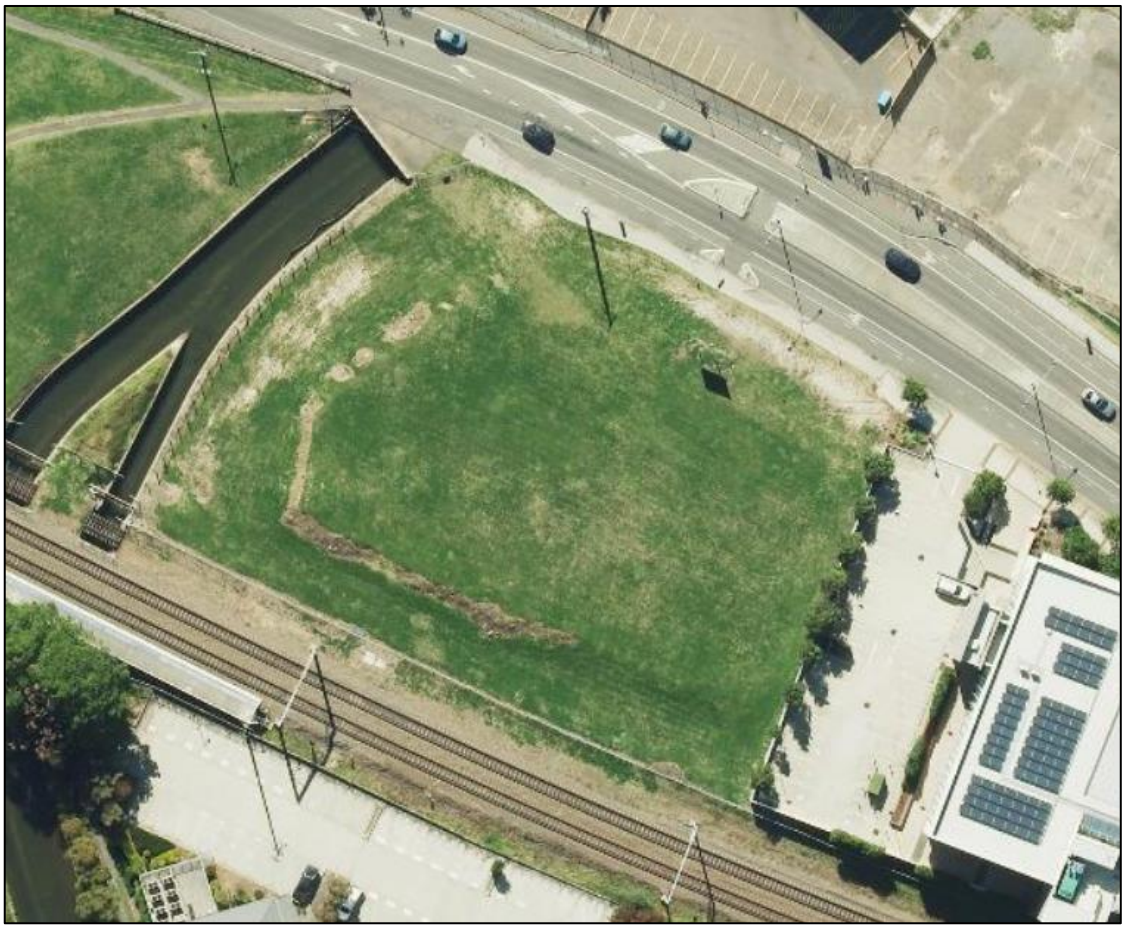
ARCHAEOLOGICAL IMPACT ASSESSMENT:

PRELIMINARY ABORIGINAL ARCHAEOLOGICAL ASSESSMENT

42 Honeysuckle Drive
Newcastle NSW
(Newcastle LGA)



Benjamin Streat & Yolanda Pavincich

Archaeo*logical* Management & Consulting Group &
Streat Archaeological Services

for

Doma Group

October 2017

Disclaimer

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Cover Image
Aerial of Study Area
Six Maps (Accessed 12st September 2017)

ACKNOWLEDGEMENT OF COUNTRY

Doma Group would like to acknowledge the Traditional Custodians of the Newcastle Area– the Awabakal peoples– and pay respect to their cultural heritage, beliefs and continuing relationship with the land.

Doma Group would also like to acknowledge the post contact experiences of Aboriginal peoples who have attachment to the Sydney area.

“We pay our respect to the Elders – past, present and future – for they hold the memories, traditions, culture and hopes of Aboriginal Peoples in the area.”

Doma Group recognises the role of the registered Aboriginal parties in the management of the Aboriginal cultural heritage sites, landscape features and values of this project.

Doma Group would like to thank the Registered Aboriginal Parties for their participation in this project and for their valuable contribution to this Aboriginal Cultural Heritage Assessment which has been enriched by their willingness to share valuable aspects of their cultural knowledge especially in respect of Caring for Country

CONTENTS PAGE

TABLE OF FIGURES

LIST OF TABLES

EXECUTIVE SUMMARY

Study Area

The study site is that piece of land described as Lot 22 on the Land Titles Office Deposited Plan 1072217 and also known by the street address, 42 Honeysuckle Drive, Newcastle, Parish of Newcastle, County of Northumberland.

Archaeological Management and Consulting Group (AMAC) in conjunction with Streat Archaeological Services (SAS) has been commissioned by Doma Group to prepare a Preliminary Aboriginal Archaeological Assessment. This document will assist in formulating the final Aboriginal Cultural Heritage Assessment (ACHA), with the aim to provide further advice as to the Aboriginal archaeological potential, as well as, information pertaining to the status and integrity of the site and development impacts, as part of the overall Archaeological Impact Assessment Requirement 12 of the Secretary's Environmental Assessment Requirements (SEARs) for SSD #8440.

An Aboriginal Cultural Heritage Assessment is currently being prepared as part of the Archaeological Impact Assessment in response to requirement 12 of the SEARs SSD #8440. The status of said document is in Stage 2 of the Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW 2010). As further investigation has been proposed the timeframes for the Aboriginal Cultural Heritage Assessment have been extended to account for a program of test excavation. The results of which will be detailed within the final Aboriginal Cultural Heritage Assessment.

Aboriginal Consultation

Consultation for this report has been undertaken in accordance with the Office of Environment and Heritage (OEH) and National Parks and Wildlife Act 1974: Part 6; National Parks and Wildlife Act Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW 2010).

An Aboriginal Cultural Heritage Assessment is currently being prepared where full Aboriginal consultation, as per the Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW 2010), is being undertaken and is within the second stage of consultation. All Registered Aboriginal Parties (RAPs) that have registered for this project have been informed of the Preliminary Aboriginal Archaeological Assessment and have indicated support for the recommendations on the basis that an Aboriginal Cultural Heritage Assessment is currently being prepared and a programme of test excavation will be undertaken.

Physical Evidence

A site inspection was undertaken on 16/10/17 by Benjamin Streat, Archaeologist of SAS. This site inspection was carried out on foot and photographs were taken. The site inspection revealed that the study area which occupies one landform unit, Newcastle Lowlands, gentle undulating slope, Hunter River Plain, was heavily grassed and limited soil surface was visible with one Aboriginal artefact was located.

Significance

No formal significance has of yet been assigned to the study area.

Recommendations

A background analysis of the archaeological context revealed that the registered Aboriginal archaeological sites immediately adjacent to the study area and one Aboriginal artefact has been recorded as part of this study (Site Card pending). Therefore, the study area has the potential to hold Aboriginal archaeological and cultural objects and/or deposits. In light of this, and in the context of the information provided about the proposed development, the following has been recommended to manage the archaeological and cultural values of the study area.

The recommendations have been formulated after consultation with both, the proponents and the OEH, and after reviewing the development application plans (Figure 9.1-9.5).

It is recommended that:

- Further investigation in the form of a full Aboriginal Cultural Heritage Assessment and Aboriginal Archaeological Assessment be undertaken in accordance with the Guide to investigating, assessing and reporting on Aboriginal cultural heritage in New South Wales, Part 6 National Parks and Wildlife Act 1974 (DECCW 2010); This process is in train and has reached Stage 2 of the Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW 2010).
- Consultation with the Registered Aboriginal Parties (RAPs) should continue, as per the requirements detailed in the Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW, 2010).
- A systematic subsurface disbursed test excavation programme should be carried out under the Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales. This is to take place prior to the development activity proceeding (Figure 9.1-9.5). The authors and contributors to this report have no objection for this recommendation being undertaken as conditions of any development approval process.
- In the event, archaeological test excavations reveal Aboriginal archaeological objects or deposits, the following is recommended. Once the nature and extent of the archaeological site has been established through test excavation, the data will be analysed and synthesised into a test excavation report. Dependent on the status of the project, an Aboriginal Heritage Impact Permit (AHIP) and/or Aboriginal Cultural Heritage Management Plan (ACHMP), is to be produced in order to allow the development to proceed. An ACHMP will need to be subject to review by the Department of Planning (DoPE), with input from the OEH, but no formal AHIP will need to be in place should the development achieve State Significant Development status. Otherwise the formal NSW legislative requirements under the National Parks and Wildlife Act will need to be observed.
- An analysis of artefacts retrieved should be conducted in a frame work to allow for comparison with previous relevant results.
- After this, and before any ground disturbance takes place as part of the construction, all development staff, contractors and workers should be briefed prior to works commencing on site, as to the status of the area and

their responsibilities regarding any Indigenous archaeological deposits and/or objects that may be located during the following development.

- An Aboriginal Heritage Information Management System (AHIMS) site card impact form will be submitted with this report to detail and understand the changes in the study area.

Should any human remains be located at any stage during the development;

- All excavation in the immediate vicinity of any objects of deposits shall cease immediately;
- The NSW police and OEH's Enviroline be informed as soon as possible:
- Once it has been established that the human remains are Aboriginal ancestral remains, OEH and the relevant Registered Aboriginal Parties will identify the appropriate course of action.

CONTACT DETAILS

The contact details for the following archaeologist, NSW Police, OEH are as follows:

Organisation	Contact	Contact Details
NSW Environment Line		131 555
NSW Newcastle City Local Area Command		LAC Office: 30 Harriet Street Waratah NSW 2298 Ph: (02) 4926 6515 Fax: (02) 4926 6511
Archaeological Management & Consulting Group	Mr. Benjamin Streat or Mr. Martin Carney	122c-d Percival Road Stanmore NSW 2048 Ph:(02) 9568 6093 Fax:(02) 9568 6093 Mob: 0405 455 869 Mob: 0411 727 395 benjaminstreat@archaeological.com.au
Office of Environment & Heritage **NSW Department of Planning and Environment**	Archaeologist – Newcastle regional office	PO Box 1002 Dangar NSW 2309 Ph: (02) 4927 3119 rog.hcc@environment.nsw.gov.au

1.0 INTRODUCTION

1.1 BACKGROUND

Archaeological Management and Consulting Group (AMAC) in conjunction with Streat Archaeological Services (SAS) has been commissioned by Doma Group to prepare a Preliminary Aboriginal Archaeological Assessment. This document will assist in formulating the final Aboriginal Cultural Heritage Assessment (ACHA), with the aim to provide further advice as to the Aboriginal archaeological potential, as well as, information pertaining to the status and integrity of the site and development impacts, as part of the overall Archaeological Impact Assessment Requirement 12 of the Secretary's Environmental Assessment Requirements (SEARs) for SSD #8440.

An Aboriginal Cultural Heritage Assessment is currently being prepared as part of the Archaeological Impact Assessment in response to requirement 12 of the SEARs SSD #8440. The status of said document is in Stage 2 of the Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW 2010). As further investigation has been recommended the timeframes for the Aboriginal Cultural Heritage Assessment have been extended to account for a proposed program of test excavation. The final Aboriginal Cultural Heritage Assessment will include any test excavation results.

1.2 STUDY AREA

The study site is that piece of land described as Lot 22 on the Land Titles Office Deposited Plan 1072217, and also known by the street address, 42 Honeysuckle Drive, Newcastle, Parish of Newcastle, County of Northumberland.

Address	Lot	Deposited Plan
42 Honeysuckle Dr	22	1072217

1.3 SCOPE

The aims of this assessment are, to assess the Aboriginal archaeological potential of the study area and to measure the impact of the proposed development on any soil profiles with the potential to contain Aboriginal archaeological deposits and objects, to develop mitigative strategies under the appropriate legislation and to devise an appropriate strategy for the management of Aboriginal archaeological and cultural heritage values of the area. No information in this report has been identified as or is of a restricted nature.

This report will assess the impact of the proposed development on any identified items or places of Aboriginal cultural heritage value and to develop mitigative strategies under the appropriate legislation for the management of Aboriginal archaeological and cultural heritage values of the study area. The process has also allowed the proponent and/or the proponent's representative to outline the project details and the participating Aboriginal stakeholders to have input into formulating mitigative strategies at identified points in the impact assessment process.

This assessment is intended for submission as part of SEARs requirement 12 State Significant Development Application SSD#8440.

"12. Heritage

- Identify if there are any listed or potential heritage items within the vicinity of the site, and If any are likely to be affected, a Heritage Impact Statement is required;
- Assess any impacts to State and local heritage including, conservation areas, natural heritage areas, places of Aboriginal heritage value, buildings, works, relics, gardens, landscapes, views and trees, and mitigation and management measures required, and;
- Assess Aboriginal cultural heritage impacts, including current Aboriginal Heritage Information Management System (AHIMS) search results, a summary of the site's disturbance history, and an assessment of the likelihood of harming Aboriginal objects" (Significant Development Application SSD#8440).

1.4 ABORIGINAL CONSULTATION & PARTICIPATION SUMMARY

Consultation for this report has not been undertaken in accordance with the Office of Environment and Heritage (OEH) and National Parks and Wildlife Act 1974: Part 6; National Parks and Wildlife Act Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW 2010), as this is a desktop study and no Aboriginal Heritage Impact Permit (AHIP) is being applied for at present.

An Aboriginal Cultural Heritage Assessment is currently being prepared where full Aboriginal consultation, as per the Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW 2010), is being undertaken and is within the second stage of consultation. All Registered Aboriginal Parties (RAPs), that have registered for this project have been informed of the Preliminary Aboriginal Archaeological Assessment and have indicated support for the recommendations on the basis that an Aboriginal Cultural Heritage Assessment is currently being prepared.

1.5 AUTHOR IDENTIFICATION

The analysis of the archaeological background and the reporting were undertaken by Mr. Benjamin Streat (BA, Grad Dip Arch Her, Grad Dip App Sc), archaeologist and Director of Streat Archaeological Services Pty Ltd in association with Ms. Yolanda Pavincich (B. Arch, Grad Dip Cul Her) and under the guidance of Mr. Martin Carney archaeologist and Managing Director of AMAC Group.

1.6 ACKNOWLEDGEMENTS

The author would like to thank the following for advice and/or input into this assessment:

- Chris Farrington and Bianca Hummel from Doma Group;
- Anna Lansley and Neil Petherbridge from Northrop Consulting Engineers Pty Ltd;
- Valentino Gareri from Bates Smart;
- Matthew Blackert from Douglas and Partners Pty Ltd;

2.0 LEGISLATIVE CONTEXT AND STATUTORY CONTROLS

This section of the report provides a brief outline of the relevant legislation and statutory instruments that protect Aboriginal archaeological and cultural heritage sites within the state of New South Wales. Some of the legislation and statutory instruments operate at a federal or local level and as such are applicable to Aboriginal archaeological and cultural heritage sites in New South Wales. This material is not legal advice and is based purely on the author's understanding of the legislation and statutory instruments. This document seeks to meet the requirements of the legislation and statutory instruments set out within this section of the report.

2.1 COMMONWEALTH HERITAGE LEGISLATION AND LISTS

One piece of legislation and two statutory lists and one non-statutory list are maintained and were consulted as part of this report: The National Heritage List and The Commonwealth Heritage List.

2.1.1 Environmental Protection and Biodiversity Conservation Act 1999

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) offers provisions to protect matters of national environmental significance. This act establishes the National Heritage List and the Commonwealth Heritage List which can include natural, Indigenous and historic places of value to the nation. This Act helps ensure that the natural, Aboriginal and historic heritage values of places under Commonwealth ownership or control are identified, protected and managed (Australian Government 1999).

2.1.2 National Heritage List

The National Heritage List is a list which contains places, items and areas of outstanding heritage value to Australia; this can include places, items and areas overseas, as well as, items of Aboriginal significance and origin. These places are protected under the Australian Government's EPBC Act.

2.1.3 Commonwealth Heritage List

The Commonwealth Heritage List can include natural, Indigenous and historic places of value to the nation. Items on this list are under Commonwealth ownership or control and as such are identified, protected and managed by the Federal Government.

2.2 NEW SOUTH WALES STATE HERITAGE LEGISLATION AND LISTS

The state (NSW) based legislation that is of relevance to this assessment comes in the form of the acts which are outlined below.

2.2.1 National Parks and Wildlife Act 1974

The NSW National Parks and Wildlife Act 1974 (as amended*)* defines Aboriginal objects and provides protection to any and all material remains which may be evidence of the Aboriginal occupation of lands continued within the state of New South Wales. The relevant sections of the Act are sections 84, 86, 87 and 90.

An Aboriginal object, formerly known as a relic is defined 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"* (NSW Government, 1974).

It is an offence to harm or desecrate an Aboriginal object or places under Part 6, Section 86 of the NPW Act:
Part 6, Division 1, Section 86: Harming or desecrating Aboriginal objects and Aboriginal places:

(1) A person must not harm or desecrate an object that the person knows is an Aboriginal object.

Maximum penalty:

(a) in the case of an individual—2,500 penalty units or imprisonment for 1 year, or both, or (in circumstances of aggravation) 5,000 penalty units or imprisonment for 2 years, or both, or

(b) in the case of a corporation—10,000 penalty units.

(2) A person must not harm an Aboriginal object.

Maximum penalty:

(a) in the case of an individual—500 penalty units or (in circumstances of aggravation) 1,000 penalty units, or

(b) in the case of a corporation—2,000 penalty units.

(3) For the purposes of this section, ***circumstances of aggravation*** *are:*

(a) that the offence was committed in the course of carrying out a commercial activity, or

(b) that the offence was the second or subsequent occasion on which the offender was convicted of an offence under this section.

This subsection does not apply unless the circumstances of aggravation were identified in the court attendance notice or summons for the offence.

(4) A person must not harm or desecrate an Aboriginal place.

Maximum penalty:

(a) in the case of an individual—5,000 penalty units or imprisonment for 2 years, or both, or

(b) in the case of a corporation—10,000 penalty units.

(5) The offences under subsections (2) and (4) are offences of strict liability and the defence of honest and reasonable mistake of fact applies.

(6) Subsections (1) and (2) do not apply with respect to an Aboriginal object that is dealt with in accordance with section 85A.

(7) A single prosecution for an offence under subsection (1) or (2) may relate to a single Aboriginal object or a group of Aboriginal objects.

(8) If, in proceedings for an offence under subsection (1), the court is satisfied that, at the time the accused harmed the Aboriginal object concerned, the accused did not know that the object was an Aboriginal object, the court may find an offence proved under subsection (2).

2.2.2 Environmental Planning & Assessment Act 1979

The Environmental Planning and Assessment Act 1979 (EP&A Act) states that environmental impacts of proposed developments must be considered in land use planning procedures. Four parts of this act relate to Aboriginal cultural heritage.

- Part 3, divisions 3, 4 and 4A refer to Regional Environmental Plans (REP) and Local Environmental Plans (LEP) which are environmental planning instruments and call for the assessment of Aboriginal heritage among other requirements.
- Part 4 determines what developments require consent and what developments do not require consent. Section 79C calls for the evaluation of

  The likely impacts of that development, including environmental impacts on both the natural and built environments and the social and economic impacts in the locality (NSW Government 1979).
- Part 5 of this Act requires that impacts on a locality which may have an impact on the aesthetic, anthropological, architectural, cultural, historic, scientific, recreational or scenic value are considered as part of the development application process (NSW Government, 1979).

2.2.3 The Aboriginal Land Rights Act 1983

The NSW *Aboriginal Land Rights Act 1983* (ALR Act), administered by the NSW Department of Aboriginal Affairs, established the NSW Aboriginal Land Council (NSWALC) and Local Aboriginal Land Councils (LALCs). The ALR Act requires these bodies to:

- take action to protect the culture and heritage of Aboriginal persons in the council's area, subject to any other law;
- promote awareness in the community of the culture and heritage of Aboriginal persons in the council's area.

These requirements recognise and acknowledge the statutory role and responsibilities of New South Wales Aboriginal Land Council and Local Aboriginal Land Councils.
The ALR Act also establishes the Office of the Registrar whose functions include but are not limited to, maintaining the Register of Aboriginal Land Claims and the Register of Aboriginal Owners.
Under the ALR Act the Office of the Registrar is to give priority to the entry in the Register of the names of Aboriginal persons who have a cultural association with:

- lands listed in Schedule 14 to the NPW Act;
- lands to which section 36A of the ALR Act applies (NSW Government, 1974 & DECCW 2010).

2.2.4 The Native Title Act 1993

The *Native Title Act 1993* (NTA) provides the legislative framework to:

- recognise and protect native title;
- establish ways in which future dealings affecting native title may proceed, and to set standards for those dealings, including providing certain procedural rights for registered native title claimants and native title holders in relation to acts which affect native title;
- establish a mechanism for determining claims to native title;

- provide for, or permit, the validation of past acts invalidated because of the existence of native title.

The National Native Title Tribunal has a number of functions under the NTA including maintaining the Register of Native Title Claims, the National Native Title Register and the Register of Indigenous Land Use Agreements and mediating native title claims (NSW Government, 1974 & DECCW 2010).

2.2.5 New South Wales Heritage Register and Inventory 1999

The State Heritage Register is a list of places and objects of particular importance to the people of NSW. The register lists a diverse range of over 1,500 items, in both private and public ownership. Places can be nominated by any person to be considered to be listed on the Heritage register. To be placed an item must be significant for the whole of NSW. The State Heritage Inventory lists items that are listed in local council's local environmental plan (LEP) or in a regional environmental plan (REP) and are of local significance.

2.2.6 Register of Declared Aboriginal Places 1999

The NPW Act protects areas of land that have recognised values of significance to Aboriginal people. These areas may or may not contain Aboriginal objects (i.e. any physical evidence of Aboriginal occupation or use). Places can be nominated by any person to be considered for Aboriginal Place gazettal. Once nominated, a recommendation can be made to EPA/OEH for consideration by the Minister. The Minister declares an area to be an 'Aboriginal place' if the Minister believes that the place is or was of special significance to Aboriginal culture. An area can have spiritual, natural resource usage, historical, social, educational or other type of significance. Under section 86 of the NPW Act it is an offence to harm or desecrate a declared Aboriginal place. Harm includes destroying, defacing or damaging an Aboriginal place. The potential impacts of the development on an Aboriginal place must be assessed if the development will be in the vicinity of an Aboriginal place (DECCW 2010).

2.3 LOCAL PLANNING INSTRUMENTS

2.3.1 Newcastle Local Environmental Plan 2012

The Newcastle Local Environmental Plan was prepared by Newcastle City Council in 2012. Section 5.10 deals with Heritage Conservation. The plan states in Clause 1:

The objectives of this clause are as follows:

(a) to conserve the environmental heritage of Newcastle,

(b) to conserve the heritage significance of heritage items and heritage conservation areas, including associated fabric, settings and views,

(c) to conserve archaeological sites, and

(d) to conserve Aboriginal objects and Aboriginal places of heritage significance.

It is subsections c and d of this clause which are of relevance to this development.

The plan states in Clause 2, that consent is required when:

(a) demolishing or moving any of the following or altering the exterior of any of the following (including, in the case of a building, making changes to its detail, fabric, finish or appearance):

(i) a heritage item,

(ii) an Aboriginal object,

(iii) a building, work, relic or tree within a heritage conservation area.

(b) altering a heritage item that is a building by making structural changes to its interior or by making changes to anything inside the item that is specified in Schedule 5 in relation to the item.

(c) disturbing or excavating an archaeological site while knowing, or having reasonable cause to suspect, that the disturbance or excavation will or is likely to result in a relic being discovered, exposed, moved, damaged or destroyed,

(d) disturbing or excavating an Aboriginal place of heritage significance.

(e) erecting a building on land:

(i) on which a heritage item is located or that is within a heritage conservation area, or;

(ii) on which an Aboriginal object is located or that is within an Aboriginal place of heritage significance.

(f) subdividing land:

(i) on which a heritage item is located or that is within a heritage conservation area, or;

(ii) on which an Aboriginal object is located or that is within an Aboriginal place of heritage significance.

In addition to this Clause 8 states:

The consent authority must, before granting consent under this clause to the carrying out of development in an Aboriginal place of heritage significance:

(a) consider the effect of the proposed development on the heritage significance of the place and any Aboriginal object known or reasonably likely to be located at the place by means of an adequate investigation and assessment (which may involve consideration of a heritage impact statement), and

(b) notify the local Aboriginal communities, in writing or in such other manner as may be appropriate, about the application and take into consideration.

This report is fulfilling section 8 (a) of this clause.

2.3.2 Newcastle Development Control Plan 2012

The Newcastle DCP states that:

Where a development will disturb the ground surface, provide documentation to satisfy the consent authority that the due diligence process has been followed. The documentation should include (but is not limited to) the following:

- A statement indicating the results of the AHIMS database search and any other sources of information considered.
- A statement indicating whether there are landscape features that indicate the presence of Aboriginal objects.
- A statement indicating whether the proposed development is likely to harm Aboriginal objects.
- A statement indicating whether an Aboriginal Heritage Impact Permit (AHIP) is required.

- Where required, prepare an Aboriginal cultural heritage assessment to assess the impact of the proposed development on Aboriginal cultural heritage consistent with the Office of Environment and Heritage *Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW.*
- Where required, prepare an Aboriginal cultural heritage assessment report consistent with the Office of Environment and Heritage *Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW* that includes strategies to avoid or minimise harm to Aboriginal objects and places of cultural significance.
- Where the investigation and assessment requires the preparation of an Aboriginal cultural heritage assessment report, provide documentation to satisfy the consent authority that the relevant Aboriginal community and stakeholders have been involved in the decision-making process.

2.3.3 Newcastle Archaeological Management Plan

Suters Architects and Planners, in association with Lavelle, C and M.J. Doring Pty Ltd and Turner, created an Archaeological Management Plan for Newcastle City Council in 1997, regarding potential archaeological sites in Newcastle. This plan does not refer to Aboriginal Archaeology.

2.4 DUE DILIGENCE CODE OF PRACTICE FOR THE PROTECTION OF ABORIGINAL OBJECTS IN NEW SOUTH WALES

This assessment conforms to the parameters set out in the Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales, Part 6 National Parks and Wildlife Act 1974, (DECCW 2010).
The Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales states that if;

- a desktop assessment and visual inspection confirm that there are Aboriginal objects or that they are likely, then further archaeological investigation and impact assessment is necessary.

2.5 CODE OF PRACTICE FOR ARCHAEOLOGICAL INVESTIGATION OF ABORIGINAL OBJECTS IN NEW SOUTH WALES

Any further work resulting from recommendations should be carried out conforming to the Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales, Part 6 National Parks and Wildlife Act 1974, (DECCW 2010).

2.6 GUIDELINES

This report has been carried out in consultation with the following documents which advocate best practice in New South Wales:

- Aboriginal Archaeological Survey, Guidelines for Archaeological Survey Reporting (NSW NPWS 1998);
- Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales, Part 6 National Parks and Wildlife Act 1974, (DECCW 2010);

- Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales, Part 6 National Parks and Wildlife Act 1974, (DECCW 2010);
- Aboriginal Cultural Heritage Standards and Guidelines Kit (NPWS 1998);
- Australia ICOMOS 'Burra' Charter for the conservation of culturally significant places (Australia ICOMOS 1999);
- Part 6; National Parks and Wildlife Act Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW 2010).

3.0 DESCRIPTION OF STUDY AREA

The study site is that piece of land described as Lot 22 on the Land Titles Office Deposited Plan 1072217, and also known by the street address, 42 Honeysuckle Drive, Newcastle, Parish of Newcastle, County of Northumberland. The study area covers an area of approximately 3584 square metres.

The study area has been subject to previous Aboriginal archaeological assessment (AMAC 2010, *draft only*). Site inspection has revealed that the study area does not appear to have been subject to recent large-scale development. Several large-scale developments have been carried out adjacent to the study area to the north and west, as well as, a sealed roadway to the north which has resulted in modifications to the natural drainage of and water flow across the study area. Clearing has occurred on the study area, and a large amount of introduced vegetation (grasses) has become established on the study area. Native vegetation that once was present within the study area is no longer present. Several large-scale filling events have taken place in the history of the study area. Whether intact natural soil profiles are still present beneath these fill events remains unclear. The introduced fill appears to be local material and does contain Aboriginal artefacts.

This study area occupies the entirety of the properties known as 42 Honeysuckle Drive, Newcastle, New South Wales and has undergone minor disturbance. An outline of the nature of this disturbance is given in section 5.11. However, large sections of land adjacent to the study area have been subject to land reclamation, dredging of the Hunter River channel and Cottage Creek, inundation from flooding, and have resulted in some disturbance. Smaller sections of the study area have been subject to little or no disturbance. It is unclear if these disturbance events have resulted in the destruction of the natural soil profile or merely buried the said profile.

Onsite inspections and research suggest the presence of some original soil profile being intact and parts of the study area have nil potential to contain *in situ* Aboriginal objects and/or areas of archaeological potential. Parts of the study area, which have been subject to relatively minor disturbance and are representative of former coastal strips not subject to regular tidal inundation, are present in the western end of the study area. Some buried intact soil profiles may possibly have been part of a meandering and tidal-affected creek of the original watercourse channel and would have been possibly too wet to offer an attractive camping location to Aboriginal people in the past, when compared to more elevated and drier land situated upslope towards Hunter Street. Archaeological evidence may be present on this drier land.

As a result of the site inspection, one surface artefact was located and a site card has been submitted with the Aboriginal Heritage Information Management System (Site card number pending).

Figure 3.1 **Aerial of study area.**
Study area outlined in red. Six Maps, LPI Online, accessed 11/09/2017.

Figure 3.2 **Topographic map with site location.**
Study area in pink. Six Maps, LPI Online, accessed 11/09/2017.

4.0 ENVIRONMENTAL CONTEXT

To adequately understand and assess the potential Aboriginal archaeological resource that may be present within the study area it is vital to understand the environment in which the Aboriginal inhabitants of the study area carried out their activities. The environment that Aboriginal inhabitants lived in is a dominant factor in shaping their activity and therefore the archaeological evidence created by this activity. Not only will the resources available to the Aboriginal population have an influence on the evidence created but the survival of said evidence will also be influenced by the environment.

4.1 TOPOGRAPHY

The study area extends over one topographic zone which consists of gently undulating (slope <2%) Quaternary age sands and clays of the Lower Hunter River Plain, with low relief of up < 1m in the form and elevation of up to 12 m. This topographic zone is located on the interface between the Hamilton (hm) soil landscape and its landscape variant Hamilton (hma) which are sands between 1–3 m in depth overlying stiff estuarine clays, (Matthei 1995, p. 38).

4.2 GEOLOGY AND SOILS

The soil landscape map for the Newcastle 1:100 000 map sheet shows that the majority of the study area lies on reclaimed land. Any intact natural soil profiles present within the study area may lie within the Hamilton (hm) soil landscape or its landscape variant Hamilton (hma).

The geology of the study area, consists of Quaternary sand overlying clay deposits. Sediment depth is up to 38 m, comprising 1–3 m of sand which is underlain by stiff estuarine clay. The Hamilton soil landscape is a residual soil landscape which occurs on Quaternary deposits of the undulating well drained Hunter Plain. Soils are typically greater than 15 centimetres in depth, well drained weak Podzols. Some soils are greater than 15 centimetres in depth, these are well drained brown Podzolic soils on fans.

The Hamilton (hma) landscape variant is a recently incised channel cut into the Hamilton (hm) soil landscape, part of this channel has been excavated by human activity in the form of the widening and deepening of the Hunter River channel, (Matthei 1995, p. 38).

The following are typical soil profiles for the Hamilton (hm) soil landscape;

Dominant Soil Material	Soil Horizon	Description	Depth (cm)
Hm1	A Horizon	Brownish black speckled loamy sand with coarse loamy sand texture with single grained structure and a sandy fabric. Slightly acidic, stones and charcoal are absent. Roots are common near the surface and rare at depth	30-50
Hm2	A2 Horizon	Dull yellow orange to greyish yellow brown sand with coarse sandy texture with single grained structure and a sandy fabric. Slightly acidic, stones and charcoal are absent.	50-80

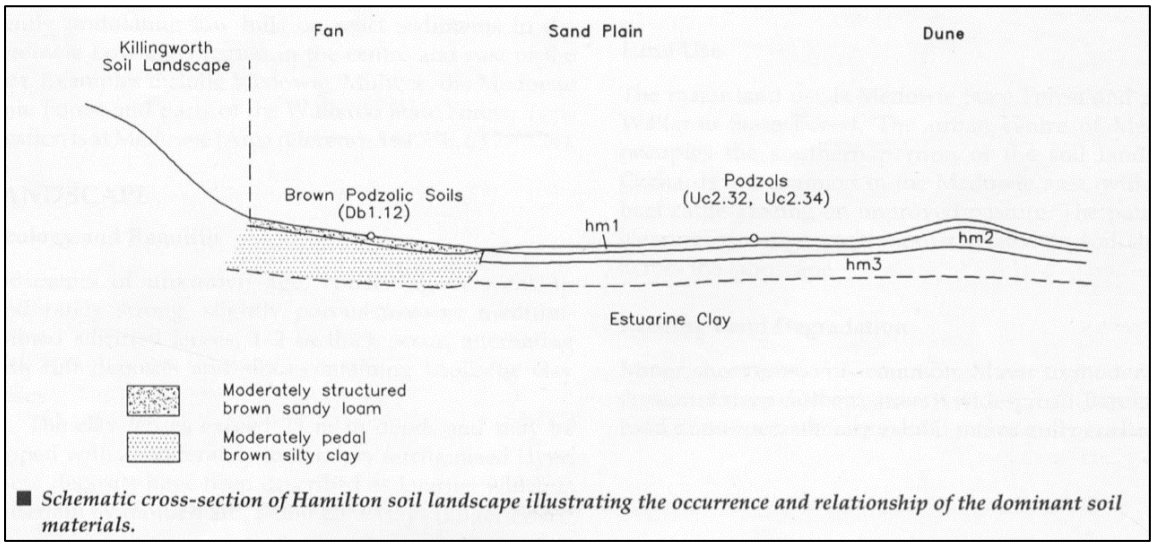
		Roots are common near the surface and rare at depth.	
Hm3	B Horizon	Dark brown to dull yellow orange clayey sand with fine sandy clay coarse sand texture with single grained structure and a sandy fabric. Slightly acidic, stones and charcoal are uncommon. Roots are absent	80>120

4.3 WATERCOURSES

The study area lies in a resource zone in which reliable fresh water was present. Much of the study area is covered by very well drained soil profiles, however, reliable fresh water was available from Cottage Creek which is on the immediate western edge of the study area. The study area is on the immediate coastal fringe where enormous food resources were available. As such this area has been identified as of being of high archaeological potential.

4.4 VEGETATION

All the natural vegetation has been cleared from the study area for urban development. Species that may have occupied the site include River Sheoak (Casuarina cunninghamiana) along the banks of the Hunter River and Cottage Creek. Swamp Sheoak (Casuarina glauca), Swamp Mahogany (Eucalyptus robusta), Broad-Leaved Paperbark (*Melaleuca quinquenervia)*, Flooded Gum (Eucalyptus grandis) and Weeping Lilly Pilly (Waterhousea floribunda), (Matthei 1995, p. 38).



■ *Schematic cross-section of Hamilton soil landscape illustrating the occurrence and relationship of the dominant soil materials.*

Figure 4.1 **Dominate Soil Material relationships.**
Matthei (1995).

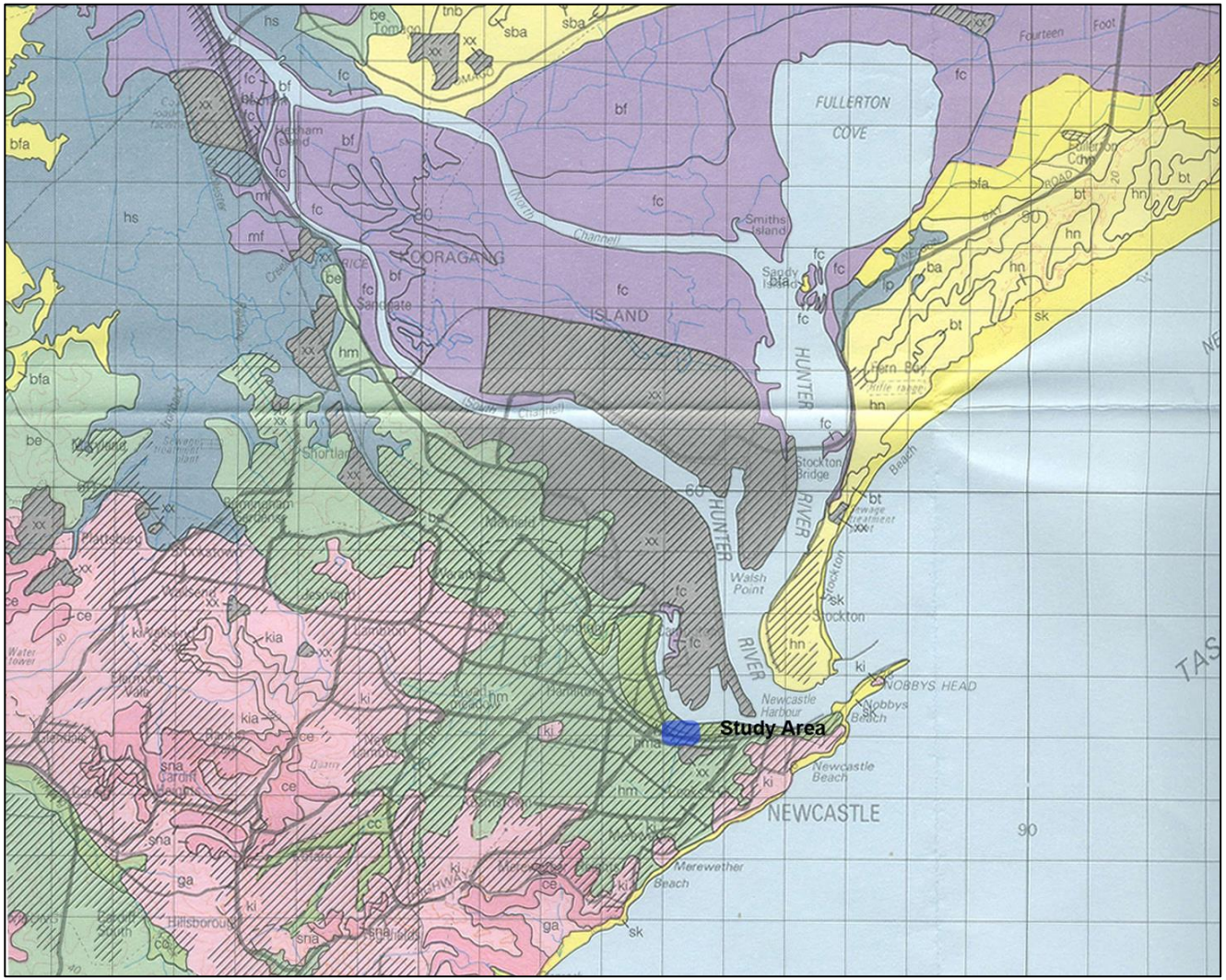


Figure 4.2 Newcastle Soil Landscape Sheet Map 1:100 000.
Matthei (1995).

5.0 BACKGROUND INFORMATION

Pre-field work research consisted of an analysis and synthesis of the background data to determine the nature of the potential archaeological and cultural heritage resource in the region.

Background research entailed a detailed review of sources of information on the history, oral history, ethno-history and archaeological background of the study area and surrounds and will include, but not be limited to material from:

- OEH archaeological assessment and excavation reports and cultural heritage assessments;
- OEH Library;
- State Library of NSW including the Mitchell Library;
- Local libraries and historical associations;
- National Library of Australia.

A search of the OEH AHIMS was undertaken and the results examined. The site card for each site within 1000m in all directions from the centre of the study area was inspected (where available), and an assessment made of the likelihood of any of the sites being impacted by the proposed development.

The OEH library of archaeological reports (Hurstville) was searched and all relevant reports were examined. Searches were undertaken on the relevant databases outlined in the Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales, Part 6 National Parks and Wildlife Act 1974, (DECCW 2010);
Further to this the following sources were examined:

- The National Heritage List;
- The Commonwealth Heritage List;
- The NSW State Heritage Inventory;
- The National Native Title Register;
- The Register of Declared Aboriginal Places;
- Prevailing local and regional environmental plans;
- Environmental background material for the study area.

5.1 ARCHAEOLOGICAL CONTEXT

It is generally accepted that Aboriginal occupation of Australia dates back at least 40,000 years (Attenbrow 2002, p.20-21; Kohen et al. 1983). The result of this extensive and continued occupation has left a vast amount of accumulated depositional evidence, and the Port Stephens area is no exception. Archaeological evidence of occupation of the region by Aboriginal people dates from the Pleistocene period. Evidence for the earliest occupation includes C14 dates from Moffats Swamp of 14,750 BP, north of Newcastle (AMBS 1993) and 10 000–13000 BP, at Glennies Creek (Dallas 2003, p.17). The majority of reliably dated archaeological sites within the region are less than 5,000 years old which places them in the mid to late Holocene period. A combination of reasons has been suggested for this collection of relatively recent dates. There is an argument that

an increase in population or 'intensification' of resource use across much of the continent took place around this time leading to a great deal more evidence being deposited compared to the sparser pre-occupation period. It is also the case that many archaeological sites along the past coastline may have been submerged as the seas rose to approximately their current level around 6,000 years ago. This would have had the effect of covering evidence of previous coastal occupation.

Different landscape units not only influence the preservation of sites but can determine where certain site types will be located. On the coastal fringe of the most common Aboriginal archaeological site type are Open Artefact Scatters or Open Campsites which are locations where two or more pieces of stone show evidence of human modification. These sites can sometimes be very large, up to thousands of artefacts and include other habitation remains such as animal bone, shell or fireplaces known as *hearths*, (Attenbrow 2002, p.75-76). Evidence of open scatters can be located in areas where erosion has taken place or embedded in stratified sediments visible only if erosion or excavation has occurred. Open scatters are most likely to occur near water sources and are generally found on ridges, saddles, spurs and headlands (Brayshaw 1985; AMBS 1993, p.3).

5.2 ABORIGINAL LAND USE AND RESOURCES

The study area lies in a resource zone in which reliable fresh water was available from Cottage Creek which is on the immediate western edge of the study area. The study area was on the immediate coastal fringe where enormous food resources were available.

Sites containing fresh water and sedentary food sources, coupled with the presence of other resources which may have been exploited or available on a seasonal basis, would suggest that Aboriginal land use of the study area was regular and repeated, with this reflected in the archaeological record.

Concentrated and repeated occupation may be represented in areas that have reliable access to water and foods sources. These areas will possess a high archaeological potential (Goodwin 1999). Newcastle's coastline and the Hunter River provided a rich dietary intake for the local inhabitants in which estuarine and marine resources could be exploited. Coastal populations depended heavily on marine resources such as fish and shellfish but were not limited to such diets as cabbage palms and bracken fern roots were also included (Dyall 1971). During some of the early explorations of the area there are accounts regarding the density of shell middens found along the Hunter River

"These are four feet deep, without either sand or earth." (cited, Dallas 2004*).*

Farming practices were also utilised in the form of land clearing. This was conducted through the burning of grasslands in order to encourage new growth which attracted local game. It is likely that these activities would result in repeated occupation as do ritualistic activities which take place within specific sacred places.

The procurement of specific resources for ritualistic or domestic purposes would rely on the accessibility and availability of these resources. There are readily mapped resources within the region that may have been exploited by Aboriginal occupants and more were present before the land was cleared and settled.

The Lower Hunter River was found to be the dividing boundary between the Worimi people who occupied the northern side of the river and the Awabakal who occupied the southern side (AHMS 2001). Repeated occupation by both groups indicates the area to have been a resource rich zone, one where natural landforms provide a common landmark.

The traditional life of the Aboriginal population of the Newcastle area was seen to remain despite European settlement and the impact of European culture. This is reflected in the historical documentation of the area and illustrations by Joseph Lycett in which the cultural activities of local Indigenous people are depicted. One of the key ethnohistoric sources was Reverend Lancelot Threlkeld. Threlkeld, took an interest in the language and culture of the Awabakal people. He established a missionary at Belmont and later at Toronto, where many local Indigenous stayed. He wrote about the various encounters he had with the local Indigenous including the stories which they spoke of, some of which referred to ceremonial events and sacred places (Umwelt 2014).

Through to the later 1830s, there are accounts of ongoing interactions between Aboriginal and non-Aboriginal people in the Newcastle settlement, as the employment of Aboriginal people in Newcastle grew. Jobs such as fishing, carriers, and servants were undertaken by local Indigenous in return for European items such as, blankets and corn (Turner 1997). Influenza and diseases spread through the population, however, it was not seen to have affected the Hunter region as much as, the Sydney based Indigenous populations. However, inevitably the continued expansion of the settlement and the selling off of land when free settlement was introduced, led to the marginalization of Aboriginal people.

5.3 THE AWABAKAL NATION

It is estimated that around 250 distinct languages were in use throughout the continent at the time of contact. The exact number cannot be known for certain, however, 250 is a conservative estimate. These languages fell within two language groups; the *Pama-Nyungan* and the *Non-Pama-Nyungan* languages. Knowledge of the different language groups in any given area is variable. Early European recordings noted the names of particular Aboriginal individuals and groups, but were not always clear about which named groups represented a language rather than some other social grouping (Hardy and Streat 2008). There was one language group observed in the Newcastle area at the time of European contact, this was the Awabakal language group.

Austin (Austin et al. 1995) suggests, that speakers of the Awabakal language were spread around the greater Newcastle region and the estuary of the Hunter River. Their territory ranged from Fern Bay and Stockton in the north to Tuggerah Lakes area in the south. Their nearest neighbours were the Worimi to the north who were centred around Port Stephens, however, it is believed the Hunter River, as a major geographic feature, was the demarcation line between the territories of these two language groups. To the south of the Awabakal were the Kuringgai, whilst the Wonaruah, and the Darkinjung, occupied areas to the northeast and southeast of the Awabakal, and the Kamilaroi occupied land to the northwest. This view is concurred with by the Australian Institute of Aboriginal and Torres Strait Islander Studies, (Australian Institute of Aboriginal and Torres Strait Islander Studies 2000). There may have been a significant amount of interaction, both cultural and linguistic, between the Awabakal and the Worimi nations and it is probable that the territorial boundary altered from time to time.

Within these large language groups resource access and ownership was centred around extended family groups or 'clans' which appear to have had ownership of land, (Attenbrow 2002). As it was unlikely to be acceptable to find sexual partners within the family grouping, and for other reasons such as resource sharing, a number of clans would often travel together in a larger group. These groups are referred to as *bands*. Whether the clan or the band was the most important group politically to an individual is likely to have varied from place to place. Group borders were generally physical characteristics of the landscape inhabited, such as waterways or the limits of a particular resource. Groups also shared spiritual affiliations, often a common dreaming ancestor, history, knowledge and dialect, (Attenbrow 2002).

The majority of reliably dated archaeological sites within the region are less than 5,000 years old which places them in the mid to late Holocene period. A combination of reasons has been suggested for this collection of relatively recent dates. There is an argument that an increase in population and 'intensification' of much of the continent took place around this time leading to a great deal more evidence being deposited than was deposited as a result of the sparser pre-occupation period (Hiscock 2008, p.106).

Different landscape units not only influence the preservation of sites but can determine where certain site types will be located. Across the whole of the Newcastle area the most common Aboriginal archaeological site type is occupation evidence in open artefact scatters (DECCW 2010). These are often found in elevated areas above swamps or creeks and often contain diagnostic tool types. Many hundreds of artefact sites have been recorded within the Hunter Valley, despite the fact, that much of the area has already been developed to such an extent that any archaeological evidence that may have once been present has been destroyed.

A wide variety of activities comprised the lifestyle of the Aboriginal groups across the region. Some behaviours leave traces which can be retrieved by archaeological study of material remains. Many of these can be reconstructed by oral history, observations of European explorers and ethnologists, and other forms of past recording such as photography or art. Some of the details of the complexity and sophistication of the past lifestyles of Aboriginal people in the area have been lost, but many can be reconstructed using the variety of sources available.

The influx of European settlers had a substantial impact on the land use patterns of the Worimi and severely altered the movement between the coast and the interior that is thought to have existed at the time. The costal fringe was a particularly rich resource zone and was exploited for resources such as fish, shellfish, small mammals and on occasion whales. Seasonal movement was observed by European settlers and documented at the time; however, prevailing archaeological theory suggests that the traditional view of a nomadic Aboriginal band is somewhat inaccurate. While movement undoubtedly occurred, it appears to have been on a lower scale than previously thought, particularly in such resource rich zones as the coastal fringe (Dallas 2008).

It is generally accepted that Aboriginal occupation of Australia dates back at least 40,000 years (Attenbrow 2002 p.20-21; Kohen et al. 1983). The result of this extensive and continued occupation has left a vast amount of accumulated depositional evidence, and the Port Stephens area is no exception. Archaeological evidence of occupation of the region by Aboriginal people dates from the Pleistocene period. Evidence for the earliest occupation includes C14 dates from Moffats Swamp of 14,750 BP, north of Newcastle (Baker, 1993) and 10 000–13000 BP, at Glennies Creek (Dallas 2003, p.17). The majority of reliably dated archaeological sites within the region are less than 5,000 years

old which places them in the mid to late Holocene period. A combination of reasons has been suggested for this collection of relatively recent dates. There is an argument that an increase in population and 'intensification' of much of the continent took place around this time leading to a great deal more evidence being deposited compared to the sparser, pre-occupation period. It is also the case that many archaeological sites along the past coastline may have been submerged as the seas rose to approximately their current level around 6,000 years ago. This would have had the effect of covering evidence of previous coastal occupation.

5.4 PREVIOUS ARCHAEOLOGICAL STUDIES NEAR THE STUDY AREA

As part of the research process of this report the library of Archaeological assessments, test excavation and open area salvage excavation reports which is located at the offices of DECCW at Hurstville, was consulted. Those viewed by the author as being of the most relevance to this report are outlined below.

Brairstow & Turner (1987) – Test Excavations – Bond & Scotts Sts, Newcastle.

Bairstow and Turner carried out an archaeological excavation at Bond & Scott Streets in Newcastle East in 1987, but the finds were neither retained nor analysed. During a subsequent test excavation in 1989, a number of additional flaked stone artefacts were located close to Bond Street and were located in what was thought to be buried intact original soil profiles.

Lavelle & Mider (1993) – Archaeological Monitoring – Bond St, Newcastle.

Lavelle & Mider undertook archaeological monitoring of excavation works in 1993, at Bond Street in Newcastle East and located 6 stone tools. These included a chert point and a sandstone grinding stone and were also located in what was thought to be buried intact original soil profiles.

Higginbotham & Assoc. (1998) – Test Excavations – Bond St, Newcastle.

Higginbotham and Associates carried out test excavations at the same site in 1998, which revealed a considerable quantity of 'stone rubble' that was initially considered to constitute railway ballast associated with the later historic period of site use. Australian Museum Business Services (AMBS), later identified this material as being largely Aboriginal in origin, as flaked stone tools were present amongst un-worked cobbles and boulders. It remains a point of conjecture, as to whether this material was located within buried intact original soil profiles or was representative of re-deposited material from the historical European period.

Godden McKay Logan (1997) – Test Excavations – 738 Hunter St, Newcastle.

Godden McKay Logan (GML) conducted archaeological excavations at 738 Hunter Street, Newcastle in 1997, which located 3 flaked stone artefacts. The 3 flaked stone artefacts were all relatively small and were reduced from silcrete and chert. These artefacts were located within buried intact original soil profiles.

Archaeological Heritage Management Solutions (2001) – Test Excavations – *Palais Royale* Hunter St, Newcastle.

Archaeological Heritage Management Solutions (AHMS) conducted an assessment in conjunction with a European archaeological survey on a portion of land located on the northern side of Hunter Street, between the existing 'Palais Royale' Cottage Creek and

the Great North Railway, Newcastle in 2001. No Indigenous archaeological resources were located during the course of this survey. However, due to the possibility of intact topsoil deposits and the undertaking of a European test excavation programme members of the Awabakal Local Aboriginal Land Council requested to be present in case Indigenous artefacts were recovered during the test excavation process.

The subsequent program of test excavation as was the case with GML's excavation, yielded buried intact original soil profiles, which contained significant Aboriginal archaeological deposits comprising shell midden materials and large numbers of flaked stone artefacts. The assemblage consisted of approximately 5,734 pieces of stone. While the assemblage has not yet been completely catalogued it is expected that upwards of 4,000 flaked stone artefacts will be evident. The assemblage also contained a total of some 2,939 whole or fragmentary shells, and approximately 326 pieces of animal bone. The stone artefacts consisted of tuff, silcrete, quartz, rhyolite and flint.

Archaeological Heritage Management Solutions (2004) – Test Excavations – 710 Hunter St, Newcastle.

In 2004, AHMS conducted an archaeological excavation at 710 Hunter Street, Newcastle, which yielded 513 stone artefacts, predominately tuff pieces which exhibited attributes of abrasion. Only small areas of intact original soil profiles could be found as it was mainly disturbed and re-deposited fills encountered.

Mary Dallas Consulting (2004) – Test Excavations – *Boardwalk Site* Honeysuckle Dr, Newcastle.

Mary Dallas Consulting conducted a test excavation programme in conjunction with a European archaeological excavation at the 'Boardwalk Site" on Honeysuckle Drive, east of the 'square about', within the bounds of the Civic Railway workshops, Newcastle in 2004. This excavation yielded the partial and disturbed remains of a coastal campsite with a thin scatter of shells some 113 stone artefacts as well animal bone from a buried former landscape. The stone artefacts consisted of tuff, silcrete, quartz, rhyolite and flint. No further archaeological work was recommended based on the highly disturbed nature of the area due to two centuries of European activity.

Umwelt (2005) – Test Excavations – 9 Watt St, Newcastle.

Umwelt conducted a subsurface historical test excavation programme at 9 Watt Street, Newcastle, which yielded disturbed soil profiles that contained five Aboriginal flaked stone artefacts. These were identified as coming from disturbed contexts and no evidence was located to suggest they had been manufactured on site. The artefacts, it was concluded, were imported onto the site as a result of the importation of levelling fill (Umwelt, 2005).

Archaeological Heritage Management Solutions (2005) – Test Excavations – 700 Hunter St, Newcastle.

In 2005, AHMS conducted a subsurface excavation programme at 700 Hunter Street, Newcastle which yielded buried intact and disturbed soil profiles which contained significant Aboriginal archaeological deposits comprising shell midden materials and large numbers of flaked stone artefacts. The assemblage consisted of more than 4000 stone artefacts and included human skeletal remains as a result of the study areas association with a former cemetery. Some of the skeletal remains were identified as Aboriginal, however, they were not in a pre-European burial context that were associated with the cemetery. The stone artefacts consisted of tuff, silcrete, quartz, rhyolite and flint, (AHMS 2005).

Insite Heritage (2005) – Test Excavations – 200-212 Hunter St, Newcastle.

Insite Heritage undertook historical archaeological excavations at 200–212 Hunter Street, Newcastle, in 2006. Aboriginal artefacts were identified during these excavations. However, they were all identified as coming from disturbed contexts and no evidence was located to suggest they had been manufactured on site. These artefacts it was concluded, were imported onto the site as a result of the importation of levelling fill (Insite, 2005).

Archaeological Management & Consulting (2014) – Test Excavations – 409 Hunter St, Newcastle.

AMAC conducted a subsurface test excavation programme at 409 Hunter Street, Newcastle, in 2014, which yielded both buried intact and disturbed soil profiles and contained significant Aboriginal archaeological deposits comprising large numbers of flaked stone artefacts. The assemblage consisted of more than 500 stone artefacts. The stone artefacts consisted of tuff, silcrete and quartz (AMAC 2015).

Archaeological Management & Consulting (2014) – Test Excavations – 11-15 Watt St, Newcastle.

AMAC conducted a subsurface historical test excavation programme at 11–15 Watt Street, Newcastle, in 2014, which yielded disturbed soil profiles which contained one Aboriginal flaked stone artefact and was identified as coming from disturbed contexts. However, no evidence was located to suggest they had been manufactured on site. The artefact, it was concluded, was imported onto the site as a result of the importation of levelling fill (AMAC 2014).

Archaeological Management & Consulting (2014) – Salvage Excavations – 409 Hunter St, Newcastle.

AMAC conducted a subsurface salvage excavation as part of an Aboriginal Cultural Heritage Management Plan at 409 Hunter Street, Newcastle, in 2014, which yielded both buried intact and disturbed soil profiles and contained significant Aboriginal archaeological deposits comprising large numbers of flaked stone artefacts. The assemblage consisted of more than 6500 stone artefacts. The stone artefacts consisted of tuff, silcrete and quartz, (AMAC, in press).

The practical ramifications of the results of the aforementioned archaeological assessments and excavations, are that there is a low/moderate potential for Aboriginal archaeological objects to be present within the study area, particularly if buried intact original soil profiles are present.

However, given the disturbance identified within the study area it is more likely that disturbed Aboriginal archaeological objects are present. These would still require an AHIP and/or Aboriginal Cultural Heritage Management Plan (ACHMP) to legally allow for the disturbance of the said objects. This potential is not reflected in the visibility of surface archaeological material and is more accurately reflected in the results of past assessments and excavations within the vicinity of the study area and from within similar landscape units in the Hunter Valley.

5.5 REGISTERED ARCHAEOLOGICAL SITES WITHIN THE STUDY AREA

As a result of the site inspection conducted on the 16/10/17, a flake piece of Merewether chert was recorded (site card pending). Therefore, there is now a registered site within the study area.

There are three previously recorded sites located within the immediate vicinty of the study area;

Site Cottage Creek OS 1 38-4-1222

Site Cottage Creek OS 1 38-4-1222, is located adjacent to a bitumen footpath and a redirected creek in what is thought to be imported fill. The material and nature of the artefacts are similar to much other material found across the Newcastle region. There is potential for these artefacts to contribute further to the education of the general public about the past habitation of the area. This site is assessed as having low educational significance as it is highly disturbed. This site has been disturbed however it is possible additional areas of potential archaeological deposit are located in the vicinity. The site therefore presents opportunities for further research and is assessed as having low scientific significance. Overall the archaeological significance of the site is low.

Site Wickham Village OS 1 38-4-1223

Site Wickham Village OS 1 38-4-1223 , is located on a relatively undisturbed area adjacent to the original line of Cottage Creek. The material and nature of the artefacts are similar to much other material found across the Newcastle region. There is considerable potential for these artefacts to contribute further to the education of the general public about the past habitation of the area. This site is assessed as having moderate educational significance. This site remains relatively undisturbed and it is probable additional areas of potential archaeological deposit are located in the vicinity. The site therefore does present opportunities for further research and was assessed as having moderate scientific significance.

Palais Royale 38-4-0831

Palais Royale 38-4-0831 is located on the northern side of Hunter Street, between the existing ‘Palais Royale’ site and Cottage Creek and the Great North Railway, Initially as a result of the archaeological assessment no Indigenous archaeological resources were located as a result of surface inspection. However due to the possibility of intact topsoil deposits and the undertaking of a European test excavation programme members of the ALALC requested to be present in case Indigenous artefacts were recovered during the test excavation process. The subsequent program of test excavation yielded buried intact soil profiles which contained significant Aboriginal archaeological deposits comprising shell midden materials and large numbers of flaked stone artefacts. The assemblage consisted of approximately 5,734 pieces of stone. While the assemblage has not yet been fully catalogued it is expected that upwards of 4,000 flaked stone artefacts will be evident. The assemblage also contained a total of 2,939 whole or fragmentary shells and approximately 326 pieces of animal bone. The stone artefacts consisted of tuff, silcrete, quartz, rhyolite and flint

Figure 5.1 **Previously recorded sites within immediate vicinity of study area.**
Stars indicate approximate location of sites Cottage Creek OS 1 (red), Wickham Village OS 1 (blue) and Palais Royale (green), New site (site card no. pending) indicated in purple, study area indicated by orange outline. Six Viewer (2012).

5.6 AHIMS SEARCH RESULTS

The Archaeological Heritage and Information Management System Database (AHIMS) is located at the OEH Offices at Hurstville in New South Wales. This database comprises information about all the previously recorded Aboriginal archaeological sites registered with OEH. Further to the site card information that is present about each recorded site, the assessments and excavation reports that are associated with the location of many of these sites are present in the library of reports.

The location of these sites) must be viewed as purely indicative as errors in the recording of the locations of sites often occurs due to the disparate nature of the recording process, the varying level of experience of those locating the sites and the errors that can occur when transferring data. If possible, sites that appear to be located near a study area should be relocated.

An AHIMS extensive 1km search was conducted on the 12th September 2017 (ID 301094). This search resulted in 22 registered sites near the study area with one new site recorded as being on the study area (Site Card Pending).

Table 5.1 AHIMS Search Results

Site ID	Site name	Site status	Site features
38-4-0559	The Broadwalk- Newcastle 1	Valid	PAD
38-4-0544	700 Hunter Street	Valid	Artefact
38-4-0772	710 Hunter Street Newcastle PAD	Valid	Shell, PAD
38-4-0831	Palais Royale	Partially Destroyed	PAD Artefact, Shell
38-4-0832	Empire Hotel PAD	Valid	PAD
38-4-0952	Bellevue Hotel PAD	Valid	PAD
38-4-0851	710 Hunter St Newcastle, PAD	Valid	PAD
38-4-1222	Cottage Creek OSI	Valid	Artefact
38-4-1223	Wickham UFCCALE OS1	Valid	Artefact
38-4-1642	409 Hunter Street Newcastle Fill duplicate of 409 Hunter Street Newcastle Insitu	Valid	Artefact, Shell
38-4-1716	Wickham Transport Interchange PAD	Valid	PAD
38-4-1812	Isolated Find 6 - Rail	Destroyed	Artefact
38-4-1813	Isolated Find 7 - Rail	Destroyed	Artefact
38-4-1814	Isolated Find 8 -Rail	Destroyed	Artefact
38-4-1815	Isolated Find 5 - Rail	Destroyed	Artefact
38-4-1816	Isolated Find 4 -Rail	Destroyed	Artefact
38-4-1817	Artefact Scatter 1 –Rail	Destroyed	Artefact
38-4-1818	Isolated Find 9 - Rail	Destroyed	Artefact
38-4-1803	Isolated Find 3-Rail	Valid	Artefact
38-4-1795	38 Hannell St Newcastle PAD	Valid	PAD
38-4-1804	Isolated Find 1-Rail	Valid	Artefact
38-4-1805	Isolated Find 2-Rail	Valid	Artefact

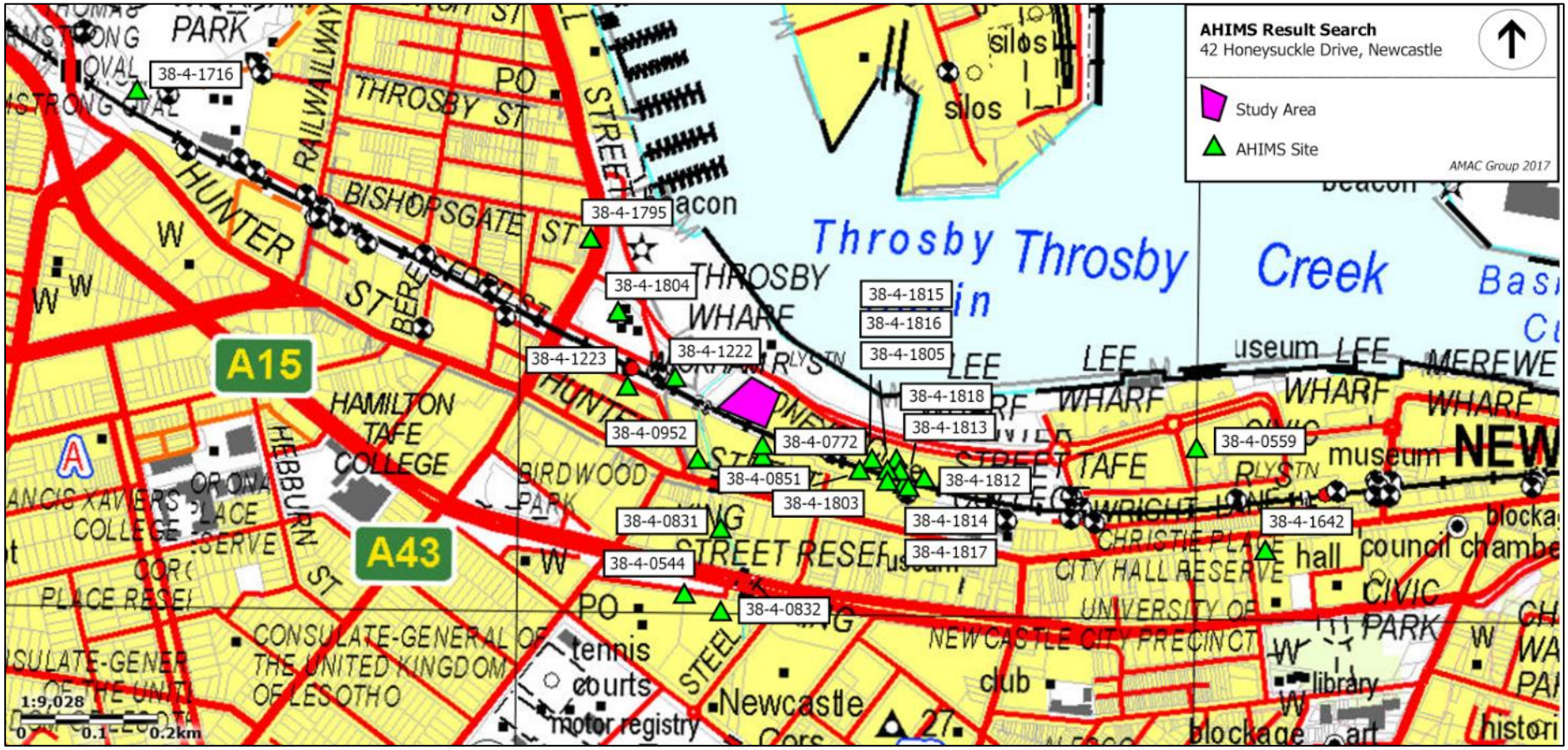


Figure 5.2: **AHIMS Search Results.**
OEH (2017) Memory Map (2012) Topographic Map 1:25000 South East.

5.7 OTHER SEARCH RESULTS

Results for other statutory databases searched are given below;

- The study area does not appear on the National Heritage List (DSEWPC, 2012);
- The study area does not appear on the Commonwealth Heritage List (DSEWPC 2012);
- The study site does not appear on the State Heritage Register (DSEWPC, 2012).
- The study area does not appear on the Register of Declared Aboriginal Places (DECCW, 2012);

5.8 SUMMARY OF ARCHAEOLOGICAL PREDICTIVE MODEL FOR THE REGION

Predictive modelling is an adaptive process which relies on a framework formulated by a number of factors, including but not limited to the use of local land systems, the environmental context, archaeological work and any distinctive sets of constraints that would influence land use patterns. This is based on the concept that different landscape zones may offer different constraints, which is then reflected in the spatial distributions and forms of archaeological evidence within the region (Hall and Lomax 1996).

Early settlement models focused on seasonal mobility, with the exploitation of inland resources being sought once local ones become less abundant. These principles were adopted by Foley (1981) who developed a site distribution model for forager settlement patterns. This model identifies two distinctive types of hunter and gather settlements; ‘residential base camps’ and ‘activities areas’. Residential base camps are predominately found located in close proximity to a reliable source of permanent water and shelter. From this point the surrounding landscape is explored and local resources gathered. This is reflected in the archaeological record, with high density artefact scatters being associated with camp bases, while low density and isolated artefacts are related to the travelling routes and activity areas (Figure 5.3) (Foley 1981).

However, more recently, investigation into understanding the impacts of various episodes of occupation on the archaeological record has been explored, of which single or repeated events are being identified. This is often a complex process to establish, specifically within predictive models as land use and disturbance can often result in post depositional processes and the superimposition of archaeological materials by repeated episodes of occupation.

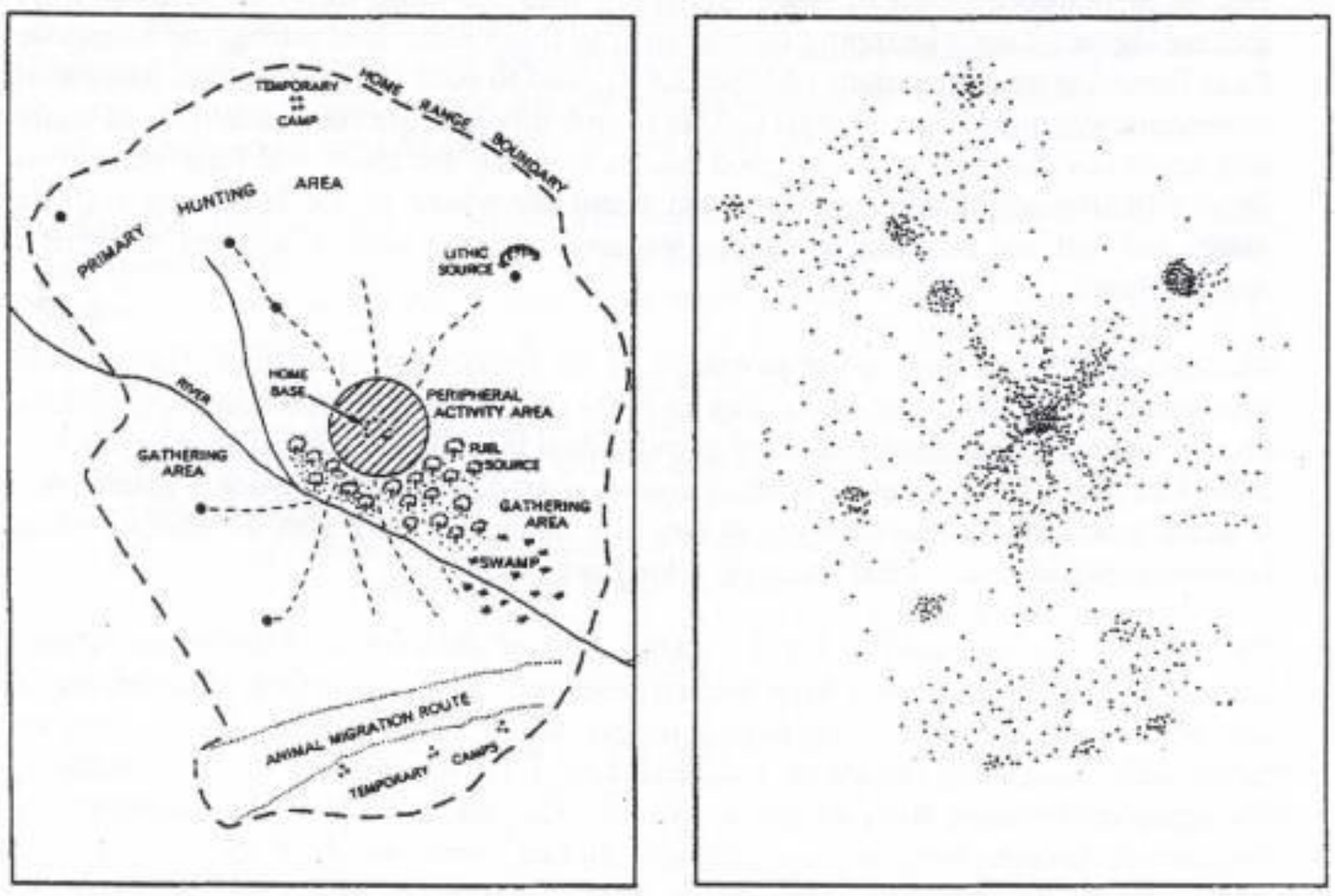


Figure 5.3 Examples of forager settlement patterns.
Foley (1981).

The principals behind this model have been incorporated into other predictive models such as that of McBryde (1976). McBryde's model is centred on the utilisation of food resources as a contributor to settlement patterns, specifically with reference to the predictability and reliability of food resources for Aboriginal people within the immediate coastal fringe and/or hinterland zone, with migratory behaviour being a possibility. Resources such as certain species of animals, particularly; small marsupials and reptiles, plant resources and nesting seabirds may have been exploited or only available on a seasonal or intermittent basis. As such, archaeological sites which represent these activities whilst not being representative of permanent occupation may be representative of brief, possibly repeated occupation.

Jo McDonald and Peter Mitchell have since contributed to this debate, with reference to Aboriginal archaeological sites and proximity to water using their Stream order model (1993). This model utalises Strahler's hierarchy of tributaries (Figure 5.4).
This model correlates with the concept of proximity to permanent water and site locations and their relationship with topographical units. They identify that artefact densities are greatest on terraces and lower slopes within 100m of water.

Intermittent streams however, also have an impact on the archaeological record. It was discovered that artefacts were most likely within 50 – 100m of higher (4^{th}) order streams, within 50m (2^{nd}) order streams and that artefact distributions around (1^{st}) order streams was not significantly affected by distance from the watercourse. Landscapes associated with higher order streams (2^{nd}) order streams were found to have higher artefact densities and more continuous distribution than lower order streams.

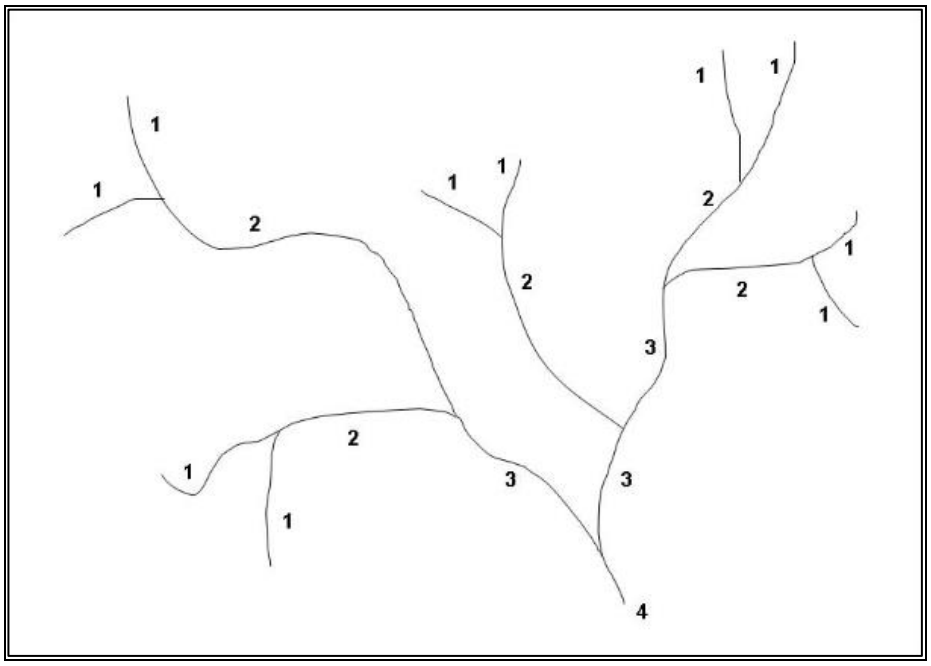


Figure 5.4 **Strahler's hierarchy of tributaries.**
Strahler (1957).

This Hunter Region predictive model was developed by Kuskie and Kamminga (2000) through the use of data attained from previous archaeological work regarding site location and distribution. The following table is based on the archaeological expectations regarding the use of landscape units and resources and how this is likely to be reflected in the archaeological record.

Table 5.2 Occupation patterns as reflected in the archaeological record

Occupation Pattern	Activity Location	Proximity to water	Proximity to food	Archaeological Record
Transitory Movement	All landscape zones, often on ridge and spur crest, watercourses and valley flats	Not important	Not important	• Assemblages of low density and diversity • Evidence of tool maintenance & repair • Evidence for stone knapping
Hunting and/or gathering without camping	All landscape zones	Not Important	Near food resources	• Assemblages of low density and diversity • Evidence of tool maintenance & repair • Evidence for stone knapping • High frequency of used tools
Camping by small groups	Frequently associated with permanent & temporary water	Nearby	Near food resources	• Assemblages of low to moderate density and diversity • Evidence of tool maintenance & repair • Evidence for stone knapping • Hearths
Nulcear family base camp	Level or gently undulating ground	Nearby reliable source	Near food resources	• Assemblages of high density and diversity • Evidence of tool maintenance & repair and casual knapping • Heat treatment pits, stone lined ovens • Grindstones
Community base camp	Level or gently undulating ground	Nearby reliable source	Near food resources	• Assemblages of high density and diversity • Evidence of tool maintenance & repair and casual knapping • Heat treatment pits, stone lined ovens • Grindstones & orchre • Large area > 100sqm with isolated campsites

The Aboriginal Cultural Heritage Data Audit (DOP, 2005) produced the following table as part of the NSW Comprehensive Coastal Assessment Toolkit (DOP, 2005) which made the following statements outlined in table 4.3 about the predictive location of Aboriginal sites in Coastal NSW. These statements support the conclusions drawn in the following predictive model established for the study area. The study makes one very important claim which is that Aboriginal Ceremonial or Dreaming Sites can only be identified by Aboriginal community knowledge.

All models state that the primary requirement of all repeated, concentrated or permanent occupation is reliable access to fresh water. Brief and possibly repeated occupation may be represented in areas that have unreliable access to ephemeral water sources, however these areas will not possess a high archaeological potential (Goodwin 1999)

Table 5.3 Aboriginal Cultural Heritage Data Audit, Predictive Modelling for Coastal Aboriginal Sites, NSW.

Site Type	Archaeological/ Predictive Modelling
Aboriginal Ceremony and Dreaming Sites	Can only be identified on the basis of Aboriginal community knowledge.
Aboriginal Resource and Gathering Sites	Can occur at any location where plant and animal target species are found at present or were available in the past.
Art Sites:	All rock paintings or drawings and some rock engravings will occur within rock shelters/overhangs, most commonly within sandstone cliff lines and in granite boulder fields. Rock engravings may occur wherever there are suitable rock-surface exposures.
Artefacts:	Will occur in all landscapes with varying densities. Artefacts of greatest scientific significance will occur in stratified open contexts (such as alluvial terraces, sand bodies) and rock shelter floors.
Burials:	Most likely (but not always) to be buried in, or eroding from, sandy soils. Can occur within rock shelters/overhangs, most commonly within sandstone cliff lines and in granite boulder fields.
Ceremonial Ring Sites:	Environmental factors may be of particular importance in site location including association with sources of water, ridges, unstructured soils and geological boundaries. Distance to adjacent ceremonial ring sites may influence site location.
Conflict Sites:	Can only be identified on the basis of historical records and community knowledge.
Grinding Grooves:	Most likely to occur on surface exposures of sandstone. Occasionally occur within sandstone rock shelters.
Modified Trees	Will only occur where target tree species survive and if these are of an age generally greater than 100 years old.
Non-Human Bone and Organic Material Sites:	Will occur in any surface or buried context where preservation conditions allow. Most commonly survive in open shell midden sites and in rock shelter floor deposits.
Ochre Quarry Sites:	Can occur at any location where suitable ochre sources are found, either as isolated nodules or as suitable sediments (clays).
Potential Archaeological Deposits:	Can occur in all landscape types. PADs of greatest scientific significance will occur in stratified open contexts (such as alluvial terraces, sand bodies) and rock shelter floors.
Shell Middens:	Will occur as extensive packed shell deposits to small shell scatters in all coastal zones along beaches, headlands and estuaries, both in open situations and in rock shelters. May occur along rivers and creeks where edible shellfish populations exist or existed in the past.
Stone Arrangements	Tend to be on high ground, often on the tops of ridges and peaks commanding views of the surrounding country. Often situated in relatively inaccessible places.
Stone Quarry Sites:	Can occur at any location where suitable raw materials outcrop, including pebble beds/beaches.
Waterholes	May occur within any river or creek. Rare examples may occur in open exposures of rock.

5.9 ARCHAEOLOGICAL PREDICITVE MODEL FOR THE STUDY AREA

The following section gives an indication of the likelihood of certain site types being located within the study area. These indications are based on the research and results of assessments and excavations in the vicinity of the study area and also from the region. The predictive model also takes into account the variables of landscape features, landscape resources, landscape disturbance and ethnographic evidence gathered from Aboriginal Stakeholder groups and individuals, (Orton 2000, p. 76 – 77).

Site Type	Basis	Likelihood
Open Artefact Scatters	Higher order streams are located in the landscape units represented in the study area, chiefly Cottage Creek, however they have long since been disturbed and buried. Excavations at locations in the immediate vicinity of the study are also suggestive of the presence of open artefact scatters within disturbed context	Likely
Isolated Artefacts	Higher order streams are located in the landscape units represented in the study area, chiefly Cottage Creek, however they have long since been disturbed and buried. Isolated surface find present on site (site card pending)	Likely
Grinding Grooves	Boulders of sandstone or outcrops do not occur in the landscape units.	Unlikely
Midden Deposits	Given the proximity of the study area to the disturbed and buried Cottage Creek and original Hunter River estuary foreshore, it is likely to be the site of food procurement, consumption, and refuse discard. It is presently unclear whether intact original soil profiles are present, however if they are, associated archaeological material may occur within said deposits.	Likely
Stone Resources Sites	Rock outcrops are not present within the Hamilton (ha) soil landscape.	Unlikely
Scarred Trees	Trees of sufficient age do not appear to remain within the study area	Unlikely
Sandstone Shelter Sites	The soil landscape of the study area does not contain sandstone overhangs.	Unlikely
Burials	While it is possible that undisturbed sand bodies may lie within the study area. These sites tend to occur within deep, sandy and/or soft soil contexts within sand dune formations, often in association with midden materials.	Unlikely

	The Hamilton (hm) soil landscape is highly acidic which leads to the poor preservation of organic material such as bone. Burials have been infrequently recorded within Newcastle area.	
Ceremonial Sites	Consultation with relevant Aboriginal Stakeholder groups and individuals has not revealed the presence of ceremonial or social sites within the study area however it is possible that such information may become available in the future as a result of further consultation	Likely

5.10 ABORIGINAL CULTURAL LANDSCAPE MAP 2005

The study area has been identified within the Hunter and Central Coast Aboriginal Cultural Landscapes Map 5 (Figure 5.5) as holding cultural value. This map was developed in consultation with the local Aboriginal Communities in 2005. The study site is located in an area identified by Aboriginal communities has holding both spiritual/ ceremonial value as well as physical evidence.

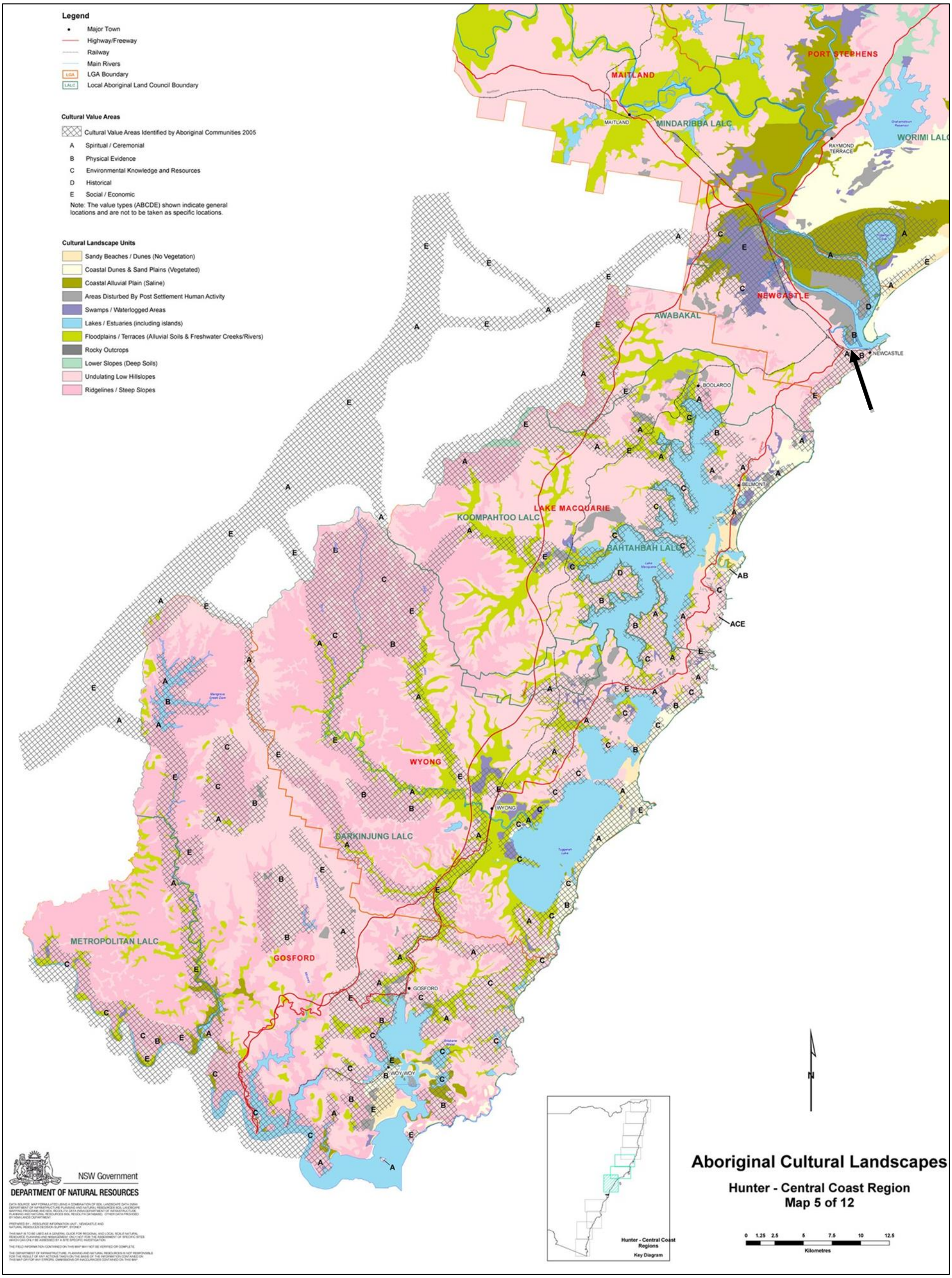


Figure 5.5 Aboriginal Cultural Landscapes within the Hunter and Central Coast Region.
Study area indicated by Black arrow. Department of Planning (2005).

5.11 LAND USE AND DISTURBANCE FACTORS

This section of the report provides an assessment of land use, the level of disturbance and the likely archaeological potential of the study area. The archaeological potential is based on the level of previous disturbance as well as the previously discussed predictive model for the region.

The Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales, Part 6 National Parks and Wildlife Act 1974, (DECCW 2010); defines disturbed lands as given below.

"Land is disturbed if it has been the subject of a human activity that has changed the land's surface, these being changes that remain clear and observable. Examples include ploughing, construction of rural infrastructure (such as dams and fences), construction of roads, trails and tracks (including fire trails and tracks and walking tracks), clearing vegetation, construction of buildings and the erection of other structures, construction or installation of utilities and other similar services (such as above or below ground electrical infrastructure, water or sewerage pipelines, stormwater drainage and other similar infrastructure and construction of earthworks)"

This definition is based on the types of disturbance as classified in The Australian Soil and Land Survey Field Handbook (CSIRO 2010). The following is a scale formulated by CSIRO (2010) of the levels of disturbances and their classification.

Minor Disturbance		Moderate Disturbance		Major Disturbance	
0	No effective disturbance; natural	**3**	Extensive clearing (eg: poisoning and ringbarking)	**6**	Cultivation; grain fed
1	No effective disturbance other than grazing by hoofed animals	**4**	Complete clearing; pasture native or improved, but never cultivated	**7**	Cultivation; irrigated, past or present
2	Limited clearing (eg: selected logging)	**5**	Complete clearing; pasture native or improved, cultivated at some stage	**8**	Highly disturbed (quarrying, road works, mining, landfill, urban)

The above scale is used in determining the level of disturbance of the study area and its impact on the potential archaeology which may be present.

5.11.1 Disturbance and Archaeological Potential

It is important to note that the following assessments describe the archaeological potential of the study area. It is acknowledged that if the study area has little or no archaeological potential, the study area may still have cultural significance to the Aboriginal community.

This study area occupies the entirety of the properties known as 42 Honeysuckle Drive, Newcastle, New South Wales and has undergone minor disturbance. An outline of the nature of this disturbance is given in section 5, however, large sections of land adjacent to the study area have been subject to land reclamation, dredging of the Hunter River channel and Cottage Creek, inundation from flooding, have resulted in some disturbance. Smaller sections of the study area have been subject to little or no

disturbance. It is unclear if these disturbance events have resulted in destruction of the natural soil profile or merely buried said profile.

Onsite inspections and research suggest the presence of some original soil profile being intact and parts of the study area have nil potential to contain *in situ* Aboriginal objects and/or areas of archaeological potential. Parts of the study area which have been subject to relatively minor disturbance and are representative of former costal strips not subject to regular tidal inundation are present in the western end of the study area. Some buried intact soil profiles may possibly have been part of a meandering and tidal-affected creek of the original watercourse channel and would have been possibly too wet to offer an attractive camping location to Aboriginal people in the past, when compared to more elevated and drier land situated upslope towards Hunter Street. Archaeological evidence may be present on this drier land.

Moderate - High Disturbance, Low-Moderate Archaeological Potential: Although the land is considered reclaimed, it also sits within what would have been an intertidal zone, therefore disturbance is high. However, the study area holds a registered site (Site Card Pending) which indicates artefacts are present within disturbed fills.

5.12 GEOTECHNICAL REPORT (DOUGLAS PARTNERS 2017)

Geotechnical investigations were undertaken by Douglas Partners 2017 on the 15th August 2017, with fieldworks taking place between the 15 -16 September 2017. The investigation comprised of the following;

- Seven cone penetration tests (CPTs 305,306,307,308,309A,310A and 311) and four piezocone penetration tests (CPTu 301A, 302, 302B and 304A). The tests were continued to depths ranging from 15m to 30m respectively;
- The CPTs were conducted using a purpose-built truck-mounted CPT rig. A 35m diameter instrumented cone and friction sleeve assemble was hydraulically trust into the soil at a rate of about 2cm/sec. Cone tip resistance, sleeve friction and inclination from vertical were recorded by a computer data acquisition system for subsequent plotting and analysis. The piezocone was also used to perform dissipation tests, consisting of halting the cone penetration within a suitable material, and monitoring the decrease in pore pressure with time;
- Upon completion of each test, the remnant hole was dipped to determine the depth to the water table;
- Four bores, Bores 201 to 204 were drilled to about 6.0m depth using a purpose built geotechnical drilling rig and where undertaken as part of the environmental investigation, in situ standard penetration tests were not carried out in the bores;
- Groundwater monitoring wells (piezometers) were installed Bores 201 to 203. A data logger was installed in Bore 202 to measure groundwater levels;
- The bores and CPTs were set out by a geotechnical engineer who logged the subsurface profile and also collected representative samples for strata identification;
- The surface level of the test locations was measured by a DP site engineer to approximately ±0.1m in accuracy, which is considered similar to the surface levels as shown on the site survey plan supplied by the client. Co-ordinates of the test locations were recorded using a hand held GPS which is considered to be accurate within 15m depending on satellite coverage (Figure 5.6)

The borehole investigation encountered a silty sand filling up to 3.7m depth overlaying a sand and clayey sand to 6.0m. This filling material consisted of large concrete like particles and varied in density. The investigations also established that the free groundwater ranged between 1.7 – 3.5m in depth.

The level of disturbance encountered corresponds with the reclamation works and as such it is predicted that there will be limited intact soils, however previous investigations of the area and presence of a surface find within the study area indicate that there is a potential for artefacts within a disturbed context to be present. All Aboriginal objects are protected under the National Parks and Wildlife Act 1974.

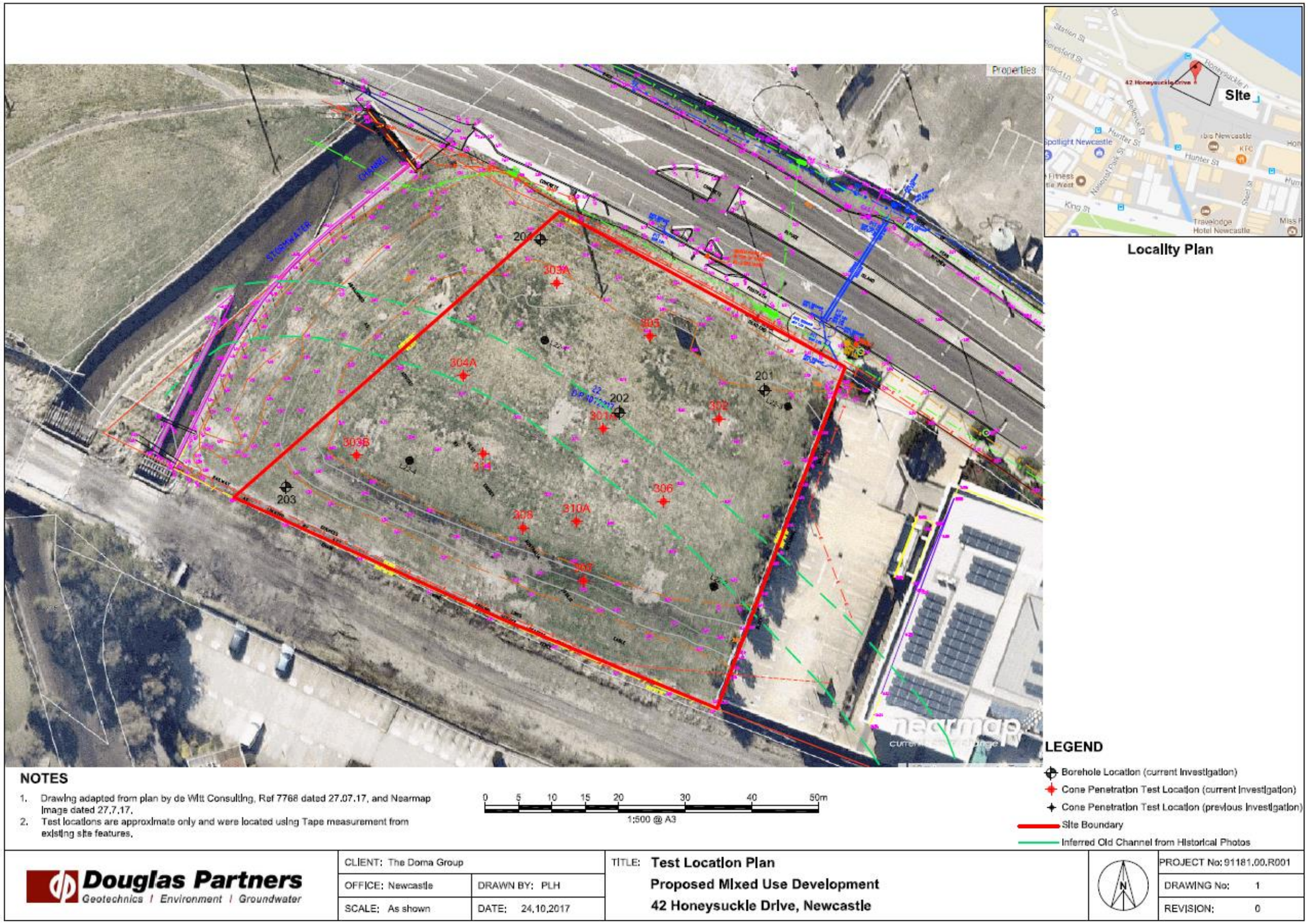


Figure 5.6 **Geotechnical Test Location Plan.**
Douglas Partners Pty Ltd (2017.)

6.0 ABORIGINAL CONSULTATION

This section documents the requirements of the Aboriginal consultation process that should be undertaken as part of any Aboriginal archaeological and cultural heritage assessment where an Aboriginal Heritage Impact Permit (AHIP) or test excavation is required. Section 4.1 outlines the guidelines for Aboriginal consultation issued by the DECCW. Section 4.2 documents the steps taken for this Aboriginal cultural assessment and the outcomes of the consultation. Further information, including copies of correspondence to and from registered parties is included in Appendix A.

6.1 OEH CONSULTATION REQUIREMENTS

Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 (DECCW 2010), referring to Part 6 Approvals under the NPW Act were released in April 2010. The responsibilities of the proponent when test excavation is to take place and/or permit under section 90 of the NPW Act are listed below.

http://www.environment.nsw.gov.au/resources/cultureheritage/commconsultation/09781ACHconsultreg.pdf

Stage 1 – Notification of project proposal and registration of interest

Stage 1 states that:

"4.1.2- Proponents are responsible for ascertaining, from reasonable sources of information, the names of Aboriginal people who may hold cultural knowledge relevant to determining the significance of Aboriginal *objects* and/or *places*. Reasonable sources of information could include (a) to (g) below. Proponents must compile a list of Aboriginal people who may have an interest for the proposed project area and hold knowledge relevant to determining the cultural significance of Aboriginal *objects* and/or *places* by writing to:

(a) the relevant DECCW (sic) EPRG regional office

(b) the relevant Local Aboriginal Land Council(s)

(c) the Registrar, *Aboriginal Land Rights Act 1983* for a list of Aboriginal owners

(d) the National Native Title Tribunal for a list of registered native title claimants, native title holders and registered Indigenous Land Use Agreements

(e) Native Title Services Corporation Limited (NTSCORP Limited)

(f) the relevant local council(s)

(g) the relevant catchment management authorities for contact details of any established Aboriginal reference group.

4.1.3- Proponents must write to the Aboriginal people whose names were obtained in step 4.1.2 and the relevant Local Aboriginal Land Council(s) to notify them of the proposed project. The proponent must also place a notice in the local newspaper circulating in the general location of the proposed project explaining the project and its exact location. The notification by letter and in the newspaper must include:

(a) the name and contact details of the proponent

(b) a brief overview of the proposed project that may be the subject of an application for an AHIP, including the location of the proposed project

(c) a statement that the purpose of community consultation with Aboriginal people is to assist the proposed applicant in the preparation of an application for an AHIP and to assist the Director General of DECCW in his or her consideration and determination of the application

(d) an invitation for Aboriginal people who hold cultural knowledge relevant to determining the significance of Aboriginal object(s) and/or place(s) in the area of the proposed project to register an interest in a process of community consultation with the proposed applicant regarding the proposed activity

(e) a closing date for the registration of interests.

4.1.4- There must be a minimum of 14 days from the date the letter was sent or notice published in the newspaper to register an interest. The time allowed to register an interest should reflect the project's size and complexity.

4.1.5- The proponent must advise Aboriginal people who are registering an interest that their details will be forwarded to DECCW and the Local Aboriginal Land Council (LALC) unless they specify that they do not want their details released.

4.1.6- The proponent must make a record of the names of each Aboriginal person who registered an interest and provide a copy of that record, along with a copy of the notification from 4.1.3 to the relevant DECCW EPRG regional office and LALC within 28 days from the closing date for registering an interest.

4.1.7- LALCs holding cultural knowledge relevant to determining the significance of Aboriginal objects and places in the proposed project area who wish to register an interest to be involved in consultation must register their interest as an Aboriginal organisation rather than as individuals.

4.1.8- Where an Aboriginal organisation representing Aboriginal people who hold cultural knowledge has registered an interest, a contact person for that organisation must be nominated. Aboriginal cultural knowledge holders who have registered an interest may indicate to the proponent they have appointed a representative to act on their behalf. Where this occurs, the registered Aboriginal party must provide written confirmation and contact details of those individuals to act on their behalf.

Stage 2 – Presentation of information about the proposed project

Stage 2 states that:

"4.2.1- The proponent must initiate arrangements for presenting the proposed project information to the registered Aboriginal parties (from Stage 1).

4.2.2- The presentation of proposed project information should provide the opportunity for:

(a) the proponent to present the proposal, outline project details relevant to the nature, scope, methodology and environmental and other impacts

(b) the proponent to outline the impact assessment process including the input points into the investigation and assessment activities
(c) the proponent to specify critical timelines and milestones for the completion of assessment activities and delivery of reports
(d) the proponent and registered Aboriginal parties to clearly define agreed roles, functions and responsibilities
(f) the registered Aboriginal parties to identify raise and discuss their cultural concerns, perspectives and assessment requirements (if any).

4.2.3- The proponent should record or document that the proposed project information has been presented. This record or documentation should include any agreed outcomes, and any contentious issues that may require further discussion to establish mutual resolution (where applicable). The proponent should provide a copy of this record or documentation to registered Aboriginal parties.

4.2.4- Depending on the nature, scale and complexity of the proponent's project, it may be reasonable and necessary for the proponent to:

(a) conduct additional project information sessions to ensure that all necessary information about the project is provided and enable registered Aboriginal parties to provide information about the cultural significance of Aboriginal object(s) and/or place(s) that may be present on the proposed project area
(b) create the opportunity for registered Aboriginal parties to visit the project site" (DECCW 2010).

Stage 3 – Drafting, review and finalisation of the Cultural Heritage Assessment Report

Stage 3 states that:

"4.3.1- The proponent must present and/or provide the proposed methodology(s) for the cultural heritage assessment to the registered Aboriginal parties.

4.3.2- The registered Aboriginal parties must be given the opportunity to review and provide feedback to the proponent within a minimum of 28 days of the proponent providing the methodology. The review should identify any protocols that the registered Aboriginal parties wish to be adopted into the information gathering process and assessment methodology and any matters such as issues/areas of cultural significance that might affect, inform or refine the assessment methodology. Comments should be provided in writing, or may be sought verbally by the proponent and accurately recorded.

4.3.3- As part of this consultation, the proponent must also seek cultural information from registered Aboriginal parties to identify:

(a) whether there are any Aboriginal objects of cultural value to Aboriginal people in the area of the proposed project
(b) whether there are any places of cultural value to Aboriginal people in the area of the proposed project (whether they are Aboriginal places declared under s.84 of the NPW Act or not). This will include places of social, spiritual and cultural value, historic places with cultural significance, and potential places/areas of historic, social, spiritual and/or cultural significance.

4.3.4- Some information obtained from registered Aboriginal parties may be sensitive or have restricted public access. The proponent must, in consultation with registered Aboriginal parties, develop and implement appropriate protocols for sourcing and holding cultural information. In some cases the sensitive information may be provided to the proponent by an individual and the proponent should not share that information with all registered Aboriginal parties or others without the express permission of the individual.

4.3.5- Information obtained in 4.3.4 is used to understand the context and values of Aboriginal object(s) and/or place(s) located on the proposed project site. This information must be integrated with the scientific (archaeological) assessment of significance. Together the context, values, and scientific assessment provide the basis for assessing Aboriginal heritage values and recommending management options.
The information collected by the proponent during the consultation process must be used only to inform decision making for any application for an AHIP, unless the registered Aboriginal parties agree otherwise.

4.3.6- The proponent must seek the views of registered Aboriginal parties on potential management options. Management options will include ways to avoid or mitigate harm and/or conserve known Aboriginal object(s) and/or place(s). Management options should consider how Aboriginal people can continue their association with identified Aboriginal heritage values.

4.3.7- The proponent must document all feedback received in Stage 3 from registered Aboriginal parties in the final cultural heritage assessment report. This must include copies of any submissions received and the proponents response to the issues raised. In some cases this may require an acknowledgment of sensitive information and a list of Aboriginal people who should be contacted for permission to receive further details" (DECCW 2010).

Stage 4 – Review of draft cultural heritage assessment report.

Stage 4 states that:

"4.4.1- The proponent must prepare a draft cultural heritage assessment report.

4.4.2- The proponent must provide a copy of the draft cultural heritage assessment report to registered Aboriginal parties for their review and comment.

4.4.3- The proponent must give registered Aboriginal parties a minimum of 28 days from sending the draft report to make submissions. The time allowed for comment on the draft report should reflect the project's size and complexity. Comments should be provided in writing or, where provided verbally, accurately recorded.

4.4.4- After considering the comments received on the draft report the proponent must finalise the report. The final report must include copies of any submissions received, including submissions on the proposed methodology and on the draft report. The final report must also include the proponent's response to each submission. The report must then be submitted to DECCW for consideration with the proponent's application for an AHIP.

4.4.5- The proponent must provide or make available copies of the final cultural heritage assessment report and the AHIP application to registered Aboriginal parties and the relevant LALC(s) (whether or not the LALC is registered in Stage 1). The report and application must be provided or made available within 14 days of the AHIP application being made" (DECCW 2010).

6.2 CONSULTATION SUMMARY

Consultation for this report has been undertaken in accordance with the Office of Environment and Heritage and National Parks and Wildlife Act 1974: Part 6; National Parks and Wildlife Act Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW 2010).

An Aboriginal Cultural Heritage Assessment is currently being prepared where full Aboriginal consultation as per the Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW 2010) is being undertaken and is within the second stage of consultation. All Registered Aboriginal Parties (RAPs) that have registered for this project have been consulted regarding the Preliminary Aboriginal Archaeological Assessment and have agreed to the recommendations on the basis that an Aboriginal Cultural Heritage Assessment is currently being prepared and a programme of test excavation.

All registered parties have been consulted regarding the recommendations of this document and way forward with regards to further investigations and the test excavation programme.

The following Aboriginal organisations/ Individuals registered an expression of interest to be involved with the project;

Aboriginal Organisation/Individuals	Contact
Indigenous Learning	Craig Archibald
Gidawaa Walang Cultural Heritage Consultancy	Ann Hickey
Widescope Group	Steven Hickey
Cacatua General Services	George Sampson
Lower Hunter Aboriginal Incorporated	David Ahoy
Didge Ngunawal Clan	Paul Boyd
Awabakal LALC	Pete Townsend
Guringai Tribal Link Aboriginal Corp.	Tracey Howie
Awabakal Traditional Owners Aboriginal Corp.	Kerrie Brauer
Awabakal Descendants Traditional Owners	Pete Leven
Amanda Hickey Cultural Services	Amanda Hickey
A1 Indigenous Services	Carolyn Hickey
JTM Traffic Management	Norm Archibald
AGA Services	Ashley Sampson
Worimi TOC	Candy Towers

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7.0 SITE SURVEY

A site inspection was undertaken on 16/10/17 Archaeologist Benjamin Streat of SAS conducted this inspection. This site inspection was carried out on foot and photographs were taken. The site inspection revealed that the study area which occupies one landform unit, Newcastle Lowlands, gentle undulating slope, Hunter River Plain, was heavily grassed and limited soil surface was visible one Aboriginal artefact was located.

Figure 7.1 **Location of recently identified artefact.**
Artefact indicated by yellow star. Streat (2017).

Figure 7.2 **Artefact located as result of site inspection.**
Streat (2017).

Figure 7.3 **Close up of artefact located as a result of site inspection.**
Streat (2017).

8.0 SIGNIFICANCE ASSESSMENT

The processes of assessing significance for items of cultural heritage value are set out in *The Australian ICOMOS Charter for the Conservation of Places of Cultural Significance: the Burra Charter* (amended 1999) formulated in 1979 and based largely on the Venice Charter of International Heritage established in 1966. Archaeological sites may be significant according to four criteria, including scientific or archaeological significance, cultural significance to Aboriginal people, representative significance which is the degree to which a site is representative of archaeological and/or cultural type, and value as an educational resource. In New South Wales the nature of significance relates to the scientific, cultural, representative or educational criteria and sites are also assessed on whether they exhibit historic or cultural connections.

8.1 ARCHAEOLOGICAL SIGNIFICANCE

8.1.1 Educational Significance

The educational value of any given location will depend on the importance of any archaeological material located, on its rarity, quality and the contribution this material can have on any educational process (Australia ICOMOS, 1999 p. 11).

No educational significance can as yet be assigned to the study area. However, Aboriginal archaeological deposits and/or objects have a low - moderate potential of being located.

8.1.2 Scientific Significance

The scientific value of any given location will depend on the importance of the data that can be obtained from any archaeological material located, on its rarity, quality and on the degree to which this may contribute further substantial information to a scientific research process. (Australia ICOMOS, 1999 p.11).

No scientific significance can as yet be assigned to the study area. However, Aboriginal archaeological deposits and/or objects have a low- moderate potential of being located.

8.1.3 Representative Significance

The representative value of any given location will depend on rarity and quality of any archaeological material located and on the degree to which this representativeness may contribute further substantial information to an educational or scientific research process. (Australia ICOMOS, 1999 p.11).

No representative significance can as yet be assigned to the study area. However, Aboriginal archaeological deposits and/or objects have a low- moderate potential of being located.

8.2 SOCIAL AND CULTURAL SIGNIFICANCE

As defined in the 'Burra Charter' (ICOMOS, 1999) cultural significance is broken into three parts: aesthetic, historic and scientific value for past, present or future generations. Cultural significance is a concept which assists in estimating the value of any given place. Places that are likely to be of significance are those which can contain information which may assist with the understanding of the past or enrich the present, and which will

be of value to future generations. The meaning of these terms in the context of cultural significance is outlined below. It should be noted that they are not mutually exclusive, (Australia ICOMOS, 1999 p.12).

8.2.1 Historic Significance

A place may have historic value because it has influenced, or has been influenced by, an historic figure, event, phase or activity. It may also have historic value as the site of an important event. For any given place the significance will be greater where evidence of the association or event survives in situ, or where the settings are substantially intact, than where it has been changed or evidence does not survive. However, some events or associations may be so important that the place retains significance regardless of subsequent treatment. (Australia ICOMOS, 1999 p.11).

No specific historic significance has yet been assigned by registered Aboriginal parties. Consultation still in progress.

8.2.2 Scientific Significance

The scientific value of any given location will depend on the importance of the data that can be obtained from any archaeological material located, on its rarity, quality and on the degree to which this may contribute further substantial information to a scientific research process (Australia ICOMOS, 1999 p.11).

No specific scientific significance has yet been assigned by registered Aboriginal parties. Consultation still in progress.

8.2.3 Aesthetic Significance

Aesthetic value includes aspects of sensory perception for which criteria can and should be stated. Such criteria may include consideration of the form, scale, colour, texture and material of the fabric; the smells and sounds associated with the place and its use (Australia ICOMOS, 1999 p.11).

No specific Aesthetic significance has yet been assigned by registered Aboriginal parties. Consultation still in progress.

9.0 PROPOSED ACTIVITY

This section outlined the proposed activity including the staging and timeframes a long with the potential harm of the proposed activity on Aboriginal objects and or declared Aboriginal places, assessing both the direct and indirect result of the activity on any cultural heritage values associated with the study area.

It also aims to outline the justification for harm with the intention of avoiding and minimising harm where possible.

9.1 DESCRIPTION OF PROPOSED ACTIVITY

The development proposed for the site 42 Honeysuckle Drive, Newcastle is a nine-storey mixed hotel, residential and commercial building at ground level – no basement is proposed. The footprint of the development will cover almost the entire allotment of approximately 3728 square metres. Excavation will be required for several elements across the site footprint: installation of services, lift pits, stairwells, fire tanks, concrete piers, re-use tanks, water quality devices and deep root planting zones (Figure 9.1).

Deep piling excavation for approximately 304 piers at a depth of 8.0 metres will be conducted for 85 footings, 4 lift core bases, and 3 stair core bases. A further 20 piers at a depth of 4.0 metres are required for 2 below ground fire tanks. The southwest subsurface fire tank needs a concrete casing approximately 10.0 metres long x 3.0 metres wide and excavated at a depth of 4.0 metres. The concrete casing for the northern subsurface fire tank will be approximately 5.0 metres square and similarly excavated to a depth of 4.0 metres (see Figure 9.1).

Further excavations are required for circular concrete cases for 2 water quality devices, 1 approximately 2.4 metres diameter, the other 1.6 metres diameter and both 2.0 metres deep. Additional excavation is needed for concrete cases for a re-use tank, ca. 4.4 metres long x 3.0 metres wide x 1.5 metres deep and a re-use tank outlet pit, ca. 0.9 metres square x 0.9 metres deep. The water devices and re-use tank facilities are all located to the northeast of the development. A concrete casing for a pump out pit will be excavated ca. 2.4 meters square x 1.5 metres deep located approximately in the central area of the development. Finally, concrete caps for all the piers of the footings, lift bases and stair bases will be excavated to a depth of 0.6 metres (see table 9.1**Error! Reference source not found.** below for a breakdown of proposed development excavations).

At ground level, the building does not cover the entire allotment and the remaining curtilage will be used as outdoor dining in the forecourt with landscaping at the entrance and along the eastern and southern carpark facades (Figure 9.3).

Development plans are included below for clarification (Figure 9.1-9.5)

At present no construction plans have been provided therefore the impact of the development cannot be fully assessed

Table 9.1 Proposed scope of development excavations

Item Details	Description	Number	Excavation Depth
Concrete Piles	Piles for 85 footings, 4 lift core bases, 3 stair core bases – 0.6 m dia.	304	8.0 m
	Piles for southwest subterranean fire tank – 0.6 m dia.	14	4.0 m
	Piles for northern subterranean fire tank – 0.6 m dia.	6	4.0 m
Subterranean Fire Tanks	Southwest fire tank concrete casing – 10.0 m x 3.0 m	1	4.0 m
	Northern fire tank concrete casing - ca. 5.0 m square	1	4.0 m
Pile Caps - Footings	Triangular Caps – 2.8 m x 2.8 m – Each footing cap covers 3 concrete. piles	82 (total of 246 concrete piles covered)	0.6 m
	Rectangular Caps – 3.6 m x 2.6 m – Each footing cap covers 4 concrete piles	3 (total of 12 concrete piles covered)	0.6 m
Pile Caps – Lift Core Bases	Northwest lift pile cap – 6.6 m x 3.6 m	1	0.6 m
	North central (west) lift pile cap – 6.0 m x 3.6 m	1	0.6 m
	North central (east) lift pile cap – 3.6 m square	1	0.6 m
	Northeast lift pile cap – 6.5 m x 3.6 m	1	0.6 m
Pile Caps – Stair Core Bases	Southwest stair pile cap – 5.3 m x 3.6 m	1	0.6 m
	Southern stair pile cap – 6.6 m x 3.6 m	1	0.6 m
	Northwest stair pile cap – 5.3 m x 3.6 m	1	0.6 m
Water Quality Devices	Northeast water device – 2.4 m dia.	1	2.0 m
	Water device directly south from above – 1.6 m dia.	1	2.0 m
Re-Use Tanks	Northeast re-use tank – 4.4 m x 3.0 m	1	1.5 m
	Re-use tank outlet pit directly north from above – ca. 0.9 m square	1	0.9 m
Pump Out Pit	Central site area – ca. 2.4 m square	1	1.5 m

9.2 POTENTIAL HARM TO ABORIGINAL OBJECTS AND CULTURAL HERITAGE

The proposed development activity will disturb the ground surface and may disturb Aboriginal objects and areas of cultural significance. The study area has the potential to contain moderate -high significant Aboriginal archaeological and cultural objects and/or deposits which would be subject to disturbance from the development and proposed basement.

9.3 ASSESSING HARM

The proposed development will harm objects and/or deposits of Aboriginal and archaeological significance. Test excavation has been proposed under the Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales, Part 6 National Parks and Wildlife Act 1974, (DECCW 2010) to assess the level of disturbance of the site and the potential harm that may be the result of the proposed activity on the current registered site as well as any potential Aboriginal objects and/or deposits.

9.4 AVOIDING AND MINIMISING HARM TO ABORIGINAL OBJECTS

The proposed development will harm objects and/or deposits of Aboriginal and archaeological significance. Test excavation has been proposed under the Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales, Part 6 National Parks and Wildlife Act 1974, (DECCW 2010) to assess the level of disturbance of the site and the potential harm that may be the result of the proposed activity on the current registered site as well as any potential Aboriginal objects and/or deposits. The results of said excavation will assist in minimising harm to Aboriginal objects and/or places, if present.

9.5 JUSTIFICATION OF HARM TO ABORIGINAL OBJECTS

This cannot be addressed at this point in time. Test excavation has been proposed to assess the level of disturbance and whether Aboriginal objects and/or places are present and harm to the registered site within the study area (Site Card pending).

9.6 ECOLOGICALLY SUSTAINABLE DEVELOPMENT AND INTERGENERATIONAL EQUITY

The ability of any development to be completely ecologically sustainable will be limited by definition. However, the proponents of this development appear to have made significant efforts to meet the needs of the current generation without compromising the ability of future generations to meet their own needs. This has been accomplished by proposing a plan on a manageable and affordable scale while still protecting and conserving the archaeological resources. This is being accomplished by a program of subsurface test excavation with the possibility of further salvage excavation if needed as well as extensive consultation with the relevant Aboriginal community.

Inter- generational equity refers to the equitable sharing of resources between current and future generations. The planet's current generation should ensure that future generations have the same opportunities and resources available. This idea is being

accomplished by designing a building with as little disturbance to the ground surface as possible and as such any archaeological or cultural material that may be present in these areas either identified of unidentified will be left intact and persevered for future generations.

9.7 STATE SIGNFICANT DEVELOPMENT CERTIFICATION

The development may take place within the specifications of Development Consent (Section 89E Environmental Planning and Assessment Act 1999), State Significant Development No. 8440. This involves addressing the Secretary's Environmental Assessment Requirements (SEARs) as per Section 78A(8A) of the *Environmental Planning and Assessment Act 1979* and Schedule 2 of the Environmental Planning and Assessment Regulation 2000.

An Aboriginal Cultural Heritage Assessment is currently being prepared as part of the Archaeological Impact Assessment in response to requirement 12 of the SEARs SSD #8440. The status of said document is in Stage 2 of the Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW 2010). As further investigation has been proposed the timeframes for the Aboriginal Cultural Heritage Assessment have been extended to account for a program of test excavation. The results of which will be detailed within the final Aboriginal Cultural Heritage Assessment.

An Aboriginal Cultural Heritage Assessment is currently being prepared where full Aboriginal consultation as per the Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW 2010) is being undertaken and is within the second stage of consultation. All Registered Aboriginal Parties (RAPs) that have registered for this project have been informed of the Preliminary Aboriginal Archaeological Assessment and have indicated support for the recommendations on the basis that an Aboriginal Cultural Heritage Assessment is currently being prepared and a programme of test excavation will be undertaken.

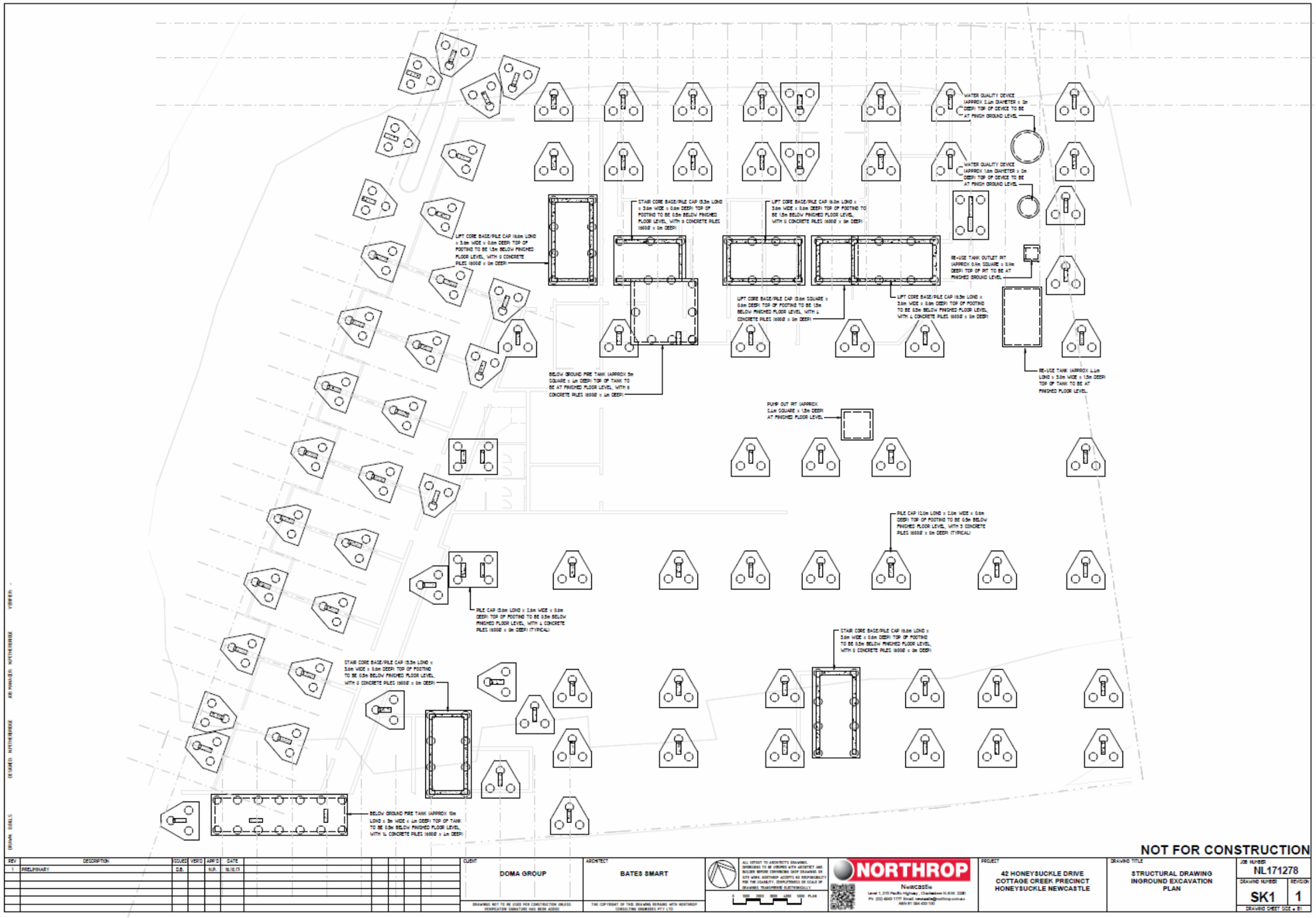


Figure 9.1 Structural drawing of below ground excavation plan for the development.
Bates Smart Inground Excavation Plan No. SK1 (October 2017).

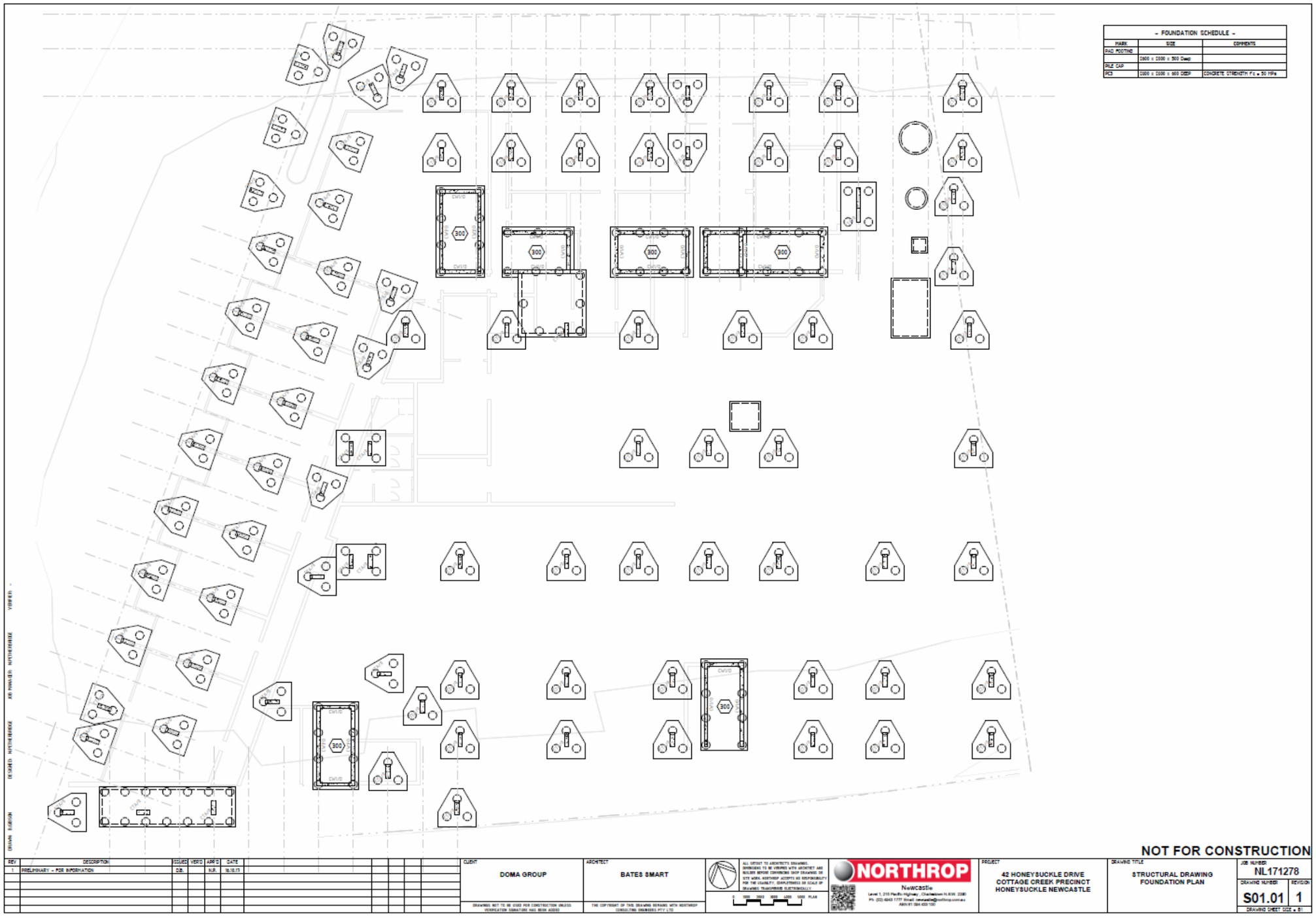


Figure 9.2 **Structural drawing of foundation plan for the development.**
Bates Smart Foundation Plan No. S01.01 (October 2017).

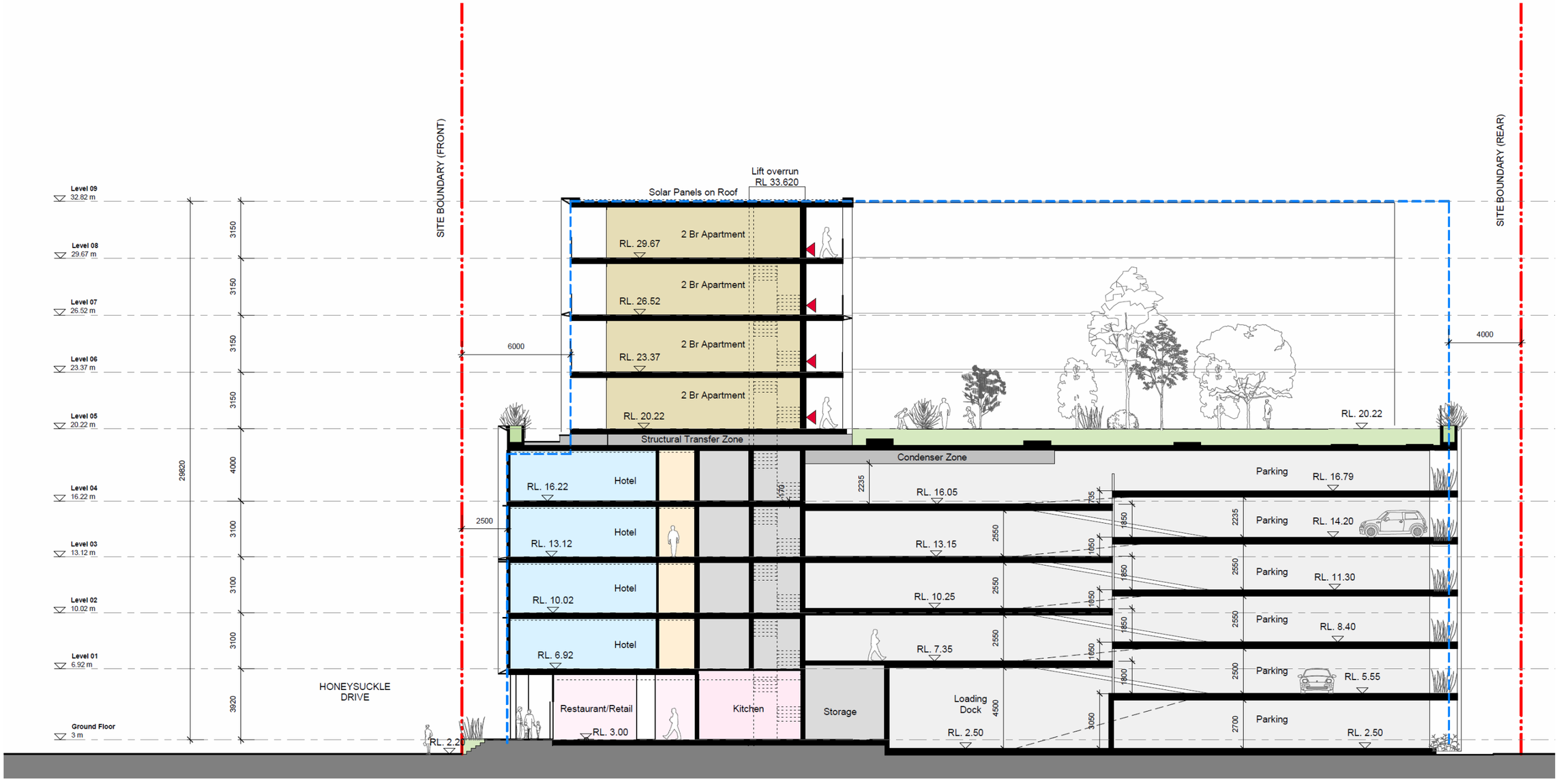


Figure 9.3 **Excerpt of Current North-South Section plan for the development.**
Bates Smart Section North-South Plan No. A11.002 (September 2017).

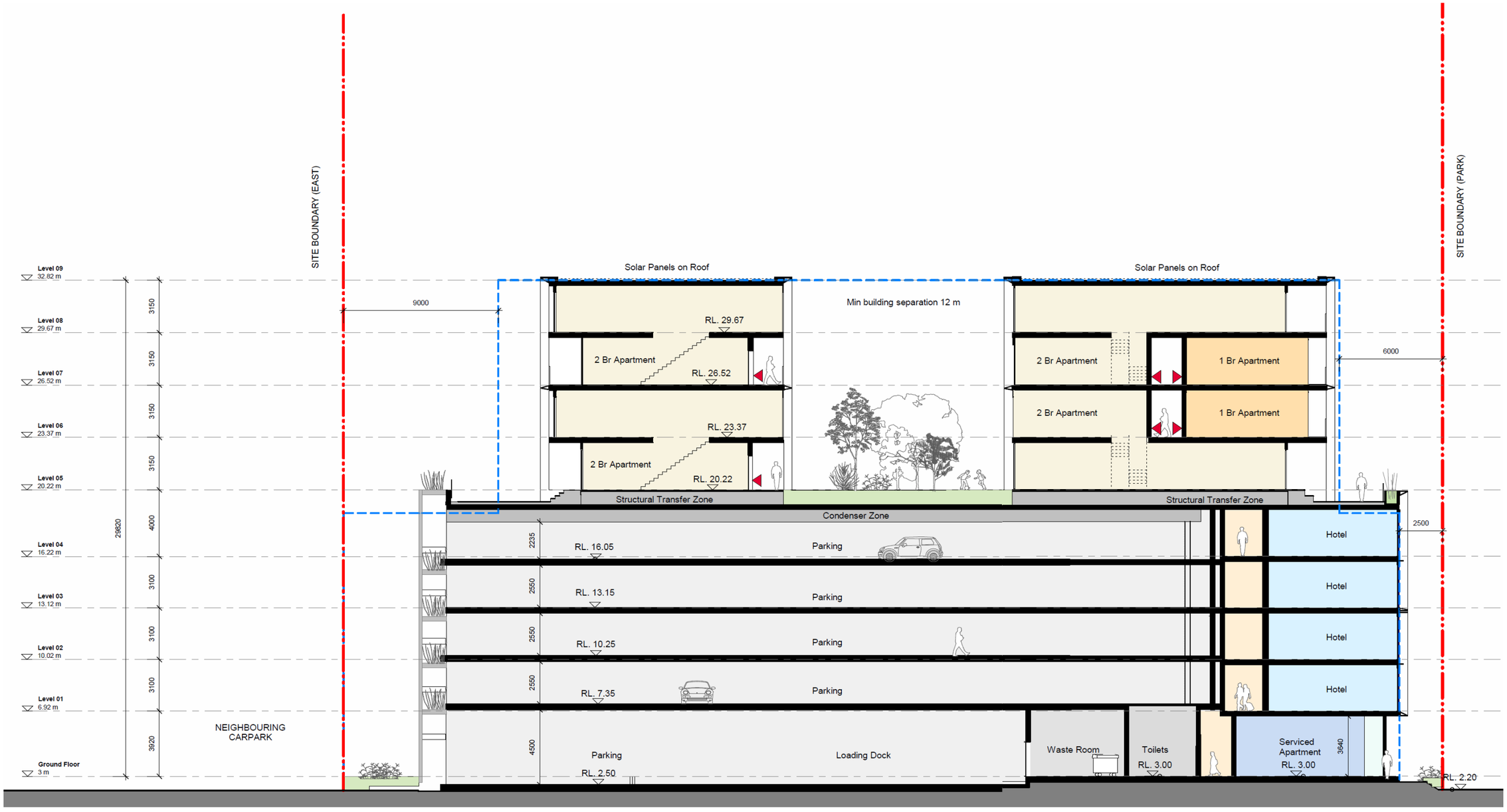
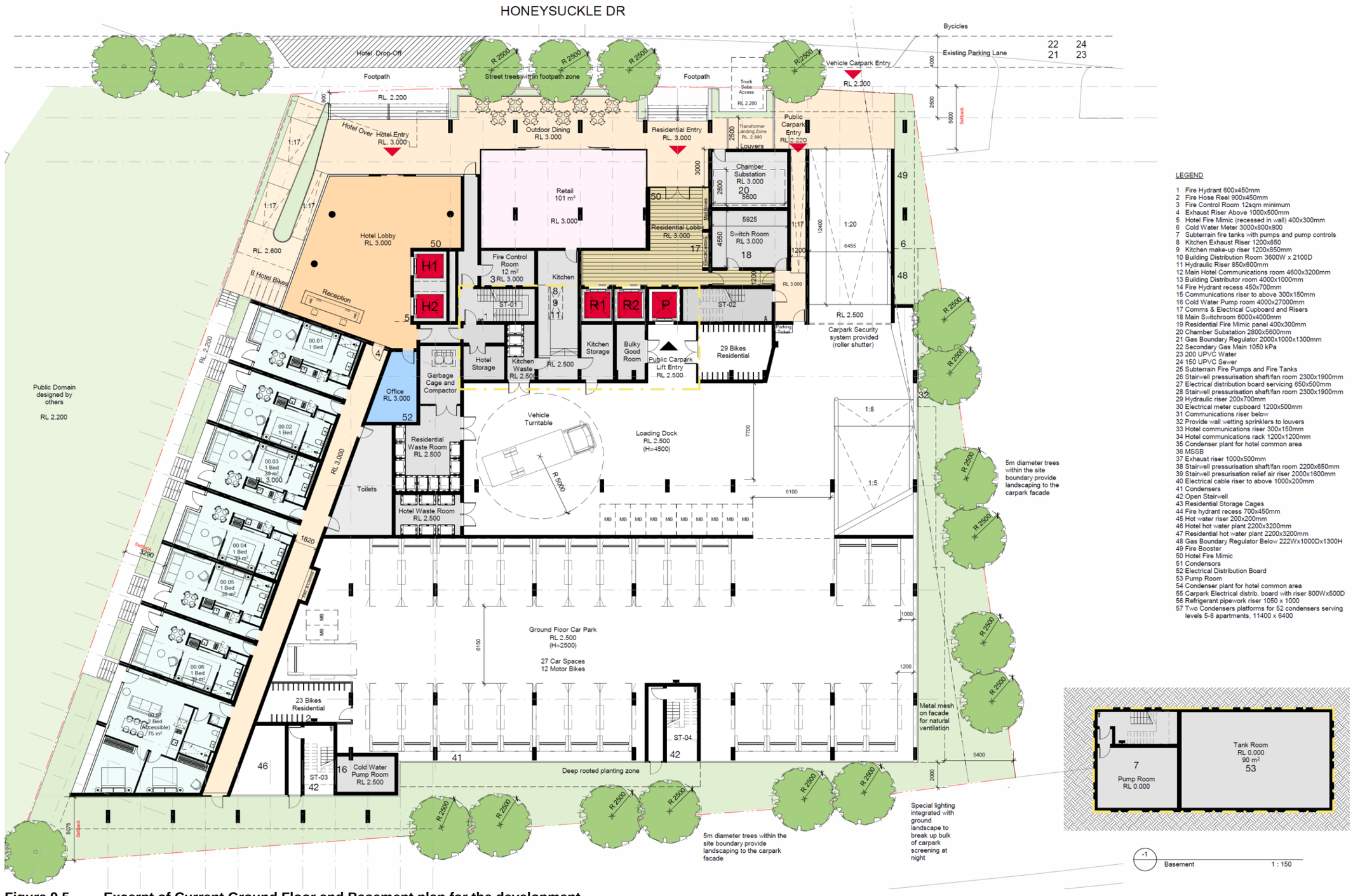


Figure 9.4 **Excerpt of Current East-West Section plan for the development.**
Bates Smart Section East-West Plan No. A11.001 (September 2017).



LEGEND

1 Fire Hydrant 600x450mm
2 Fire Hose Reel 900x450mm
3 Fire Control Room 12sqm minimum
4 Exhaust Riser Above 1000x500mm
5 Hotel Fire Mimic (recessed in wall) 400x300mm
6 Cold Water Meter 3000x800x800
7 Subterrain fire tanks with pumps and pump controls
8 Kitchen Exhaust Riser 1200x850
9 Kitchen make-up riser 1200x850mm
10 Building Distribution Room 3600W x 2100D
11 Hydraulic Riser 850x600mm
12 Main Hotel Communications room 4600x3200mm
13 Building Distributor room 4000x1000mm
14 Fire Hydrant recess 450x700mm
15 Communications riser to above 300x150mm
16 Cold Water Pump room 4000x27000mm
17 Comms & Electrical Cupboard and Risers
18 Main Switchroom 6000x4000mm
19 Residential Fire Mimic panel 400x300mm
20 Chamber Substation 2800x5600mm
21 Gas Boundary Regulator 2000x1000x1300mm
22 Secondary Gas Main 1050 kPa
23 200 UPVC Water
24 150 UPVC Sewer
25 Subterrain Fire Pumps and Fire Tanks
26 Stairwell pressurisation shaft/fan room 2300x1900mm
27 Electrical distribution board servicing 650x500mm
28 Stairwell pressurisation shaft/fan room 2300x1900mm
29 Hydraulic riser 200x700mm
30 Electrical meter cupboard 1200x500mm
31 Communications riser below
32 Provide wall wetting sprinklers to louvers
33 Hotel communications riser 300x150mm
34 Hotel communications rack 1200x1200mm
35 Condenser plant for hotel common area
36 MSSB
37 Exhaust riser 1000x500mm
38 Stairwell pressurisation shaft/fan room 2200x650mm
39 Stairwell presurisation relief air riser 2000x1600mm
40 Electrical cable riser to above 1000x200mm
41 Condensers
42 Open Stairwell
43 Residential Storage Cages
44 Fire hydrant recess 700x450mm
45 Hot water riser 200x200mm
46 Hotel hot water plant 2200x3200mm
47 Residential hot water plant 2200x3200mm
48 Gas Boundary Regulator Below 222Wx1000Dx1300H
49 Fire Booster
50 Hotel Fire Mimic
51 Condensors
52 Electrical Distribution Board
53 Pump Room
54 Condenser plant for hotel common area
55 Carpark Electrical distrib. board with riser 800Wx500D
56 Refrigerant pipework riser 1050 x 1000
57 Two Condensers platforms for 52 condensers serving levels 5-8 apartments, 11400 x 6400

Figure 9.5 **Excerpt of Current Ground Floor and Basement plan for the development.**
Bates Smart Section East-West Plan No. A03.101 (September 2017).

10.0 MANAGEMENT AND MITIGATION

The management recommendations presented in the following section of the report take into account the following:

- Legislation outlined in this report which protects Aboriginal cultural and archaeological objects and places in New South Wales;
- Research and assessment carried out by the author/s of this report;
- Results of previous archaeological assessment and excavation in the vicinity of the study area;
- The concerns and views of the Aboriginal stakeholders listed in this report;
- The impact of the proposed development on any Aboriginal archaeological material that may be present;
- The requirements of the consent authority (Newcastle City Council).

10.1 CARE AND CONTROL

If any archaeological material is recovered it shall be subject to a care and control agreement established after the nature and significance of the archaeological or cultural material is understood as per requirement 26 of the Code of Conduct for the investigation of Archaeological objects in NSW.

10.2 RECOMMENDATIONS

A background analysis of the archaeological context revealed that the registered Aboriginal archaeological sites immediately adjacent to the study area and one Aboriginal artefact has been recorded as part of this study (Site Card pending). Therefore, the study area has the potential to hold Aboriginal archaeological and cultural objects and/or deposits. In light of this, and in the context of the information provided about the proposed development, the following has been recommended to manage the archaeological and cultural values of the study area.

The recommendations have been formulated after consultation with both, the proponents and the OEH, and after reviewing the development application plans (Figure 9.1-9.5).

It is recommended that:

- Further investigation in the form of a full Aboriginal Cultural Heritage Assessment and Aboriginal Archaeological Assessment be undertaken in accordance with the Guide to investigating, assessing and reporting on Aboriginal cultural heritage in New South Wales, Part 6 National Parks and Wildlife Act 1974 (DECCW 2010); This process is in train and has reached Stage 2 of the Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW 2010).
- Consultation with the Registered Aboriginal Parties (RAPs) should continue, as per the requirements detailed in the Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW, 2010).
- A systematic subsurface disbursed test excavation programme should be carried out under the Code of Practice for Archaeological Investigation of

Aboriginal Objects in New South Wales. This is to take place prior to the development activity proceeding (Figure 9.1-9.5). The authors and contributors to this report have no objection for this recommendation being undertaken as conditions of any development approval process.

- In the event, archaeological test excavations reveal Aboriginal archaeological objects or deposits, the following is recommended. Once the nature and extent of the archaeological site has been established through test excavation, the data will be analysed and synthesised into a test excavation report. Dependent on the status of the project, an Aboriginal Heritage Impact Permit (AHIP) and/or Aboriginal Cultural Heritage Management Plan (ACHMP), is to be produced in order to allow the development to proceed. An ACHMP will need to be subject to review by the Department of Planning (DoPE), with input from the OEH, but no formal AHIP will need to be in place should the development achieve State Significant Development status. Otherwise the formal NSW legislative requirements under the National Parks and Wildlife Act will need to be observed.
- An analysis of artefacts retrieved should be conducted in a frame work to allow for comparison with previous relevant results.
- After this, and before any ground disturbance takes place as part of the construction, all development staff, contractors and workers should be briefed prior to works commencing on site, as to the status of the area and their responsibilities regarding any Indigenous archaeological deposits and/or objects that may be located during the following development.
- An Aboriginal Heritage Information Management System (AHIMS) site card impact form will be submitted with this report to detail and understand the changes in the study area.

Should any human remains be located at any stage during the development;

- All excavation in the immediate vicinity of any objects of deposits shall cease immediately;
- The NSW police and OEH's Enviroline be informed as soon as possible:
- Once it has been established that the human remains are Aboriginal ancestral remains, OEH and the relevant Registered Aboriginal Parties will identify the appropriate course of action.

GLOSSARY

Term	Definition
Aboriginal/ Aborigine	These terms apply to indigenous Australians throughout time.
Aboriginal Object	A term now used (formerly 'relic') within the NSW *National Parks and Wildlife Act, 1974* to refer to "…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."
AHIP	Aboriginal Heritage Impact Permit, issued under Part 6 of the National Parks and Wildlife Act 1974, where harm to an Aboriginal object or Aboriginal place cannot be avoided.
Alluvial	Describes material deposited by, or in transit in flowering water.
AMAC	Archaeological Management and Consulting Group.
Artefact	Any object, usually portable, that has been made or shaped by human hand.
Assemblage	A collection of artefacts found in close proximity with one another often excavated together.
Axe grinding Grooves	Areas on a stone surface where other items such as stone tools, wood or bones have been sharpened.
Basalt	A dark coloured, basic volcanic rock.
Bioturbation	Reworking of sediments through the action of ground dwelling life forms. This can also include soil cracking and root activity.
Broken Flake	A flake fragment which displays only part of the diagnostic features of a complete flake.
BP	Before present (AD1950).
Burial	Sites containing the physical remains of deceased Aboriginal people.
Ceremonial Sites	Places or objects of ceremonial, religious or ritual significance to Aboriginal people.

Term	Definition
Chert	A herd siliceous rock suitable for flaking into tools.
DCP	Development Control Plan.
DP	Deposited Plan.
Erosion	Process where particles are detached from rock or soil and transported away principally via water, wind and ice.
Flake	A piece of stone, detached by striking a core with another stone.
Flaking/Knapping	The process of making stone tools by detaching flakes from a piece of stone.
Friable	Easily crumbled or cultivated.
Hard setting	Soil which is compact and hard. It appears to have a pedal structure when dried out.
Heritage Division	Formerly known as the Heritage Branch
Holocene	The period of time since the last retreat of the polar icecaps, commencing approximately 10,000 – 110,000
Intensification	Increased social and economic complexity.
Landscape Unit	An area of land where topography and soils have distinct characteristics, are recognisable, describable by concise statements and capable of being represented on a map.
Laminite	A thinly bedded, fine grained sedimentary rock.
LEP	Local Environment Plan.
LGA	Local Government Area.
Lithics	A term used to describe stone and stone artefacts.
Loam	A medium textured soil of approximate composition of 10-25% clay, 25-50% silt and 2% sand.
Loose	A soil which is not cohesive.
Matrix	Finer grained fraction, typically a cementing agent within soil or rock in which larger particles are embedded.

Term	Definition
Midden	Aboriginal occupation site consisting chiefly of shells, which can also include bone, stone artefacts and other debris.
NPW Act	National Parks and Wildlife Act 1974
OEH	NSW Office of Environment and Heritage (formerly known as the DECCW)
Open Campsite	A surface accumulation of stone artefacts and/ or other artefacts exposed on the ground surface.
Potential Archaeological Deposit (PAD)	An area where no surface archaeological remains are visible but where it has been assessed that there is some potential for sub-surface archaeological remains to be present.
Ped	An individual, natural soil aggregate.
Pedal	Describes a soil in which some or all of the soil material occurs in the form of peds in a moist state.
Plastic	Describes soil material which is in a condition which allows it to undergo permanent deformation without appreciable volume change or elastic rebound and without rupture.
Pleistocene	The epoch of geological time starting 1.8 million years ago.
Quartz	Common mineral with naturally sharp edges and poor fracturing properties. Colour ranging from clear, to milky white and pink.
Quartzite	Homogenous medium to coarse grained metamorphosed sandstone.
Rock Painting	Encompassing drawing, paintings or stencils that have been placed on a rock surface usually within a rock shelter.
Rock Engraving	Pictures which have been carved, pecked or abraded into a rock surface, usually sandstone and predominantly open, flat surfaces.
Sandstone	A detrital sedimentary rock with predominantly sand sized particles.
Scarred/ Carved Tree	A tree from which bark has been deliberately removed.

Term	Definition
Sclerophll	Denoting the presence of hard stiff leaves, typically used to classify forest and indicative of drier conditions.
Sedimentation	Deposition of sediment typically by water.
Silcrete	A sedimentary rock comprising of quartz grains in a matrix of fine grained – amorphous silica.
Silt	Fine soil particles in size ranges of 0.02 – 0.002mm.
Slope	A landform element inclined from the horizontal at an angle measured in degrees or as a percentage.
SHI	State Heritage Inventory
SHR	State Heritage Register
Subsoil	Subsurface material comprising the B and C horizons of soils with distinct profiles.
Stone Resource Site	A geological feature in the landscape from which raw material for the manufacture of stone tools was obtained.
Texture	The coarseness or fineness of a soil as measured by the behaviour of a moist ball of soil when pressed between the thumb and forefinger.
Topsoil	A part of the soil profile, typically the A1 Horizon, containing material which is usually darker, more fertile and better structured than the underlying layers.
Weathering	The physical and chemical disintegration, alteration and decomposition of rocks and minerals at or near the earth's surface by atmospheric and biological agents.

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APPENDICES

APPENDIX ONE SECRETARY'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS (2/06/17) FOR SSD# 8440

Secretary's Environmental Assessment Requirements

Section 78A(8A) of the *Environmental Planning and Assessment Act*
Schedule 2 of the Environmental Planning and Assessment Regulation 2000

Application Number	SSD 8440
Proposal Name	Mixed use development including commercial / retail uses, residential apartments and hotel accommodation
Location	42 Honeysuckle Drive, Newcastle (Lot 22 DP 1072217)
Applicant	Doma Holdings (Honeysuckle) Pty Ltd
Date of Issue	2 June 2017
General Requirements	The Environmental Impact Statement (EIS) must meet the minimum form and content requirements in clauses 6 and 7 of Schedule 2 the *Environmental Planning and Assessment Regulation 2000*. Notwithstanding the key issues specified below, the EIS must include an environmental risk assessment to identify the potential environmental impacts associated with the development. Where relevant, the assessment of the key issues below, and any other significant issues identified in the risk assessment, must include: • adequate baseline data; • consideration of potential cumulative impacts due to other development in the vicinity; and • measures to avoid, minimise and if necessary, offset the predicted impacts, including detailed contingency plans for managing any significant risks to the environment. The EIS must be accompanied by a report from a qualified quantity surveyor providing: • a detailed calculation of the capital investment value (CIV) (as defined in clause 3 of the *EP&A Regulation 2000*) of the proposal, including details of all assumptions and components from which the CIV calculation is derived; • a detailed cost report prepared in accordance with Newcastle Section 94A Development Contributions Plan 2009; • an estimate of the jobs that will be created by the future development during the construction and operational phases of the development; and • certification that the information provided is accurate at the date of preparation.
Key issues	The EIS must address the following specific matters: **1. Statutory and Strategic Context** Address the statutory provisions applying to the development contained in all relevant environmental planning instruments, including: • State Environmental Planning Policy (State & Regional Development) 2011; • State Environmental Planning Policy 55 – Remediation of Land; • State Environmental Planning Policy 65 – Design Quality of Residential Flat Development & Accompanying Apartment Design Guide; • State Environmental Planning Policy (Building Sustainability Index BASIX) 2004;

	• State Environmental Planning Policy (Urban Renewal) 2010; • Threatened Species Conservation Act 1995 (TSC Act); and • Newcastle Local Environmental Plan (LEP) 2012. Address the relevant planning provisions, goals and strategic planning objectives in the following: • NSW 2021 (State Plan); • Hunter Regional Plan 2036; • Newcastle Urban Renewal Strategy 2014; • Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW (DECCW, 2011); • Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010; • Guide to Traffic Generating Developments (RMS, 2002); • Austroads Guide to Traffic Management Part 12: Traffic Impacts of Development; • Interim Construction Noise Guidelines (DECCW, 2009); • Newcastle Development Control Plan 2012; • Newcastle Section 94A Development Contributions Plan 2009; • Port of Newcastle Port Development Plan (PDP) 2015; and • Aquifer Interference Policy (2012). **2. Land Use** The EIS shall: • address the relationship between the proposed residential and hotel land uses; and • provide fit-out and operational details of the hotel, if proposed, including a preliminary operational management plan. **3. Built Form and Urban Design** • The proposal must be informed by a design excellence strategy, prepared in consultation with the Office of the Government Architect, which may require a design excellence process in accordance with the *Director General's Design Excellence Guidelines*. • Address design quality, with specific consideration of bulk and scale, overall site layout, axis, vistas and connectivity, open spaces and edges, ground floor activation, primary elements, gateways, façade, rooftop, mechanical plant, massing, setbacks, building articulation, materials and choice of colours. • Demonstrate that the proposal addresses and provides amenity to the light rail corridor and existing developments to the south and the proposed pedestrian/cycle link to run adjacent to the Cottage Creek drainage channel. • Provide design approaches to mitigate any potential flooding. **4. Residential Amenity** • Provide information detailing the impact and provision of solar access, overshadowing, acoustic impacts, visual privacy, view loss and wind. A high level of environmental amenity must be demonstrated. • Demonstrate compliance with SEPP 65 and the Apartment Design Guide (ADG) recommendations to achieve a high level of environmental and residential amenity. **5. Ecologically Sustainable Development (ESD)** • Detail how ESD principles (as defined in clause 7(4) of Schedule 2 of the Environmental Planning and Assessment Regulation 2000 will be incorporated in the design, construction and ongoing operation phases of the development.

- Demonstrate how the proposed development responds to sustainable building principles and best practice, and improves environmental performance through energy efficient design, technology and renewable energy.
- Include a description of the measures that would be implemented to minimise consumption of resources, water and energy, including an Integrated Water Management Plan which details any proposed alternative water supplies, proposed end uses of potable and non-potable water, and water sensitive urban design.

6. Noise

- Identify the likely noise impacts any acoustic measures required to ensure acceptable residential amenity noting the proximity to the operational areas of the Port of Newcastle.
- Identify the main noise generating sources and activities at all stages of construction, and any noise sources during operation. Outline measures to minimise and mitigate the potential noise impacts on surrounding occupiers of land.

7. Transport and Accessibility (Construction and Operation)

- Detail access arrangements at all stages of construction and measures to mitigate any associated traffic impacts.
- Detail existing pedestrian and cycle movements within the vicinity of the site and determine the adequacy of the proposal to meet the likely future demand for increased public transport and pedestrian and cycle access.
- Describe the measures to be implemented to promote sustainable means of transport, including public transport use, pedestrian and bicycle linkages, in addition to addressing the potential for implementing a location specific sustainable travel plan.
- Demonstrate the provision of sufficient on-site car parking having regard to the availability of public transport.
- Estimate the total daily and peak hour trips generated by the proposed development, including accurate details of the current and future daily vehicle movements.
- Assess the impacts of the traffic generated on the local road network, and surrounding intersections (including Hannell Street / Honeysuckle Drive intersections) using SIDRA or similar traffic model and any potential need for upgrading or road works (local and classified) to maintain existing levels of service.
- Address the impacts of the proposal having regard to the cumulative traffic impact of other proposed developments in the area and the impact of the Newcastle Light Rail project.
- Details of service vehicle provision, access, delivery and loading arrangements and estimated service vehicle movements (including vehicle type and the likely arrival and departure times).

8. Flooding

The EIS is to include an assessment of any potential flood risk on site in accordance with any relevant provisions of the NSW Floodplain Development Manual (2005), The Cottage Creek Flood Management Plan 1999 and the Newcastle Floodplain Risk Study 2012 including an:

- assessment of existing flood behaviour and impact of sea level rise, climate change, and ecosystem migration;
- assessment of potential flood impacts on the proposed development and measures to mitigate any potential flooding;
- assessment of potential impacts of the proposed development on flood behaviour at the site and impacts on adjacent land, and measures to mitigate any potential flooding;
- emergency management measures and evacuation;

- consistency with any floodplain risk management plans;
- compatibility with the flood hazard of the land;
- assessment of whether the proposal will significantly adversely affect the environment or cause avoidable erosion, siltation, destruction of riparian vegetation or a reduction in the stability of river banks or watercourses; and
- detailed consideration of the proposed drainage associated with the proposal, including stormwater and drainage infrastructure.

9. Drainage

Provide details of all drainage associated with the proposal, including stormwater and drainage infrastructure.

10. Water Quality

- Assessment of existing site hydrogeology, groundwater quality and levels; licensing requirements (including details of groundwater dewatering required during the construction phase and that for ongoing water take following completion of the project); and
- details of any structural works due to potential subsidence impacts and whether such activity will cause displacement of groundwater to surface.

11. Mine Subsidence

Provide a Geotechnical Investigation and Report which addresses potential subsidence risks, stabilisation works required/undertaken and confirms suitability of the site for the proposal.

12. Heritage

The EIS shall:

- identify if there are any listed or potential heritage items within the vicinity of the site. If any items are likely to be affected a Heritage Impact Statement is required;
- assess any impacts to State and local heritage including conservation areas, natural heritage areas, places of Aboriginal heritage value, buildings, works, relics, gardens, landscapes, views and trees and mitigation and management measures required; and
- assess Aboriginal cultural heritage impacts, including current Aboriginal Heritage Information Management System (AHIMS) search results, a summary of the site's disturbance history and an assessment of the likelihood of harming Aboriginal objects.

13. Sediment, Erosion and Dust controls (Construction and Excavation)

The EIS shall:

- identify measures and procedures to minimise and manage the generation and off-site transmission of sediment, dust and fine particles;
- provide an assessment of presence of acid sulfate soils on the site and any mitigation measures required.

14. Utilities

- In consultation with relevant agencies, ascertain existing capacity and licensing requirements for ongoing water supply and any additional electricity works and or boosted water supply (including need for hydraulic plans) are adequately addressed for the provision of utilities including staging of infrastructure.
- Provide an assessment of potential noise / electromagnetic frequency (EMF) impacts and appropriate mitigation measures related to any existing or proposed electrical infrastructure in the vicinity of the site.

	15. Public Benefit and Contributions Provide confirmation of the public benefit offer to be derived from the proposal and address Council's Section 94A Contribution Plan and/or details of any Voluntary Planning Agreement. **16. Servicing and Waste** Identify, quantify and classify the likely waste streams to be generated during construction and operation and describe the measures to be implemented to manage, reuse, recycle and safely dispose of this waste. Identify appropriate servicing arrangements (including but not limited to, waste management, loading zones, mechanical plant) for the site.
	The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation required under Schedule 1 of the *EP&A Regulation 2000*. Provide these as part of the EIS rather than as separate documents. In addition, the EIS must include the following: • architectural drawings (to a usable scale at A3); • architectural design statement; • landscape drawings (to a usable scale at A3); • landscape design statement; • site survey plan, showing existing levels, location and height of existing and adjacent structures/buildings; • site analysis plan; • shadow diagrams; • ESD statement; • pre-submission consultation statement; • heritage impact assessment; • archaeological impact assessment; • bushfire assessment • access impact statement; • traffic and parking assessment; • visual and view impact analysis and photomontages; • stormwater concept plan; • flood risk assessment • sediment and erosion control plan; • operational management plan; • preliminary construction management plan, including a construction traffic management plan, construction noise and vibration management plan, construction waste management plan and cumulative impact of construction activities on other nearby sites; • geotechnical and structural report; • services and infrastructure report; • contamination assessment; and • schedule of materials and finishes.
Consultation	During the preparation of the EIS, you are required to consult with the relevant local, State or Commonwealth Government authorities, service providers, and the local community. You must consult with the City of Newcastle Council and the Office of the Government Architect. The EIS must describe the pre-submission consultation process, issues raised and how the proposed development has been amended in response to these issues. A short explanation should be provided where amendments have not been made to address an issue.
Further consultation after 2 years	If you do not lodge a development application and EIS for the development within 2 years of the issue date of these SEARs, you must consult further with the Secretary in relation to the preparation of the EIS.