

Aboriginal Cultural Heritage Assessment Report, University of Newcastle, Honeysuckle City Campus Development (Stage 1A Enabling Works)



Prepared for University of Newcastle
by Curio Projects

October 2018

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Aboriginal Cultural Heritage Assessment Report Cover Sheet

Report Title:	University of Newcastle, Honeysuckle City Campus Development—Aboriginal Cultural Heritage Assessment Report
Author(s) Name:	Sam Cooling, Natalie Vinton
Author(s) Contact Details:	Curio Projects L1/204 Clarence Street, Sydney NSW 2000 0402 522 789 (Sam Cooling) sam.cooling@curioprojects.com.au
Address of Subject Area:	The University of Newcastle, Honeysuckle City Campus 16 Honeysuckle Drive, Newcastle NSW 2300 Lots 1, 2, and 3 in DP 1163346 (Site 1) Lot 21 in DP 1165985 (part Sites 2 and 3) Part Lot 2 in DP 1226145 (part Sites 2 and 3) Newcastle City Council LGA
Report prepared for:	The University of Newcastle Carole Mandicourt-Jones The University of Newcastle University Drive, Callaghan NSW 2308 Carole.Mandicourt-Jones@newcastle.edu.au +61 2 4921 7149
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Relevant Abbreviations

Abbreviation/Term	Definition
ACHAR	Aboriginal Cultural Heritage Assessment Report
ACHMP	Aboriginal Cultural Heritage Management Plan
ADTOAC	Awabakal Descendants Traditional Owner Aboriginal Corporation
AHIMS	Aboriginal Heritage Information Management System
AHIP	Aboriginal Heritage Impact Permit
ASIRF	Aboriginal Site Impact Recording Form
ATOAC	Awabakal Traditional Owner Aboriginal Corporation
ATR	Archaeological Technical Report
'Code of Practice'	DECCW 2010, <i>Code of Practice for the Archaeological Investigation of Aboriginal Objects in New South Wales</i> .
'Consultation Guidelines'	DECCW 2010, <i>Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010</i> .
DEECW	Department of Environment, Climate Change and Water (now Office of Environment and Heritage—OEH).
'Due Diligence Code of Practice'	DECCW 2010, <i>Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW</i> .
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
'Guide to Investigating'	OEH 2011a, <i>Guide to Investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW</i> .
Heritage Act	<i>NSW Heritage Act 1977</i>
ICOMOS	International Council of Monuments and Sites
LALC	Local Aboriginal Land Council
LGA	Local Government Area
NPW Act	<i>NSW National Parks and Wildlife Act 1974</i>
OEH	NSW Office of Environment and Heritage (formerly DECCW)
PAD	Potential Archaeological Deposit
RAPs	Registered Aboriginal Parties
SHR	NSW State Heritage Register
SU	Survey Unit

Executive Summary

Curio Projects Pty Ltd was commissioned by University of Newcastle (UON) to prepare an Aboriginal Cultural Heritage Assessment Report (ACHAR) for the new Honeysuckle City Campus development of the University of Newcastle, located within the Honeysuckle Precinct (the study area).

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

This ACHAR should be submitted to support an Aboriginal Heritage Impact Permit (AHIP) application for the UON HCCD study area (as described in this report) to the NSW Office of Environment and Heritage (OEH) in accordance with Section 90 of the *NSW National Parks and Wildlife Act 1974* (NPW Act).

This report has been prepared following the requirements for reporting as established in DECCW *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (24 September 2010) (Code of Practice), and OEH 2011a *Guide to Investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Guide to Investigating).

Summary of ACHAR Findings

- The original Honeysuckle shoreline would have extended approximately northeast to southwest through the study area, from the southeastern side of Site 1, across to the southwestern side of Site 2. All of Site 3 would have originally been located along/in close proximity to the original shoreline.
- In situ Aboriginal archaeological deposits are likely to be present where intact original soil profiles remain. Due to levels of historical fill across the entire study area, this potential is unlikely to be accurately reflected in any surface manifestation of Aboriginal artefacts that may be present.
- There is **moderate to high potential** for intact Aboriginal archaeological deposits to be present where natural remnant soil profiles exist (i.e. in the southeast corner of Site 1, southeast of Site 2, and across all of Site 3). There is a **moderate to high potential** for isolated Aboriginal artefacts in disturbed contexts to be located across the whole of the study area. While these disturbed objects would not be of archaeological research potential or significance, they have cultural and social significance to the local Aboriginal community. These deposits may be of moderate to high scientific significance, depending on the nature and extent of any deposit that is present.
- The study area also has potential for Aboriginal post-contact sites, an archaeological feature and site type that are relatively undocumented within the Newcastle region.
- The study area is of high social and cultural significance to the Awabakal/Guringai people. The location of the study area, close to the Hunter River and in the Greater Newcastle area, is an area that is, and has in the past, provided resources for Awabakal people that have been hunted and collected for thousands of years. The study area not just an isolated site, but connected to

many Cultural Heritage sites across this region and within Awabakal Traditional Country, which should be viewed on a whole as an Aboriginal Cultural Landscape.

- Due to the presence of the layers of historical fill at the site, as well as historical archaeological resource, Aboriginal archaeological test excavation under the OEH *Code of Practice* was unable to be undertaken within the study area, prior to the AHIP application.
- The UON HCCD study area has one registered Aboriginal site located within its boundaries (UoN1A-1, #38-4-1968) that is likely to be impacted by the proposed development works of the Stage 1A Enabling Works.
- The development of the UON HCCD project is proposed to be undertaken over the course of a number of years, in numerous stages, with varying development impacts (many of which are not yet known, as the development is only currently at Concept Plan stage). The works undertaken will enable the development of Sites 1, 2 and 3. The bulk of the enabling works will be undertaken in the west of site 1 where the first building (building A1) will be constructed. These enabling works will have the potential to impact Aboriginal objects where ground disturbing works are required.
 - No bulk excavation is proposed, in fact, filling of all of Site 1 is required to create the minimum habitable floor level across the site.
 - Enabling works impacts consist predominantly of trenching for new services, and other low impact activities such as boreholes for decontamination, geotechnical investigation, and mine remediation grouting.
- The nature of the overall concept plan development (as it currently stands) will contribute positively towards the conservation of any potential Aboriginal archaeological deposit and cultural heritage values contained within the site, as it is not likely to include any extensive basement excavation that would substantially impact or remove natural soil profiles with the potential for Aboriginal archaeological objects and deposits.
- Should development impacts not require disturbance of natural soil profiles (at present, the concept plan suggests that the majority of subsurface natural soil profiles will be retained intact beneath the development), then these will be able to be retained within the study area, thereby preserving the archaeological deposit and its associated significance for future generations, regardless of whether the exact nature of the archaeological deposit is able to be ascertained through archaeological investigations coupled with the development impacts, or not.

Management Recommendations

The following management and mitigation statements are made, following from the Aboriginal cultural heritage assessment of the UON HCCD study area, including Aboriginal community consultation, ethnohistorical and environmental context, archaeological survey, predictive modelling, heritage significance assessment and impact assessment, in accordance with relevant NSW legislation and statutory requirements. It is recommended that:

- The proposed Stage 1A enabling works have the potential to impact one registered Aboriginal site, and potentially impact natural soil profiles with the potential to retain an intact Aboriginal archaeological signature. Therefore, the proponent should apply for an AHIP application under Section 90 of the NSW National Parks and Wildlife Act 1974 to the NSW OEH, to allow impact to

these sites, and allow other archaeological mitigation works for the study area, as proposed through this ACHAR.

- The AHIP application should be area wide to cover any proposed Stage 1A impacts within Sites 1, 2 and 3, as well as required impacts for the enabling works within the surrounding streets and laneways. The proposed AHIP area is presented in Figure 53.
- The AHIP should include provisions for the archaeological investigation strategy management for the study area, as proposed through 8.0 of this ACHAR
- Following approval of the AHIP, the proposed archaeological investigation (Management Strategy One), including monitoring of service trenching, related possible targeted test excavation, and community collection, should be undertaken, to be coordinated with the enabling works trenching etc.
- Consultation with project RAPs has determined that long term curation of Aboriginal cultural materials, recovered from the archaeological investigation and community collection, should be reburied on a safe location within the public domain of the UON Honeysuckle Campus, once development has proceeded to a stage appropriate to identify such a location, ideally in association with an Aboriginal Learning Circle. This would be discussed and determined in consultation with the UON and project RAPs, once development of the site has proceeded to a stage in which reburial could be safely and sensitively undertaken.
- Continuing consultation with the project RAPs should be undertaken through subsequent development stages of the project.
- While the Stage 1A enabling works will be subject to the NPW Act, and require an AHIP, following approval of the UON HCCD concept plan State Significant Development (SSD) Application, the requirement for individual AHIP applications for development works will no longer be legally required.
- Therefore, it is recommended that an Aboriginal Cultural Heritage Management Plan (ACHMP), should be prepared for the wider UON HCCD project, in order to provide a working framework and strategic advice for the appropriate and sensitive management of Aboriginal cultural heritage and archaeology going forward for the life of the project. Project RAPs, particularly identified cultural knowledge holders, should be involved in all stages of development of this ACHMP, ideally to be facilitated within a workshop environment.
- Opportunities to interpret any Aboriginal cultural material, archaeological deposits, and identified Aboriginal cultural heritage values should be considered as part of a holistic approach to interpreting the UON Honeysuckle Campus Development. An Aboriginal cultural heritage interpretation strategy should be developed for the UON HCCD project, in consultation with the project RAPs, to be incorporated into the wider heritage interpretation strategy for the development.
- An Aboriginal cultural induction should be developed to provide to all future employees and construction workers on the site, prior to the commencement of construction works.

1.0 Introduction

1.1. The Purpose of this Report

Curio Projects Pty Ltd was commissioned by University of Newcastle (UON) to prepare an Aboriginal Cultural Heritage Assessment Report (ACHAR) for the new Honeysuckle City Campus Development (HCCD) of the University of Newcastle (UON), located within the Honeysuckle Precinct (the study area).

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

As archaeological test excavation has not yet been able to be undertaken within the study area, details regarding the archaeological investigation and technical details in relation to the study area have been incorporated into this ACHAR, as opposed to the preparation of a separate Archaeological Technical Report.

This ACHAR should be submitted to support an Aboriginal Heritage Impact Permit (AHIP) application for the UON HCCD study area (as described in this report) to the NSW Office of Environment and Heritage (OEH) in accordance with Section 90 of the *NSW National Parks and Wildlife Act 1974* (NPW Act).

This report has been prepared following the requirements for reporting as established in DECCW *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (24 September 2010) (Code of Practice), and OEH 2011a *Guide to Investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (Guide to Investigating).

1.2. Project Background and Development Context

The closure of the heavy rail corridor at Honeysuckle has provided significant opportunities for development in this precinct, including the development of a new UON campus. The current development proposes the expansion of the UON city campus, through the development of new university facilities within the Honeysuckle Precinct of the Newcastle CBD, to be known as the UON Honeysuckle City Campus. The new Honeysuckle City Campus will be located on a series of connected sites that have been acquired by the UON from the Hunter Development Corporation between Honeysuckle Drive and Civic Lane. A Concept Master Plan has been developed for the site to provide UON with a sensible and flexible framework to guide the future development of the Honeysuckle City Campus.

The UON has acquired what is known as 'Site 1' from the Hunter Development Corporation, with an optional Purchase Agreement for the two further adjacent sites along the rail corridor land north of Civic Lane (Sites 2 and 3). This ACHAR applies to the whole potential site area (i.e. Sites 1, 2 and 3, as well as additional easements in surrounding streets for the installation of required services such as sewer, water, electrical, and telecommunications).

The UON has lodged a State Significant Development Application (SSDA) for the Concept Plan of the UON HCCD project (SSD 9262). Separate Development Applications (DAs) will then be lodged for the remainder of the works at a later date. Secretary's Environmental Assessment Requirements (SEARs) for

the UON HCCD Concept Plan were issued on 8 May 2018, and the Environmental Impact Statement (EIS) was lodged in July 2018. At the time of writing, the EIS was on public exhibition until 29 August 2018.

However, Stage 1A early/enabling works (as described in Section 5.1) are required to be undertaken at the HCCD site prior to the approval of the overall SSD Concept Plan for the development. Therefore, the early/enabling works phase of the development will still be subject to the provisions of the NPW Act, and will therefore require an AHIP.

1.3. Project Area

The study area is located approximately between Honeysuckle Drive and Civic Lane, within the Honeysuckle Precinct of the Newcastle CBD, within the Newcastle City Council LGA (Figure 1). The future UON Honeysuckle City Campus (the study area) will be located across a number of lots across three separately identified sites (Sites 1, 2 and 3), which currently exist generally as vacant lots, car parking and part of the former heavy rail corridor (Figure 2). Site 1 and part of Site 2 are also currently used as site compound and materials handling for the construction of the Newcastle Light Rail nearby. Figure 3 presents the three main sites of the proposed development, and defines the relevant lots and DPs.

The study area to which this report (and the corresponding AHIP) refers includes a slightly wider area than solely the lots of Site 1, 2 and 3, to capture the extent of the enabling works, including services, boreholes etc that will be required to prepare the site for the first stage of development, providing new service routes, and connecting the new development into surrounding services (electrical, telecommunication, sewer, water).

The main development area (i.e. Sites 1, 2 and 3) is generally bounded to the north by Honeysuckle Drive, which is lined on its northern side by recent residential apartment blocks, to the east by Settlement Lane (also lined by recent apartment blocks) and the former Civic Railway Station, to the south by Civic Lane, and to the west by Worth Place (Figure 3).

The required pathways for the reticulation of electrical and telecommunication cables and new sewer and water connections to the new UON site have also been included within this ACHAR, and will be included within the proposed AHIP area.

TABLE 1: SUMMARY OF STUDY AREA BY SITE, LOTS AND DPS, AS RELEVANT TO IMPACTS FOR AHIP APPLICATION

Site	Area	Lots
Site 1	8,546m ²	Lots 1, 2 and 3 DP 1163346
Site 2	6,174m ²	Part Lot 21 DP 1165985 Part Lot 2 DP 1226145
Site 3	5,692m ²	Part Lot 21 DP 1165985 Part Lot 2 DP 1226145
<u>Road Easements (Trenching only)</u>		
<i>Wright Lane</i>	N/A—Partial	Part Lot 4 DP 1111305
<i>Honeysuckle Drive</i>	N/A—Partial	-
<i>Auckland Street</i>	N/A—Partial	-
<i>Worth Place</i>	N/A—Partial	-



LEGEND

Study Area

0 200 400 m

CRS: GDA94 / MGA zone 56
1: 2000
Curio Projects - 2018

FIGURE 1: GENERAL STUDY AREA CONTEXT, SITES 1, 2 AND 3 (SOURCE: CURIO 2018)

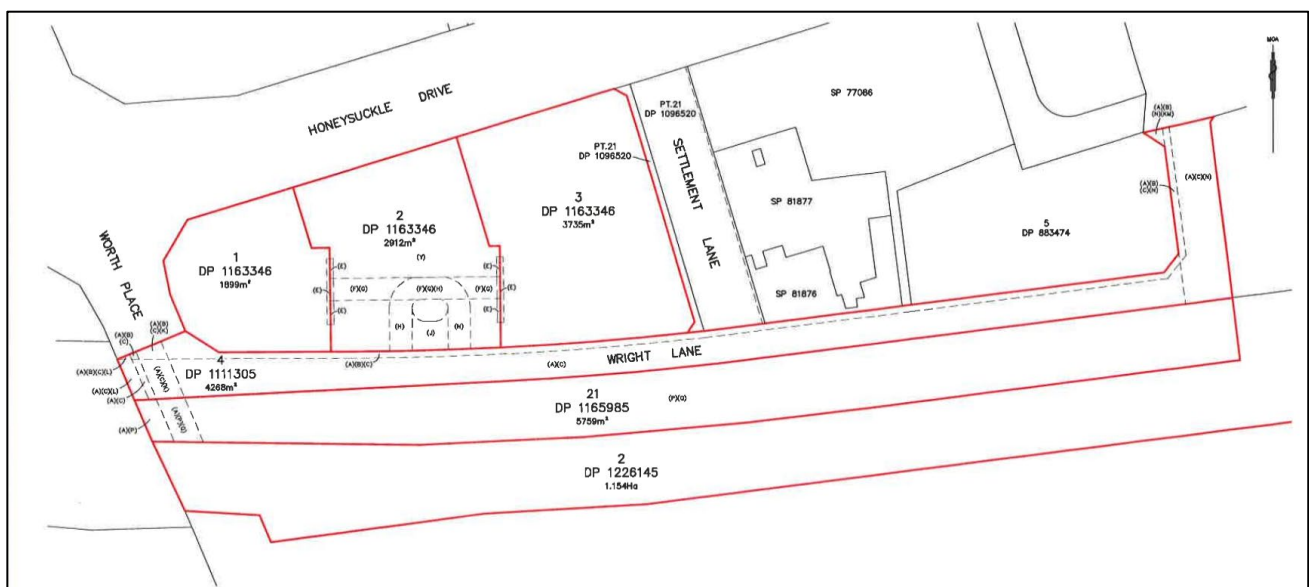


FIGURE 2: EXISTING LOTS AND DPS ACROSS THE STUDY AREA AND SURROUNDS. (SOURCE: MONTEATH & POWYS, 2017)



FIGURE 3: STUDY AREA (SOURCE: CURIO 2018)

1.4. Relevant Statutory Controls

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

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

1.4.1. Environmental Planning and Assessment Act 1979

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

Part 4, Division 4.1 of the EP&A Act identifies and defines State Significant Development projects (SSD) as those declared under Section 89C of the EP&A Act. SSD and State Significant Infrastructure projects (SSI), replace 'Concept Plan' project approvals, in accordance with Part 3A of this Act, which was repealed in 2011.

Where a project is assessed to be an SSD, the process of development approval differs, with certain approvals and legislation no longer applicable to the project. Of relevance to the assessment of

Aboriginal heritage for a development, the requirement for an AHIP in accordance with Section 90 of the NPW Act is removed for SSD projects (EP&A Act, Section 89J).

1.4.2. NSW National Parks and Wildlife Act 1974

The NSW National Parks and Wildlife Act 1974 (NPW Act), administered by the NSW Office of Environment and Heritage (OEH), is the primary legislation that provides statutory protection for all 'Aboriginal objects' (Part 6, Section 90) and 'Aboriginal places' (Part 6, Section 84) within NSW.

An Aboriginal object is defined through the NPW Act as:

*"any deposit, object or material evidence (not being a handicraft made for sale) relating to the Aboriginal habitation of the area that comprises New South Wales, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction, and includes Aboriginal remains."*¹

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

"...any act or omission that:

(a) destroys, defaces or damages the object or place, or

(b) in relation to an object-moves the object from the land on which it had been situated, or

(c) is specified by the regulations, or

(d) causes or permits the object or place to be harmed in a manner referred to in paragraph

(a), (b) or (c), (NPW Act 1974)

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

1.4.3. Native Title Act 1993

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

In 2013, the Awabakal and Guringai people submitted a Native Title claim over an area extending from Maitland to Hornsby (NC2013/002), however this claim was discontinued in 2017.

1.4.4. OEH Guidelines

In order to best implement and administer the protection afforded to Aboriginal objects and places as through the NPW Act, and EP&A Act, the OEH have prepared a series of best practice statutory guidelines with regards to Aboriginal heritage. These guidelines are designed to assist developers, landowners and archaeologists to better understand their statutory obligations with regards to Aboriginal heritage in NSW, and implement best practice policies into their investigation of Aboriginal

¹ NPW Act 1974, Part 1: 5

heritage values and archaeology in relation to their land and/or development. This report has been prepared in accordance with these guidelines, including:

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

1.5. Objectives of Aboriginal Heritage Assessment:

The objectives of the Aboriginal heritage assessment for the UON HCCD site were to:

- understand the number, extent, type, condition, integrity and archaeological potential of Aboriginal heritage sites and places within the study area;
- determine whether identified Aboriginal sites and places are a component of a wider Aboriginal cultural landscape;
- understand how the physical Aboriginal sites relate to Aboriginal tradition within the wider Newcastle area;
- prepare a scientific cultural values assessment for all identified Aboriginal cultural heritage;
- aim to minimise impacts to Aboriginal cultural heritage through sensible and pragmatic site and land management;
- determine how the proposed project may impact any identified Aboriginal cultural heritage;
- determine where impacts are unavoidable and develop a series of impact mitigation strategies that benefit Aboriginal cultural heritage and the proponent (in close consultation and discussion with the local Aboriginal community); and
- provide clear recommendations for the conservation for archaeological values and mitigation of impacts to these values.

1.6. Limitations and Constraints

The impact assessment as presented in this report, was prepared using documents provided by JohnStaff Projects, prepared by GHD and Northrop. Therefore, the impact assessment presented in Section 7.0 has been based on impacts as described in Northrop 2018, *HCCD Enabling Works—Early Works Application—Civil, Water & Sewer*, prepared for University of Newcastle; and GHD 2018, *HCCD Enabling Works—Electrical/Communications Schematic Design Report and DA Input Report*, prepared for University of Newcastle.

This report does not include any historical archaeological or built heritage assessment.

1.7. Investigators, Contributors and Acknowledgements

This report has been prepared by Sam Cooling, Senior Archaeologist of Curio Projects, with review by Natalie Vinton, Director of Curio Projects. Table 2 presents a complete list of the project team, including qualifications, affiliation and role in the project, as well as project RAPS survey participants (further details of all project RAPS are presented in Section 2.0).

Curio Projects would also like to acknowledge the ongoing assistance throughout the project of Sheena Duggan, Project Manager of JohnStaff Planning, and Isaac Conway, Assistant Delivery Manager of the University of Newcastle. Curio Projects would also like to thank all the project RAPS for their advice and input into this report, as detailed further in Section 2.0.

TABLE 2: INVESTIGATORS AND CONTRIBUTORS

Person (Qualification)	Affiliation	Role
Sam Cooling, Senior Archaeologist (BA, M Archaeological Science)	Curio Projects	Project Manager, Report Author
Natalie Vinton, Director (BA (Hons) Archaeology and Palaeoanthropology)	Curio Projects	Report Reviewer
Andre Fleury, Archaeologist (B. Hist, M Archaeological Science)	Curio Projects	Field Survey, GIS
Pete Townsend	Awabakal Local Aboriginal Land Council	Aboriginal Heritage Officer (Field Survey)
Peter Leven	Awabakal Descendants Traditional Owners Aboriginal Corporation	Aboriginal Heritage Officer (Field Survey)
Tracey Howie	Guringai Tribal Link	Aboriginal Heritage Officer (Field Survey)
Arthur Fletcher	Kawul Pty Ltd trading as Wonn1 Sites	Aboriginal Heritage Officer (Field Survey)
Suzie Worth	Kawul Pty Ltd trading as Wonn1 Sites	Aboriginal Heritage Officer (Field Survey)
Craig Horne	Gidawaa Walang Cultural Heritage Consultancy	Aboriginal Heritage Officer (Field Survey)

2.0 Aboriginal Community Consultation

Aboriginal community consultation is required for assessment of Aboriginal cultural heritage, and should be undertaken in the early stages of project planning in order to best guide the development process. This section documents the process of Aboriginal community consultation that has been undertaken for the Aboriginal cultural heritage assessment of the UON HCCD study area.

Aboriginal people are recognised as the determinants of their own heritage. Therefore, the ongoing process of Aboriginal community consultation for the UON HCCD project seeks to identify social and cultural values of the study area and its surrounds to the local Aboriginal community and will incorporate the assessment and acknowledgement of this significance into the future development stages of the project following SSDA approval.

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

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

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

Consultation for the UON HCCD project have been undertaken in accordance with OEH statutory guidelines *Aboriginal cultural heritage consultation requirements for proponents 2010*.

A complete log of all communications between Curio Projects and registered Aboriginal parties (RAPs) for the project, as well as all written responses (unless requested by RAPs to be not directly included) has been provided as Appendix A.

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

Stage 1—Notification of project proposal and registration of interest

Stage 2—Presentation of Information about the Proposal Project

Stage 3—Gathering Information about Cultural Significance

Stage 4—Review of Draft Cultural Heritage Assessment Report

2.1. Stage 1—Notification of project proposal and registration of interest

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

On behalf of the University of Newcastle, Curio Projects initiated a process of Aboriginal Community Consultation in accordance with OEH consultation guidelines in May 2018. In accordance with Stage 1.2

of the Consultation guidelines, letters were sent to the relevant statutory bodies on 4 May 2018 (NSW Office of Environment and Heritage, Awabakal Local Aboriginal Land Council, the Registrar *Aboriginal Land Rights Act 1983*, the National Native Title Tribunal, Native Title Services Corporation Limited, City of Newcastle Council, and the Hunter Local Land Services), requesting names of Aboriginal people who may have an interest in the proposed project area and hold knowledge relevant to determining the cultural significance of Aboriginal objects and places relevant to the UON HCCD study area.

A public notice advertising the UON HCCD project was also placed in the Newcastle Herald on 9 May 2018 (consistent with Stage 1.3 of the Consultation Guidelines), advising of the project location and proposed development, and inviting registration from local Aboriginal people.

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

2.1.1. Registered Aboriginal Parties

As a result of Stages 1.2 and 1.3, seventeen RAPs were identified for the UON HCCD project (in alphabetical order):

- Awabakal Descendants Traditional Owners Aboriginal Corporation (ADTOAC);
- Awabakal Local Aboriginal Land Council (ALALC);
- Awabakal Traditional Owners Aboriginal Corporation (ATOAC);
- Didge Ngunawal Clan;
- Divine Diggers Aboriginal Cultural Consultants (DDACC);
- Gidawaa Walang Cultural Heritage Consultancy (GWCHC);
- Guringai Tribal Link;
- Jarban & Mugrebea;
- Kawul Pty Ltd trading as Wonn1 Sites;
- Mr Kevin Duncan;
- Lower Hunter Aboriginal Incorporated (LHAI);
- Murra Bidgee Mullangari Aboriginal Corporation (MBMAC);
- Mr Steve Talbott;
- Wattaka Wonnarua CC Service;
- Widescope Indigenous Group;
- Worimi Traditional Owners Indigenous Corporation (WTOIC); and
- Yinarr Cultural Services.

A copy of the notification and the details of registered Aboriginal parties were provided to OEH and the ALALC, initially on 6 June 2018, with revised list provided on 21 September 2018.

2.2. Stage 2 and Stage 3

Each project RAP was provided with written details of the proposed project and the draft proposed Aboriginal cultural heritage assessment methodology for the project (Stage 2 of the consultation guidelines). This letter was sent via registered post and/or email to all project RAPs in June 2018. Request was made for comment and/or review within 28 days of provision of the methodology document. A copy of the methodology document is provided in Appendix A.

An initial inspection of the study area was undertaken on 14 June 2018, attended by Sam Cooling (Senior Archaeologist, Curio Projects), Pete Townsend (Culture & Heritage Officer, Awabakal LALC), and representatives from UON and JohnStaff Projects (Isaac Conway and Sheena Duggan respectively).

A subsequent archaeological field survey of the project study area was conducted on 24 July 2018, to which all RAPs were invited to attend. RAP survey participants included Peter Leven (Awabakal Descendants Traditional Owners Aboriginal Corporation), Tracey Howie (Guringai Tribal Link), Craig Horne (Gidawaa Walang Cultural Heritage Consultancy), and Arthur Fletcher and Suzie Worth (Wonn1 Sites). This survey was conducted by Sam Cooling with assistance from Andre Fleury (Archaeologists with Curio Projects), and attended by Isaac Conway (Assistant Delivery Manager, University of Newcastle). Further details regarding the results of the field survey are provided in Section 4.0.

2.3. Stage 4—Review of Draft Cultural Heritage Assessment Report

This draft ACHAR was provided to all project RAPs on 27 August 2018 for review and comment. Request was made for comments and submissions by 24 September 2018 (28 days from date of provision of draft ACHAR).

The following key points were received from the review of the draft ACHAR by the project RAPs:

- Received feedback that Awabakal Traditional Owners Corporation, Awabakal Descendants Traditional Owners Corporation, Guringai Tribal Link, Lower Hunter Aboriginal Inc., are the recognised knowledge holders in the Newcastle community for the project site specifically.
- One representative from each recognised knowledge holder group should be present during site works to ensure that a combined knowledge set is available to the archaeologist in determining the significance of any potential cultural material.
- Methodology should be updated to allow sieving and/or walkover of stockpiled fill material following topsoil stripping, best methodology to be discussed between RAPs and client in the field, depending on site logistics, WHS requirements and practicality.
- Methodology should include some targeted test excavation in the southeast of Site 1 (i.e. along/to the southeast of the original Honeysuckle Shoreline), following topsoil stripping, prior to filling. Opportunity at this early stage to investigate Aboriginal archaeology in this location at this early stage of development, acknowledging that future buildings on the site will likely require piling/deep piers for construction, which impacts potential archaeology and sites.
- Recovered artefactual material to be kept temporarily at the Awabakal LALC offices keeping place (to be catalogued and recorded prior to storage at the LALC), until such time as a permanent reburial site within the UON HCCD development can be identified and the artefacts safely reburied in a culturally sensitive manner and registered with AHIMS.
- Opportunity for the creation of a Learning Circle within the public domain of the new UON Honeysuckle Campus, potentially in association with the reburial site, to facilitate a 'sustainable cultural learning environment', beneficial to both the local Aboriginal community, and the future university campus.
- Recognised knowledge holders should be involved in all aspects of the development of an Aboriginal Cultural Heritage Management Plan for the project, potentially to be developed through a workshop environment.

2.4. Submissions Received from Aboriginal Community

Table 3 provides a summary of submissions received from RAPs with regards to the UON HCCD project. This table has been revised and updated following RAP review of the draft ACHAR. Comments as summarised below have generally been paraphrased from verbal comment, or indicated where they are a direct quote from a written response. The following comments have been summarised and paraphrased where appropriate. Full details of all comments, feedback and copies of written submissions are included in Appendix A.

TABLE 3: SUMMARY OF KEY RAP SUBMISSIONS/COMMENTS

#	Date of Submission	Format	Comment
1	4.7.18	Written (response to project methodology)	'consider the value of 'place' within the Heritage and Cultural weighting...ensure the protection and conservation of Place & Objects which impact significantly on the spirituality, cultural, historic and general legacy needs of Aboriginal people to address inequalities in social and community well being' Request for additional information and results regarding the previously assessed areas surrounding the proposed project area. Concern regarding possible need for methodology modification in the event that additional investigation becomes necessary. Request for draft timetable for methodology and estimation of days for the proposed assessment and proposed Test excavation. Some confusion around intent to undertake Aboriginal archaeological investigation at site. (Methodology was slightly ambiguous, requested clarification). <i>Curio responded to all these comments via email on 5.7.18, including clarification of proposed methodology and intent for Aboriginal archaeological investigation at the study area.</i>
2	24.7.18	Verbal (during field survey)	Raised concern for management of any potential skeletal material/burial sites should they be present within the study area. Burial should remain in situ. Should Aboriginal skeletal material/burials be found within the site, would like the option to negotiate with UON to explore possible other avenues with alternative locations for the building, rather than impacting the burial. Concern about ambiguity of wording in reports, important that intent of words and recommendations is not able to be interpreted to mean something else. Importance of Aboriginal interpretation and signage within new development. Opportunity for an Aboriginal learning circle within development? Awabakal LALC has a keeping place, sometimes enter Care & Control for special artefacts, generally prefer repatriation of artefacts. Artefacts should be wrapped in melaleuca to reburial, not in plastic as required by OEH.

#	Date of Submission	Format	Comment
3	24.7.18	Verbal (during field survey)	Important that the Aboriginal community have the opportunity to get involved in development process, provide opportunity to gain Aboriginal cultural information to confirm and support the strong cultural and oral history of the Awabakal/Guringai people of the Newcastle region. Newcastle foreshore is a very significant area for Awabakal people, important not to lose significance due to neglect through development process. Avoid ambiguous wording in reporting. Importance of Aboriginal interpretation and signage within new development. Particularly that used Awabakal language. Concern for superimposing Aboriginal culture and language from different regions over Awabakal land, contributes to the genocide of Awabakal culture, and homogenization of Aboriginal culture and stories, 'watering down' the truth. Important to recognise that the study area is Awabakal Country, and the work, stories, interpretation etc should reflect as such.
4	24.7.18	Verbal (during field survey)	Need for an Aboriginal cultural induction for all workers on development site, prior to commencement of construction. Site 2 and 3 completely hardstand, no visibility, important for RAPs to be present during removal of top surface, not just after site has already been dug out.
5	24.7.18	Verbal (Phone call)	Assessment needs to be specific to what is being planned, if proposed changes, assessment needs to change too. Lots of work undertaken in the area.
6	22.9.18	Email	Study area is of high social and cultural significance to Worimi people Recommend Aboriginal archaeological test excavations be undertaken within all study areas Very high potential of Aboriginal Objects in all fill across all study areas. Removal of fill needs to be monitored by RAPs, RAPs have right to sieve and retrieve Aboriginal objects from fill. Worimi TOIC preference for long term management of Aboriginal objects to be stored in Worimi TOIC keeping place.
7	25.9.18	Verbal (Phone call)	Section 8.4, says reburial in melaleuca leaves, should be bark. Otherwise methodology seemed appropriate for works. Preference to collect artefacts via site walkover and topsoil stockpiling rather than have any damage to artefacts. Appropriate for reburial of artefacts back on site once possible.
8	24.9.18	Verbal (Phone call)	Opportunity to sieve a sample of the fill topsoil materials to recover any additional possible artefacts should be made.

#	Date of Submission	Format	Comment
			Monitoring works should have at least two RAPs on site at a time to make the work worth it for the community. Recovered materials can be temporarily stored at Awabakal LALC offices keeping place until permanent location can be identified. Do walkover of the site once existing Downer site complex removed to collect any surface artefacts (as well as registered site).
9	3.10.18	Verbal (Phone call)	Ok with temporary storage of artefacts at ALALC keeping place until appropriate reburial location within development is identified. Repatriation should involve learning circles etc within new development, include recommendation in ACHAR to this effect. Once artefacts are reburied and registered, they will need to remain there, so may as well create a 'sustainable cultural learning environment' in the space within the university campus public domain. Need beneficial community initiatives. Implementation of learning circle/Aboriginal cultural heritage space to link in with the landscape and the development design. Ok with the general methodology, with such a site type, walkover and monitoring is really the only option.
10	4.10.18	Verbal (Phone call)	ACHMP be developed by way of workshop, have done a few times for other projects, gets it done fast, helps to set out the format, can organise an Awabakal notification at the front. Storage of artefacts at ALALC is not appropriate, but as temporary site only can work as long as all artefacts are catalogued and photographed beforehand
11	5.10.18	Email	Recommend a cumulative impact assessment of Newcastle with regards to Aboriginal cultural heritage be undertaken, possibly by OEH and Newcastle City Council in consultation with local Aboriginal community (Understand this has a far broader scope than the current project). Recommend that one representative from each of the registered knowledge holder groups as supplied by Awabakal LALC be present during site works. Ensure a combined knowledge set available to the archaeologist in determining the significance of any potential cultural material. Recommend testing under the Code of Practice in the South Eastern corner of Site 1 following stripping of top 200mm, prior to reintroduction of required fill layer. Help to adequately investigate any subsurface deposits in this area and along the original foreshore, to acquire genuine archaeological information to feed into the future stages of the development, and Aboriginal Cultural Heritage Management Plan.

2.5. Curio Responses to Submissions

Table 4 provides a summary of Curio responses to RAP submissions. This table has been revised and updated following RAP review of the draft ACHAR. All written responses received were replied to, directly addressing any comments, acknowledging how they had been addressed within ACHAR if relevant, or explaining if otherwise.

TABLE 4: SUMMARY OF CURIO RESPONSES TO RAP SUBMISSIONS

Comment No.	Curio Response
1	Addressed in project methodology. Statement of significance updated, project methodology wording clarified further.
2	Project methodology and ACHAR updated to address management of potential skeletal remains, opportunities for Aboriginal Learning Circle noted within Aboriginal Heritage Management (Section 8.3) of ACHAR. Management of Aboriginal Objects (Section 8.4) revised to note preferred reburial on site as long term management strategy.
3	Social significance updated in ACHAR to include significance of Newcastle foreshore to Awabakal people. Inclusion of comments within Aboriginal Heritage Management (Section 8.3) of ACHAR.
4	Management recommendations updated to include development of an Aboriginal cultural induction for all development site workers.
5	Methodology updated to note that assessment as presented in ACHAR is specific to development works, future works will require additional assessment and Aboriginal cultural heritage management, to be developed through the ACHMP for the project site.
6	Social and cultural significance updated to reflect high significance of study area to Worimi people. Archaeological test excavation specific to Stage 1A enabling works are addressed through this ACHAR. Confirmation that future development works will require further assessment and archaeological investigation, specific to the development impacts, once known. Section 8.1 (Archaeological management) revised to include provision for walkover and sieving of removed topsoil/fill. Acknowledge Worimi preference for long term storage, however majority of project RAPs indicated that preference was temporary storage at Awabakal LALC, with long term management to be reburial on site.
7	Section 8.4 wording revised. Section 8.1 methodology revised to include provision for walkover and sieving of removed topsoil/fill.
8	Section 8.1 methodology revised to include provision for walkover and sieving of removed topsoil/fill and requirement for at least two project RAPs to be present during monitoring works. Section 8.4 updated to reflect Awabakal LALC as temporary artefact storage, with long term management to be reburial on site when appropriate and possible.
9	Revise Section 8.3 to include wording 'creation of a sustainable cultural learning environment', and requirement for beneficial community initiatives through future heritage interpretation at development site.
10	Section 8.4 revised to recommend development of ACHMP via a workshop environment.
11	Acknowledged difficulties surrounding Intergenerational Equity. Unable to address directly within the scope of this individual project, however Curio Projects believes that this is an important overarching issue for the Awabakal people, and would provide support to such a project in any way possible.

Comment No.	Curio Response
	Potentially something for OEH consideration. Included in this document for information and to represent the recommendations of the Awabakal people. Section 8.1 Methodology revised to recommend one representative from each registered knowledge holder is present during proposed site work. As per Awabakal LALC recommendations as well. Section 8.1.1 revised to include provision for further investigation of spoil pile, including walkover and sieving of sample of material. (Also recommended by several other RAPs) Topsoil stripping and filling in southeast corner of Site 1 will no longer be undertaken as part of Stage 1A Enabling Works, but will be postponed to a later stage in the development, at which time test excavation in this location can be incorporated into a wider program of Aboriginal test excavation and archaeological investigation at the site.

Future development stages should include consultation with the project RAPs as identified above, to ensure appropriate ongoing management and mitigation of potential impacts to Aboriginal cultural heritage within the study area.

3.0 Summary and Analysis of Background Information

This section summarises the environmental and archaeological background and context for the study area, including previous work undertaken in the proximity. This summary serves to place the study area and proposed development into an appropriate regional context, as well as provide a current archaeological predictive model for the region. This will assist to determine the nature and significance of any potential Aboriginal archaeology that may be present, as well as assist in the development of appropriate management mechanisms. Through a desktop assessment, a general understanding of any potential archaeology at the site can be formed, and appropriate measures developed, prior to any non-reversible impact to the site and Aboriginal archaeology and cultural values.

3.1. Aboriginal Ethnohistory of Newcastle

The traditional custodians of the Honeysuckle Point area as well as across much of the wider Newcastle region are the Awabakal people. While the majority of written records relating to Awabakal people of the Newcastle region were written by early European colonists and the like, and therefore represent the views of the authors rather than that of the Aboriginal people themselves, these resources can still provide a useful insight into the activities, locations, tools, clothing etc of local Aboriginal people during the early contact period. Regardless, it is well established that Aboriginal people intensively inhabited the Hunter Valley/Newcastle region, long before 1788 (Figure 4).

A number of natural and prominent landscape features around the Newcastle area are known to be of significance/sacred sites to local Aboriginal people. One of these sacred sites is Nobbys Head, known to the Awabakal people as *Whibay Gamba*, where it is said that a kangaroo jumped from Fort Scratchley (*Tahlbihn Point*) to Nobbys, where it remained hidden in the bowels of the island, occasionally thumping its tail and shaking the land (thought of as a reference to the region's earthquake activity). Other known significant Aboriginal sites in the Newcastle area include a tool making site at *Pillapay Kullaitaran* (Glenrock Lagoon) and shell midden sites across *Meekarlba* (Honeysuckle), (City of Newcastle 2018), (adjacent to/consistent with the current study area). Newcastle is known to local Awabakal people as *Muloobinba*, while the Hunter River is known as *Coquon*.

Awabakal people in the Newcastle/Honeysuckle area would have had access to a wide variety of food and other subsistence resources, due to the diversity of landscape features associated with the close proximity to the Hunter River and its estuary, and the South Pacific Ocean along the Newcastle coast. Numerous historical observations make reference to these abundant resources and their use by Aboriginal people.

An observation of the quantity of fish available in the Hunter River was made by Lieutenant Grant of the Royal Navy, who noted that:

'fish were taken in great quantities, and of various kinds, particularly mullets, which were large and well flavoured. We caught also a species of jew fish, one of which weighed 56 pounds, and proved excellent eating. From the numbers of this fish, which escaped the seine, I am inclined to think there is great plenty in this river' (AMBS 2005, after Grant 1803)

Aboriginal people of the area would fish both from canoes as well as from the shoreline, using both line and spear fishing techniques, as well as hunting for other sealife such as lobsters. In the mid 1800s, William Scott of Port Stephens observed Aboriginal men and women working together to fish:

'The women would be on the lookout for the shining, shimmering mass of fish to come round some wooded headland, and when their shrill outcries told of the approach of the finny prey, the men would rush to the shore. Hissing into the water would hurtle the heavy spears....' (AMBS 2005, after Newcastle Morning Herald Supplement 1993)



FIGURE 4: 'ABORIGINES RESTING BY CAMP FIRE, NEAR MOUTH OF THE HUNTER RIVER, NEWCASTLE' (NOBBY'S HEAD VISIBLE IN CENTRE BACKGROUND OF PAINTING). PAINTING BY JOSEPH LYCETT, C. 1817 (SOURCE: NLA, [HTTP://NLA.GOV.AU/NLA.OBJ-138500420](http://nla.gov.au/nla.obj-138500420))

Reverend Lancelot Threlkeld, former London actor and businessman turned missionary, arrived Newcastle in 1825, initially residing at Government Cottage (Government Farm, in proximity to the study area, in the general location of the former Palais Royale, near the western corner of Hunter and Steel Streets, Newcastle), before being appointed the missionary of a newly established government supported Aboriginal mission at Belmont, on Lake Macquarie in 1825 (Gunson 1967), and a subsequent mission at 'Ebenezer' (Toronto) from 1828-1841. During his time as a missionary, Threlkeld saw himself as a kind of 'protector, interpreter and evangelist' of the local Aboriginal people, and his work contributed significantly to the recording of Awabakal culture and language (Lake Macquarie City Library). With the help of Awabakal tribal leader Biraban, Threlkeld learned much of the Awabakal dialect, and went on to publish works on Awabakal language and culture, as well as to work with advocates of Aboriginal welfare, including acting as an interpreter for Aboriginal people in court (Gunson 1967). Much of Threlkeld's work remains today as a significant resource, preserving knowledge Awabakal language and cultural practice in the early 1800s (with Awabakal people maintaining their continuous cultural connections and language through to the present day).

During his time living at Government Cottage, Threlkeld described witnessing a corroboree nearby:

'The native camp which surrounded our habitation gave a cheerfulness to the scene at night in consequence of the number of fires kept up by the families at the front of their

sleeping places, which were mere erections of boughs and trees, or sheets of bark placed upright supported by stakes. The blacks chose our place of residence for their new encampment, they having been so frequently molested by many of the Prisoners of the Crown who perambulated the settlement in the night for purposes that would not bear the light of day. Our sable friends determined to celebrate our arrival amongst them with a ball and supper, and when all was prepared, late in the evening, messengers came to invite us to the entertainment in due form. About 40 natives were assembled and the music commenced, two sticks knocked together by one of the eldest of the men, which kept good time to the intonation of both male and female performers who changed the tune for the dancers, some joining in both exercises keeping the most exact time with the music of the sticks, the strains of the voice, the contortions of the body and stamping feet'. The first set of the dance was indescribable, the second part consisted of the kangaroo dance in which the blacks place their waddies so as to resemble the tail of a kangaroo, and stooping forward in a bending posture, as though they were on all fours, each one placed his hands on the one before him near the sham tail, when they all jumped together, going around in a circle, like kangaroos, making a peculiar noise to imitate the cry of the animal, grunting Wa! Wa! Wa!, and making the ground resound with the stamping of their feet. Supper consisted of kangaroo, wallaby (sic) and fish, all cooked by being thrown on the fire when after the fire and skin of the animals is thoroughly scorched, black as charcoal, the carcass was carved with a small hatchet into small portions and pieces were thrown to the company who squatted on the grass and the entrails were given to the dogs. It was nearly midnight when the dance finished.' (Threlkeld in Gunson 1974).

3.2. Landscape Context

3.2.1. Soils and Geology

The study area is located across a variant of the 'Hamilton' soil landscape (Variant A), as well as straddling the soil landscape boundary to the 'Hamilton' soil landscape proper (Figure 5) (Department of Minerals and Energy (unpublished)). The Hamilton soil landscape is a residual soil landscape (i.e. soils have formed in situ from the weathering of the parent rock), generally located along landscapes classified as level plain to gently undulating plain comprised of very low-lying sandplains truncated by recent stream channels in the south east of the Hunter Region. Part of the stream channels across this soil landscape have been excavated by human activity, often heavily disturbed by urban and industrial developments (particularly in relation to the 'Hamilton Variant A' soil landscape). Slopes within the residual landscape are generally lower than 2%, with local relief of <1m, and elevation <10m. The Hamilton soil landscape has been completely cleared of all vegetation (Engel 1966). Geology in this location consists of quaternary sands overlaying clay deposits, with sediment depth up to 38m, comprising 1-3m of sand generally underlain by stiff estuarine clays.

Topsoil across the Hamilton soil landscape tends to be 20-60cm of brownish-black specked loamy sand (A1 horizon), underlain by 15-30cm of loose, pale, coarse sand (A2 horizon), over a brown to orange sandy pan (B horizon). Due to the landscape positioning of this soil landscape along the Hunter River/Throsby Creek foreshore, it is possible for localized variants to exist, caused by previous Aeolian and/or alluvial events. Particularly in closer proximity to the shoreline, there is the potential for historical fill and land reclamation fills to overly the original soil profiles.

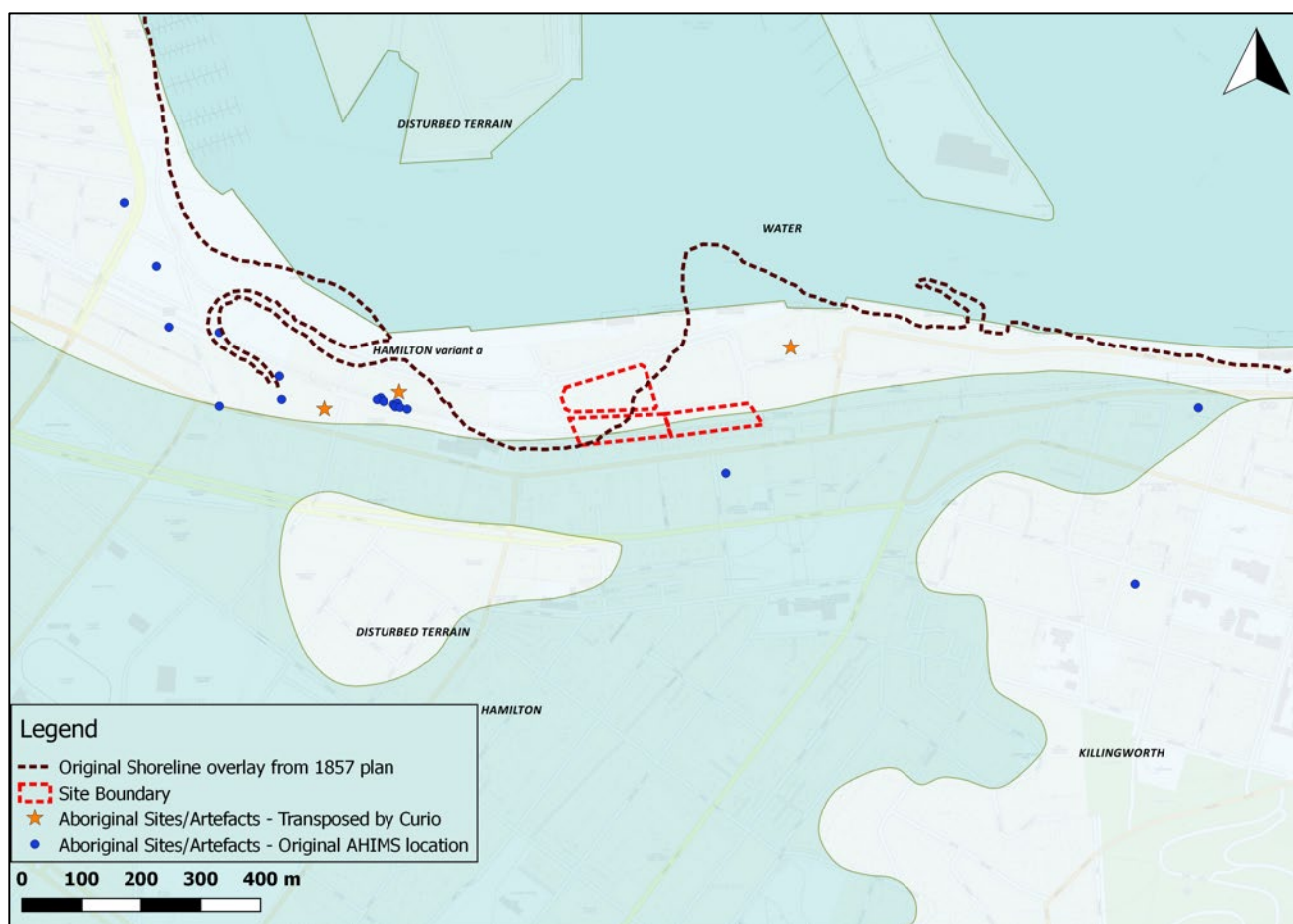


FIGURE 5: SOIL LANDSCAPES, STUDY AREA INDICATED IN RED. (SOURCE: GOOGLE EARTH PRO WITH CURIO ADDITIONS 2018)

3.2.2. Hydrology

The study area is located approximately 100m to the south of the Hunter River foreshore near its junction with Throsby Creek. The study area is also located approximately 550m to the east of Cottage Creek, which has been demonstrated to have a high concentration of Aboriginal archaeological sites in the vicinity. Archaeological evidence has generally shown that Aboriginal occupation was highly concentrated around creeks in the Newcastle region.

3.2.3. Landscape and Landforms

Immediately prior to European arrival in the Newcastle area, the northern shores of the harbour would have been predominantly mudflats and mangroves, with the land on the southern side of the harbour more solid, yet fronted by shoreline of shallow water with a 'string of shallow pond behind a narrow strip of mud or sand' (Doring 1991). Honeysuckle Point itself was an exception to this general pond/tidal formation along the southern shore of the harbour, consisting of low lying solid ground which formed a point, protruding into the harbour forcing Throsby Creek to flow around it.

The western side of Honeysuckle Point (i.e. consistent with the current study area) would have originally consisted of a partly tidal flat, with an ill-defined swampy/mangrove northern boundary, as bounded to the south by Maitland Road (now Hunter Street). Along with the whole Newcastle port and harbour area, Honeysuckle Point has been subject to major land reclamation and modification from its original form, including the removal of part of the original 'point', construction of a sea wall, and reclaiming the land behind the seawall (along the west of the original 'point'). While the landform of Honeysuckle Point is virtually unrecognizable today from its original formation, historical plans and

accounts provide an understanding of the original landform and landscape setting, to contribute to our understanding of the original landform that Aboriginal people would have readily utilised prior to European arrival.

3.2.4. Flora and Fauna

While all native vegetation has been removed from the study area and surrounds, an understanding of the native vegetation of the general Honeysuckle area provides an indication of the types of resources that would have been available to Aboriginal people occupying the area.

The study area is likely to have been located across or near the interface between the Hunter-Macleay Dry Sclerophyll Forest vegetation slightly back from the foreshore, to the more mangrove estuarine vegetation along the floodplain and intertidal zones of the Hunter Valley, including species such as Swamp Oak (*Eucalyptus glauca*), and Grey and River Mangroves (*Avicennia marina* and *Aegeras corniculatum*) (MDCA 2004; RPS 2016b).

The interface of these vegetation communities would have provided habitats for a wide variety of animals, as well as potential food resources for Aboriginal people. Faunal resources within or in close proximity to the study area would likely have included fish and a variety of oysters, shellfish etc, as well as mammals such as kangaroos, wallabies, bandicoots, possums, echidnas and a variety of birds, lizards and snakes.

3.2.5. Raw Material Resources

The local Awabakal people utilised available local stone resources to manufacture stone tools, as well as acquiring other materials from more distant locales through trade with other clans. The Hunter River is a source of fine-grained siliceous stone, which includes silcrete, indurated mudstone, volcanic tuff, quartz, and other fine grain siliceous (FGS) materials which are available as cobbles/gravels along the length of the river. These fine grained rock types provide the required properties for the manufacture of stone tools, in that they are brittle and break predictably, yet can hold a sharp edge when knapped.² An outcropping of volcanic tuff is located at Nobbys Head (AMBS 2005), often referred to as 'Nobbys' Tuff' or 'Merewether Chert' (Enright 1935). Therefore, raw material resources for the manufacture of stone tools would have been readily available in abundance to the local Aboriginal people living in and around the study area.

3.2.6. Modern Land Use, Land Reclamation and Disturbance

While colonial settlement and land use is widespread in the Newcastle region, the spatial and stratigraphic impact on the natural soil profiles is not adequately understood (AMBS 2005). The development of the study area since 1804 was assessed in an Archaeological Assessment report for the project (Curio Projects 2018), and identified four different phases of site occupation:

- **Phase 1—Early Settlement (1810–1857)**
 - *Early settlement of the site, including on the fringes of the 'Government Farm' (c.1810), as well as part of the 'Bishop's Settlement' (c.1840s) prior to resumption of the land for rail purposes (1857).*
- **Phase 2—Reshaping the Harbour and Railway Expansion (c.1857–1933)**
 - *Establishment of the Honeysuckle Railway Workshops (1857), and the main modification and land reclamation works to Honeysuckle Point (c. early 1900s).*

² 'Knapping' is the process by which stone tools are manufactured or created.

- **Phase 3—Civic (Honeysuckle) Railway Workshops and Decline (1933–1990s)**
 - *Ongoing use as the Civic Railway Workshops from 1933, until its closure in the early 1990s.*
- **Phase 4—Honeysuckle Precinct (1990s–Current)**
 - *Following demolition of railway buildings, the study area has not been subject to any substantial development, and currently exists as a vacant lot and carparks. The former railway lines running through Site 2 and 3 of the study area were removed in c.2016.*

The study area has been subject to various historical land uses and levels of disturbance which vary in nature and extent across the three sites. The historical land disturbance across the site generally relates to three main types of historical activities:

- Early land use (i.e. vegetation clearing and early structures relating to Government Farm, post 1850s subdivision—Bishop’s settlement);
- Land reclamation along the Hunter River foreshore, including modification to Honeysuckle Point, construction of a sea wall and filling behind; and
- Railway lines, workshops, and associated structures/activities required for the construction, function, and demolition of the Honeysuckle Point/Civic Railway Workshops.

While these activities would have impacted the ability for intact natural soil profiles to be present across the study area, previous archaeological work has demonstrated that levels of ground disturbance are not sufficient to have removed/completely disturbed all natural soil profiles (discussed further below).

Geotechnical Investigation

Geotechnical investigation was undertaken at the site for a previous development and client (i.e. not in relation to the current development), however, from this information, a general understanding of the geotechnical profile within part of the study area (i.e. Site 1) has been able to be constructed. ‘Unit 2a’ in these previous geotechnical investigations was interpreted as being associated with the original 1850’s shoreline, which constituted original estuarine muds which had later been covered by land reclamation. This soil profile, described as soft clay/silt estuarine soils, was noted in specific locations across the site (i.e. extending from the southeast corner) between c.40cm-2m below ground level (varying across the site depending on geographical location).

The geotechnical investigations also generally confirmed the extent of the original shoreline, as estimated in Curio overlays, with the original shoreline cutting approximately across the southeast corner of Site 1, and northeast corner of Site 2 (with Site 3 located wholly across original land, i.e. not within an area of land reclamation). Additionally, the water table level should be considered in relation to subsurface works, particularly when considering that the geotechnical works in 2011 in the north of the study area (i.e. northern boundary of Site 1), encountered water at c.2.0m below ground level.

Other relevant geotechnical work in the general project area undertaken for the Newcastle Light Rail project, has confirmed the nature of the soil profiles in the area, with a geotechnical test pit near the Civic Theatre (Hunter Street, Newcastle—<100m from study area) identifying natural sands from c.70cm below ground level (RPS 2016b).

3.2.7. Summary of Environmental Context

Historical use and associated land disturbance within the study area is likely to have disturbed and/or removed the natural soil profiles to some degree, however this would vary across the study area.

Located partially across the path of the original shoreline of Honeysuckle Point, prior to reclamation, the northwestern part of the study area would have originally been located in the river.

The more southern/southeastern parts of the UON HCCD study area would have been located in good proximity to a variety of natural resource zones, including both fresh and salt water floral and faunal resources appropriate for collection/hunting and preparation of shell and estuarine species, as well as close to a wide variety of raw materials for stone tool manufacture, such as Nobby's Tuff and Hunter River cobbles. The general Honeysuckle Point area and southern foreshore of the Hunter River/within the Hunter estuary delta, would have been a significant location for Aboriginal occupation in the Newcastle area. In consideration of the environmental context, the study area would most definitely have been used by Aboriginal people, with the potential for short term or longer stay campsites.

3.3. Material Evidence of Aboriginal Land Use

3.3.1. Archaeological Evidence of Aboriginal Occupation

Archaeological evidence recovered from the Hunter Valley region suggests that Aboriginal occupation of the region commenced at least 35,000 years ago (Koettig 1987), with early Pleistocene dates recovered from the north-east mountains in the Hunter Valley. While scientific dates recovered from archaeological dates in the more immediate vicinity of the study area and surrounds date to the Holocene period (i.e. within the last c.10,000 years), this is not necessarily an indication that the more coastal areas of the region were not inhabited by Aboriginal people until later, but is rather likely to be a reflection of rising sea levels c.10,000 years ago, obscuring Pleistocene sites along the coastlines. Other factors such as high levels of urban development, soil and landscape conditions that do not favour the preservation of datable material, and lack of archaeological research in specific areas, may also contribute to the lack of older dates from the more coastal Newcastle region. One Aboriginal archaeological site in close proximity to the study area has been scientifically dated, indicating that Aboriginal people had occupied the site from c.6,700 years ago (the former Palais Royale site at 684 Hunter Street, discussed further below). Regardless of the consistency of scientific dating of archaeological materials across the Newcastle and Hunter Valley regions, it is clear that Aboriginal people have occupied and utilised the landscape consistently and intensively for tens of thousands of years.

3.3.2. Newcastle Aboriginal Heritage Study (AMBS 2005)

AMBS was commissioned by Newcastle City Council to undertake an Aboriginal Heritage Study (AHS) for the Newcastle LGA, in order 'to provide a greater understanding of the Aboriginal heritage of the Newcastle area, and to develop a framework for the strategic conservation and management of Aboriginal cultural heritage'. The work undertaken for this 2005 study included a desktop study, along with consultation with local Aboriginal stakeholders, to develop a landscape model of archaeological sensitivity across the LGA. The current study area is included within the 'Lower Hunter Plain: Urban Newcastle' landscape, and while the study notes that prior to the historical period and landscape modification 'these urban areas would have been of high archaeological sensitivity, due to their proximity to the Hunter River and its tributaries, and the occurrence of Aboriginal heritage deposits', it allocated the region a sensitivity rating of 'low' due to previous disturbance.

However, it should be noted that the AHS was prepared prior to numerous significant Aboriginal archaeological excavations in central and western Newcastle, demonstrating the presence of intact Aboriginal archaeological sites, with the report itself noting that 'in recent years, a number of studies have demonstrated that presence of Aboriginal archaeological materials in the area' (AMBS 2015: 81).

3.3.3. AHIMS Search

The OEH guidelines for Aboriginal cultural heritage management require a current extensive search of the Aboriginal Heritage Information Management System (AHIMS) database, managed by OEH (i.e. current within the last 12 months).

The AHIMS search was undertaken on 22nd February, 2018, and returned 23 results with a buffer of 1km around the centre of the study area. The extensive AHIMS search is attached as an Appendix A to this report. No registered sites were located directly within the current study area.

AHIMS search results always require a certain amount of scrutiny in order to acknowledge and accommodate for things such as inconsistencies in the coordinates (differing datums between years of recording), the existence of and impact to registered sites (impact to a registered site technically requires the submission of a Heritage Impact Recording form to be submitted to the OEH, however these forms are not always submitted), and other database related difficulties. It should also be noted that AHIMS database is a record of archaeological work that has been undertaken, and registered with OEH in the region. The AHIMS database is therefore a reflection of recorded archaeological work, the need for which has likely been predominantly triggered by development, and not a representation of the actual archaeological potential of the search area. AHIMS searches should be used as a starting point for further research and not as a definitive, final set of data.

Therefore, the above AHIMS search result has been synthesized as best possible within the scope of this current report to determine the most likely nature and location of previously registered sites in proximity to the current study area. Three sites have been transposed from the AHIMS coordinates to correct known location (based on data and plans within relevant archaeological reports), and indicated thusly on Figure 6.

Summary descriptions of Aboriginal site features as identified by OEH, and as relevant to this report are presented in Table 5. The 23 results from the current AHIMS search included five different site types, some in combination with each other. These sites are summarised in

Table 6. The general location of each of these registered sites in relation to the study area is depicted in Figure 6. The most common site types registered in the area are Artefact sites, followed by PAD sites.

TABLE 5: ABORIGINAL SITE FEATURES REFERRED TO IN THIS REPORT.

Site Feature	Description/Definition by OEH
Artefact Site (Open Camp Sites/artefact scatters/isolated finds)	Artefact sites consist of objects such as stone tools, and associated flaked material, spears, manuports, grindstones, discarded stone flakes, modified glass or shell demonstrating physical evidence of use of the area by Aboriginal people. Registered artefact sites can range from isolated finds, to large extensive open camp sites and artefact scatters. Artefacts can be located either on the ground surface or in a subsurface archaeological context.
Potential Archaeological Deposit (PAD)	An area where Aboriginal cultural material such as stone artefacts, hearths, middens etc, may be present in a subsurface capacity. Evidence for Aboriginal cultural material may not be present on the ground surface, but still may be present at a location.
Shell Midden	A shell midden site is an accumulation or deposit of shellfish resulting from Aboriginal gathering and consumption of shellfish from marine, estuarine or

Site Feature	Description/Definition by OEH
	freshwater environments. A shell midden site may be found in association with other objects like stone tools, faunal remains such as fish or mammal bones, charcoal, fireplaces/hearths, and occasionally burials. Shell midden sites are often located on elevated, dry ground close to the environment from which the shellfish were foraged, and where fresh water resources are available. Shell middens may vary greatly in size and components.

TABLE 6: AHIMS SITES IN VICINITY OF STUDY AREA

Site Type	Number of Sites	Percentage of Sites (%)
Artefact	14	61%
Artefact and Shell	1	4%
Artefact, Shell Midden and Potential Archaeological Deposit (PAD)	1	4%
Potential Archaeological Deposit (PAD)	6	27%
Shell Midden and Potential Archaeological Deposit (PAD)	1	4%
TOTAL	23	100

AHIMS Site #38-4-0831 is the Palais Royale site, which has been partially destroyed (see details of archaeological excavation as below), however excavation was not undertaken across the entire site, and therefore it is considered that some of the Aboriginal archaeological deposit still remains in this location.

Ten isolated artefacts were encountered and registered during survey for the removal of the former rail corridor to the west of the study area. While seven of these sites have been noted as ‘destroyed’ on the AHIMS database (presumably because these artefacts were removed from their location during survey), the presence of these sites indicates the ability for Aboriginal stone objects to be present in the region, even in isolation in areas of presumably high disturbance.

In addition to the seven sites that have been updated in AHIMS as ‘destroyed’, recent works undertaken for the Newcastle Light Rail has also seen the submission of Aboriginal Site Impact Recording forms for a further three sites that were covered by the above AHIMS search (#38-4-1222, #38-4-1223 and #38-4-1804).

It is possible that other site results from this AHIMS search have already been subject to harm or have been destroyed under AHIPs or through authorised site works, and have not been updated in AHIMS. However, as none of these sites are located within the current study area, this is not of a direct concern for this project, and the location of all sites, regardless of their current status, will inform the Aboriginal archaeological potential assessment for the current study area.

An additional artefact site was recorded and registered as a result of the Aboriginal archaeological survey for the current project site (Site Name: UoN1A-1, AHIMS # 38-4-1968). This is detailed further in Section 5.0 below.

Assessment of AHIMS Search

The AHIMS results, combined with the landforms and geology of the study area suggest that the most likely site types to be present within the study area and surrounds would be limited to stone artefact sites, shell middens, and PAD sites, as the required geology for other site types such as art sites, grinding grooves and scarred trees etc is not present.

The registered sites suggest that the presence of a highly disturbed site does not necessarily mean that the potential for Aboriginal stone artefacts/shell middens in the area has been completely destroyed. In fact, the AHIMS search results tend to indicate that the site types in the area have the potential to be in the form of buried intact natural soil profiles that retain Aboriginal archaeological potential, as well as in the form of isolated artefacts in disturbed contexts (which are still afforded statutory protection, regardless of location within a disturbed context).

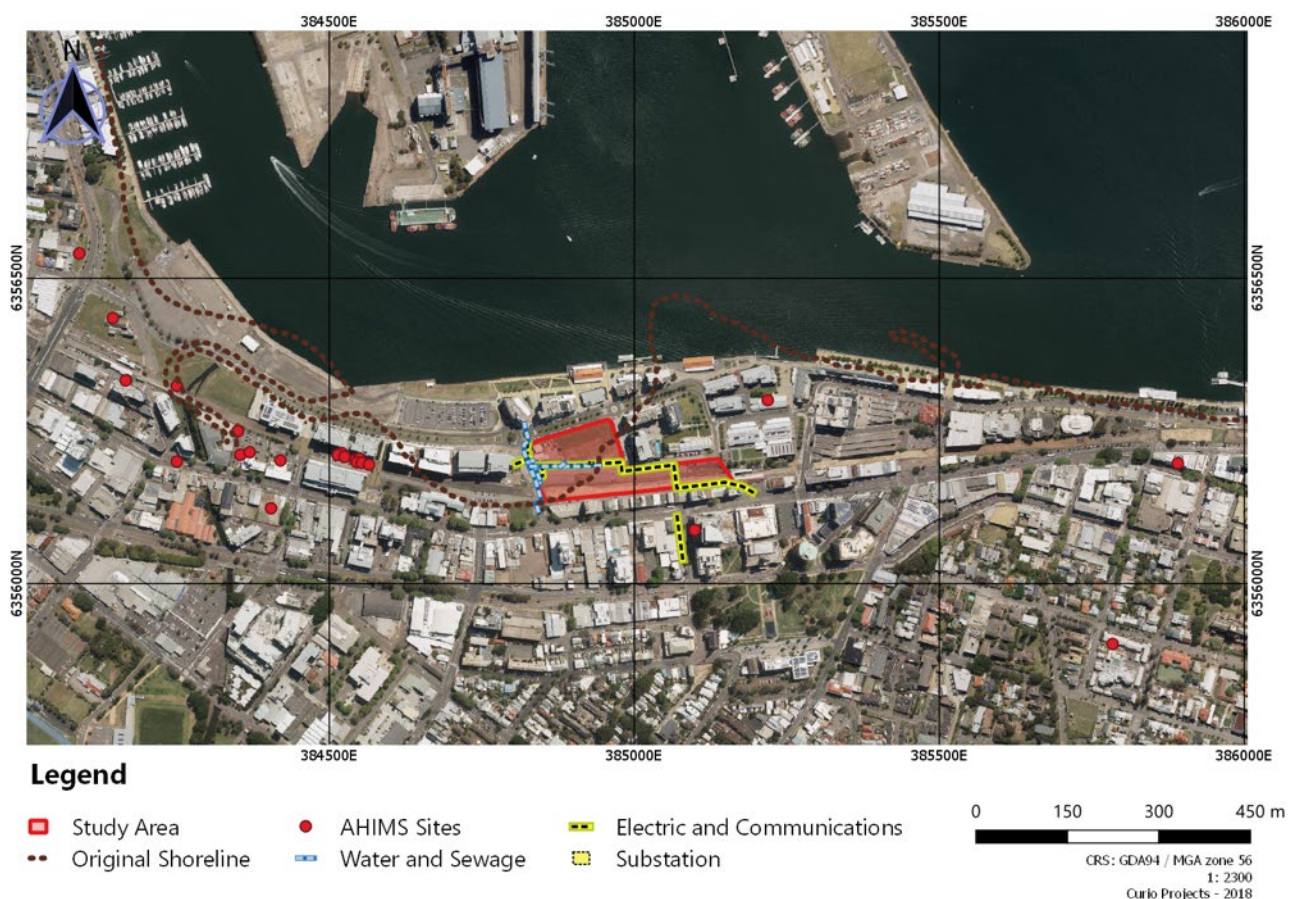


FIGURE 6: AHIMS SEARCH RESULTS SITES, WITH INDICATIVE LOCATION OF 1857 SHORELINE (APPROXIMATE ONLY). (SOURCE: CURIO 2018)

3.3.4. Previous Archaeological Investigations

Review of relevant previous archaeological work is a highly informative and necessary step in identifying the likely nature of the potential archaeology at a site. The investigation of previous work undertaken in the region, on similar sites, and on similar landscape or landforms, can inform our understanding of a site by providing a proxy against which a newly investigated site can be measured (albeit with caution). That is to say, understanding the archaeological record at a general location can provide us with an

indication of the nature and level of potential of archaeology that may be present at a site, prior to any subsurface investigation. As archaeology is by its very nature, a destructive discipline, it is important to acquire as much information and understanding of a site as possible prior to undertaking fieldwork (as once evidence has been excavated, its context is effectively destroyed), and also to avoid any unnecessary fieldwork at a site.

Research into archaeological investigations undertaken in proximity to the current subject site indicate the types of archaeology that may survive in the area, and the environment that has allowed it to survive. The location of the sites noted below are presented in Figure 9.

700 Hunter Street, Newcastle (Ibis Hotel), Assessment and Excavation (Douglas et al 2001)

Historical archaeological assessment was undertaken of 700 Hunter Street, Newcastle, which had formally been the site of several industrial warehouses, and at some point in its historical use, had also been the site of an early cemetery. The initial archaeological assessment of the site suggested that remnant original topsoil could be present beneath the levels of historical fill, and therefore Aboriginal archaeological test excavation was recommended where natural soil profiles were encountered during historical archaeological excavation.

Aboriginal test excavation was undertaken at 700 Hunter Street, Newcastle (in collaboration with historical archaeological excavation), and identified approximately 4000+ Aboriginal stone artefacts, as well as 2,939 whole and fragmentary shells and approximately 326 pieces of animal bone. The Aboriginal cultural deposit was located within the grave fills/exhumation deposits, as well as within in situ topsoil between grave cuts. Douglas et al concluded that the site has been:

‘subject to repeated Aboriginal visitation and use in the past for a range of purposes including tool manufacture, maintenance and/or replacement, along with a range of other activities including food procurement, consumption and discard.’ (Douglas et al. 2001)

Boardwalk Site, Newcastle—Aboriginal Archaeological Test Excavation (MDCA 2004)

An Archaeological Assessment (historical archaeology) was prepared for the ‘Boardwalk’ site by GML in 2001, which identified the potential for Aboriginal cultural material to be present within the footprint of the Boardwalk development site (GML 2001). Therefore, MDCA were engaged to undertake Aboriginal archaeological assessment and investigation of the Boardwalk site. Site survey in 2001 identified three Aboriginal surface artefacts as well as scattered shell remains within disturbed contexts. Regardless of the high levels of disturbance of the site, the Boardwalk site was assessed to be an area of Aboriginal Archaeological Sensitivity, due to the presence of the identified artefacts, the presence of other known Aboriginal sites in the vicinity of the site, as well as geotechnical information that suggested the possible survival of former land surfaces.

Aboriginal archaeological test excavation was undertaken under a Section 87 permit, concurrently with historical archaeological test excavation. The Aboriginal archaeological test excavation sought to identify whether significant and intact Aboriginal archaeological deposits were present within the development area, and if so, whether this presented a constraint to the development proposal. The excavation included both machine and manual excavation of select areas across the site, and uncovered the partially disturbed remains of an Aboriginal coastal campsite (including remains of Aboriginal shell middens, stone artefacts, and charcoal fragments) within a buried former land surface. The interpretation of the results of the archaeological excavation, suggested that while the site was definitely used in the past by Aboriginal people as a short term campsite, it was unlikely to have been

used intensively, due to the paucity of the shell midden materials, and other artefactual and faunal remains. However, it was also acknowledged the high level of disturbance at the site caused by historical activities, which have the potential to impact the condition of the remnant archaeological deposit.

The Boardwalk Site report also made reference to two larger and more complex Aboriginal archaeological sites that were known at the time of writing—700 Hunter Street to the west (as noted above) and the Convict LumberYard site to the east—both located in proximity to the Boardwalk site. The report concluded that while the relationship between these sites and the Boardwalk campsite were not made clear through the excavation, there remained the possibility that the site was somehow related to the usage of the more substantial sites (i.e. potential as a short term campsite for cooking of daytime meals before returning to the larger sites).

Honeysuckle Central (Lee Wharf 25)—Heritage Impact Statement (GML 2008)

In 2008, GML prepared a Heritage Impact Statement consistent with the land of 'Site 1' within the current study area. Section 4.2.2 of the HIS presented an assessment of the Aboriginal archaeological potential for the lot. The report describes an archaeological site survey in the area immediately south of Lot 25 (i.e. likely within either Site 2 or Site 3 of the current study area) undertaken in 2003, that located a single Aboriginal stone artefact in an area of mixed fill. The report does not mention the registration of this artefact. The report concluded that 'there is low potential for in-situ Aboriginal archaeological objects to survive on Lot 25'. This conclusion was based on the historical archaeological monitoring undertaken by GML in 2006 of an adjacent site to the east (Lots 12 and 24, Lee Wharf, approximately consistent with the location of the existing Chifley Apartments development on Honeysuckle Drive; GML 2006), which did not expose any Aboriginal artefacts (GML 2006).

However, it should be noted that the 2008 GML report was prepared both before the Aboriginal archaeological excavation undertaken at the former Palais Royale site in 2011 (described below), as well as prior to the 2010 regulation to the NSW NPW Act and new statutory guidelines for Aboriginal cultural heritage management in NSW. Additionally, the report only assessed the potential for 'in situ deposits' and did not make reference to the statutory protection/potential for presence of isolated Aboriginal objects in a disturbed context, which while they may not be of archaeological research interest, are still afforded statutory protection in accordance with the NSW NPW Act. The 2008 report did not assess the archaeological potential for Sites 2 and 3 of the current study area.

Former Palais Royale Site (now KFC), 684 Hunter Street, Newcastle (AHMS 2011)

In 2011, AHMS undertook Aboriginal archaeological salvage excavation in accordance with a Section 90 AHIP at the former Palais Royale Site, located at 684 Hunter Street, Newcastle (now the site of a KFC franchise). A trench measuring 16m x 3m (an area of 48m²) was subject to salvage excavation, recovering 5,534 Aboriginal objects, midden materials, and hearth materials which were able to be scientifically dated (using both radiocarbon and OSL dating). The overall investigation of the site therefore identified three distinct period of Aboriginal occupation of the site, with a stratigraphic profile dating back to some 6,700 years BP. Consultation with the Aboriginal community at this time indicated that the 684 Hunter Street site and surrounds possesses exceptional Aboriginal cultural heritage values.

The excavation was undertaken in conjunction with the historical archaeological excavations in the same area. The assessment of the site, following Aboriginal salvage excavation, concluded that the identified Aboriginal cultural material site, likely extended a few hundred metres in either direction of the former Palais Royale site. In addition, following construction of the now extant KFC building on the

site, areas of the site that had not been subject to construction impacts, were relisted on the AHIMS database, for future conservation.

Lee Wharf Development: Square-about and Lot 24 Honeysuckle Drive, Newcastle—Archaeological Excavation (AMAC 2012)

AMAC undertook archaeological test excavation in 2005, followed by full excavation in 2006 of two locations within the Honeysuckle Precinct, known then as Lot 24 (immediately adjacent to the east of the current study area, consistent with the location of Settlement Lane) and the ‘Square-about site’ (just to the north east of the current study area) (Figure 7). While this study initially focused predominantly on historical archaeology, the excavation also encountered Aboriginal archaeology, which is of relevance and presents significant implications for the Aboriginal archaeological potential within the current study area.

The excavation encountered layers of historical fill, underlain by generally intact natural soil profiles of grey sandy loam and yellow dune sands. The excavation encountered several Aboriginal stone objects made of local Nobby’s tuff (including a large core), as well as several concentrated areas of shellfish species (Sydney cockle and Hercules whelk) at the top of the grey sand natural soils layer. Analysis of this potential Aboriginal site, concluded similar to MDCA 2004 (Boardwalk site above), that the location was likely representative of low intensity usage campsite, however full excavation and investigation of the Aboriginal deposit in this location was not undertaken.

Of high importance and significance, was the presence of post-contact Aboriginal objects encountered during this excavation, in the form of flaked glass, and possible knapping of flint (transported from England as ships ballast). The report stated that ‘a more widespread distribution of such artefacts on Honeysuckle Point would not be surprising’ (AMAC 2012: 102). Aboriginal post-contact sites are relatively undocumented within the Newcastle region, and therefore the potential for the study area to have Aboriginal post-contact archaeological evidence would be of high significance to the archaeological record, and highly likely to be of high social/cultural significance to the local Aboriginal community.



FIGURE 7: 2012 AMAC STUDY AREA WITH REFERENCE TO SITE 1, 2 AND 3 LOCATION (SOURCE: AMAC 2012: 8)

18 Honeysuckle Drive, Newcastle (AMAC 2014)

In 2014, Street Archaeological Services and AMAC undertook an Aboriginal due diligence heritage assessment of 18 Honeysuckle Drive, Newcastle (immediately northwest of Site 1 of the HCCD study area, across Honeysuckle Drive). This development was undertaken as a State Significant Development (SSD) and therefore was not subject to the provisions of the NPW Act.

The 18 Honeysuckle Drive study area was assessed to be located wholly across reclaimed land, with no potential to contain intact Aboriginal archaeological deposits, due to the former location of the site below the shoreline within the Hunter Valley estuary. However, the site still had potential for Aboriginal objects to be present within disturbed contexts, and the report identified that the site, regardless of archaeological significance, had the potential for intangible Aboriginal cultural heritage significance.

Therefore, it was recommended that consultation with Aboriginal stakeholders should be undertaken for the development, as well as the preparation of an Aboriginal Cultural Heritage Management Plan (ACHMP) to take the place of an AHIP (not required under SSD) in order to address any potential unexpected Aboriginal finds at the site during development.

Wickham Transport Interchange (Artefact 2015)

Artefact Heritage prepared an 'Archaeological Survey Report' for the proposed Wickham Transport Interchange, which found that the study area had the potential for Aboriginal objects, and required archaeological investigation. As a result of this investigation, the Wickham study area was registered as a Potential Archaeological Deposit (AHIMS #38-4-1716).

Following the issue of an AHIP for the Aboriginal archaeological investigation of the PAD site, Artefact Heritage undertook test and salvage excavation of the site in 2015. The test excavation uncovered approximately 391 artefacts, which then lead to the recovery of approximately 3,912 artefacts through the targeted salvage excavation. Artefact concluded that the site likely presented with two different vertical distributions of artefact concentrations, potentially representing two different Aboriginal occupation layers, and concluded that the site had high significance and research value, providing evidence of Aboriginal occupation at the site spanning across at least a 7000 year period.

This excavation recovered substantial artefact deposits within contexts that had been presumed to be highly disturbed due to previous impacts associated with the construction of the Great Northern Railway Line. This once more confirmed that even sites in the region that have been previously subject to seemingly substantial ground impacts, can still retain a significant and intact Aboriginal archaeological deposit.

University of Newcastle, NeW Space, 409 Hunter Street, Newcastle (AMAC 2015, 2017; AMAC & Streat 2014)

Aboriginal archaeological test and salvage excavation was undertaken in 2014 by AMAC of the future University of Newcastle 'NeW Space' building (now completed). The test excavation program (under the OEH Code of Practice) encountered both disturbed, as well as intact soil profiles, and recovered over 500 Aboriginal stone artefacts of tuff, silcrete, and quartz, which were identified in situ, and considered to be of high cultural significance to the local Aboriginal community.

Salvage excavation of the site was undertaken in accordance with that proposed through the prepared Aboriginal Cultural Heritage Management Plan (ACHMP) for the site, and yielded over 6500 Aboriginal stone artefacts. Overall, excavation across the 'NeW Space' site yielded regionally significant densities

of Aboriginal stone artefacts (up to 800m² in the southwest corner of the site (AMAC 2015), and confirmed that while numerous historical developments and activities had been undertaken at the site since 1788, this tended to have resulted in the gradual buildup of fill across the site, retaining significant Aboriginal archaeological deposits intact.

Newcastle Bus Interchange (Artefact 2016)

Artefact Heritage prepared an Aboriginal Archaeological Survey Report to identify whether any Aboriginal objects or places would be impacted by the construction of the new Newcastle Bus Interchange, on the corner of Hunter Street and Stewart Ave, Newcastle. This included an archaeological survey, background research and impact assessment, which assessed the whole of the study area to be a PAD site, an extension of the previously registered PAD site for the Wickham Transport Interchange (Artefact 2015, as above), and therefore recommended the preparation of an ACHAR and AHIP (including Aboriginal consultation), as well as recommendations for salvage excavation for the site prior to construction works.

Newcastle Light Rail (RPS 2016a and b)

RPS prepared an Aboriginal Due Diligence for the Newcastle Light Rail project which recommended that there were four Aboriginal sites within the project site (including two confirmed PAD sites) which would require an AHIP covering the entire project area, to allow impact to and salvage of these four sites, as well as to cover for discovery of additional Aboriginal sites, including assessment and mitigation. While the due diligence report identified two areas of high archaeological sensitivity within the Light Rail corridor, as well as the potential for additional unidentified Aboriginal objects to be present across all areas of the proposal site, a detailed archaeological survey was not undertaken at this time, nor were additional PAD areas identified along the path of the light rail project.

Following the results of the Due Diligence report, RPS prepared an ACHAR to accompany an AHIP application for the entire light rail project area. This included an archaeological survey, with specific focus on the four identified AHIMS sites within the project area. The part of the Light Rail project area adjacent to the current study area was surveyed as 'Survey Unit 2'. The ACHAR also presented an AHIP methodology which included mechanisms for community artefact collection of the registered sites, and targeted two-staged salvage excavation in locations where development works were expected to exceed the depth of previous disturbance (i.e. potentially into natural soil profiles). The proposed salvage works were primarily identified to be at the Wickham Stabling Facility. Following the approval of the AHIP application, the proposed salvage excavation was undertaken by Umwelt in 2018 (results and report are not yet available).

Although the Light Rail project area passes immediately adjacent to the current study area, no specific archaeological excavation (Figure 8), nor identified Aboriginal artefacts were located as a result of the light rail project Aboriginal assessment in this location.

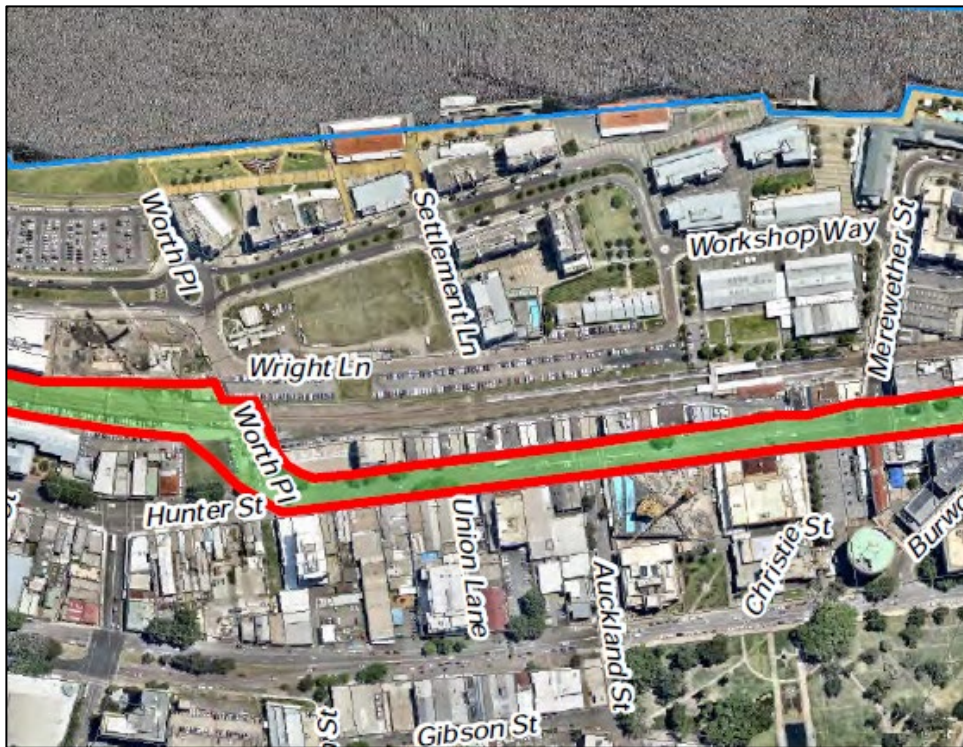


FIGURE 8: LIGHT RAIL SURVEY UNIT 2, IN REFERENCE TO THE LOCATION OF THE CURRENT STUDY AREA (SOURCE: RPS 2016B: 23)

42 Honeysuckle Drive, Newcastle (Doma Hotels) (AMAC 2017)

AMAC undertook a preliminary Aboriginal archaeological assessment in 2017 of the nearby site of 42 Honeysuckle Drive, Newcastle, which was followed by an Aboriginal Cultural Heritage Assessment Report (ACHAR) and subsequent Aboriginal archaeological test excavation in 2018 (however the latter two reports are not yet available). The initial assessment identified the presence of one registered Aboriginal site immediately adjacent to the 42 Honeysuckle Drive site, and an additional artefact was registered within the site as a part of the assessment. Therefore, the 42 Honeysuckle Drive study area was assessed to have Aboriginal archaeological potential, requiring test excavation, Aboriginal community consultation, and an Aboriginal Cultural Heritage Management Plan (ACHMP), following approval of the development as a State Significant Development.

Relevant to the UON HCCD study area, the 42 Honeysuckle Drive assessment identified that while several large scale filling events had taken place previously within the site, there remained potential for intact natural soil profiles to remain beneath the fill. The AMAC 2017 report also emphasised that the introduced fill material appeared to be local in origin, and did contain Aboriginal artefacts.

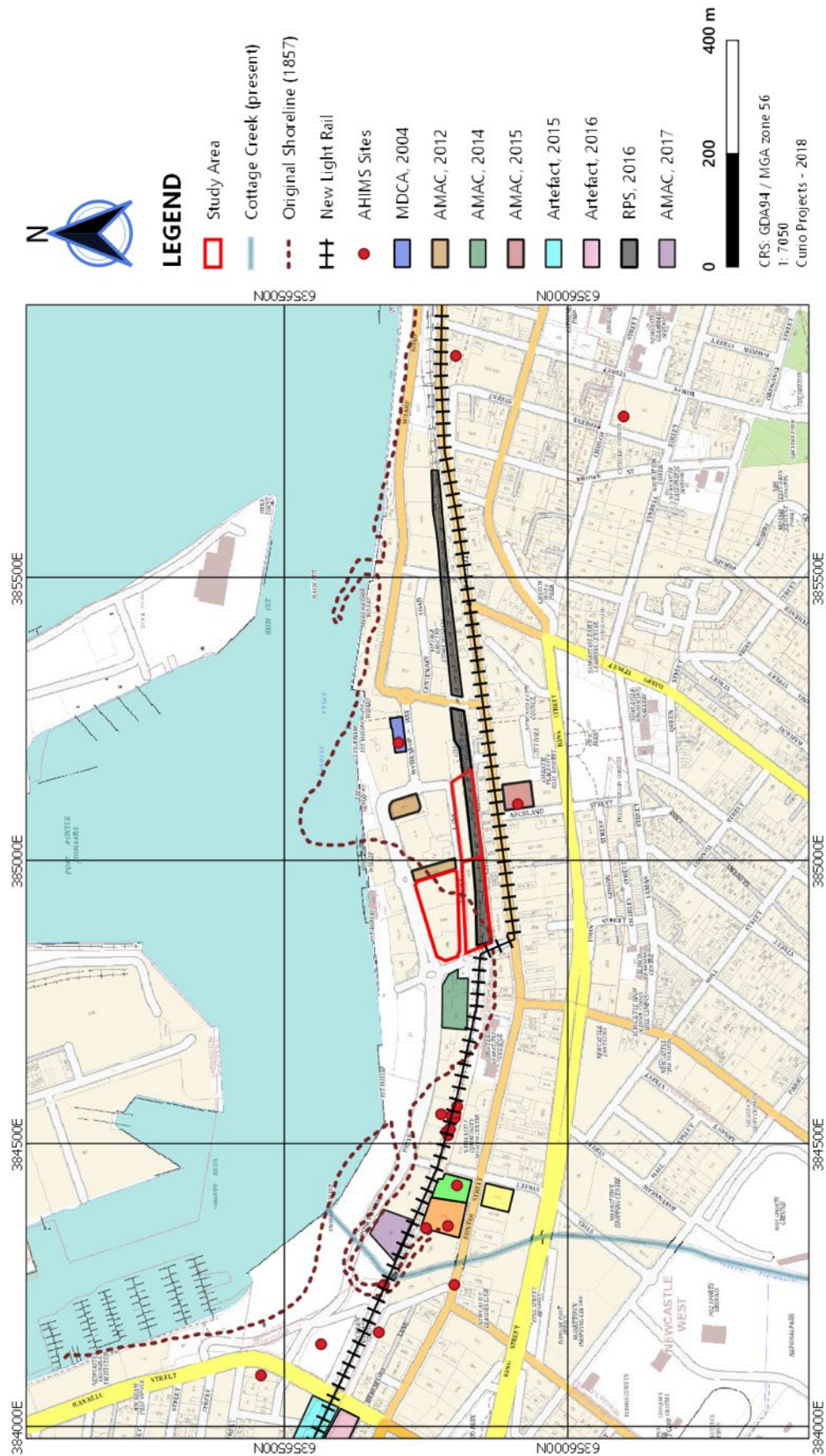


FIGURE 9: LOCATION OF PREVIOUS ABORIGINAL ASSESSMENTS/EXCAVATIONS MENTIONED IN TEXT (SOURCE: CURIO 2018)

3.4. Regional Character and Archaeological Predictive Model

The background context of the study area and wider Newcastle region, has determined that Aboriginal archaeological deposits are ubiquitous along the coast and shorelines of the Newcastle CBD, and that the presence of previous development at a site is not sufficient to state that all Aboriginal archaeological potential has been removed. The deep sandy nature of soil profiles in coastal and shoreline locations, has meant that subsequent modern development has often required filling of a site sufficient to support the development, thereby effectively capping and sealing many subsurface Aboriginal deposits in situ beneath existing buildings. Numerous archaeological excavations have been undertaken in close proximity to the study area over the past decade, with almost all excavations identifying Aboriginal artefacts, some of substantially high densities. Following the assessment of previous archaeological work within its landscape and historical context, the following statements can be made regarding the regional Aboriginal archaeological context of the Newcastle (West) CBD area:

- Archaeological evidence confirms that the Honeysuckle Point/Throsby Creek shoreline was highly utilised by Aboriginal people, as evidenced by numerous camp sites and shell middens. Therefore, it is reasonable to predict that Aboriginal camp sites would have extended all along the original shoreline.
- The most common site types in the area are stone artefact and shell midden sites, as well as Potential Archaeological Deposits (PADs) that are likely to consist primarily of stone artefacts and shell.
- Aboriginal stone and shell deposits are ubiquitous across the Newcastle (West) CBD area, within both in situ, and disturbed contexts.
- The Newcastle (West) CBD area is situated in association with rich natural resource zones, with reliable water sources, and was intensively inhabited and utilised by Awabakal people both prior to, and immediately following, European settlement.
- Archaeological evidence tends to indicate a higher concentration of Aboriginal occupation in proximity to Cottage Creek.
- Where present, intact remnant natural sand profiles, with the potential of yielding an Aboriginal archaeological deposit, are generally located c.70cm-1.5m below the existing ground level, depending on localised levels of historical fill.

The analysis of previous archaeological work in the region, in combination with the landforms within the study area (including the approximate alignment of the original Honeysuckle Point shoreline), has enabled an Aboriginal archaeological predictive model to be developed for the UON HCCD study area, which is presented as follows.

- The original Honeysuckle shoreline would have extended approximately northeast to southwest through the study area, from the southeastern side of Site 1, across to the southwestern side of Site 2. All of Site 3 would have originally been located along/in close proximity to the original shoreline.
- In situ Aboriginal archaeological deposits are likely to be present where intact original soil profiles remain.

- This potential is unlikely to be accurately reflected in any surface manifestation of Aboriginal artefacts that may be present.
- Aboriginal artefacts have the potential to be present in a disturbed context on the ground surface, and within areas of fill within the study area, including areas of land reclamation fill.
- The site types that are most likely to be present within the study area are stone artefact and shell midden deposits, or a combination of both.
- Intact (in situ) Aboriginal archaeological deposits have the potential to be located within the southern sections of the study area, approximately consistent with, and further south than, the original Honeysuckle foreshore.
- Remnant natural soil profiles along the original foreshore of the Hunter River/Throsby Creek present with the potential for palaeobotanical evidence of the pre-European environment of the cove.
- There is **moderate to high potential** for intact Aboriginal archaeological deposits to be present where natural remnant soil profiles exist (i.e. in the southeast corner of Site 1, southeast of Site 2, and across all of Site 3).
- There is a **moderate to high potential** for isolated Aboriginal artefacts in disturbed contexts to be located across the whole of the study area. While these disturbed objects would not be of archaeological research potential or significance, they have cultural and social significance to the local Aboriginal community.
- The study area has potential for Aboriginal post-contact sites, an archaeological feature and site type that are relatively undocumented within the Newcastle region. Should post-contact site types be present, they would be of high significance to the archaeological record, and highly likely to be of high social/cultural significance to the local Aboriginal community.

Figure 10 presents a general map of Aboriginal archaeological sensitivity for the study area, predicated mainly on land positioning north and south of the original shoreline, with provisions made for a 10m buffer for the exact path of the original shoreline, (acknowledging the inherent inaccuracies of overlay mapping).

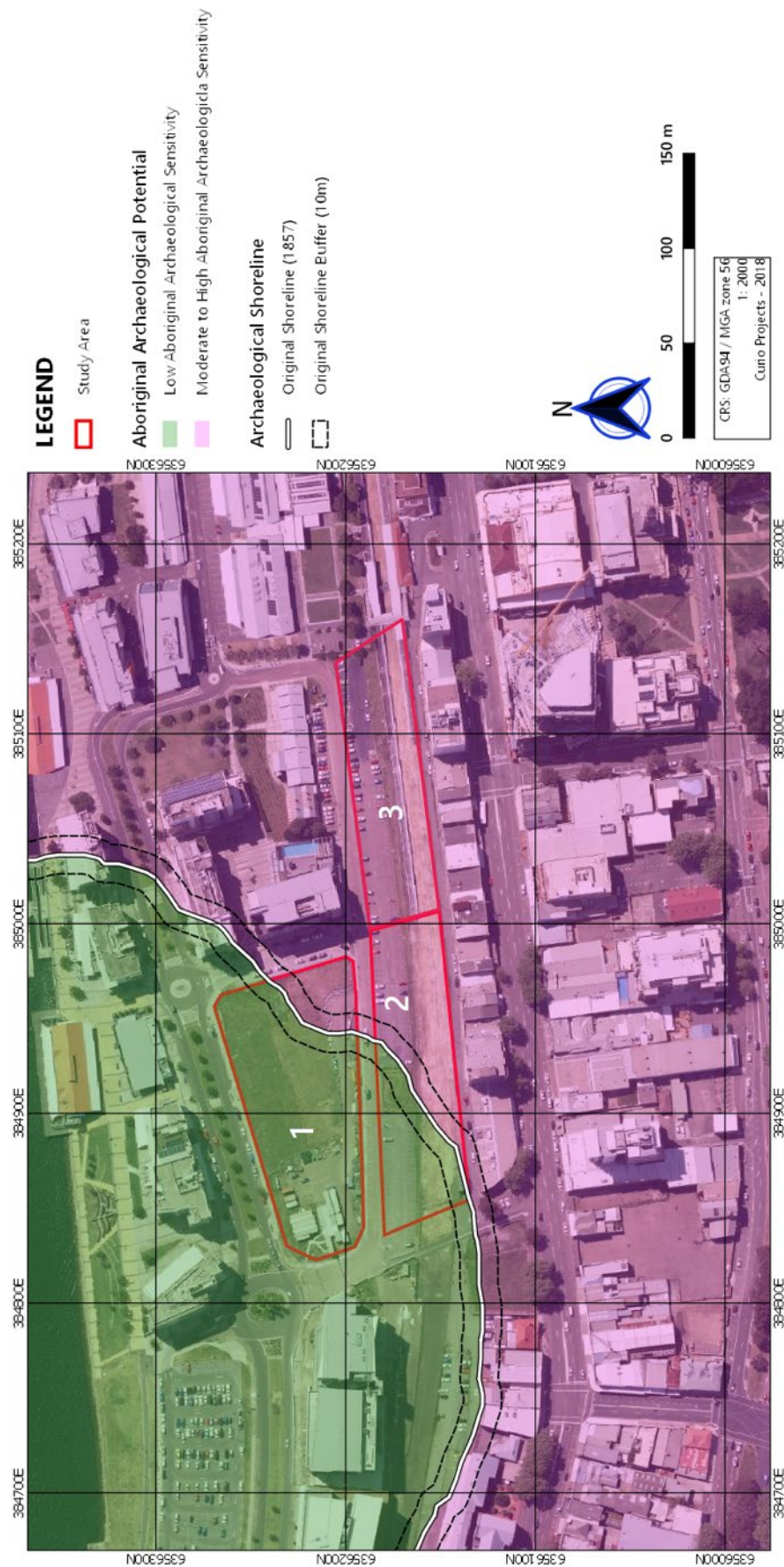


FIGURE 10: ABORIGINAL ARCHAEOLOGICAL SENSITIVITY WITHIN THE STUDY AREA (SOURCE: CURIO 2018)

4.0 Description of Project Area

The study area currently consists of a large, partially grasses vacant lot (Site 1) fronting Honeysuckle Drive (bounded by Worth Place in the west and Settlement Lane in the east) (Figure 16 and Figure 17), one long sealed carpark (northern side of Sites 2 and 3) (Figure 18 and Figure 19) and the former rail corridor with rail tracks removed and a loose gravel base (currently used as staging area for nearby construction of the Newcastle Light Rail, under construction at the time of the site visit) (Figure 20). Sites 2 and 3 are located immediately to the south of Site 1, with the southern parts of Sites 2 and 3 previously a part of the Newcastle to Wickham rail line, prior to rezoning and rail line removal in 2016. At time of site inspection, Site 1 was being used as a carparking/development staging area for the Newcastle Light Rail project (Figure 21 to Figure 24).

With regards to surrounding development, the study area is bounded to the north, east and west by multi storey residential/commercial units, and to the south by rows of commercial properties/shops between Hunter Street and Civic Lane (Figure 25 to Figure 32). Civic Railway Station bounds the study area to the southeast (i.e. along the eastern boundary of Site 3), where the Railway platforms remain (Figure 33).

The northeastern part of the study area (i.e. the eastern side of Site 3) is adjacent to some of the remaining State heritage listed buildings of the Civic Railways Workshops Group (Divisional Engineers Office and Boiler House and Machine Shop), currently in use by Wine Selectors. The remaining former Civic Railway Workshops Group buildings are located further to the northeast of the study area, currently the home of the Museum of Newcastle.



FIGURE 11: RECENT AERIAL OF STUDY AREA, SITES 1, 2 AND 3 OUTLINED IN RED. SHOWING SITE COMPOUND WITHIN SITE 1, AND COMPLETE CARPARKING FACILITIES AND HARDSTAND ACROSS SITES 2 AND 3 (SOURCE: GOOGLEEARTH PRO 2018)



FIGURE 12: VIEW EAST, CONTEXT OF SITE 1 LOCATION, VIEW EAST DOWN HONEYSUCKLE DRIVE, WORTH PLACE VISIBLE CURVING TO RIGHT OF PHOTO. SITE 1 IS LOWER AREA OF LAND IN CENTRE OF IMAGE SURROUNDED BY MESH FENCING ETC (SOURCE: CURIO 2018)



FIGURE 13: VIEW EAST ALONG HONEYSUCKLE DRIVE, MESH FENCING IN RIGHT DELINEATES NORTHERN BOUNDARY OF SITE 1 (SOURCE: CURIO 2018)



FIGURE 14: VIEW EAST ACROSS SITES 2 AND 3, EXISTING CARPARK (SOURCE: CURIO 2018)



FIGURE 15: VIEW EAST FROM WORTH PLACE ACROSS SITE 2, CARPARK TO LEFT, FORMER RAIL LINE TO RIGHT (SOURCE: CURIO 2018)



FIGURE 16: VIEW EAST ALONG FORMER RAIL CORRIDOR (SOUTHERN PART OF SITE 2), CURRENTLY USED AS PARKING/CONSTRUCTION STAGING FOR CONSTRUCTION OF LIGHT RAIL (SOURCE: CURIO 2018)



FIGURE 17: INTERIOR OF SITE 1, NORTH. VIEW EAST (SOURCE: CURIO 2018)



FIGURE 18: INTERIOR OF SITE 1, NORTH. VIEW SOUTHEAST (SOURCE: CURIO 2018)



FIGURE 19: INTERIOR OF SITE 1. VIEW WEST FROM SETTLEMENT LANE (SOURCE: CURIO 2018)



FIGURE 20: INTERIOR OF SITE 1. VIEW NORTH FROM WRIGHT LANE (SOURCE: CURIO 2018)



FIGURE 21: VIEW SOUTHEAST FROM SITE 1, TOWARDS SITE 2 AND 3 (SOURCE: CURIO 2018)



FIGURE 22: VIEW SOUTHEAST FROM SITE 1, TOWARDS SITE 2 AND 3 (SOURCE: CURIO 2018)



FIGURE 23: VIEW EAST ALONG WRIGHT LANE, BETWEEN SITE 1, AND SITES 2 AND 3 (SOURCE: CURIO 2018)



FIGURE 24: CIVIC LANE, VIEW EAST, SITES 2 AND 3 BOUNDARY VISIBLE IN LEFT OF IMAGE (SOURCE: CURIO 2018)



FIGURE 25: CIVIC LANE, VIEW EAST, SITES 2 AND 3 BOUNDARY VISIBLE IN LEFT OF IMAGE (SOURCE: CURIO 2018)



FIGURE 26: VIEW WEST ALONG HONEYSUCKLE DRIVE, SITE 1 VISIBLE IN LEFT (SOURCE: CURIO 2018)



FIGURE 27: VIEW NORTH FROM SITE 1 ACROSS HONEYSUCKLE DRIVE (SOURCE: CURIO 2018)



FIGURE 28: VIEW EAST ACROSS SOUTH OF SITE 1, TO CHIFLEY COMPLEX, ALONG NORTH-EASTERN SITE BOUNDARY (SOURCE: CURIO 2018)



FIGURE 29: VIEW FROM CIVIC STATION, WEST TOWARDS SITES 2 AND 3 (VISIBLE AS CARPARKS IN BACKGROUND) WITH SITE 1 FURTHER IN THE RIGHT BACKGROUND OF IMAGE (SOURCE: CURIO 2018)

5.0 Archaeological Survey

The OEH states that the ‘purpose of an archaeological field survey is to record all (or a representative sample of all) the material traces and evidence of Aboriginal land use that are visible at or on the ground surface, or exposed in sections or visible as features’ (OEH 2010a: 12).

Although at the time of preparation of this assessment, the UON HCCD study area was mostly covered by hardstand (gravel, carpark surfaces), and largely in use as site compounds/staging locations for the construction of the Newcastle Light Rail, and therefore was assumed to have very low visibility and exposure, an archaeological survey was still undertaken. Archaeological survey was undertaken across Site 1, however, at the time of survey, Sites 2 and 3 were completely covered in gravel roads and carpark hardstand, and therefore while a site inspection was performed, full survey coverage was not possible, as no exposed soil profiles were present. The survey was also constrained by presence of construction materials, site compounds and fencing.

The study area was surveyed in accordance with the requirements as set out in OEH statutory guidelines *Code of Practice*, and *Guide to Investigating*.

5.1. Sampling Strategy

The purpose of the survey was to inspect visible ground surfaces, soil exposures and visible soil profiles, in order to identify whether surface Aboriginal artefacts were present, as well as to further determine the potential for Aboriginal archaeological deposits within the study area. The survey also aimed to provide a time for discussion of the project with the RAPs, encouraging questions and comment on the proposed cultural heritage methodology, and input into the proposed process of Aboriginal archaeological management going forward for the project.

The study area was surveyed by Curio Projects archaeologists and representatives from the Aboriginal community (project RAPs) on 23 July 2018. A pedestrian survey aimed to assess Site 1 of the study area, by undertaking advantageous transects (allowing for the large quantity of construction materials etc present across Site 1 due to its current use as a site compound for the construction of the Newcastle Light Rail at the time of survey), with targeted and specific attention paid to areas of soil exposure, and those away from the main compound activities (i.e. particular attention was paid to soil exposure around the perimeter of the site). As noted above, a visual inspection of Sites 2 and 3 was performed, but full coverage formal survey was not possible due to complete surfacing of these locations (Figure 30 and Figure 31).

When Aboriginal sites were identified, they were recorded by the survey team (including a description, GPS location, and digital photographs), and recorded directly into an AHIMS Site Recording Form on the OEH phone application. Additional field notes were made regarding the soil conditions, evidence of disturbance, and possible extent of the identified site, during recording.



FIGURE 30: PART OF SITE 3 CARPARK (SOURCE: CURIO 2018)



FIGURE 31: PART OF SITE 3, GRAVEL COVERED FORMER HEAVY RAIL LINE, VIEW SOUTH (SOURCE: CURIO 2018)

5.1.1. Visibility and Exposure

Visibility and exposure are two important factors that greatly influence the effectiveness of an archaeological survey, and can reflect an inherent bias in site recording, where less conspicuous site types (such as stone artefacts, as opposed to rock shelters or scarred trees), are often unrecorded due to landscape obstruction. Assessment of visibility and exposure at a site, can provide information regarding the level of unavoidable bias that is likely to be present within an archaeological survey.

The OEH defines visibility and exposure as follows:

Visibility is the amount of bare ground (or visibility) on the exposures which might reveal artefacts or other archaeological materials. It is important to note that visibility, on its own, is not a reliable indicator of the detectability of buried archaeological material. Things like vegetation, plant or leaf litter, loose sand, stony ground or introduced materials will affect the visibility. Put another way, visibility refers to 'what conceals'.

Exposure is different to visibility because it estimates the area with a likelihood of revealing buried artefacts or deposits rather than just being an observation of the amount of bare ground. It is the percentage of land for which erosion and exposure was sufficient to reveal archaeological evidence on the surface of the ground. Put another way, exposure refers to 'what reveals'. (OEH 2010a: 38-39)

The archaeological survey for the UON HCCD study area, was undertaken in acknowledgement of the above definitions, which were assessed, and in turn used to provide an assessment of effective survey coverage (as presented below).

5.2. Field Methods

In accordance with OEH recording requirements, Site 1 of the study area was surveyed according to survey units, landforms and landscapes. The survey was conducted on foot, and targeted landforms and soil exposure as identified through the sampling strategy above. All RAPs were invited to participate in this survey.

Survey participants included Tracey Howie (Guringai Tribal Link), Peter Leven (Awabakal Descendants Traditional Owners Aboriginal Corporation), Craig Horne (Gidawaa Walang Cultural Heritage Consultancy), Arthur Fletcher and Suzie Worth (Kawul Pty Ltd T/A Wonn1 Sites), as well as Sam Cooling and Andre Fleury (Curio Projects archaeologists), and Isaac Conway (University of Newcastle).

The mapping of survey units was undertaken on the basis of the GPS recorded data, with reference to aerial and topographic information, and recorded through a combination of digital photographs and field notes, including observation of soil exposure and visibility, accessibility, levels of visible disturbance, erosion, presence of shell or artefactual material, or any other relevant observations.

5.3. Survey Results

5.3.1. Survey Units and Landforms

IN ACCORDANCE WITH OEH REQUIREMENTS, THE EXPOSURE AND VISIBILITY WAS RECORDED FOR EACH SURVEY UNIT, IN ACCORDANCE WITH LANDFORMS AND LANDSCAPES. SURVEY UNITS AND SURVEY COVERAGE ARE SUMMARISED IN TABLE 7, WITH ALL SURVEY UNITS PRESENTED IN FIGURE 32. LANDFORM SUMMARY IS PRESENTED IN

Table 8, however the entire surface of the study area consisted of either disturbed and redeposited soils, or areas of hardstand (gravel and asphalt), within a highly modified and urbanised landscape.

TABLE 7: SURVEY COVERAGE

Survey Unit (SU)	Landform	Survey Unit Area (m ²)	Visibility (%)	Exposure (%)	Effective Coverage Area (m ²)	Effective Coverage (%)
SU1	Disturbed/Modified	1100	40	80	528	48
SU2	Disturbed/Modified	465	10	50	70	15
SU3	Disturbed/Modified	880	5	10	4	0.4
SU4	Disturbed/Modified	810	0	0	0	0

TABLE 8: LANDFORM SUMMARY

Landform	Landform Area (m ²)	Area effectively surveyed (m ²)	% of landform effectively surveyed	Number of Sites	Number of Artefacts
Disturbed/Modified	3255	602	18	1	2



FIGURE 32: SURVEY UNITS WITHIN THE UON HCCD STUDY AREA, LOW RESOLUTION AERIAL TO DEPICT APPROXIMATE CURRENT CONDITIONS OF SITE (SOURCE: CURIO 2018, OVER GOOGLEREARTH PRO AERIAL)

5.3.2. Survey Unit 1 (SU1)—Main Access Track

Survey Unit 1 (SU1) traversed the main southern access dirt track, from the compound entrance west to the site boundary. This SU consisted predominantly of the main graded dirt vehicle access track, lined on both sites by construction materials (Figure 33 and Figure 34). All visible soil exposures were examined for artefactual material, although much of SU1 outside of the dirt track exposure, was covered in grass or stockpiled construction materials. No artefacts or Aboriginal sites were identified within SU1.



FIGURE 33: SU1 VIEW WEST (SOURCE: CURIO 2018)



FIGURE 34: SU1 VIEW EAST (SOURCE: CURIO 2018)

5.3.3. Survey Unit 2 (SU2)—Western Perimeter

SU2 traversed the western extent of Site 1, with particular focus on areas of soil exposure around the perimeter of the site and between stockpiled construction materials (Figure 35 to Figure 37). SU2 presented with some shell scatter within highly disturbed soils (broken oyster, cockle, pipi shells)

(Figure 38), as well as the identification and registration of one stone artefact site in the northwest corner. Two stone artefacts were found on the ground surface, in an area of exposed soil between stockpiled construction materials, close to the western perimeter fence. Both artefacts were located within a disturbed surface context (Figure 39 and Figure 40). This artefact site was registered as 'UoN1A-1', (AHIMS # 38-4-1968), and is described in more detail below.



FIGURE 35: SU2, VIEW EAST ACROSS CONSTRUCTION MATERIALS STOCKPILE (SOURCE: CURIO 2018)



FIGURE 36: STOCKPILED CONSTRUCTION MATERIALS ACROSS SU2 (SOURCE: CURIO 2018)



FIGURE 37: GRASSED AREA ALONG WESTERN SITE BOUNDARY FENCE (SOURCE: CURIO 2018)



FIGURE 38: SHELL SCATTER IN OBVIOUSLY DISTURBED CONTEXT, AMONGST ROADBASE GRAVEL ETC (SOURCE: CURIO 2018)



FIGURE 39: AREA OF EXPOSURE BETWEEN CONSTRUCTION MATERIALS IN WHICH ARTEFACTS WERE LOCATED (SOURCE: CURIO 2018)



FIGURE 40: ARTEFACT SITE IN DISTURBED SURFACE CONTEXT (SOURCE: CURIO 2018)

5.3.4. Survey Unit 3 (SU3)—Northern Perimeter

SU3 traversed the northern perimeter extent of Site 1, although the majority of this SU was covered in either construction building materials, or grass, with low visibility and exposure (Figure 41). Again, some broken shell scatter was evidence in small areas of exposure, however this was considered to be disturbed/redeposited fill soils, and was not representative of in situ shell midden sites.



FIGURE 41: SU3 NORTHERN PERIMETER TRANSECT, VIEW EAST
(SOURCE: CURIO 2018)



FIGURE 42: BROKEN SHELL SCATTER IN EXPOSED SURFACE FILL
(SOURCE: CURIO 2018)

5.3.5. Survey Unit 4 (SU4)—Cross Site

SU4 began at the western end of SU3, where temporary fencing was reached, restricting further survey to the eastern boundary of Site 1. The majority of SU4 was completely obscuring with no visibility due to designated gravel covered site carparking, and higher density of stockpiled construction materials (Figure 43 and Figure 44).



FIGURE 43: EASTERN EXTEND OF SU3, TEMPORARY FENCING
DELINEATING PARKING AREAS (SOURCE: CURIO 2018)



FIGURE 44: SURVEY UNIT 4 (SOURCE: CURIO 2018)

5.4. Description of New Site Identified (AHIMS #38-4-1968)

One new Aboriginal stone artefact site was registered within the UON HCCD Site 1 as a result of the archaeological survey. 'UoN1A-1' (AHIMS #38-4-1968) was located in the northern half of SU2, and consisted of two stone artefacts. The first artefact was a thick distal flake manufactured from tuff, measuring 38mm long x 60mm wide x 15mm thick. The flake was smoothed and well-weathered, with distinctive ventral ripples, a hinge termination, with platform removed (Figure 46). The second artefact consisted of a flaked piece, with some evidence of negative flake scars, but no identifiable diagnostic flake features (platform, point of percussion, termination etc), manufactured of a FGS/chert material,

measuring 32mm long x 37mm wide x 7mm thick (Figure 47). The new site was recorded in the field, GPS located, and registered with AHIMS.

Both artefacts were located immediately on the surface, and both are considered to be located in a disturbed context/within the top layer of fill at the site, rather than represent an in situ deposit, nor suggest the potential for sub-surface artefact deposits in the exact location of the registered site. The site was located in the northwest of Site 1, a location which is landform-wise, decisively within an area that would have originally been located within the Hunter River/Throsby Creek prior to land reclamation.



FIGURE 45: EXPOSURE IN WHICH ARTEFACTS WERE LOCATED, RECORDING ARTEFACTS (SOURCE: CURIO 2018)



FIGURE 46: TUFF FLAKE VENTRAL SURFACE (SOURCE: CURIO 2018)



FIGURE 47: CHERT FLAKED PIECE, DORSAL SURFACE (SOURCE: CURIO 2018)

5.5. Summary and Discussion

No previously recorded sites were located within the study area. Detailed archaeological survey was undertaken of Site 1, however only a visual inspection was performed of Site 2 and 3 of the UON HCCD, as both these sites were completely covered at the time by hardstand, gravel, and carparking, providing no visibility or exposure for survey. All project RAPs were invited to participate in the survey, of which representatives from five RAPs were in attendance on the day. As a result of the survey, one new Aboriginal stone artefact site, consisting of two stone artefacts located in a disturbed context, was registered with AHIMS. The survey results are summarised below in Table 9.

Due to low visibility across the study area, (the use of Site 1 as a site compound for the nearby construction of the Newcastle Light Rail, as well as due to the known levels of fill in this area covering natural soil profiles), the survey did not provide substantial information to further refine the Aboriginal archaeological potential at the study area. However, the identification of a surface artefact site in a disturbed context, confirmed the prediction that Aboriginal artefacts have the potential to be located within the study area in a disturbed context, even within areas of land reclamation, due to the use of local materials as a source of reclamation fill (i.e. from Honeysuckle Point itself).

Following the field survey, the original assessment of Aboriginal archaeological potential within the study area is still considered to be valid, being, that where natural soil profiles are present, particularly along and to the south of the path of the original Honeysuckle shoreline, there is potential for Aboriginal archaeological deposits to be present.

The results of the field survey, when viewed in the context of the landscape and archaeological context for the study area, tends to support the wider archaeological predictive modelling for the Newcastle (West) and surrounding Honeysuckle Precinct areas; i.e. that this area was intensively occupied by Aboriginal people prior to, and following the founding of the colonial Newcastle town, and that the study area has potential to contribute further to this archaeological record, and Aboriginal cultural heritage significance.

TABLE 9: SUMMARY OF SURVEY RESULTS

Site Number	Feature(s)	Survey Unit	Landform
#38-4-1968 (UoN1A-1)	Artefact (n=2)	2	Disturbed/Modified

6.0 Cultural Heritage Values and Significance Assessment

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

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

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

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

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

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

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

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

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

6.1. Assessment of Aboriginal Cultural Heritage Values

6.1.1. Social (Cultural) and Spiritual Value

Social, cultural and spiritual values of a site can only be identified through consultation with Aboriginal people. During the consultation process, project RAPs identified that the Newcastle and Honeysuckle foreshore area (including the study area) is very a significant area for the Awabakal people. The Awabakal and Guringai people have ‘a continuing, contemporary history of trying to protect and preserve the Newcastle region’, and ‘the mental, physical and spiritual wellbeing of the Awabakal and

Guringai People and those Aboriginal Peoples that feel a connection to this landscape is a contemporary phenomenon and not just 'a thing of the past'... The sites and landscape features link contemporary Awabakal and Guringai people with generations of their ancestors and are extremely important teaching places and places of spiritual renewal'.³

'The Project area, as well as all the rest of our traditional Country, is of great significance and important to us as Awabakal as it has been part of the greater area that has provided for and shaped the beliefs and cultural practices of our People for thousands of years. All of these areas have and still play a major role in the lives of our People for many and varied reasons that draw us to focus on what it is to be an Awabakal person'.⁴

The location of the study area, close to the Hunter River and in the Greater Newcastle area, is an area that is, and has been in the past, provided resources for Awabakal people that have been hunted and collected for thousands of years. The study area not just an isolated site, but connected to many Cultural Heritage sites across this region and within Awabakal Traditional Country, which should be viewed on a whole as a Cultural Landscape.

In addition, in response to the draft ACHAR, the Worimi Traditional Owners Indigenous Corporation also stated that the study area is of high social and cultural significance to the Worimi people.

Overall, consultation with the Awabakal and Guringai people and other project RAPs, has identified that the study area possesses very high social, cultural and spiritual significance.

6.1.2. Historical Value

The study area is located in the west of the Newcastle CBD, in proximity to many early activities in the colonial history of Newcastle, including being located on the fringe of Government Farm. There is evidence from surrounding archaeological investigations, as well as from historical accounts from Reverend Threlkeld, that Aboriginal people continued to occupy and undertaken their traditional cultural practices in this area for some time following the 1804 establishment of the Newcastle penal colony.

The UON HCCD study area therefore has moderate historical significance for its location within the early landscape as a documented point of first contact between Aboriginal people and the early European colonists in the Newcastle area, where Awabakal and Guringai people experienced the first stages of dispossession from their land. The Newcastle region, including the study area, is a key landscape in the history of Aboriginal and European contact in Australia.

Any archaeological evidence that may provide a tangible connection to this aspect of the history of the study area and surrounds (i.e. post-contact Aboriginal artefacts) is likely to be of high historical significance.

6.1.3. Scientific (Archaeological) Value

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

³ Quote from 'Statement of Significance by the Awabakal and Guringai Peoples', document provided to Curio Projects by Awabakal Traditional Owners Aboriginal Corporation (ATOAC), 4.7.18.

⁴ Quote from correspondence from Awabakal Descendants Traditional Owners Aboriginal Corporation, dated 5.10.18 (full correspondence included within Appendix A)

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

Following OEH guidelines for assessing scientific value (OEH 2011), five key criteria have been considered with regards to the scientific and archaeological context of the study area in order to determine the level of scientific significance of the study area. These criteria, as they have been applied to the study area, are defined below in Table 10. Following the criteria above, an assessment of the potential scientific significance of the UON HCCD study area has been undertaken, identified as relevant to the five key criteria.

TABLE 10: ARCHAEOLOGICAL SIGNIFICANCE CRITERIA

Criteria	Description
Research Potential	Research potential describes how much potential a site has to contribute to a further scientific or archaeological understanding of a site/area/region. This should include consideration of factors such as: <i>integrity and condition</i> (the level of soil disturbance that a site has been subject to and the ability for the site to yield intact archaeological deposits); <i>complexity</i> (demonstrated or potential ability of a site to yield a complex archaeological deposit); <i>archaeological potential</i> (the potential for a site to yield an archaeological deposit or resource); and <i>connectedness</i> (the connection of a site to others in the local area or wider region, though aspects such as type, chronology, content, location etc).
Rarity	Rarity refers to the frequency of similar site types in a local or regional area/landscape.
Representativeness	Representativeness refers to the level of variability between or within Aboriginal sites in an area or region, what is already conserved, how sites relate to each other, and the condition that a particular site type may be in that is able to better present or demonstrate more clearly that specific site type through the archaeological record.
Education Potential	Education potential refers to the ability of a site to contribute to the public record and provide teaching resources in order to further understanding of Aboriginal cultural heritage and archaeology. Is the site well preserved? Are there artefacts that would be good to use in teaching? Are there recognisable site features, artefacts types, records etc, that would be productive in teaching or use within public heritage interpretation strategies?
Archaeological Landscapes	The study of Aboriginal cultural heritage and archaeological study in the context of the wider landscape (geographical and cultural/social) in which they exist.

Research Potential

The nature or extent of an intact Aboriginal archaeological deposit within the study area has not yet been able to be determined, as due to the high amount of fill, and the potential historical archaeology across the site, test excavation has not been able to be undertaken under the *Code of Practice*.

The study area has been determined to have moderate to high archaeological potential for intact Aboriginal archaeological deposits to be present where natural soil profiles exist (particularly in the southeast of Site 1, southeast of Site 2, and all of Site 3), as well as a moderate to high potential for

isolated artefacts in a disturbed context. Artefacts in a disturbed context would not have scientific significance.

If intact Aboriginal archaeological deposits or objects are present within the UON HCCD study area, in undisturbed contexts, these may have moderate research potential, particularly in connection with other nearby sites (e.g. Palais Royale, NeW Space, Wickham Interchange PAD), and could contribute further to understanding Aboriginal occupation patterns along Honeysuckle Point.

Natural soil profiles, should they be present within the study area, could also have the potential for palaeobotanical evidence of the pre-European environment of the Hunter River/Throsby Creek cove, which could have moderate to high research potential, providing opportunities to further reconstruct the ecological conditions of the area pre-1788.

AMAC 2012 identified the presence, and additional archaeological potential in the Honeysuckle area for post-contact Aboriginal objects, such as Aboriginal artefacts manufactured of flaked glass, possible knapping of flint etc. Aboriginal post-contact sites are relatively undocumented within the Newcastle region, and therefore the potential for the study area to have Aboriginal post-contact archaeological evidence would likely be of high research potential.

The integrity, condition, and complexity of the potential Aboriginal archaeological deposit within the study area is currently unknown, and should be further assessed at a later date, following future archaeological investigation.

The artefact site identified during the field survey 'UoN1A-1', consisted of two isolated artefacts in a disturbed context, and while it may have social and cultural significance to the local Aboriginal community, is of no scientific research potential, as it cannot contribute any additional information to the archaeological or scientific record.

Rarity

If post-contact Aboriginal objects such as Aboriginal artefacts manufactured of flaked glass, knapping of ballast/flint etc are found to be present within the study area, they would be considered rare.

A low density Aboriginal artefact deposit, consistent with a background scatter derived from general occupation and use of the surrounding area (particularly with reference to movement between other identified archaeological sites (i.e. Palais Royale), would be unlikely to be considered rare, as there are several examples of such general occupation use of the area that have been investigated archaeologically (i.e. MDCA 2004).

Aboriginal artefacts within disturbed contexts can be described to be relatively likely and common in this area of Newcastle, particularly due to the relocation of local soils for use in historical filling and land reclamation. Therefore, artefact site 'UoN1A-1' is not considered to be rare.

Representativeness

Depending on the nature and extent of the potential Aboriginal archaeological deposit at the site, there is the potential for any artefact and occupation deposits (if present) to be representative of the use of Honeysuckle Point, and the general coastlines of the Newcastle CBD by Aboriginal people. However, this would depend on the presence and condition of an Aboriginal archaeological deposit in this location, which cannot at present be determined.

Artefact site 'UoN1A-1' is an isolated artefact site in a disturbed context, and is not considered to be representative of any scientifically significant Aboriginal site type.

Education Potential

The potential Aboriginal archaeological deposit within the UON HCCD study area has the potential to be of moderate to high education potential, depending on the nature, density, form and artefact types of any material recovered. Should a substantial artefact assemblage be recovered from the UON HCCD site, particularly with rare or complex stone tool types, this could have education potential for both use in teaching collections by the local Aboriginal community, as well as potential for integration into the heritage interpretation plan and implementation within the new UON campus.

However, it is not possible to grade the education potential of any potential resource within the study area at present, as the nature of the potential Aboriginal archaeological resource is not known.

Without context, nor as examples of particularly diverse or unique technological features, the artefacts contained within site 'UoN1A-1' are assessed to have low to no education potential.

Archaeological Landscapes

The UON HCCD study area exists within a wider Aboriginal archaeological landscape, both within the context of Honeysuckle Point as its occupation patterns by Aboriginal people (which it has been suggested by previous archaeological works, may likely focus around Cottage Creek), as well as across the wider Newcastle CBD region.

Should the study area present with an intact Aboriginal archaeological deposit, this could potentially contribute further to the archaeological understanding of Aboriginal site use and occupational habits along the Honeysuckle Point and Throsby Creek northern shoreline. Therefore, the study area may be of moderate significance when considered as part of a wider Aboriginal archaeological landscape across Honeysuckle and the Newcastle CBD.

Summary of Scientific Significance

While Aboriginal archaeological investigations have yet to be undertaken within the UON HCCD study area, the potential Aboriginal archaeological deposit at the site may be of an overall moderate scientific significance, depending on the nature, extent, type and condition of the deposit (if present). Numerous archaeological excavations in the surrounding area have demonstrated that it is likely that natural soil profiles are preserved within the study area, at an average of approximately 70cm below existing ground level (allowing for some local variation). The registered site located within the study area (UoN1A-1) is assessed to have no scientific significance.

Overall, it is not yet possible to determine the nature and extent of any Aboriginal archaeological deposit at the study area without investigating the site physically. However, should an Aboriginal archaeological deposit be present, given the location of the study area across the Honeysuckle foreshore it would potentially be of moderate research potential (high research potential should post-contact sites be present), with low to moderate education potential, and potentially moderate significance as part of the wider Honeysuckle and Newcastle CBD Aboriginal archaeological landscape.

6.1.4. Aesthetic Value

The UON HCCD study area has been subject to numerous levels of historical disturbance, including multiple fill events, land reclamation, and use for rail lines and workshops, which has resulted in the

current appearance of the study area as a highly modified landscape, with most evidence for the original foreshore landform removed.

For this reason, the cultural significance of the study area and surrounds is likely to be more related to the intangible values over aesthetic values of the Honeysuckle region. However, landscape features outside of, but in close proximity to the study area, such as the Hunter River/Throsby Creek, now located c.100m to the north of the study area, still contribute to the aesthetic values of the Honeysuckle area. Therefore, the study area is considered to have moderate aesthetic significance related to its general landscape positioning along the original Honeysuckle foreshore.

Aboriginal archaeological deposits that have the potential to be present within the UON HCCD study area, may also have aesthetic significance for technological form of the artefacts, or as potentially considered useful for education and interpretative purposes. However, this would have to be identified further following Aboriginal archaeological investigation at the study area.

6.2. Statement of Significance

The UON HCCD study area has been identified to possess high social, cultural and spiritual significance to the Awabakal and Guringai people, as a place of both historical, as well as continuing contemporary connection to Country. Aboriginal sites in the region can serve to 'link contemporary Awabakal and Guringai people with generations of their ancestors and are extremely important teaching places and places of spiritual renewal'. The location of the study area, close to the Hunter River and in the Greater Newcastle area, is an area that is, and has been in the past, provided resources for Awabakal people that have been hunted and collected for thousands of years. The study area not just an isolated site, but connected to many Cultural Heritage sites across this region and within Awabakal Traditional Country, which should be viewed on a whole as a Cultural Landscape.

The location of the UON HCCD study area along the original Honeysuckle foreshore is part of a key landscape in the history of Aboriginal and European contact in Newcastle, as a documented point of first contact between Aboriginal people and the early European colonists in the Newcastle area, where Awabakal and Guringai people experienced the first stages of dispossession from their land. Archaeological evidence that may provide a tangible connection to this aspect of the history of the study area and surrounds (i.e. post-contact Aboriginal artefacts) is likely to be of high historical significance.

While the nature and extent of any Aboriginal archaeological deposit at the study area is not currently known, should an Aboriginal archaeological deposit be present, given the location of the study area across the Honeysuckle foreshore it would potentially be of moderate research potential (high research potential should post-contact sites be present), with low to moderate education potential, and potentially moderate significance as part of the wider Honeysuckle and Newcastle CBD Aboriginal archaeological landscape.

While the cultural significance of the study area and surrounds is likely to be more related to the intangible values over aesthetic values of the Honeysuckle region (due to high levels of historical land modification), its general positioning along the culturally significant location of the original Honeysuckle foreshore suggests that the study area may have moderate aesthetic significance.

7.0 Impact and Harm Assessment

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

The UON HCCD project will be undertaken in a series of stages over the course of a number of years in order for the extent of the full development to be realised. Therefore, this impact assessment specifically addresses the development impacts of the enabling works for the AHIP that this ATR will accompany.

While specific design (and therefore impacts) for subsequent development stages are not yet known (and will be the subject of future Aboriginal archaeological management once known), some general discussion of these future potential impacts of the overall HCCD development has also been included here, with a view to transparency and facilitating an overall picture of the concept development. This has been considered with an aim to form a general picture of the overall effect that the entire UON Honeysuckle development may have on the Aboriginal cultural heritage and archaeological values. In this way, an insight into the potential cumulative impact of the entire UON HCCD project can be obtained.

This discussion of potential future Aboriginal archaeological impacts (as relates to the wider overall development) is then developed further into mitigation strategies and management recommendations in Section 8.0.

7.1. Ecologically Sustainable Development

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

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

7.1.1. Precautionary Principle

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

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

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

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

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

7.1.2. Intergenerational Equity

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

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

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

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

7.2. Description of Proposed Development

The University of Newcastle is seeking to expand its presence in the CBD of Newcastle and is in the process of acquiring three parcels of land within the Honeysuckle Precinct. The three sites are proposed to house the Honeysuckle City Campus Development (HCCD), intended to be a large scale academic precinct.

At present, the HCCD development is proposed to be completed over multiple stages (see Figure 48 for proposed building locations reference):

- Stage 1a—Construction of Building A1 (Site 1);
- Stage 1b—Construction of Building B (Site 2);
- Stage 2—Construction of Building A2 (Site 1);
- Stage 3—Construction of Building C (Site 1)
- Stage 4—Construction of Buildings D, E & F (Site 2 & 3)

It is understood that Site 2 and 3 have not yet been secured and remain an option for the University to purchase from Hunter Development Corporation (HDC). As nominated in the Concept Master Plan Report (COX Architecture, October 2017), if all sites are developed, the campus will have a total yield of 62,574 m² gross floor area (GFA), comprised of the following:

- Academic space - 50,746 m² GFA (approximately 800 staff & 4,380 students)
- Student accommodation - 11,828 m² GFA (394 beds)



FIGURE 48: UON HCCD—CONCEPT PLAN PROPOSED BUILDINGS (SOURCE: COX ARCHITECTURE 2017)

7.2.1. Enabling Works (Stage 1A)

The stage of works to which this ACHAR (and the AHIP application) applies, is the Enabling Works for Stage 1A of the UON HCCD project (i.e. construction of Building A1 in the northwest of Site 1). The Stage 1A enabling works include installation of sewer, water, electrical and telecommunication services required to service Building A1 and to connect the new development into existing services, as well as bulk earthworks to fill Site 1. Geotechnical and contamination testing of the subsurface soil profiles will also be required within the site to further the detailed and structural design of the overall development.

Mine remediation works will also be required for Site 1, in the form of mine grouting and verification works (due to the presence of former mine working sites present at substantial depths beneath the development site). The grouting works will be required for the development site in order to increase stability at mine level, and reduce the potential for subsidence within the development site.

The proposed ground works required for the Enabling Works Stage 1A of the UON HCCD development for water, sewer, electrical, telecommunications, geotechnical and grouting works include:

- Bulk earthworks within Site 1 (construction of a 500mm capping/fill layer over the entirety of Site 1) in order to achieve minimum floor levels required to mitigate site flooding and contamination risks;
- Installation of two PVC watermains, one 57m x 150mm diameter, and one 173m x 250mm diameter (c.3-4.5m depth);
 - *Optional installation of two additional watermains: 2 x 60m x 150mm diameter to service future Building C;*
- Installation of the sewer main extension, including: the installation of a 70m x 150mm diameter pipe at 3-4.5m depth along Wright Lane; and installation of a 20m x 150mm diameter pipe at 1.5-3m depth to connect to manhole on Worth Place;

- Installation of three water/sewer maintenance chambers;
- Installation of one electrical kiosk substation in vacant space between future proposed Building A2 and Building C, to supply Building A1;
- Installation of conduits and pits for electrical, NBN and communications (minimum 400-500mm width and 600-700mm depth); and
- Installation of UON private communication network cable, conduits and pits, extending from Honeysuckle City Campus to Auckland Street adjacent to Hunter Street after the NeW Space Building (located on the corner of Hunter and Auckland Streets).

The general locations of the main enabling works ground impacts (i.e. new services trenching and electrical substation) are presented in relation to the study area in Figure 49. Figure 50 presents a general plan of the proposed bulk earthworks in the form of filling across all of Site 1. The exact location of the proposed geotechnical and contamination boreholes are yet to be determined, however these are considered to be low impact activities (with diameter c.75mm). Locations of proposed mine subsidence grouting boreholes (based on the location of existing boreholes that will be re-drilled) are presented in Figure 51.

Further details regarding the Stage 1A enabling works activities are presented in Appendices B and C, which provides the Northrop and GHD DA input documentation for the sewer, water, electrical and telecommunications reticulation strategies for Stage 1A of the UON HCCD project.

Contamination Considerations—Bulk Earthworks

Due to the requirements of obtaining an AHIP prior to undertaking contamination investigations including test pits and sampling, no Honeysuckle City Campus Development specific contamination investigations have occurred to date. The extent of contamination of the site has been based on previous development investigations which date back to 2011 and 2013. These prior investigations noted heavy metal contamination and asbestos identification. It has also been identified that Acid Sulphate Soils are also likely to be present, based on site locality.

Elimination of the hazard is seen as the highest form of Work Health & Safety and Environmental (WHS&E) mitigation measures. Therefore, should stripped topsoil/spoil be identified during enabling works as contaminated, this will necessitate handling by trained personnel only, with further measures undertaken at such time in agreement with the Principal contractor. While the stripped topsoil from Site 1 is proposed for reuse within the site following filling, the extent of contamination may render this intent not possible, and require removal and disposal of contamination soil off-site. The requirement for this variation to proposed re-use of topsoil material, would need to be determined once works start.

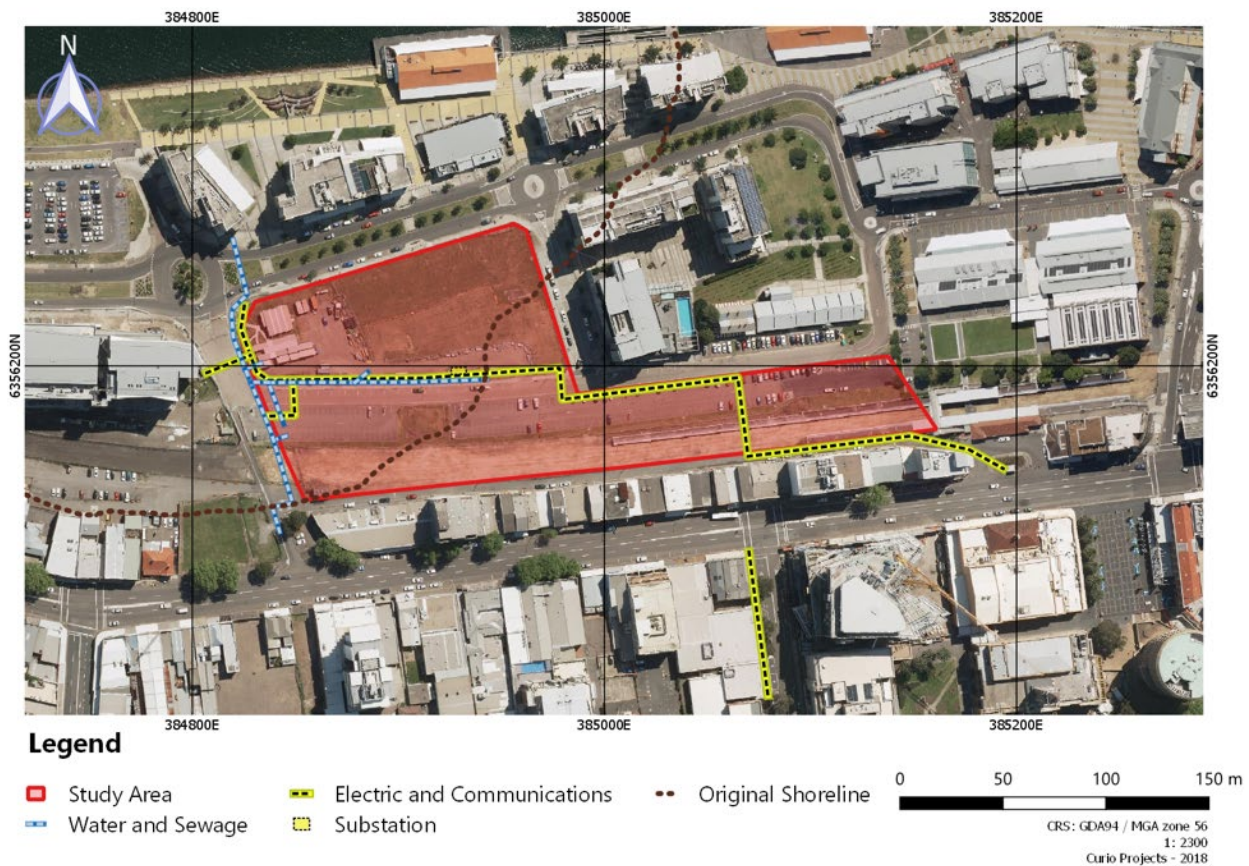


FIGURE 49: ENABLING WORKS—LOCATIONS OF PROPOSED TRENCHING IMPACTS (SOURCE: CURIO 2018)

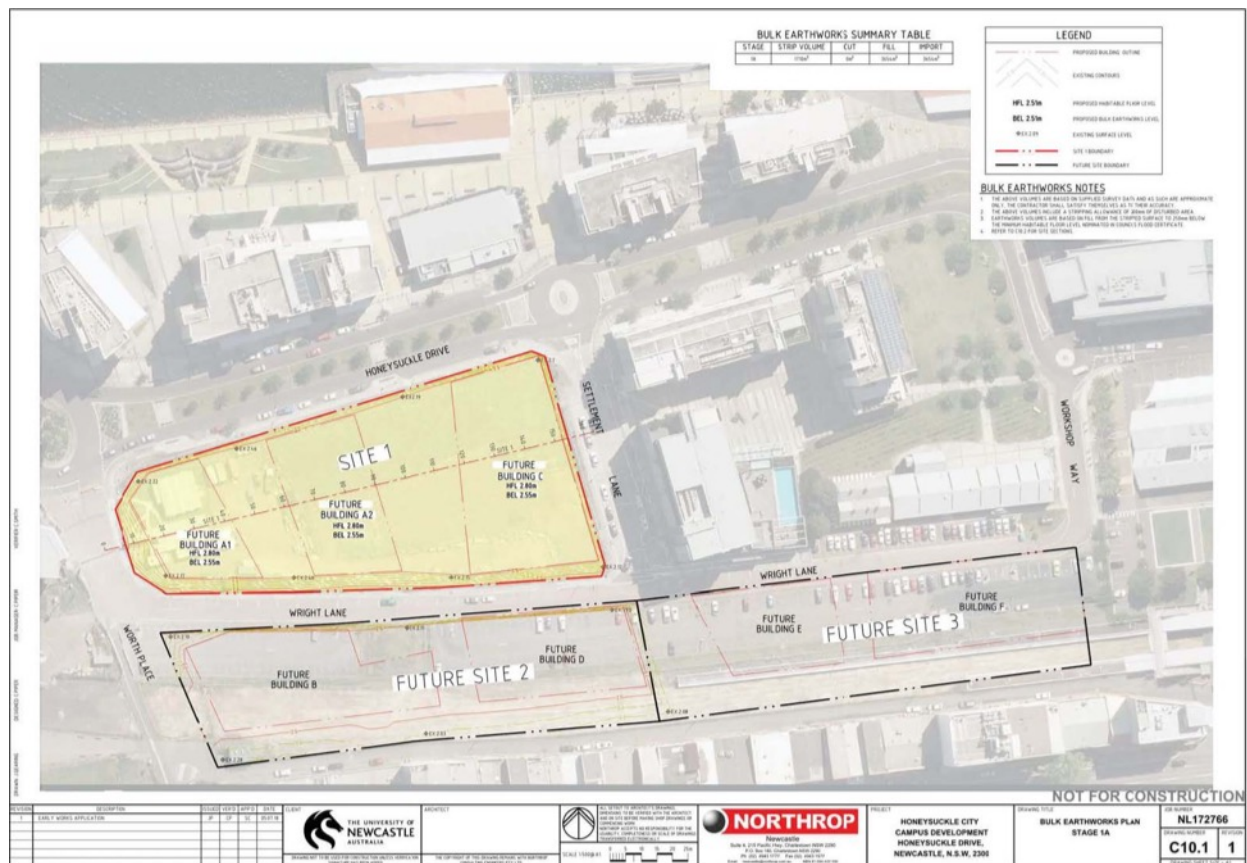


FIGURE 50: ENABLING WORKS PROPOSED ACTIVITY—SITE FILL PLAN (SOURCE: NORTHROP 2018)

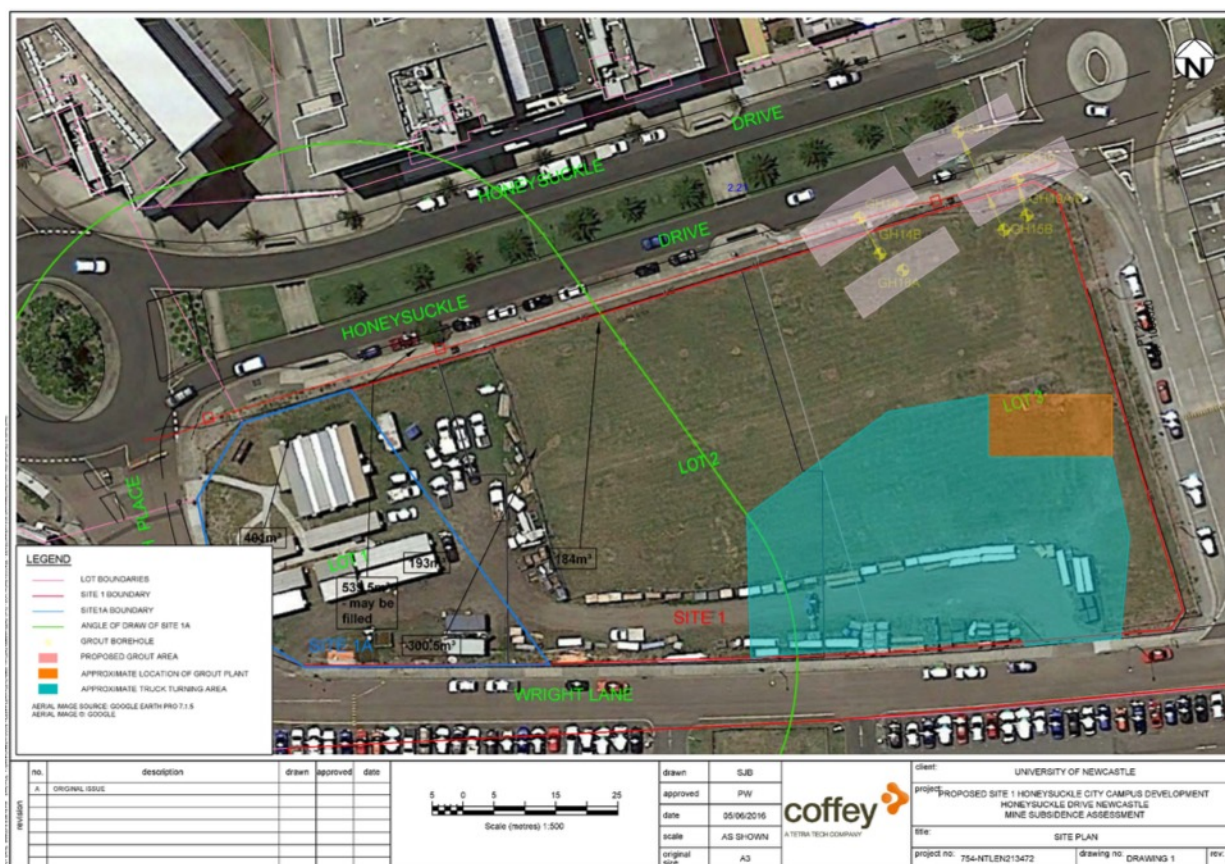


FIGURE 51: ENABLING WORKS PROPOSED ACTIVITY—GROUTING ACTIVITIES (SOURCE: COFFEY 2018)

7.3. Conservation and Impact Assessment

7.3.1. Proposed Impact to the Potential Archaeological Resource

The Stage 1A enabling works have the potential to impact upon the potential Aboriginal archaeological deposit at the study area, especially development impacts that extend below the layer of historical fill across the site (i.e. beneath c.70cm below existing ground level). The enabling works also have the potential to impact isolated Aboriginal objects in a disturbed context both on the ground surface, and potentially within the layers of historical fill at the site.

The main ground disturbance impacts of the Stage 1A enabling works have been categorised into three main levels of impact—new trenching works, boreholes, and bulk earthworks for filling. The nature, location and extent of these three impact categories have been discussed below with reference to possible impact to the potential Aboriginal archaeological deposit within the study area.

New Service Trenching

The width and depth of the new trenching works will generally depend on the nature of the services being installed. For example, the water and sewer trenches are proposed to be c. 1.5-4.5m deep (depending on location), and therefore have a high potential to encounter natural soil profiles (which in turn have the potential of yielding an Aboriginal archaeological deposit). While trenching for electrical and telecommunications services are proposed to be c.70-90cm deep (with some flexibility required during installation depending on location and encountered subsurface conditions), and therefore have slightly less potential to impact substantial areas of natural soil profiles with the potential of containing an Aboriginal archaeological deposit.

In addition, the location of the trenching works across the study area will also determine the level of impact to potential Aboriginal archaeological deposits. Trenching works located to the northwest of the path of the original shoreline will have low to no potential to impact upon intact Aboriginal archaeological deposits, as this area is reclaimed land, and originally would have been located in the Hunter River. However, trenching within reclaimed land still has potential to impact isolated Aboriginal artefacts within the fill/disturbed context. Conversely, service trenching to the southeast of the original shoreline, has the potential to encounter natural soil profiles that have the potential to retain an in situ Aboriginal archaeological deposit, and therefore has moderate potential to impact in situ Aboriginal objects and sites.

Proposed mitigation measures should reflect the difference in Aboriginal archaeological sensitivity between the northwest and southeast of the study area, with appropriate management strategies developed to these two different sensitivity zones.

Bulk Earthworks—Filling

Due to the proximity of the site to the water table, filling will be required across all of Site 1 of the UON HCCD project, in order to achieve minimum habitable floor levels (the current site levels range from 2.0 to 2.5m AHD, while Council's minimum habitable floor level for flood management is 2.8m AHD).

Therefore, it is proposed that Stage 1A of the project includes:

- Strip existing topsoil layer (nominal depth of c.200mm) and stockpile topsoil on site (contamination issues permitting);
- Import fill material to fill all of Site 1; and
- Once filling is complete, respreads stockpiled topsoil to remainder of the site (contamination issues permitting), other than that within the direct footprint of Building A1.

The bulk earthworks strategy for Stage 1A involves removal of the topsoil across Site 1, and therefore has the potential to impact Aboriginal artefacts in a disturbed context either on the surface of the site, or within the c.200mm topsoil present. However, the re-spreading of this topsoil following filling of the site, would see any potential Aboriginal objects retained within the site, and therefore, have minimal overall impact to Aboriginal archaeology or cultural heritage values.

Boreholes (Geotechnical/Contamination/Grouting)

Boreholes are proposed within Site 1 for geotechnical and contamination investigations, as well as for grouting to stabilise the underlying mine network. Mine grouting works involves the injection of a cement stabilising flyash material into the mine working via boreholes drilled from the surface into the mine workings. The grout thus stabilises the mine workings by filling voids at mine level, and filling fracture in the overlying rock (Coffey 2018). Drilling for mine stabilisation works first commenced at the site in 2011, and while some grouting was undertaken at this time, grouting was not completed. Therefore, grouting works for the Stage 1A development of the UON HCCD development will include the redrilling of several former boreholes (due to collapse of borehole walls or from encountering a coal pillar at mine depth), c. 75mm in diameter, as well as pumping grout into the relevant boreholes to facilitate stabilisation. Following completion of the grouting works, up to two additional boreholes will be required to confirm grout flow and grout penetration.

The exact number and location of the required redrilled boreholes, and new boreholes for geotechnical and contamination works are yet to be confirmed, however boreholes are relatively minimal in size and

therefore impact, and while an AHIP is required to cover any impact to potential Aboriginal archaeological deposits, archaeological mitigation strategies are likely to relate more to overall management of cumulative impacts to Aboriginal cultural heritage over specific mitigation of the physical boreholes.

7.4. Harm to Aboriginal Objects and Values

The above described works have the potential to impact both surface, and subsurface Aboriginal artefacts, both within a disturbed context, and in situ within natural soil profiles (should an in situ deposit be present). The level of physical impact across the site will depend on the varying nature of the development activities (i.e. more shallow trenching for electrical and telecommunications, vs deeper trenching for water and sewer). Conversely, as the Stage 1A development of the study area does not include any provision for a basement requiring bulk excavation, and will in fact, will be filled by an additional c.500mm, the proposed bulk earthworks will essentially conserve any potential Aboriginal archaeological deposit in these areas.

An area-wide AHIP will be required to allow the Stage 1A enabling works to be undertaken within the site (due to the potential for the proposed works to disturb the ground surface with the potential for Aboriginal artefacts and archaeological deposits-both in intact and disturbed contexts). However, targeted mitigation strategies are appropriate for the different impact and Aboriginal archaeological sensitivity locations within the study area.

There is no potential for natural soil profiles capable of recovering an intact Aboriginal archaeological deposit to the north of the original shoreline. While Aboriginal artefacts may be present in this location, they would likely have been redeposited by alluvial forces within the harbour prior to land reclamation, and would not be representative of intact, stratified archaeological deposits. However, culturally, any Aboriginal artefacts located in this area would be of high significance to the Aboriginal community. The main enabling works impacts (i.e. services trenching) are presented with reference to the Aboriginal archaeological sensitivity at the site in Figure 52.

The study area has been identified as being of very high social, cultural and spiritual significance to the local Aboriginal community, and therefore, consideration of the potential impact that the enabling works may have on this cultural value must also be considered through the course of the proposed development.

Aboriginal artefacts have been identified by the community as having tangible heritage significance to the community, and therefore, the enabling works do have the potential impact on Aboriginal cultural heritage values. However, the minor nature of the enabling works themselves (including the limited ground disturbance proposed into zones potentially containing natural soil profiles), may assist in ensuring this impact to Aboriginal cultural heritage values remains low. Particularly if the development is complemented by appropriate and meaningful engagement and consultation with the Aboriginal community ongoing through the project, including eventual development of meaningful Aboriginal cultural heritage interpretation initiatives within the future UON development.

N.B. Following Aboriginal consultation (i.e. through the review of the draft ACHAR), the project RAPs have identified that topsoil stripping would be considered an impact to potential Aboriginal sites and objects, regardless of whether the soil is returned to the site following filling, and would like the opportunity to recover any Aboriginal cultural material present within the topsoil (addressed further in methodology in Section 8.1 below).

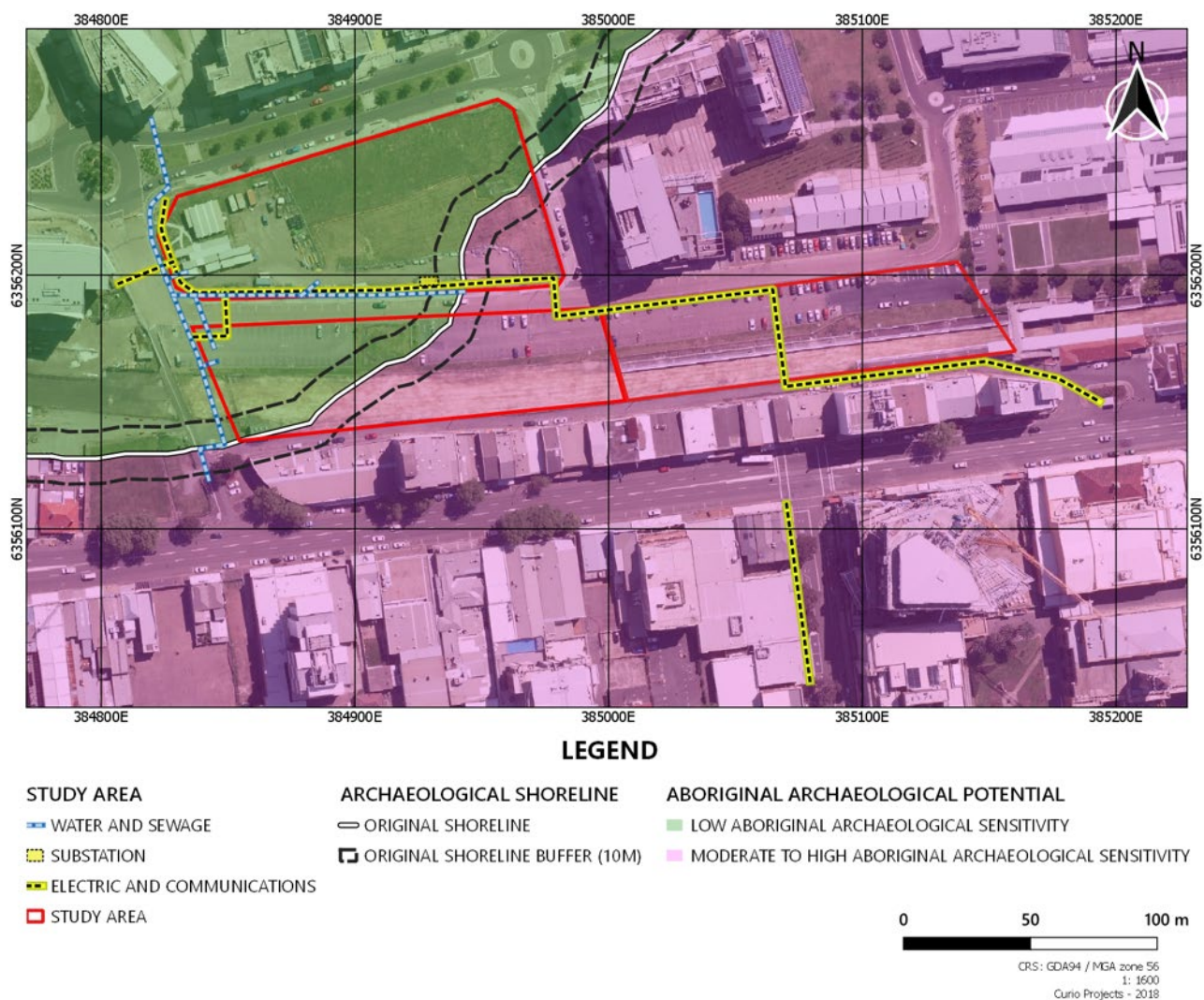


FIGURE 52: PROPOSED TRENCHING IMPACTS OVER ARCHAEOLOGICAL SENSITIVITY (SOURCE: CURIO 2018)

7.4.1. Avoiding and Minimising Harm

Uncertainty regarding the nature, extent, and significance of the potential Aboriginal archaeological deposit at the study area, indicates that it is appropriate to apply the precautionary principle to the assessment and management of Aboriginal cultural heritage within the study area via the mitigations/management recommendations. While the Stage 1A enabling works activities are relatively minor in nature, archaeological strategies are still considered appropriate in order to acquire any additional information possible to refine the assessment of Aboriginal archaeological potential within the study area. For example, archaeological monitoring of new service trenches, with the opportunity to investigate natural soil profiles if present, may serve to further refine and investigate the nature, extent, and significance of the potential Aboriginal archaeological deposit at the study area.

The nature of the overall concept plan development, without any basement of extensive excavation into nature soil profiles currently proposed, will also contribute positively towards the conservation of any potential Aboriginal archaeological deposit and cultural heritage values contained within the site. Should development impacts not require disturbance of natural soil profiles (at present, the concept plan suggests that the majority of subsurface natural soil profiles will be retained intact beneath the development), then these will be able to be retained within the study area, thereby preserving the archaeological deposit and its associated significance for future generations, regardless of whether the

exact nature of the archaeological deposit is able to be ascertained through archaeological investigations coupled with the development impacts, or not.

Following RAP review of the draft ACHAR, project RAPs have identified that it would be appropriate to undertake targeted test excavation in the southeast of Site 1 (i.e. along and to the south of the approximate location of the original Honeysuckle shoreline), following topsoil stripping, and prior to filling activities. This is recommended in acknowledgement that although basement excavation is not proposed for Site 1, any building will require some form of piling or deep piers during construction, which has the potential to impact potential Aboriginal sites.

In response to this recommendation, the UON has indicated that the impact to the southeast of Site 1 is not critical to Stage 1A development works (i.e. the development of Building A1 in the west of Site 1). The UON also acknowledges the future requirement for Aboriginal archaeological test excavation across other areas of the project site for future development stages. Therefore, it was determined that bulk earthworks for the Stage 1A Enabling Works in the southeast corner of Site 1 (i.e. area approximately consistent with the original shoreline), would be postponed to a later stage in the development (i.e. not undertaken as part of Stage 1A Enabling Works). Archaeological investigation of this location within Site 1 is still be proposed, it would be incorporated into a future wider program of Aboriginal test excavation and archaeological investigation at the site, which will be the subject of a future ARD and assessment.

Therefore, the Stage 1A Enabling Works will have no impact to the southeast area of Site 1 (i.e. south of the Honeysuckle shoreline), other than through service trenching works (as described).

7.5. Summary of Impact Assessment

Only one registered Aboriginal site is located within the UON HCCD study area (UoN1A-1), which will be directly impacted by the proposed enabling works development activities, due to the requirement for top soil stripping across all of Site 1 to allow for filling of the site.

While no other registered sites are present within the study area, and the nature, extent, and condition of any potential Aboriginal archaeological deposit at the site is not currently known, the development works have the potential to directly impact any other isolated artefacts, or potential Aboriginal deposits located within natural soil profiles (if present within the study area). The impacts for identified Aboriginal sites and features are summarised in Table 11.

TABLE 11: IMPACT ASSESSMENT

Site Number	Type of Harm	Degree of Harm	Consequence of Harm
UoN1A-1 (#38-4-1968)	Direct	Total	Total loss of value
N/A (Any other isolated artefacts/PAD if natural soil profiles present)	Direct	Partial	Partial loss of value

8.0 Archaeological Management and Mitigation

The UON HCCD project will be developed sequentially, undertaken as a series of stages of development, potentially extended over ten years or more, therefore, details of ground impacts proposed for all development stages are not yet known. This, in combination with the high levels of fill across the entire study area (and proximity to the water table which means the site is likely to be filled rather than excavated to facilitate development), means that the approach to Aboriginal heritage management must also be staged, flexible, and able to be adaptive to provide a management framework for Aboriginal cultural heritage and archaeology for the life of the development.

This report (and the AHIP it supports) relates specifically to the proposed development impacts of the Stage 1A Enabling Works, and therefore provides recommendations for management and mitigation of the specific development impacts that this activity entails. The Stage 1A Enabling Works phase of the UON HCCD development does not propose extensive bulk excavation across the study area, nor is any basement excavation currently proposed for the overall UON HCCD Concept Plan.

Therefore, the Aboriginal cultural heritage values and Aboriginal archaeological potential of the study area are proposed to be managed and mitigated via three main strategies:

- **Archaeological investigation** tailored to specific development works (once development impacts for each stage of development are known);
- Preparation of an **Aboriginal Cultural Heritage Management Plan** to provide an ongoing structure and framework to guide Aboriginal cultural heritage management as the project progresses; and
- **Aboriginal Heritage Interpretation** to facilitate a long term conservation outcome for Aboriginal cultural heritage values (tangible and intangible) within the proposed development, beneficial to both the development itself within the new university campus, as well as contributing to the acknowledgement, maintenance, and celebration of Awabakal cultural heritage.

These three strategies are proposed to be applied to all stages of the development works, through the life of the project, however are discussed here with predominantly with specific reference to Stage 1A enabling works development activities. It is believed that the application of these three strategies across the life of the UON HCCD project will serve to minimise the harm posed by the development to Aboriginal cultural heritage values, through the conservation of Aboriginal archaeological deposits where possible, investigation and recovery where not possible to conserve in situ, and improved acknowledgement and celebration of Awabakal/Guringai culture and significance within the future university campus development.

8.1. Strategy One—Archaeological Investigation

Archaeological investigation is proposed within the UON HCCD study area with specific reference to the Stage 1A enabling works development impacts. The Aboriginal archaeological program to be implemented during Enabling Works would include community collection of surface artefacts, as well as archaeological monitoring of trenching within areas of high Aboriginal archaeological sensitivity, with the mechanism to implement targeted Aboriginal archaeological test excavation, if and where natural soil profiles are encountered through trenching works.

As the study area also has moderate to high potential for historical archaeological relics to be present Aboriginal archaeological test excavation under the OEH *Code of Practice* prior to AHIP application has

not been possible for the study area prior to the AHIP application. In addition, the presence of a layer of historical fill across the entire site (c.70cm deep), in combination with the relatively high water table, and the development of the overall UON HCCD concept plan which indicates that minimal bulk excavation would be required for the development, meant that area-wide Aboriginal archaeological test excavation was not appropriate for the study area.

Therefore, the proposed archaeological program in relation to the Stage 1A enabling works will consist of three distinct methods of investigation: *Aboriginal community collection* of the registered site (UoN1A-1); *Archaeological monitoring* of trenching works in high sensitivity areas, and; *Targeted test excavation* where/if natural soil profiles are encountered through trenching.

The aims of the Aboriginal archaeological investigation program (collection, monitoring and test excavation) for the UON HCCD Enabling Works program is to:

- Collect any Aboriginal artefacts that are known to be, or may be, present on the surface, or are uncovered through excavation works (i.e. stripping of the topsoil to prepare for filling);
- Identify if intact soil profiles are present within the development impact zones via archaeological monitoring; and
- Undertake archaeological test excavation (where possible) within intact natural soil profiles (where encountered through development works, requiring impact).

The recovery of any Aboriginal artefacts (whether in disturbed or in situ context) would be of high significance to the Aboriginal community. The recovery of additional information regarding the nature of soil profiles within the study area (i.e. presence/depth of natural soil profiles within the site, presence of in situ Aboriginal archaeological deposits), could serve to further our understanding of the Aboriginal occupation and use of the study area, in the context of landscape patterning in the Newcastle (West) CBD region, and facilitate informed Aboriginal heritage management for the site, for the life of the UON HCCD project (e.g. potentially 10+ years).

8.1.1. Community Collection Methodology

Community collection of the registered Aboriginal site (AHIMS #38-4-1968) is proposed following approval of the AHIP, and prior to commencement of Stage 1A enabling works within the site. The collection of this registered site would also include a walkover of Site 1 (once the site has been cleared of the current Downer light rail site compound facilities and materials), to collect any other surface Aboriginal artefacts that may be evident across the surface of the site, a walkover of the stockpiled topsoil (contamination issues permitting), and opportunity to sieve a sample of stripped topsoil materials to recover any additional artefacts (contamination issues permitting).

The community collection of surface artefacts would be undertaken in accordance with the following methodology:

- Collection of the registered Aboriginal site, including re-recording of GPS location, photography, and appropriately bagging and labelling the artefacts;
- Walkover of Site 1 via strategic transects in order to identify any additional surface Aboriginal artefacts (once Downer site complex removed, prior to topsoil stripping activities);
- Walkover of stockpiled topsoil once stripped (contamination issues permitting);

- Opportunity to sieve a sample of the stripped topsoil material (contamination permitting); and
- When Aboriginal artefacts are identified, they will be recorded by an archaeologist, including a description, GPS location, and digital photographs, and appropriately bagged and labelled.

As the bulk earthworks required for the site includes topsoil stripping (c.20cm), which will then be stockpiled (contamination permitting), prior to replacement on site following addition of fill, the project RAPs have also requested that the opportunity be made for monitoring, walkover and/or sieving of a sample of this stripped topsoil, in order to recover any additional artefacts that may be present in the topsoil. The ability to sieve the topsoil (as it will be reused on site), will be discussed with the client and development contractor prior to commencement of Enabling Works, in consideration of any contamination factors encountered during site works to ensure all WH&S and Environmental requirements are still met.

Community collection would be undertaken by select representatives from the project RAPs (minimum two RAPs on site at a time, one from each recognised cultural knowledge holder group in order to provide accurate and holistic cultural advice to project archaeologist), accompanied by a suitably qualified and experienced archaeologist.

8.1.2. Monitoring and Test Excavation

The proposed enabling works consists predominantly of the excavation of several new trenches for the installation of new electrical, telecommunications, sewer and water services. Therefore, Aboriginal archaeological monitoring is proposed for these trenches in areas of high Aboriginal archaeological sensitivity (i.e. trenching located to the southeast of the original Honeysuckle shoreline, as per Figure 52), in order to recover any uncovered Aboriginal artefacts, and to provide the opportunity to identify natural soil profiles (should they be uncovered in the enabling works trenching), to facilitate investigation of the nature of the potential Aboriginal archaeological deposit within the study area, if possible.

The aims of the monitoring and test excavation program are to systematically record and recover any identified subsurface Aboriginal artefacts that would be impacted by the enabling works development activity. The following methodologies will be reviewed by the project RAPs, to be confirmed in the final ATR.

Monitoring Methodology

The monitoring of the service trench excavations located in areas of high Aboriginal archaeological sensitivity (i.e. southeast of the original Honeysuckle shoreline as per Figure 52) would be coordinated with the service contractors, and in consideration of any identified contamination constraints and would generally involve:

- Monitoring of the trench excavation should be undertaken under the supervision of a qualified archaeologist, ideally accompanied by one representative from each acknowledged cultural knowledge holder RAP group.
- The general stratigraphy of the soil profiles shall be recorded via field notes, photography, and preparation of stratigraphic section drawings.
- The spoil from the trenches shall be set aside at an accessible location at the site, to allow for community collection of any recovered artefacts by the project RAPs, if desired (contamination permitting).

- Any Aboriginal artefacts recovered from the monitoring of the trenches will be bagged and clearly labelled according to trench location, date, and project.
- Should natural A1 soil horizon be identified within the trenches located to the south of the original Honeysuckle foreshore, opportunity should be made (to be discussed with the project RAPs) to commence test excavation in these locations, in accordance with the test excavation methodology as presented in the section below.
- Allowance must be made for any contamination considerations or issues at the site during proposed archaeological mitigation works, should such issues become apparent, in order to ensure that all WH&S and Environmental requirements are met during site works. This may require slight variation of proposed strategy of soil monitoring/walkover of stockpiled soil, and should this be required, would be discussed between the archaeologist, contractor, client, and RAPs in the field.

Trenches located to the north/northwest of the approximate location of the original Honeysuckle shoreline would not be subject to archaeological monitoring due to the low sensitivity of these areas to contain an intact Aboriginal archaeological deposit. However, contamination issues allowing, the soil excavated from the northeastern service trenches would be stockpiled on site/nearby during development works, allowing for the opportunity for the project RAPs to do a walkover of this soil and recover any Aboriginal artefacts that may be present within the excavated soil (from disturbed context).

Aboriginal Archaeological Test Excavation Methodology—Service Trenching

As discussed above, standard Aboriginal test excavation under the OEH *Code of Practice* is not possible at the UON HCCD site for the following reasons:

- The study area is completely covered by a layer of historical fill, likely averaging c.70cm in depth (with likely variation), and the development is unlikely to require extensive bulk excavation (in fact, Site 1 will require filling prior to development); and
- A historical archaeological deposit has the potential to be present across the study area, and would overlay the potential remnant soil profiles with the potential to contain in situ Aboriginal archaeological deposits, and will require investigation/removal in accordance with a S140/S60 consent (NSW Heritage Act), prior to the commencement of any Aboriginal test excavation.

The principle of test excavation as outlined in Requirement 16 of the *Code of Practice* have been taken into consideration in the preparation of this methodology, and have been adhered to—as much as possible—taking into account the nature of the excavation (i.e. within the parameters of a new service trench). The methodology and research design developed for the Stage 1A enabling works within the study area has been designed to cover the removal of displaced Aboriginal objects within historical archaeological deposits (if encountered), with the exception of Aboriginal skeletal remains.

Should natural soil profiles be encountered within the enabling works trenches located *south* of the path of the original shoreline (given a 10m buffer of the overlay mapping of the shoreline, as per Figure 49) during the archaeological monitoring phase, excavation in the immediate vicinity will be paused, and a suitably qualified and experienced archaeologist will be consulted to assess the nature of the soils, in order to confirm whether the soils are in fact remnant natural profiles. If soils are confirmed to be natural, the Archaeologist/Aboriginal Excavation Director, Sam Cooling, in consultation with project RAPs, would identify if test excavation is possible within the parameters of the excavated trench (i.e.

considering factors such as accessibility, WHS conditions, and the required level of ground impact for the specific trench).

Should it be identified that test excavation is possible within the identified natural soil profile within the trench, the following methodology would be applied:

- Should a remnant soil profile be positively identified, that is capable of being subject to archaeological test excavation, then this would be undertaken entirely by hand, with the purpose of testing for Aboriginal archaeological material within the natural soil profile.
- Test excavation will commence by the initiation of a provenanced 50cm x 50cm test excavation unit (TU) within the identified trench presenting with natural soil profiles.
- Where appropriate, test excavation units may be extended by 50cm on any side, dependent on the nature and extent of the identified natural soil profile, and in consideration of the shape and size of the excavated service trench, with the maximum continuous surface area of any one TU to be no greater than 3m².
- Test excavation units will be excavated in 10cm spits, unless a shallower depth is defined by natural soil profiles, or other stratigraphy is identified.
- Test excavation will proceed to the depth of the required service trench (i.e. within the impact zone of the proposed activity).
- The deposit from each TU would be wet sieved through a 5mm aperture wire-mesh sieve, with any recovered objects recorded in correspondence to their TU and catalogued appropriately.
- If the test excavation within the identified natural soil profile does not identify any Aboriginal objects or archaeological deposits within the excavation impact zone required for the service trench, then excavation will cease in this location, and the archaeological investigation will return to monitoring.
- A post-excavation report detailing the results of both the monitoring and test excavation phases (if required) of the investigation would be prepared following completion of the archaeological works for the Stage 1A enabling works. This report would be prepared in accordance with the conditions of any AHIP issued for the site, and would be provided to all project RAPs for their information, as well as forwarded to OEH.
- Where possible, information derived from the monitoring/test excavation would be used to expand the archaeological and geomorphological understanding of the UON HCCD study area.
- Stone artefact recording of any recovered Aboriginal stone artefacts would follow the requirements detailed through the OEH *Code of Practice*, and in accordance with current accepted academic texts for stone artefact analysis and recording in southeast Australia (i.e. Holdaway and Stern 2004).

Research Framework

Two primary objectives have been identified for the archaeological investigation proposed for the Stage 1A Enabling Works activities at the UON HCCD site, with regard to the Aboriginal archaeological potential of the study area. These objectives are:

- to identify whether natural soil profiles capable of retaining an Aboriginal archaeological deposit are present within the study area (within the impact zone of the required service trenching); and
- to determine whether these natural soil profiles contain an Aboriginal archaeological deposit, and, if present, to undertake an assessment of the deposit within a local and regional landscape context.

Several research questions have been developed to inform the above objectives. General research questions for the proposed archaeological investigation of the study area include:

- Is there a residual soil horizon (deposit) within the UON HCCD study area? If so, what are its characteristics and extent?
- Do identified natural soil profiles provide any evidence for the path of the original Honeysuckle shoreline across the study area? Can the soil profiles inform a geomorphological context of the study area? If so, how?
- Does test excavation provide any additional information as to whether the overall study area is likely to retain a remnant Aboriginal archaeological signature?
- How can the Aboriginal archaeological deposit (if recovered) be interpreted in a local (i.e. Honeysuckle) and regional (i.e. wider Newcastle CBD) context?
- Is there any evidence for 'post-contact' Aboriginal archaeological deposits, such as knapped glass artefacts and flaked ballast?
- Is the archaeological deposit (if encountered) culturally significant? To what extent?

The research questions will guide the limited test excavation within the service trenches (where undertaken), and assist to further refine the Aboriginal archaeological predictive model for the study area, which would allow for the development of more specific research questions, and for the further development of management and mitigation measures for future development stages of the UON HCCD project.

8.1.3. Incorporation with Historical Archaeology

Due to the historical archaeological potential of the study area, the Aboriginal archaeological monitoring will be undertaken in conjunction with the program of historical archaeological investigation, which will be guided by a separate historical ARD, and subject to a Section 140/Section 60 permit from the NSW Heritage Division.

The historical archaeological investigation would take a similar form to the Aboriginal monitoring and service trench target excavation, in that monitoring of service trench excavation is proposed in order to ensure no relics are encountered, or should relics or historical archaeological deposits be encountered by construction works, to enable the archaeological excavation and recording of any archaeological resource within the impact zone of the construction activity. For further details regarding the historical archaeological investigation, reference should be made to the separate historical ARD document.

8.1.4. Contamination Considerations

As discussed in Section 7.2.1, the extent of potential contamination issues within the study area is not currently known, awaiting approval of the DA and AHIP before extensive works to investigate this factor can be undertaken. That is to say, should stripped topsoil proposed for stockpiling and replacement on site post-filling Site 1 be found to be contaminated (partially or wholly), this may necessitate removal

from site, without replacement after filling, limiting the opportunities for surface collection or sieving of spoil. Should this situation be encountered, project RAPs would be informed, however as WHS&E measures will be viewed as the highest priority during site works, the requirement to adhere to WHS&E requirements would need to take precedence over archaeological investigations/management strategies detailed in this report.

8.2. Strategy Two—Aboriginal Cultural Heritage Management Plan

Once the UON HCCD Concept Plan SSDA (SSD 9262) has been approved, the project site will no longer be subject to the requirements of the *NPW Act*, and therefore will no longer require AHIPs for future work for the life of the SSD approval (notwithstanding any future legislative changes). As the UON Honeysuckle Campus is likely to be developed over an extended time period (i.e. possibly 10+ years), a mechanism should be implemented to adequately address, manage and mitigate potential development impacts to Aboriginal cultural heritage and archaeology throughout the life of the project.

It is recommended that this take the form of an Aboriginal Cultural Heritage Management Plan (ACHMP), to be prepared following the results of the Aboriginal archaeological investigation undertaken in parallel with the enabling works (as discussed in this report), in order to provide advice and key times within the development process, where Aboriginal heritage and archaeology should be considered and applied to the study area, particularly in combination with new development stages and proposed ground impacts. This ACHMP would serve to provide assurance to the project RAPs of the University's commitment to sensitive and appropriate management of Aboriginal cultural heritage values for the study area, while providing the client with a living framework document to provide clear guidance for future responsibilities and requirements for Aboriginal cultural heritage management for the Honeysuckle City Campus Development. The project RAPs, and in particular the recognised knowledge holders for the project location and surrounds, should be closely involved in and consulted throughout all stages of the preparation of the ACHMP.

Consultation with project RAPs through review of the draft ACHAR has identified that the ACHMP could be appropriately developed through a workshop session.

8.3. Strategy Three—Future Aboriginal Heritage Interpretation

Opportunities to interpret any Aboriginal cultural material, archaeological deposits, and identified Aboriginal cultural heritage values should be considered as part of a holistic approach to interpreting the UON Honeysuckle Campus site. An Aboriginal cultural heritage interpretation strategy should be developed for the UON HCCD project, in consultation with the project RAPs, to be incorporated into the wider heritage interpretation strategy for the development.

The development of an Aboriginal cultural heritage interpretation strategy would determine strategies for the presentation of Aboriginal cultural heritage values of the site and surrounding Honeysuckle area, into the public domain and future development of the new university campus. Appropriate heritage interpretation can contribute to the conservation and celebration of the history and cultural heritage of the local Awabakal people of the Honeysuckle region, preserving their culture, history and stories within the development for generations to come.

Consultation with project RAPs through the review of the draft ACHAR has identified that an opportunity should be made for the creation of a Learning Circle within the public domain of the new UON Honeysuckle Campus (to be discussed with the client, project RAPs etc prior to implementation), potentially in association with a reburial site for Aboriginal artefacts recovered from site

works/archaeological investigation (discussed further in Section 8.4 below). The creation of an Awabakal/Guringai Learning Circle within the new UON development could facilitate a 'sustainable cultural learning environment', beneficial to both the local Aboriginal community, and the future university campus.

8.4. Management of Aboriginal Objects

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

The project RAPs have identified their preference for long term management of artefacts to be repatriation of Aboriginal artefacts to the study area, reburied in a safe location, once development has proceeded to an appropriate stage to allow so. The project RAPs have identified that artefacts to be repatriated should not be buried in a box (as per standard OEH requirements), but should be wrapped in melaleuca bark, and reburied directly.

Until repatriation can be undertaken, any Aboriginal objects recovered through the proposed archaeological investigation and community collection within the study area, should be stored temporarily at the offices of the Awabakal LALC. All Aboriginal artefacts recovered from the Stage 1A Enabling Works will be fully catalogued and photographed prior to being placed in temporary storage at the Awabakal LALC.

Once a reburial site has been identified within the UON HCCD public domain (to be discussed and identified in consultation between the UON and project RAPs), the artefacts should be registered as an Aboriginal site on the OEH AHIMS database, and interpretation opportunities explored for the creation of an Awabakal/Guringai 'Learning Circle' in association with the reburial site.⁵ Opportunities for the location and design of future Aboriginal cultural heritage interpretation space(s) within the public domain of the new UON HCCD development should be explored in consultation with the UON, project landscape architects, and project RAPs, with an aim to create a 'sustainable cultural learning environment'⁶ within the new campus development, linking with the landscape, facilitating a cultural space beneficial both to the local Aboriginal community, and the future university campus.

8.4.1. Unexpected Skeletal Remains

The discovery of any potential skeletal remains would be in accordance with the approved OEH protocol for the discovery of human remains which is stated as:

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

- a) Not further harm these remains;*
- b) Immediately cease all work at the particular location;*
- c) Secure the area so as to avoid further harm to the remains;*

⁵ Reburial of artefacts should be undertaken at a safe depth, and/or the coordinate location restricted in order to protect the artefacts from any unintended future excavation.

⁶ Pers comms. Tracey Howie. Guringai Tribal Link

- d) Notify the local police and OEH's Environment Line on 131 555 as soon as practicable and provide any available details of the remains and their location; and*
- e) Not recommence any work at the particular location unless authorised in writing by OEH.*

The project RAPs have identified through consultation for the project, that it is most appropriate for identified Aboriginal skeletal burial remains to be retained in situ at the site. Should confirmed Aboriginal skeletal remains/burials be identified within the study area, project RAPs should be immediately notified, and invited to participate in a discussion between OEH, the client, and the project archaeologist, to determine the most appropriate management options for the remains. Project RAPs have identified that it is culturally appropriate for any confirmed Aboriginal burials to remain in situ.

9.0 Management Recommendations

The following management recommendations are made for the University of Newcastle, Honeysuckle City Campus Development (UON HCCD), located within the Honeysuckle Precinct, Newcastle CBD.

These recommendations are made on the basis of:

- Legislation as detailed and adhered to through this ACHAR, including the NPW Act, EP&A Act, and relevant OEH statutory guidelines, protecting Aboriginal cultural and archaeological objects and places in NSW;
- Background research and archaeological analysis of the study area in its local and regional contexts;
- Consultation with the local Aboriginal community regarding the cultural significance of the study area and surrounding Honeysuckle area, noting their concerns, views and requests;
- The impact of the proposed development of the Stage 1A enabling works for the UON HCCD project; and
- A consideration of the potential cumulative posed by the overall development project of the UON HCCD, acknowledging the need for the application of a comprehensive Aboriginal cultural heritage management program throughout the life of the development.

9.1. Conclusions

- The original Honeysuckle shoreline would have extended approximately northeast to southwest through the study area, from the southeastern side of Site 1, across to the southwestern side of Site 2. All of Site 3 would have originally been located along/in close proximity to the original shoreline.
- In situ Aboriginal archaeological deposits are likely to be present where intact original soil profiles remain (i.e. to the southeast of the path of the original Honeysuckle shoreline). Due to levels of historical fill across the entire study area, this potential is unlikely to be accurately reflected in any surface manifestation of Aboriginal artefacts that may be present.
- There is **moderate to high potential** for intact Aboriginal archaeological deposits to be present where natural remnant soil profiles exist (i.e. in the southeast corner of Site 1, southeast of Site 2, and across all of Site 3). There is a **moderate to high potential** for isolated Aboriginal artefacts in disturbed contexts to be located across the whole of the study area. While these disturbed objects would not be of archaeological research potential or significance, they have cultural and social significance to the local Aboriginal community. These deposits may be of moderate to high scientific significance, depending on the nature and extent of any deposit that is present.
- The study area also has potential for Aboriginal post-contact sites, an archaeological feature and site type that are relatively undocumented within the Newcastle region.
- The study area is of high social and cultural significance to the Awabakal/Guringai people. The location of the study area, close to the Hunter River and in the Greater Newcastle area, is an area that is, and has in the past, provided resources for Awabakal people that have been hunted and collected for thousands of years. The study area not just an isolated site, but connected to

many Cultural Heritage sites across this region and within Awabakal Traditional Country, which should be viewed on a whole as an Aboriginal Cultural Landscape.

- Due to the presence of the layers of historical fill at the site, as well as historical archaeological resource, Aboriginal archaeological test excavation under the OEH *Code of Practice* was unable to be undertaken within the study area, prior to the AHIP application.
- The UON HCCD study area has one registered Aboriginal site located within its boundaries (UoN1A-1, #38-4-1968) that is likely to be impacted by the proposed development works of the Stage 1A Enabling Works.
- The development of the UON HCCD project is proposed to be undertaken over the course of a number of years, in numerous stages, with varying development impacts (many of which are not yet known, as the development is only currently at Concept Plan stage. The stage to which this ACHAR relates is the Stage 1A Enabling Works to allow development of Building A1 in the west of Site 1. These enabling works will have the potential to impact Aboriginal objects where ground disturbing works are required.
 - No bulk excavation is proposed, in fact, filling of all of Site 1 is required to create the minimum habitable floor level across the site.
 - Enabling works impacts consist predominantly of trenching for new services, and other low impact activities such as boreholes for decontamination, geotechnical investigation, and mine remediation grouting.
- The nature of the overall concept plan development (as it currently stands) will contribute positively towards the conservation of any potential Aboriginal archaeological deposit and cultural heritage values contained within the site, as it is not likely to include any extensive basement excavation that would substantially impact or remove natural soil profiles with the potential for Aboriginal archaeological objects and deposits.
- Should development impacts not require disturbance of natural soil profiles (at present, the concept plan suggests that the majority of subsurface natural soil profiles will be retained intact beneath the development), then these will be able to be retained within the study area, thereby preserving the archaeological deposit and its associated significance for future generations, regardless of whether the exact nature of the archaeological deposit is able to be ascertained through archaeological investigations coupled with the development impacts, or not.

9.2. Management Recommendations

The following management and mitigation statements are made in light of the conclusions above, following from the Aboriginal cultural heritage assessment of the UON HCCD study area, including Aboriginal community consultation, ethnohistorical and environmental context, archaeological survey, predictive modelling, heritage significance assessment and impact assessment, in accordance with relevant NSW legislation and statutory requirements. It is recommended that:

- The proposed Stage 1A enabling works have the potential to impact one registered Aboriginal site, and potentially impact natural soil profiles with the potential to retain an intact Aboriginal archaeological signature. Therefore, the proponent should apply for an AHIP application under Section 90 of the NSW National Parks and Wildlife Act 1974 to the NSW OEH, to allow impact to

these sites, and allow other archaeological mitigation works for the study area, as proposed through this ACHAR.

- The AHIP application should be area wide to cover any proposed Stage 1A impacts within Sites 1, 2 and 3, as well as required impacts for the enabling works within the surrounding streets and laneways. The proposed AHIP area is presented in Figure 53.
- The AHIP should include provisions for the archaeological investigation strategy management for the study area, as proposed through 8.0 of this ACHAR
- Following approval of the AHIP, the proposed archaeological investigation (Management Strategy One), including monitoring of service trenching, related possible targeted test excavation, and community collection, should be undertaken, to be coordinated with the enabling works trenching etc.
- Consultation with project RAPs has determined that long term curation of Aboriginal cultural materials, recovered from the archaeological investigation and community collection, should be reburied on a safe location within the public domain of the UON Honeysuckle Campus, once development has proceeded to a stage appropriate to identify such a location, ideally in association with an Aboriginal Learning Circle. This would be discussed and determined in consultation with the UON and project RAPs, once development of the site has proceeded to a stage in which reburial could be safely and sensitively undertaken.
- Continuing consultation with the project RAPs should be undertaken through subsequent development stages of the project.
- While the Stage 1A enabling works will be subject to the NPW Act, and require an AHIP, following approval of the UON HCCD concept plan State Significant Development (SSD) Application, the requirement for individual AHIP applications for development works will no longer be legally required.
- Therefore, it is recommended that an Aboriginal Cultural Heritage Management Plan (ACHMP), should be prepared for the wider UON HCCD project, in order to provide a working framework and strategic advice for the appropriate and sensitive management of Aboriginal cultural heritage and archaeology going forward for the life of the project. Project RAPs, particularly identified cultural knowledge holders, should be involved in all stages of development of this ACHMP, ideally to be facilitated within a workshop environment.
- Opportunities to interpret any Aboriginal cultural material, archaeological deposits, and identified Aboriginal cultural heritage values should be considered as part of a holistic approach to interpreting the UON Honeysuckle Campus Development. An Aboriginal cultural heritage interpretation strategy should be developed for the UON HCCD project, in consultation with the project RAPs, to be incorporated into the wider heritage interpretation strategy for the development.
- An Aboriginal cultural induction should be developed to provide to all future employees and construction workers on the site, prior to the commencement of construction works.



FIGURE 53: EXTENT OF STUDY AREA, INCLUDING SERVICE TRENCH LOCATIONS, TO BE INCLUDED WITHIN CURRENT AHIP APPLICATION AS SUPPORTED BY THIS ACHAR (SOURCE: CURIO 2018)

10.0 References

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APPENDIX A—Aboriginal Consultation Log and Correspondence

APPENDIX A—Aboriginal Consultation Log—University of Newcastle, Honeysuckle City Campus Development

Stage 1—Notification of project proposal and registration of interest

Stage 1.1—Compilation of a list of Aboriginal stakeholders

Statutory Body	Contact	Date Sent	Date Reply	Comment
NSW Office of Environment and Heritage Regional Office (Hunter Central Coast)	Mr Steven Cox	4.5.18	15.6.18	List of potential Aboriginal Stakeholders for your project.
The Registrar, Aboriginal Land Rights Act	Ms Jodie Rikiti	4.5.18	7.5.18	No Registered Aboriginal Owners pursuant to Division 3 of the Aboriginal Land Rights Act 1983.
National Native Title Tribunal	N/A	4.5.18	4.5.18	No registered owners
Awabakal Local Aboriginal Land Council (LALC)	Mr Pete Townsend	4.5.18	14.5.18	<i>List of current knowledge holders, any individual or group not mentioned in the attached consultation list, is considered by ALALC, its members, and the wider Aboriginal community, as NOT having the sufficient knowledge of determining the significance of Aboriginal objects and places</i>
Newcastle City Council	Mr Tom Smith	4.5.18	8.5.18	<i>I advise that Aboriginal cultural information and stakeholder lists can be obtained from Local Aboriginal Land Councils. I would suggest approaching the Awabakal Local Aboriginal Land Council for stakeholder information.</i>
Native Title Services Corp		4.5.18		No Response
Hunter Local Land Services		4.5.18		No Response

Stage 1.2—Newspaper Advertisement

Newspaper	Date Sent	Date Printed
Newcastle Herald	4.5.18	9.5.18

A minimum 14 days were allowed for Aboriginal people to respond to the newspaper advertisement (23 May 2018).

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

Organisation/Person	Contact	How Name was Obtained	Date Contacted	Date Registered	Comments
Awabakal LALC	Pete Townsend	LALC	14.5.18	14.5.18	<i>ALALC being a local knowledge holder for Aboriginal Culture & Heritage and a legislative body for Culture & Heritage under section 52.4 of the Aboriginal Land Rights Act 1983 (ALR83), I wish to Express & Register an interest for ALALC to be involved with all aspects of these proposed work/s going forward.</i>
Awabakal Descendants Traditional Owners Corporation (DTOC)	Peter Leven	ALALC	14.5.18	28.5.18	Verbal registration via phone.
Guringai Tribal Link	Tracey Howie	ALALC	14.5.18	28.5.18	Phone call with Pete Townsend of ALALC requesting Guringai be registered, email to Tracey to confirm registration.
Lower Hunter Aboriginal Incorporated (Inc.)	David Ahoy	ALALC	14.5.18	16.5.18	<i>We are the only organization in the Newcastle region that is recognised as Aboriginal Knowledge Holders by the</i>

Organisation/Person	Contact	How Name was Obtained	Date Contacted	Date Registered	Comments
					<i>Awabakal, Biraban and Bahtabah Aboriginal Land Councils and Lake Macquarie City Council with having many of the largest aboriginal identified families in the Newcastle and Lake Macquarie region.</i>
AGA Services	Ashley, Gregory & Adam Sampson	OEH	25.6.18	N/A	
Aliera French Trading	Aliera French	OEH	25.6.18	N/A	
Arwarbukarl Cultural Resource Association, Miromaa Aboriginal Language and Technology Centre	Darren McKenny	OEH	25.6.18	N/A	
Awabakal Traditional Owners Aboriginal Corporation (TOAC)	Kerrie Brauer	OEH	25.6.18	26.6.18	<i>Awabakal Traditional Owners would like to Register our Interest Regarding the Proposed Aboriginal Community Consultation for the Proposed Aboriginal Community Consultation for the University of Newcastle, Honeysuckle City campus Development (HCCD), Honeysuckle Precinct Project.</i>
Cacatua Culture Consultants	Donna & George Sampson	OEH	25.6.18	N/A	
Crimson-Rosie	Jeffrey Matthews	OEH	25.6.18	N/A	
DFTV Enterprises	Derrick Vale Snr	OEH	25.6.18	N/A	
Deslee Talbott Consultants	Deslee Matthews	OEH	25.6.18	N/A	

Organisation/Person	Contact	How Name was Obtained	Date Contacted	Date Registered	Comments
Divine Diggers Aboriginal Cultural Consultants	Deidre Perkins	OEH	25.6.18	25.6.18	
Gidawaa Walang & Barkuma Neighbourhood Centre Inc.	Ann Hickey/Craig Horne	OEH	25.6.18	29.6.18	
Indigenous Learning	Craig Archibald	OEH	25.6.18	N/A	
Jarban & Mugrebea	Les Atkinson	OEH	25.6.18	3.7.18	
Jumbunna Traffic Management Group Pty Ltd	Norm Archibald	OEH	25.6.18		
Kauma Pondee Inc.	Jill Green	OEH	25.6.18		
Kawul Cultural Services	Vicky Slater	OEH	25.6.18		
Kawul Pty Ltd trading as Wonn1 Sites	Arthur Fletcher	OEH	25.6.18	8.7.18	
Lower Hunter Wonnarua Cultural Services	Uncle Tommy Miller	OEH	25.6.18		
Murra Bidgee Mullangari Aboriginal Corporation	Darleen Johnson-Carroll	OEH	25.6.18	26.6.18	
Mur-Roo-Ma Inc.	Anthony Anderson	OEH	25.6.18		
Myland Cultural & Heritage Group	Warren Schillings	OEH	25.6.18		
Nur-Run-Gee Pty Ltd	Leonard Anderson OAM	OEH	25.6.18		
Roger Matthews Consultancy	Roger Matthews	OEH	25.6.18		

Organisation/Person	Contact	How Name was Obtained	Date Contacted	Date Registered	Comments
Wattaka Wonnarua CC Service	Des Hickey	OEH	25.6.18	25.6.18	
Widescope Indigenous Group	Steven Hickey	OEH	25.6.18	29.6.18	
Wonnarua Culture Heritage	Gordon Griffiths	OEH	25.6.18		
Wonnarua Elders Council	Richard Edwards	OEH	25.6.18		
Worimi Traditional Owners Indigenous Corporation	Candy Lee Towers	OEH	25.6.18	25.6.18	
Yarrowalk (A division of Tocomwall Pty Ltd)	Scott Franks	OEH	25.6.18	No	<i>Thank you for the notice of registration of interest for this project, as this project is outside the Registered Native title claimed area of the PCWP (Scott Franks and Anor on behalf of the Plains Clans of the Wonnarua People NC2013/006), known as PCWP) we do not wish to be consulted or registered for this project.</i>
Yinarr Cultural Services	Kathleen Steward Kinchela	OEH	25.6.18	29.6.18	
N/A	Steve Talbott	OEH	25.6.18	1.7.18	
N/A	Kevin Duncan	OEH	25.6.18	28.6.18	
N/A	Ron Smith	OEH	25.6.18		
Didge Ngunawal Clan	Lilly Carroll	OEH	25.6.18	25.6.18	

A minimum 14 days were allowed for Aboriginal people to register and interest to be consulted. Two rounds of invitations were sent out, firstly on 14.5.18, and secondly on 25.6.18, following OEH response to request for names of stakeholders.

Stage 1.5—Registered Aboriginal Parties (In Alphabetical Order)

Aboriginal Organisation/Person	Contact	Method Registered	Date Registered and Comments (if relevant)
Awabakal Descendants Traditional Owners Corporation (ADTOC)	Peter Leven	Phone call	28.5.18
Awabakal Local Aboriginal Land Council (LALC)	Pete Townsend	Email	14.5.18
Awabakal Traditional Owners Aboriginal Corporation (ATOAC)	Kerrie Brauer	Email	26.6.18
Divine Diggers Aboriginal Cultural Consultants	Deidre Perkins	Email	25.6.18
Didge Ngunawal Clan	Paul Boyd & Lilly Carroll	Email	25.6.18
Gidawaa Walang Cultural Heritage Consultancy	Craig Horne	Email	29.6.18
Guringai Tribal Link	Tracey Howie	Phone call	28.5.18
Jarban & Mugrebea	Les Atkinson	Email	3.7.18
Kawul Pty Ltd trading as Wonn1 Sites	Arthur Fletcher	Email	8.7.18
Kevin Duncan	Kevin Duncan	Email	28.6.18
Lower Hunter Aboriginal Incorporated	David Ahoy	Email	16.5.18
Murra Bidgee Mullangari Aboriginal Corporation	Ryan Johnson	Email	27.6.18
Steve Talbott	Steve Talbott	Email	1.7.18
Wattaka Wonnarua CC Service	Des Hickey	Email	25.6.18
Widescope Indigenous Group	Steven Hickey	Email	29.6.18
Worimi Traditional Owners Indigenous Corporation	Tammy Towers	Email	25.6.18
Yinarr Cultural Services	Kathleen Steward Kinchela	Email	29.6.18

A copy of the registered Aboriginal parties was provided to the OEH and Awabakal LALC via email on 21 September 2018.

In response to the provision of the list of RAPs to the ALALC, a submission was received from Peter Townsend, Culture and Heritage Officer, Awabakal ALAC, advising the ‘great concern to the local Newcastle Aboriginal community’ regarding the importance of ‘only the parties that are named on ALALC’s knowledge holders list, are engaged on a commercial basis as actual knowledge holders for the proposed site.’ Curio provided email response to this correspondence on 21.9.18, noting these concerns, and acknowledging that in accordance with OEH statutory guidelines, ‘consultation should not be confused with employment’, that ‘Aboriginal people are the primary determinants of their own heritage, particularly with regards to whom is recognised and trusted within a local Aboriginal community as having the right to speak for Country’, and confirmation that the proponent had been advised of this. A copy of the ALALC email correspondence is included in this Appendix.

Stage 2—Presentation of information about proposed project

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

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

RAP	Date Sent	Date Reply	Method of Reply	Comments, Outcomes or Issues
Awabakal LALC	7.6.18	14.6.18	In Person	Indicated at onsite meeting on 14.6.18 that was supportive of proposed methodology and project approach
Lower Hunter Aboriginal Inc.	7.6.18			
Awabakal DTOAC	7.6.18	24.7.18	In Person	Important that the Aboriginal community have the opportunity to get involved in development process, provide opportunity to gain Aboriginal cultural information to confirm and support the strong cultural and oral history of the Awabakal/Guringai people of the Newcastle region. Newcastle foreshore is a very significant area for Awabakal people, important not to lose significance due to neglect through development process. Importance of Aboriginal interpretation and signage within new development. Particularly that used Awabakal language. Concern for superimposing Aboriginal culture and language from different regions over Awabakal land, contributes to the genocide of Awabakal culture, and homogenization of Aboriginal culture and stories,

RAP	Date Sent	Date Reply	Method of Reply	Comments, Outcomes or Issues
				'watering down' the truth. Important to recognise that the study area is Awabakal Country, and the work, stories, interpretation etc should reflect as such.
Guringai Tribal Link	7.6.18	24.7.18	In Person	Concern about management of any potential skeletal material/burial sites, should they be present within study area. Burials should remain in situ. Should Aboriginal skeletal material/burials be found within the site, would like the option to negotiate with UON to explore possible other avenues with alternative locations for the building, rather than impacting the burial. Concern about any ambiguity of wording in reports, important that intent is not able to be interpreted to mean something else than intended. Importance of Aboriginal interpretation and signage within new development. Care and Control with ALALC Keeping Place for artefacts until can be reburied on site.
Divine Diggers Aboriginal Cultural Consultants	25.6.18	25.6.18	Email	<i>All seems good to me with the methodology</i>
Didge Ngunawal Clan	25.6.18	25.6.18	Email	<i>DNC has previously worked on Honeysuckle Drive @ no#42. From a total of 15 pits dug, through AMAC (Ben Streets), we found quite a few artefacts from both disturbed & intact deposits, from mixed fill & compacted surface. From 1 of the pits there contained shell deposits from large oyster, charcoal, slag, & European & Aboriginal artefacts. These artefacts were found between mixed fill & natural A2 towards the south of the study area @ the flat lower slope of the man-made hill.</i>
Wattaka Wonnarua CC Service	25.6.18			
Worimi Traditional Owners Indigenous Corporation	25.6.18	2.7.18	Email	<i>There are sites near by the project areas so I would recommend, as you already have stated will happen, to have test excavations I am supportive of that to occur.</i>

RAP	Date Sent	Date Reply	Method of Reply	Comments, Outcomes or Issues
Awabakal TOAC	26.6.18	4.7.18	Phone and Email	Kerrie Brauer called Sam Cooling (Curio) and sent email. Some confusion around wording of test excavation after AHIP, vs under Code of Practice before AHIP. SC clarified meaning (test excavation not possible before due to historical archaeology and nature of fill across site). Kerrie requested further context for discussion re: other nearby archaeological work, timetable and estimated days for test excavation, emphasis on cultural heritage understanding and importance of place as whole (social/cultural), not just scientific/archaeological. <i>'consider the value of 'place' within the Heritage and Cultural weighting...ensure the protection and conservation of Place & Objects which impact significantly on the spirituality, cultural, historic and general legacy needs of Aboriginal people to address inequalities in social and community well being'</i> Request for additional information and results regarding the previously assessed areas surrounding the proposed project area. Concern regarding possible need for methodology modification in the event that additional investigation becomes necessary. Request for draft timetable for methodology and estimation of days for the proposed assessment and proposed Test excavation. Some confusion around intent to undertake Aboriginal archaeological investigation at site. (Methodology was slightly ambiguous, requested clarification). Curio responded to all these comments via email on 5.7.18, including clarification of proposed methodology and intent for Aboriginal archaeological investigation at the study area.
Murra Bidgee Mullangari Aboriginal Corporation	27.6.18	27.6.18	Email	<i>I have read the project information and methodology for the above project, I endorse the recommendations made by Curio Projects.</i>
Kevin Duncan	28.6.18			

RAP	Date Sent	Date Reply	Method of Reply	Comments, Outcomes or Issues
Gidawaa Walang Cultural Heritage Consultancy	29.6.18	24.7.18	In Person	Supportive of methodology.
Yinarr Cultural Services	29.6.18			
Steve Talbott	2.7.18	24.7.18	Phone	Assessment needs to be specific to what is being planned, if proposed changes, assessment needs to change too. Lots of work undertaken in the area.
Jarban & Mugrebea	3.7.18			
Widescope Indigenous Group	3.7.18			
Kawul Pty Ltd trading as Wonn1 Sites	8.7.18	24.7.18	In Person	Need for an Aboriginal cultural induction for all workers on development site, prior to commencement of construction. Site 2 and 3 completely hardstand, no visibility, important for RAPs to be present during removal of top surface, not just after site has already been dug out.

All RAPs were provided with a minimum of 28 days (from date of provision of methodology document) to provide feedback of the project information and proposed cultural heritage methodology document. N.B. The methodology was sent on different dates (i.e. 7.6.18 and late June/early July 2018) due to the delay in OEH response, which predicated additional registrations. Verbal comment was also accepted from RAPs if desired, during the field survey (see below).

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

Stage 2.2—On-Site Consultation Meeting and Field Survey—Opportunity for RAPs to Visit project site—Attendees

Two opportunities were made for RAPs to visit the project site, firstly on 14.6.18 for an on-site meeting and site visit (prior to receipt of OEH list of parties), and secondly on 24.7.18 for the archaeological field survey (following completion of full registration process including OEH list). All RAPs were invited to attend the field survey.

RAP	Representative	Date	Comments/Discussion
Awabakal LALC	Pete Townsend	14.6.18	
Awabakal Descendants Traditional Owners Aboriginal Corporation	Peter Leven	24.7.18	Important that the Aboriginal community have the opportunity to get involved in development process, provide opportunity to gain Aboriginal cultural information to confirm and support the strong cultural and oral history of the Awabakal/Guringai people of the Newcastle region. Newcastle foreshore is a very significant area for Awabakal people, important not to lose significance due to neglect through development process. Avoid ambiguous wording in reporting. Importance of Aboriginal interpretation and signage within new development. Particularly that used Awabakal language. Concern for superimposing Aboriginal culture and language from different regions over Awabakal land, contributes to the genocide of Awabakal culture, and homogenization of Aboriginal culture and stories, ‘watering down’ the truth. Important to recognise that the study area is Awabakal Country, and the work, stories, interpretation etc should reflect as such.
Guringai Tribal Link	Tracey Howie	24.7.18	Raised concern for management of any potential skeletal material/burial sites should they be present within the study area. Burial should remain in situ. Should Aboriginal skeletal material/burials be found within the site, would like the option to negotiate with UON to explore possible other avenues with alternative locations for the building, rather than impacting the burial. Concern about ambiguity of wording in reports, important that intent of words and recommendations is not able to be interpreted to mean something else.

RAP	Representative	Date	Comments/Discussion
			Importance of Aboriginal interpretation and signage within new development. Opportunity for an Aboriginal learning circle within development? Awabakal LALC has a keeping place, sometimes enter Care & Control for special artefacts, generally prefer repatriation of artefacts. Artefacts should be wrapped in melaleuca to rebury, not in plastic as required by OEH.
Gidawaa Walang Cultural Heritage Consultancy	Craig Horne	24.7.18	
Kawul Pty Ltd trading as Wonn1 Sites	Arthur Fletcher and Suzie Worth	24.7.18	Need for an Aboriginal cultural induction for all workers on development site, prior to commencement of construction. Site 2 and 3 completely hardstand, no visibility, important for RAPs to be present during removal of top surface, not just after site has already been dug out.

Stage 3—Gathering information about cultural significance

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

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

Stage 4—Review of draft cultural heritage assessment report

All RAPs were provided a copy of the draft ACHAR via email and registered post on 27 August 2018 and provided with a minimum of 28 days to review. Comments received are detailed below. Where verbal comment has been provided rather than written comment, Curio Projects has confirmed with the RAP that they are happy with this method of submission of feedback and comments. A reminder email for feedback/comment was sent to all RAPs on 18 September 2018.

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

RAP	Contact	Date Sent	Date Reply	Method	Comments, Outcomes or Issues	How Comments were Addressed (where relevant)
Awabakal LALC	Pete Townsend	27.8.18	24.9.18	Phone (Verbal)	- Fine with most of report. Would like the opportunity to sieve a sample of the fill topsoil materials to recover any additional possible artefacts. - Monitoring works should have at least two RAPs on site at a time to make the work worth it for the community. - Recovered materials can be temporarily stored at Awabakal LALC offices keeping place until permanent location can be identified. - Do walkover of the site once existing Downer site complex removed to collect any surface artefacts (as well as registered site).	Section 8.1.1. Methodology revised to include provision for sieving/walkover and collection of any artefactual material in topsoil fill layer requiring stripping prior to site filling. Section 8.1 Included provision for one representative from <u>each</u> of the registered knowledge holder groups to be present on site during works (as also recommended by ADTOAC). Section 8.4 Management of Aboriginal Objects revised.
Lower Hunter Aboriginal Inc.	David Ahoy	27.8.18	26.9.18	Phone (Verbal)	Happy with report and recommendations	
Awabakal DTOAC	Peter Leven	27.8.18	5.10.18	Email	- Agree in principle with draft ACHAR, find it to be a comprehensive document. Intergenerational Equity <i>'In my opinion intergenerational equity for Awabakal People in Newcastle has</i>	Acknowledged. Unable to address directly within the scope of this individual project, however Curio Projects believes that this is an important overarching issue for

RAP	Contact	Date Sent	Date Reply	Method	Comments, Outcomes or Issues	How Comments were Addressed (where relevant)
					<i>not been adequately assessed, as no formal quantification of the cumulative impacts due to the ongoing development has to my knowledge ever been compiled.'</i> Recommend a cumulative impact assessment of Newcastle with regards to Aboriginal cultural heritage be undertaken, possibly by OEH and Newcastle City Council in consultation with local Aboriginal community (Understand this has a far broader scope than the current project).	the Awabakal people, and would provide support to such a project in any way possible. Potentially something for OEH consideration? Included in this document for information and to represent the recommendations of the Awabakal people.
					Monitoring and Test Excavation. Recommend that one representative from each of the registered knowledge holder groups as supplied by Awabakal LALC be present during site works. Ensure a combined knowledge set available to the archaeologist in determining the significance of any potential cultural material.	Section 8.1 Methodology revised to recommend one representative from each registered knowledge holder is present during proposed site work. As per Awabakal LALC recommendations as well.

RAP	Contact	Date Sent	Date Reply	Method	Comments, Outcomes or Issues	How Comments were Addressed (where relevant)
					- Given depth of service trenches and artefacts known to be present in fill, please expand on any potential methods for investigating spoil pile, e.g. possibility for sieving. - A major concern with methodology is the fact there is no definite plan of construction. Introduced fill makes future investigation very difficult, yet future piling and footings will cause significant impact. Common theme to ignore building foundations in development. - Recommend testing under the Code of Practice in the South Eastern corner of Site 1 following stripping of top 200mm, prior to reintroduction of required fill layer. Help to adequately investigate any subsurface deposits in this area and along the original foreshore, to acquire genuine archaeological information to feed into the future stages of the development, and	Section 8.1.1 revised to include provision for further investigation of spoil pile, including walkover and sieving of sample of material. (Also recommended by several other RAPs) Topsoil stripping and filling in southeast corner of Site 1 will no longer be undertaken as part of Stage 1A Enabling Works, but will be postponed to a later stage in the development, at which time test excavation in this location can be incorporated into a wider program of Aboriginal test excavation and archaeological investigation at the site.

RAP	Contact	Date Sent	Date Reply	Method	Comments, Outcomes or Issues	How Comments were Addressed (where relevant)
					Aboriginal Cultural Heritage Management Plan.	
Guringai Tribal Link	Tracey Howie	27.8.18	3.10.18	Phone (Verbal)	Pretty happy with report as is. Happy that ALALC addressed the issue of outside groups in Awabakal/Guringai Country. - Ok with temporary storage of artefacts at ALALC keeping place until appropriate reburial location within development is identified. Repatriation should involve learning circles etc within new development, include recommendation in ACHAR to this effect. - Once artefacts are reburied and registered, they will need to remain there, so may as well create a 'sustainable cultural learning environment' in the space within the university campus public domain. - Need beneficial community initiatives. Implementation of learning circle/Aboriginal cultural heritage space	Section 8.4. Management of Aboriginal Objects. Revised to include aim of creation of a 'sustainable cultural learning environment' and confirmation of requirement for beneficial community initiatives through future Aboriginal cultural heritage interpretation.

RAP	Contact	Date Sent	Date Reply	Method	Comments, Outcomes or Issues	How Comments were Addressed (where relevant)
					to link in with the landscape and the development design. Ok with the general methodology, with such a site type, walkover and monitoring is really the only option.	
Divine Diggers Aboriginal Cultural Consultants	Deidre Perkins	28.8.18	18.9.18	Email	Draft seems good to go. Apologies for not replying sooner.	
Didge Ngunawal Clan	Paul Boyd	27.8.18	18.9.18	Phone (Verbal)	All happy with report.	
Wattaka Wonnarua CC Service	Des Hickey	28.8.18	N/A	N/A	No response received. Email sent. Registered post RTS unclaimed 14.9.18.	
Worimi Traditional Owners Indigenous Corporation	Candy Towers	27.8.18	22.9.18	Email	- Study area is of high social and cultural significance to Worimi people - Recommend Aboriginal archaeological test excavations be undertaken within all study areas	Noted. Current ACHAR addresses works as proposed by Stage 1A Enabling Works only. Future Aboriginal archaeological test excavation and other mediation works will be proposed within Sites 2 and 3, once nature and scope of development works are known. Also to be addressed and managed through the creation of the ACHMP.

RAP	Contact	Date Sent	Date Reply	Method	Comments, Outcomes or Issues	How Comments were Addressed (where relevant)
					- Very high potential of Aboriginal Objects in all fill across all study areas. - Removal of fill needs to be monitored by RAPs, RAPs have right to sieve and retrieve Aboriginal objects from fill. - Worimi TOIC preference for long term management of Aboriginal objects to be stored in Worimi TOIC keeping place.	Agreed and addressed through this ACHAR. Section 8.1 has been updated to include provision for sieving of topsoil fill material/walkover during and/or following topsoil stripping to recover artefacts. Preference noted. However majority of project RAPs have indicated preference for temporary storage of artefacts at Awabakal LALC office, with long term management in form of reburial of artefacts within future UON campus, returning artefacts to current resting place.
Awabakal TOAC	Kerrie Brauer	27.8.18	4.10.18	Phone (Verbal)	- ACHMP be developed by way of workshop, have done a few times for other projects, gets it done fast, helps to set out the format, can organise an Awabakal notification at the front. - Storage of artefacts at ALALC is not appropriate, but as temporary site only can work as long as all artefacts are catalogued and photographed beforehand	Section 8.4 revised to recommend development of ACHMP via a workshop environment.
Murra Bidgee Mullangari AC		28.8.18	N/A	N/A	No response	

RAP	Contact	Date Sent	Date Reply	Method	Comments, Outcomes or Issues	How Comments were Addressed (where relevant)
Kevin Duncan		27.8.18	N/A	N/A	No response	
Gidawaa Walang Cultural Heritage Consultancy	Craig Horne	28.8.18	25.9.18	Phone (Verbal)	Section 8.4, says reburial in melaleuca leaves, should be bark. Otherwise methodology seemed appropriate for works. Preference to collect artefacts via site walkover and topsoil stockpiling rather than have any damage to artefacts. Appropriate for reburial of artefacts back on site once possible.	Wording in Section 8.4 revised to bark.
Yinarr Cultural Services		28.8.18	N/A	N/A	No response.	
Steve Talbott		27.8.18	12.10.18	Email	Read report and agree with recommendations. Happy that issues raised re: methodology have been addressed.	
Jarban & Mugrebea		28.8.18	N/A	N/A	No response.	
Widescope Indigenous Group		28.8.18	N/A	N/A	No response.	
Kawul Pty Ltd (Wonn1 Sites)		28.8.18	N/A	N/A	No response.	

APPENDIX B—AHIMS Extensive Search

Curio Projects Pty Ltd
46 Ivy Street
Darlington Sydney New South Wales 2008
Attention: Natalie Vinton
Email: natalie.vinton@curioproperties.com.au

Date: 22 February 2018

Dear Sir or Madam:

**AHIMS Web Service search for the following area at Lot : 2, DP:DP1163346 with a Buffer of 1000 meters,
conducted by Natalie Vinton on 22 February 2018.**

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of the Office of the Environment and Heritage AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

23	Aboriginal sites are recorded in or near the above location.
0	Aboriginal places have been declared in or near the above location. *

If your search shows Aboriginal sites or places what should you do?

- You must do an extensive search if AHIMS has shown that there are Aboriginal sites or places recorded in the search area.
- If you are checking AHIMS as a part of your due diligence, refer to the next steps of the Due Diligence Code of practice.
- You can get further information about Aboriginal places by looking at the gazettal notice that declared it. Aboriginal places gazetted after 2001 are available on the [NSW Government Gazette \(http://www.nsw.gov.au/gazette\)](http://www.nsw.gov.au/gazette) website. Gazettal notices published prior to 2001 can be obtained from Office of Environment and Heritage's Aboriginal Heritage Information Unit upon request

Important information about your AHIMS search

- The information derived from the AHIMS search is only to be used for the purpose for which it was requested. It is not be made available to the public.
- AHIMS records information about Aboriginal sites that have been provided to Office of Environment and Heritage and Aboriginal places that have been declared by the Minister;
- Information recorded on AHIMS may vary in its accuracy and may not be up to date .Location details are recorded as grid references and it is important to note that there may be errors or omissions in these recordings,
- Some parts of New South Wales have not been investigated in detail and there may be fewer records of Aboriginal sites in those areas. These areas may contain Aboriginal sites which are not recorded on AHIMS.
- Aboriginal objects are protected under the National Parks and Wildlife Act 1974 even if they are not recorded as a site on AHIMS.
- This search can form part of your due diligence and remains valid for 12 months.

AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref/PO Number : UON DD

Client Service ID : 329407

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
38-4-0525	Catholic Education Site	AGD	56	385680	6355710	Open site	Valid	Artefact : -	Open Camp Site	100771
	<u>Contact</u>	<u>Recorders</u>	<u>Permits</u>							
38-4-0559	The Broadwalk- Newcastle 1	AGD	56	385000	6356250	Open site	Valid	Potential Archaeological Deposit (PAD) : 0		98887
	<u>Contact</u>	<u>Recorders</u>	<u>Permits</u>							
38-4-0544	700 Hunter Street	AGD	56	384250	6356020	Open site	Valid	Artefact : -	1298,2043,2453	
	<u>Contact</u>	<u>Recorders</u>	<u>Permits</u>							
38-4-0772	710 Hunter Street Newcastle PAD	AGD	56	384350	6356250	Open site	Valid	Shell : -, Potential Archaeological Deposit (PAD) : -		
	<u>Contact</u>	<u>Recorders</u>	<u>Permits</u>							
38-4-0796	200 Hunter Street PAD	AGD	56	385787	6356006	Open site	Valid	Potential Archaeological Deposit (PAD) : -		
	<u>Contact</u>	<u>Recorders</u>	<u>Permits</u>							
38-4-0831	Palais Royale	AGD	56	384300	6356100	Open site	Partially Destroyed	Potential Archaeological Deposit (PAD) : -, Artefact : 5534, Shell : -	2045,2049	102256
	<u>Contact</u>	<u>Recorders</u>	<u>Permits</u>							
38-4-0832	Empire Hotel PAD	AGD	56	384300	6356000	Open site	Valid	Potential Archaeological Deposit (PAD) : -		
	<u>Contact</u>	<u>Recorders</u>	<u>Permits</u>							
38-4-0952	Bellevue Hotel PAD	AGD	56	384250	6356200	Open site	Valid	Potential Archaeological Deposit (PAD) : -		99845,99874
	<u>Contact</u>	<u>Recorders</u>	<u>Permits</u>							
38-4-0851	710 Hunter St Newcastle, PAD	AGD	56	384350	6356250	Open site	Valid	Potential Archaeological Deposit (PAD) : -		
	<u>Contact</u>	<u>Recorders</u>	<u>Permits</u>							
38-4-1222	Cottage Creek OSI	GDA	56	384250	6356324	Open site	Valid	Artefact : 1		
	<u>Contact</u>	<u>Recorders</u>	<u>Permits</u>							
38-4-1223	Wickham UFCCALE OS1	GDA	56	384166	6356333	Open site	Valid	Artefact : 1		
	<u>Contact</u>	<u>Recorders</u>	<u>Permits</u>							

Report generated by AHIMS Web Service on 22/02/2018 for Natalie Vinton for the following area at Lot : 2, DP:DP1163346 with a Buffer of 1000 meters. Additional Info : Aboriginal DD.

Number of Aboriginal sites and Aboriginal objects found is 23

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

AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref/PO Number : UON DD

Client Service ID : 329407

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
38-4-1642	409 Hunter Street Newcastle Fill duplicate of 409 Hunter Street Newcastle Insitu <u>Contact</u>	GDA	56	385099	6356088	Open site	Valid	Artefact : -, Shell : -		
		<u>Recorders</u>	Mr.Benjamin Streat					<u>Permits</u>	3920,4186	
38-4-1812	Isolated Find 6 - Rail <u>Contact</u>	GDA	56	384542	6356203	Open site	Destroyed	Artefact : -		
		<u>Recorders</u>	RPS Australia East Pty Ltd -Hamilton,Ms.Cheng-Yen Loo					<u>Permits</u>		
38-4-1813	Isolated Find 7 - Rail <u>Contact</u>	GDA	56	384549	6356205	Open site	Destroyed	Artefact : -		
		<u>Recorders</u>	RPS Australia East Pty Ltd -Hamilton,Ms.Cheng-Yen Loo					<u>Permits</u>		
38-4-1814	Isolated Find 8 -Rail <u>Contact</u>	GDA	56	384545	6356199	Open site	Destroyed	Artefact : -		
		<u>Recorders</u>	RPS Australia East Pty Ltd -Hamilton,Ms.Cheng-Yen Loo					<u>Permits</u>		
38-4-1815	Isolated Find 5 - Rail <u>Contact</u>	GDA	56	384520	6356214	Open site	Destroyed	Artefact : -		
		<u>Recorders</u>	RPS Australia East Pty Ltd -Hamilton,Ms.Cheng-Yen Loo					<u>Permits</u>		
38-4-1816	Isolated Find 4 -Rail <u>Contact</u>	GDA	56	384514	6356211	Open site	Destroyed	Artefact : -		
		<u>Recorders</u>	RPS Australia East Pty Ltd -Hamilton,Ms.Cheng-Yen Loo					<u>Permits</u>		
38-4-1817	Artefact Scatter 1 -Rail <u>Contact</u>	GDA	56	384553	6356198	Open site	Destroyed	Artefact : -		
		<u>Recorders</u>	RPS Australia East Pty Ltd -Hamilton,Ms.Cheng-Yen Loo					<u>Permits</u>		
38-4-1818	Isolated Find 9 - Rail <u>Contact</u>	GDA	56	384565	6356195	Open site	Destroyed	Artefact : -		
		<u>Recorders</u>	RPS Australia East Pty Ltd -Hamilton,Ms.Cheng-Yen Loo					<u>Permits</u>		
38-4-1803	Isolated Find 3-Rail <u>Contact</u>	GDA	56	384525	6356208	Open site	Valid	Artefact : -		
		<u>Recorders</u>	RPS Australia East Pty Ltd -Hamilton,Ms.Cheng-Yen Loo					<u>Permits</u>	3970	
38-4-1795	38 Hannell St Newcastle PAD <u>Contact</u>	GDA	56	384090	6356541	Open site	Valid	Potential Archaeological Deposit (PAD) : -		
		<u>Recorders</u>	Extent Heritage Pty Ltd ,Doctor.Tessa Bryant					<u>Permits</u>	4122	
38-4-1804	Isolated Find 1-Rail <u>Contact</u>	GDA	56	384145	6356435	Open site	Valid	Artefact : -		
		<u>Recorders</u>	RPS Australia East Pty Ltd -Hamilton,Mr.Ben Slack					<u>Permits</u>	4025	
38-4-1805	Isolated Find 2-Rail <u>Contact</u>	GDA	56	384525	6356208	Open site	Valid	Artefact : -		
		<u>Recorders</u>	RPS Australia East Pty Ltd -Hamilton,Mr.Ben Slack					<u>Permits</u>	3970	

Report generated by AHIMS Web Service on 22/02/2018 for Natalie Vinton for the following area at Lot : 2, DP:DP1163346 with a Buffer of 1000 meters. Additional Info : Aboriginal DD.

Number of Aboriginal sites and Aboriginal objects found is 23

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

APPENDIX C—Northrop 2018, Water & Sewer DA Plans

LEGEND

- PROPOSED BUILDING OUTLINE
- EXISTING CONTOURS
- HFL 2.51m
- BEL 2.51m
- PROPOSED HABITABLE FLOOR LEVEL
- PROPOSED BULK EARTHWORKS LEVEL
- EXISTING SURFACE LEVEL
- Φ EX 2.09
- SITE 1 BOUNDARY
- FUTURE SITE BOUNDARY

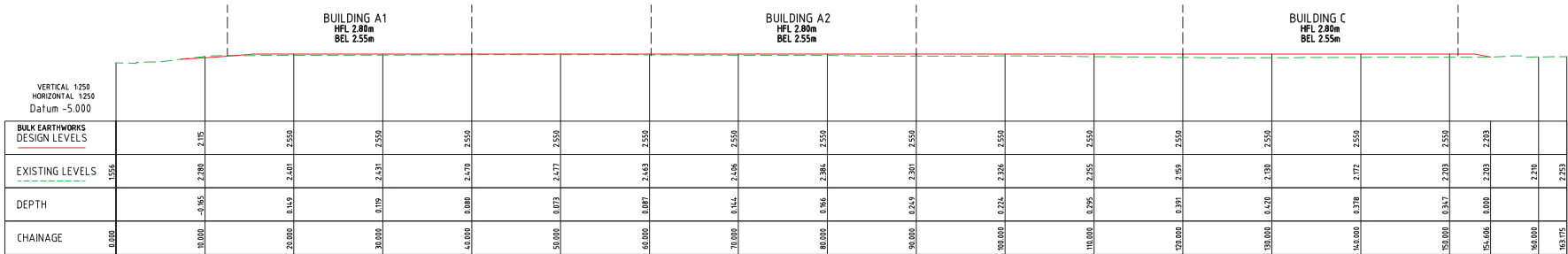
1. THE ABOVE VOLUMES ARE BASED ON SUPPLIED SURVEY DATA AND AS SUCH ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL SATISFY THEMSELVES AS TO THEIR ACCURACY.
2. THE ABOVE VOLUMES INCLUDE A STRIPPING ALLOWANCE OF 20mm OF DISTURBED AREA.
3. EARTHWORKS VOLUMES ARE BASED ON FILL FROM THE STRIPPED SURFACE TO 250mm BELOW THE MINIMUM HABITABLE FLOOR LEVEL NOMINATED IN COUNCIL'S FLOOD CERTIFICATE.
4. REFER TO C10.2 FOR SITE SECTIONS.



NOT FOR CONSTRUCTION

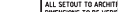
REVISION		DESCRIPTION		ISSUED	VERD	APP'D	DATE	CLIENT	ARCHITECT	PROJECT		DRAWING TITLE		JOB NUMBER		
1		EARLY WORKS APPLICATION		JP	CP	SC	05/01/18	 THE UNIVERSITY OF NEWCASTLE AUSTRALIA	 NORTHROP Newcastle Suite 4, 215 Pacific Hwy, Charlestown NSW 2290 P.O. Box 180, Charlestown NSW 2290 Ph (02) 4943 1777 Fax (02) 4943 1572 Email: newcastle@northrop.com.au	HONEYSUCKLE CITY CAMPUS DEVELOPMENT HONEYSUCKLE DRIVE, NEWCASTLE, N.S.W. 2300	BULK EARTHWORKS PLAN STAGE 1A		NL172766			
DRAWING NOT TO BE USED FOR CONSTRUCTION UNLESS VERIFICATION OF DIMENSIONS IS OBTAINED FROM ARCHITECT								THE COPYRIGHT OF THIS DRAWING REMAINS WITH NORTHROP CONSULTING ENGINEERS (Pty) Ltd								
									SCALE 1:50 @ A1							

VERBEEK, C. SMITH
JOB MANAGER, C. PIPER
DESIGNED, C. PIPER
DRAWN, J. GEARING



SITE 1 LONG SECTION

NOT FOR CONSTRUCTION

REVISION		DESCRIPTION		ISSUED	VER'D	APP'D	DATE	CLIENT	ARCHITECT	PROJECT		DRAWING TITLE	JOB NUMBER	
1		EARLY WORKS APPLICATION		JP	CP	SC	05.07.18	 THE UNIVERSITY OF NEWCASTLE AUSTRALIA	 Newcastle Suite 4, 215 Pacific Hwy, Chatterdown NSW 2290 P.O. Box 160, Chatterdown NSW 2290 Ph (02) 4943 1777 Fax (02) 4943 1577 Email: enquiries@northrop.com.au ABN 61 084 433 100	HONEYSUCKLE CITY CAMPUS DEVELOPMENT HONEYSUCKLE DRIVE, NEWCASTLE, N.S.W, 2300	BULK EARTHWORKS LONGITUDINAL SECTIONS	NL172766		
												SCALE 1:250 @ A1	DRAWING NUMBER	REVISION
													C10.2	1
								DRAWING NOT TO BE USED FOR CONSTRUCTION UNLESS VERIFICATION SIGNATURE HAS BEEN ADDED	THE COPYRIGHT OF THIS DRAWING REMAINS WITH NORTHROP CONSULTING ENGINEERS PTY LTD.			DRAWING SHEET SIZE = A1		

APPENDIX D—GHD 2018, Electrical and Comms DA Plans

UNIVERSITY OF NEWCASTLE

HCCD - ENABLING WORKS

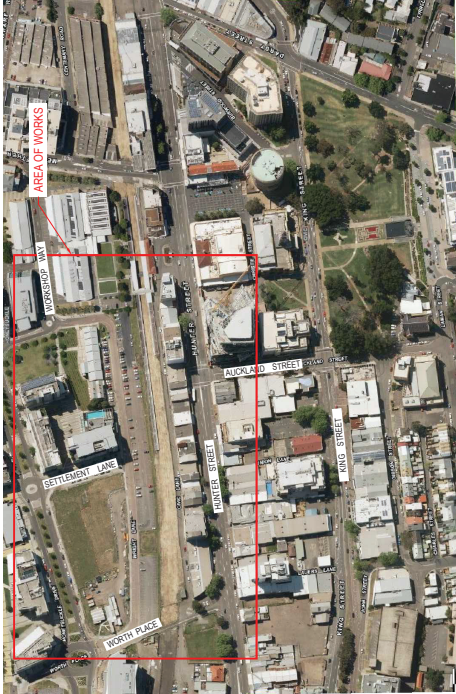
ELECTRICAL / COMMUNICATIONS SERVICES

22-19320



DRAWING LIST

DRG No.	DRAWING TITLE
22-19320-E001	COVER SHEET & DRAWING LIST
22-19320-E002	SITE RETICULATION - POWER, COMMUNICATIONS & NBN LAYOUT
22-19320-E003	MAIN SWITCHBOARD - SINGLE LINE DIAGRAM & TYPICAL TRENCH DETAILS



LOCALITY PLAN

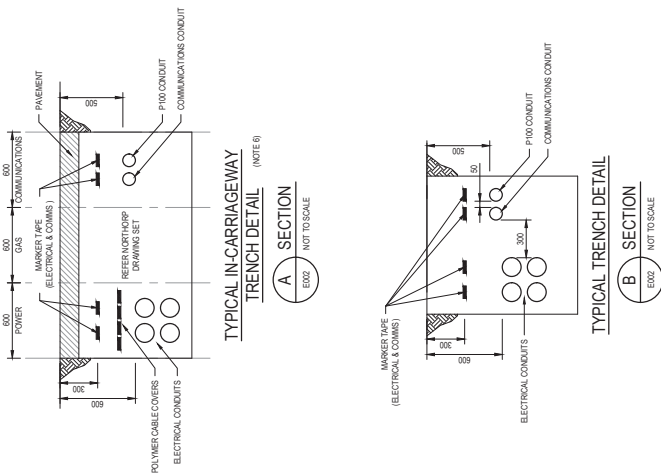
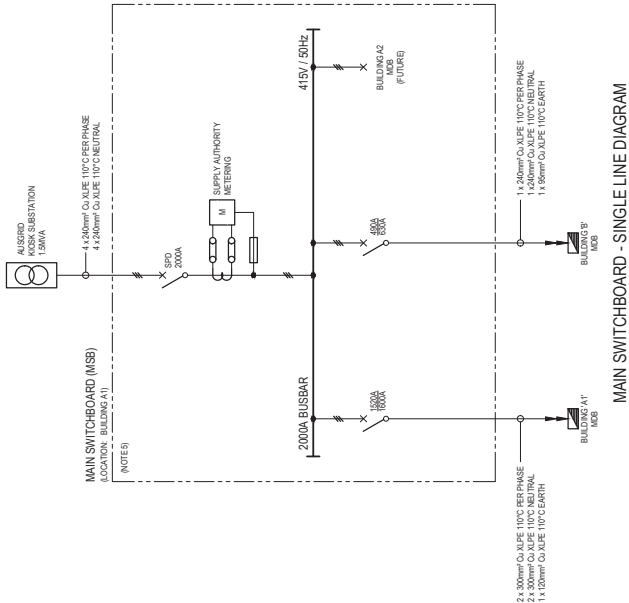
UNIVERSITY OF NEWCASTLE HCCD - ENABLING WORKS										Client	
COVER SHEET & DRAWING LIST										Project	
COVER SHEET & DRAWING LIST										Title	
Drawing No: 22-19320-E001										Original Issue	
A1										Scale	
DO NOT SCALE										Scale	
Conditions of Use This document may only be used by GHD's client and any other person who has been authorised in writing by GHD for the purpose for which it was prepared and it is not to be used for any other purpose or for any other person.										Scale	
GHD Tower 1, Level 3 GHD Tower 2, Level 3 PO Box 5403 Hunter Region NSW 2310 Ph: 08 1 249 78 9999 Fax: 08 1 249 78 9998 E: enabling@ghd.com.au W: www.ghd.com.au										Scale	
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UNIVERSITY OF NEWCASTLE HCCD - ENABLING WORKS				PRELIMINARY			
SITE RETICULATION POWER, COMMUNICATIONS & NBN LAYOUT				A1			
Drawing No: 22-19320-E002				Rev: C			
Client				Project			
Title				This drawing must not be used for construction unless approved by the client			
Scale				1: 500			
DO NOT SCALE				Conditions of this drawing may only be used by the client and any other person who has been given written permission for the purpose for which it was prepared and for any other purpose.			
GHD Tower, Level 3 GHD Pty Ltd PO Box 5403 Hunter Rgn Mail Cent, NSW 2310 Ph: 02 4979 9999 Fax: 02 4979 9998 www.ghd.com.au				UNIVERSITY OF NEWCASTLE NEWCASTLE AUSTRALIA			
GHD Tower, Level 3 GHD Pty Ltd PO Box 5403 Hunter Rgn Mail Cent, NSW 2310 Ph: 02 4979 9999 Fax: 02 4979 9998 www.ghd.com.au				UNIVERSITY OF NEWCASTLE HCCD - ENABLING WORKS SITE RETICULATION POWER, COMMUNICATIONS & NBN LAYOUT			
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A100 PRELIMINARY ISSUE				A100			



- NOTES:
1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE SCHEMATIC DESIGN REPORT.
 2. UNDERTAKE DETAILED VALUATION OF BELOW GROUND SERVICES (EXISTING).
 3. CO-ORDINATE IN-GROUND SERVICES WITH OTHER SERVICES.
 4. CONTRACTOR TO UNDERTAKE A DETAILED SITE SURVEY INCLUDING SERVICES LOCATION PRIOR TO UNDERTAKING EXCAVATION WORKS.
 5. MSB / MSB DETAILED DESIGN NOT INCLUDED AS PART OF THIS DESIGN. SHOWN FOR CLARITY.
 6. SPACING AS PER STREET OPENING CONFERENCE.



UNIVERSITY OF NEWCASTLE HCCD - ENABLING WORKS MAIN SWITCHBOARD - SINGLE LINE DIAGRAM & TYPICAL TRENCH DETAILS				PRELIMINARY			
Client: UNIVERSITY OF NEWCASTLE Project: HCCD - ENABLING WORKS Title: MAIN SWITCHBOARD - SINGLE LINE DIAGRAM & TYPICAL TRENCH DETAILS				Drawing No: 22-19320-E003			
Designer: A. CLEMENTS Checked: A. CLEMENTS Approved: A. CLEMENTS Scale: NOT TO SCALE				Rev: B			
DO NOT SCALE				This Drawing must not be used for construction unless signed for approval			
GHD Tower, Level 3 100 Waterloo Road, Newcastle NSW 2200 Australia PO Box 5433 Hawthorne NSW 2122 Tel: 02 4979 9999 Fax: 02 4979 9968 www.ghd.com.au				Call the No. 1300 654 390 or 1300 654 390			
UNIVERSITY OF NEWCASTLE				Printed by: AECI Clements			
BS ARC JL 17.05.18				Print Date: 18 May 2018 - 11:02 AM			
A PRELIMINARY ISSUE				Project: 22-19320-E003			
No Revision				Drawn: AECI Clements			

CHECK FOR OTHER SERVICES BEFORE BORING OR EXCAVATING - PHONE-DIAL-BEFORE-YOU-DIG ON TELEPHONE 1100 OR AT WWW.1100.COM.AU

GENERAL NOTES

- THE PROJECT OBJECTIVE IS TO INSTALL A NEW K TYPE KIOSK SUBSTATION AT 16 HONEYSUCKLE DRIVE. THE PROPOSED SUBSTATION IS PART OF THE PROPOSED UNIVERSITY OF NEWCASTLE, HONEYSUCKLE CITY CAMPUS DEVELOPMENT.
- CLAIMS FOR VARIATIONS TO THE COST OF NON-CONTESTABLE WORKS, INCLUDING ROCK EXCAVATION, WILL NOT BE ACCEPTED UNLESS VERIFIED ON SITE BY AUGSARD WHILE THE WORKS ARE IN PROGRESS.
- THE ASP1 IS RESPONSIBLE FOR UNDERTAKING SATISFACTORY CONSULTATION WITH ALL LOCAL CUSTOMERS TO THE ELECTRICITY SUPPLY. NOTICE MUST BE IN WRITING IN ACCORDANCE WITH CLAUSE 90 OF THE NATIONAL ENERGY RETAIL RULES.
- THE ASP1 MUST MINIMISE THE IMPACT OF THE WORKS ON THE ELECTRICITY SUPPLY TO CUSTOMERS AND PROVIDE NOTICE TO ALL AFFECTED CUSTOMERS PRIOR TO ANY PLANNED INTERRUPTIONS TO THE ELECTRICITY SUPPLY. NOTICE MUST BE IN WRITING IN ACCORDANCE WITH CLAUSE 90 OF THE NATIONAL ENERGY RETAIL RULES.
- SPECIFIC PRIOR APPROVAL MUST BE SOUGHT FROM AUGSARD FOR ANY PLANNED ELECTRICITY SUPPLY INTERRUPTIONS. THE DURATION OF ANY INTERRUPTIONS MUST BE AGREED WITH AUGSARD PRIOR TO THE WORKS BEING COMMENCED. THE DURATION WILL BE LESS THAN ONE HOUR, BUT A SUITABLE TIME FOR THE INTERRUPTION CANNOT BE MUTUALLY AGREED TO WITH THE AFFECTED CUSTOMERS.
- ARRANGE PHASING OF 11KV AND LOW VOLTAGE TRANSFORMER TERMINATIONS TO ACHIEVE DYN 11 INTERCONNECTION CAPABILITIES.
- THE ASP1 IS REQUIRED TO COMPLY WITH THE CORRECT PROCEDURES FOR WORKING WITH AND/OR AROUND ASBESTOS MATERIAL (REFER TO AUGSARD NUS 211 'WORKING WITH ASBESTOS PRODUCTS'). THERE ARE NO KNOWN ASBESTOS REGISTERED CONTAINING ASBESTOS AFFECTED BY THE PROPOSED WORKS.
- ALL WORKS TO BE UNDERTAKEN IN ACCORDANCE WITH AUGSARD'S RELEVANT NETWORK STANDARDS (CURRENT EDITIONS).
- LOCATION OF EXISTING UNDERGROUND UTILITIES AND OTHER SERVICES TO BE CONFIRMED ON SITE PRIOR TO COMMENCEMENT OF CONSTRUCTION WORKS.
- ACCORDING TO HONEYSUCKLE REDEVELOPMENT AREA FLOOD STUDY (2018), THE 100-YEAR FLOOD LEVEL (1% AEP) OF THE PROPOSED SITE LEVEL IS LEVELLED AT 2.5m AHD WHICH IS HIGHER THAN THE 100-YEAR FLOOD LEVEL.
- THIS INFORMATION INCLUDES DATA FROM THE NSW DIGITAL CADASTRAL DATABASE BY LAND & PROPERTY INFORMATION (2018). USED UNDER CREATIVE COMMONS LICENCE (CC-BY 4.0).
- FOR IDENTIFICATION AND JOINTING PURPOSES, ALL CABLE ENDS SHALL BE LABELLED AT THE TERMINATION POINTS AND ALONG THE LENGTH OF THE CABLES DURING CABLE INSTALLATION. THE CABLES MUST BE LABELLED AS PER CERTIFIED DESIGN DRAWINGS.
- USE PRE-CAST CABLE JOINT PITS AT REF X AND Y, AS SHOWN ON AUGSARD DRAWING 220016, SH41, R03, P17B TO INSTALL THE 100mm CONDUIT. INSTALL THE P17B TO ALLOW JOINTS TO BE AT THE DEPTH INDICATED IN DETAILS 1 AND 2.

- WARNING**
- THIS DESIGN CANNOT BE USED FOR CONSTRUCTION PURPOSES UNTIL THE LOCATION OF ALL EXISTING SERVICES IS VERIFIED.
 - THE INFORMATION PROVIDED IN THIS DESIGN MUST BE CHECKED ON SITE AND THE MOST RECENT INFORMATION MUST BE USED. ANY CHANGES TO THE DESIGN OR THE NETWORK MUST BE VERIFIED IMMEDIATELY BEFORE CONSTRUCTION COMMENCES BY CONTACTING DIAL-BEFORE-YOU-DIG BY TELEPHONE ON 1100 OR AT WWW.1100.COM.AU.
 - THE DESIGN IS FOR INFORMATION PURPOSES ONLY. IT DOES NOT FORM PART OF THE BUREAU SERVICES LOCATED ON THE SITE. ANY CHANGES TO THE DESIGN MUST BE VERIFIED IMMEDIATELY BEFORE CONSTRUCTION COMMENCES BY CONTACTING DIAL-BEFORE-YOU-DIG BY TELEPHONE ON 1100 OR AT WWW.1100.COM.AU.
 - TIME OF CONSTRUCTION

ASP LEVEL 2 WORK

ALL LEVEL 2 ASP WORK DEPICTED ON THIS DRAWING IS SHOWN FOR INFORMATION PURPOSES ONLY, AND DOES NOT FORM PART OF THE CERTIFIED DESIGN.

SCHEMATIC LEGEND

EXISTING	PROPOSED	SITE PLAN SYMBOL LEGEND	EXISTING	PROPOSED	REMOVE
UGOH	UGOH	COLUMN	PRIVATE PILLAR - LV	PRIVATE PILLAR - LV	PRIVATE PILLAR - LV
RING MAIN SOLATOR	RING MAIN SOLATOR	SWITCHGEAR PILLAR - LV	SWITCHGEAR PILLAR - LV	SWITCHGEAR PILLAR - LV	SWITCHGEAR PILLAR - LV
RING MAIN CIRCUIT BREAKER	RING MAIN CIRCUIT BREAKER	CABLE JOINT - HV	CABLE JOINT - HV	CABLE JOINT - HV	CABLE JOINT - HV
CONTINUED CIRCUIT INDICATOR	CONTINUED CIRCUIT INDICATOR	KIOSK	KIOSK	KIOSK	KIOSK
HV - UG	HV - UG	DRIVEN ROD EARTHING ELECTRODE	DRIVEN ROD EARTHING ELECTRODE	DRIVEN ROD EARTHING ELECTRODE	DRIVEN ROD EARTHING ELECTRODE
HV - OH	HV - OH	STREETLIGHT - PEC	STREETLIGHT - PEC	STREETLIGHT - PEC	STREETLIGHT - PEC
OPEN	OPEN	BOUNDARY	BOUNDARY	BOUNDARY	BOUNDARY
3 PHASE OVERCURRENT PROTECTION	3 PHASE OVERCURRENT PROTECTION	STORMWATER	STORMWATER	STORMWATER	STORMWATER
EARTH FAULT PROTECTION	EARTH FAULT PROTECTION	SEWER	SEWER	SEWER	SEWER
SENSITIVE EARTH FAULT PROTECTION	SENSITIVE EARTH FAULT PROTECTION	RISING MAIN	RISING MAIN	RISING MAIN	RISING MAIN
EARTH FAULT INDICATOR	EARTH FAULT INDICATOR	TELSTRA	TELSTRA	TELSTRA	TELSTRA
OVERCURRENT & EARTH FAULT	OVERCURRENT & EARTH FAULT	DRAIN PIPE	DRAIN PIPE	DRAIN PIPE	DRAIN PIPE

CABLE LEGEND

EXISTING	PROPOSED	REMOVE
HIGH VOLTAGE - UG	HIGH VOLTAGE - UG	HIGH VOLTAGE - UG
LOW VOLTAGE - UG	LOW VOLTAGE - UG	LOW VOLTAGE - UG
SERVICE - UG	SERVICE - UG	SERVICE - UG
CONDUIT	CONDUIT	CONDUIT
EARTH CABLE	EARTH CABLE	EARTH CABLE

NEWCASTLE CBD

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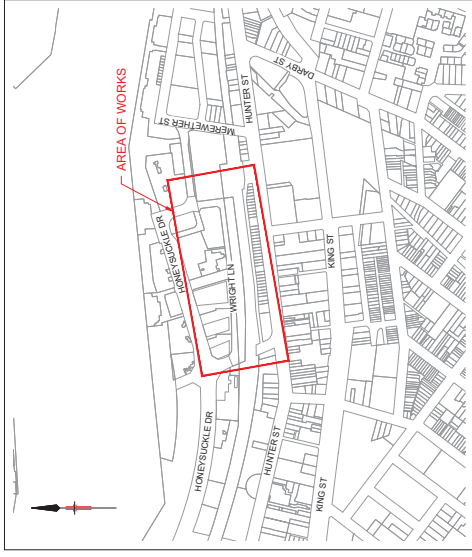
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LOCALITY PLAN

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11KV SCHEMATIC - EXISTING
11KV SCHEMATIC - PROPOSED
SYSTEM DIAGRAM NEWCASTLE CBD 202/5
SYSTEM DIAGRAM NEWCASTLE CBD 202/5

NOT TO SCALE

NOT TO SCALE

CAD DRAWING		AMENDMENTS		20/06/2021	
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WARNING

- THIS DESIGN SHOULD NOT BE USED FOR CONSTRUCTION PURPOSES UNTIL THE LOCATION OF ALL EXISTING SERVICES IS VERIFIED
- THE INFORMATION PROVIDED IN THIS DESIGN MUST BE CHECKED ON SITE AND THE MOST CURRENT INFORMATION ON THE CONFIGURATION OF ALL SERVICES, INCLUDING AUSTRIAS NETWORK, MUST BE VERIFIED
- CONSTRUCTION COMMENCES BY CONTACTING DAVID-YOUNG.DIG BY TELEPHONE ON 1100 OR AT www.1100.com.au.
- SIMILAR CONSULT WITH COUNCIL TO ENSURE THAT THE DURED SERVICES LOCATED ON THEIR RESPECTIVE
- DAVID-YOUNG.DIG INFORMATION MUST NOT BE OLDER THAN 20 BUSINESS DAYS AT THE TIME OF DISTRIBUTION.

ASPIRE! EVERY 2 WORK

NEWCASTLE UNIVERSITY
HONEYSUCKLE CAMPUS

SIZE	A1	AUSGRID PROJECT No.	SC12879
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	1	2	3	4	5	6	7	8	9	10	11	12
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SCALE 1 : 250



- WARNING**

ASP LEVEL 2 WORK

		AUC 2008	
1530NE3RT		K. HARKNESS	
AUTH NO		208504	
SUBMITTED		150618	
NEWCASTLE CITY COUNCIL			
SUBM DATE			
LGA			
DATE RECEIVED		08/06/08	
AUDITOR'S REF		00000004	
PROJECT NO		X00025349	

NEWCASTLE UNIVERSITY
HONEYSUCKLE CAMPUS
K TYPE KIOSK
WORTH PLACE, NEWCASTLE

SIZE	AUSGRID PROJECT No.	SHEETS	AMOUNT
A1	SC12879	3 of 5	0





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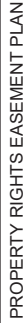


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APPENDIX E—Glossary of Technical Terms

Term	Definition
Aboriginal Object	“Any deposit, object or material evidence (not being a handicraft made for sale) relating to the Aboriginal habitation of the area that comprises NSW, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction, and includes Aboriginal remains” (DECCW 2010:18).
Aboriginal Place	“A place declared under s.84 of the NPW Act that, in the opinion of the Minister, is or was of special significance to Aboriginal culture” (DECCW 2010:18). Aboriginal places are gazetted by the minister.
Archaeological survey	A method of data collection for Aboriginal heritage assessment. It involves a survey team walking over the land in a systematic way, recording information about how and where the survey is conducted, recording information about the landscape and recording any archaeological sites or materials that are visible on the land surface. The activities undertaken by a survey team do not involve invasive or destructive procedures, and are limited to note taking, photography and making other records of the landscape and archaeological sites (e.g. sketching maps or archaeological features). (From DECCW 2010: 37)
Exposure	Estimates area with a likelihood of revealing buried artefacts or deposits rather than just an observation of the amount of bare ground. The percentage of land for which erosion and exposure was sufficient to reveal archaeological evidence of the surface of the ground. (From DECCW 2010: 37)
<i>In Situ</i>	Anything in its natural or original position or place is said to be in situ.
Knapping	The process of manufacture of stone tools.
PAD	Potential Archaeological Deposit. Nature of potential site yet unknown, environmental, archaeological and cultural modelling suggests the location has potential for a subsurface archaeological deposit to be present.
Test Unit	Location identified for archaeological test excavation
Study Area	Development/project area to which this report, the information, discussion and assessment presented within, directly refers to.
Survey Unit	Include only units of land that have been surveyed on foot. A survey unit may include more than one landform unit, correspond to a landform unit or be smaller than a landform unit depending on how the sampling strategy is structured. The survey unit is the minimum analytical or descriptive unit for the survey, and may be the same as the landform. A single survey unit should not cross the boundaries of different landforms, but there may be more than one survey unit within a landform. Sometimes survey units are also referred to as ‘sampling units’. (From DECCW 2010: 38)
Visibility	The amount of bare ground (or visibility) on the exposures which might reveal artefacts or other archaeological materials. It is important to note that visibility, on its own, is not a reliable indicator of the detectability of buried archaeological material. (From DECCW 2010: 39)