

# EXTENT

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TO AUSTRALIA AND  
THE ASIA PACIFIC



## Macquarie University Central Courtyard Precinct (CCP)

### Aboriginal Cultural Heritage Management Plan

Prepared for Macquarie University

April 2019 - Version 4

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## Abbreviations

Acronyms	Glossary
ACHMP	Aboriginal Cultural Heritage Management Plan
CCP	Central Courtyard Precinct
CEMP	Construction Environmental Management Plan
CRM	Cultural Resource Management
Cth	Commonwealth
DEC	Department of Environment and Conservation NSW (now OEH)
DECC	Department of Environment and Climate Change NSW (now OEH)
DECCW	Department of Environment Climate Change and Water (now OEH)
DP&E	Department of Planning and Environment (NSW)
EA	Environmental Assessment
Eg	For example
ER	Environmental Representative
HIS	Heritage Impact Statement
ISO	International Organisation for Standards
MCoA	Ministers Conditions of Approval
NPWS	National Parks and Wildlife Service (NPWS) (incorporated in OEH)
NSW	New South Wales
OEH	Office of Environment and Heritage (NSW)
PA	Project Approval
RAP	Registered Aboriginal Party
SEARs	Secretary's Environmental Assessment Requirements
SHI	Statement of Heritage Impact
SoC	Statement of Commitments
SSD	State Significant Development

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# 1. Introduction

## 1.1 Project Description

Macquarie University proposes to redevelop the Central Courtyard Precinct (CCP) within the University campus. The proposed CCP development comprises the *replacement* of existing buildings (C9A and C10A) and carparking areas (hereafter referred to as the 'subject area') (Figures 1 and 2). Approval for the Project has been approved as a State Significant Development (SSD), under Division 4.7 of the *Environmental Planning and Assessment Act 1979* (SSD 17\_8755). Condition B23 of this approval notes that an Aboriginal Heritage Management Plan (ACHMP) (this document) is needed (Table 1).

This document provides guidance on the process and management of Aboriginal cultural heritage in the post-approval phase of the Project. It further outlines the processes and timeframes associated with Aboriginal consultation, and any off-site heritage measures that may be required as part of the project.

It is highlighted that while this document is designed to manage Aboriginal heritage for the CCP, development work in the form of extant structure demolition has already occurred.

## 1.2 Purpose of the ACHMP

The purpose of this plan is to define the rationale, policies and procedures to be implemented for management and mitigation of known, and as yet unknown, Aboriginal heritage object, sites and/or deposits during the construction phase of the Project.

### 1.2.1 Objectives

The overall objectives of this ACHMP are to:

- ◆ Present overall heritage management principles and guidelines for the design and construction phase of the Project;
- ◆ Summarise potential impacts on identified heritage sites arising from the Project;
- ◆ Describe how measures will be implemented to prevent or mitigate Aboriginal heritage impacts;
- ◆ Provide specific guidelines for the mitigation of known heritage sites that will be directly and indirectly impacted by the Project;
- ◆ Provide specific guidelines and procedures for unexpected finds and possible discovery of human remains;
- ◆ Provide procedures for consultation with the Aboriginal community including Relevant Aboriginal Parties (RAP) timeframes and processes; and
- ◆ Outline an effective monitoring, auditing and reporting framework to assess the effectiveness of the controls implemented.

- ♦ Fulfil the requirements of the Project Approval issued by DPE (Table 1)

The draft ACHMP was provided to Relevant Aboriginal Parties for the Project between 18 and 29 April 2019 for review, and included a meeting with several of them to discuss in detail. Comments and recommendations made by the RAPs (Appendix 1) have been included in the final document.

Table 1. Project Approval conditions and where this report addresses them.

Condition	Location in this Report
B23. Prior to the commencement of construction works, an Aboriginal Cultural Heritage Management Plan (ACHMP) must be prepared and submitted to the Department for approval. The ACHMP must address, but not be limited to, the following;	Entire report.
(a) Be prepared by a suitably qualified and experienced expert in consultation with the Registered Aboriginal Parties as identified in the letter titled <i>Central Courtyard Precinct (SSD_8755), Macquarie University: Aboriginal heritage advice</i> prepared by Extent Heritage dated 22 March 2019;	This report was written by Extent Heritage Pty Ltd
(b) Processes, timing, and methods for maintaining Aboriginal community consultation throughout the remainder of the project;	Section 5.2 and Appendix 1
(c) Detailed review and investigation of the Aboriginal cultural heritage that may be present across the site;	Sections 3 - 5
(d) Processes for reviewing, monitoring and updating the ACHMP as the project progresses, including incorporating any mitigation measures identified in the ACHAR being prepared in accordance with the requirements of condition D5;	Sections 8 and 9
(e) Procedures to ensure all works are to immediately cease if unexpected archaeological artefacts are found on-site during any stage of the works and appropriate procedures for notification and recommencing works;	Sections 5.3.3., 5.3.4, 6.4 and 6.5; Appendices 2 and 3
(f) Protocols for the salvage required for the project and also for the long term management of any areas of cultural or archaeological significance, within the project boundaries, but not subject to salvage excavations;	Section 6
(g) A requirement for all salvage works to be carried out under the supervision of a qualified archaeologist and representatives of the Registered Aboriginal Parties (RAPs) for the project; and	Sections 5.3 and 6.2
(h) A requirement for preparation of a final report outlying the results of any salvage work undertaken, which must be prepared in consultation with the project RAPs and should include all comments provided by the project RAPs regarding the salvage	Section 6.7



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process and any long term management of Aboriginal objects.	
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### 1.2.2 Approach

This ACHMP is designed to articulate how the conditions of planning approval, statements of commitment and relevant legislative requirements are to be met as design and construction of this Project occurs. The ACHMP is an operational document to guide the specific heritage mitigation measures.

### 1.3 Limitations

This document has been prepared with limited previous assessment and/or consideration to Aboriginal heritage of the subject area. A formal Aboriginal Cultural Heritage Assessment (ACHA) has not been undertaken, nor detailed on-site investigations (although one is proposed as part of the broader CCP project). As such, our understanding of the sub-surface cultural material is limited.

This report does not deal with management of historical archaeological heritage, built heritage or landscape components.

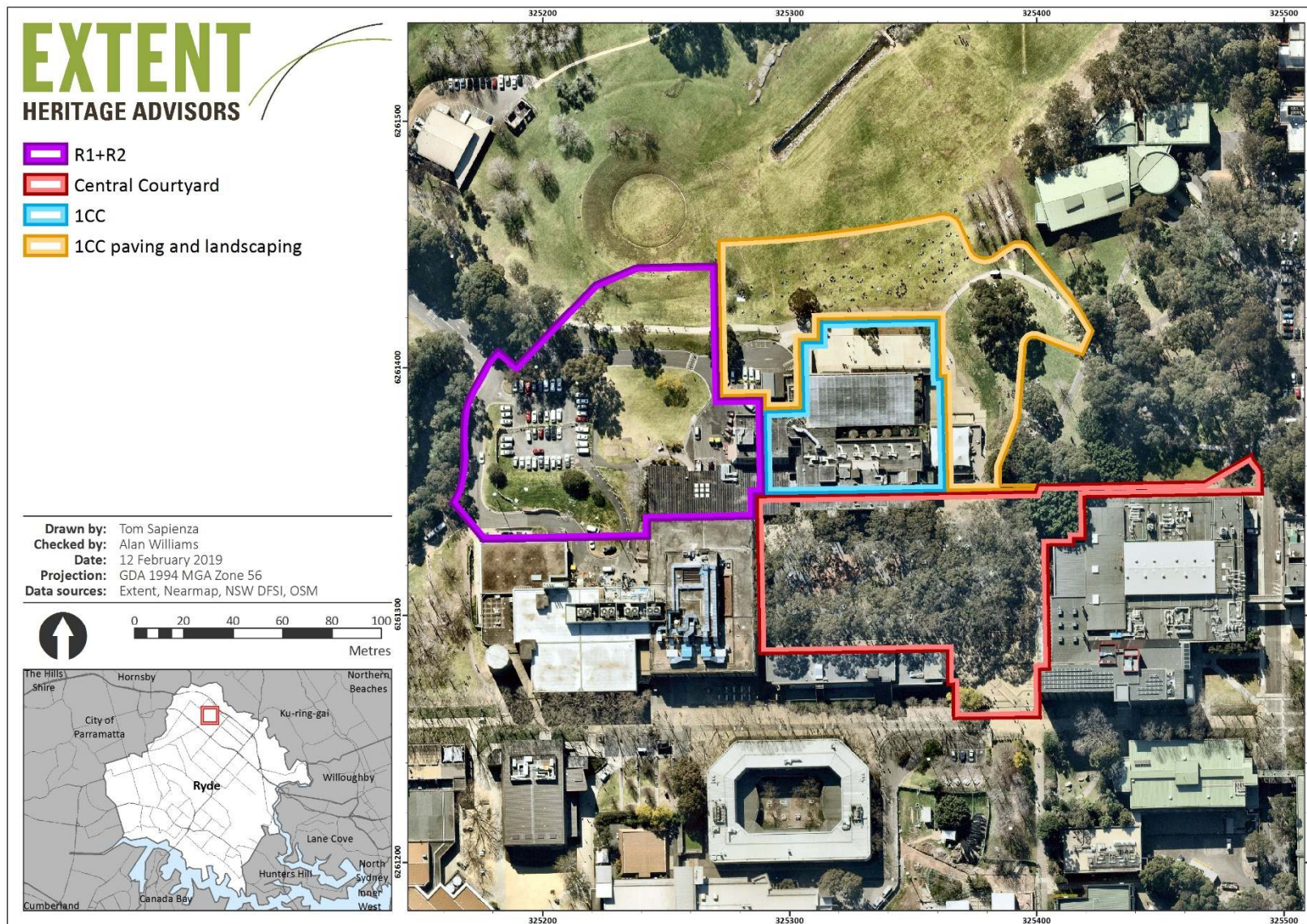


Figure 1. The subject area.



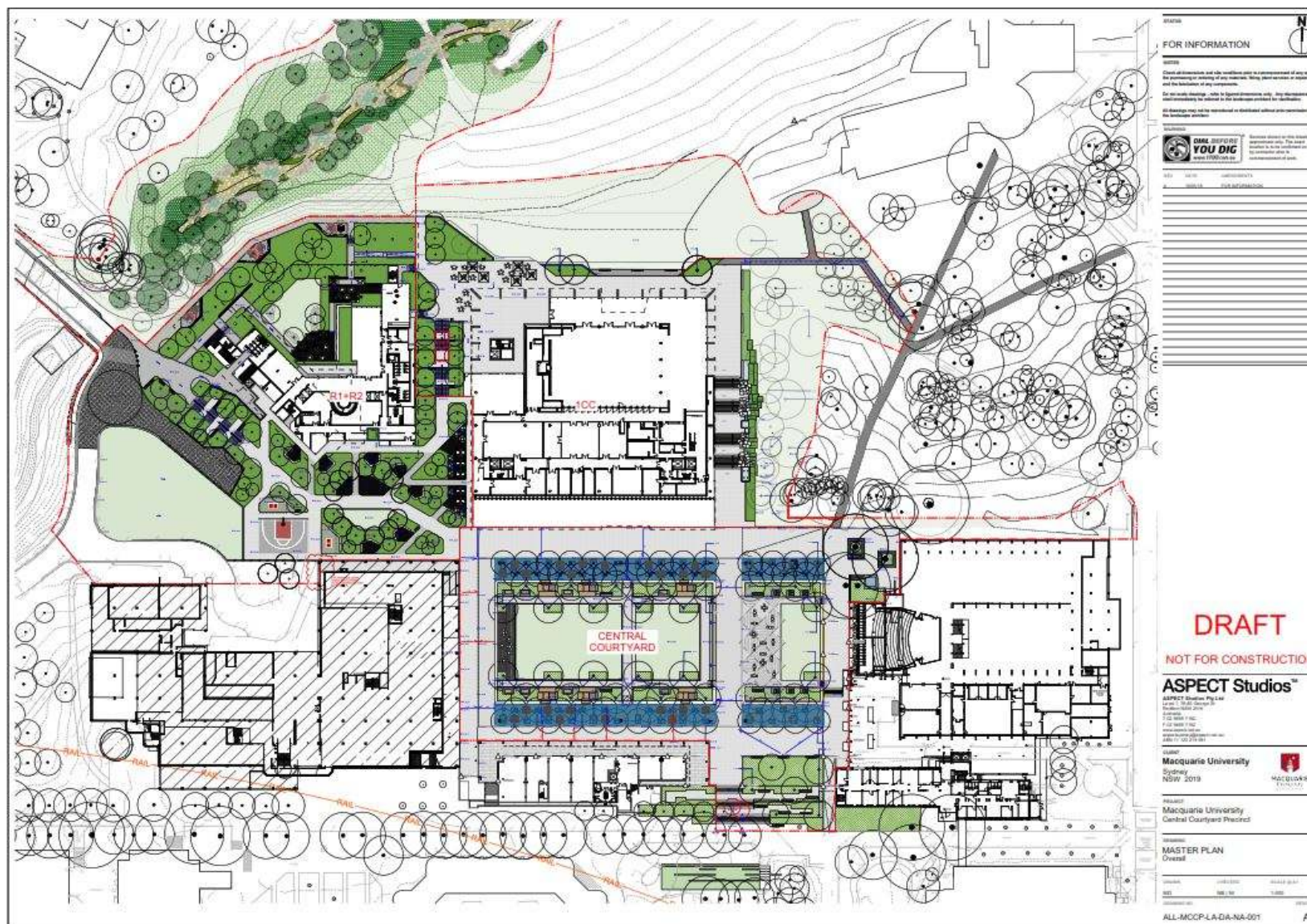


Figure 2. Central Courtyard Precinct development plan.

## 2. Legislative and Regulatory Requirements

### 2.1 Key Environmental Legislation

Aboriginal heritage is protected and managed under the following legislation:

- ♦ *Commonwealth Environment Protection and Biodiversity Conservation Act 1999;*
- ♦ *Commonwealth Native Title Act, 1993*
- ♦ *NSW National Parks and Wildlife Act 1974;*
- ♦ *NSW Heritage Act 1977; and*
- ♦ *NSW Environmental Protection and Assessment Act 1979.*

*The National Parks & Wildlife Act, 1974* (NPW Act) provides blanket protection for Aboriginal objects (material evidence of indigenous occupation) and Aboriginal places (areas of cultural significance to the Aboriginal community) across NSW.

*The Environmental Planning and Assessment Act, 1979* (EP&A Act) requires that environmental impacts are considered in land-use planning, including impacts on Indigenous heritage. Where Project approval is to be determined under Division 4.7 of the Act, further approvals under the *National Parks & Wildlife Act, 1974* are not required. In those instances, management of Aboriginal heritage follows the applicable Aboriginal assessment guidelines, any relevant EIS recommendations and the Minister's Conditions of Approval (MCoA) developed for the Project.

### 2.2 Minister's Conditions of Approval

The Minister's Conditions of Approval (MCoA) have yet to be issued, but will be included here when available. A draft condition has been provided in relation to the need for an ACHMP, and is presented in Table 1.

### 2.3 Statement of Commitments

This ACHMP also considers the requirements in the Statement of Commitments (SoC) from the EIS. These include:

- ♦ Consultation with the Metropolitan Local Aboriginal Land Council.
- ♦ The implementation of an unexpected finds protocol in accordance with Section 91 of the *National Parks and Wildlife Act 1974*.

#### 2.3.1 Approvals, Permits, Licences

Approval of a project under Division 4.7 of the EP&A Act removes the requirement to obtain certain statutory approvals including:

- The requirement to obtain an Aboriginal heritage impact permit under section 90 of the *National Parks and Wildlife Act 1974*.

## 2.4 Guidelines and Standards

The ACHMP has been developed using best practice heritage guidelines and standards. These guidelines and standards, established by the Office of Environment and Heritage, were developed to guide the assessment, conservation and mitigation of Aboriginal heritage in New South Wales. Many of the guidelines are designed to obtain permits and approvals under the *National Parks and Wildlife Act 1974*.

Not all guidelines are applicable for Division 4.7 project approvals (such as Aboriginal community consultation guidelines); however, they are useful documents to guide the general direction of assessment of the significance of heritage sites; and their conservation and mitigation.

Relevant guidelines include:

- *Due Diligence Code of Practise for the Protection of Aboriginal Objects* in New South Wales (OEH, 2010).
- *Code of Practice for Archaeological Investigation of Aboriginal Objects* in New South Wales (OEH, 2010).
- *Aboriginal cultural heritage consultation requirements for proponents* 2010 (OEH, 2010).
- *Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation* (Draft; DECCW 2005).



## 3. Identified Aboriginal Heritage Sites

### 3.1 Background

Aboriginal heritage assessments were undertaken to inform the broader University campus and/or the CCP, and included:

- ♦ Mary Dallas Consulting Archaeologists (2012) Due Diligence Aboriginal heritage assessment for Macquarie University, North Ryde. Unpublished report to Macquarie University Property.
- ♦ Extent Heritage (2019) Central Courtyard Precinct – Aboriginal Heritage Advice. Unpublished letter to Macquarie University.

These documents included:

- ♦ Consultation with the Metropolitan Local Aboriginal Land Council.
- ♦ A search of Aboriginal Heritage Information Management System (AHIMS) database to identify previously recorded Aboriginal heritage sites within the subject area.
- ♦ An archaeological survey to relocate known Aboriginal heritage sites to identify any previously unknown Aboriginal heritage sites by project archaeologist(s) and Aboriginal community members.
- ♦ Identification of areas of Aboriginal archaeological sensitivity associated with shale and sandstone formations, where as yet unknown Aboriginal sites objects and places may be found in reasonably undisturbed soil profiles or natural sandstone outcrops.

In addition as part of the document finalisation process, consultation was undertaken with a number of Registered Aboriginal Parties (Section 5.2), and any information provided in relation to tangible and/or intangible cultural heritage is included here.

### 3.2 Assessment Results

The Aboriginal heritage due diligence assessment, which only cursorily considered the CCP, found (MDCA 2012):

- ♦ Few archaeological assessments have been undertaken within Macquarie University and the surrounding area, for the M2 Motorway, Chatswood-Epping Rail Link and at Eden Gardens in Macquarie Park. These investigations have generally revealed very low artefact densities within heavily disturbed contexts.
- ♦ Previous research and ethnographic information suggest that the university grounds were likely to have been used only ephemerally or transiently in the past. Typically, large creeklines or swamps would have formed the focus of long-term or repeated occupation, and neither types of resource are within the subject area.
- ♦ Aboriginal Heritage Information Management System (AHIMS) database search results demonstrate that evidence of Aboriginal occupation in the general vicinity of the university is limited, and usually expressed as low density artefact scatters, isolated objects and/or

Potential Archaeological Deposits (PADs). These findings are, however, constrained by the limited investigations that have occurred in the area.

- ◆ No registered Aboriginal sites have been identified within Macquarie University.
- ◆ Existing information suggests that much of the subject area has been heavily disturbed by historical land use and activities, primarily for market gardening. This disturbance has reduced or removed the potential for cultural materials to be present in these locales.
- ◆ Archaeological survey identified three areas within the broader University Campus that were of Aboriginal archaeological sensitivity (Figure 3). None of these areas are within the area proposed for the CCP upgrade.
- ◆ The assessment considered that the subject area has low to nil potential for cultural materials to be present, with the exception of the three areas of archaeological sensitivity. For these three areas, the assessment recommended that further assessment and investigation be undertaken if they were subject to future development.
- ◆ The assessment recommended that an unexpected finds procedure be implemented for development across the subject area, and that consultation with the Metropolitan LALC be maintained for any activities where excavation was required.

Subsequent Aboriginal heritage advice developed by Extent Heritage to explore the CCP in more detail found that:

- ◆ Few archaeological assessments have been undertaken within Macquarie University and the surrounding area.
- ◆ Regional archaeological information suggests that cultural material if present would likely consist of various densities of Aboriginal objects (stone artefacts) either on the surface or sub-surface to depths of perhaps 50cm. (This excluded the potential for soil profiles to be deeply buried by introduced fill, as is the case in some parts of the CCP).
- ◆ The spatial distribution of these sites is generally linked to the presence of water courses, with larger river corridors being of greater significance. The CCP is in the general vicinity of a minor first order creekline, and some distance from the more significant Lane Cover River (>500m). As such, it is considered that any cultural material would reflect ephemeral or transient use of the locale, and likely be of low scientific significance.
- ◆ No registered Aboriginal sites have been identified within Macquarie University.
- ◆ Regardless of the cultural material that may have been present on the study area, a wealth of photographs from the 1960s to present day reveal that there has been extensive disturbance in the late 20th Century.
- ◆ Consultation with the Metropolitan LALC did not identify any site-specific intangible values associated with the CCP.
- ◆ The assessment found the subject area to have low to nil archaeological potential.
- ◆ The preparation and implementation of an ACHMP was recommended.

An updated basic search of the cadastral lot comprising the University Campus, undertaken during the preparation of this ACHMP, confirmed that no Aboriginal sites have been registered on AHIMS (Client Service ID 397652).





Figure 3. Corresponding areas of Aboriginal archaeological sensitivity (blue) within Macquarie University campus (MDCA 2012:15, with Extent Heritage edits). The CCP development area is circled in red.



### 3.2.1 Existing disturbance

#### 1CC and Central Courtyard

The 1CC and Central Courtyard (Figure 1) has been subject to extensive disturbance in the latter part of the 20th Century, which has likely heavily impacted and/or destroyed any material cultural heritage that may have been present within the footprint.

For the most part the proposed CCP development comprises the *replacement* of existing buildings (C9A and C10A) and carparking areas that were established on the study area in the late 1960s. An overlay of the proposed CCP footprint with the original building structures (Figure 1) reveals that all but certain components of the landscaping are within this former development curtilage. The foundations of these previous structures, which are clearly present today (Plates 1-3), as well as the surface of the carparking area, indicate that they are several metres lower than surrounding landscape. Hence, any shallow cultural deposits that may have been present have likely been lost as a result of this previous development. Photographs of the construction of the original buildings clearly show these original excavations (Figure 4) with only the courtyard appearing to reflect the natural land surface. Photographs of the area prior to its construction in 1966 (Figure 5) and 1967 (Figure 7) further show earthworks, including what appears to be significant cutting and filling – most evident by the clear bench of several metres shown in Figure 6 – across much of the CCP area.

In relation to the courtyard area to the south of the CCP area, and to the car parking area to the west of the CCP area, it is unlikely that these locations remained unaffected by the surrounding developments. Indeed, a photograph of the study area in 1979 (Figure 8) suggests that the courtyard has extensive exposed clay (B2 horizon) with only minimal – and likely introduced – topsoil. This was confirmed by geotechnical information undertaken within the courtyard area, which revealed a soil profile of concrete (0-20cm) and fine to coarse-grained sandy gravel fill (20-30cm) onto a residual silty clay that can be interpreted as a B2 horizon (Appendix 4). Observations of the study area today show that the courtyard area has since been affected by construction of a range of hard-surfaces and infrastructure (e.g. drainage, lighting), and the effects of a large number of tree plantings (Plate 3), and as such the potential for the presence of intact topsoils is considered unlikely. In addition, the proposed works to the courtyard will raise the finished level by 500-800mm, rather than this area being excavated.

In relation to the landscaping proposed to the north of the CCP structures, visual inspection indicates that today these areas appear relatively undisturbed. However, historical photographs from the 1960s (Figures 5-8) demonstrate that these areas, have been subject to earthworks as well. Photographs from the 1970s (Figure 9-11) further show a range of ancillary activities (including car parking) and truncated surfaces evident in these areas during this time. Further discussion of these areas is discussed below.

While the angle of the historical photographs does not allow clear overlays to be made with the current CCP footprint, it is clear that considerable landscape modification has occurred to the general area encompassing the existing courtyard, former buildings and carparking area in the central, southern and western portions of the CCP. These include significant cutting, with Figure 5 and 7 suggesting that soil to the height of a vehicle (presumably 1.8-2.5m) has been removed from large parts of the study area. As outlined above, cultural materials are generally considered to be constrained to the upper 50cm of the natural soil profile, and hence have likely been lost. While the extent of earthworks within the courtyard to the south and the proposed landscaping areas to the north are less clear, construction activities have clearly occurred during and following the construction of buildings C9A and C10A on the

site. Given the shallow nature of any cultural materials, it is considered that, even in these areas, significant impact and loss of such deposits has likely occurred.

## **R1 and R2**

While this area does not appear to have been subject to the same level of deep impacts as other parts of the CCP, nonetheless there is evidence of earthworks that have likely resulted in truncation and/or modification to any natural soil profile (and associated cultural material if present).

This is most evident in the 1967 and 1972 photographs that show significant earthworks occurring in the general vicinity of the study area (Figures 8 and 10). While no earthworks can be directly correlated to the site itself, a number of roads and tracks running between the various activities are clearly evident in the study area's curtilage. A range of structures and plantings (notably two poplar/coniferous trees) evident in 1967 are no longer present on site, and suggest subsequent earthworks has occurred. Notably, the large six-storey structure immediately south of the study area in the 1967 photograph does not appear to be the current structure (Building C7A) at the end of Gymnasium Road, and indirectly suggests major demolition and subsequent re-construction has occurred on, or within, the southern portion of the study area (Figure 8). Also in the 1967 photograph, it is highlighted that the recently established amphitheatre has resulted in a disruption to Mars Creek for several hundred metres. This indirectly suggests various infilling and vegetation removal of this alignment must have occurred, parts of which would be encompassed within the study area. The extent of these works may be shown in the 1966 photograph (Figure 7) reportedly taken either within, or just to the north of, the study area, and which shows excavations of >2m below surface as part construction activities.

A more recent photograph from 2009 shows that the study area encompassed a range of roads, carparks and smaller house structures (Figure 12). These would all have resulted in some level of ground disturbance, with road construction usually requiring 30-40cm of excavation prior to their establishment, and house sites invariably levelled to an under-lying hard surface before construction. Further, the various services and drainage usually needed for these activities result in even greater depths of impact.

Finally, Macquarie University has provided Extent Heritage with surface height data compiled from both the 1965 works, and the current levels (recovered as part of the CCP project) (Figure 13). Overall, these suggest truncation of the soil profile by ~1m in the south and east of the site (encompassing parts of R1), and substantial elevation of the site in the north and west. The areas closest to the former alignment of Mars Creek have been buried beneath 2-6m of introduced material, with 1965 levels of ~52m AHD compared with the current surface of ~56m AHD. This then suggests that parts of the study area to the south and east have likely had the natural soil profile (and any associated cultural material if present) removed. To the north and west, the natural soil profile may have been buried at a considerable depth, however the works associated with the 1960s construction of the area would suggest that the deposits could have been significantly modified/truncated prior to their burial. The introduction of this volume of fill would also have resulted in modification and compression of any natural soil profile (if present), and is commonly considered by NSW OEH to represent a significant impact in other contexts.

Regardless of the cultural material that may have been present in the study area, a wealth of photographs from the 1960s to present day reveal that there has been extensive disturbance in the late 20th Century. This includes the construction of several multi-storey buildings, within the footprint of which the CCP is largely contained. The evidence suggests that excavations of up to 2m in depth have

occurred across much of the study area, with the loss of topsoil across the rest of the study area. Only the courtyard itself appears to show limited evidence of truncation, but even here introduction of hard-surfaces, infrastructure and numerous tree plantings would have affected the integrity, and therefore significance, of any cultural material that may have been present. Consultation with the Metropolitan LALC did not identify any site-specific intangible values associated with the CCP.



Plate 1. The proposed CCP location, looking north. Note the modified Mars Creek in the background.



Plate 2. The proposed CCP location, looking east. Note the sharp drop between the left (north) and right (south) sides of the study area. The right locations are considered closer to natural ground levels, indicating significant excavation to much of the study area in the left.





Plate 3. The proposed CCP location, looking southeast. This photograph shows the courtyard, which appears to be closest to the natural pre-1960 ground surface, however has been affected by drainage works, tree planting, and introduction of hard-surfaces, all of which likely impacted any under-lying shallow cultural deposits.



Figure 4. An image of the of the construction of buildings C9A and C10A in 1967, which were formerly situated on the CCP study area, looking west. Note the excavation of several metres below the natural landsurface, which is evident by the level of the central culturally planted courtyard just evident in the right of the photograph. Establishment of paving, lighting and other cultural planting to the left (south) of the building footprint is also evident, and likely affected any shallow deposits if present.



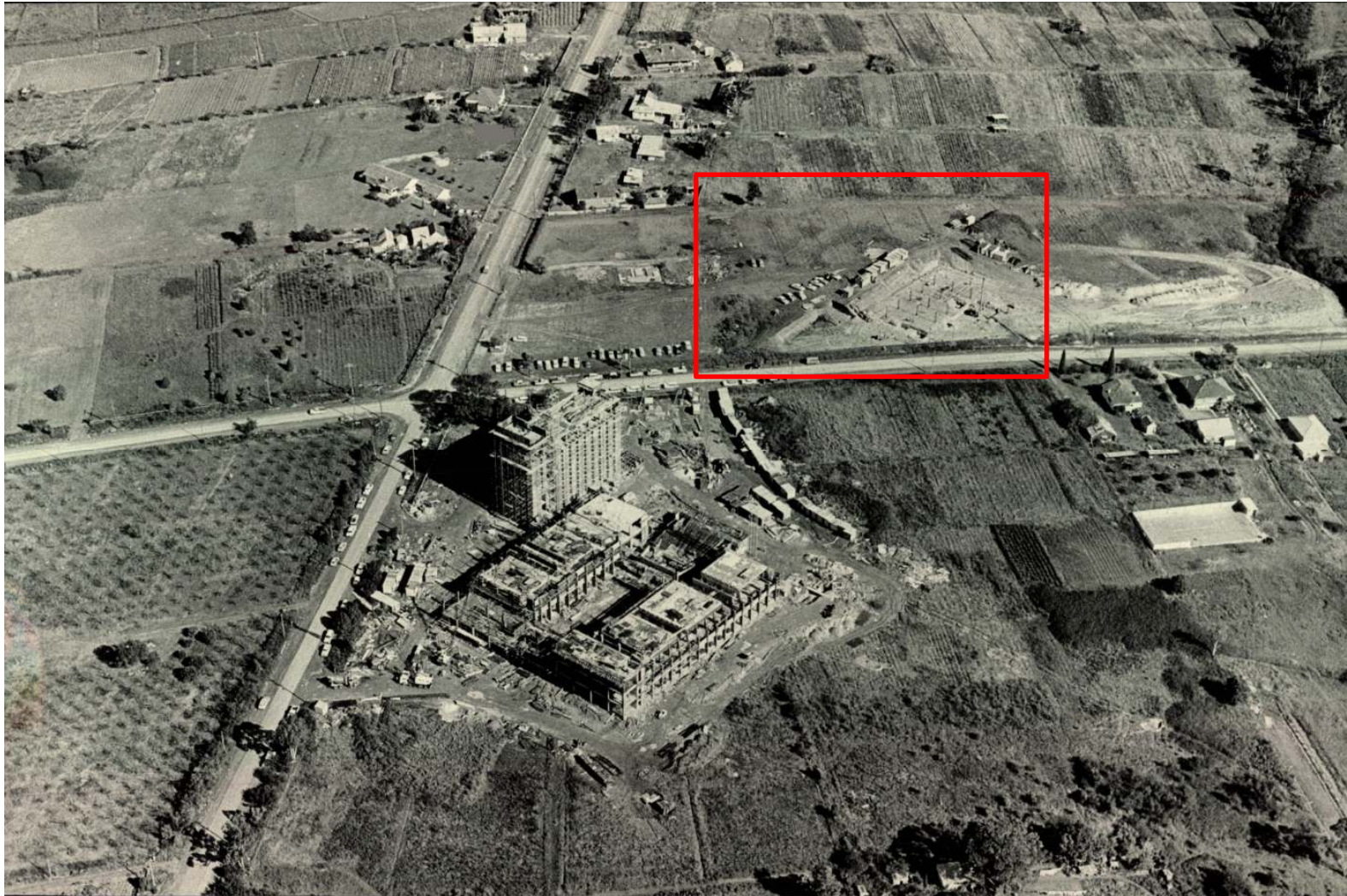


Figure 5. An image of the construction of buildings C7A and C7B in 1966, looking southwest. The general location of the CCP is marked, and indicates that earthworks were occurring in this area leading up to the construction of Buildings C9A and C10A.





Figure 6. An image of the University in 1966 reported as just south of the amphitheatre, taken from the corner of Gymnasium Road, looking northeast towards Mars Creek in the background. This area likely is either within, or on the edge of, the northwest corner of the study area, and shows excavations in excess of 2m in depth (note the mechanical excavator in the left of photograph for scale).



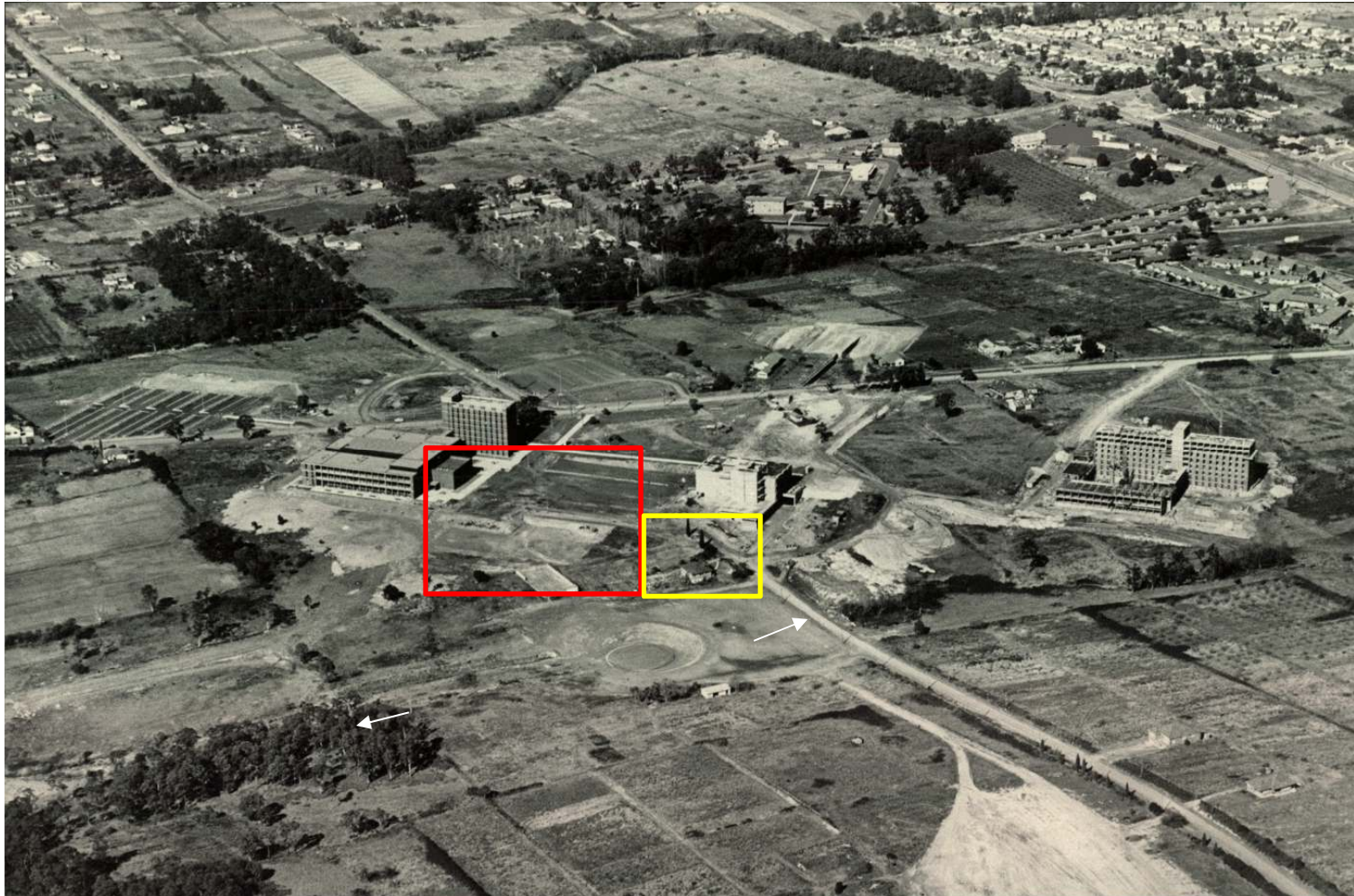


Figure 7. An image of the university in 1967, looking southeast towards the future location of Buildings C9A and C10A – where CCP is currently proposed (1CC in red; R1 and R2 in yellow). This photograph shows that significant earthworks have occurred in this general location, including numerous roads and tracks running through the study area. Given the shallow nature of the soil profile, these would likely have affected any cultural materials (if present). Also note the two arrows showing the two ends of Mars Creek, recently disconnected by the establishment of the amphitheatre and associated works (i.e. the de-vegetation and infilling of the creek).





Figure 8. An image of the university in 1979, looking northwest towards the recently completed courtyard (planted with trees in the foreground) and buildings C9A and C10A– where the CCP is currently proposed (shown in red). This photograph shows clearing of the landscape behind the buildings, in areas proposed for landscaping and residential accommodation in the CCP development. Note the courtyard that also appear to show extensive truncated clay overlain by a patchy – presumably introduced – topsoil.

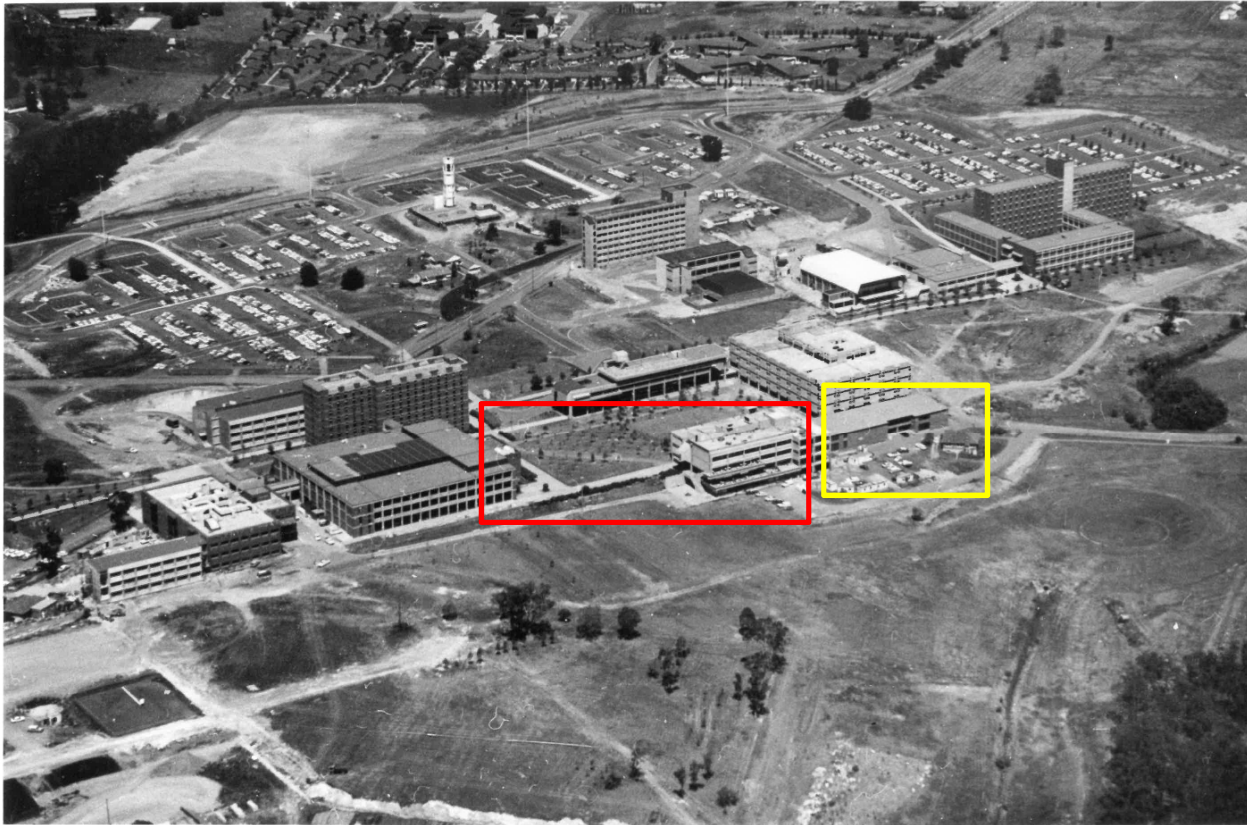


Figure 9. An image of the university in 1972, looking southwest towards the recently completed buildings C9A and C10A— where CCP is currently proposed (1CC in red; R1 and R2 in yellow). The carparking and other activities in front of the building, currently proposed as landscaping in the CCP designs. Note the lack of step elevation change evident in the late 1960s in this location, suggesting some form of filling and levelling has occurred in several parts of the surrounding area.



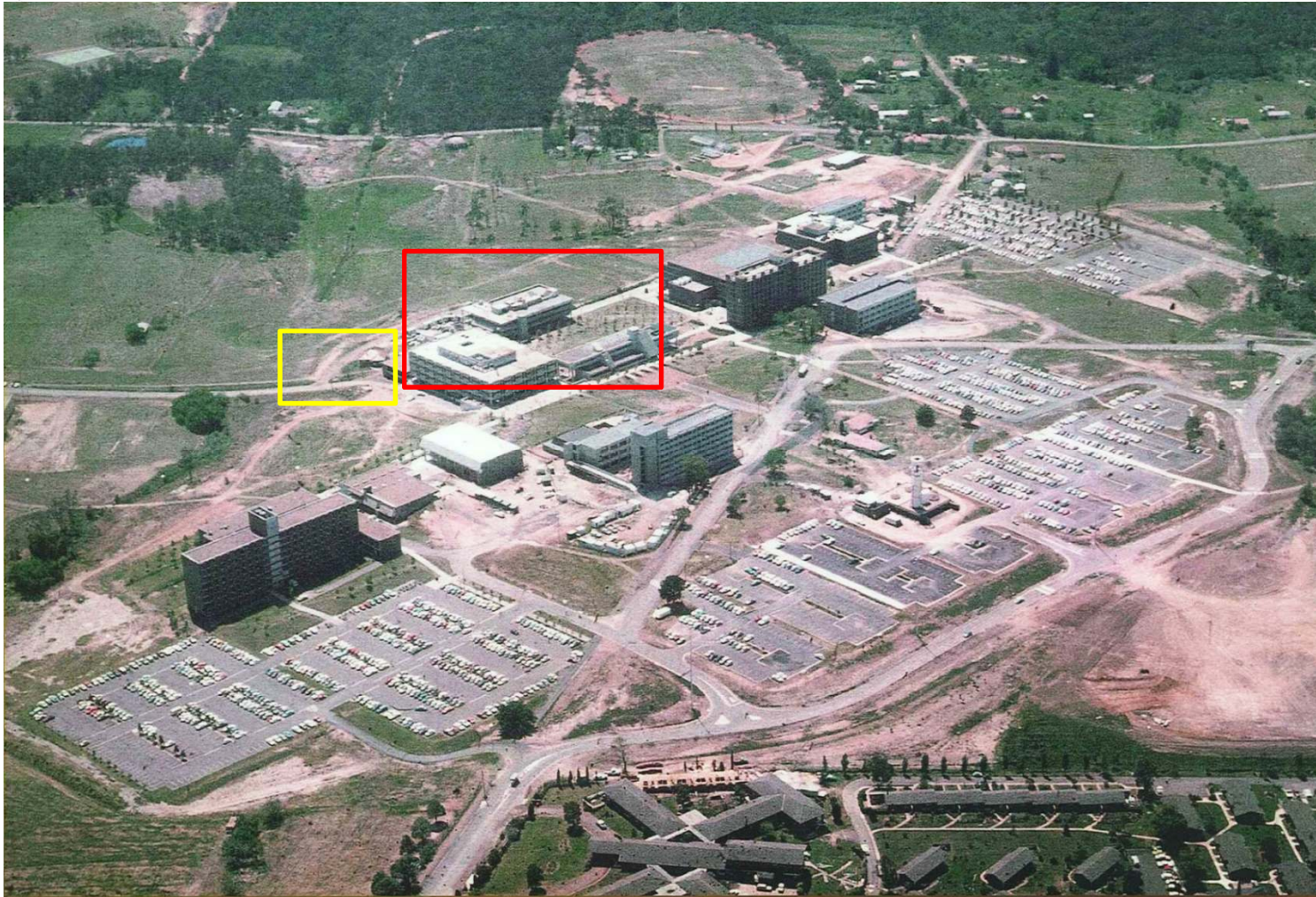


Figure 10. An image of the university in 1972, looking northeast. The CCP location is shown in red. Note several tracks and exposed areas behind Buildings C9A and C10A, and which likely reflect the loss of topsoil in these locations.



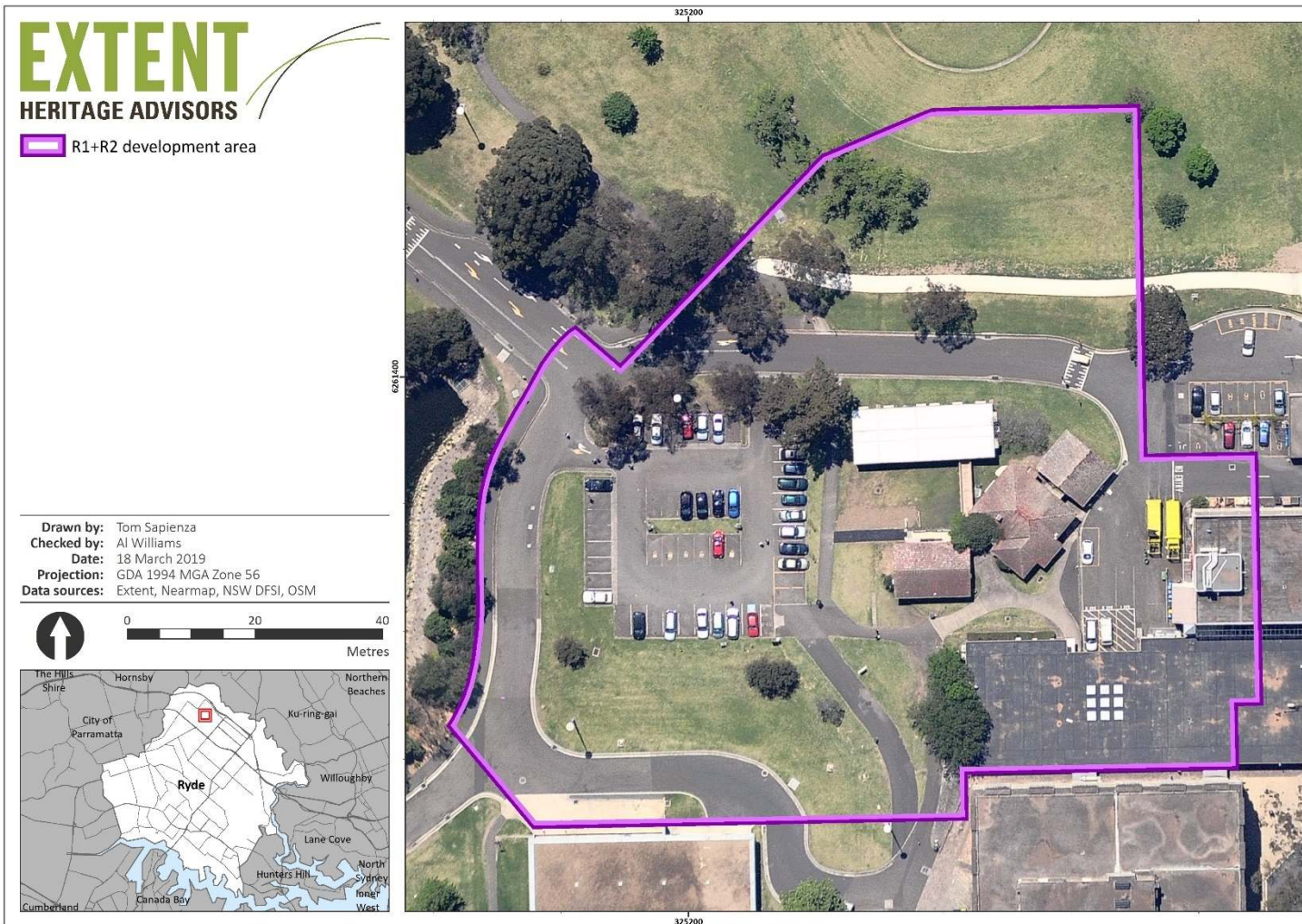


Figure 11. An image of the R1 and R2 area in 2009. The area is similar to its current day appearance, although a range of smaller structures evident across the eastern portion of this locale have since been removed. These structures have likely resulted in disturbance to the under-lying soil profile, which in this locale appears close to the 1965 levels (see Figure 12).



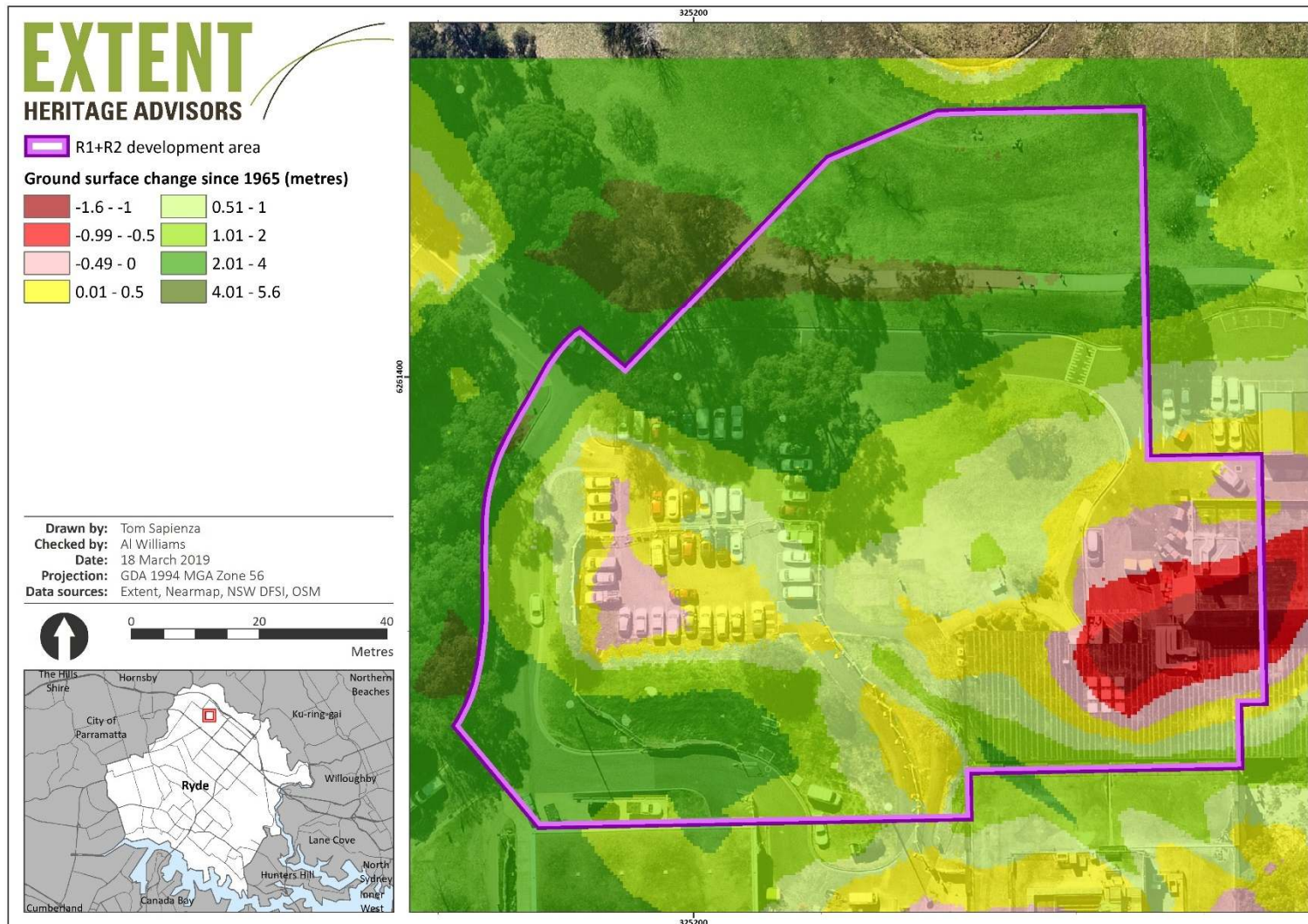


Figure 12. An interpolation of the levels of cut and fill that have occurred within the study area since 1965 and based on geotechnical data obtained as part of the CCP project.

### 3.2.2 The Archaeological Resource

Regional archaeological information suggests that cultural material if present would likely consist of various densities of Aboriginal objects (stone artefacts) either on the surface or sub-surface to depths of perhaps 50cm. The spatial distribution of these sites is generally linked to the presence of water courses, with larger river corridors being of greater significance. The CCP is in the general vicinity of a minor first order creekline, and some distance from the more significant Lane Cover River (>500m). As such, it is considered that any cultural material would reflect ephemeral or transient use of the locale, and likely be of low scientific significance. Consultation with the Metropolitan LALC did not identify any site-specific intangible values associated with the CCP. It is considered unlikely that more significant site types such as rockshelters, rock engravings and/or grinding grooves would be present within the CCP, since there is no evidence that sandstone outcropping was ever present (as demonstrated by the geotechnical results and the aerial photographs).

Regardless of the cultural material that may have been present in the study area, a wealth of photographs from the 1960s to present day reveal that there has been extensive disturbance in the late 20th Century. This includes the construction of several multi-storey buildings, within the footprint of which the CCP is largely contained. This data shows the likely truncation and/or loss of the natural soil profile, most evident by the complete removal of a 200m stretch of Mars Creek in 1966, and which likely included parts of the study area. The evidence suggests that excavations of up to 2m in depth have occurred across parts of the study area, with the loss of topsoil (and any associated cultural material) across the rest of the study area. In the case of R1 and R2, this data suggests that several parts of the site were subject to extensive filling, which may have inadvertently buried any natural soil profiles if remaining, but would equally have resulted in indirect impacts through compression and sediment mixing (either during establishment or through more recent pedoturbation). Only the courtyard itself appears to show limited evidence of truncation, but even here introduction of hard-surfaces, infrastructure and numerous tree plantings would have affected the integrity, and therefore significance, of any cultural material that may have been present. Further, given the similar levels of this area with those in R1 and R2 (that are known to encompass 2-4m of fill), it is considered high likely that similar activities must have occurred.

In conclusion, it is therefore considered that much of the study area has been truncated to depths exceeding those where the natural soil profile would have been present; and as such it is considered unlikely that cultural materials (if present) would have survived (Figure 13). *It is considered that there is low risk of significant cultural materials being present in these areas.* A small part of the northwest of the study area appears to have been subject to the introduction of fill materials (mainly parts of R1 and R2), and these areas have *some* potential for disparate patches of deeply buried natural soil profiles, within which cultural materials may be present (Figure 13). Although even here, there is evidence of numerous disturbances prior to the filling activities.

### 3.2.3 Cultural Values

In 2015, as part of the CCP project, Balarniji (2016) undertook an Indigenous engagement strategy with staff from the Walanga Muru (Office of Indigenous Strategy at Macquarie University). This included three meetings/site visits with the Indigenous staff (n=10), as well as a review of the local ethnographic history by Dr. Billy Griffiths (Deakin University). While acknowledging that the strategy was not focussed on the potential Aboriginal heritage impacts of the CCP project, it is noted that the strategy makes no reference to any site-specific concerns. Rather, its key findings recommend increasing the visibility and

engagement of cultural heritage using the CCP as a centrepiece. The review of the local ethnographic history similarly did not identify any ethnographic accounts that could be linked to the CCP, with documented past activity generally being associated with the nearby Lane Cove River.

During the development of the present document, a site meeting was undertaken with a site officer from the Metropolitan LALC, Selina Timothy, on 22 January 2019. The site officer agreed that the CCP has been heavily disturbed in the historical period, and recommended that the CCP development proceed without any further Aboriginal heritage assessment, pending the development and endorsement of a Campus-wide heritage management plan (HMP).

More generally, the Metropolitan LALC representative acknowledged that the Sydney region as a whole was of cultural significance to Aboriginal people, and that the preservation and conservation of Aboriginal cultural and archaeological sites was of high importance for maintaining a connection to Country. The site officer suggested the use of Aboriginal language in any interpretation of the subject area and the incorporation of native plants into landscaping elements across the campus (see Appendix 1).

Additional consultation was undertaken as part of the finalisation process of this document with nine Registered Aboriginal Parties (RAP) (Section 5.2; Appendix 1). This included a meeting with several of the RAPs, and written feedback from the remaining. With one exception, no specific additional areas of cultural value were identified beyond those outlined in Section 3.2.2. Of note was reference made by one of the RAPs (Tocomwall) to a number of Aboriginal massacres reportedly in close proximity, or within, the University grounds. No further details were provided by the RAP, and a review of several literature resources for the region, including the comprehensive history by Dr. Griffiths (see above) and University of Newcastle's recent mapping of such events nationally (<https://c21ch.newcastle.edu.au/colonialmassacres/map.php>), failed to identify any further information on these. If further information in relation to such events is identified during the project, this section will be modified to incorporate such data, and suitably management actions implemented.



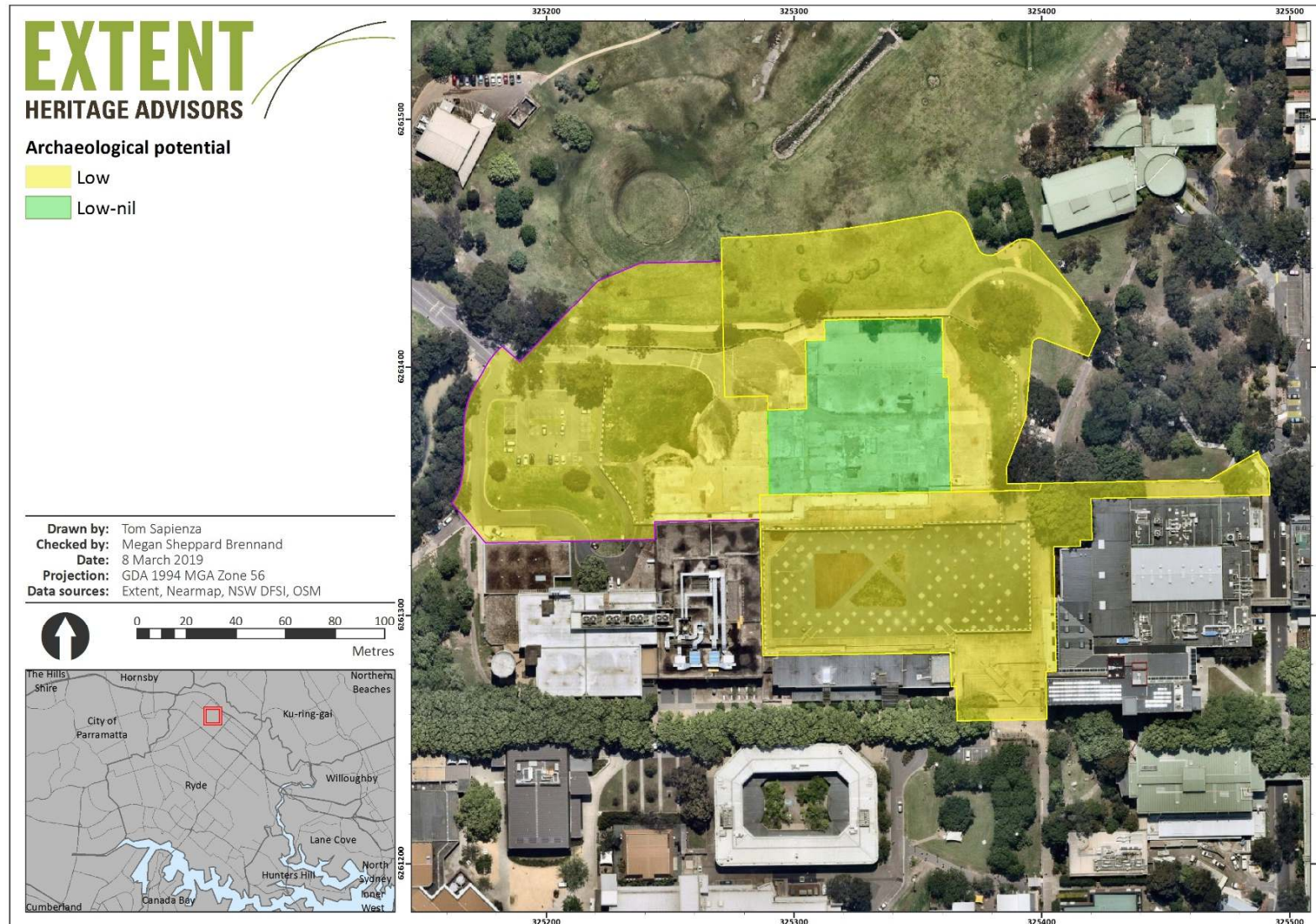


Figure 13. Archaeological potential in the subject area.



## 4. Project Impacts

The development will require the establishment of foundations for several hi-rise structures. As such, both piling and localised deep excavation will be included in the project works. These activities will result in high likelihood that all areas of potential as identified in Figure 13 would be subject to impact by the proposed development.

### 4.1.1 Evaluation of Impacts

While specific details are not available for the broader CCP, the following types of impact are considered likely:

- ♦ **Demolition of existing structures:** In most cases, removal of existing structures would be required to allow re-development. Typically, these activities would be constrained to the current surface, or near surface, although some deeper impacts could occur through removal of basement, existing piling and/or associated sub-surface infrastructure features. *This has largely already been completed for the Project, with only the concrete ground slabs subject to further demolition.*
- ♦ **Piling:** In modern construction, substantial buildings would typically require the installation of piles to support the structure. These are typically spread across the structure's footprint, and more extensively around it's perimeter. Piles come in a variety of forms and sizes, but usually require screwing, drilling or hammering into the ground and often to under-lying bedrock, and as such would impact any subsurface deposits. Further, the structure usually sits upon a series of capping beams that run across the top of the piles. Such beams can often be designed to sit below the current surface, and as such require substantial excavation for their installation.
- ♦ **Excavation:** A range of excavation would likely be required within a structure's footprint, either to establish and supplement the piling program and for basement level requirements.
- ♦ **Indirect activities:** With construction comes a range of indirect activities, such as storage compounds, parking areas, site facilities, etc. All of these would likely have some level of surface and near-surface impacts from their installation and use. There is also potential for indirect sub-surface impacts through compression and/or compaction of the soil profile, although this seems likely minor given the extremely deep depth of any in situ cultural materials.

### 4.1.2 Potential Aboriginal Heritage Impact

Based on the information available for the subject area, it is considered that cultural materials (if present) would likely be composed of low density artefact scatters, isolated finds and/or PADs in close proximity to water sources. Disturbance plays a key role in the survival of such deposits, and in the case of the CCP, past impacts have been extensive.

The areas considered to contain low archaeological potential are 1CC paving and landscaping, the Central Courtyard and the R1 + R2 residential development (Figure 13). The remainder of the CCP (Figure 13) is considered to have low-nil risk of containing Aboriginal objects, and as such proposed works are considered to have low risk of harming/destroying cultural materials.

No areas identified as having Aboriginal cultural value would be affected by the development.

## 5. Aboriginal Archaeological Management Plan

### 5.1 General Approach

To implement a consistent and clear framework for the Aboriginal cultural heritage management for the CCP, this ACHMP proposes a strategic approach to manage Aboriginal heritage for the subject area which puts in place measures for the investigation, assessment and management of unexpected finds throughout the course of the CCP development.

The following mitigation policies and procedures should be adopted as part of the overall management of the site's archaeological resource.

#### 5.1.1 Prior to Construction

- ♦ An Aboriginal cultural heritage awareness induction should be included in the general site induction for all staff and contractors involved in the works, so that all personnel involved are aware of heritage and archaeological requirements.
- ♦ The heritage induction should be formulated to include information on the Aboriginal archaeological and cultural resource of the subject area, its cultural values, archaeological sensitivity zones, and protocols that apply to their protection.
- ♦ The Relevant Aboriginal Parties must be provided an opportunity to undertake a site inspection.

#### 5.1.2 During Construction

- ♦ In order to implement relevant Aboriginal cultural heritage controls, the Project Archaeologist should be regularly involved in the Project team communication about the progress of development within the subject area. Depending on the nature of impact, activities in accordance with Section 6 should be implemented, which may include archaeological excavation and/or monitoring of the upper soil profile. This should include documented inspections by specialised staff (heritage architect, arborist, environmental officer and/or the Project archaeologist) to ensure mitigation measures are working effectively, and to ensure timely decision making and timely delivery of advice in the event of any unexpected changes to the Project, or unexpected archaeological discoveries.
- ♦ In the event that suspected or known Aboriginal object/s are identified, the unexpected finds procedures as defined in this document must be implemented. This would likely involve all works in the area to cease, while the find is managed.

#### 5.1.3 Post Construction

- ♦ Within 12 months of the construction being completed, a report summarising any archaeological excavations and/or monitoring undertaken during the works must be developed and lodged with OEH. Further details of this report are presented in Sections 6.6 and 6.7.

The site officer from MLALC suggested the use of Aboriginal language in any interpretation of the subject area and the incorporation of native plants into landscaping elements across the campus.

## 5.2 Aboriginal Community Consultation

The engagement and involvement of the Aboriginal community is an important part of the heritage management processes of the Project. Aboriginal consultation has occurred since the inception of the Project (via its various assessment phases) in 2019 (Appendix 1).

A formal Aboriginal consultation process in accordance with OEH guidelines has been undertaken for the preparation of this document. This process resulted in the identification of 44 potential stakeholder organisations who may hold cultural knowledge for the area and who may wish to register an interest in the Project. Notification letters were distributed to these 44 organisations to determine their interest in the Project, and an advertisement was also placed in the *Northern District Times* seeking expressions of interest from Aboriginal community members. Nine of these organisations registered as Registered Aboriginal Parties (RAPs) for the Project:

- ◆ Metropolitan Local Aboriginal Land Council;
- ◆ A1 Indigenous Services;
- ◆ Amanda Hickey Cultural Services;
- ◆ Barking Owl Aboriginal Corporation;
- ◆ Darug Aboriginal Cultural Heritage Assessments
- ◆ Darug Boorooberongal Elders Aboriginal Corporation;
- ◆ Didge Ngunawal Clan;
- ◆ Tocomwall; and
- ◆ Wailwan Aboriginal Group.

Macquarie University proposes to continue the consultation process with these (9) Aboriginal stakeholders throughout the course of the Project. Consultation includes the following (Table 2):

1. **Liaison and development of the ACHMP** – Relevant Aboriginal Parties has been provided with a copy of the draft ACHMP for their review and feedback, prior to its adoption. Comments have been received and incorporated, where relevant. A period of 21 days will be provided for stakeholder review, or when comments from all RAPs are received. This phase has been completed, with changes made throughout the document, as well as the specific discussions in Appendix 1.
2. **Opportunity for the RAPs to undertake a site inspection prior to construction** – all Relevant Aboriginal Parties will be provided an opportunity to visit and walk around the site prior to construction occurring.
3. **Involvement in archaeological investigation, mitigations and/or monitoring** – all Relevant Aboriginal Parties with appropriate OH&S and insurance requirements will be asked to tender for works on the project, and were successful afforded the opportunity to participate in the mitigation works outlined in this ACHMP.

4. **Final debrief** – Macquarie University would hold a series of meetings at the end of the Project to review the archaeological program (if implemented) to identify the successes and failures of the Project for incorporation into subsequent projects.

The large number of Relevant Aboriginal Parties likely to be involved in the Project may mean they cannot all be involved in all stages of the work. For this reason, in relation to (2) above, development of a tender process is proposed for Relevant Aboriginal Parties, which will be managed by Extent Heritage personnel throughout the life of the Project. The subsequent selection of RAPs will then provide some certainty for when their services are required. The RAP selection process will be developed once Macquarie University has feedback on (2) above, and when some indication of the volume and timing of mitigation works is determined.

### 5.2.1 Consultation Timeframes

Table 2: Aboriginal community consultation tasks and timeframes for the Project.

Task	Details	Timeframe (estimate)	Dates (estimate)
<b>Liaison and development of the ACHMP</b>	Relevant Aboriginal Parties will be provided with a copy of the ACHMP for their feedback and review, prior to its implementation	3 weeks	<b>COMPLETED (14-24 April 2019)</b>
<b>Pre-construction site inspection</b>	RAPs be afforded the opportunity to visit the site prior to construction	1 day	<b>Prior to construction</b>
<b>Involvement in archaeological mitigation works</b>	Timeframes will vary depending on the type of mitigation (collection, monitoring, test excavation, salvage excavation) and the work area.	Varies Over course of the Project	<b>Varies</b> <b>Over course of the Project</b>
<b>Review of archaeological mitigation</b>	Discussions are to be held at the completion of archaeological mitigation works per work area.	Within 4 weeks of the completion of the mitigation works	<b>Varies</b> <b>Over course of the Project</b>
<b>Final Reporting</b>	Review of draft archaeological reports to comment on cultural heritage significance of the archaeological sites mitigated.  All RAPs provided a digital copy of the final archaeological report	28 days to provide feedback on draft reports	<b>Varies</b> <b>Over course of the Project</b>

### 5.2.2 RAP Selection Process

At the request of the RAPs, a tender or selection process for on-site works will be undertaken once the quantum of works is understood. This is in contrast to a roster system originally proposed, and will therefore potentially result in inequitable site attendance by the RAPs.

The selection process would be determined by Extent once the quantum of works is understood, and in parallel with the endorsement of the ACHMP by DPE. Only RAPs that have registered interest will be considered in the tender process. The tender process may result in multiple successful tenderers, with a range of different tasks and phases likely required.

The tender process would provide each RAP organisation with two weeks to provide a response to the selection criteria. These would be tailored for the specific project requirements, but as a default would include:

1. Demonstrated involvement and engagement in the project.
2. Demonstrated company experience, including any regional and/or site specific cultural knowledge.
3. Demonstrated connection to country.
4. Experience of the proposed site's officers in undertaking the works.
5. Fees for undertaking the works.
6. Having the necessary insurances and other HSE requirements to participate in the works.

## 5.3 Hierarchical Management Actions

With types of impact broadly defined based on current knowledge (Section 3), the strategic approach proposed includes the following hierarchical management options, each of which will be further described in Section 6.

### 5.3.1 Areas of High Archaeological Potential or Value

Currently, **no areas of high archaeological value or potential** have been identified within the subject area, however, this may require revision as work is undertaken and cultural material (if present) is identified and assessed. Should such deposits be identified, the development should consider re-design and/or modifications to avoid impact.

Where avoidance of impact is unfeasible, minimising such impact through development design and controls should be prioritised, and appropriate heritage mitigation measures should be implemented. This may include a staged program of archaeological test and salvage excavation, community collection, public interpretation and outreach programs, for example.

### 5.3.2 Areas of Moderate Archaeological Potential

Currently, **no areas of moderate archaeological value or potential** have been identified within the subject area, however, this may require revision as work is undertaken and cultural material (if present) is identified and assessed. Should such deposits be identified, the development should consider re-design and/or modifications to avoid impact.

Where avoidance of impact is unfeasible, minimising such impact through development design and controls should be prioritised, and appropriate heritage mitigation measures should be implemented. This may include a staged program of archaeological test and salvage excavation, community collection, public interpretation and outreach programs, for example.

### 5.3.3 Areas of Low Archaeological Potential

The areas of low archaeological potential are 1CC paving and landscaping and the Central Courtyard (Figure 13). The removal of topsoil in these areas should be monitored by Extent Heritage personnel and/or members of the Aboriginal community to ensure any cultural material (if present) can be managed accordingly. It is highlighted that in the case of the R1 + R2 residential development area, monitoring of the topsoil would first require the removal of the upper ~2m of introduced fill. Given the potential mixing of the under-lying natural soil profile with the introduced fill, monitoring should be initiated at, or near the current day surface.

If intact topsoil units are found, they would be re-classified as of moderate archaeological potential and managed in accordance with Section 5.3.2.

### 5.3.4 Areas of Low-Nil Archaeological Potential

Area 1CC, in the centre of the CCP, is considered to have low-nil potential for Aboriginal objects to be present (Figure 13).

No further archaeological mitigation measures are proposed for this area. This area would be managed through unexpected finds procedures and human remains protocols (Appendix 2 and Appendix 3).

#### 5.3.5 Areas with Known Intangible Values.

Currently, no areas of known intangible values have been identified within the subject area.



## 6. Methods and Procedures

### 6.1 General

This section provides overarching archaeological methodology, team, timeframes and other requirements to meet the strategic Aboriginal heritage approach outlined in Section 5.

The methodologies are also based on the type of impact (direct or indirect) and the type of construction techniques. The construction methodologies include demolition of existing structures, piling and excavation. Indirect impacts may include vehicle movement, spoil removal, site facilities establishment, and other logistical activities.

### 6.2 Areas of High Archaeological Potential

Currently, **no areas of high archaeological potential** have been identified within the CCP, but this may require revision as the Project and any archaeological investigations progress.

Any areas identified as of high archaeological potential should be subject to development avoidance and/or additional heritage mitigation. As a default, additional heritage mitigations would consist of further sub-surface (salvage) archaeological excavation. However, other types of mitigation may be considered instead or, and/or in addition to such works, where agreed by the Project Archaeologist, registered Aboriginal parties, and Macquarie University. Any mitigation that does not consist of sub-surface (salvage) archaeological excavation must be correlated to the cultural values and/or material culture of the subject area.

#### Research Objectives

In the event that sub-surface (salvage) archaeological excavation is undertaken, the following research objectives should form the focus of the work:

- ◆ Using fine resolution excavation and environmental analyses to further characterise the archaeological deposits relating to the prehistoric Aboriginal occupation. This includes a greater understanding of resource exploitation; identification of any change through time in spatial and chronological phases of activity; and site formation processes.
- ◆ Obtain a statistically viable assemblage of cultural material, for detailed analysis of the lithic assemblage to provide further information on the suite of production activities, from exploitation of the raw material outcrops to the development of complex stone tools.
- ◆ To use the findings of excavation program to further understand the nature and duration of Aboriginal occupation within the Sydney Region, and where possible, compare it with other locally documented sites.
- ◆ To allow greater cultural association between the site and the RAPs (i.e. a form of cultural salvage) through involvement in the excavation, and options for the interpretation of the results, should the community decide that this is appropriate.

The following general approach would apply to all sub-surface (salvage) archaeological excavations within these areas identified as of high cultural potential or value:

- ◆ Prior to any excavations, suitable HSE procedures and processes must be implemented in the case of asbestos and/or other soil contaminants that the excavation team may interact with.
- ◆ Excavations should consist of a significant proportion of the cultural deposit in question. Typically, in the Sydney Basin, this is in the order of 100m<sup>2</sup> for a given site, with the smallest salvage area being 25m<sup>2</sup>. However, the overall size of the cultural deposit and the amount of impact affecting the cultural deposit should also be considered in the development of a spatial amount of excavation.
- ◆ Excavations would be undertaken by a team of heritage professionals and/or Aboriginal stakeholder.
- ◆ Mechanical excavation would be undertaken to remove the modern fill and/or overburden to the surface (or near-surface) of the cultural deposit (where required). None of these overlying deposits would be subject to further investigation. The mechanical excavation would also undertake the necessary earthworks to allow a safe work space to be established for the subsequent salvage excavations.
- ◆ Salvage excavations are initially proposed to be undertaken as a series of contiguous 0.25 m<sup>2</sup> (50x50cm) pits in square shape, focussing on the cultural deposit of interest. The shape, size and direction of the salvage may be modified during the program to ensure the maximum recovery of cultural deposits; and to fulfil the research objectives.
- ◆ All excavation would be undertaken manually in 5cm spits using hand tools
- ◆ Salvage pits would be excavated until it proves unsafe to continue excavation, the depth of the proposed impact has been reached, and/or the base of identified Aboriginal artefact bearing units, continuing below this depth to confirm the soils below are culturally sterile.
- ◆ All material from the salvage pits would be bucketed and sieved through 3 mm mesh sieve.
- ◆ All Aboriginal objects and other archaeological material would be appropriately labelled and bagged for subsequent analysis.
- ◆ Additional samples for dating, soil, and/or palaeoclimatic information will also be taken where appropriate.
- ◆ Soil profiles will be recorded in accordance with the Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales (OEH, 2010), including scaled drawings, photographs, and written descriptions.
- ◆ Where the above methodology proves unfeasible or unsuitable, the proposed methodology may be revised at the discretion of the Project Archaeologist in consultation with Macquarie University and Relevant Aboriginal Parties based on the archaeological site, timeframes and/or other issues.

### 6.3 Areas of Moderate Archaeological Potential

Currently, **no areas of moderate archaeological potential** have been identified within the CCP, but this may require revision as the Project and any archaeological investigations progress.

Any areas identified as of moderate archaeological potential should be subject to development avoidance and/or additional heritage mitigation. As a default, additional heritage mitigations would consist of further sub-surface (test) archaeological excavation. However, other types of mitigation may

be considered instead or, and/or in addition to such works, where agreed by the Project Archaeologist, registered Aboriginal parties, and Macquarie University. Any mitigation that does not consist of sub-surface (test) archaeological excavation must be correlated to the cultural values and/or material culture of the subject area.

## Research Objectives

In the event that sub-surface (test) archaeological excavation is undertaken, the following research objectives should form the focus of the work:

- ◆ Are in-situ deposits present?
- ◆ Are Aboriginal archaeological deposits present? What information can they provide about the past Aboriginal occupation of the study area and the broader region?
- ◆ What impact has the historical occupation and use of the study area had on the remains of earlier Aboriginal occupation?
- ◆ How do the results compare to what was expected based on the desktop research?

## Test Excavations

The key aim of the test excavation program is to identify the presence or absence of Aboriginal objects and their broad spatial patterning across the site. As a default, the following methodology is to be utilised. However, this may require modification in some instances (such as the deep deposits identified in R1+R2), and is permissible where agreed by the Project Archaeologist, registered Aboriginal parties, and Macquarie University.

Test excavation would involve manually dug test pits, spaced at set intervals in a grid across areas of archaeological potential within the impact footprint. The grid would be designed to avoid extant structures and buried services, which will remain until the construction phase of the project. Where test pits need to be moved as a result of extant structures or buried services, they will be placed broadly on the same grid, as close to the original location as possible. The proposed excavation methodology includes:

- ◆ Prior to any excavations, suitable HSE procedures and processes must be implemented in the case of asbestos and/or other soil contaminants that the excavation team may interact with.
- ◆ Placement of test excavation units on a systematic grid across areas of archaeological interest, ensuring that individual units are separated by at least 5m.
- ◆ Manual excavation using hand tools.
- ◆ Individual test excavation units of 0.25 and/or 1m<sup>2</sup> size. Test excavation units may be combined and excavated as necessary to understand the site characteristics.
- ◆ All excavation would be undertaken manually in 10cm spits.
- ◆ Excavation to continue to the base of the identified Aboriginal object-bearing soil(s) and below, sufficient to confirm that the underlying soil(s) is/are culturally sterile.
- ◆ Sieving of all excavated material through a 5mm sieve.
- ◆ Photographic and scale-drawn records of the excavations.

We highlight that excavation procedures and protocols may be modified at the discretion of the Aboriginal Project Archaeologist, in consultation with the RAPs and Macquarie University as the conditions in the field and nature of the excavations develop.

Following these works, the areas of interest would be re-assessed, and would then be subject to the hierarchical management and mitigation measures as presented in Sections 4 and 5 relevant to their revised ranking.

## 6.4 Areas of Low Archaeological Potential

Monitoring of all development work involving excavation or ground surface disturbance to the upper 1m of soil profile should occur in the areas identified as having low archaeological potential (Figure 13). In the case of the R1+R2 area (Figure 1), monitoring would include the over-lying fill (believed to be ~ 2m thick) and the upper 1m of any natural soil profile (if present) beneath it.

The methodology for monitoring would include:

- ♦ Prior to any monitoring, suitable HSE procedures and processes must be implemented in the case of asbestos and/or other soil contaminants that the excavation team may interact with.
- ♦ Monitoring of any over-lying modern/introduced fill to the surface of the natural soil profile (if present) is to be undertaken by the Project Archaeologist and up to 3 RAPs.
- ♦ Monitoring of the removal of the upper soil profile (to a natural or culturally sterile layer) to be undertaken by the Project Archaeologist and up to 3 RAPs.
- ♦ The excavation will be carried out under the direction of Extent Heritage personnel.
- ♦ If evidence of cultural material is identified, works would stop, and the Project Archaeologist in consultation with the RAPs and Macquarie University would determine the archaeological ranking of the find (either of low-nil, moderate and/or high potential). The relevant hierarchical management and mitigation measures as outlined in Sections 6 and 6 of the ACHMP would then be implemented in accordance with this ranking.

## 6.5 Areas of Low -Nil Archaeological Potential

The procedure for discovery of possible human remains and unexpected finds procedure as presented in Appendix 2 and Appendix 3 should be implemented for areas of low-nil archaeological potential (Figure 13).

## 6.6 Post Excavation Analysis

If archaeological excavation were to occur, post excavation analysis would be required to appropriately document the archaeological and cultural findings of the field program. Extent Heritage personnel, in consultation with Macquarie University, would discuss the post excavation analysis and determine the tasks to be implemented.

The following general post excavation approaches may likely be implemented:

- ◆ **Artefact Analysis:** All Aboriginal objects would be recorded, documented and appropriately bagged and labelled for subsequent analysis. The analysis will include raw material types, artefact features, measurements, etc. Additional analysis, such as conjoin analysis and/or use-wear and residue analysis may also be undertaken at this stage. Documentation and long term storage of the artefacts will be undertaken in accordance with the Australian Museum collection policies, which currently forms best practice.
- ◆ **Digitisation and organisation of site records:** All field notes, sketches and photographs will be digitised and organised for subsequent reporting.
- ◆ **Chronological dating:** Where appropriate, radiocarbon and/or OSL samples will be collected and processed to provide an indication of the age of soil profiles and any associated archaeological materials.
- ◆ **Soil Analysis:** Where appropriate, soil samples will be collected to undertake particle size, organic phosphorous, total carbon and other techniques to further characterise the formation and modifications to the soil profile, to further inform the archaeological record.
- ◆ **Palaeo-climatic Analysis:** Where appropriate, samples will be taken for subsequent palaeo-climatic analysis, such as vegetation change (through pollen and phytolith analysis), fire history (charcoal), temperature records (oxygen and carbon isotopes) and other techniques that provide climatic history and context for any archaeological materials recovered.
- ◆ **Other Analysis:** As the Project progresses, additional techniques to provide further information on the cultural history of the subject area may be identified. These analyses would be implemented where appropriate.

## 6.7 Reporting

Each area investigated, salvaged, monitored and/or mitigated in some way would have a brief interim or compliance report developed. This avoids the need to undertake detailed and time-consuming post excavation analysis before or during the construction. Post excavation analysis would be ongoing throughout the Project, and at, or nearing, completion of the Project, a detailed report on all archaeological works would be compiled.

The following general approach would apply to all reporting:

- ◆ At the completion of each stage of the archaeological mitigation program, a short compliance report would be developed to provide interim findings and allow the construction program to proceed.
- ◆ Following the completion of each stage of the archaeological mitigation program, post excavation analysis is begun with results being reported back as they become available to the Relevant Aboriginal Parties.
- ◆ At, or nearing, the completion of the Project, a detailed report on all archaeological mitigation works and post excavation analysis is developed and AHIMS database records updated as required.
- ◆ All reporting would conform broadly to OEH guidelines where relevant.



## 6.8 Storage of Archaeological Material Collected

The mitigation program may result in artefactual material and the long term curation of this material needs to be ensured. This will be developed in consultation with the Relevant Aboriginal Parties, but is likely to include (in preferential order):

- ◆ Stored and displayed at Macquarie University;
- ◆ Deposition with the Australian Museum;
- ◆ Re-burial on site, in an appropriate location in the vicinity of the subject area; or
- ◆ Lodged with a RAP under a Care and Control Agreement.

The following general approach would apply to artefact storage:

- ◆ During the Project, all archaeological materials would be stored with the Project Archaeologist for analysis and documentation. Storage and labelling would be undertaken in accordance with Australian Museum collection policies, since these currently form the most rigorous curation methods.
- ◆ Towards the end of the Project, the Project Archaeologist would undertake steps to determine the long term storage of any archaeological material collected, with a focus on the preferential order outlined above.
- ◆ Once the archaeological materials have been situated in their long term storage location, a site card should be lodged with the OEH AHIMS database. The site card should lodge all relevant information about the archaeological materials, including where it was found/recovered, relevant reports associated with it, and its final storage location.

## 6.9 Discovery of Potential Human Remains Procedures

During construction works, it is possible that previously possible human remains may be discovered. Refer to Appendix 2 for the Possible Discovery of Human Remains Procedure.

## 6.10 Unexpected Finds Procedures

During construction works, it is possible that previously unknown Aboriginal objects or sites may be discovered. Refer to Appendix 3 for the Unexpected Finds Procedures.

## 7. Risk Assessment

### 7.1 Basis for Assessment

The key construction activities and potential impacts on Aboriginal archaeology are summarised in Table 3.3. The risk assessment is based on (1) the likelihood of an impact occurring as a result of a proposed activity; and (2) the consequences of the impact if the event occurs. The risk matrix, and definition of likelihood and consequence are provided in Tables 4 and 5.

Table 3: Key construction activities, risks and impacts.

Activity	Potential Impact	Residual Risk		
		Consequence	Likelihood	Risk
Demolition work results in physical disturbance of Aboriginal sites/objects.	Damage to Aboriginal archaeological resources. Non-compliance with development consent conditions.	Moderate	Unlikely	Medium
Construction work results in physical disturbance of Aboriginal sites/objects.	Damage to Aboriginal archaeological resources. Non-compliance with development consent conditions.	Moderate	Unlikely	Medium
Construction work results in disturbance of previously unidentified of Aboriginal sites/objects, or skeletal remains.	Inadvertent damage, destruction or removal of Aboriginal archaeological resources.	Moderate	Unlikely	Medium
	Failure to notify and properly manage discovered objects.	Moderate	Unlikely	Medium

Table 4: Risk matrix

Likelihood	Consequence				
	Insignificant	Minor	Moderate	Major	Severe
Almost Certain	Medium	High	High	Extreme	Extreme
Likely	Medium	Medium	High	High	Extreme
Possible	Low	Medium	Medium	High	High
Unlikely	Low	Low	Medium	Medium	High
Rare	Low	Low	Low	Medium	Medium
Extreme	Intolerable - Risk reduction is mandatory wherever practicable. Residual risk can only be accepted if endorsed by senior management.				
High	Intolerable or tolerable if managed to as low as reasonably practicable - Senior management accountability				

Medium	Tolerable if managed to as low as reasonably practicable - Management responsibility
Low	Tolerable - Maintain systematic controls and monitor

Table 5: Classification of Likelihood and Consequence.

Likelihood	Description
Almost Certain	The event is expected to occur in most circumstances. This event could occur at least once during a project of this nature. 91-100% chance of occurring during the Project
Likely	The event will probably occur in most circumstances. This event could occur up to once during a project of this nature. 51-90% chance of occurring during the Project
Possible	The event could occur but not expected. This event could occur up to once every 10 projects of this nature. 11-50% chance of occurring during the Project
Unlikely	The event could occur but is improbable. This event could occur up to once every 10-100 projects of this nature. 1-10% chance of occurring during the Project
Rare	The event may occur only in exceptional circumstances. This event is not expected to occur except under exceptional circumstances (up to once every 100 projects of this nature). Less than 1% chance of occurring during the Project
Consequence	Description
Insignificant	Minor disturbance of archaeological resources. No damage to Aboriginal sites/objects or historical relics.
Minor	Moderate disturbance of archaeological resources or repairable damage to Aboriginal sites/objects or historical relics.
Moderate	Considerable damage to Aboriginal sites/objects or historical relics.
Major	Major damage to Aboriginal sites/objects or historical relics.

## 7.2 Risk Management

The following risk management measures will be implemented to minimise potential impact to Aboriginal archaeological resources (Table 6). The measures identified are based on:

- ♦ Anticipated impacts to archaeological resources;
- ♦ Assessed scientific (archaeological) significance, and (where known) overall heritage significance;



- ◆ Legislative requirements and the planning approval framework; and
- ◆ Recommendations in previous reports.

Overarching mitigation policies and procedures for the risk management measures outlined below are provided in Section 5.

Table 6: Risk Management Measures.

Activity	Risk Management Measure
Demolition or construction work results in physical disturbance of Aboriginal sites/objects.	<p>All staff, contractors and other relevant personnel carrying out activities with potential to disturb subsurface cultural deposits must undertake a project induction to ensure that they have an understanding and are aware of the Aboriginal archaeological issues which may affect the activity.</p> <p>Mitigation measures and procedures from this ACHMP will be included in relevant activity or area specific Work Method Statements, where required.</p>
Discovery of possible human remains	If human remains are uncovered, all works in the area would cease and project would follow procedures outlined in Appendix 2.
Discovery of previously unidentified Aboriginal or historical archaeological resources.	In the case of unexpected Aboriginal objects or historical archaeological relics being uncovered by the works, immediately stop all works that would impact on the find and follow the procedure detailed in Appendix 3.

## 8. Compliance Management

All Project personnel, sub-contractors, consultants and visitors will receive training in environmental and heritage obligations during the site inductions and toolbox talks. Training will include an archaeological awareness component to reinforce the importance of heritage issues and the management measures that will be implemented. Specific archaeological awareness training will cover:

- ♦ Protection of identified Aboriginal sites and archaeological resources;
- ♦ Adherence to approval conditions and any consultation requirements with Registered Aboriginal parties;
- ♦ The means of identifying Aboriginal archaeological resources and the roles of personnel with regard to archaeological management measures.

Records would be kept of all personnel undertaking the site induction and training, including the contents of the training, date and name of trainer/s.

Key staff will undertake more comprehensive training relevant to their position and/or responsibility. This training may be provided as 'toolbox' training or at a more advanced level by the Site/Environmental Manager or delegated representatives.

### 8.1 Auditing

Audits (both internal and external) will be undertaken to assess the effectiveness of environmental controls, and compliance with this ACHMP.

The planned audit process is detailed in the relevant Environmental Management Plan.

### 8.2 Monitoring

Inspections of areas with identified Aboriginal archaeological resources will occur for the duration of the Project. Regular processes including documented inspections by specialised staff (heritage architect, arborist, environmental officer and/or archaeologist) will be utilised to ensure mitigation measures are working effectively.

A register of issues identified through inspections will be maintained to ensure that any issues are recorded for future action.

### 8.3 Reporting and Review

Reporting will be undertaken by an appointed officer, and will include a staged Performance Report/Review. Each report will detail relevant training, inspections, monitoring and auditing undertaken for the reporting period relating to archaeological management on the Project.

This ACHMP will be updated every six months or as required.

## 9. Review and Improvement

### 9.1 Continual Improvement

Continual improvement of this plan will be achieved by the continual evaluation of environmental management performance against environmental policies, objectives and targets for the purpose of identifying opportunities for improvement. The continual improvement process will be designed to:

- ◆ Identify areas of opportunity for improvement of environmental management which leads to improved environmental performance;
- ◆ Determine the root cause or causes of non-conformances and deficiencies;
- ◆ Develop and implement a plan of corrective and preventative action to address non-conformances and deficiencies;
- ◆ Verify the effectiveness of the corrective and preventative actions; and
- ◆ Document any changes in procedures resulting from process improvement.

### 9.2 Plan Update

This plan would be updated and revised as necessary every six months from finalisation, until the completion of the ground disturbance phase of the Project.

Changes to this plan will be approved by the client and in consultation with RAPs (if required) and documented in the document control section for each revision. A copy of the updated plan and changes will be distributed to all RAPs.



## References

Balarinji (2016) Indigenous Engagement Strategy Report. Macquarie University Central Courtyard Precinct. Unpublished Report to Macquarie University.

Extent Heritage (2019) Central Courtyard Precinct (SSD\_8755), Macquarie University: Aboriginal heritage advice. Prepared for Macquarie University.

Mary Dallas Consulting Archaeologist (2012) Due Diligence Aboriginal heritage assessment for Macquarie University, North Ryde. Unpublished Report to Macquarie University Property.

## Appendix 1:      Aboriginal Community Consultation

## Pre-Notification

Agency	Contact	Date	Description	Extent contact
Pre-Notifications Sent Out				
City of Ryde Council	-	21.12.18	Requested details of any Aboriginal organisations or individuals who may be interested in the project.	Alan Williams
Metropolitan Local Aboriginal Land Council	Selina Timothy			
Greater Sydney Local Land Services	-			
NTSCorp	George Tonna			
Office of Environment and Heritage	Susan Harrison			
National Native Title Tribunal	-	21.12.18	Submitted register search request.	Alan Williams
Office of the Registrar, <i>Aboriginal Land Rights Act 1983</i>	-	21.12.18	Submitted register search request.	
Pre-Notification Responses				
National Native Title Tribunal		24.12.18	Advised the land was freehold, and Native Title did not apply	Alan Williams
Office of Environment and Heritage	Barry Gunther	21.12.18	Provide an overarching list of stakeholders for the Sydney Basin	Alan Williams
NTSCorp	Elizabeth Loane	14.1.19	Indicated that the Metropolitan LALC should be contacted	Alan Williams
City of Ryde	Michael Edwards	11.1.19	Provided two additional individuals who have undertaken works in the discipline, and may have pertinent information.	Alan Williams
Greater Sydney Local Land Services	Margaret Botterell	6.2.19	Advised that contact with OEH should be made in relation to this issue.	Alan Williams



## Notification

Agency	Contact	Date	Description	Extent contact
<b>Notifications Sent Out</b>				
A1 Indigenous Services	Carolyn Hickey	14.1.19	E-mailed and/or posted project notification to this organisation.	Alan Williams
Amanda Hickey Cultural Services	Amanda Hickey	14.1.19	E-mailed and/or posted project notification to this organisation.	Alan Williams
B.W Consultants	Ralph Hampton; Nola Hampton	14.1.19	E-mailed and/or posted project notification to this organisation.	Alan Williams
Badu	Karia Lea Bona	14.1.19	E-mailed and/or posted project notification to this organisation.	Alan Williams
Barking Owl Aboriginal Corporation	Jody Kulakowski	14.1.19	E-mailed and/or posted project notification to this organisation.	Alan Williams
Biamanga	Seli Storer	14.1.19	E-mailed and/or posted project notification to this organisation.	Alan Williams
Bilinga	Simalene Carriage	14.1.19	E-mailed and/or posted project notification to this organisation.	Alan Williams
Bilinga Cultural Heritage Technical Services	Robert Brown	14.1.19	E-mailed and/or posted project notification to this organisation.	Alan Williams
Butucarbin Aboriginal Corporation	Jennifer Beale	14.1.19	E-mailed and/or posted project notification to this organisation.	Alan Williams
Callendulla	Corey Smith	14.1.19	E-mailed and/or posted project notification to this organisation.	Alan Williams
Darug Aboriginal Cultural Heritage Assessments	Gordon Morton	14.1.19	E-mailed and/or posted project notification to this organisation.	Alan Williams
Darug Boorooberongal Elders Aboriginal Corporation	Gordon Workman	14.1.19	E-mailed and/or posted project notification to this organisation.	Alan Williams
Darug Land Observations	Anna Workman	14.1.19	E-mailed and/or posted project notification to this organisation.	Alan Williams

**SYD18384 Notification Log**  
**Macquarie University**

Agency	Contact	Date	Description	Extent contact
Dharug	Andrew Bond	14.1.19	E-mailed and/or posted project notification to this organisation.	Alan Williams
Didge Ngunawal Clan	Lillie Carroll; Paul Boyd	14.1.19	E-mailed and/or posted project notification to this organisation.	Alan Williams
DJMD Consultancy	Darren Duncan	14.1.19	E-mailed and/or posted project notification to this organisation.	Alan Williams
Eric Keidge	Eric Keidge	14.1.19	E-mailed and/or posted project notification to this organisation.	Alan Williams
Ginninderra Aboriginal Corporation	Steven Johnson; Krystle Carroll	14.1.19	E-mailed and/or posted project notification to this organisation.	Alan Williams
Goobah Developments	Basil Smith	14.1.19	E-mailed and/or posted project notification to this organisation.	Alan Williams
Gulaga	Wendy Smith	14.1.19	E-mailed and/or posted project notification to this organisation.	Alan Williams
Gunyu	Kylie Ann Bell	14.1.19	E-mailed and/or posted project notification to this organisation.	Alan Williams
Gunyu Cultural Heritage Technical Services	Darlene Hoskins-McKenzie	14.1.19	E-mailed and/or posted project notification to this organisation.	Alan Williams
Jerringong	Joanne Anne Stewart	14.1.19	E-mailed and/or posted project notification to this organisation.	Alan Williams
Metropolitan Local Aboriginal Land Council	Nathan Moran	14.1.19	E-mailed and/or posted project notification to this organisation.	Alan Williams
Minnamunnung	Aaron Broad	14.1.19	E-mailed and/or posted project notification to this organisation.	Alan Williams
Munyunga	Kaya Dawn Bell	14.1.19	E-mailed and/or posted project notification to this organisation.	Alan Williams
Munyunga Cultural Heritage Technical Services	Suzannah McKenzie	14.1.19	E-mailed and/or posted project notification to this organisation.	Alan Williams
Murramarang	Roxanne Smith	14.1.19	E-mailed and/or posted project notification to this organisation.	Alan Williams

**SYD18384 Notification Log**  
**Macquarie University**

Agency	Contact	Date	Description	Extent contact
Murrumbul	Mark Henry	14.1.19	E-mailed and/or posted project notification to this organisation.	Alan Williams
Murrumbul Cultural Heritage Technical Services	Levi McKenzie-Kirkbright	14.1.19	E-mailed and/or posted project notification to this organisation.	Alan Williams
Nerrigundah	Newton Carriage	14.1.19	E-mailed and/or posted project notification to this organisation.	Alan Williams
Nundagurri	Newton Carriage	14.1.19	E-mailed and/or posted project notification to this organisation.	Alan Williams
Pemulwuy CHTS	Pemulwuy Johnson	14.1.19	E-mailed and/or posted project notification to this organisation.	Alan Williams
Thauaira	Shane Carriage	14.1.19	E-mailed and/or posted project notification to this organisation.	Alan Williams
Thoorga Nura	John Carriage	14.1.19	E-mailed and/or posted project notification to this organisation.	Alan Williams
Tocomwall	Scott Franks	14.1.19	E-mailed and/or posted project notification to this organisation.	Alan Williams
Wailwan Aboriginal Group	Philip Boney	14.1.19	E-mailed and/or posted project notification to this organisation.	Alan Williams
Walbunja	Hika Te Kowhal	14.1.19	E-mailed and/or posted project notification to this organisation.	Alan Williams
Walgalu	Ronald Stewart	14.1.19	E-mailed and/or posted project notification to this organisation.	Alan Williams
Wallung	Lee-Roy James Boota	14.1.19	E-mailed and/or posted project notification to this organisation.	Alan Williams
Wingikara	Hayley Bell	14.1.19	E-mailed and/or posted project notification to this organisation.	Alan Williams
Wingikara Cultural Heritage Technical Services	Wandai Kirkbright	14.1.19	E-mailed and/or posted project notification to this organisation.	Alan Williams
Yerramurra	Robert Parson	14.1.19	E-mailed and/or posted project notification to this organisation.	Alan Williams

**SYD18384 Notification Log**  
**Macquarie University**

Agency	Contact	Date	Description	Extent contact
Bennelong Putney Project	Adam Joseph	14.1.19	E-mailed and/or posted project notification to this organisation.	Alan Williams
Metropolitan LALC	Selina Timothy	14.1.19	E-mailed and/or posted project notification to this organisation.	Alan Williams
<b>Registrations of Interest Received</b>				
Didge Ngunawal Clan	Lilly Carroll; Paul Boyd	14.1.19	Registered an interest in the project	Alan Williams
A1 Indigenous Services	Carolyn Hickey	14.1.19	Registered an interest in the project	Alan Williams
Tocomwall	Scott Franks	14.1.19	Registered an interest in the project	Alan Williams
Amanda Hickey Cultural Services	Amanda Hickey	14.1.19	Registered an interest in the project	Alan Williams
Darug Boorooberongal Elders Aboriginal Corporation	Gordon Workman	14.1.19	Registered an interest in the project	Alan Williams
Wailwan Aboriginal Group	Phillip Boney	15.1.19	Registered an interest in the project	Alan Williams
Barking Owl Aboriginal Corporation	Jody Kulakowski	25.1.19	Registered an interest in the project	Alan Williams
Metropolitan LALC	Selina Timothy	22.1.19	Registered an interest in the project during a site inspection	Megan Brennand Sheppard
Darug Aboriginal Cultural Heritage Assessments	Celestine Everingham	08.02.19	Registered an interest in the project.	Alan Williams
OEH	Susan Harrison	4.3.19	Provided a list of registered stakeholders for the project	Alan Williams
Metropolitan LALC	Selina Timothy	4.3.19	Provided a list of registered stakeholders for the project	Alan Williams
<b>Preliminary Activities</b>				
Metropolitan LALC	Selina Timothy	22.1.19	Undertook a site inspection of the CCP to provide preliminary views on the site	Alan Williams
Metropolitan LALC	Selina Timothy	22.1.19	Selina emailed through a site visit report.	Megan Sheppard Brennand
<b>Review of ACHMP</b>				
All RAPs	-	8.4.19	Emailed registered parties to advise that we are writing the ACHMP and invite them to a meeting on Thursday 18 April or to provide comment on the report	Megan Sheppard Brennand



**SYD18384 Notification Log**  
**Macquarie University**

Agency	Contact	Date	Description	Extent contact
Didge Ngunawal Clan	Lilly Carroll; Paul Boyd	8.4.19	Lilly emailed to confirm their attendance at the meeting	Megan Sheppard Brennand
All RAPs	-	14.4.19	Distributed ACHMP for comment; and followed up on earlier comments in relation to the meeting	Alan Williams
Tocomwall, Barking Owl, Didge Ngunawal	-	18.4.19	Participated in a meeting to discuss ACHMP. Minutes were subsequently provided for review. Minutes included in the report provide details of the discussion.	Alan Williams
A1 Indigenous Services; Amanda Hickey Cultural Services; Darug Boorooberongal Elders Aboriginal Corporation; Wailwan Aboriginal Group; Metropolitan LALC; Darug Aboriginal Cultural Heritage Assessments	-	18.4.19	Provided a summary of the meeting outcomes (for RAPs that were not present) and sought review of the report to be provided as written comment.	Alan Williams
Didge Ngunawal Clan	Paul Boyd	18.4.19	Reviewed the minutes of the meeting and confirmed their accuracy	Alan Williams
Amanda Hickey Cultural Services	Amanda Hickey	22.4.19	Provided response indicating acceptance of the ACHMP when including the changes proposed in the meeting	Alan Williams
A1 Indigenous Services	Carolyn Hickey	22.4.19	Provided response indicating acceptance of the ACHMP when including the changes proposed in the meeting	Alan Williams
Barking Owl	Jody Kulakowski	22.4.19	Provided response indicating acceptance of the ACHMP when including the changes proposed in the meeting	Alan Williams
Darug Aboriginal Cultural Heritage Assessments	Celestine Everingham	24.4.19	Telephoned and indicated her support for the proposed approach, but that she disagreed with the 'tender selection process' being proposed; and would prefer the work to be assigned to only Darug Traditional Owners. AW advised that this would be incorporated as part of the selection process.	Alan Williams

**From:** Megan Sheppard Brennand  
**Sent:** Monday, 8 April 2019 3:44 PM  
**To:** Celestine Everingham (+61294103665@fax.utbox.net); cazadirect@live.com; amandahickey@live.com.au; barkingowlcorp@gmail.com; boorooberongal@outlook.com.au; didgengunawalclan@yahoo.com.au; scott@tocomwall.com.au; waarlan12@outlook.com; metrolalc@metrolalc.org.au  
**Cc:** Dr Alan Williams  
**Subject:** Aboriginal heritage advice to Macquarie University - ACHMP

Dear All,

As you may be aware Extent Heritage is providing Aboriginal heritage advice to Macquarie University. This has included the initiation of an Aboriginal consultation process for which your organisation has registered an interest. While a more detailed Aboriginal Cultural Heritage Assessment is proposed for the university campus, current focus has been on the approval associated with the Centre Courtyard Precinct (SSD\_8755). This is a fairly small development in the centre of the campus, and for which we understand an approval from the Department of Planning and Environment is imminent. As part of the approval, there is a requirement to develop an Aboriginal Cultural Heritage Management Plan (ACHMP), and this document is proposed for completion and wider review imminently.

At this stage, the data on the site suggests a very low likelihood of tangible material culture is likely to be present, although northwest parts of the site are buried by 2m of fill (and hence there is some potential for deeply buried cultural material). As such, it is likely that recommendations will largely focus on monitoring of the development work, but we will be seeking your input in this regard as part of the finalisation process.

At this stage, we are proposing to provide the report to you early next week (likely Monday 15 April). To minimise the need for a substantive consultation period (nominally 3 weeks), we would then like to organise a meeting with a representative of your organisations to discuss the report and obtain feedback. We propose this meeting for Thursday (18 April) morning at Extent Heritage offices (Pymont), and for which [REDACTED]

[REDACTED] Can you please let me know if you would be available to attend? If not, we are still willing to pay the same amount for those willing to prioritise review and comment of the report by Wednesday 24 April. Finally, if not possible, we will of course allow organisations to have 3 weeks to comment upon the report, but no payment will be made for this.

Once this process is achieved, and assuming everyone has commented, the report will be finalised by about the 26 April for submission to the Consent Authority; and a final version will be provided to you.

I will be out of the office from Wednesday 10 April so please cc Alan Williams in on any correspondence.

Cheers,  
Megan

**Megan Sheppard Brennand**  
Research Assistant  
T 02 9555 4000  
[msbrennand@extent.com.au](mailto:msbrennand@extent.com.au)  
[extent.com.au](http://extent.com.au)  
Connect with us on:

**From:** Dr Alan Williams  
**Sent:** Thursday, 18 April 2019 2:52 PM  
**To:** 'lilly carroll'; 'barkingowlcorp@gmail.com'; 'scott@tocomwall.com.au'  
**Cc:** Laressa Barry  
**Subject:** Macquarie University - ACHMP Meeting Minutes - For Review  
**Attachments:** SYD18384\_ACHMP meeting minutes\_18Apr19.pdf

Hi All,

Thanks very much for coming to meet with us today. Please find attached a draft set of minutes for your review. Can you please review and provide written confirmation of the accuracy of these, or provide any updates for modification. Can I get these by mid next week to allow prompt finalisation of the ACHMP if possible. Happy to receive other comments on the report beyond those outlined here if you have any.

Thanks  
Al

**Dr Alan Williams** | B.Sc (Hons), M.Sc, Ph.D. FSA, MAACAI

Associate Director

T 02 9555 4000 | M 0428 810 150

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# Macquarie University Central Courtyard Precinct – Aboriginal Cultural Heritage Management Plan

## Meeting Minutes

<b>Location</b>	Extent Heritage Sydney Office Level 3, 73 Union Street Pyrmont NSW 2009
<b>Date/Time</b>	18 April 2019, 10-12am
<b>Chair</b>	Dr Alan Williams FSA MAACAI (Extent Heritage)
<b>Attendees</b>	Jody Kulakowski (Barking Owl Aboriginal Corporation) Scott Franks (Tocomwall) Paul Boyd (Didge Ngunawal Clan) Laressa Barry (Extent Heritage) Cameron Neal (Extent Heritage)
<b>Apologies</b>	Selina Timothy (Metropolitan Local Aboriginal Land Council) Carolyn Hickey (A1 Indigenous Services) Amanda Hickey (Amanda Hickey Cultural Services) Gordon Workman (Darug Boorooberongal Elders Aboriginal Corporation) Phillip Boney (Wailwan Aboriginal Group) Celestine Everingham (Darug Aboriginal Cultural Heritage Assessments)

### Key Outcomes:

Based on the discussions, the following key points and/or outcomes were sought for incorporation into, or modification of, the management plan:

- ♦ The need for a site inspection for the RAPs prior to construction to be incorporated into the ACHMP
- ♦ Further investigation of massacre sites reportedly within the region; and suitable recommendations for their management if found to be in close proximity to the site.
- ♦ The modification of the roster process to a 'tender' process for RAP involvement in field investigation to avoid perceived collusion issues.
- ♦ Ensure that any archaeological investigations are suitably managed for contamination (e.g. asbestos) to ensure the safety of all personnel.
- ♦ Any cultural material recovered should be first considered for long term curation at the University, rather than other venues.
- ♦ All participants were satisfied with the proposed hierarchical approach, and the methods proposed for implementation.



## Minutes:

AW: Undertook a significant part of the meeting running through the ACHMP section by section. This included the broader project background and recent approval process. Key focus and discussion included: (a) a review of the assessment/approvals process to date; (b) key findings from Mary Dallas Consulting Archaeologist's (MDCA) 2012 due diligence assessment of the University Campus and Extent's preliminary heritage advice for the CCP from 2018, which included discussions on previous disturbance; (c) the proposed development plans for the CCP and its potential impacts to Aboriginal heritage/areas of potential; and (d) the Aboriginal cultural heritage management recommendations for proceeding with the development of the CCP.

Extent identified a number of hierarchical management options for the site based on archaeological potential. This included monitoring of soil removal to identify in situ soil profiles by Extent Heritage personnel and members of the RAPs, likely provision for test excavation in areas of intact topsoil, development redesign and/or salvage excavation before development proceeds. Extent noted that an ACHAR was being prepared for the entire Macquarie University Campus, and that any feedback from the ACHAR would be fed back into the ACHMP, where appropriate.

SF: Concerned that OEH did not submit a response to Department of Planning and Environment (DPE) with regards to Aboriginal Cultural Heritage as part of the Secretary's Environmental Assessment Requirements (SEARs) phase and questioned whether Aboriginal heritage would be adequately considered at the assessment phase. AW responded that, despite the omission from OEH, DPE was satisfied that project approval could be given, on the condition that an ACHMP be prepared for the CCP development; and that an ACHAR encompassing the entire Campus be prepared.

SF: Expressed concern that there was no consideration of intangible cultural values to the site, and indicated that the broader region was potentially associated with early conflict/massacre sites of the Bidjigal people. He acknowledged that some form of interpretation should be included for the site in the future, but stressed the need to consult with the correct 'mobs' for the area. He thought that Ryde Council had a comprehensive understanding of which groups to consult with.

SF: Raised concerns over the input of the Metropolitan LALC and their ability to 'sign off' on the site for the approval. Indicated that consultation with the traditional owners was preferred. AW indicated that prior to the approval, the consultation process was ongoing, and as such the identified State government body (i.e. LALCs) were the identifiable organization to undertake initial discussions with, although acknowledged the failing of the broader consultation system. Further identified that the rationale for the meeting and discussion on the ACHMP was very much to get the broader Aboriginal community review, and not rely solely on discussions to date.

SF/PB: Recommended the formation of an Aboriginal Consultative Committee of key Traditional knowledge holders be established to manage appropriate outcomes, with periodic meetings to be arranged as the development progressed. Strongly recommended that work, where

appropriate or feasible, be offered preferentially offered to local Aboriginal groups or companies who showed interest in the works; and that this would be better managed as a tender process, rather than a simply rotating roster system as proposed. A preference for those attending meetings as a selection criterion for the tender process was recommended.

SF/PB: Raised concerns about contamination that may be encountered within the excavations due to past activities, e.g. asbestos. AW indicated that suitable HSE requirements would be sought by Extent from the principal contractor prior to any works in this regard.

**From:** Barking Owl Aboriginal Corporation <barkingowlcorp@gmail.com>  
**Sent:** Monday, 22 April 2019 10:49 PM  
**To:** Dr Alan Williams  
**Subject:** Re: Macquarie University - ACHMP Meeting Minutes - For Review  
**Attachments:** SYD18384\_ACHMP meeting minutes\_18Apr19.pdf

Dear Alan,

Myself and the members of Barking Owl Aboriginal Corporation confirm the minutes of meeting held on 18/04/19 to be accurate RE: Macquarie University Central Courtyard Precinct – Aboriginal Cultural Heritage Management Plan and we are satisfied with the proposed approach, and the methods proposed for implementation and have no further comments or recommendations.

Kind regards

Jody Kulakowski  
Barking Owl Aboriginal Corporation

On 18 Apr 2019, at 2:51 pm, Dr Alan Williams <[awilliams@extent.com.au](mailto:awilliams@extent.com.au)> wrote:

Hi All,

Thanks very much for coming to meet with us today. Please find attached a draft set of minutes for your review. Can you please review and provide written confirmation of the accuracy of these, or provide any updates for modification. Can I get these by mid next week to allow prompt finalisation of the ACHMP if possible. Happy to receive other comments on the report beyond those outlined here if you have any.

Thanks

Al

**Dr Alan Williams** | B.Sc (Hons), M.Sc, Ph.D. FSA, MAACAI

Associate Director

T 02 9555 4000 | M 0428 810 150

[awilliams@extent.com.au](mailto:awilliams@extent.com.au)

[extent.com.au](http://extent.com.au)

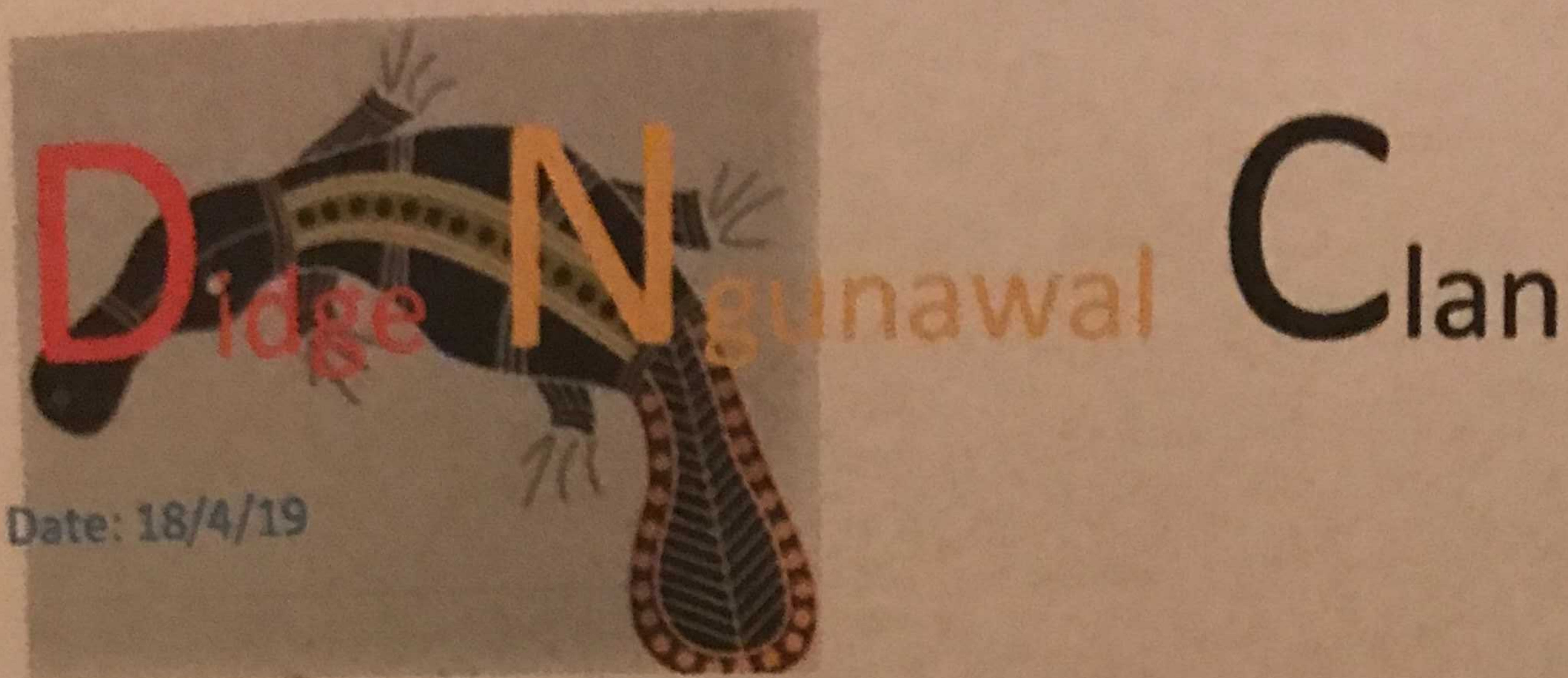
Connect with us on:



SYDNEY | MELBOURNE | BRISBANE | PERTH

Barking Owl Aboriginal Corporation  
[barkingowlcorp@gmail.com](mailto:barkingowlcorp@gmail.com)





## **REPORT FOR MACQUARIE UNIVERSITY CENTRAL COURTYARD PRECINCT ACHMP**

Didge Ngunawal Clan agrees to the minutes that Dr Alan Williams has formulated and everything that we wanted to be outlined has been finalised.

All other feedback upon this project has been implemented and no other requests are to be made. DNC are happy with the project to progress to the next stage, and wish to work with you on this job soon.

Kind Regards,

Paul Boyd & Lilly Carroll

Directors DNC



**From:** Dr Alan Williams  
**Sent:** Thursday, 18 April 2019 3:05 PM  
**To:** 'Cazadirect@live.com'; 'amandahickey@live.com.au'; Uncle Gordon Workman; 'waarlan12@outlook.com'; 'Selina Timothy'; Celestine Everingham (+61294103665@fax.utbox.net)  
**Cc:** Laressa Barry  
**Subject:** Macquarie University - ACHMP - Request for Comment

Dear All,

Sorry we didn't see you at the meeting today where we discussed the Aboriginal Cultural Heritage Management Plan (ACHMP) for the Central Courtyard Precinct at Macquarie University. The meeting included three of the RAP organisations, and while still to be confirmed, recommended the following broad inclusions and/or modifications to the document:

- ◆ The need for a site inspection for the RAPs prior to construction to be incorporated into the ACHMP
- ◆ Further investigation of massacre sites reportedly within the region; and suitable recommendations for their management if found to be in close proximity to the site.
- ◆ The modification of the roster process to a 'tender' process for RAP involvement in field investigation to avoid perceived collusion issues.
- ◆ Ensure that any archaeological investigations are suitably managed for contamination (e.g. asbestos) to ensure the safety of all personnel.
- ◆ Any cultural material recovered should be first considered for long term curation at the University, rather than other venues.
- ◆ All participants were satisfied with the proposed hierarchical approach, and the methods proposed for implementation.

As per previous e-mails, can I please ask that you review the document, and if you have any comments, concerns or requested changes to provide them to me. In terms of timing and payment, we are willing to pay \$400 (ex GST) for you to prioritise your review of the document, and return correspondence by 24 April 2019. If this proves not possible, the consultation period ends on the 5 May 2019. No payment will be made for any comments received after the 24 April.

Happy to discuss

Thanks  
AI

**Dr Alan Williams** | B.Sc (Hons), M.Sc, Ph.D. FSA, MAACAI  
Associate Director  
T 02 9555 4000 | M 0428 810 150

[awilliams@extent.com.au](mailto:awilliams@extent.com.au)

[extent.com.au](http://extent.com.au)

Connect with us on:



**From:** Amanda Hickey <Amandahickey@live.com.au>  
**Sent:** Monday, 22 April 2019 9:12 AM  
**To:** Dr Alan Williams  
**Subject:** Re: Macquarie University - ACHMP - Request for Comment

Good morning Alan

So sorry I could not make the meeting.  
My apologies

AHCS has review the documents for Aboriginal Cultural Heritage Management Plan (ACHMP) for the Central Courtyard Precinct at Macquarie University and is happy with it

Looking forward to working with you on this  
If there's anything you need please feel free to contact me

Have a great day Alan  
Amanda AHCS

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**From:** Dr Alan Williams <awilliams@extent.com.au>  
**Sent:** Thursday, April 18, 2019 3:04:59 PM  
**To:** 'Cazadirect@live.com'; 'amandahickey@live.com.au'; Uncle Gordon Workman; 'waarlan12@outlook.com'; 'Selina Timothy'; Celestine Everingham (+61294103665@fax.utbox.net)  
**Cc:** Laressa Barry  
**Subject:** Macquarie University - ACHMP - Request for Comment  
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Happy to discuss

**From:** Caza X <cazadirect@live.com>  
**Sent:** Monday, 22 April 2019 10:21 AM  
**To:** Dr Alan Williams  
**Subject:** Re: Macquarie University - ACHMP - Request for Comment  
**Attachments:** A1MU.Invoice - Copy.pdf

## A1

### Indigenous Services

Contact: Carolyn  
M: 0411650057  
E: Cazadirect@live.com  
A: 10 Marie Pitt Place, Glenmore Park, NSW 2745  
ABN: 20 616 970 327

Hi Alan,  
A1 supports and endorses the Aboriginal Cultural Heritage Management Plan (ACHMP) for the Central Courtyard Precinct at Macquarie University.  
Thank you  
Carolyn Hickey

---

**From:** Dr Alan Williams <awilliams@extent.com.au>  
**Sent:** Thursday, 18 April 2019 3:04 PM  
**To:** 'Cazadirect@live.com'; 'amandahickey@live.com.au'; Uncle Gordon Workman; 'waarlan12@outlook.com'; 'Selina Timothy'; Celestine Everingham (+61294103665@fax.utbox.net)  
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**Subject:** Macquarie University - ACHMP - Request for Comment

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**Metropolitan Local Aboriginal Land Council**

36-38 George Street Redfern NSW 2016  
PO Box 1103 Strawberry Hills NSW 2012  
Telephone: (02) 8394 9666 Fax: (02) 8394 9733 Email: [bookings@metrolalc.org.au](mailto:bookings@metrolalc.org.au)

Tuesday 22<sup>nd</sup> January 2019

Megan Sheppard Brennand  
Research Assistant  
EXTENT HERITAGE  
3/73 Union Street  
Pymont NSW 2009

Dear Megan

**Re: Site Survey at Central Courtyard Precinct  
Macquarie University  
2 Link Road  
Macquarie University, NSW 2109**

On Tuesday 22<sup>nd</sup> January 2019, I Selina Timothy as a representative of Metropolitan Local Aboriginal Land Council participated in a site inspection survey at the above property to determine the purpose of identifying any Aboriginal sites and cultural and heritage values. The entire property was assessed at this time with Megan Sheppard Brennand, Research Assistant for EXTENT HERITAGE.

***Property/Inspection Description***

The project in question is the Central Courtyard Precinct, which is an SSD project of a new building in the place of an old building in the center of campus. OEH is currently seeking a formal Aboriginal Cultural Heritage Assessment process for the site (as you can see from recent consultation documentation sent to you), but the proponent is seeking to turn this into something more campus wide (but with less critical timeframes).

The site has already been cleared of buildings and has been disturbed by works previously carried out and we did not find or didn't identify any material or subsurface potential of cultural significant.



### ***Aboriginal Heritage***

No Aboriginal sites or objects were located within the boundaries of the proposed development areas nor are any registered sites within the area are recorded.

We didn't identify any material or subsurface potential of cultural significant at the site but Aboriginal people of the past would have used the nearby area as an important source of food and a place of trade.

This indication of Aboriginal occupations, usage and the significance for Aboriginal people past and present still remains. All parts of Sydney hold significance to the Aboriginal people and the preservation and conservation of such sites is of high importance for our connection to Country

MLALC would like to request and propose a need for Aboriginal language to be utilized in any visual interpretation, naming conventions and/or outputs that stem from the project and to have native plant with seasonal fruits in the landscaping.

### ***Conclusions and Recommendations***

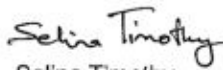
If any cultural materials are unearthed during any stages of the proposed development then all works are to cease and MLALC and Representatives from The Office of Environment and Megan Sheppard Bennand Research Assistant for EXTENT HERITAGE are to be contacted immediately.

Cultural significant objects found during works carried out are to be cared, respected and recorded in the correct way.

After proposed development finalized, MLALC suggested that landscapes of native vegetation be planted and would also like to suggest Aboriginal names of the area to be used in any visual interpretations and or buildings.

If you require further information please do not hesitate in contacting the MLALC Office for assistance.

Regards,

  
Selina Timothy

Culture and Heritage Officer  
Metropolitan Local Aboriginal Land Council (MLALC)

## Appendix 2: Procedure for Discovery of Possible Human Skeletal Remains

## Procedure for Discovery of Possible Human Skeletal Remains

### Purpose

This procedure details the actions to be taken when possible human skeletal material (remains) are found during construction activities.

### Scope

This section outlines the procedure for handling human remains in accordance with the Skeletal Remains: Guidelines for the Management of Human Skeletal Remains under the Heritage Act 1977 (NSW Heritage Office 1998) and the Aboriginal Cultural Heritage Standards and Guidelines Kit (NPWS 1997); and the relevant NSW legislation.

### Procedure

In the event that possible human skeletal material (remains) are encountered during construction, the following steps shall be taken:

- ◆ STOP ALL WORK in the vicinity of the find ( $\leq 50\text{m}$ ) and immediately notify the relevant Site Supervisor, who will immediately notify the Environment Manager and the Project Manager. The Site Supervisor will demark the area to protect the possible human skeletal material (remains), and inform all site personnel of restricted access to the area of discovery until further notice.
- ◆ The Environment Manager is to record the details, take photos of the find and its context (without causing further excavation or disturbance) and notify the Project Archaeologist and the NSW Police.
- ◆ All directions dictated by the NSW Police, in discussion with the Project Archaeologist (where relevant), must be followed.
- ◆ In the event that the human remains are considered archaeological, and NSW Police release the finds location, the Environment Manager must contact OEH's Greater Sydney Branch on 02 9995 6864. Notification should provide a verbal description of the remains as well as the burial context.
- ◆ All directions dictated by the OEH's Greater Sydney Branch, in discussion with the Project Archaeologist (where relevant), must be followed. This may include the need to engage technical specialist (e.g. Forensic Anthropologist), and liaison with the RAPs, to recover the remains.
- ◆ Work is not to commence in the area unless authorised in writing by OEH and/or the NSW Police.



## Appendix 3: Procedure for Discovery of Unexpected Finds – Aboriginal Heritage

## Procedure for Discovery of Unexpected Finds – Aboriginal Heritage

### Purpose

This procedure details the actions to be taken when a previously unidentified and/or potential Aboriginal heritage item/object/site is found during construction activities.

### Scope

This section outlines the procedure for managing unexpected finds in accordance with the Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales (DECCW 2010) and the Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW (OEH 2011); and the relevant NSW legislation.

### Procedure

- ◆ In the event that a potential heritage artefact/item/object/site is encountered during construction the following steps shall be taken.
- ◆ STOP ALL WORK in the vicinity of the find and immediately notify the relevant Site Supervisor. The Supervisor will then notify the Environment Manager and the Project Manager, and demark the area to protect the find.
- ◆ The Environment Manager is to record the details, take photos of the find and ensure that the area is adequately protected from additional disturbance.
- ◆ The Environment Manager contacts the Project Archaeologist to notify them of the location of the find.
- ◆ All instructions provided by the Project Archaeologist are to be followed. This may include:
  - ◆ The find is not a potential Aboriginal object: work can recommence.
  - ◆ The find is a potential Aboriginal object: appropriate approvals and/or mitigation measures require implementation.
  - ◆ The find is a potential historical relic: appropriate approvals and/or mitigation measures require implementation.
- ◆ Work is not to commence in the area unless authorised in writing by the Project Archaeologist.