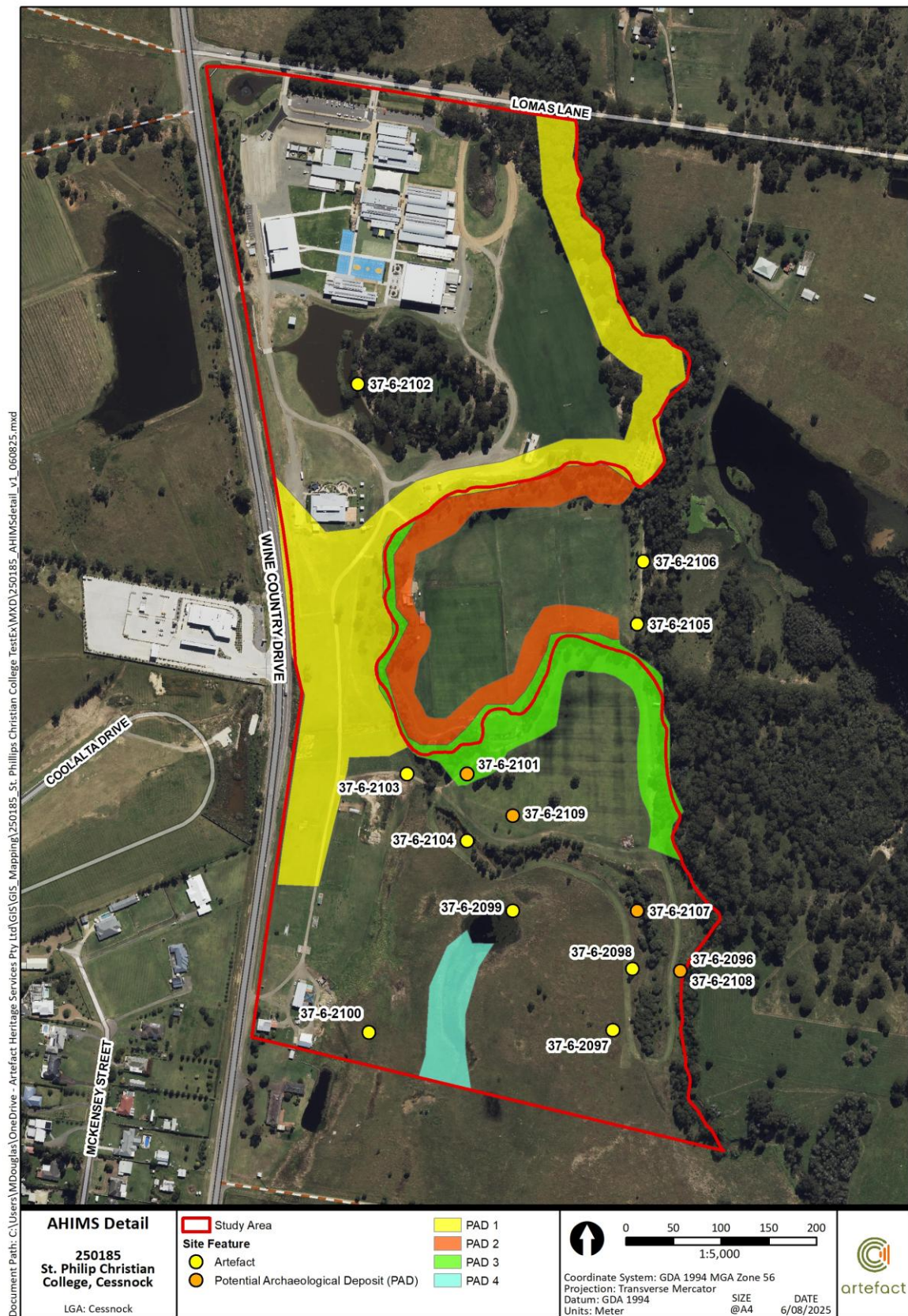


Figure 3: AHIMS detail.



4.2 Archaeological context and literature

4.2.1 Previous assessment within the project area

Two previous assessments have been undertaken within the project area. An additional archaeological assessment was completed by Umwelt within the local area. They are summarised below:

AECOM (2009), Aboriginal Cultural Heritage Assessment Report, Proposed St Phillips College Campus Wine Country Drive, Nulkaba.

The following is as summarised in section 5.4 of the ACHAR prepared by McCardle Cultural Heritage (2024):

AECOM (2009) undertook an ACHA of the investigation area and a total of 10 Aboriginal sites were identified. The assessment also produced a model of archaeological deposit within the project area that was based on the presence of visible archaeological material and the analysis of suitable landforms. To summarise, the assessment identified:

- *One isolated find (solitary stone artefact) in a disturbed context on the western side of the remnant woodland in the northern section of the study area;*
 - *Three isolated finds and six low-density artefact scatters associated with drainage lines in the southern section, or along the margins of Black Creek in the central section (inside the oxbow loop);*
 - *Areas of archaeological deposit modelled on the visible archaeological evidence and analysis of suitable landforms. These areas of deposit include the Black Creek margin (inside the oxbow loop) and along the length of eastern and western drainage lines, and the downstream section of middle drainage line north of the dam.*
 - *Four areas of Potential Archaeological Deposit (PAD) associated with the remaining riparian zones to a width of 50 m from the creek bank and along the lower slop adjacent to the oxbow loop.*
-

In the absence of Aboriginal stakeholder comments on the social (cultural) values of the project area, the Aboriginal heritage significance was based on archaeological (scientific) significance alone and the sites identified were considered to hold low heritage significance values as:

- *The assemblages they contain are commonly found within the Hunter Valley region and in the Central Lowlands landscape and are well-represented elsewhere, are not rare in the local or regional context, and offer low research potential;*

- *The sites have also been subject to disturbance due to past land practices and subsequent erosion, and are unlikely to remain in-situ; and*
 - *The sites have little potential for public education and offer little aesthetic value.*
-

AECOM recommended that test excavation will be required for the PADs, that archaeological salvage excavations under a Section 90 AHIP for the areas modelled as archaeological deposits and/or an AHIP for the identified sites, will be required should these be impacted on by the development.

Umwelt (2011), Aboriginal Cultural Heritage and Archaeological Assessment: Stage 3 Modification, Austra Coal Mine Project.

Umwelt completed an ACHAR approximately 6.50 km southwest of study area for an Environmental Assessment (EA for Austar Coal Mine. The assessment included archaeological surface surveys in consultation with Registered Aboriginal Parties (RAPs). The archaeological survey identified a total of 13 previously unrecorded archaeological sites comprising

- Four isolated finds.
- Four artefact scatters (comprising mostly of mudstone and silcrete artefacts within alluvial deposits).
- Four PADs.
- One potential scarred tree.

Majority of these sites were located within hillslope, flats and proximity to streams/creeks. RAPs identified that all sites were of cultural significance, and the PAD and potential scarred tree were of high cultural significance. An additional 10 known sites were re-surveyed that included similar site types as well as grinding grooves and shelter sites. While no archaeological excavations were completed as part of the assessment, it was recommended an Aboriginal Cultural Heritage Management Plan (ACHMP) be prepared, a monitoring program be established, artefacts recovered should be stored in a keeping place, and all workers be subject to cultural awareness training

McCardle Cultural Heritage Pty Ltd (2024), St Philip's Cessnock College Cessnock Aboriginal Cultural Heritage Assessment Report

McCardle Cultural Heritage Pty Ltd were engaged by Barr Planning on behalf of St Philip's Cessnock College to prepare an Aboriginal Cultural Heritage Assessment Report (ACHAR). The ACHAR included approximately 37.05 hectares of the college, of which the excavation area of this report was included.

The AHIMS search resulted in the identification of 9 AHIMS sites within the project area. The majority of these sites included isolated and low-density artefact scatters or mudstone and silcrete. Based on the AHIMS spatial distributions, artefact scatters occur in higher densities in the vicinity of major tributaries (4th and 5th) with lower distribution frequency and densities in proximity to upper tributaries and 1st and second order streams. All of the sites within the project area were within 50 m of a water source. However, the report does not provide further detail regarding the specific sites within the project area or boundary extents of these sites. A detailed summary of sites was provided within the CMP (2024) as described in section

As part of the ACHAR a survey was conducted. No new sites were identified. None of the known sites were relocated with the exception of the existing PADs. Three of the PAD extents were redefined.

The ACHAR discussed the varying levels of disturbance with vegetation clearance, and excavation and fill works associated with the extant school buildings and infrastructure.

Consultation with RAPs was undertaken as part of the ACAHR process however no RAPs disclosed any specific cultural knowledge or information regarding the project area nor did any RAPs attend the archaeological survey due to COVID 19 restrictions.

Umwelt (2025), St Philip's Christian College Cessnock Aboriginal Heritage Management Plan: Aboriginal Sites SPC7 (AHIMS #37-6-2103), SPC9 (AHIMS #37-6-2105) and SPC10 (AHIMS #37-6-2106).

Umwelt was engaged by St Philip's Christian Education Foundation Ltd (St Philip's) to prepare an Aboriginal Heritage Management Plan (AHMP) to fulfil certain requirements of a Direction to Carry Out Remedial Works (the Direction) issued by DCCEEW on 5 July 2024. The Direction resulted from an investigation by DCCEEW into possible harm caused to SPC7 (AHIMS #37-6-2103), SPC9 (AHIMS #37-6-2105) and SPC10 (AHIMS #37-6-2106) during ground disturbance activities within the study area without an Aboriginal Heritage Impact Permit (AHIP) in place. The report outlines the results of Aboriginal archaeological test excavations undertaken within and directly adjacent to the Remediation Areas nominated by the Direction.

The key findings from excavations associated with SPC9 and SPC10 included the following:

- 20 m² x 0.25 m² test pits were excavated totalling 5 m² and a total of 33 stone artefacts were recovered.
- The average artefact density per test pit was low at 1.9 which is an average of 6.6 per m². Artefacts classes included flakes (n=9), broken flakes (n=17), a core, a flaked piece and retouched flakes (n=5). Retouched flakes included broken backed flakes and flakes used as cores. Raw materials included silcrete, mudstone, tuff, volcanic (potentially from thinning an axe blank), quartz and quartzite. Signs of heat treating the raw materials for easier manufacture was also evident.
- The artefact analysis and test pit observations found that the SPC9 & SPC10 subsurface testing area contains an artefact assemblage that has low archaeological significance and research potential.

The key findings associated with SPC7 included the following:

- A total of 5 m² was excavated and a relatively large artefact assemblage of 239 artefacts were recovered. Artefact frequencies per test pit ranged from 1–64. The average artefact density per test pit was 19.9 and the average density per square metre was 59.75.
- Artefacts classes included flakes (n=53), broken flakes (n=156), flaked pieces (n=21) and retouched flakes (n=9). Retouched flakes included broken backed flakes (n=3), flakes used as cores (n=3), one geometric microlith and two artefacts with steep retouch.
- Raw materials included silcrete, mudstone, tuff, volcanic (potentially from thinning an axe blank) and quartzite. Signs of heat treating the raw materials for easier manufacture was also evident.
- The artefact analysis found that the SPC7 subsurface testing area contained an artefact assemblage that has moderate to high archaeological significance and research potential due to the moderate-high density assemblage within a relatively intact context, evidence of specialised knapping areas and the derivation of material from a heat treatment pit.

Discussion of SPC7 noted the possibility for the site to extend beyond the boundaries of the Remediation Area Boundary, which is itself highly arbitrary. However, further subsurface

archaeological investigation is necessary to confirm the extent of these deposits and whether or not they relate to archaeological resources recovered as part of this test excavation (See Section 8.3.1).

4.2.2 Previous geotechnical assessment within the project area

Douglas and Partners (2009), Preliminary Geotechnical Investigation, St Philip's Christian College, Nulkaba

Douglas and Partners completed preliminary geotechnical investigations prior to the construction of the extant main school in the north of the study area (Figure 4). A total of 13 test bores were excavated, one of which was located within the portion of excavated PAD (108) and one in proximity to the northern portion of the excavated area (109). Both boreholes encountered topsoil overlaying orange brown clay encountered at 0.2-0.6 m.

RCA Australia (2024), Preliminary Geotechnical Investigation, St Philip's Christian College, Nulkaba

The findings of the geotechnical investigation studies for the proposed development at St Philip's Christian College Cessnock Campus undertaken by RCA Australia in April 2024 were to inform foundation design and mitigate construction risk (Figure 4). The report for surface and subsurface conditions was informed by fieldwork undertaken in July 2021. The test results for geotechnical test pits and boreholes found soil types of clay, silty clay and clayey silts in depths up to 2.1m. Bedrock was not encountered in the test pits or boreholes undertaken for that investigation.

The geotechnical test pits in the area to the south of the D.A.L.E. building and within the archaeological test excavation area were test pit 1, test pit 2, test pit 3, test pit 4 and test pit 6 (Figure 4). These test pits encountered topsoil of between 0.2-0.3m thickness overlying residual natural sandy clay and clay soils up to 2.1m depths. Test pit 6 encountered fill material at depths to 0.15m, as topsoil had been removed for the parking area.

Figure 4: Borehole locations (Douglas and Partners 2009; RCA Australia 2024).



4.3 Historic records of Aboriginal material cultural

The Wonnarua people have inhabited the land along the lower Hunter River for time immemorial. Europeans recorded eleven Ngurras of the Worimi Nation, however, Worimi Elders record that there were eighteen (Worimi Conservation Lands, n.d.; 'Gathang', Murrumbidgee, n.d.; Brayshaw 1987, p.35). Enright (1932, p.6) noted the confusion among European observers about what constituted 'tribes', 'hordes' and language groups. He also claimed the Garuagal 'occupied country adjoining Telegraph Creek and along the lower Hunter, and their territory joined that of the Buraigal, who lived on the right bank of Karuah up to Stroud (Enright 1932, p.6; see also Elkin 1932). The Guringai, Guringay or Gringai people are the traditional custodians of the land between the Hunter and Manning Rivers, 'from the ocean to and including the Great Dividing Range'. Guringai Country extends to Singleton and to the Barrington Ranges, according to Robert Syron and Luke Russell, 'bordering the Birripai speaking people of the north, the Awabakal people to the south and the Wannarua and Komelroi people to the west'. While there is some uncertainty over the precise relationship between Gringai and Wonnarua and inland Worimi, the groups were closely aligned (Syron and Russell 2018; Archer, 2007, pp.73-118).

To the west, Wonnarua were neighbours with Darkinyung and to the northwest, Gomeroi (Gamilaraay/Kamilaroy). These people also had close connections with the Wonnarua in the upper Hunter Valley, where there is one reference to the people of Newcastle being known as the Mulubinba (Moolabinda), rather than the place. (University of Newcastle Special Collections, 2013). Mann who arrived at Brisbane Water in 1842 recalled that the 'the New-castle, or "Moolabinda" tribe' was 'at enmity' with the Wannungine around Brisbane Water. However European observers were renowned for mistaking or conflating place and people (Mann, 1936, p.9).

The river, its tributaries and the surrounding valley was a centre for Wonnarua people. They called Hunter River the Coquun, or 'fresh water'. The lower reaches of the Paterson River were called Yimmang and the Williams River was known as Dooribang. The Coquun valley is generally undulating country with lightly timbered flood plains with Iron Bark Gum and Box trees and open native grasslands. The edges of the Hunter, Goulburn, Paterson, and Williams Rivers were thickly treed with 'swamp oaks' and similar timber canopies. Smaller tributary creek systems had grassy or swampy 'meadows', 'chains of ponds' and 'billabongs'. Some creeks and rivers had dense vine forests and 'scrub' along their banks. The flood plains and the hills above however were lightly timbered with grassy plains that supported a vast array of larger animals. The sweeping valleys around the lower Hunter region in particular were an incredibly rich environment that supported a large population of Aboriginal people (Hunter Living Histories 2012; Lucas et al n.d., p.90; Lang 1875, p.90).

Archaeologists have found evidence of people across the valley from at least 20,000 years ago, with more dense population from around 10,000 years ago at the end of the last Ice Age. A campfire hearth at Glennies Creek, some 35 kilometres north of Branxton has been dated at 20,200 years Before Present (BP). In surrounding regions, Aboriginal occupation has been dated to 19,000 years ago on the Liverpool Plains, 11,000 years ago in the upper Mangrove Creek catchment of the Hawkesbury River and 17,000 years ago at Moffats Swamp near Raymond Terrace. However, the majority of dated Aboriginal archaeological sites in the Hunter Valley are less than 4,000 years of age. Yet if we consider other evidence of occupation in other parts of the continent that has been dated to between 40,000 and 60,000 years ago and the landscape history of the Hunter Valley region itself, it is very likely people were living across the valley for more than 20,000 years (Hunter Living Histories 2012; Lucas et al n.d., p.6 & 11).

There were and are many important communication networks across the region. Song lines connected people by pathways and points across the landscape. Group boundaries along the pathways were where the dream time songs changed and have been noted as 'hand-over points.' As

Cameron Archer notes, territories were not separated by discreet boundaries; 'rather they were within a series of pathways which were probably related to physical features of the land.' Song lines that criss-cross the broader Coquun valley region were very important elements of Wonnarua, Gringai and other neighbouring groups lifeways and cultures (Archer 2007, p.86).

Wonnarua and Gringai clans or family groups cooperated in both hunting and food gathering. The clans had rights and relationships with other clan groups with whom they inter-married, some of whom may have belonged to different language groups. It was therefore not uncommon for wives to speak different languages or dialects from their husbands, and for children to speak both languages (Brayshaw 1987, p.36).

Kinship is interwoven throughout Wonnarua and Guringai society, as it is in all First Nations across Australia. This creates a complex dynamic in which, as archaeologist Helen Brayshaw notes, 'every individual had a specific relationship with every other individual, with the food they ate, and with the land.' This wide network of kinship ties and obligations extended economic and social links far beyond clan heartlands. People travelled widely for social, marital and other exchanges. These extended rights and ties were promoted and maintained by regular gatherings or corroborees at which songs and dances were exchanged and wives were sought. Ceremonies such as initiation or 'food increase' and trade of goods was common across wide areas and into surrounding nations such as Gomeroi, Worimi and others (Brayshaw 1987, p.36).

Wonnarua and Gringai men hunted the large animals such as kangaroos, wallaby and emus, whilst the women and children hunted smaller animals and collected fruits, berries and medicinal plants. Yams were important staples. A French officer in the New South Wales Corp Francis Louis Barrallier observed at Newcastle in 1802 people eating 'the roots of Fern and a sort of root or yam'. The rhizome of the ferns was reported at Lake Macquarie and Dungog, where it was called 'Bungwall'. It was roasted in the ashes and pounded to a paste between two stones (Brayshaw 1987, p.74).

As Gringai Elder James Wilson-Miller describes:

Each kinship group moved in a cyclical pattern through their allotted lands. Men were responsible for hunting the larger game, such as the womboin (kangaroo), murrin (emu), ukae (dingo) and the baninbellang (wallaby). Their skills were also applied to fishing. Women, on the other hand, gathered bush fruits, yams, grubs, roots, waterlilies and the many species of smaller game such as the wirraman (lizard), mouse and possum (Miller 1985).

Another important food source was the cabro or ship's worm. Lieutenant James Grant described this in 1801:

On our passage down it [Hunter River], we saw several natives with their canoes ... In many of them we saw fires, and in some of them observed that kind of eatable to which they give the name of cabra: it appears to be abominably filthy, however when dressed it is not disagreeable to the taste. The cabra is a species of worm which breeds in the wood that happens to be immersed in water, and are found in such parts of the river wherein trees have fallen ... When fire is not at hand, the natives eat them raw ... I tasted them on the recommendation of one of my men, and found them not unpalatable (Grant 1803, pp.162-3).

Nets were made and used to catch emu and makroo (fish). Women, girls and uninitiated boys gathered roots, berries and smaller game in the kokas (coolamons) and buakuls (string bags). They

dug for yams and other taproots with their yamsticks and waded into creeks for waterlilies (Miller 1985).

Wooden weapons and utensils included boomerangs, woomeras and digging sticks. Various plant gums and resins were used as adhesives for certain weapons and tools. Stone was used to make axe heads, scrapers, knives, chisels and spear heads. Stone tools were often made at distant locations and traded far and wide (Brayshaw 1987, p.35; Worimi Conservation Lands n.d.).

It was noted in the 1820s that Worimi in the Port Stephens area traded with 'the upper districts of the Hunter's River or its branches', undoubtedly the Wonnarua and Gringai people. This consisted of trade in 'iron tomahawks, seashells, with which they scrape and sharpen their spears, and pieces of glass' and that these were exchanged for 'opossum skins' and 'belts of yarn' that could be made into various items including nets and head adornments.

Sustaining resources was critical to Wonnarua and Gringai people. They well understood this and moved through areas of their Country in regular cycles, guided by seasonal conditions. This helped ensure they didn't hunt, fish or harvest an area too much so there would be food for the next season. They also had totem animals that were not hunted (Brayshaw 1987, p.35,76; Worimi Conservation Lands n.d; Fawcett 1898, p.152; Threlkeld in Gunson 1974, pp.55,73; Sokoloff 1973, p.103). For example, at Lake Macquarie, the men had 'great veneration' for the flying fox believing that 'if a man were to kill me purposely, he will also be killed.' According to the missionary Threlkeld 'they would not look at it nor speak its name.' The women were unaffected by the flying fox but had a similar relationship with a small bird like a woodpecker. Totems also had a bearing in kinship and marriage. The ethnologist W. J. Enright noted that 'the Worimi had, within the hordes, divisions each with a totem peculiar to itself' (Enright 1932:6).

Wooden weapons and utensils such as boomerangs, woomeras (spear-throwers) and digging sticks were made from trees such as Wild Myrtle. Various plant gums and resins were used as adhesives for certain weapons tools. Various stones were used to make axe heads, scrapers, knives, chisels and spear heads. In the Newcastle area chert (a flint-like quartz) was mined for tool-making. All these tools and other items would have been traded amongst the Awabagal clans as well as with neighbouring groups including Wonnarua and Worimi people (Brayshaw 1987 p.35; Maynard et al 2021; Threlkeld in Gunson 1974, pp.42, 54, 206).

Wonnarua and Guringai Country is landscape rich in the imprint of art as well as industry. In the Pokolbin State Forest area an extant network of caves are noteworthy for their hand stencils and series of vertical lines. The lines may have been created using an actual digging stick as a stencil. Uncle Warren Taggart, Aboriginal Elder of the Wonnarua people, suggests they reflected 'the people that were there', indicating they may have been a kind of census (Hunter Living Histories 2018).

5.0 LANDSCAPE CONTEXT

The following landscape context is summarised from the McCardle Cultural Heritage Pty Ltd (2024) ACHAR. See Appendix B for full landscape context discussion.

5.1 Soils, geology and landforms

McCardle discussed the project area consists of creek and creek flats on a low gradient slope. The investigation area was located within '*Permian Dalwood Group including the Rutherford Formation that consists of mudstone, conglomerate sandstone, sandstone and shale*', mudstone being a raw material suitable for stone knapping. The Unit A and Unit B of the Branxton soil landscape of the study area is considered Holocene and Pleistocene and has potential to contain very old alluvial archaeological deposits. Branxton soils typically comprise yellow soloths of brown loamy sand topsoil with a gradual or clear change to bleached bright brown or yellow orange loamy sand on lower slopes. The subsoils comprise brown clay, sometimes mottled from approximately 250 mm onwards. Flats adjacent to creek lines and water sources typically comprise alluvial siliceous sands of brown sandy loam overlaying a dull yellow brown loamy sand.

5.2 Hydrology

Black Creek, a 3rd order stream flows directly adjacent PAD 01 and was between approximately 160 – 3 m from the excavation test pit locations of this report (see 7.0 and 8.0). Three additional first-order drainage lines are present, one of which flows east within the centre of the PAD, the other two drainage lines are located southwest of the PAD.

6.0 SUMMARY AND PREDICTIONS

6.1 Regional and local archaeological character

The following is outlined in section 6.8-6.9 of the ACHAR (McCardle 2024):

The inferences that can be made about the nature of occupation within the investigation area and the previously identified sites in the project area are limited by the small sample size. However, consistent with the occupation model (Kuskie and Kamminga 2000), it is inferred from the evidence obtained during the survey that:

- *Aboriginal people used and occupied the area at a low to moderate intensity within the past 4,000 years. Although occupation of the region extends back to at least 20,000 years ago, the environmental context would have been very different to the present over such an extended of time;*
 - *the area was very well suited for occupation including camping through repeated visits, longer duration, and/or visited by small to moderate groups of people. This is expected due to the proximity to reliable water and resources as well as the presence of flats that was suitable for camping. This is evidenced through the high number of sites and densities of those sites. However, it is not possible to determine the evidence represents continued occupation including camping and hunting and/or gathering or numerous transitory movements;*
 - *most of the surface artefact evidence appears to be consistent with transitory movement through the landscape and short-duration visits by small to medium parties of hunters and/or gatherers for food procurement; and*
 - *the stone material mudstone and silcrete were predominantly used for stone-working activities, largely because of its local availability, and it was probably procured from, relatively local colluvial gravels in a casual, opportunistic manner.*
-

The survey results are consistent with, or do not contradict the general model of occupation.

Although the results from this assessment are limited by the sample size, the evidence can be compared with other assessment and sites from the region. The main purpose for this is to identify any differences or similarities with other assessments throughout the region (such as site patterning, site types, land form preference etc) in order to provide a framework to interpret and establish representativeness for the identified sites within the investigation area. Several similarities have been recognised between the evidence within the investigation area and other assessments from the surrounding area. These are as follows:

-
- prevalence of stone artefact evidence (not surprising given the durability of stone);
 - similar raw materials used for tool manufacture (mudstone and silcrete);
 - similar artefact types (flakes, broken flakes, flake pieces, cores); and
 - sites located on similar landforms (creeks, flats).
-

6.2 Predictive model

The following is as outline in section 6.10 of the ACHAR (McCardle 2024):

In view of the survey results, the predictive model of site location can be reassessed for the investigation area as follows:

-
- The potential for bora/ceremonial, carved tree, scarred tree, rock engraving and stone arrangement sites to occur within the investigation remains assessed as very low or negligible.
 - No direct evidence of lithic procurement sites was identified, however the potential for casual, opportunistic procurement of stone, such as mudstone from creek gravels within the investigation area cannot be discounted.
 - No evidence was encountered of burial sites, and although the potential for skeletal remains to occur within the investigation area is considered to be very low, it cannot be discounted.
 - Sites of traditional cultural significance (such as mythological sites) were not identified by the Aboriginal stakeholders or stakeholder representatives involved in the investigation.
 - The registered Aboriginal stakeholders also did not disclose any specific knowledge of other cultural values/places (for example, historically known places or resource use areas). However, the possibility cannot be excluded that traditional or historical Aboriginal values or associations may exist that were not divulged to MCH by the persons consulted, although this potential is assessed as low.
 - Several open artefact sites were identified within the investigation area. There remains a high potential for additional open artefact evidence to occur in the areas currently obscured by vegetation.
 - Site location, in relation to landforms and proximity to reliable water is also supported by the evidence.
-

7.0 TEST EXCAVATION METHODOLOGY

7.1 Aims and Objectives

Sub-surface testing aims to assess the presence or absence of sub-surface archaeological deposits and identify the nature, depth and extent of these deposits. From this, an assessment of archaeological significance will be made. This will allow appropriate management and mitigation measures to be developed where objects will be harmed.

A number of research questions have been designed to guide the archaeological fieldwork for this project. The purpose of the research questions is to provide parameters to allow the fieldwork to be focussed and to provide useful data to guide future management of Aboriginal objects throughout the life of this project. They can also help determine significance of Aboriginal objects and to assess the risk of harm as a result of the proposed activity.

The key research questions underpinning the test excavation are as follows:

- Does AHIMS 37-6-2101 (St Philip's PAD 1) contain Aboriginal objects?
- How are artefacts connected to the landform, and in what ways does the character of the site reflect its position within the broader landscape?
- Are there stratified deposits present?
- How does the archaeological resource of the site compare to other known sites in the region?
- Are materials suitable for dating present?

7.2 Test excavation personnel

Test excavations were undertaken by the following personnel (Table 4):

Table 4: Test excavation personnel.

Personnel	Role
Kristen Tola	Excavation Supervisor (Artefact Heritage)
Lily Hackett	Archaeologist (Artefact Heritage)
Neve Penklis	Archaeologist (Artefact Heritage)
Bonnie Clarke	Archaeologist (Artefact Heritage)
Jason Browne	RAP (Mindaribba LALC)
Carolyn Hickey	RAP (Indigenous Services Pty Ltd)
Amanda De Zwart	RAP (Amanda Hickey Cultural Services)
Steven Hickey	RAP (Widescope Indigenous Group)
Clarissa Swan	RAP (Culturally Aware)

7.3 Sample strategy

Only areas of PAD 1 within the proposed work footprint were subject to test excavations (Table 5). To minimise the destruction of archaeological resources, test excavations were completed in accordance with Requirements 15 and 16 of the Code of Practice. Consequently, no more than 0.5% of the PAD was disturbed and excavations ceased once sufficient data had been gathered. A total of 32 test pits measuring 500 mm x 500 mm) were proposed to be excavated across the areas of proposed impact to AHIMS ID 37-6-2101 (St Philip's PAD 1). These test pits were evenly spaced between 15 m intervals.

Two of the 32 test pits were not excavated (test pit 2 and test pit 13) due to being located within areas of high ground disturbance as shown in Figure 5 (see section 8.0 for discussion).

Table 5: Summary of sample area

Site	Total area of excavation (m ²)	Total area of site (m ²)	Excavated percentage of total area (%)
AHIMS ID 37-6-2101 - St Philip's PAD 1	7.5	56,575	0.013

7.4 Excavation procedure

All test pits were excavated by hand, and all retrieved deposits were sieved through a 5 mm wire-mesh sieve using wet sieving. The first test excavation units of PAD 1 were excavated and documented in 50 mm vertical spits. Following this, all test pits were excavated by 100 mm spits. All pits were excavated to culturally sterile (clay) deposits to confirm whether Aboriginal objects were present.

A recording sheet was completed for each test pit. Details recorded on each sheet include the date of excavation, name of excavators, depth, soil description and PH values for each spit. A photographic record was made for the north wall and the base of every test pit, and a scale drawing of a representative section wall of each test pit was completed. The location of each test pit was recorded using a hand-held differential GPS with 30 cm accuracy. Once dug to sterile clay test pits were backfilled with clean commercial sand.

7.5 Radiometric dating

Section 3.4 of the test excavation methodology outlined samples of organic material suitable for radiometric dating (charcoal, bone, shell, wood, etc.) would be collected, where possible, for the dating of archaeological deposits, if present. During test excavations no suitable material was identified and therefore no samples were collected.

Figure 5: Location of excavated test pits.



8.0 EXCAVATION RESULTS

8.1 Landforms, soils and disturbance

A total of 30 test pits were excavated (Figure 5). Test pit 2 and test pit 13 was not excavated due to its location within a gravel and bitumen carpark the natural sloped landform of which had been significantly modified (Figure 12). The following discussion separates the test pits into mid slope (test pit 15-29), lower slope (test pit 1-8) and creek flat (test pit 9 -14) closest to the banks of Black Creek due to the similarities in landform context and soil deposits encountered.

8.1.1 Mid slope

Test pits 15-32 were situated east of Wine Country Drive and west of a gravel vehicle farm access track. Within this area of the PAD and in between test pit locations several ground disturbances and existing subsurface surfaces were observed including:

- A concrete pad
- Subsurface drainage
- Agricultural irrigation channels
- Deposited fill gravel from the vehicle track

As such test pits were placed in areas of least disturbance. Test pits 30, 31 and 32 were offset by approximately 0.5 m to avoid an agricultural irrigation channel and planted trees.

Soils encountered in this area typically comprised humic stained silty sandy loam with grass rootlets overlaying a slightly lighter grey, yellow brown sandy clay terminating onto a yellow sticky clay. A thin lens (typically 1-2 spits) of sub-angular small gravels (<5 cm) were encountered throughout the test pits. Only one pit (test pit 26) encountered charcoal. The clay base within several of the test pits in this area was significantly cracked and undulating. Test pit 26 is representative of the soil and clay cracking encountered on the mid slope as summarised in Table 6.

Table 6: Stratigraphic description of Test Pit 26 (representative of upper slopes)

Spit	Description	Munsell and pH
1 (0-100 mm)	Thick grass and root loots overlaying uniform dark humic stained sandy loam. Soil was fairly coarse and lightly compact with few gravel inclusions.	10 YR 2/2 pH 7 ½
2 (100-200 mm)	Dark brown sandy loam continues into spit 2. Lense of gravel through spit 2 and throughout test pit.	
3 (200-300 mm)	Diffuse transition into more orange/yellow brown sandy clay loam with gravel inclusions continuing. Sharp transition to orange, brown mottled clay at base of spit.	10 YR – 2/2 pH – 8
4 (300-400 mm)	A large east-west facing crack between clay encountered (possible cracked B horizon). The crack was filled with above brown silty sandy loam that continued slightly beneath the southern clay baulk.	7.5 YR pH 7 ½

Spit	Description	Munsell and pH
5 (400-500 mm)	Southern side of clay baulk was removed to investigate if the clay was natural or had been redeposited overlaying natural deposits. The deposit within the crack was slightly under the lip of the clay baulk.	4/4 10 YR pH 8
6 (500-600 mm)	Deposit within the crack continued but narrowed and terminated at 600 mm onto orange yellow brown sterile natural clay.	

Figure 6: North wall of TP 26 prior to clay removal



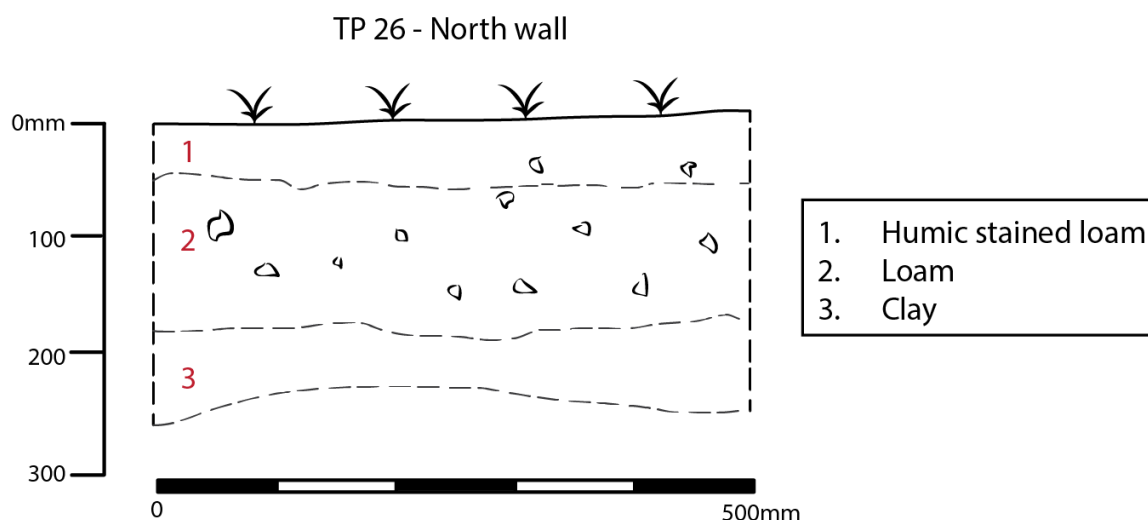
Figure 7: Base of test pit 26



Figure 8: Base of TP 26 post-clay removal



Figure 9: Stratigraphic drawing of TP 26



8.1.2 Lower slope

Test pits 1-8 were situated on the slower slope descending eastward towards Black Creek. A single Surface artefact (red silcrete flake) was identified in between test pit 15 and test pit 4 (Figure 13 and Figure 14). The northern portion of this part of the PAD comprise comparatively high levels of ground disturbance and landform modification through the construction of a gravel and bitumen carpark and subsurface drainage (Figure 12). These areas of high disturbance and landform modification resulted in very shallow deposits (<2 spits) of moderately compact grey yellowy brown silty clay with gravel inclusions overlaying yellow clay. Comparatively, test pits 5 and 6 were the only two test pits in this lower sloped area that comprised 4 spits which appeared far less disturbed and likely representative of the natural deposits and gravels of the slope as summarised in Table 7 (Figure 10 and Figure 11).

Table 7: Stratigraphic description of test pit 5 (representative of upper slopes).

Spit	Description	Munsell and pH
1 (0-100 mm)	Medium brown silty sandy loam with grass rootlets. Loosely compact fined grained soil with no gravel inclusions.	5 YR 3/3 pH -6
2 (100-200 mm)	Spit 1 continues into spit 2. At about 150 mm a sharp transition of sub-circular gravel pebble lens was encountered throughout the pit (approximately 60% of the soil matrix). The gravels compromise about 3-10 cm clasts). A single red flaked artefact with cortex was encountered while excavating.	5 YR 4/3 – pH – 6
3 (200-300 mm)	Gravels continue into spit 3. Soil transitions into slightly yellowish brown sandy clay. Small (<3 mm) charcoal flecks in southern wall of spit. Yellow sticky clay was encountered in the SW corner that descended toward the NE corner.	7.5 YR 4/6 pH – 6
4 (300-320 mm)	Spit 3 gravel deposit continued to descend NE until a depth of 320 in the NE corner. Some of the gravels were imbedded into the yellow sticky clay depressions.	10 YR – 5/8 pH - 6

Figure 10: Base of TP 5



Figure 11: North wall of TP 5



Figure 12: Proposed location TP 2, abandoned due to disturbance levels in that area. View northwest



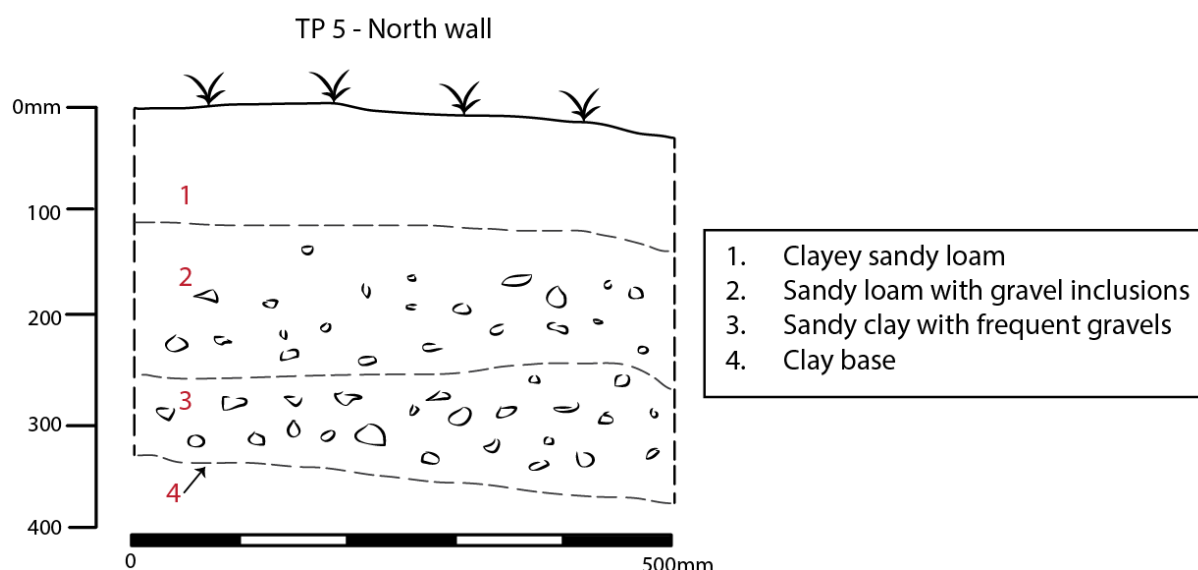
Figure 13: Surface artefact



Figure 14: Location of surface artefact. View southwest



Figure 15: Stratigraphic drawing of TP 5.



8.1.3 Creek flat

Test pits 9-14 were located within the flat banks of Black Creek. Test pit 11-14 were offset between 1-3 m from their proposed location due to the presence of very compact gravels and bitumen. Test pit 12-14 were highly disturbed and very shallow as summarised in Table 9. Test pit 9 and 11 were the deepest test pits of the whole PAD (<600 mm) to be excavated comprising very loosely sandy clay soils with minimal gravels likely representative of the natural alluvial deposits of the creek (Table 8, Figure 16 and Figure 17).

Due to time constraints test pit 13 was not excavated. Soil deposits on the test pits either side of test pit 13 (test pit 12 and test pit 14 comprised similar shallow highly disturbed deposits and it was therefore assumed similar deposits would be encountered in test pit 13.

Table 8: Stratigraphic description of test pit 9 (representative of natural deposits of creek flat).

Spit	Description	Munsell and pH
1 (0-100 mm)	Pale grey, brown sandy loam loosely compact. Minimal gravels and grassroots.	10 YR 3/3 pH – 7
2 (100-200 mm)	Fined grained sandy silty soil with slight clay content. Sparse relets and few gravel inclusions.	10 YR – 3/4 pH – 6 ½
3 (200-300 mm)	One large rock, potential manuport from base of spit 3 also in upper spit 4.	10 YR – 5/4 pH – 6
4 (300-400 mm)	Slightly paler sandy silt. Some mottling clay.	
5 (400-500 mm)	Upper deposits continue into spit 5 with increasing yellow/orangey clay. Some ironstone and manganese gravels. One heat treated tuff artefact identified within base of spit layer when excavating.	7.5 YR 4/6 pH – 6

Spit	Description	Munsell and pH
6 (500-600 mm)	Clay content increased from previous spit becoming more compact towards base of spit. Infrequent Ironstone and manganese gravels throughout spit (<2 mm and <1%). Additional two potential artefacts identified while excavating.	

Figure 16: Base of TP 9



Figure 17: North wall of TP 9



Figure 18: In situ rock in base of spit 3 in TP 9



Figure 19: Stratigraphic drawing of TP 9.

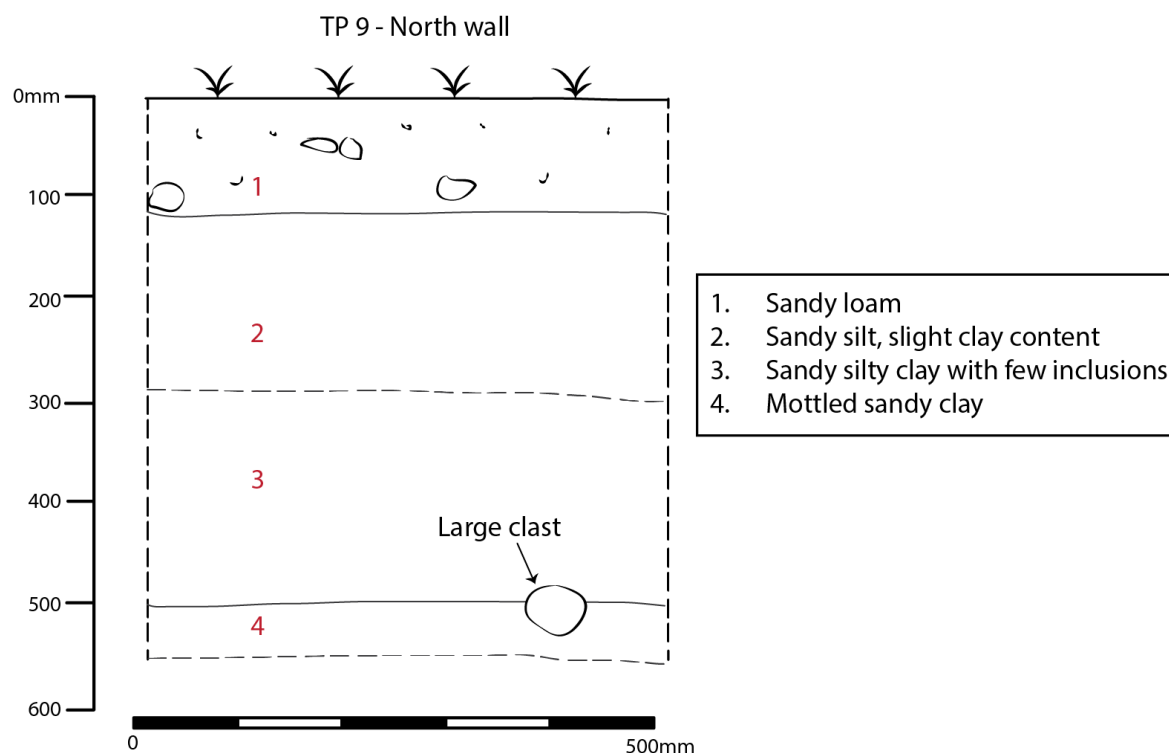


Table 9: Stratigraphic description of test pit 12 (representative of disturbance)

Spit	Description	Munsell and pH
1 (0-100 mm)	Grey, brown fine-medium grained silty soils with sub-angular gravels (10-40 mm). Some grass roots. Approximately 70% road gravels.	2.5 YR 4/2 – Dark grey brown pH – 8 ½
2 (100-130 mm)	Gravels continue overlaying onto a hard transition of dark red-brown clay at 130 mm depth.	7.5 YR 2.5/2 – Very dark brown pH – 7 ½

Figure 20: Base of TP 12



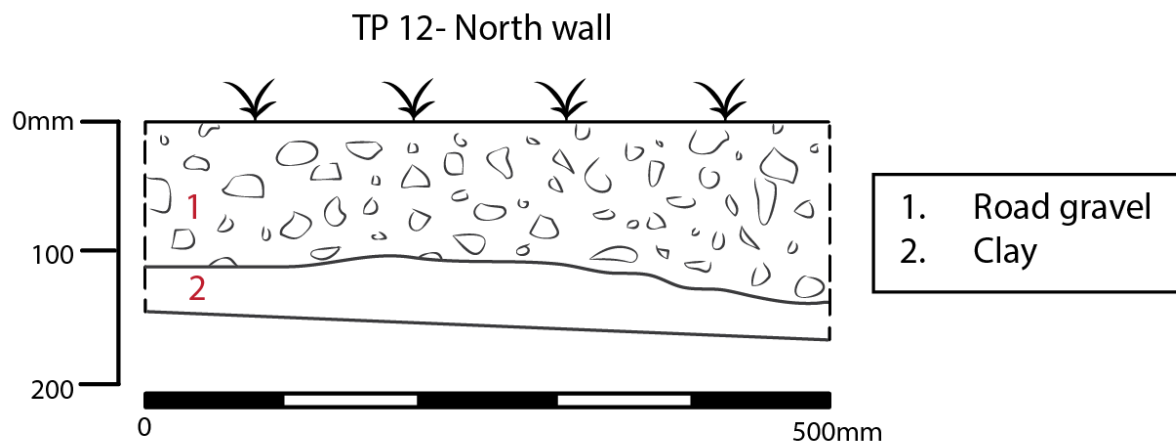
Figure 21: North wall of TP 12



Figure 22: Proposed location TP 13, abandoned due to disturbance levels in that area. View northeast



Figure 23: Stratigraphic drawing of TP 12



8.2 Aboriginal objects

8.2.1 Preamble

The predominant aim of artefact analysis is to classify and quantify artefacts for the purposes of extracting meaningful data with which to characterise and compare assemblages. The main attributes of artefacts recorded included provenance details, raw material, typology, dimensions, proportion of cortex and weight. If applicable, artefacts were characterised as tool types, and information specific to cores (such as platform types and number of complete and partial flake scars) was also recorded.

For the purpose of attaining meaningful data, it is important that the categories assigned to characterise artefact attributes are neither unnecessarily complex (thereby confounding results and identification of trends and relationships), nor too broad (thereby not providing enough information).

Numerous classificatory schemes for stone artefacts exist, some which focus on the interpreted 'function' of the artefact, some which focus on the morphology of the artefact, and some which combine both approaches. This technical report does not include scope for supplementary investigation, such as use-wear or residue analysis. The following analysis section focuses on artefact morphology.

Classification of the raw material of artefacts is no less problematic than classifying the type of artefact. Lampert (1993) noted that, as well as there being significant variability possible within any single rock type, many raw material grades into one another in their naturally occurring seams and cobbles.

8.2.1.1 Distribution and density

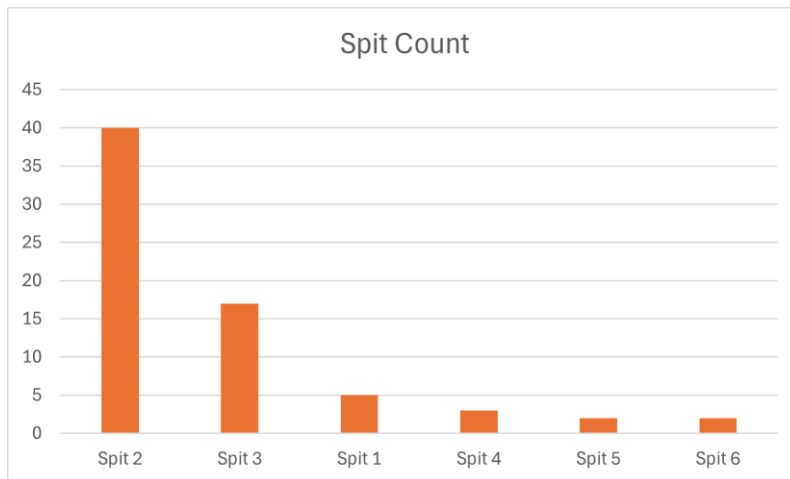
A total of 72 stone artefacts were recovered from the test excavations (Figure 27). Of the 28 test pits only 15 contained artefacts. Artefacts were concentrated within two distinct areas of the PAD. One concentration was located in the southern portion of the PAD on the southern side of the east-west drainage line that flows across the PAD. This concentration comprised a total of 23 artefacts within six test pits measuring approximately 37 x 76 m (see section 8.3.1). Artefacts per test pit ranged from one-six in this area.

The second concentration of artefacts was located in the central portion of the PAD and northern portion of the testing area, south of an existing school building (see section 8.3.2). This concentration was deposited within seven test pits comprising 48 artefacts including the red surface silcrete flake. This concentration measured approximately 67 m x 118 m. A total of four of the seven test pits in this concentration ranged from one or two artefacts per test pit. Comparatively test pit 15 contained eight artefacts and test pit 17 comprised 22 artefacts (the highest density of all the test pits excavated), both located within the southern portion of this concentration. Test pit 9 contained 9 artefacts which was also the test pit where the majority of artefacts deposited at a greater depth (>spit 4) were located. A single artefact was recovered from test pit 14 approximately 115 m east of test pit 9.

8.2.1.2 Spit count

The majority of artefacts were recovered from spit 2 (100-200 mm), followed by spit 3 (200-300 mm) (Figure 24). Gravel deposits were also encountered within largely spit 2 and 3. As mentioned, one surface flake was identified. A total of five artefacts were recovered from spit 1, one of which was within the test pit adjacent to the surface artefact (test pit 15). Therefore, the surface flake may be a surface expression of the subsurface scatter. However, this area was in proximity to high pedestrian and vehicle areas and was also regularly mowed therefore may have been redeposited. The majority of artefacts within deeper spits (spit 4- 6) were retrieved from test pit 9.

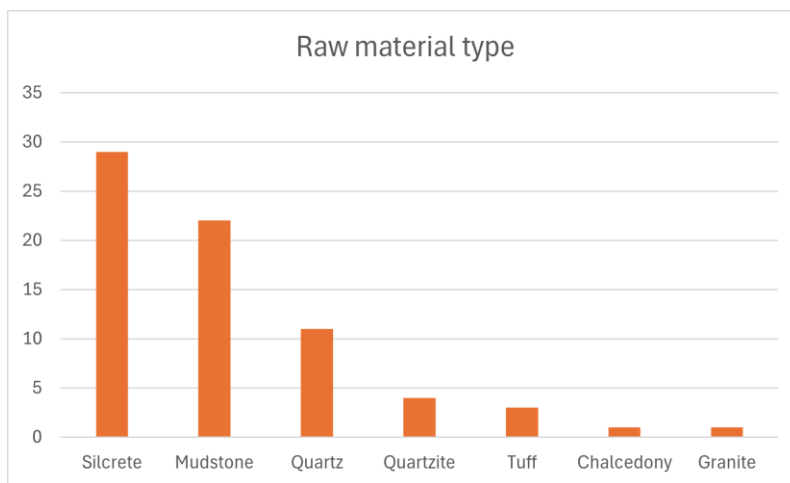
Figure 24: Visual representation of the number of artefacts per spit.



8.2.1.3 Raw material

The assemblage of artefacts raw material type (Figure 25) comprised largely of silcrete (29, 40%) of varying colours (red, pink, yellow), followed by mudstone (22, 30%, yellow, brown, red), quartz (11, pink and white), Quartzite (4), tuff (3) then chalcedony (1) and granite (1). Test pit 17 comprised the highest concentration of silcrete artefacts (12).

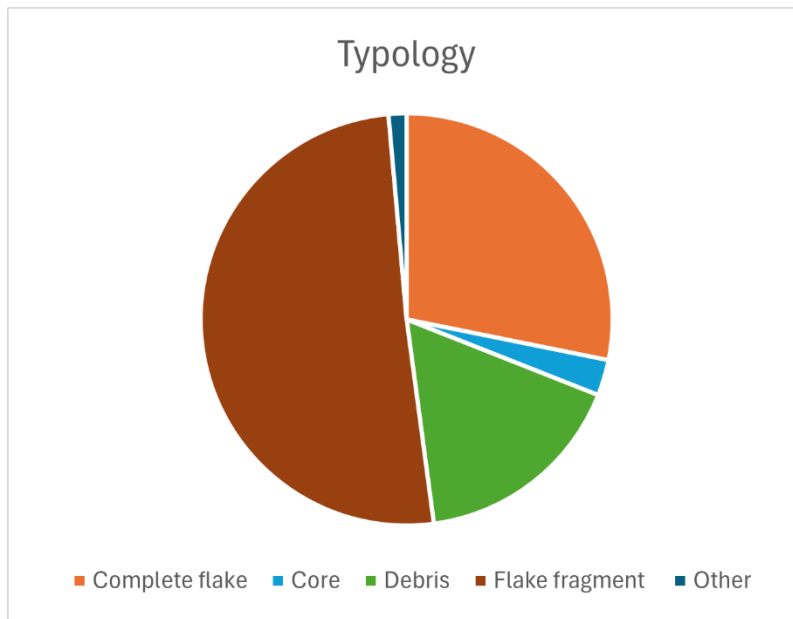
Figure 25: Visual representation of raw material types.



8.2.1.4 Typology

The large majority of artefacts comprised flake fragments (36) including broken laterally (3), distal (20), proximal (6) and medial flakes (7) all of varying raw material types. Flake fragments can be indicative of site disturbance, where artefacts have been broken through trampling, deposition or past subsurface impact. This was followed by complete flakes (20) of varying materials (dominated by silcrete and mudstone). A total of 12 artefacts were identified as debris (mudstone, silcrete and quartz). A total of two cores (chalcedony and quartzite) were recovered both from the same northern artefact scatter and within spit 3-4. See Figure 26 below.

Figure 26: Visual representation of typologies.



8.2.1.5 Reduction stages

Artefacts that are the result of early-stage reduction tend to have a long transverse margin and short on the longitudinal/lateral margin. As artefacts are prone to fracture along their shortest margin, longitudinal/lateral flake fragments are indicative of early-stage artefact manufacture. The higher percentage of transverse flake fragments in the deposit indicates that the site is predominantly characteristic of later stage artefact manufacture processes.

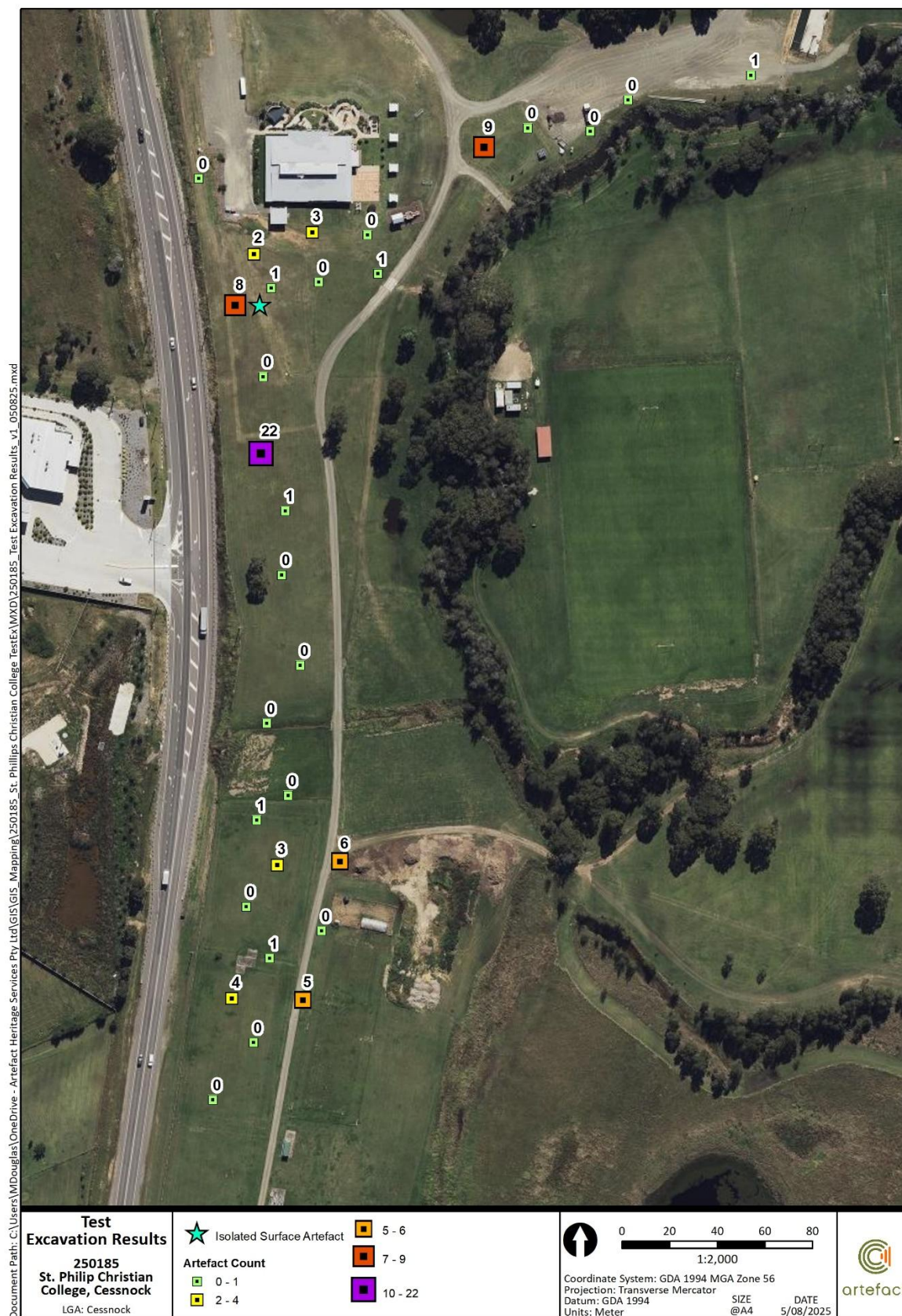
8.2.1.6 Cores and Cortex

A total of two cores (chalcedony and quartzite) were recovered both from the same northern artefact scatter and within spit 3-4. The chalcedony core comprised a multi core with 3 platforms and evidence of preparation. It did not appear to be not exhausted. The quartzite core only had 1 platform with no preparation but was also not exhausted. Both cores exhibited elongated negative flake scarring. This is consistent with the higher percentage of transverse flake fragments within the larger assemblage and of the 20 complete flakes 10 exhibited elongated, block or expanding form. A total of 12 artefacts still retained evident of cortex, mostly mudstone followed by silcrete artefacts.

8.2.1.7 Retouch

Of the 23 complete flakes, only 3 flakes exhibited evidence of retouch. One red quartzite within spit 2 of test pit 17 exhibited denticulate retouch on the right margin (dorsal) within quadrant 2 and 4. One yellow mudstone within test pit 17 (spit 2) had evidence of bifacial chattering retouch on the left margin. One red mudstone from test pit 15 (spit 2) also had evidence of bifacial chattering but on all 4 quadrants of the flake. Two artefacts demonstrated evidence of being heat affected, both mudstone, one from test pit 17 and one from test pit 5.

Figure 27: Excavation results.



8.3 Revised and newly identified Aboriginal sites

8.3.1 St Phillips College Artefact Scatter 11 (SPC AS 11)

Site name	St Phillips College Artefact Scatter 11 (SPC AS11)
AHIMS ID	AHIMS ID 37-6-4590
Site type	Artefact subsurface scatter
Length	115 m
Width	80 m
Zone	56
Easting	345528
Northing	6369893
Horizontal accuracy	30 cm
Location method	Non-differential GPS
Landform pattern	Undulating plain
Landform unit	Low gradient slope and flat creek bank
Land use	Recreation/Semi-rural
Vegetation	Cleared
Distance to water	11 m
Directions to site	Enter St Philip's Christian College Cessnock from 10 Lomas Ln, Nulkaba NSW 2325. Pass the reception and continue south along the gravel vehicle track until you reach the scatter near the agricultural shed.
Description of features	The subsurface artefact scatter was identified through test excavations of PAD 01 (AHIMS ID 37-6-2101) (Figure 28 and Figure 29). The scatter comprised 23 artefacts within 6 test pits. Artefacts per test pit ranged from 1-6 in this area. Artefacts comprised mudstone (6), quartz (7), tuff (1), silcrete (8), quartz (7), quartzite (1).
Site interpretation	A low-density artefact scatter of moderate significance. The scatter contains in situ secondary reduction events decreasing in artefact density with further distance from Black Creek. The boundary of the scatter is restricted to the sample areas of PAD 01 that were tested and therefore the artefact scatter likely extends further east towards Black Creek. Further subsurface investigation outside of the current study area would be necessary to determine whether the deposit extends towards, or is contiguous with, SPC7 (AHIMS #37-6-2103).
Site condition	Good
Open/closed site	Open
Restrictions	None

Figure 28: Eastern edge of SPC AS 11. View southeast.



Figure 29: northern extent of SPC AS 11 in proximity to the drainage line to the left. View west.



8.3.2 St Phillips College Artefact Scatter 12 (SPC AS 12)

Site name	St Phillips College Artefact Scatter 12 (SPC AS 12)
AHIMS ID	AHIMS ID 37-6-4591
Site type	Artefact subsurface scatter
Length	135.5 m
Width	103 m
Zone	56
Easting	345536
Northing	6369625
Horizontal accuracy	30 cm
Location method	Non-differential GPS
Landform pattern	Undulating plain
Landform unit	Low gradient slope and flat creek bank
Land use	Recreation/Semi-rural
Vegetation	Cleared
Distance to water	26 m
Directions to site	Enter St Philip's Christian College Cessnock from 10 Lomas Ln, Nulkaba NSW 2325. Pass west, the reception and continue south along the gravel vehicle track until you reach the scatter south of a children's playground and school building.
Description of features	A total of 48 artefacts were recovered from test excavations from 7 test pits (Figure 30). A total of 4 of the 7 test pits in this concentration ranged from 1-2 artefacts per test pit. Comparatively test pit 15 contained 8 artefacts and test pit 17 comprised 22 artefacts (the highest density of all the test pits excavated). Test pit 9 also contained 9 artefacts although to the east closest to the bank of Black creek.
Site interpretation	The site is assessed as a moderate density artefact scatter with colluvial and alluvial soil deposits. The scatter contains in situ secondary reduction events. The boundary of the scatter is restricted to the sample areas of PAD 01 that were tested and therefore the artefact scatter likely extends further east towards Black Creek. The site was assessed as being of moderate significance.
Site condition	Good
Open/closed site	Open
Restrictions	None

Figure 30: SPC AS 12. View towards edge of northern boundary of scatter.



Figure 31: View of SPC AS 12 from test pit 1. View south.



8.3.3 St Phillips College Isolated Find (SPC ISO 13)

Site name	St Phillips College Isolated Find (SPC ISO 13)
AHIMS ID	AHIMS ID 37-6-4592
Site type	Isolated subsurface artefact
Length	1 m
Width	1 m
Zone	56
Easting	345732
Northing	6369973
Horizontal accuracy	30 cm
Location method	Non-differential GPS
Landform pattern	Undulating plain
Landform unit	Creek flat
Land use	Recreation/Semi-rural
Vegetation	Cleared
Distance to water	15 m
Directions to site	Enter St Philip's Christian College Cessnock from 10 Lomas Ln, Nulkaba NSW 2325. Pass west, the reception and continue south along the gravel vehicle track. Once you reach the children playground turn east into gravel carpark. The isolated find is at the eastern end of the carpark north of Black creek.
Description of features	A single black granite complete flake was recovered from test pit 14 approximately 115 m east of test pit 9 within spit 1 (Figure 32).
Site interpretation	Although test pit 14 is located within the same flat creek landform as test pit 9, test pit 12 was very shallow and significantly disturbed from the gravel carpark. Therefore, this artefact is likely not in situ and has been redeposited and recorded as an isolated find.
Site condition	Disturbed
Open/closed site	Open
Restrictions	None

Figure 32: Disturbed context of SPC ISO 13. View southwest.



Figure 33: Artefact scatter boundaries and isolated find.



9.0 DISCUSSION AND ANALYSIS

9.1 Discussion

9.1.1 Site interpretation and integrity

The recovered two moderate density artefact scatters and one isolated find recovered during the test excavation are consistent with similar artefacts previously recorded within the local vicinity and adjacent to Black Creek (in terms raw material type, landform context and lithic typology). The extent of St Phillips College Artefact Scatter 12 was concentrated west of the gravel vehicle track. No test pits were located between test pit 9 and test pit 7 and 8 due to cut and fill disturbance from the gravel vehicle track and no overlap with proposed works. As such there is a gap of subsurface data between test pit 9 and the test pits on the western side of the track. However, because of their relative proximity and similar types of artefacts recovered, it was assessed artefacts from test pit 9 were likely part of the same artefact deposit encountered to the west and were therefore considered the same site. The extent of both SPC AS 11 and SPC AS 12 include portions of a gravel vehicle track where some surface disturbance was observed that likely extends to the subsurface. However, because no test pits were located within the track this could not be confirmed and therefore it was assessed the scatters site boundary is inclusive of this track until further archaeological investigations due to the close proximity of artefacts in undisturbed deposits adjacent to the track.

The single artefact recovered from test pit 14 was recorded as an isolated find as summarised in section 8.3.3 below. Although test pit 14 is located within the same flat creek landform as test pit 9, test pit 14 was much shallower and significantly disturbed from cut and fill from the gravel carpark, similar to test pit 12 outlined in Table 9. Therefore, this artefact is likely not in situ and has been redeposited as an isolated find. As such, this artefact has been recorded as an isolated find.

The test excavation results verified disturbance observed on the surface, namely the cut and fill from the gravel car park in the northeast portion of the excavation area. While other surface and subsurface disturbances were observed within the testing area such as the concrete platform structure, and subsurface drainage and pipeline, test pit locations strategically avoided these areas. And therefore, no additional subsurface disturbances within the soil were encountered and the remaining test pits other than those in the gravel car park (test pit 11-14) were assessed as natural deposits. No Artefacts were recovered from three test pits located between the boundary of SPC AS 11 and SPC AS 12 and therefore this area was assessed as archaeologically sterile and has been excluded from the updated PAD 01 boundary.

The soils encountered during the archaeological test excavation were consistent with the soils encountered during the geotechnical investigations. The soil profile was largely homogenous with increasing depth and silty sand content on the creek flats demonstrating alluvial deposits adjacent Black Creek and consistent with the Branxton soil profile. Given the sloping gradient across the majority of the tested area, it is considered that the site would have also been subject to colluvial forces on the mid and lower slopes. The only exception to the homogenous stratigraphy encountered included the large depressions and 'cracks' within the interface between the upper A horizon and underlying B horizon clay. These 'cracks' appeared infrequently and without an apparent distinct distribution pattern. These depressions may be remnant evidence of previous tree roots when the land was cleared of its native vegetation. These roots may have also been burnt within a fire event leaving the 'cracks' behind. However, if this were the case it would be expected more charcoal would be present within the deposits of the cracks which was not the case, hence the former is more likely. Alternatively, the excavated area is located within a floodplain and has likely been subject to historical Backwater flooding from the creek (BMT 2021). Therefore, the shrinking and swelling of the clay through historical flooding events with periods of desiccation has formed these microtopographic

depressions within the clay subsoil. Further archaeological investigations may provide further evidence for their interpretation.

With evidence of flake scarring on complete flakes and non-exhausted cores, and the minimal cortex (25%) identified within complete flakes suggests a secondary reduction process. This combined with minimal disturbance suggests that the overall geographic distribution of the artefact assemblage may remain relatively intact with the exception of the disturbed context of the gravel carpark within test pit 12-14.

9.1.2 Assessment of predictive model

It is important to note the test excavations were located only in areas of proposed impacts. As such the test excavation results represent only a sample data of the broader landform context and PAD. The archaeological sites identified likely extend beyond the tested area with the remaining untested PAD 01. With the lack of appropriate charcoal dating material available during excavations and limited ability to identify specific occupation phases it is considered likely that the site was occupied over repeated occasions and the artefact scatters are the result of secondary reduction sequence events.

While previous investigations within the Hunter Valley have dated some archaeological sites to 20,200 years Before Present (BP) (e.g. at Glennies Creek) and Aboriginal people have likely inhabited the land for up to 60,000 years +, the majority of Aboriginal archaeological sites in the broader Hunter Valley date to mid-late Holocene and are less than 4,000 years old. Few sites within Cessnock specifically have been subject to dating although a site at Oaks Golf Course approximately 2.90 km southwest of the excavation area dated to 1,200 BP (Virtus Heritage 2024). It is likely the assemblage recovered from test excavations is also of a similar age, 4,000 years or less however this would need to be confirmed with dating evidence during future archaeological investigations.

Historical records indicate that Aboriginal people were present within the study area in early 1800s when early pastoralists started to settle in Cessnock and Lake Macquarie around 1820s contributing to the dispossession of the Wonnarua people.

9.1.3 Response to TEM research questions

9.1.3.1 Does AHIMS 37-6-2101 (St Philip's PAD 1) contain Aboriginal objects?

Yes, of the sample area that were subjected to test excavation, St Phillips PAD 1 (AHIMS 37-6-2101) contains 72 artefacts over 3 separate AHIMS sites which include:

- AHIMS ID 37-6-4590, St Philip's College Artefact scatter 11 (23 artefacts)
- AHIMS ID 37-6-4591, St Philip's College Artefact scatter 12 (48 artefacts)
- AHIMS ID 37-6-4592, St Philip's college Isolated artefact 13

Because the entirety of the PAD was not excavated the extent of these newly identified sites likely extends into areas of the PAD that were unexcavated and outside the works footprint.

9.1.3.2 How are artefacts connected to the landform, and in what ways does the character of the site reflect its position within the broader landscape?

Artefacts were retrieved at greater depths closer to the creek bank where deeper alluvial deposits were present. Artefacts on the lower and mid slopes were deposited within colluvial shallower deposits. These results were consistent with the predictive modelling and AHIMS sites within the local archaeological context located in similar landforms and with similar artefact assemblages.

9.1.3.3 Are there stratified deposits present?

The stratigraphy encountered across the PAD typically comprised a dark/medium brown silty loamy topsoil that gradually transitions to lighter brown, orange sterile clay with depth. Varying frequency and density of gravels were also stratified within the transition from A horizon to below B horizon clay. Comparatively deep alluvial silty sand deposits were encountered directly adjacent the bank of Black Creek. These soil deposits are consistent with the Branxton soil landscape.

9.1.3.4 How does the archaeological resource of the site compare to other known sites in the region?

Similar low-moderate density artefact scatters with similar raw material types deposited within slopes and creek flats have previously been recorded within the local area and around Black Creek on AHIMS. Due to the various artefacts and artefact concentrations along the length of Black Creek within the boundaries of the school, the whole area was utilised and inhabited by Aboriginal people in the past. The similarities in material and tool type between scatters indicate a likely similar late Holocene age (as discussed in 9.1.2).

It is uncertain whether the Aboriginal archaeological resources identified within SPC AS 11 relate to the lithic material previously identified within the SPC7 (AHIMS #37-6-2103) Remediation Area. While the deposits are comparable in terms of the materiality and morphology of the artefacts, as well as their concentration at similar depths below the ground surface, insufficient subsurface investigation has been undertaken to conclude whether these specific sites are contiguous.

9.1.3.5 Are materials suitable for dating present?

Very few test pits contained evidence of charcoal, none of which were of sufficient size to sample for radiometric dating. No other suitable materials for dating were encountered.

10.0 SIGNIFICANCE ASSESSMENT

10.1 Significance assessment criteria

In accordance with the Code of Practice, an assessment of the scientific value of an Aboriginal object is required in order to form the basis of its management. The Guide provides the following criteria for the assessment of scientific value:

- Research potential - does the evidence suggest any potential to contribute to an understanding of the area and/or region and/or state's natural and cultural history?
- Representativeness - how much variability (outside and/or inside the subject area) exists, what is already conserved, how much connectivity is there?
- Rarity - is the subject area important in demonstrating a distinctive way of life, custom, process, land-use, function or design no longer practised? Is it in danger of being lost or of exceptional interest?
- Education potential - does the subject area contain teaching sites or sites that might have teaching potential?

It is important to note that heritage significance is a dynamic value.

10.2 Statement of scientific value

10.2.1 AHIMS ID 37-6-4590, St Philip's College Artefact scatter 11

SPC AS 11 comprised a low-density subsurface artefact scatter of 23 artefacts. The scatter did not contain any rare raw material or tool types for the regional area nor were they deposited within a particularly significant archaeological context that has not previously been identified in the local area. Many similar scatters are located adjacent to Black Creek and therefore is considered low in terms of rarity and representativeness. The scatter has been assessed as within undisturbed natural deposits and potentially extends beyond the test excavation area towards the northeast and therefore there is moderate archaeological research potential. The artefacts have moderate potential to aid in the education of Aboriginal heritage and Indigenous culture if they were to be used as a teaching aid through community engagement, such as through public engagement workshops, incorporated into learning at the St Phillips Christian College or through display in consultation with RAPs. The site is assessed as having overall moderate significance.

10.2.2 AHIMS ID 37-6-4591, St Philip's College Artefact scatter 12

SPC AS 12 comprised a moderate-density subsurface artefact scatter of a total of 48 artefacts. The scatter did not contain any rare raw material or tool types for the regional area nor were they deposited within a particularly significant archaeological context that has not previously been identified in the local area. However, compared to similar AHIMS scatters recorded around Black Creek, SPC AS 12 was of a comparatively higher density. It is also considered low in terms of rarity, representativeness. The site is assessed as having moderate archaeological research potential due to the higher concentration of artefacts. The full extent of the scatter was also not identified and therefore there is potential for additional artefacts or potential tools to be present. The artefacts have moderate potential to aid in the education of Aboriginal heritage and Indigenous culture if they were to be used as a teaching aid through community engagement, such as through public engagement

workshops, incorporated into learning at the St Phillips Christian College or through display in consultation with RAPs. The site is assessed as having overall moderate significance.

10.2.3 AHIMS ID 37-6-4592, St Philip's college Isolated artefact 13

SPC ISO 13 comprised a single artefact with a highly disturbed context. It was assessed the artefact was likely redeposited and was not in situ. The flake itself was not particularly rare or archaeologically significant being similar to other isolated finds in the local area. As such the site has been assessed as being of low research or educational potential. The overall significance of the site is considered low.

A summary of the archaeological significance of sites identified is presented in Table 10 below.

Table 10: Significance assessment

Site name (AHIMS ID)	Research potential	Representativeness	Rarity	Education potential	Overall significance assessment
SPC AS 11 (AHIMS ID 37-6-4590)	Moderate	Low	Low	Moderate	Moderate
SPC AS 12 (AHIMS ID 37-6-4591)	Moderate	Low	Low	Moderate	Moderate
SPC ISO 13 (AHIMS ID 37-6-4592)	Low	Low	Low	Low	Low

11.0 IMPACT ASSESSMENT

11.1 Description of likely impacts

The proposed works comprise alterations and additions to St Philip's Christian College, Cessnock campus. This includes:

- alterations and additions to existing buildings and construction of seven new buildings to provide for:
 - school facilities (K – 12), including the DALE special school, for 1649 students (increase of 451 students), 200 staff and out-of-school-hours care;
 - trade training centre, library/ chapel, administration centre, sports centre and café;
 - a new indoor aquatic centre with two swimming pools, viewing area and café;
 - a new performing arts centre including auditorium and theatre;
 - provision of an early learning centre with 83 children (age group 0–5) and 16 staff;
- construction of a roundabout at the Lomas Lane/Wine Country Drive intersection;
- new site vehicle access from Wine Country Drive, internal roadworks and 250 car spaces;
- landscaping works and signage; and
- community use of school facilities.

11.2 Potential impacts to Aboriginal heritage

11.2.1 AHIMS ID 37-6-4590, St Philip's College Artefact Scatter 11

At this stage, there is insufficient evidence to determine whether SPC AS 11 is contiguous with the Remediation Area of SPC7 (AHIMS #37-6-2103), whereby this assessment considers the impacts of the proposal on each site individually. SPC AS 11 will be directly impacted by the proposed new building, surrounding landscaping and road. Assuming the scatter is independent of SPC7, these works will impact the entire artefact scatter comprising SPC AS 11 and will result in a total loss of value.

11.2.2 AHIMS ID 37-6-2103, SPC7

At this stage, there is insufficient evidence to determine whether with the Remediation Area of SPC7 is contiguous with SPC AS 11 (AHIMS #37-6-4590), therefore this assessment considers the impacts of the proposal on each site individually. There are no ground disturbing works proposed within the Remediation Area, nor is there any infrastructure which would require maintenance or construction. While vegetation management will be required within the Remediation Area, this activity can be undertaken without the potential to harm Aboriginal objects when implemented without ground disturbing measures. Taken together there are no proposed works which would directly impact SPC7. Vehicular Access will generally not be required within the Remediation Area as there are no active tracks intersecting with SPC7.

11.2.3 AHIMS ID 37-6-4591, St Philip's College Artefact Scatter 12

SPC AS 12 will be directly impacted by the proposed D.A.L.E No.2 building and road. The entire scatter will be impacted which will result in a total loss of value.

11.2.4 AHIMS ID 37-6-4592, St Philip's College Isolated Artefact 13

SPC ISO 13 will be directly impacted by the overflow car park which will result in a total loss of value.

A summary of the impacts is provided in Table 11 and shown in Figure 34 and Figure 35.

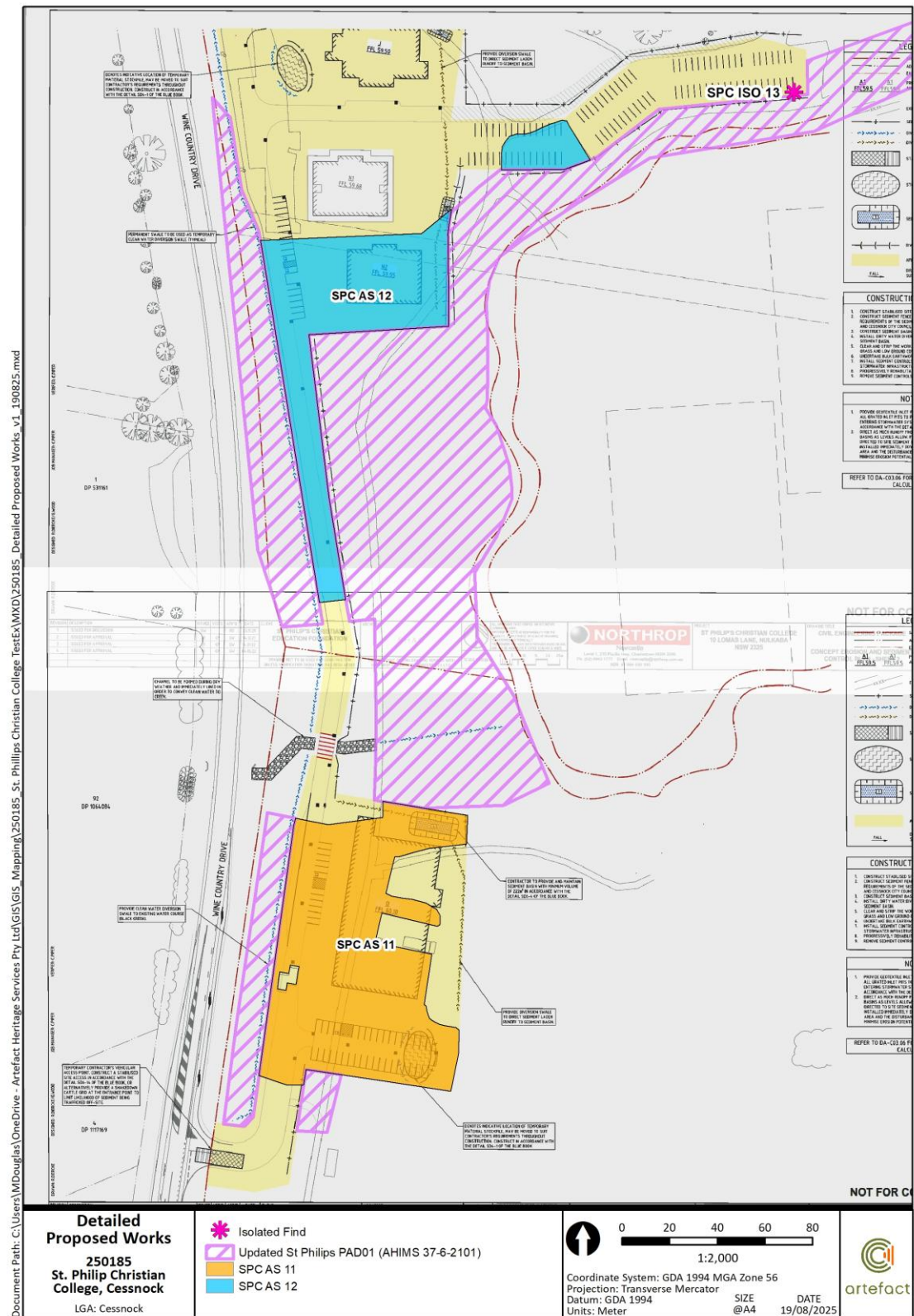
Table 11: Impact assessment

Site name (AHIMS ID)	Type of harm	Degree of harm	Consequence of harm
SPC AS 11 (AHIMS ID 37-6-4590)	Direct	Total	Total loss of value
SPC7 (AHIMS ID 37-6-2103)	none	none	no loss of value
SPC AS 12 (AHIMS ID 37-6-4591)	Direct	Total	Total loss of value
SPC ISO 13 (AHIMS ID 37-6-4592)	Direct	Total	Total loss of value

Figure 34: Identified sites overlaid onto proposed works.



Figure 35: Identified sites overlaid onto detailed drawings of the proposed works.



12.0 MANAGEMENT AND MITIGATION MEASURES

As this report is inconclusive with regards to the relationship between SPC AS 11 (AHIMS #37-6-4590) and SPC7 (AHIMS #37-6-2103), this section addresses only the management of, and mitigation of harm to, the sites identified during the test excavation (see Section 8.3), being AHIMS ID 37-6-4590, AHIMS ID 37-6-4591 and AHIMS ID 37-6-4592. As a result, this section should be read in conjunction with the Aboriginal Heritage Management Plan prepared by Umwelt (2025) which outlines the management requirements for the SPC7 Remediation Area, both in the context of the proposed works and future operations within the site.

12.1 Guiding principles

The overall guiding principle for cultural heritage management is that where possible Aboriginal sites should be conserved.

Where unavoidable impacts occur then measures to mitigate and manage impacts are proposed. Mitigation measures primarily concern preserving the heritage values of sites beyond the physical existence of the site. The most common methods involve detailed recording of Aboriginal objects, archaeological test and salvage excavations, artefact analysis and, where appropriate, reburial of Aboriginal objects in a location determined by the RAPs.

Mitigation measures vary depending on the assessment of archaeological significance of a particular Aboriginal site and are based on its research potential, rarity, representatives and educational value. In general, the significance of a site would influence the choice of preferred conservation outcomes and appropriate mitigation measures, usually on the following basis:

- Low archaeological significance – conservation where possible. SSD Conditions of Approval would be required to impact the site before work can commence.
- Moderate archaeological significance – conservation where possible. If conservation was not practicable, further archaeological investigation would be required such as salvage excavations or surface collection in accordance with the SSD Conditions of Approval.
- High archaeological significance – conservation as a priority. Where all other practical alternatives have been discounted mitigation measures such as comprehensive salvage excavations in accordance with the SSD Conditions of Approval would be required.

Sites of unknown scientific value should be conserved where possible. Where conservation is not practical further investigation under the Code of Practice will be required to confirm the presence of Aboriginal objects and gather enough information to assess significance. Test excavation is not a mitigation measure; it is an investigatory action required to gather enough information to inform the development of appropriate mitigation measures.

12.2 Site avoidance

The conservation of archaeological sites should be considered the first mitigation measure where possible. It is understood redesign of the proposed works that overlap with the three sites is not possible. As such, SSD conditions of consent is required to approve harm to St Philip's College Artefact scatter 11, St Philip's College Artefact scatter 12 and St Philip's college Isolated artefact 13 through archaeological salvage. These sites must not be harmed prior to SSD conditions of consent are obtained.

12.3 Archaeological salvage excavations

An archaeological salvage excavation methodology must be prepared prior to salvage excavations of St Philip's College Artefact scatter 11 and St Philip's College Artefact scatter 12. A methodology for the completion of the salvage excavation should be developed in consultation with the RAPs. The methodology could be prepared as a condition of SSD approval.

12.3.1.1 Surface collection of artefacts

It is recommended surface collection of the surface artefact associated with St Philip's College Artefact scatter 12 be undertaken prior to any ground disturbing works within St Philip's College Artefact scatter 12 and PAD 01. SSD conditions of consent must be obtained prior to the surface collection taking place. Surface collection may occur during the salvage excavations of the associated St Philip's College Artefact scatter 12. A methodology for the surface collection should be prepared. This methodology may be included in the salvage methodology if surface collection and salvage excavations were to occur at the same time.

12.4 Heritage Induction

A heritage induction must be prepared, this will outline the Aboriginal history of the area and guidance on identifying Aboriginal artefacts in the field, this is required for contractors to fulfill the Unexpected Finds Procedure as well as an outline of the legislative framework and penalties for harming Aboriginal sites without an AHIP or appropriate consent. The UFP should also include an unexpected human remains policy in accordance with condition 31 of the existing conditions of consent.

12.5 Changes to the project area

Advice provided within this report is based upon the most recent information provided by the proponent at the time of writing. Any changes made to the project should be assessed by an archaeologist in consultation with the RAPs. Any changes that may impact on Aboriginal sites not assessed as part of the project may warrant further investigation and result in changes to the recommended management and mitigation measures.

13.0 CONCLUSION

13.1 Summary of findings

- A total of 72 artefacts were recovered as part of test excavations.
- The three sites identified included:
 - AHIMS ID 37-6-4590, St Philip's College Artefact scatter 11 (23 artefacts). This site was located within the lower slope and adjacent the flat bank of Black Creek. This site was assessed as having low archaeological significance.
 - AHIMS ID 37-6-4591, St Philip's College Artefact scatter 12 (48 artefacts). This site was located on the mid slope and was assessed as having moderate archaeological significance.
 - AHIMS ID 37-6-4592, St Philip's college Isolated artefact 13 comprised a single isolated find within a disturbed context adjacent Black creek. It was assessed as having low archaeological significance.
- All three identified archaeological sites will be directly and totally impacted by the proposed works.

13.2 Recommendations

- The proponent should determine if avoidance of any of the AHIMS registered sites is possible.
- Where avoidance is not possible SSD conditions of consent is required to harm the identified sites:
 - St Philip's College Artefact scatter 11 (AHIMS ID 37-6-4590)
 - St Philip's College Artefact scatter 12 (AHIMS ID 37-6-4591)
 - St Philip's college Isolated artefact 13 (AHIMS ID 37-6-4592)
- Due to St Philip's College Artefact scatter 11 and St Philip's College Artefact scatter 12 assessed as being of moderate significance, archaeological salvage is recommended. This would include the preparation of an archaeological salvage excavation methodology. The methodology could be prepared as a condition of SSD approval.
- Due to the presence of a surface artefact in association with the moderately significant St Philip's College Artefact scatter 12, it is recommended surface collection of the surface artefact take place. This would include the preparation of a surface collection methodology. The surface collection may take place during the salvage excavations.
- A heritage induction including an Unexpected Finds Procedure must be prepared and all workers must be inducted prior to the commencement of works.
- Any changes that may impact on Aboriginal sites not assessed as part of the project may warrant further investigation and result in changes to the recommended management and mitigation measures.

14.0 REFERENCES

'Aboriginal People – the Gringai', History in the Williams River Valley, viewed at <https://williamsvalleyhistory.org/aborigines-gringai/>.

AECOM, 2009, Aboriginal Cultural Heritage Assessment Report, Proposed St Phillips College Campus Wine Country Drive, Nulkaba.

Archer, A.C., 2007, 'Social and environmental change as determinants of ecosystem health: a case study of social ecological systems in the Paterson Valley NSW Australia', PhD Thesis, University of Newcastle.

BMT, 2021, Flood Impact Assessment, St Phillips Christian College, 10 Lomas Lane, Nulkaba.

Brayshaw, H., 1987, *Aborigines of the Hunter Valley. A Study of Colonial Records*, Scone, NSW: Scone and Upper Hunter Historical Society.

Douglas and Partners, 2009, Preliminary Geotechnical Investigation, St Philip's Christian College, Nulkaba.

Elkin, 1932, Notes on the Social Organisation of the Worimi, a Kattang-speaking people, *Oceania*, 2:3, pp. 359-363.

Enright, W.J., 1932, 'The Kattnag (Kutthung) or Worimi – An Aboriginal Tribe', *Dungog Chronicle*, 3 May.

Grant, J., 1803, *The Narrative of a Voyage of Discovery*, C Roxworth, London.

Hunter Living Histories, 2018, 'Aboriginal cultural attributes of the Upper Hunter Valley', viewed at <https://hunterlivinghistories.com/2018/11/22/rock-art-2015-18/>.

Hunter Living Histories, n.d., 'History', University of Newcastle, viewed at <https://hunterlivinghistories.com/history/>.

Lang, J. D., 1875. (1834), *An Historical and Statistical Account of New South Wales etc.*, Sampson Low, Marston, Low & Searle, London.

Lucas, Stapleton & Partners, n.d., 'Hunter Estates, Comparative Heritage Study', Volume 2 Aboriginal Archaeology Reports,' viewed at https://hunterlivinghistories.com/wp-content/uploads/2008/02/2013-hunter_homestead_study_vol_2_app2.pdf.

Mann, J F., 1936, 'Brisbane Water 95 Years Ago. Quaint Story of Olden Times', *Gosford Times and Wyong District Advocate*, 29 October.

McCardle Cultural Heritage Pty Ltd , 2024, St Philip's Cessnock College Cessnock Aboriginal Cultural Heritage Construction Management Plan.

McCardle Cultural Heritage Pty Ltd. 2024, St Philip's Cessnock College Cessnock Aboriginal Cultural Heritage Assessment Report.

Miller, J., 1985, *Koori: A Will To Win*, Angus and Robertson, viewed at <https://wonnarua.org.au/wp-content/uploads/2021/06/about-the-wonnarua-2.pdf>).

Muurrbay Aboriginal Language and Culture Co-operative, n.d. Gathang (Birrby, Guringay & Warrimay, viewed at <https://muurrbay.org.au/languages/gathang/>.

RCA Australia, 2024, Preliminary Geotechnical Investigation, St Philip's Christian College, Nulkaba

Syron, R and Russell, L, 2018 'The Kabook and Watoo People of the Gringai Barrington River Gloucester, NSW', Hunter Living Histories, University of Newcastle, viewed at <https://hunterlivinghistories.com/2018/08/15/the-kabook-watoo/>.

Threlkeld, L. E., in Gunson N. (ed), 1974, Australian reminiscences and papers of LE Threlkeld. *Vol 1 Australian Aboriginal Studies 40*, Australian Institute of Aboriginal Studies, Canberra.

Umwelt (2025), St Philip's Christian College Cessnock Aboriginal Heritage Management Plan: Aboriginal Sites SPC7 (AHIMS #37-6-2103), SPC9 (AHIMS #37-6-2105) and SPC10 (AHIMS #37-6-2106).

Umwelt, 2011, Aboriginal Cultural Heritage and Archaeological Assessment: Stage 3 Modification, Austra Coal Mine Project.

University of Newcastle Special Collections, 2013. "The many names of Newcastle – Mulubinba." *Hunter Living Histories*, accessed on 8 July 2022 at <https://hunterlivinghistories.com/2013/08/30/the-many-names-of-newcastle-mulubinba/>.

Virtus Heritage, 2024, Cessnock LGA Aboriginal Cultural Heritage Management Plan.

Worimi Conservation Lands, (nd.) <https://worimiconservationlands.com/>.



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

Your Ref/PO Number : 250185

Client Service ID : 1030340

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status **	SiteFeatures	SiteTypes	Reports
37-6-1988	OGC PAD 1	GDA	56	344423	6366624	Open site	Valid	Potential Archaeological Deposit (PAD) : 2		
	Contact							Permits	3142,3309,3353	
37-6-1216	Cessnock 2	AGD	56	347709	6367136	Open site	Valid	Artefact : -		102381
	Contact							Permits	2977	
37-6-2097	SPC 2	GDA	56	345845	6369387	Open site	Valid	Artefact : 16		104496
	Contact							Permits	4065	
37-6-2104	SPC8	GDA	56	345692	6369586	Open site	Valid	Artefact : 15		104496
	Contact							Permits	4065	
37-6-2109	St Phillips PAD 4	GDA	56	345740	6369612	Open site	Valid	Potential Archaeological Deposit (PAD) : 1		104496
	Contact							Permits	4065	
37-6-1465	Hightrade 1	AGD	56	345700	6372300	Open site	Valid	Artefact : -		
	Contact							Permits		
37-6-1126	Mt View IF2	AGD	56	343430	6366410	Open site	Valid	Artefact : -		102381
	Contact							Permits	1819	
37-6-4108	SLV IF1	GDA	56	344101	6366757	Open site	Valid	Artefact : -		
	Contact							Permits		
37-6-4100	Werakata AFT2	GDA	56	348279	6372236	Open site	Valid	Artefact : -		
	Contact							Permits		
37-6-1724	OGC 7	GDA	56	344287	6367106	Open site	Valid	Potential Archaeological Deposit (PAD) : 2, Artefact : 8		
	Contact							Permits	3142,3309,3353	
37-6-2105	SPC9	GDA	56	345871	6369813	Open site	Valid	Artefact : 18		104496
	Contact							Permits	4065	
37-6-2106	SPC10	GDA	56	345877	6369879	Open site	Valid	Artefact : 10		104496
	Contact							Permits	4065	
37-6-4088	Alkira Ave ST1	GDA	56	347839	6367309	Open site	Valid	Modified Tree (Carved or Scarred) : -		
	Contact							Permits		
37-6-4091	Alkira Ave AFT	GDA	56	347840	6367324	Open site	Valid	Artefact : -		
	Contact							Permits		
37-6-1733	OGC 3	AGD	56	344300	6366780	Open site	Valid	Artefact : 6		
	Contact							Permits	3142,3309,3353	

Report generated by AHIMS Web Service on 05/08/2025 for Lily (Artefact) Hackett for the following area at Datum :GDA, Zone : 56, Eastings : 342700.0 - 348700.0, Northings : 6366500.0 - 6372500.0 with a Buffer of 0 meters. Number of Aboriginal sites and Aboriginal objects found is 44

This information is not guaranteed to be free from error omission. Heritage NSW and its employees disclaim liability for any act done or omission made on the information and consequences of such acts or omission.

Page 2 of 4



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

Your Ref/PO Number : 250185

Client Service ID : 1030340

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status **	SiteFeatures	SiteTypes	Reports
37-6-2103	SPC7	GDA	56	345629	6369656	Open site	Valid	Artefact : 1		104496
	Contact	Recorders	Mr.Rick Bullers							
37-6-3414	Site 1 143 O'Connors Road Nulkab	GDA	56	343760	6368404	Open site	Valid	Artefact : -		
	Contact	Recorders	Mr.Giles Hamm							
37-6-4111	SLV AS3	GDA	56	344567	6366596	Open site	Valid	Artefact : -		
	Contact	Recorders	Extent Heritage Pty Ltd - Pyrmont - Individual users,Mr.Cameron Neal (emm consu							
37-6-2099	SPC 4	GDA	56	345740	6369512	Open site	Valid	Artefact : 2		104496
	Contact	Recorders	Mr.Rick Bullers							
37-6-2100	SPC 5	GDA	56	345589	6369385	Open site	Valid	Artefact : 10		104496
	Contact	Recorders	Mr.Rick Bullers							
37-6-1217	Cessnock 1	AGD	56	347691	6367126	Open site	Valid	Artefact : -		102381
	Contact	Recorders	MCH - McCardle Cultural Heritage Pty Ltd							
37-6-1723	OGC 6	GDA	56	344489	6366548	Open site	Valid	Artefact : 11		
	Contact	Recorders	Jim Wheeler							
37-6-1732	OGC 2	AGD	56	344500	6366750	Open site	Valid	Potential Archaeological Deposit (PAD) : 2, Artefact : 1		
	Contact	Recorders	Extent Heritage Pty Ltd - Pyrmont - Individual users							
37-6-2098	SPC 3	GDA	56	345866	6369451	Open site	Valid	Artefact : 1		104496
	Contact	Recorders	Mr.Rick Bullers							
37-6-2101	St Phillips PAD 1	GDA	56	345692	6369656	Open site	Valid	Potential Archaeological Deposit (PAD) : 1		104496
	Contact	Recorders	Mr.Rick Bullers							
37-6-3552	Site 2 143 O'connor Rd Nulkaba	AGD	56	344259	6368450	Open site	Valid	Artefact : -		
	Contact	Recorders	Mr.Giles Hamm							
37-6-4109	SLV AS1	GDA	56	344156	6366998	Open site	Valid	Artefact : -		
	Contact	Recorders	Extent Heritage Pty Ltd - Pyrmont - Individual users,Mr.Cameron Neal (emm consu							
37-6-4090	Alkira Ave ST2	GDA	56	347744	6367379	Open site	Valid	Modified Tree (Carved or Scarred) :		
	Contact	Recorders	Mr.Martin Wright							
37-6-4261	Deadmans Creek Scar Tree	GDA	56	348229	6372361	Open site	Valid	Modified Tree (Carved or Scarred) :		
	Contact	Recorders	Mr.Glen Walker,Ms.Ashley Deveridge							

Report generated by AHIMS Web Service on 05/08/2025 for Lily (Artefact) Hackett for the following area at Datum :GDA, Zone : 56, Eastings : 342700.0 - 348700.0, Northings : 6366500.0 - 6372500.0 with a Buffer of 0 meters.. Number of Aboriginal sites and Aboriginal objects found is 44

This information is not guaranteed to be free from error omission. Heritage NSW and its employees disclaim liability for any act done or omission made on the information and consequences of such acts or omission.

Page 3 of 4



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

Your Ref/PO Number : 250185
Client Service ID : 1030340

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status **	SiteFeatures	SiteTypes	Reports
--------	----------	-------	------	---------	----------	---------	----------------	--------------	-----------	---------

** Site Status

Valid - The site has been recorded and accepted onto the system as valid

Destroyed - The site has been completely impacted or harmed usually as consequence of permit activity but sometimes also after natural events. There is nothing left of the site on the ground but proponents should proceed with caution.

Partially Destroyed - The site has been only partially impacted or harmed usually as consequence of permit activity but sometimes also after natural events. There might be parts or sections of the original site still present on the ground

Not a site - The site has been originally entered and accepted onto AHIMS as a valid site but after further investigations it was decided it is NOT an aboriginal site. Impact of this type of site does not require permit but Heritage NSW should be notified

Report generated by AHIMS Web Service on 05/08/2025 for Lily (Artefact) Hackett for the following area at Datum :GDA, Zone : 56, Eastings : 342700.0 - 348700.0, Northings : 6366500.0 - 6372500.0 with a Buffer of 0 meters.. Number of Aboriginal sites and Aboriginal objects found is 44

This information is not guaranteed to be free from error omission. Heritage NSW and its employees disclaim liability for any act done or omission made on the information and consequences of such acts or omission.

Page 4 of 4

APPENDIX B – SITE CARDS



artefact

Artefact Heritage and Environment

ABN 73 144 973 526

Suite 56, Jones Bay Wharf

26-32 Pirrama Road

Pymont NSW 2009 Australia

+61 2 9518 8411

office@artefact.net.au

www.artefact.net.au