585 & 587 Pennant Hills Road, West Pennant Hills and 3 & 5 Copeland Road, Beecroft

Historical Archaeological Assessment, Statement of Heritage Impact and Research Design

FINAL REPORT

Prepared by
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Austral Archaeology Pty Ltd
Archaeological & Cultural Heritage Consultants

for
S.Chilly Developments Pty Ltd
Hornsby Shire Council Local Government Area

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EXECUTIVE SUMMARY

Austral Archaeology Pty Ltd (Austral Archaeology) has been commissioned by S.Chilly Developments Pty Ltd (the proponent) to undertake a historical archaeological assessment, and to prepare a Statement of Heritage Impact (SoHI) and research design for the proposed Copeland Greens seniors living development. The study area consists of the following properties and is bound by Pennant Hills Road to the west, Copeland Road to the south, and the properties of 7 Copeland Road to the east and 583 Pennant Hills Road to the north.

The study area is within the boundaries of the Hornsby Shire Council, and the location is shown in Figure 1.1, Figure 1.2 and Figure 1.3.

None of the land parcels appear on the State Heritage Register (SHR), although Lot 56, DP1212724 (part of 587 Pennant Hills Road) is listed as a heritage item in the Hornsby Local Environmental Plan 2013 (the Hornsby LEP 2013) and is recognised as being one of the earliest examples of a dwelling in the district (OEH 2015). While this building is the subject of a Conservation Management Plan (CMP) prepared by Wilson (2011), the CMP has not been endorsed by the Heritage Council.

The purpose of this historical archaeological assessment, SoHI and research design is to undertake an archaeological investigation which will examine the proposed development in light of the archaeological potential and significance of the study area and provide suitable management recommendations. If required, this assessment will also be able to accompany an application to the Heritage Division for a permit to be issued under the NSW Heritage Act 1974.

Historical Background

The original inhabitants of the district were Aboriginal people of either the Darug (Hinterland), Bediagal or Darramurragal language groups (Attenbrow 2003:24). However, after about 50 years of European occupation, the Aboriginal people were forced from their lands, destroying the vital relationship between country, culture, custom and ceremonies for Aboriginal people.

The parcel of land which makes up the study area was first granted to Reverend Samuel Marsden by Governor Hunter on 16 April 1799. This grant of land, which included a total of 100 acres, was named “Mount Wilberforce” after William Wilberforce, a very influential English evangelist who had recommended Marsden for the position of assistant chaplain in the colonies (Yarwood 1967). Ten convict labourers were assigned to Marsden, who grazed Suffolk sheep, pigs and cattle on the land. A vast array of crops were planted including wheat and maize, and Marsden also experimented with hops, turnips, clover, rye, hemp, flax, gooseberries and currants (Beecroft Cheltenham History Group 1995:9). By the time of his death in 1838, Marsden is reported to have owned 29 farms, covering a vast area of some 11,724 acres (4,744.5 hectares) (Patrick et al 2007:35).

Marsden advertised the Mount Wilberforce estate for sale in 1818 when the property was listed as containing a "house, out-house and barn buildings", which must have all been erected during Marsden's occupancy. The location of the cottage within Marsden's estate is unknown, although it is highly likely that it lay near to the centre of his grant, outside of the present study area on land to the western side of Pennant Hills which was later sold separately.

Captain John Welsh (alternatively spelt Walsh or Welch) purchased the Mount Wilberforce estate from Marsden in 1818 but after only four years and much angst he sold the farm to George Thomas Palmer in 1822, choosing to relocate to Tasmania.

Sometime during 1838, or shortly before, he constructed a cottage within the estate with his son, William Pemberton Palmer, who resided there for a short time as a gardener during 1839.

It is likely that this newly constructed cottage is likely to have replaced the original residence constructed by Marsden. However, there is a possibility that the newly built cottage meant that there were now two separate houses on the estate, with William Palmer living in the newly constructed main residence, and a second smaller cottage being the original farmstead built by Marsden.
Upon his father’s death in 1854, much of his land across western Sydney was sold, subdivided or both. Following the subdivision, Francis Allsop purchased a Lot containing 28 acres (11.3 hectares) of partially cleared land, now north of Hannah Street. James Smith purchased Lot 1, containing the cottage, dairy, stables, hay-shed and partially cleared land which sits west of Pennant Hills Road. Edward Maher purchased the south-eastern Lot 3 comprising 33 acres (13.4 hectares) of partially cultivated land, of which comprises the study area.

According to a biography and the oral history of the Maher family, they did not build the original cottage but instead it was already present when they purchased the land. It was a family belief that the cottage had been constructed by Samuel Marsden for use by his shepherds. Nonetheless, Edward and Brigid Maher extended the little cottage by the addition of a timber wing containing five or six small bedrooms to cater for their family of 14 children. Edward also planted an orchard of various fruits, including apples, pears, apricots and peaches, and bred sheep, a cow and horses.

Edward James Maher died at his residence, named in his obituary as “Mount Wilberforce, Pennant Hills” on 17 September 1894, aged 63 years. The property containing the study area, now called ‘Home Farm’, was subdivided into three smaller allotments, with three of Edward’s sons receiving a block each. Following the death of his son Charles in 1929, his block containing the study area passed to his son Wallace Michael Maher. Wallace undertook a subdivision into five smaller allotments, as shown in Registered Plan 601. The cottage and an outbuilding were shown on the registered plan as being in Lot 4.

Following the subdivision, Gordon Musgrave purchased lots 4 and 5, bordered by Pennant Hills Road on the west and Copeland Road on the south and totalling approximately 5 acres (2 hectares). The Musgraves undertook their own subdivision and the lot on the corner of Pennant Hills Road and Copeland Road along with part of the neighbouring lot to the north was bought by the McGrath family in 1948.

The cottage was occupied by both the Musgraves and the McGraths, before ownership passed to the Littlewood family in 1966 and the James family in 1968, and finally the Callaghans in 2003. The house was badly damaged in a fire in 2009 but most of the damage was to the later 20th century extension. The core of the two-roomed cottage managed to remain standing.

The Callaghans commissioned Helen Wilson to prepare a CMP for the property as part of an attempt to restore it after the fire. This report was completed in March 2011. However, it appears that the demolition and conservation works recommended in the CMP were never carried out.

It is concluded that there is are varying degrees of archaeological potential and sensitivity within the study area relating to the location of the various outbuildings, the location of previously identified wells, and the various additions and extensions to the main cottage. The archaeological remains of these structure and any associated deposits, should they be present, are considered to be of local significance. Although many of the impacts from the proposed works may affect the location of other known structural remains, these are considered to be 20th century in nature and not of significance.

Conclusions

It is concluded that there is are varying degrees of archaeological potential and sensitivity within the study area relating to the location of the various outbuildings, the location of previously identified wells, and the various additions and extensions to the main cottage. The archaeological remains of these structure and any associated deposits, should they be present, are considered to be of local significance. Although many of the impacts from the proposed works may affect the location of other known structural remains, these are considered to be 20th century in nature and not of significance.

Recommendations

The following recommendations are made in conjunction with Figure 0.1. It is recommended that:
1) Given that parts of the study area have been assessed as having moderate to high archaeological potential and relics of local significance may be impacted during the proposed construction works, an excavation permit is required under the NSW Heritage Act 1977. To comply with the NSW Heritage Act 1977, the proponent should apply for a Section 140 Excavation Permit. A suitably accredited archaeologist who is approved by the Heritage Division to oversee the excavation of sites of local significance will need to be nominated as Excavation Director.

2) Further archaeological investigations will be required in advance of construction in areas of high archaeological potential, as outlined in Section 10.1. These areas are marked in red on Figure 0.1. The investigations can only be undertaken following the approval of the Section 140 Excavation Permit and will involve a sub-surface testing and salvage programme overseen by the nominated Excavation Director.

3) Archaeological monitoring of any excavation work is to be undertaken in advance of construction in areas of moderate archaeological potential, as outlined in Section 10.2. These areas are marked in orange on Figure 0.1. The archaeological monitoring can only be undertaken following the approval of the Section 140 Excavation Permit and are to be overseen by a suitably qualified archaeologist who can record and assess any finds identified.

4) No further archaeological investigation needs to be undertaken in the areas assessed to contain nil or low archaeological potential. Works in these areas can proceed with caution in accordance with the unexpected finds procedure (Section 10.3). These areas are marked green on Figure 0.1.

   In the event that a relic is identified within an area of low or nil archaeological potential prior to the approval of the Section 140 Excavation Permit, excavation will need to cease while the archaeological item is assessed. Works may not be able to resume until the permit has been approved.

5) In the event that historical archaeological relics not assessed or anticipated by this report are found during the works, all works in the immediate vicinity are to cease immediately and the Heritage Division be notified in accordance with Section 146 of the NSW Heritage Act 1977. A qualified archaeologist be contacted to assess the situation and consult with the Heritage Branch of the Office of Environment and Heritage regarding the most appropriate course of action.

6) In the event that Aboriginal archaeological material or deposits are encountered during earthworks, all works affecting that material or deposits must cease immediately to allow an archaeologist to make an assessment of the find. The archaeologist may need to consult with the Office of Environment and Heritage (OEH) and the relevant Aboriginal stakeholders, regarding the find. Section 89A of the NP&W Act 1974 requires that the OEH must be notified of any Aboriginal objects discovered within a reasonable time.

7) Should the proposed development be altered significantly from the proposed concept design, then a reassessment of the heritage/archaeological impact may be required. This includes any impacts not explicitly stated in Section 8 and includes the installation of any subsurface services.
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1 INTRODUCTION

1.1 Introduction

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The purpose of this historical archaeological assessment, SoHI and research design is to undertake an archaeological investigation which will examine the proposed development in light of the archaeological potential and significance of the study area and provide suitable management recommendations. If required, this assessment will also be able to accompany an application to the Heritage Division for a permit to be issued under the NSW Heritage Act 1974.
Figure 1.1  Topographic map showing study area in relation to wider development areas.
Figure 1.2  Aerial photograph showing the location of the study area in relation to surrounding development.
Figure 1.3  Detailed aerial photograph showing the cadastral boundaries within the study area.
1.2 Proposed Works

The scope of works described in this section is taken from plans and information provided by the Proponent and is described in greater detail in Section 8.

The main components of the proposed works which are likely to impact on archaeological material have been identified as follows:

- Demolition of existing structures at 585 Pennant Hills Road, and at 3 and 5 Copeland Road;
- Partial demolition of the main residence at 587 Pennant Hills Road with adaptive reuse of the 19th century, two-room cottage;
- Tree removal;
- Construction of a seniors living development comprising 19 self-contained units;
- Construction of a two-storey basement car parking area;
- Installation of new pathways, driveways and pedestrian walkways;
- Installation of a Victorian heritage garden surrounding the heritage cottage on the north, east and south sides;
- Installation of landscaping for each new dwelling;
- Construction of letter box wall; and
- Construction of heritage wall with plaque.

1.3 Objectives

The objectives of this report are to:

- Identify any potential historical archaeological resources, values or constraints present within the study area;
- Produce an archaeological predictive model and sensitivity map to guide any management decisions regarding the study area;
- Make a statement of significance regarding any archaeological heritage present within the study area;
- Assess the impact of the proposed works on any identified heritage resources; and
- Make appropriate management and mitigation recommendations.

1.4 Project Team and Acknowledgements

This project was overseen by Justin McCarthy (Managing Director, Austral Archaeology) and managed by David Marcus (Senior Archaeologist, Austral Archaeology). The assessment was authored by Amy Ziesing (Archaeologist, Austral Archaeology) and David Marcus. Amy Ziesing prepared all GIS mapping in this report and undertook the site inspection. David Marcus reviewed the draft report.

Austral Archaeology would like to acknowledge the participation of the following people and organisations that have contributed to the preparation of this report:

- Rajesh Joshi S.Chilly Developments Pty Ltd
- Karen Richardson Hornsby Shire Council Librarian
- Rebecca Ward NSW Heritage Division Librarian
- Helen Wilson Helen Wilson Heritage Conservation Design
1.5Methodology

The methodology supporting this report involved a period of research to locate additional background material and to prepare a synthesis of the historical research to better reflect and understand the archaeo-historical context and potential of the study area.

This report draws heavily on three previous reports that cover the study area, namely:


This report is underpinned by the philosophy of the ICOMOS Burra Charter and by the practices and guidelines of the New South Wales Heritage Division.

1.6Limitations of the Report

The statement of archaeological potential only applies to subsurface features or deposits associated with the European occupation of the site and not to any Aboriginal cultural heritage or built heritage items currently on the site.

This report also relies on information provided by oral history accounts of relatives and previous property owners, which are inherently biased and subject to an individual's interpretation of a memory.

The results, assessments and judgements contained in this report are constrained by the standard limitations of historical research and by the unpredictability inherent in archaeological zoning from the desktop. Whilst every effort has been made to gain insight to the historical archaeological profile of the subject site, Austral Archaeology Pty Ltd cannot be held accountable for errors or omissions arising from such constraining factors.

1.6.1Limitations Relating to Georeferencing of Historical Images

In order to accurately plot a map or aerial image onto a known geographic coordinate system, a GIS program must perform the act of “georeferencing”. For the purpose of this project, the GIS operator took previously georeferenced aerial photos and topographic maps to use as a base for the projection. Known reference points, or “control points”, are marked on both the base map and the subject map. The GIS program then predicts the spatial location of each control point on the subject map based on their location on the base map, with a residual error.

Additional errors are also present in early plans due to inherent inaccuracy in early survey plans and recordings. While these inaccuracies may be minor, GIS mapping can compound these errors when comparing different maps, as earlier maps inherently contain less structures and features which can be compared to later maps.

As a result of a combination between the residual error in georeferencing of historical plans and the inherent inaccuracy, many of the figures included in this document show the approximate location of features rather than exact representations of the potential sub-surface archaeology. However, it should be noted that the maximum error is only expected to be up to 5 metres.
1.7 Abbreviations

The following are common abbreviations which may be used within this report:

- **AHC** Australian Heritage Council
- **Burra Charter** The Australia ICOMOS Charter for Places of Cultural Significance
- **CHL** Commonwealth Heritage List
- **CMP** Conservation Management Plan
- **DCP** Development Control Plan
- **DoP** NSW Department of Planning
- **EP&A Act** Environmental Planning and Assessment Act 1979
- **EPI** Environmental Planning Instrument
- **Heritage Act** New South Wales Heritage Act 1977
- **ICOMOS** International Council on Monuments and Sites
- **IHO** Interim Heritage Order
- **LEP** Local Environmental Plan
- **LGA** Local Government Area
- **NHL** National Heritage List
- **NP&W Act** National Parks and Wildlife Act 1974
- **NSW HC** New South Wales Heritage Council
- **NT Register** Register of the National Trust (NSW)
- **OEH** Office of Environment and Heritage
- **RAIA** Royal Australian Institute of Architects
- **RMS** Roads and Maritime Services
- **RNE** Register of the National Estate
- **SEARS** Secretary's Environmental Assessment Requirements
- **SEPP** State Environmental Planning Policy
- **SHI** State Heritage Inventory
- **SHR** State Heritage Register
- **SOHI** Statement of Heritage Impact

2 STATUTORY CONTEXT

2.1 Introduction
The following section summarises the relevant statutory context, including heritage listings, acts, and environmental planning instruments which are relevant to the site and its cultural heritage.

2.2 Environment Protection and Biodiversity Conservation Act 1999
The Environment Protection and Biodiversity Conservation Act 1999 (EP&BC Act) established the Australian Heritage Council (formerly the Australian Heritage Commission) and provides for the protection of cultural heritage at a national level and for items owned or managed by the Commonwealth. The EP&BC Act has established two heritage registers:

- Commonwealth Heritage List: for significant items owned or managed by Commonwealth Government agencies.
- National Heritage List: for items assessed as being of national cultural significance.

Australian Heritage Council approval is required for works to an item registered on either of these lists which would impact on its significance.

No part of the study area appears on either the Commonwealth Heritage List or the National Heritage List.

The Australian Heritage Council is also responsible for keeping the Register of the National Estate (RNE). In 2007 the RNE was frozen and no further sites were added to it. For Commonwealth properties, the RNE was superseded by the Commonwealth and National Heritage Lists. The RNE is now retained as an archive of information about more than 13,000 places throughout Australia.

No part of the study area appears on the Register of the National Estate.

2.3 New South Wales Heritage Act 1977
The Heritage Council is the approval authority under the New South Wales Heritage Act 1977 (the Heritage Act) for works to an item on the State Heritage Register (SHR). Section 57(1) of the Heritage Act identifies the need for Heritage Council approval if the work involves the following tasks:

- demolishing the building or work,
- damaging or despoiling the place, precinct or land, or any part of the place, precinct or land,
- moving, damaging or destroying the relic or moveable object,
- excavating any land for the purpose of exposing or moving the relic,
- carrying out any development in relation to the land on which the building, work or relic is situated, the land that comprises the place, or land within the precinct,
- altering the building, work, relic or moveable object,
- displaying any notice or advertisement on the place, building, work, relic, moveable object or land, or in the precinct,
- damaging or destroy any tree or other vegetation on or remove any tree or other vegetation from the place, precinct or land

Demolition of an SHR item (in whole) is prohibited under the Heritage Act, unless the item constitutes a danger to its occupants or the public. A component of an SHR Item may only be demolished if it does not contribute to the significance of the item.

Section 57(1) of the Heritage Act also applies to archaeological remains (relics) within an SHR site, and excavation can only proceed subject to approval of a Section 60 application by the Heritage Division. Archaeological remains on sites not listed on the SHR are addressed under Section 139 of the Heritage Act.

No part of the study area appears on the State Heritage Register.
2.3.1 **Exemptions**

The process of a standard exemption, which applies to all SHR sites, was designed to streamline the approvals process, particularly where works are minor and/or have little impact on significance. For full details of the standard exemptions, refer to the Heritage Division website:


Prior to conducting any work which may be exempt, an Exemption Notification Form must be completed and submitted to the Heritage Council or its delegate, State Water, with sufficient information to determine whether the works meet the standard exemption guidelines. Sufficient information normally takes the form of a short report clearly stating the scope of the work and how it meets the guidelines. The Exemption Notification Form must be approved prior to work commencing.

Site specific exemptions relate to individual SHR items and can only be employed for works which have no potential to materially affect the item (Standard Exemption 6). Furthermore, site specific exemptions must be specifically identified as exemptions in a Cultural Management Plan endorsed by the Heritage Council or its delegate and using wording agreed upon prior to Heritage Council endorsement.

2.3.2 **Excavation Permits**

Under Section 139 of the Heritage Act, “a person must not disturb or excavate any land 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 unless the disturbance or excavation is carried out in accordance with an excavation permit”.

Relics are defined by the Heritage Act to be:

any deposit, artefact, object or material evidence that:

(a) relates to the settlement of the area that comprises New South Wales, not being Aboriginal settlement, and

(b) is of State or local heritage significance.

An excavation permit is also required if a relic has been discovered in the course of excavation without a permit (Section 139(2) of the Heritage Act). Section 139 of the Heritage Act applies to all relics which are not listed on the SHR or protected by an Interim Heritage Order (IHO). Relics protected by an SHR listing or an IHO are subject to approval required by Section 57(1) of the Heritage Act and require a Section 60 Application.

If an excavation permit is required by Section 139 of the Heritage Act, an application is made under Section 140 of the Act. To obtain an excavation permit, the Section 140 application must include an archaeological assessment and Research Design. The archaeological assessment establishes the archaeological sensitivity of the site, its significance and the likely impact of the proposed development. The Research Design outlines the method proposed to mitigate the impact of the development (such as monitoring, test excavation, sampling, or open area excavation). The Research Design also provides research questions which the archaeological resource has the potential to answer. An archaeological assessment and Research Design need to be prepared in accordance with the Heritage Council’s relevant guidelines, including Historical Archaeological Sites and the Historical Archaeology Code of Practice. For further details of these guidelines, refer to the Heritage Division website:


The Heritage Act also contains provisions for the unintentional disturbance of archaeological relics. Under Section 146 of the Act, the Heritage Council must be immediately notified in the event of relics being unintentionally located or disturbed. Works may be required to cease, pending consultation and further research.
2.3.3 Heritage and Conservation Register (Section 170 Register)

Under Section 170 of the Heritage Act, government instrumentalities must keep a Heritage and Conservation Register (a Section 170 Register) which contains items under the control or ownership of the agency and which are, or could, be listed as heritage items (of State or local significance). Road reserves within the study area are owned by the Department of Roads and Maritime Services.

The study area is not listed on any Section 170 Heritage and Conservation registers.

2.4 Environmental Planning Instruments

An Environmental Planning Instrument (EPI) is made under the Environmental Protection and Assessment Act 1979 (EP&A Act). An EPI can be a Development Control Plan (DCP) Local Environmental Plan (LEP) or a State Environmental Planning Policy (SEPP).

2.4.1 Hornsby Local Environmental Plan 1994

The original LEP for the Hornsby LGA was the Hornsby Local Environmental Plan 1994, which listed heritage items under Schedule D.

587 Pennant Hills Road (listed as Lot 5, DP801996, assumed to correspond with Lot 56, DP1212724) was listed as a heritage item of regional significance on Schedule D of the Hornsby Local Environmental Plan 1994.

The listing does not include the remaining lots covered in the study area.

2.4.2 Hornsby Local Environmental Plan 2013

The current LEP for the study area is the Hornsby Local Environmental Plan 2013. Part 5.10 of the Hornsby LEP deals with heritage conservation, and subsection (2) and (3) determine whether development consent needs to be granted by the Hornsby Shire Council prior to any activities occurring which may impact cultural heritage. Heritage items are listed under Schedule 5, Part 1 of the Hornsby LEP.

587 Pennant Hills Road (listed as Lot 5, DP801996, assumed to correspond with Lot 56, DP1212724) is listed on the Hornsby Local Environmental Plan 2013 as item number 791.

The listing does not include the remaining lots covered in the study area.

2.4.3 Hornsby Development Control Plan 2013

The applicable DCP for the study area is the Hornsby Development Control Plan 2013 (the Hornsby DCP). Part 9 of the Hornsby DCP outlines design controls to be implemented when dealing with heritage items, although there are no specific requirements under the DCP which relate to historic archaeological features or potential.

2.5 Non-Statutory Heritage Listings

A number of organisations maintain registers of buildings or sites which they have assessed and believe to be of cultural heritage significance. These registers have no statutory authority. However, the inclusion of a place on a non-statutory register suggests a certain degree of community esteem and appreciation. Non-statutory registers include the National Trust Register, the Royal Australian Institute of Architects (RAIA) 20th Century Register of Significant Buildings, and the Art Deco Society of New South Wales Art Deco Building Register.

The study area is not listed on the National Trust Register, the RAIA 20th Century Register of Significant Buildings, or the Art Deco Building Register.

2.6 Heritage Studies and Conservation Management Plans

2.6.1 Hornsby Heritage Study 1993

In 1993, the New South Wales Department of Planning and the Hornsby Shire Council commissioned Perumal Murphy Wu Pty Ltd to prepare a comprehensive study of the heritage of the LGA (Perumal Murphy Wu 1993:1). The study was divided into "heritage items" (Schedule 1) and "conservation areas" (Schedule 2).
The property at 587 Pennant Hills Road was listed under Schedule 1 as a heritage place to be included on the LEP and the heritage study also identified that the site held archaeological potential. The following recommendations from the heritage study directly relate to management of the archaeological potential of the study area (Perumal Murphy Wu 1993:34):

25. Owners of sites of archaeological importance (i.e. identified in the archaeological survey) should be advised of the cultural and potential cultural significance of their buildings, structures, machinery and sites, whether they are subject to special controls or not. Owners should have access to appropriate conservation measures and available funding (available from the Heritage Council or National Trust).

26. Where the loss of buildings or archaeological sites seems likely, physical remains should be properly researched, photographed and recorded by a professional archaeologist. Owners of sites of archaeological significance, or potential, should be advised of their obligations under the Heritage Act. (Where excavations affecting European historical relics more than 50 years old are concerned, the Act requires that a permit first be obtained from the Heritage Council).

27. Conservation Plans and Archaeological Management Plans should be required for any development which might affect archaeological remains on archaeological sites identified as heritage items in the LEP.

2.6.2 Conservation Management Plan 2011

In 2011, the owners of 587 Pennant Hills Road, Mark and Rebecca Callaghan, commissioned a CMP for the property to manage the conservation of the building following a fire in 2009. Although the CMP was primarily prepared with regards to managing the built heritage of the site, it noted the high levels of archaeological potential present in the study area and recommended that an archaeologist be engaged to prepare an archaeological assessment (Wilson 2011:5, 50). As such, the CMP does not include detailed policies for the management of the archaeological resource but instead notes that management policies should be prepared by an archaeologist at a later point (Wilson 2011:53). However, the following policy was included in the Schedule of Conservation Works which specifically requires archaeological supervision:

- Demolition of the concrete east verandah floor to expose any remnant sandstone to the base and won sandstone steps which may still exist (Wilson 2011:58)

2.7 Section Summary

Table 2.1 lists the relevant statutory and non-statutory registers, listings and orders, and identifies those in which any part of the site is listed.
### Table 2.1  Summary of heritage register listings for the subject study area.

<table>
<thead>
<tr>
<th>Register/Listing</th>
<th>Inclusion</th>
<th>Statutory implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Heritage List</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Commonwealth Heritage List</td>
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<td>No</td>
</tr>
<tr>
<td>Register of the National Estate</td>
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<td>No</td>
</tr>
<tr>
<td>State Heritage Register</td>
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<td>No</td>
</tr>
<tr>
<td><em>Hornsby Local Environmental Plan 1994</em></td>
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<td>No</td>
</tr>
<tr>
<td><em>Hornsby Local Environmental Plan 2013</em></td>
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</tr>
<tr>
<td><em>Conservation Management Plan 2011</em></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Register of the National Trust (NSW)</td>
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<tr>
<td>The RAIA 20th Century Register</td>
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<tr>
<td>The Art Deco Society’s Art Deco Building Register</td>
<td>No</td>
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</tr>
</tbody>
</table>
3 HISTORICAL BACKGROUND

The following historical background is designed to contextualise a site specific history which will aid in the understanding of the archaeological potential of the study area. This section is comprised of two main sub-sections. The first (Section 3.1) is a historical sketch of early settlement of the region while the second (Section 3.2) is a targeted development history of the study area. This work will provide a useful and concise summary of the history of the Mount Wilberforce Estate and the archaeological potential of the project site.

3.1 European Settlement

3.1.1 Overview

The original inhabitants of the district were Aboriginal people of either the Darug (Hinterland), Bediagal or Darramurragal language groups (Attenbrow 2003:24). However, after about 50 years of European occupation, the Aboriginal people were forced from their lands, destroying the vital relationship between country, culture, custom and ceremonies for Aboriginal people.

The lands surrounding the study area were not occupied in the early days of European settlement, as more accessible lands along the Parramatta and Hawkesbury rivers were initially preferred (Schofield 1988:3).

The Beecroft area was first noted by Europeans for the fine timber forests which could provide for private and Government building projects in the colony. The Field of Mars Common was set aside for public use by Governor Gidley King in 1804 and covered an area of approximately 5,000 acres (2,023.4 hectares), increasing to over 6,000 acres (2,428.1 hectares) by the end of the 1840s. By this time the majority of the common had been acquired by private individuals, especially around the district of Hunters Hill (Schofield 1988:6). After decades of heated discussion, the Government resumed the remaining portion of the Common in 1874. The land was surveyed between 1884 and 1886 and the land in the northern portion, around Beecroft, Cheltenham and Epping area, was deemed unsuitable for government purposes and subdivided for sale. Concurrently the Great Northern Railway was constructed through the former Field of Mars Common from Sydney to Hornsby, opening in 1886.

3.1.2 Samuel Marsden's Grant – 1799 to 1818

Reverend Samuel Marsden arrived in Sydney in March 1774 on board the William. Marsden first resided in Bridge Street, Sydney, and then with his family at the Parramatta barracks, where he assumed the role of assistant chaplain to the colony. His first land grant was at One Tree Hill, with further land being added to form the extensive 'Kingston Farm' that stretched down to the Parramatta River. He also owned extensive land at Ermington, which he named 'Brush Farm'.

The study area lay within the 100 acres (40.5 hectares) of land granted to Marsden by Governor Hunter on 16 April 1799 in the area known as Dundas (Figure 3.1) (Wilson 2011:12). He named this farm "Mount Wilberforce" after William Wilberforce, a very influential English evangelist who had recommended Marsden for the position of assistant chaplain in the colonies (Yarwood 1967). This was one of seven land grants given by Governor Hunter in the district, along with adjoining 100 acre (40.5 hectare) lots being granted to Thomas Arndell, Francis Oakes and Rowland Hassel (Figure 3.2). What became known as Pennant Hills Road is variously described as being the original route linking Marsden's Brush Farm and Mount Wilberforce estate or a track used by timber-getters (Schofield 1988:27; Wilson 2011:17).
Figure 3.1  Plan showing the location of the initial 100 acre grants given out by Governor Hunter in Pennant Hills. Portion 5 was granted to Marsden, and surrounding grants were given to Reverend James Cover (2), Thomas Arndell (4) and Rowland Hassall (8) (after Patrick et al 2007:44).

Provision of the land relied upon commencing its improvement and cultivation within five years (Wilson 2011:12). Ten convict labourers were assigned to Marsden, who grazed Suffolk sheep, pigs and cattle on the land. A vast array of crops were planted including wheat and maize, and Marsden also experimented with hops, turnips, clover, rye, hemp, flax, gooseberries and currants (Beecroft Cheltenham History Group 1995:9). By the time of his death in 1838, Marsden is reported to have owned 29 farms, covering a vast area of some 11,724 acres (4,744.5 hectares) (Patrick et al 2007:35).
Marsden advertised the Mount Wilberforce estate for sale in 1818 when the property was listed as containing a “house, out-house and barn buildings”, which must have all been erected during Marsden’s occupancy (Patrick et al 2007:46). The location of the cottage within Marsden’s estate is unknown, although it is highly likely that it lay near to the centre of his grant, outside of the present study area on land to the western side of Pennant Hills which was later sold separately.

The sale of the Mount Wilberforce estate coincided with Marsden receiving a large land grant in Bathurst, west of the Blue Mountains, and his being offered a chance to live and preach in Parramatta. By the time Marsden left in 1818, the area was no longer known as Dundas but was now being called Pennant Hills (Millhouse 1987:48).

3.1.3 John Welsh, George Palmer and the First Subdivision – 1818 to 1855

Captain John Welsh (alternatively spelt Walsh or Welch) purchased the Mount Wilberforce estate from Marsden in 1818 but after only four years and much angst he sold the farm to George Thomas Palmer in 1822, choosing to relocate to Tasmania (Beecroft and Cheltenham Historical Society 1983:9; NBRS 2016:7; Wilson 2011:17). In 1820, two years after purchasing the land, he complained to Governor Macquarie that bullock teams taking timber from Pennant Hills to the river via the Government Road that traversed his property were destroying his crops (Hornsby Shire Historical Society 1983:66; Wilson 2011:17). Marsden had also previously complained to Deputy-Surveyor Meehan of similar damage to his orchards, the stealing of his onions, and that the road ran too close to his house (Hornsby Shire Historical Society 1983:51), although it is not clear if Marsden was referring to his Mount Wilberforce or Brush Farm property.
George Thomas Palmer (1784-1854) was the son of the Colony's commissariat, John Palmer (1760-1833). He was born at Brompton, Kent, in 1784 and joined the army in 1800. In 1805 he married Catherine Irene Pemberton (1787-1855) in Malta. The couple came to Sydney in 1806, with Palmer then being a lieutenant in the 61st Regiment with permission to settle as a free immigrant (Steven 1967). Between 1813 and 1814 Palmer was superintendent of Government stock and he then developed his home at Pemberton Grange in nearby Parramatta (Wilson 2011:18). He also acquired significant land in Bringelly before purchasing land in Dundas in 1822. Later the same year, Palmer requested 22 convict labourers to assist him in clearing land at his farm in Parramatta. This is assumed to refer to his Pemberton Grange property but he may have also used this workforce to clear land on the recently acquired Mount Wilberforce property (Wilson 2011:18).

Sometime during 1838, or shortly before, he constructed a cottage within the estate with his son, William Pemberton Palmer, who resided there for a short time as a gardener during 1839 (Maclehose 1839:123). The lease notice was for:

All that ESTATE or FARM known by the name of MOUNT WILBERFORCE...lately in the occupation of Mr. W. P. Palmer, comprising a newly-erected Verandah Cottage, with every requisite accommodation for a small genteel Family, Together with suitable Out-buildings, Orchard, Garden, and about 100 Acres of Land (The Sydney Gazette and New South Wales Advertiser, 9 May 1839, pg. 3).

The Mount Wilberforce farm is recorded as having had a cottage and outbuildings when sold by Marsden to Welsh in 1818 (Patrick et al 2007:46) and when sold by Welsh to Palmer in 1822 (Wilson 2011:13), and a later sales notice from 1847 also refers to only a single residence on the entire 40.5 hectare farm (The Sydney Morning Herald, 19 August 1847, pg. 1). Therefore, this newly constructed cottage is likely to have replaced the original residence constructed by Marsden. However, there is a possibility that the newly built cottage meant that there were now two separate houses on the estate, with William Palmer living in the newly constructed main residence, and a second smaller cottage being the original farmstead built by Marsden. However, if this was the case, then it would be assumed that both residences would be mentioned in the sales notice.

Upon his father's death in 1854, much of his land across western Sydney was sold, subdivided or both. Originally, Palmer had tried to sell the entire 100 acres (40.5 hectares) at Pennant Hills in 1847 (The Sydney Morning Herald, 14 August 1847, pg. 4), but after his death the farm was subdivided into three more manageable lots and sold by the executor of his will, William Davies with sales advertisements placed in newspapers throughout 1855:

Lot 1 is situated at the corner of three roads, namely, to Parramatta, Lane Cove and Castle Hill; contains about 43 acres, a five-room verandah cottage with kitchen, dairy, stables, hay-shed, &; about two acres of orchard, the choicest fruits; the whole cleared, fenced, and mostly cropped. About 17 acres are laid down in grass, but quite eligible for cultivation. A never-failing supply of spring water.

Lot 2 has also a long frontage to the road, and contains 30 acres of excellent land, partly cleared, plenty of most useful timber, three sides fenced and a cottage for labourers.

Lot 3 also contains 30 acres, partly cleared, good land, by the roadside, three lines fenced, and in every other way similar to lot 2, except a cottage [our emphasis] (SMH, 7 May 1855, p.7).

This sales notice was repeated with identical wording across several contemporary newspapers and was republished for several weeks. However, in interpreting the wording of the sales notice, Wilson states that:

The cottage located on Lot 3 is the only cottage mentioned on any of the three lots for sale [our emphasis] and is very likely to be the same 'Verandah Cottage' mentioned in the earlier 1838 rental notice and again in the 1847 sale advertisement for Mount Wilberforce (Wilson 2011:13).
This sharply contradicts the actual sales notice, which records that Lot 1 contains "a five-room verandah cottage with kitchen, dairy, stables, [and] hay-shed", that Lot 2 contains "a cottage for labourers" and that Lot 3 (the study area) explicitly lacks any cottage (SMH 7 May 1855, pg. 7). This would imply that the newly erected cottage of 1839 is either the estate's primary residence, offered for sale in Lot 1, or is the labourers' cottage offered for sale in Lot 2. The fact that the newly erected 1839 cottage had a verandah, emphasised by Wilson (2011:13) would actually strengthen the case for arguing that it is the same cottage and verandah which was offered for sale in Lot 1, with the sales notice also emphasising that the cottage in Lot 1 contained a verandah.

Following the subdivision, Francis Allsop purchased the north-eastern Lot 2, containing 28 acres (11.3 hectares) of partially cleared land, now north of Hannah Street. James Smith purchased Lot 1, containing the cottage, dairy, stables, hay-shed and partially cleared land which sits west of Pennant Hills Road. Edward Maher purchased the south-eastern Lot 3 comprising 33 acres (13.4 hectares) of partially cultivated land (Figure 3.3).

Wilson offers four points to support her assertion that the cottage in the study area was constructed in the late 1830s (Wilson 2011:19). These statements are outlined below, followed by responses to her arguments:

- The siting of the current cottage [in the study area] on Pennant Hills Road close to the intersection of the road from Castle Hill, both main land routes, is a likely siting for an early cottage such as the one constructed by G.T. Palmer and his son. While the cottage is located close to Pennant Hills Road, it is also located on the southern boundary of the estate. If siting was important, then better locations would be further north, towards the centre of the estate, where it would be easier to access all of the estate's land while also being close to the Government track where it also splits towards Lane Cove and Castle Hill. This would provide quicker and easy access to roads running north-west, north-east and south. Lot 1 fronts the junction of all three roads and the contained the largest residence described in the 1855 sales notice.

- From the physical evidence, the old cottage at 587 Pennant Hills Road lived in by the Maher family, gives every indication of being constructed 1830s-1860s. The wide date range allows for construction either predating or following the subdivision in 1855.

- Edward Maher purchased Lot 3 of 33 acres (13.4 hectares) including a cottage in 1855. This statement is incorrect, as Lot 3 did not include a cottage in the 1855 listing.

- It would be unlikely that Edward Maher, a farmer emigrant from Ireland would have constructed another small verandah cottage on the site in his early years of occupation, [if] a "17 year old Verandah Cottage ... for a small genteel Family in a setting established with suitable Out-buildings, Orchard, Garden" was available on the site. If there was already a cottage present on the lot, then Edward Maher is more than certain to have used it. However, the presence of a cottage is not corroborated by documentary sources. As such, Edward Maher is likely to be the builder as there was no small verandah cottage available on this lot.

Adding to the overall confusion, Rappoport (2015) prepared a SoHI for the Stoneleigh property at 570 Pennant Hills Road, West Pennant Hills, which was located in Lot 1 of the 1855 subdivision and was purchased by James Smith. The listing for this building on The Hills Shire LGA Heritage Inventory Sheets describes it as being a:

Two roomed symmetrical cottage of sparrow picked stone with a steeply pitched roof and a four roomed cottage of dressed stone with central hall to the north. New verandah at front supported on iron lace columns (possibly early). Narrow lace valance and brackets removed in 1960s as also were the shutters to windows. Timber decorated barge boards to the gable ends remains...The stone building at the rear is possibly the original to which the larger house of dressed stone was adopted pre-1888... Barn to rear with attic and skillion to one side retaining some early fabric (Heritage Inventory Sheet, Ref I201, quoted in Rappoport 2015:15).
Rappoport state that the two-roomed cottage was constructed by Smith following his purchase of the land in 1855, with the four-room extension constructed 10 to 15 years later (Rappoport 2015:10). However, it is possible that the two-roomed sandstone cottage was the original farmstead constructed by Marsden and described on the sales notice of 1822. The extension to the cottage would then roughly correlate to the renovations undertaken by Palmer in 1838 or 1839, with the new building fairly similar to the description of the large cottage listed in Lot 1 of the 1855 sales notice.

Further details regarding the potential dating of the cottage built within the study area is discussed in Section 3.1.4, Section 3.2 and Section 7.
Figure 3.3  The 1855 Subdivision of Marsden's 100 acre (40.5 hectares) Mount Wilberforce estate.
3.1.4 The Maher Family – 1855 to 1941

Edward Maher and his family did not live on the purchased land immediately, preferring to keep a small inn on Church Street, North Parramatta. They are reported to have later lived and farmed "on the old Murray Estate (then owned by the Stewarts)" in Beecroft (Barker 2004:1; Cumberland Argus and Fruitgrowers Advocate, 14 January 1905, pg. 10). It is unclear when the Maher's came to actually live on their property, but by 1862 the electoral roll for that year definitely lists Edward Maher as residing at Pennant Hills (Ancestry 2017).

According to a biography and the oral history of the Maher family, they did not build the original cottage but instead it was already present when they purchased the land. It was a family belief that the cottage had been constructed by Samuel Marsden for use by his shepherds (Barker 2004:1). Nonetheless, Edward and Brigid Maher extended the little cottage by the addition of a timber wing containing five or six small bedrooms to cater for their family of 14 children. Edward also planted an orchard of various fruits, including apples, pears, apricots and peaches, and ran sheep, a cow and horses (Wilson 2011:17, 19).

As an outer suburb, Beecroft was not initially included in the Sydney sewerage or main water supply schemes. It is likely that cesspits would have been excavated, but the geology of the region was not suited for this form of waste disposal as the porous nature of the sandstone bedrock caused spillage into neighbouring properties and creeklines. Wells were sunk to provide individual access to fresh water and these continued in use until at least the 1890s, with many examples still present (Figure 3.4). Septic tanks were not installed until around 1916, with nightly visits from the 'pan man' being maintained until then (Beecroft and Cheltenham Historical Society 1983:122). The oral history of JK Maher, who recalled visiting his grandmother at the cottage, suggests that the property had two wells at this time (Wilson 2011:24). In the absence of historical documentation regarding these wells, it is assumed that they were constructed by either Palmer or Maher, although the lack of reference to a well in the 1855 subdivision notice would suggest that Maher was more likely to be responsible.

Figure 3.4 An example of a typical beehive well from the mid-1890s located at ‘Marabar’, 8 Beecroft Road, Beecroft (source: Beecroft and Cheltenham Historical Society 1983:119).
Edward James Maher died at his residence, named in his obituary as "Mount Wilberforce, Pennant Hills" on 17 September 1894, aged 63 years (CA&FA, 22 September 1894, pg. 4). By the time of his death, he was a prosperous fruit grower and had extensive landholdings in the Pennant Hills and North Rocks area. A legal dispute over his will was resolved in court in May 1897 as it "appeared that in January 1859 [Maher] made a settlement of his property...but subsequently made a will ignoring the registered deed of settlement" (The Australian Star, 13 May 1897, pg. 6). The judge set aside the deed of settlement in favour of the will executed at a later date (NBRS 2016:10). The property containing the study area, now called 'Home Farm', was subdivided into three smaller allotments, with three of Edward's sons receiving a block each. Both Arthur and Charles lived with their families in their respective properties while James resided with his elderly mother in the old cottage house (NBRS 2016:9), although this was technically on Charles' block. Brigid died at this residence in 1905 at the age of 73 (Barker 2004:2) and her largely attended funeral was held at their 'farm' (CA&FA, 14 January 1905, pg. 5).

3.1.5 The Subdivisions – 1933 to Present

After Charles Maher died in 1929, his block containing the study area passed to his son Wallace Michael Maher. Wallace undertook a subdivision into five smaller allotments, as shown in Registered Plan 601. The cottage and an outbuilding were shown on the registered plan as being in Lot 4 (Figure 3.5).

Following the subdivision, Gordon Musgrave purchased lots 4 and 5, bordered by Pennant Hills Road on the west and Copeland Road on the south and totalling approximately 5 acres (2 hectares). The Musgraves undertook their own subdivision and the lot on the corner of Pennant Hills Road and Copeland Road along with part of the neighbouring lot to the north was bought by the McGrath family in 1948 (NBRS 2016:12-14).

The cottage was occupied by both the Musgraves and the McGraths, before ownership passed to the Littlewood family in 1966 and the James family in 1968, and finally the Callaghans in 2003. The house was badly damaged in a fire in 2009 but most of the damage was to the later 20th century extension. The core of the two-roomed cottage managed to remain standing (NBRS 2016:16).

The Callaghans commissioned Helen Wilson to prepare a CMP for the property as part of an attempt to restore it after the fire. This report was completed in March 2011. However, it appears that the demolition and conservation works recommended in the CMP were never carried out.
Figure 3.5  Registered Plan 601, 6th September 1933, showing the land and structures owned by Maher after his subdivision into 5 allotments. Note that only the cottage and an outbuilding are shown in the study area at this time (source: Land and Property Information 2017).
3.2 Phases of Site Development

3.2.1 Phase One: Mount Wilberforce Estate – 1799 to 1855

Local historians have suggested that Marsden was responsible for the construction of the original two-room cottage, which was built for his head shepherd (James 1976:12; NBRS 2016:9). However, no corroborating evidence could be found to confirm this assertion. While the estate did contain a cottage when listed for sale in 1822, the location of this property is unknown and it appears likely that it lay on the western side of Pennant Hills Road.

No other development is known to have occurred during Marsden's ownership of the study area, except for vegetation clearing, the grazing of livestock and agricultural cultivation.

Welsh purchased the farm in 1818 from Marsden, and he is known to have had a tenant on the estate, it appears that he did not build any further cottages.

George Palmer purchased the entire estate from Welsh in 1822, and it is likely that he did not build any further cottages. Palmer is generally attributed as having constructed the cottage in the study area around either 1838 or 1839. This is based primarily on documents prepared by local historians whose quality of research is unknown, and by Wilson, who may have incorrectly interpreted the sales notice of 1855.

Although he never resided on the property, the 1838 lease notice states that George Palmer had recently constructed a small cottage that was inhabited by his son, William Pemberton Palmer, for a short time (TSG, 9 May 1839, pg. 3). There is no direct evidence suggesting that this cottage was built within the present study area, and on the balance of evidence, it appears likely that this cottage was the original part of the Stoneleigh house, constructed in Lot 1 on the western side of Pennant Hills Road.

3.2.2 Phase Two: The Original Cottage – Circa 1855

This assessment argues that the cottage was therefore constructed by Maher following his purchase of Lot 3 in 1855. While the Maher family initially leased out their land, it is still likely that the cottage was constructed soon after 1855.

The original building comprised of two main rooms on a north-south axis with a central hall and an east-facing front verandah, with a chimney and bakers oven extending northwards from the building (Wilson 2011:7). The property also had "barns, sheds, stables and tanks on the southern side of the farmhouse", although the exact location of these structures are unknown (Wilson 2011:20).

The cottage is also likely to have originally had at least one well to supply water, although the oral history identifies two separate wells present in the yard behind the cottage. It is assumed that at least one of the wells must have been sunk following the construction of the cottage, but it is unknown which of the two wells is earliest. One of the wells is recorded as being "12 feet [3.7 metres] from the present sunroom on the northern side" (Wilson 2011:23) while the other was identified when constructing the brick wall along the western side of the property (Figure 3.6). It is this second well which is described as having been "lined with bottles with heavy ends" (Wilson 2011:23, 38).
Figure 3.6 Location of known and potential structures believed to be constructed _circa_ 1855.
3.2.3 Phase Three: Maher’s Extensions – 1855 to 1941

Much of the information on construction works carried out by Edward Maher comes from the oral accounts of his grandson JK Maher, though oral histories can have issues with interviewer bias and informant unreliability. Every attempt to reconfirm these claims through historical sources has been undertaken.

Maher is recorded as also constructed a rectangular weatherboard building to the west of the cottage in order to serve as additional sleeping space for his 14 children. The sleeping quarters is recorded as having been constructed between the 1860s and the 1880s and it does not appear to have been directly joined to the main cottage. Instead, the building is described as being accessed "by a wooden 'causeway' with a curved iron canopy", and "at a funny angle" to the main building (Wilson 2011:21). The location of this building is not recorded, nor is it clear what orientation this building was constructed on.

During the late 19th century, the cottage was also extended westwards with the construction of a skillion roofed addition containing four small rooms and a hall. The date of this addition is unknown, but ascribed to being "pre 1900" (Wilson 2011:21).

As both the timber sleeping quarters and the skillion extension were present when the property was purchased by Musgrave in the 1940s, this must mean that the timber sleeping accommodation was located far enough westwards from the cottage that both the skillion extension and the sleeping quarters could both exist simultaneously.
Figure 3.7  Location of the known pre-1900 skillion extension, and partial arc showing the potential extent of the weatherboard sleeping quarters, based on assumption that the structure extended at a “funny” angle from the cottage.
3.2.4 Phase Four: Musgrave Alterations – 1941 to 1948

When the Musgraves purchased the property in 1941, both the main cottage and the timber sleeping quarters were in extremely poor repair, with the sleeping quarters having become infested with white ants. The Musgraves demolished the weatherboard structure and replaced it with a new, two-room extension running westwards off the skillion extension to the original cottage. Another two-room extension was added to the southern wall of the skillion extension to create a "granny flat", while the Musgraves also constructed a garage to the east of the cottage (Wilson 2011:21).

A 1943 aerial image of the cottage shows the additions undertaken by the Musgraves as well as three outbuildings present along the northern boundary fence. The land to the east of the cottage contains the remains of orchards, while plough marks are visible on the land to the north (Figure 3.8).

![Figure 3.8](image_url) Extract from the 1943 aerial image showing the cottage and outbuildings (source: DPI).
Figure 3.9 Location of the 1940's construction work undertaken by Musgrave in relation to earlier structures.
3.2.5 Phase Five: 1980s Onwards

Further subdivision occurred in 1948, which saw the removal the original driveway onto Copeland Road and its replacement with access from the busier Pennant Hills Road. The current cadastral boundaries were set by 1963, by which time separate residences had been constructed in each lot. A 1963 survey by Sydney Water (Figure 3.10) shows both the 1855 cottage and an outbuilding, which functioned as a laundry (Wilson 2011:23).

Figure 3.10 Detail from 1963 Sydney Water survey plan with 587 Pennant Hills Road shaded yellow and the extent of the study area outlined in blue (after NBRS 2016:16).

The property was subsequently purchased by the James', who constructed a swimming pool and heavy sandstone wall around 1968 in the north-eastern corner of the property, replacing an established mulberry tree and possibly the earlier laundry block. Other various outbuildings had been situated in this area, but these had all been demolished by this time (Wilson 2011:24). A new extension was also added to the northern side of the cottage, which functioned as a dining area and kitchen (Wilson 2011:14).
Both 585 and 587 Pennant Hills Road were further reduced in size around 1990 due to the widening of Pennant Hills Road, resulting in the resumption of land along the western boundary of the lots (Figure 3.11). During these works, it was reported that a well had been exposed by the construction of the high brick sound barrier wall along this frontage. No record of this discovery could be identified and only conjectural locations for this structure can be proposed (NBRS 2011:41).

Around 2005, the Callaghans constructed a new light framed wall on the south side of the main room of the cottage to form an entry corridor. At the same time all internal walls were lined with plasterboard, excluding the western and northern walls, with the latter containing the original fireplace (Wilson 2011:30). Other attempts at heritage restoration or reproduction were added by the Callaghans in 2005; however, most of these have served to detract from the original character of the cottage and should be replaced with appropriate heritage finishes. Finally, a kitchen was constructed in the northern addition to the rear wing, completed by the James’ in the 1980s.

No other developments were made in the study area until 2009, when tragically, a fire started in the living room of the western extension and spread throughout the house causing significant smoke damage. Following this, the owners, Rebecca and Mark Callaghan commissioned Helen Wilson to prepare a CMP for their property (Wilson 2011:8). This was to accompany proposed conservation works that would see the modern intrusive additions to the structure removed and conservation of all heritage aspects associated with the dwelling. Unfortunately, this conservation work was never completed.
Table 3.1 Chronology of key changes to the main property (after Wilson 2011:13-15).

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1799</td>
<td>100 acre (40.5 hectares) grant given by Governor Hunter to Reverend Samuel Marsden, which he named &quot;Mount Wilberforce&quot;.</td>
</tr>
<tr>
<td>1818</td>
<td>Entire estate transferred from Samuel Marsden to John Welsh, captain of the Claudine.</td>
</tr>
<tr>
<td>1822</td>
<td>Purchased by GT Palmer for £150 &quot;the farm called MOUNT WILBERFORCE comprising ONE HUNDRED ACRES and the rents, houses, outhouses etc...&quot;</td>
</tr>
<tr>
<td>1838</td>
<td>Notice that the estate is available for lease or sale, along with a &quot;newly erected cottage...together with suitable outbuildings, orchard, garden...&quot;</td>
</tr>
<tr>
<td>1855</td>
<td>After death of GT Palmer, William Davis (trustee) subdivided the estate into 3 smaller lots. Lot 1 - 42 acres (17 hectares) purchased by James Smith, Lot 2 - 28 acres (11.3 hectares) purchased by Frances Allsop and Lot 3 - 33 acres (13.4 hectares) purchased by Edward Maher. Maher either purchased the property with a two-roomed cottage or constructed his own. Shortly afterwards, he added a timber wing of 5 or 6 bedrooms.</td>
</tr>
<tr>
<td>1894</td>
<td>Lot 3 is split into three portions and the cottage passed to Charles Ambrose Maher.</td>
</tr>
<tr>
<td>Pre-1900s</td>
<td>Addition of a skillion-roofed extension on the western side of the cottage.</td>
</tr>
<tr>
<td>1924</td>
<td>Property passed to Wallis Michael Maher.</td>
</tr>
<tr>
<td>1941</td>
<td>Gordon Musgrave purchased 33 acres (13.6 hectares) from the Maher family and sub-divided into 4 lots. Demolished the timber extension from 1855. Constructed southern and western extensions attached to the pre-1800 skillion extension, and a car garage in the south-western corner of the property.</td>
</tr>
<tr>
<td>1948</td>
<td>Property purchased by Alfred Clive McGrath and Mona Catherine McGrath, who further subdivided the land.</td>
</tr>
<tr>
<td>1966</td>
<td>Purchased by George Ernest Littlewood and Vivian Littlewood.</td>
</tr>
<tr>
<td>1984</td>
<td>New kitchen and dining area constructed to north of original cottage.</td>
</tr>
<tr>
<td>2000</td>
<td>Purchased by Adam Strong.</td>
</tr>
<tr>
<td>2003</td>
<td>Purchased by Rachael and Mark Callaghan.</td>
</tr>
<tr>
<td>2011</td>
<td>DA/316/2011 alterations and additions to a heritage dwelling (Lot 5 DP801996). It doesn't appear that this work was completed.</td>
</tr>
<tr>
<td>Year</td>
<td>Event</td>
</tr>
<tr>
<td>------</td>
<td>-------</td>
</tr>
<tr>
<td>2015</td>
<td>DA/1485/2015 approved demolition of all structures, adaptive reuse of a heritage item and construction of 19 self-contained dwellings for a seniors living development known as Copeland Greens.</td>
</tr>
<tr>
<td>2016</td>
<td>NBRS+PARTNERS completed a Statement of Heritage Impact (SOHI) for the study area as per the requirements for DA/1485/2015.</td>
</tr>
</tbody>
</table>

![Current floor plan of the property, with the original cottage marked in black, the pre-1900s skillion extension in red, the 1940s southern extension in blue and the western family extension in green, and the 1980s northern extension in purple (after Wilson 2011:26).](image)

**Figure 3.12**  Current floor plan of the property, with the original cottage marked in black, the pre-1900s skillion extension in red, the 1940s southern extension in blue and the western family extension in green, and the 1980s northern extension in purple (after Wilson 2011:26).
Figure 3.13 Location of the post-1950s construction in relation to earlier structures.
3.2.6 Remaining Lots

The surrounding dwellings at 3 Copeland Road, 5 Copeland Road and 585 Pennant Hills Road were all constructed during the 1950s. The McGraths sold Lot 5, DP22578 (3 Copeland Road) to William Ralston Beattie in 1953. It is assumed that Beattie constructed the current residence, which is now in a state of disrepair, prior to 1958 when he is recorded as residing there. With the death of William in 1980, the property passed to his widow Yvonne (NBRS 2016:22). The property has been rented since 2004 and was sold in 2014 and again in 2016 as part of the proposed development. It is currently vacant and in a poor state of repair with exceedingly overgrown gardens.

The property at 5 Copeland Road is located on Lot 6, DP22578 which was sold by the McGraths in May 1951 to Robert Edward Scott of Epping. In 1954, Scott sold the property to a builder from Castle Hill named Robert Parker Millner who probably built the three-bedroom residence shortly afterwards (NRBS 2011:23). The property changed hands several times until 2014, when it was rented through to March 2017. It was then purchased as part of the proposed development. This property is in much better condition than its western neighbour. However, a large tree has fallen within the back yard of No. 5 and also partially across No. 3. This has destroyed the wooden deck of the property and made access difficult.

A detailed history of 585 Pennant Hills Road is not included in the NBRS assessment, and is not considered necessary here as no developments prior to 1955 were identified in that property.
4 ARCHAEOLOGICAL PREDICTIVE MODELLING

An assessment of archaeological potential usually considers the historic sequence of occupation in comparison to the structures which are currently extant, as well as the impact that the more recent constructions and works would have had on the earlier occupation phases and, as such, the likely intactness of the archaeological resource. This, in turn, is tied in with the extent to which a site may contribute knowledge not available from other sources to current themes in historical archaeology and related disciplines.

In regard to the assessment of the study area, the archaeological potential depends upon the anticipated likelihood for the survival of buried structural fabric and cultural deposits as well as an estimation of archaeological integrity. Structural fabric refers to what is generally regarded as building or civil engineering remnants. Cultural deposits refer to archaeological deposits, i.e. deposited sediments containing artefacts etc.

Having analysed the historical evidence in the previous chapters, the following section presents a summary of the potential for a physical archaeological resource to be present in the study area, that is, its archaeological sensitivity/potential.

4.1 Historical Predictive Modelling

The following predictive model draws on the areas of known archaeological sensitivity. As a general rule of archaeology, sites first redeveloped in either the late 19th or early 20th century can also retain evidence of occupation from earlier periods. It is also very common that such evidence can be recovered even when sites have been redeveloped or disturbed by modern developments. Based on the detailed background history, the following general predictive statements can be made:

- There is low potential for archaeological remains to be present which relate to Marsden or Welsh’s occupation of the site (i.e. pre-1822), as no known development occurred within the study area at this time.

- There is low potential for remnants of orchards, landscaped gardens, earlier pathways or fenced paddocks associated Maher’s purchase and occupation of Lot 3 (i.e. post 1855). Any archaeological evidence relating to the agricultural usage of the lot is likely to be ephemeral in nature and destroyed by modern disturbance.

- There is low potential for identification of any remains of any cellars or underground storage areas associated with the original cottage building. Excluding the wells (see below), there is no historical evidence that any substantial underground cellars or storage areas were present within the study area.

- There is low potential for the identification of archaeological remains associated with the weatherboard sleeping quarters constructed by Maher between 1860 and 1880. The weatherboard building is unlikely to have left substantial footings, and the exact location of the building is unknown. The subsequent construction of the 1940s western extension over the probable location of the sleeping quarters is likely to have removed any archaeological evidence.

- There is moderate potential for archaeological remains associated with yard surfaces and rubbish accumulations associated with the Maher families occupation of the study area (i.e. post 1855). Archaeological material may be identified in areas surrounding the cottage building which have not been subject to modern disturbances.

- There is low to high potential for archaeological material relating to former structures and outbuildings constructed by Maher following his purchase and occupation of Lot 3 (i.e. post-1855). This may include barns, sheds, stables, the laundry block and water tanks, whose locations are not always historically recorded. Potential is dependant on the level of post-1900s disturbance.
- There is high potential for underfloor deposits to be present in the pre-1900s skillion addition. This material is likely to be an accumulation of domestic material which has fallen through gaps in the floorboard and will provide insight into the daily lives of the various families who have inhabited the cottage.

- There is high potential for the original sandstone flagging and sandstone steps to be present underneath the current modern tiled verandah extending from the eastern cottage elevation.

- There is moderate to high potential for deep features such as wells or cesspits associated with the cottage to be present. Approximate locations are known for two wells, one of which may have been damaged during the construction of the wall along the western boundary of the property. While the original cottage is likely to have had an associated cesspit, their locations were often not recorded historically and can therefore be difficult to predict.
5 SITE INSPECTION

5.1 Site Inspection: 12 September 2017

Amy Ziesing (Austral Archaeology) conducted a site inspection of the study area on 12 September 2017 in order to identify areas of archaeological potential. The inspection examined all parts of the study area but focused on areas that had been identified as containing moderate to high archaeological potential.

5.1.1 585 and 587 Pennant Hills Road (Lot 55 and 56, DP1212724)

These two properties contained four extant structures; the circa 1855 cottage and extensions, a modern garage, a wooden pergola and a two storey modern weatherboard house. Lawn areas in both properties were overgrown and remnants of the former outbuildings were not identified during the site inspection. However, the areas where these structures were formerly located now contains a modern aluminium double shed, swimming pool and concreted driveway, demonstrating varying levels of modern disturbance in this area (Figure 5.2 to Figure 5.4). Outside of the footprint of the swimming pool, the lot is unlikely to have undergone high levels of ground disturbance. Furthermore, the main residence located in 585 Pennant Hills Road is the only phase of development since the demolition of the outbuildings in the 1960s and the modern residence is not located in the vicinity of these structures. Except for within the footprint of the swimming pool, this indicates a high potential for in-situ archaeological remains associated with the various post-1855 outbuildings to be present.
Figure 5.2  North-facing view showing double aluminium sheds located to the north-east of the cottage, within the vicinity of the potential location of the post-1855 outbuildings.

Figure 5.3  South-facing view showing the post-1960s wooden pergola located to the north-east of the original cottage.
The western property boundary consists of a brick wall, and the general area is extremely overgrown with thick grass which abuts the modern brick wall. Oral history places the location of two wells within this area (Figure 5.5). One was exposed during the widening of Pennant Hills Road in the 1990s (Wilson 2011:22). The other is described as being located 4 metres north of the current sunroom extension to the west of the original cottage (Figure 5.6). No definitive evidence of either structure could be identified during the site visit. Unusually, a modern water tap was attached to the western wall of the study area in the potential vicinity of the well. It is unknown what underground services are present in the area, and whether the tap is fed from within or outside of the study area (Figure 5.7).
Figure 5.6 North-facing view showing overgrown lawn area to west of cottage which is the possible location of the second well.

Figure 5.7 North-western facing view showing brick sound barrier wall along Pennant Hills Road frontage.
The eastern tile-covered verandah correlates with the location of the east verandah of the original cottage (Figure 5.8), and sections of the sandstone flagged floor and sandstone steps may still exist below it. It is assumed that the sandstone steps present in Figure 5.7 (right) are those that were mentioned in the oral history provided by JK Maher (grandson of Edward Maher) in the CMP (Wilson 2011:19).

![Figure 5.8](image1.png) West-facing view showing the current tiled verandah (left) and the original sandstone flagging (right).

![Figure 5.9](image2.png) General view at the rear of the double aluminium garage showing rubbish accumulation and simple construction of the building.

The areas to the north and east of the original cottage are covered by a concrete slab driveway and which may have served to cap archaeological remains and preserve them in situ (Figure 5.10). These parts of the property therefore constitute an area of archaeological potential that may contain structural remains of the laundry block and other outbuildings constructed by Maher during his occupancy of the cottage.
Figure 5.10  North-facing view showing the modern carport added to the eastern verandah by the Callaghans after 2003 with the garage in the background.

Figure 5.11  South facing view showing the original baker's oven and fireplace located on the northern facade of the two-room verandah cottage.
Original fabric associated with the cottage is still visible, including the form of the roof, two sandstock brick outer walls and the sandstone base course, the chimney, the fireplace and adjacent arched indent for the baker’s oven. The internal fabric could not be assessed at this inspection as access could not be gained. Despite this, it is known from previous assessments that a circa 1900 plaster wall of the north room of the cottage still remains, and the original sandstone steps and flagging of the eastern verandah are thought to exist under the modern tiling.

The large tree shown in Figure 5.12 appears to be the oldest tree on the site, and is referenced in local histories connected with the cottage (Barker 2004; James 1994). It is unknown if this tree was intentionally planted or if it was self-seeded. It was already mature by the time when JK Maher was visiting the site in the 1930s (Wilson 2011:24).

![Figure 5.12](image-url) West facing view showing the Moreton Bay fig tree that sits to the immediate north of the cottage and chimney.
Figure 5.13   East-facing view showing the southern and western extensions to the original cottage.

Figure 5.14   South-eastern facing view showing the western and southern extensions to the original cottage.
Figure 5.15 North facing view showing the concrete area to the south of the original cottage showing the original cottage and the verandah.

Figure 5.16 West-facing view showing the top of a garden water-feature that is located to the north of the driveway entrance from Pennant Hills Road.
5.1.2 3 Copeland Road, Beecroft (Lot 59, DP1212724)

Figure 5.17 Location of 3 Copeland Road, Beecroft

The inspection of 3 Copeland Road noted that the 1950s house was very dilapidated and had been vacant for a period of time (Figure 5.18). This and a small aluminium garden shed were the only buildings present on this site. The house footprint appears to have undergone significant bulk soil excavation to allow for the construction of a double garage under the house. The site inspection of this property did not identify any areas of archaeological potential, owing to the level of disturbance across the site. There is a wooden shed, possibly for chickens, that is present on the western property boundary which may replicate the original location of a wooden cabin, as the other extensions and outbuildings seemed to have adhered to this pattern across the site (Figure 5.20).
Figure 5.18  North-facing view showing the 1950s house with double garage underneath.

Figure 5.19  The 1943 aerial showing the cabin that existed in this property.
5.1.3 5 Copeland Road, Beecroft (Lot 60, DP1212724)

Figure 5.21 Location of 5 Copeland Road, Beecroft.
The current house comprises a rendered brick 1950s, single-storey building with a double garage underneath. The house is in a poor state of repair and the gardens are overgrown. Significant excavation of the house footprint has taken place to allow the construction of the garage. The backyard has been severely affected by the collapse of a large tree that has flattened portions of the garden and wooden timber deck which is attached to the northern side of the house (Figure 5.23).

![Figure 5.22](image)

Figure 5.22 North-western facing view showing the front of 5 Copeland Road, which sits to the south-east of the Mount Wilberforce cottage (No. 587).

The inspection of 5 Copeland Road did not identify any areas of archaeological potential. Based on the historical overlay mapping, it seems that only orchards, fenced paddocks and cultivated land extended onto this allotment during the early phases of development. No historic structures are mentioned as having been built within this property boundary until the construction of the current 1950s house.
Figure 5.23  North-facing view showing the garden of 5 Copeland Road.

5.2 Site Inspection Summary
In summary, the site inspection identified no in-situ archaeological features or deposits associated with previous phases of occupation within the study area, excluding those directly related to the original two-room verandah cottage. However, it was also determined during the site inspection that while parts of the study area have been subject to high levels of modern disturbance, the area in the vicinity of the cottage have been subject to lesser degrees of damage. The highest level of impact in this area is the excavation of the swimming pool, which has damaged archaeological remains associated with outbuildings present on the 1943 aerial image. Areas of high archaeological potential, which include in the vicinity of the former laundry block, other outbuildings, the wells and the original eastern verandah are likely to still be present within the study area.
6  HISTORICAL LAND USE AND SENSITIVITY MAPPING

6.1 Historical Land Use

The lands surrounding the study area were not immediately occupied in the early days of European settlement. While more accessible lands along the Parramatta and Hawkesbury rivers were the preferred settlement areas for farming, the forested lands to the north of the Parramatta River were used as a ready source of timber. Large-scale settlement of the wider Pennant Hills region did not occur until the early 19th century, approximately twenty years after the arrival of the first fleet and when additional land was being sought (Schofield 1988:3).

As such, the Beecroft area was first noted by Europeans for the fine timber forests which could provide for private and government building projects in the Colony. While the Field of Mars Common was set aside for public use by Governor Gidley King in 1804 and covered an area of approximately 5,000 acres (2,023.4 hectares), land grants were given out in the early 19th century, with the study area forming part of a 100 acre (40.5 hectare) grant given to Marsden in 1818. The estate was variously sold and subdivided over the next 75 years, especially following the opening of the Sydney to Hornsby railway nearby in 1886.

No definitive date for the construction of the verandah cottage and the outbuildings is known. However, three possible alternatives have been proposed. The first theory is that Marsden constructed a two room brick and thatch cottage for his head shepherd and this was later extended by Palmer and again by Maher to accommodate his large families. This would put the date of the original two-room cottage to pre-1818. The second theory is supported by Wilson (2011) and suggests that the cottage was constructed by Palmer in 1838 or 1839 before being extended by Maher. The third theory, and the one which is supported by contemporary sources, is that the land sold by Palmer to Maher in 1855 did not contain any buildings and that Palmer instead constructed Stoneleigh in 1838 or 1839. Therefore, Maher must have constructed the cottage following his purchase of the lot in 1855.

Apart from the construction of the cottage and possibly the sinking of a well, it is likely that up to the 1880s the study area was utilised predominantly for agricultural pursuits and this would have included various landscape modification processes such as land clearance, the planting and harvesting of crops, and the grazing of livestock.

Regardless of the date of construction, the original cottage was surrounded by other outbuildings, and the study area is known to contain at least one well which is likely be contemporary with the construction of the cottage. Additional changes came with the construction of a weatherboard shack to the west of the cottage by Maher for use as an additional sleeping space at some point between the 1860s and 1880s, followed by the construction of the skillion roof addition prior to the 1900s. Other extensions to the cottage came in the 1940s and finally in the 1980s, including the construction of new wings for the cottage, modern garages and sheds, and a swimming pool.

Subdivisions in both the 1940s and 1960s saw the creation of the adjoining lots while reducing the size of the land associated with the cottage. This also led to the construction of 585 Pennant Hills Road and 3 and 5 Copeland Road, which were all constructed in the 1950s.

Other 20th century development included the resumption of a small section of land on the western Pennant Hills Road frontage (No. 587) and the construction of a high brick sound barrier extending along this boundary. Subsequent development includes the construction of the carport and double aluminium garage adjacent to the cottage which were installed by the Callaghans sometime after 2003. In 2009, fire destroyed a large portion of the western extension of the cottage and smoke damage affected the rest of the building, leading to the preparation of a CMP in 2011. However, it does not appear that any of the proposed conservation works were undertaken to completion.

6.2 Degree of Historical Disturbance and Impacts

The survival and visibility of historical sites within the study is greatly affected by the process of disturbance from modern building developments. These factors need to be considered when assessing the archaeological potential of the study area.
The impacts across the majority of the study area include widespread potential ground levelling, multiple phases of construction and demolition, and the growth and removal of several trees.

Historic disturbance in itself can be of interest to archaeologists. Despite modern landscaping and construction, it is likely that at least part of the site has preserved archaeological deposits relating to the European occupation of the study area.

6.3 Sensitivity Mapping

The results of Section 4 and Section 5 are depicted in an archaeological sensitivity map below (Figure 6.1). This map shows the degree of predicted archaeological potential within the study area following site development and is only applicable to historical archaeological potential. The map forms the basis for the conclusions and management recommendations outlined in Section 11. However, one key point to note is that potential is not equal to significance, and areas of even moderate or high archaeological potential may not actually contain archaeological material which is considered significant (see Section 7).
Figure 6.1 Zones of archaeological potential within the study area. Note that archaeological potential does not equate to archaeological significance.
7 ASSESSMENT OF SIGNIFICANCE

7.1 Introduction

An assessment of cultural significance seeks to establish the importance that a place has to the community. The concept of cultural significance is intrinsically tied to the fabric of the place, its history, setting and its relationship to other items in its surrounds and the response it evokes from the community.

The assessment of cultural significance with respect to archaeological sites can present difficulties because the nature and extent of the "relics" are often indeterminate and value judgements therefore need to be made on the basis of potential attributes. The element of judgement can be greatly reduced by historical or other research, as has been completed for the current study. Archaeological deposits and features provide important evidence of the history and settlement of New South Wales. These heritage items may include deposits containing material culture (artefacts) that can be analysed to yield information regarding early urban development that is unavailable from other sources. Archaeological investigations can reveal much about technology, industry, past economic and social conditions and people's lives.

Sites that contain these elements therefore have scientific value that may be of considerable significance when analysed in association with documentary evidence. It is through this potential to reveal information about the past use of a place that archaeological sites have heritage significance.

7.2 Basis for Assessment

The Burra Charter of Australia ICOMOS was formulated in 1979 (revised 1999), based largely on the Venice Charter (for International Heritage) of 1966. The Burra Charter is the standard adopted by most heritage practitioners in Australia. The Charter divides significance into four categories for the purpose of assessment. They are: Aesthetic, Historical, Scientific/Technical, and Social significance.

The Heritage Council of New South Wales has established a set of seven criteria to be used in assessing cultural heritage significance in New South Wales, and specific guidelines have been produced to assist archaeologists in assessing significance for subsurface deposits. These are published in the Heritage Council's Assessing Significance for Historical Archaeological Sites and 'Relics' (2009). The Heritage Council's criteria incorporate those of the Burra Charter, but are expanded to include rarity, representative value, and associative value.

In order to determine the significance of a historical site, the Heritage Council have determined that the following seven criteria are to be considered (Heritage Branch 2009:3):

- Criterion (a): an item is important in the course, or pattern, of NSW's cultural or natural history (or the local area);
- Criterion (b): an item has strong or special association with the life or works of a person, or group of persons, of importance in NSW's cultural or natural history (or the local area);
- Criterion (c): an item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in NSW (or the local area);
- Criterion (d): an item has strong or special association with a particular community or cultural group in NSW for social, cultural or spiritual reasons (or the local area);
- Criterion (e): an item has potential to yield information that will contribute to an understanding of NSW's cultural or natural history (or the local area);
- Criterion (f): an item possesses uncommon, rare or endangered aspects of NSW's cultural or natural history (or the local area); and
- Criterion (g): an item is important in demonstrating the principal characteristics of a class of NSW's cultural or natural places or cultural or natural environments (or the local area).
These criteria were designed for use on known or built heritage items, where above ground heritage is both tangible and easily identified. As the nature of archaeology is that it is invisible until disturbed, the presence and attributes of archaeological material must be assumed based on the recorded levels of disturbance, known site history and the creation of predictive statements. Ultimately, the actual presence of archaeological material can only ever be framed in terms of the potential for it to be present.

The Heritage Division has assisted archaeologists by creating questions which are framed around the main NSW Heritage Criteria, and which can be used to assess the relative importance of any archaeology which is likely to be present. The questions to be asked of an archaeological deposit differ from the main criteria, but can be seen to be referential to them, in order to create a suitable framework for assessing archaeological sites.

Therefore, it should be noted that although the study area contains built heritage, the significance of the built heritage has already been assessed elsewhere (NBRS 2016; Wilson 2011). The following assessment deals also with the significance of any potential archaeological material present within the study area relating not only to the house, but surrounding buildings, grounds and features.

7.3 Significance Assessment

7.3.1 Assessment Criteria

The following section addresses the significance of the potential archaeological resource in accordance with the criteria adopted in the Heritage Council's significance guidelines for archaeological deposits (Heritage Council 2009:11-13), using selected questions from the guidelines.

Archaeological Research Potential (current NSW Heritage Criterion e)

- To which contexts (historical, archaeological and research-based) is it anticipated that the site will yield important information?

It is anticipated that the site may yield information that relates to historical (i.e. the occupation history of the site), archaeological (i.e. function and location of buildings and structures) and research-based contexts (i.e. artefactual material which can be analysed).

- Is the site likely to contain the mixed remains of several occupations and eras, or is it expected that the site has the remains of a single occupation or a short time-period?

The study area is likely to contain the mixed remains of multiple phases of occupation. However, due to the continual occupation of the study area, it may be difficult to differentiate these layers.

The original cottage, most likely built around 1855, still stands within the study area and is likely to contain mixed remains of several occupations and eras. Archaeological remains may be identified which relate to occupation by the Maher family following the subdivision of the Mount Wilberforce Estate in 1855, although there is a possibility of earlier deposits being present if the cottage dates to earlier than expected. It is likely that there are internal, underfloor deposits within parts of the cottage dating back to the earliest of occupation, and outbuildings may be present in the surrounding area.

Two wells are recorded as having been sunk on the property to provide the cottage with water and are likely to be contemporaneous with the cottage. The wells are likely to have remained in use throughout the 19th and 20th century until the introduction of mains water into the district, and as such, their usage is considered to have extended across multiple phases of occupation.

Structural remains of the original outbuildings (such as barns, sheds, stables, tanks and a laundry block) may have originally been built by Maher in 1855 to the north-east and south of the cottage. These buildings were either adapted or demolished during subsequent phases of occupation, and would represent multiple phases of occupation.

Single phase occupation is likely to be identified through remains associated with the weatherboard extension built “on a funny angle” by Maher sometime between the 1860s and 1880s. However, the level of preservation of this structure is unknown.
**Is the site rare or representative in terms of the extent, nature, integrity and preservation of the deposits (if known)?**

The local heritage listing for the cottage states that it represents one of the oldest structures in the LGA, if it is not the oldest. The original fabric is stated as being a rare example of an early surviving primitive cottage, maintaining regional significance (State Heritage Inventory 2015). However, this statement is based on research undertaken by various local history societies and repeated by Perumal Murphy Wu (1993) in the history study which formed the basis of the schedule of heritage items in the original LEP.

If the cottage dates to the 1850s, then any archaeological material will be representative of other small mid-19th century cottages which are prevalent throughout the outer suburbs of Sydney in terms of extent, nature and integrity.

**Are there a large number of similar sites?**

There are a number of comparable colonial brick, sandstone and timber slab cottages throughout the greater Sydney region, many of which are extant and still retain their outbuildings and setting. Examples include Rose Cottage in Wilberforce (SHR, #00358), Stone Cottage in Minto (SHR, #01388), Kent Street Cottage in Epping (LGOV, #1780619), Exeter Farm in Blacktown (SHR, #00205) and Hammer Cottage in Parramatta (LGOV, #2240276).

On the western side of Pennant Hills Road, Stoneleigh (LGOV, #1090062) is likely to either be the original cottage constructed by Marsden on his Mount Wilberforce estate, or to be the 1838 or 1839 cottage constructed by Palmer. Stoneleigh is in a better state of preservation, still has original outbuildings associated with it, and has less modern intrusions (Rappoport 2016).

**Is this type of site already well-documented in the historical record?**

The construction and evolution of colonial brick dwellings is well documented in the historic record, as are elements of the agricultural technologies utilised and activities located within the site.

**Is the excavation of this site likely to enhance or duplicate the data set?**

While the site may contain aspects which are unique to this particular site, excavation of this site is likely to duplicate the existing dataset.

**What is the ability of the archaeological evidence to provide information about a site that could not be derived from any other source and which contributes to the archaeological significance of that site?**

The study area is expected to contain archaeological evidence relating to the occupation of the cottage from around 1855 through to the present. This evidence will relate to the construction and occupation of the main cottage and extensions, the various outbuildings and the two wells.

Any information obtained from an examination of the archaeological material is likely to duplicate information which is readily available from other sources, such as historic documents or the oral history of the site. However, the archaeological material has the potential to be of significance in its own regard, if it is particularly well preserved and intact.

In summary, the site may contain archaeological evidence which could be preserved and which would demonstrate a continuous occupation history of the study area. Although much of this evidence is already known and could be derived from other historic sources, the archaeological evidence may uncover unexpected information and should not be discounted from consideration. As such, the site satisfies NSW Heritage Criterion (e) at a local level.
Associations with individuals, events or groups of historical importance (NSW Heritage Criteria a, b and d)

- **Does the archaeological site link to any NSW Historic Themes? Will the site contain ‘relics’ and remains which may illustrate a significant pattern in State or local history?**

The relevant themes which may be applied solely to the archaeological remains within the study area are listed below in Table 7.1.

**Table 7.1**  

<table>
<thead>
<tr>
<th>Australian Theme</th>
<th>New South Wales Theme</th>
<th>Local Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Economy - Developing local, regional and national economies.</td>
<td>Agriculture</td>
<td>Activities relating to the cultivation and rearing of plant and animal species, usually for commercial purposes. Categories: Rural landscape, farmstead, shed</td>
</tr>
<tr>
<td>4. Settlement - Building settlements, towns and cities.</td>
<td>Accommodation.</td>
<td>Activities associated with the provision of accommodation, and particular types of accommodation. Categories: Shack, homestead, cottage, house site (archaeological)</td>
</tr>
<tr>
<td>8. Culture - Developing cultural institutions and ways of life.</td>
<td>Domestic Life</td>
<td>Activities associated with creating, maintaining, living in and working around houses and institutions. Categories: Domestic artefact scatter, shed, arrangement of interior rooms.</td>
</tr>
<tr>
<td>9. Marking the phases of life</td>
<td>Persons</td>
<td>Activities of, and associations with, identifiable individuals, families and communal groups. Categories: A family home, a dynastic estate, a place of residence.</td>
</tr>
</tbody>
</table>

- **Is the site widely recognised?**

The site is recognised for its historical value within the local community. However, it is primarily the built heritage which is publicly recognised rather than its archaeological potential.

- **Does the site have symbolic value?**

The site may have symbolic value associated with the early agricultural expansion into the Beecroft district. The building also has symbolic value for the various attempts to preserve the building following the 2009 fire and the current attempts to incorporate the building into the proposed development.

- **Is there a community of interest (past or present) which identifies with, and values the specific site?**

The cottage is of interest to local history societies, such as the Hornsby Shire Historical Society. However, the interest is primarily in the built heritage rather than any archaeological material.

- **Is the site likely to provide material expression of a particular event or cultural identity?**

The site could provide material relating to the middle to upper class of the mid-19th and early 20th century through the association with the Maher family. Except for the 2009 fire, there are no known events which are likely to be identified through the archaeological material.
• Is the site associated with an important person? (the role of the person in State or local history must be demonstrated/known)

The study area forms part of the Mount Wilberforce estate which has significance for its association with Reverend Samuel Marsden, who was a notable public figure, land owner and pastoralist. His endeavours in establishing the early wool industry in Australia were significant.

The land passed to George Thomas Palmer in 1822, and he is one of the individuals who may have built the cottage in 1838 or 1839. Palmer was a prominent member of the managing committee of the Female Factory in Parramatta.

The study area is most closely associated with Edward Maher, who was a local orchardist and assisted in establishing this industry throughout wider Sydney.

• What is the strength of association between the person and the site?

The form of the present cottage is most closely linked to Maher, who is believed to be responsible for its construction. Maher is also likely to have arranged construction of various outbuildings and wells within the study area, and both Maher and his descendants lived in the cottage until the 1940s.

• Did the person live or work at the site? During the phase of their career for which they are most recognised? Is that likely to be evident in the archaeology/physical evidence of the site?

If the cottage is the same building referred to in the 1839 lease notice, William Pemberton Palmer inhabited the cottage while employed for a time as a gardener. The Mahers lived in the cottage from 1855 through to the 1940s, although evidence of the orchards and agriculture for which the Maher family were known is likely to lie outside of the study area.

• Did a significant event or discovery take place at the site? Is that evident/or likely to be evident in the archaeology/physical evidence of the site?

No significant events or discoveries took place within the study area.

• Do the archaeological remains have particular associations with individuals, groups and events which may transform mundane places or objects into significant items through the association with important historical occurrences?

Any archaeological remains present within the study area are most likely to be associated with the Maher family. However, it is unlikely that any archaeological remains are associated with significant individuals, groups or events, and that the archaeological material is mundane in nature.

As such, it is considered that any archaeological material likely to be present in the study area does satisfy NSW Heritage Criteria (a), (b), (d) or (e) in this regard.

Aesthetic or Technical Significance (NSW Heritage Criterion c)

• Does the site/is the site likely to have aesthetic value?

While the built heritage embodies significant aesthetic value, any archaeological fabric present within the study area is unlikely to contain aesthetic values although individual artefacts may be identified which are aesthetically pleasing.

• Does the site/is the site likely to embody a distinctive architectural or engineering style or pattern/layout?

The built heritage elements of the original cottage embody the regular vernacular of the architectural and engineering style of a Victorian brick cottage. Archaeological remains relating to outbuildings are likely to reflect similar styles and layout and are unlikely to be distinctive in terms of architecture or engineering style.

Oral histories note that one of the wells is lined with bottle-ends. Should this proven to be true, then the well would embody an extremely distinctive style, and one for which no other examples have been identified in a literature review. However, significance will depend on the age of the well.
Does the site demonstrate a technology which is the first or last of its kind?
The use of bottles in a well lining is unusual, and may be the first example of its kind.

Does the site demonstrate a range of, or change in, technology?
The cottage was continually inhabited from the mid-19th century through to the early 21st century. Due to the technological advances made during this timeframe, such as the introduction of electricity and plumbed services, the archaeological record is likely to demonstrate a change in technology as the buildings were modernised.

Will an archaeological excavation reveal highly intact and legible remains in the form of aesthetically attractive artefacts, aged and worn fabric and remnant structures, which may allow both professionals and the community to connect with the past through tangible physical evidence?
There exists high potential for the area under the western sound barrier wall on the Pennant Hills Road frontage to contain one of two wells associated with the cottage. This well is described as "being lined with bottles with heavy end" (Wilson 2011:38). Any archaeological remains of this well could be considered aged and worn fabric which is aesthetically attractive, while parts of the study area could contain aesthetically attractive artefacts. The well and associated artefacts would be of interest to professionals and could be used for public interpretation of the history of the site.

The archaeological material associated with cottage and wells is likely to demonstrate an easily understood, tangible connection to the past, providing a contextual view of the changing uses of the cottage and outbuildings. It is therefore considered that from a solely archaeological perspective, the site would provide material which would be of interest to the local community, as well as professionals, and does meet NSW Heritage Criteria (c) in this regard at the local level.

Ability to demonstrate the past through archaeological remains (NSW Heritage Criteria a, c, f, and g)

Does the site contain well-preserved or rare examples of technologies or occupations which are typical of particular historic periods or eras of particular significance?
The study area may contain a well which was reported as having been constructed from glass bottles (Wilson 2011:38). This well would be a rare example of its technology.

Was it a long-term or short-term use?
Occupation of the study area has occurred over a long time period, with the cottage being constructed around 1855, or potentially earlier, and it has been continually occupied through to the early 21st century. During the occupation of the successive residents, the main building, although extended and altered, has always been utilised as a residential dwelling.

Does the site demonstrate a short period of occupation and therefore represents only a limited phase of the operations of a site or technology or site? Or does the site reflect occupation over a long period?
The cottage site is likely to reflect occupation over a long period and is likely to represent a wide range of operations and technology.

Does the site demonstrate continuity or change?
The site demonstrates a continuity of occupation within the study area and reflects a concept of adaptation and change.

Are the remains at the site highly intact, legible and readily able to be interpreted?
If present, the remains of any outbuildings or extensions are unlikely to be highly intact, having been subject to their demolition and any subsequent building construction or landscaping at their location.
Interpretation of any structural material would depend solely on the quality of the remains which are identified.

Do the archaeological remains have an ability to demonstrate how a site was used, what processes occurred, how work was undertaken and the scale of an industrial practice or other historic occupation.

The archaeological remains present within the study area are only likely to provide cursory information relating to the function and occupation history of the cottage and outbuildings when compared to the information available from alternative historical sources. It is unlikely that any information will be gained beyond location and ascribing basic functions to buildings or rooms. Understanding of even these functions may require a detailed analysis of the artefactual remains.

The site is known to have been occupied for a long period of its history, and the archaeological remains are unlikely to demonstrate much in the way of additional knowledge. It is considered that the study area does not meet NSW Heritage Criteria (a), (c), (f) and (g) in this regard.

7.4 Statement of Significance

The archaeological remains associated with the current cottage are likely to consist of outbuildings and remnants of the eastern sandstone eastern verandah, as well as yard surfaces, wells and possibly cesspits. The location of many of these features are unknown and based on conjecture.

The construction of the later swimming pool to the north-east of the cottage, as well as the redevelopment of western wing and the construction further skillion extensions are likely to have at least partially removed evidence of the archaeological material in these areas, while various phases of landscaping and the further subdivision of the allotments are likely to have damaged archaeological material in other parts of the site.

The cottage, outbuildings and wells represent the long term occupation of the site, mainly by the Maher family. Very little is presumed to have changed over time with regard to either the location of the outbuildings or to the various technological aspects relating to day-to-day life, although limited modernisation of the house may have occurred.

In considering the rarity and representativeness of this site it is important to consider not only the archaeological material which is likely to be present within the study area, but the wealth of archaeological deposits that would be possessed of similar characteristics from other locations and that better exemplify them.

In this case, throughout Sydney and the surrounding area there are numerous intact archaeological deposits that are directly comparable with the cottage from within the study area. These sites are often still extant and in better states of preservation or have been investigated archaeologically and have provided adequate demonstration of Victorian vernacular slab and brick cottages.

The key areas of interest in regards to the verandah cottage relate to the research potential of examining construction techniques and locations of the outbuildings and wells and the presence of potential sub-floor deposits which could provide information on daily life in the various households. Additionally, if the oral history regarding the bottle-lined well is shown to be correct, then the well would be of considerable interest, as no other examples have been identified.

The extensive alterations and loss of original setting and landscape views are also likely to have impacted on archaeological potential and significance associated with its rarity. The changes to the fabric and additions instead make the archaeological material likely to be present with the study area as being significant at a local level in terms of its research potential.
8 STATEMENT OF HERITAGE IMPACT

8.1 Proposed Works

The current development proposal is to demolish all existing buildings apart from the main heritage cottage, which will be conserved and adaptively reused. A total of 19 self-contained dwellings will be constructed within the study area as part of a seniors living development. This will require excavation for new building foundations, extensive excavation for a basement car parking area, construction of driveways, and landscaping works across the entirety of the study area.

The main components of the proposed works which would have sub-surface impacts, based on consideration of the provided plans, include:

- Demolition of existing structures including 585 Pennant Hills Road, 3 and 5 Copeland Road, Beecroft.
- Partial demolition of 587 Pennant Hills Road, with adaptive reuse of the original two-room cottage.
- Tree removal.
- Construction of a seniors living development comprising 19 self-contained dwellings.
- Construction of a two-storey basement car parking area.
- Installation of new pathways, driveways and pedestrian walkways.
- Installation of Victorian heritage garden surrounding heritage item on north, east and south sides.
- Installation of landscaping for each new dwelling.
- Construction of letter box wall.
- Construction of heritage wall with plaque.

8.2 Assessed Impacts

There will be high levels of impact throughout the entire study area. However the highest level of impact will be associated with the construction of the dwellings and basement car parking area. The construction of the heritage plaque wall and heritage Victorian gardens will also impact the portion of the site to the east and north of the cottage, although these works will only include minimal sub-surface excavation although they will occur in areas of moderate and high archaeological potential.

There will also be landscaping disturbance along the Pennant Hills Road frontage that may impact the location of the wells. These works will impact on areas of high archaeological potential.

The plans for the proposed works, provided by the proponent, are shown in Figure 8.1 to Figure 8.3. All the proposed impacts are shown in Figure 8.5 and Figure 8.6 provides an overlay of the archaeological potential of the study area over the proposed impacts.
Figure 8.2  Demolition plan with inset showing the proposed restoration works (provided by proponent).
Figure 8.3 Landscape concept plan (provided by proponent).
Figure 8.4  Plan showing proposed basement area (provided by proponent).
8.3 Predicted Impact on the Potential Archaeological Resource

The following section provides an assessment of each element of the proposed works and whether the task has potential to impact on the identified archaeological resource (Figure 8.5).

8.3.1 Predicted Impacts with Potential to Harm the Archaeological Resource

- **Construction of the new residential units**
  
  The construction of 19 self-contained dwellings will require excavation work which will cause harm throughout the study area. While the majority of the harm will occur in areas of low archaeological potential, the construction of units in the vicinity of the stone cottage is likely to significantly harm archaeological resources associated with the probable location of outbuildings and the wells.

- **Landscaping works associated with new residential units**
  
  Landscaping works associated with the new residential units will be predominantly confined to the boundaries of the study area and in areas that are already being heavily impacted by building construction and basement excavation.
  
  The landscaping works along the high brick sound barrier wall that extends along the Pennant Hills Road frontage will impact upon the potential location of one of the two wells sunk onto the property Maher and used until at least the 1890s.

- **Demolition of the cottage extensions**
  
  While the main body of the two-room cottage is to be restored, all the remaining extensions, including the pre-1900s skillion roof addition immediately to the west of the main cottage, are to be removed. The four rooms of the skillion roof extension may contain archaeological subfloor deposits which have accumulated since the addition was constructed in the mid- to late 19th century.

- **Potential removal of the Moreton Bay fig tree**
  
  The removal of the historic Moreton Bay fig tree located to the immediate north-east of the verandah cottage has been proposed if the integrity of the north wall of the cottage is compromised. If this tree is cut down, removal of the root system may cause harm to the archaeological resource in the vicinity of the cottage.

8.3.2 Predicted Impacts with Limited Effect on the Archaeological Resource

- **Restoration of cottage and verandah**
  
  Removal of the tiles currently covering the eastern verandah is likely to reveal sandstone flagging and steps from the original verandah, which is contemporaneous with the construction of the cottage. Providing care is taken when uncovering any original fabric, harm to the archaeological resource will be limited.

- **Construction of the heritage stone feature wall**
  
  The construction of the heritage wall containing a commemorative plaque is proposed for an area to the east of the current carport. Sub-surface excavation for this feature will be minimal and is unlikely to harm the archaeological resource.

- **Landscaping works associated with the heritage item**
  
  Formal Victorian heritage gardens will be planted to the east and north of the verandah cottage, extending to the heritage wall in the east and to the southern elevation of Unit 17 in the north. The northern gardens, in particular, will impact on the potential archaeological resource associated with the probable location of outbuildings. However, the landscaping should not be of a sufficient depth or nature to cause harm archaeological material.
• **Construction of the new pathways, driveways and pedestrian access**

These works will traverse across the study area to provide car and pedestrian access to the residential units. Whilst the new pathways and driveways will affect a large portion of the site, the excavation required for their construction will be minimal. Overlaps with areas of potential archaeological resources occur primarily to the either side of the original cottage.

However, locations where pathways and driveways cross areas of archaeological potential are immediately adjacent to the locations earmarked for the construction of new units, which will cause greater degrees of harm prior to this work being undertaken.

• **Construction of the new basement car parking area**

The construction of the new two-storey basement car parking area will require extensive and deep excavation in the eastern half of the study area. The footprint of this structure, however, is located away from areas of archaeological potential and will therefore not harm the archaeological resource.

• **Tree Removal (General)**

Although tree removal across the site will be extensive, these works will be confined to areas that do not contain potential archaeological resources.

• **Construction of the entry & letterbox walls and bin waste area**

These works will occur in the south-eastern part of the study area, on the property boundary with Copeland Road. Little to no excavation will be required for these works, which are located in areas on previous archaeological potential; however, this potential is confined to early landscaping and pathways and is not considered significant.

8.4 Consideration of Heritage Values in the Design Process

The following questions are taken from the Heritage Division's guidelines to preparing statements of heritage impact.

**What aspects of the proposal respect or enhance the heritage significance of the study area?**

• **Restoration of the heritage item**

The restoration and conservation of the heritage item (verandah cottage) will have little to no impact on the potential archaeological resource. In fact the restoration of the cottage to its original form will serve to enhance the heritage characteristics associated with this property.

Attempts will also be made as part of this project to provide public interpretation of the heritage item and history of the site through a plaque and wall located to the east of the cottage. Victorian gardens will also be planted to provide a representation of the early landscaping and layout of formal colonial gardens.

**What aspects of the proposal could have a detrimental effect on the heritage significance of the study area?**

In terms of the archaeological resource, construction of units 17, 18 and 19 will impact on areas of archaeological potential associated with the location of outbuildings, the two wells and possibly Maher's weatherboard extension. Demolition of the extensions and additions to the west of the original cottage may also harm subfloor deposits which date to the mid- to late 19th century.

It is considered that the recommendations in this report provide adequate mitigative strategies for management of the archaeological values of the site.
Have more sympathetic options been considered and discounted?

The archaeological consultant did not have an opportunity to provide input into other design options which may have been more sympathetic to the archaeological resource. However, it is believed that the conservation and restoration of the heritage item will increase the heritage values associated with the overall property rather than detracting from it. The current state of the cottage does not suggest that a heritage item even exists at the site as intrusive elements added over the years have almost completely covered all original fabric, especially from the exterior.

It is hoped that the public interpretation of the archaeological results, if present, will help to spread the history of the site to a wider range of people.
Figure 8.5  Location of low, moderate or high impact activities within the study area.
Figure 8.6 Areas of proposed high and moderate level impacts overlaid on areas of archaeological potential.
9 ARCHAEOLOGICAL RESEARCH DESIGN

9.1 The Role of Research Designs in Australian Historical Archaeology

The research design presented here builds on the understanding already gained of the study area through the historical research documented above. The objective of the currently proposed archaeological investigation is to record any archaeological features or deposits in detail, gain a full understanding of the site and produce meaningful and new information that enhances the understanding of Sydney’s past.

The formulation of a focused research design is a fundamental element in the process of archaeological investigation and is a necessity for guiding research in the direction of whichever questions are considered most worthy of attention. In a heritage management context, such as that for the construction work proposed in 8, this process will primarily be concerned with the testing and salvage of historical and archaeological information from the site prior to its destruction due to the proposed development. However, the mere retrieval of information is not a professionally or ethically sufficient outcome for society in terms of the mitigation of the impact of such development (Murray & Mayne 2002:3). Instead, current philosophies regarding the retrieval of data through archaeological investigation demand that such recovery be further justified by the provision of a meaningful contribution to understanding the past.

Accordingly, it is vital that a solid research framework is established from the outset of a project; one that includes a variety of questions and problems to focus investigation in a way that is both theoretically relevant and at the same time realistic and achievable. Such questions should encompass the full spectrum of human activity, ranging from local to regional questions, and further up the scale to the national and international perspectives (Murray & Mayne 2002:4).

In The Archaeologists Field Handbook, Burke & Smith (2006:3) define the initial movement of constructing a research design as defining a problem and determining its relevance. They state:

“The most important first step in designing research is to outline the problem. This is essentially why you think your research is important, and how you think it will contribute to the discipline of archaeology. Some research problems might contribute new light on theories of human behaviour in the past, while others might contribute new methods for how we go about collecting or analysing archaeological data.”

The study area presents, therefore, two key avenues to define the research problems that can then form the basis of subsequent research questions. What can the material culture in the study area tell us about past human behaviour? And how can the material culture in the study area be used to develop more rigorous and insightful methodologies of use to the discipline of archaeology?

Recently Schacht (2010:61) has identified a ‘preliminary thematic framework for Australian historical archaeology’ as part of a broad review of themes in historical archaeological publications in Australia. As part of her work, Schacht identified several thematic groupings which are relevant to the current study area including the development of the urban rural fringe, the development of the built environment, and questions relating to status and class (Schacht 2010:71-73). The study area presents numerous opportunities for exploring these arenas of investigation in a meaningful way.

9.2 Research Problems Regarding Past Human Behaviour

The chief areas that shape the research problem of the study area relate to the earliest phases of building development and to which phase many of the subsequent outbuildings, wells and extensions relate to. The present study is focused on proposed works relating to the demolition of the various extensions to the cottage, and to areas of moderate and high level impacts which correlate to the known or probably location of outbuildings, early extensions and wells. Both the dating and precise function of these structures is conjectural and it is hoped that archaeological investigation could produce substantial new information about the past through an improved understanding of their function. Who constructed them? When were they constructed? How? What function did they serve? These are all basic questions that can be used as an entry point into the investigation of these items. These questions form the basis for broader problems relating to the nature of occupation within the study area.
9.3 Research Problems Regarding Archaeological Theory and Method

The central methodological issue at stake in this study area is the correlation between the historical, particularly oral history, and archaeological records and the reconciliation of any discrepancies that might arise. Early buildings are often not depicted on historic plans of the Shire and written descriptions of the many elements of the site are brief and unspecific. This leads to a requirement to consider how historical archaeology can supplement the visual depiction of an item in the historical record?

The dimensions of structures and outbuildings within the study area, their overall manner of construction and broad area of use have all been left somewhat unanswered by the historical record. It is hoped, therefore, that further archaeological investigation can provide more insight regarding the past, particularly in relation to the earliest phases of development.

9.4 Research Questions

These research questions are presented in four parts, reflecting general themes, built heritage, social themes and the comparison of historical and archaeological sources. Many of these research questions build on the framework developed by Wilson (2011) in the CMP.

9.4.1 General Themes

- Does the archaeological material associated with the cottage, extensions, outbuildings, wells or other structural material suggest what time period they were constructed (i.e. 1830s or 1860s) or by whom (i.e. Marsden, Palmer, Maher or Musgrave)?

- The study area was known to be occupied for over 150 years; what evidence of changing use over time can be discerned for the structural elements and artefactual deposits of the site?

9.4.2 Built Heritage – Mount Wilberforce Cottage

- What can the archaeological remains tell us about the structure and layout of the outbuildings, early cottage extension and original verandah?

- What evidence for changes in use/function of the outbuildings can be discerned from the archaeological remains of the buildings and artefactual deposits?

- What is the manner of construction of the wells? Is there any clear evidence for a cessation date for their use?

9.4.3 Social Themes

- Is it possible to determine social class of the occupants of the study area through the archaeological material?

- Does the archaeological record indicate a social hierarchy which is unchanging, or is archaeological material present which indicates a desire for improvement in individual circumstances?

9.4.4 Historical Images and Archaeology

- There are no clear historical depictions of the outbuildings, well or possible cesspit locations. What elements of information has the archaeological investigation identified as the best means to supplement the lack of visual depictions of buildings?

- In what way do the outbuildings, cottage extensions, wells and original verandah in the archaeological record differ from those proposed by the oral history?

- What particular structural features associated with the outbuildings, wells, original verandah and timber extension are unrepresented or misrepresented in the historical descriptions? Are there patterns in the types of features which are unrepresented or misrepresented?
10 METHODOLOGY

The aim of the proposed archaeological investigation at Mount Wilberforce Estate is to carry out comprehensive recording of the archaeological resource prior to the construction works undertaken for the proposed development. Recording of the site includes written description, drawings, photographs, measured plans, collection and analysis of artefacts and a response to the research questions (see Section 9.4 for details).

Investigation will be consistent with following documents and guidelines:

- *NSW Heritage Manual*, Heritage Office and Department of Urban Affairs & Planning 1996
- *The Burra Charter*, Australia ICOMOS 1999
- *Historical Archaeological Sites: Investigation and Conservation Guidelines*, NSW Department of Planning, Heritage Council of NSW 1993
- *Photographic Recording of Heritage Items Using Film and Digital Capture*, Heritage Branch Department of Planning 2006.
- *How to prepare archival records of heritage items*, Heritage Office and Department of Urban Affairs & Planning 1998.

10.1 Archaeological Testing and Salvage Methodology

10.1.1 Excavation Area Location

Various elements of the proposed works, especially construction of units 17, 18 and 19, will involve high impacts in areas of high and moderate archaeological potential. In the first instance, areas of high archaeological potential are proposed to be subject to archaeological testing and, dependant on the nature of the archaeological material identified, salvage.

The archaeological test excavation will target four specific areas. Trench 1 will investigate the potential location of one of the two wells and will measure approximately 5 metres long by 1.2 metres wide. Trench 2 will investigate the potential location of outbuildings to the north-east of the cottage, and Trench 3 will investigate the potential location of outbuildings to the south of the cottage. Both trenches will measure approximately 15 metres long by 1.2 metres wide. Following the removal of floorboards in the pre-1900s skillion roof extension to the west of the cottage, Trench 4 will be excavated in order to determine and adequately record any subfloor deposits which may be present.

While the proposed location of the trenches are shown on Figure 10.1, the exact location of each trench will be determined *in aggro* by the Excavation Director and may need to be altered depending on the identification of underground services or other obstacles.
Figure 10.1 Proposed location of archaeological test trenches.
10.1.2 General Excavation Methodology

A Safe Work Method Statement (SWMS) will be prepared for the work. All Austral Archaeology staff hold general Construction Industry Training Induction cards.

For trenches 1, 2 and 3, mechanical excavation will proceed via a series of shallow scrapes of no more than 100 millimetres, undertaken by a mechanical excavator of no more than 10 tonnes, equipped with a smooth-edged mud bucket, so that the exposed surface in the pit or trench is progressively reduced in a controlled manner. This process will continue until the extent of the structural remains in this area has been identified.

Concurrent with this, targeted manual excavation will occur where required by qualified archaeologists. Small hand tools such as picks, shovels, pointing trowels, brushes and pans will be used in manual excavation, either for cleaning up excavated areas or revealing exposed features or deposits. Where an in situ historic feature that is the target of the excavation is located, mechanical excavation will cease. The feature will then be cleaned up by hand and recorded. The archaeologist will endeavour to expose and identify all significant historic features and deposits.

In the event that structural fabric is not located, excavation will stop when culturally sterile or natural deposits have been reached. This is expected to be between 0.5 and 1 metre in depth in most instances.

For Trench 4, manual excavation will be undertaken once the present floorboards have been removed. The room is to be gridded and divided into suitable units. Excavation will be undertaken in each unit sequentially and will proceed in spits of no more than 100 millimetres until the extent of any subfloor deposits have been identified, when the excavation of the next unit will commence.

Provenance data and fabric descriptions will be recorded on numbered context recording sheets and the vertical and horizontal positions of all significant deposits and features will be recorded with reference to a permanent site datum. This survey information will be transferred to scaled site plans showing the spatial relationships between features revealed during the course of the investigation. Documentary records of the excavation will be supplemented by the preparation of Context Schedules and a Harris Matrix for the excavation area (where significant stratigraphic relationships are identified).

All significant elements will be photographed with a scale bar. Digital media will be used for general photographic recording. Artefacts will be collected but will not be processed during this phase of works. All artefacts will be retained for later analysis.

Artefacts will be bagged in suitable polyethylene or paper bags, double tagged with Tyvek (or similar) labels and put in temporary secure storage on Austral Archaeology's premises. The labels will be annotated with the trench or pit number as well as the context or layer number using permanent ink pens. Where possible, the artefacts will be subjected to a detailed a statistical analysis in order to fully answer the research questions outlined above. There are a number of statistical and analytical tools, such as a Ceramic Variation Index for determining the social standing of the users of a ceramic assemblage, available to archaeologists in order to make far reaching statements relating to class, gender and social customs and these can be employed to further enhance the understanding of the site. At the conclusion of the project they will be handed over to the proponent for retention and/or lodgement in an appropriate storage facility.

In the event that Aboriginal archaeological material or deposits are encountered during earthworks, all work within a 50 metre radius will cease immediately to allow an archaeologist to make an assessment of the find. The archaeologist will consult with the Office of Environment and Heritage and the relevant Aboriginal stakeholders, regarding the Aboriginal cultural material.

10.1.3 Conclusion of Test Excavation Programme

Dependent on the results of the test excavations, excavation of the test trenches will either mark the completion of the archaeological investigation or will demonstrate the need to undertake an open area excavation within the area of high archaeological potential.
10.1.4 Open Area Excavation

Once the Excavation Director is fully cognisant of the archaeological potential of the study area based on the results of the test trenches, they will be able to determine whether any further archaeological excavation will be required. If an open area excavation is justified, the trenches will be extended until the full extent of archaeological material present within the study area is uncovered. As required, the open area excavation will extend into areas of moderate or low archaeological potential.

10.1.5 Temporary and Permanent Artefact Storage Locations

All artefacts are to be temporarily stored at the offices of Austral Archaeology at Shop 1/92 Percival Road, Stanmore NSW, 2048, until such a time as the artefacts are cleaned and catalogued. Following analysis of the artefacts by a suitably experienced specialist, diagnostic artefacts and those which contribute to the overall significance of the site will be returned to the Proponent for storage. It is recommended that the artefacts are stored in perpetuity in a specified location within the study area, and any such artefacts may also be used as part of any site interpretation, which could be incorporated into a heritage display, potentially in the original cottage.

10.1.6 State Level Trigger

Archaeological material encountered within the study area is not expected to reach the threshold of State significance. In the event that potential archaeological material of State significance is been identified, the Excavation Director is to consult with the Company Director, Justin McCarthy, to determine whether the threshold for State significance has been met. If so, work is to cease while additional research questions and an appropriate investigation methodology are developed, and discussions are held with staff of the Heritage Division.

10.2 Archaeological Monitoring Methodology

All ground disturbance works in the areas marked on Figure 10.1 with moderate potential to contain archaeological material are to be monitored by a suitably qualified archaeologist. As such, work will proceed under the supervision of an archaeologist who will record any discovered features.

The archaeological monitoring aims to achieve two things; it will allow construction to proceed as normal, but also provides an opportunity for the archaeologist to halt works and determine if further investigation is required in the event that archaeological material is identified.

A Safe Work Method Statement will be prepared for the work. All Austral Archaeology staff hold general Construction Industry Training Induction cards.

Provenance data and fabric descriptions will be recorded on numbered context recording sheets and the vertical and horizontal positions of all significant deposits and features will be recorded with reference to a permanent site datum.

Artefacts will be collected but will not be processed during this phase of works. All artefacts will be retained for later analysis.

10.2.1 General Monitoring Methodology

An archaeologist is to be present during any ground disturbance in areas of moderate archaeological potential. The role of the archaeologist is to oversee the excavation process and to halt works in the event that any archaeological material is exposed during the excavation process.

Mechanical excavation will proceed via a series of shallow scrapes so that the exposed surface is progressively reduced in a controlled manner. This process will continue until the archaeologist has determined that a depth has been reached which is unlikely to contain archaeological material.
In the event that archaeological materials are identified during the monitoring process, mechanical excavation will cease. The feature will then be cleaned up by hand and recorded. Dependant on the nature of the archaeological material, the supervising archaeologist will either determine that excavation may proceed after the feature is recorded, or additional works may be required, such as undertaking additional test or salvage excavations.

10.3 Unexpected Finds Procedure

The remainder of works within areas of low archaeological potential are to proceed under the protocol of an unexpected finds procedure. The following notification protocols are designed to allow for archaeological advice to be sought if features or deposits of an archaeological nature are uncovered during excavation or where doubt exists concerning the provenance of any strata revealed during excavations.

In such instances, the following notification protocol is to be implemented:

1) Stop work upon identifying the potential archaeological material and establish a “no-go zone” around the item. No ground disturbance must occur within 5 metres of the potential archaeological item.

2) Without causing further damage to the potential archaeological material, clean off any excess soil by hand so that the archaeological material is clearly visible.

3) Take photographs of the potential archaeological material next to an item of recognisable size (i.e., mobile phone, shovel, pen) to serve as a scale.

4) Notify the Archaeological Consultant, providing information relating to the nature of the archaeological find (i.e., material, condition, location) and send copies of the photographs to the archaeologist.

After examining the photographs and discussing the nature of the material, the archaeologist may determine that no site inspection is required and work may continue within the “no-go zone”. Should the archaeologist need to inspect the potential archaeological material, work may continue outside of the “no-go zone” while awaiting the arrival of the archaeologist.

Subject to the archaeologist's assessment, further work may need to be undertaken. This may include, but is not limited to, the following tasks:

- No further action required
- Advise the Heritage Division of the potential find
- Continue and/or extend the size of the “no-go zone” pending a response from the regulatory authorities
- Cease work and apply for the relevant permits in order to undertake historical archaeological test or salvage excavations, as required.

10.4 Retention and Interpretation Strategy

10.4.1 Retention

If archaeological remains are uncovered that can be used as part of an interpretation process, consideration must be given to retaining them in situ. Discussions will be held with the proponent over possible interpretation of the material. A suitably qualified materials conservator may be required to assess them in order to determine the likelihood of their capacity to be retained.

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1 This may include but not be limited to the exposure of any structural material made from bricks, stone, concrete or timber and forming walls or surfaces, or the presence of more than 10 fragments of artefacts such as ceramic, shell, glass or metal from within an area of no more than 1 metre².
If the retention of these items and any associated artefacts is feasible within the context of the proposed development, then the conservator or specialist will prepare a monitoring and maintenance plan for their management. This plan will follow the *Historical Archaeological Sites: Investigation and Conservation Guidelines* produced by the Department of Planning & Heritage Council of NSW (1993).

### 10.4.2 Public Interpretation

It is important that the history of the site and information from an archaeological investigation program be disseminated to the public both during and after archaeological investigations. However, due to the relatively small scale of the archaeological investigation, it may not be possible to undertake a public open day during the investigation process. Instead, an interpretation of archaeological results should be displayed within the adaptively reused heritage dwelling, if required. As the archaeological resource is likely to be of local significance, the general public should be given the opportunity to learn about the remains where possible. To this end it is recommended that a copy of the subsequent excavation report be lodged with the Hornsby Shire and the Pennant Hills libraries.

### 10.5 Post-Excavation Analysis and Reporting

At the completion of the archaeological program the results of the excavation and analysis of the artefacts will need to be completed. The final report will require a synthesis of the plans, field notes and descriptions of the archaeological features and deposits for each trench and overview of the site as a whole. Interpretation of the results will be used to respond to the research questions to produce a meaningful outcome.

Specialists will analyse the artefacts and produce a catalogue consistent with, or comparable to, current data systems and according to best practice methodologies. The artefacts will be catalogued according to location, context number, catalogue number, and stored in zip lock polypropylene bags (or paper bags as appropriate) in labelled archive boxes. Lodgement of the collection in a repository with appropriate accompanying documentation will be required. The Client will be responsible for the storage of artefacts.

Further historical research will be conducted as necessary to complete and enhance the archaeological findings. The research would focus on site specific features and the economic background of 19th century Sydney. It is anticipated that the majority of this research can be carried out with the use of secondary sources gained from desktop investigation.
11 CONCLUSIONS AND RECOMMENDATIONS

11.1 Conclusions
It is concluded that there is are varying degrees of archaeological potential and sensitivity within the study area relating to the location of the various outbuildings, the location of previously identified wells, and the various additions and extensions to the main cottage. The archaeological remains of these structure and any associated deposits, should they be present, are considered to be of local significance. Although many of the impacts from the proposed works may affect the location of other known structural remains, these are considered to be 20th century in nature and not of significance.

11.2 Recommendations
The following recommendations are made in conjunction with Figure 11.1. It is recommended that:

1) Given that parts of the study area have been assessed as having moderate to high archaeological potential and relics of local significance may be impacted during the proposed construction works, an excavation permit is required under the NSW Heritage Act 1977. To comply with the NSW Heritage Act 1977, the proponent should apply for a Section 140 Excavation Permit. A suitably accredited archaeologist who is approved by the Heritage Division to oversee the excavation of sites of local significance will need to be nominated as Excavation Director.

2) Further archaeological investigations will be required in advance of construction in areas of high archaeological potential, as outlined in Section 10.1. These areas are marked in red on Figure 11.1. The investigations can only be undertaken following the approval of the Section 140 Excavation Permit and will involve a sub-surface testing and salvage programme overseen by the nominated Excavation Director.

3) Archaeological monitoring of any excavation work is to be undertaken in advance of construction in areas of moderate archaeological potential, as outlined in Section 10.2. These areas are marked in orange on Figure 11.1. The archaeological monitoring can only be undertaken following the approval of the Section 140 Excavation Permit and are to be overseen by a suitably qualified archaeologist who can record and assess any finds identified.

4) No further archaeological investigation needs to be undertaken in the areas assessed to contain nil or low archaeological potential. Works in these areas can proceed with caution in accordance with the unexpected finds procedure (Section 10.3). These areas are marked green on Figure 11.1.

   In the event that a relic is identified within an area of low or nil archaeological potential prior to the approval of the Section 140 Excavation Permit, excavation will need to cease while the archaeological item is assessed. Works may not be able to resume until the permit has been approved.

5) In the event that historical archaeological relics not assessed or anticipated by this report are found during the works, all works in the immediate vicinity are to cease immediately and the Heritage Division be notified in accordance with Section 146 of the NSW Heritage Act 1977. A qualified archaeologist be contacted to assess the situation and consult with the Heritage Branch of the Office of Environment and Heritage regarding the most appropriate course of action.

6) In the event that Aboriginal archaeological material or deposits are encountered during earthworks, all works affecting that material or deposits must cease immediately to allow an archaeologist to make an assessment of the find. The archaeologist may need to consult with the Office of Environment and Heritage (OEH) and the relevant Aboriginal stakeholders, regarding the find. Section 89A of the NPW Act 1974 requires that the OEH must be notified of any Aboriginal objects discovered within a reasonable time.
7) Should the proposed development be altered significantly from the proposed concept design, then a reassessment of the heritage/archaeological impact may be required. This includes any impacts not explicitly stated in Section 8 and includes the installation of any subsurface services.
Figure 11.1  Archaeological zoning plan for study area.
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