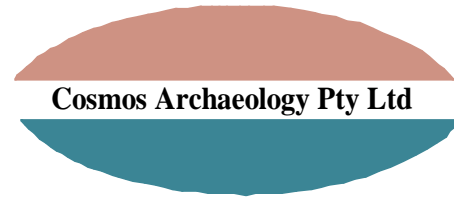


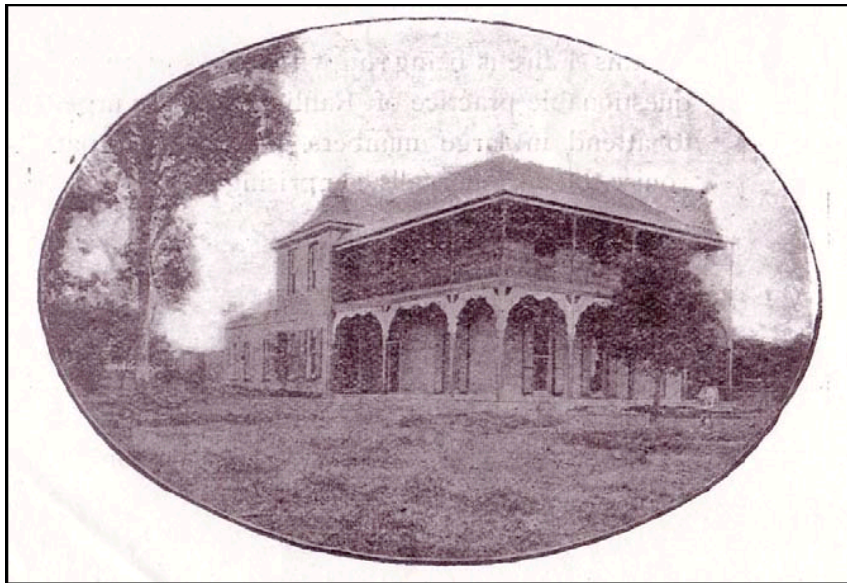
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AUBURN HOSPITAL RE-DEVELOPMENT ARCHAEOLOGICAL IMPACT ASSESSMENT & MITIGATION STRATEGY



The former King Edward VII Home for Orphans, constructed in c1888 and now part of the Arthur Stone Annex site. This is the earliest recorded occupation in the development area.

MARCH 2007

**Auburn
SYDNEY, NSW**

AUBURN HOSPITAL RE-DEVELOPMENT

Archaeological Impact Assessment & Mitigation Strategy

Prepared for:

Multiplex Constructions Pty Ltd

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MARCH 2007

J07/02

TABLE OF CONTENTS

EXECUTIVE SUMMARY	4
1.0 INTRODUCTION	5
1.1 Background.....	5
1.2 The Study Area.....	6
1.3 Proposed Development	7
1.4 Assessment Scope & Objectives	9
1.5 Conduct of the Study.....	9
2.0 METHODOLOGY & APPROACH	11
2.1 Aboriginal Archaeological Investigation	11
2.2 Historical Archaeological Investigation	11
2.3 Significance Assessment – Historical Cultural Heritage.....	11
3.0 STUDY AREA CONFIGURATION.....	13
3.1 Area 1 – Hospital.....	13
3.2 Area 2 – Arthur Stone Annex	16
3.3 Area 3 – Residences.....	19
4.0 THE INVESTIGATION – ABORIGINAL CULTURAL HERITAGE	21
4.1 Physical Landscape	21
4.2 Archaeological Research & Aboriginal Land Use Model.....	22
4.3 Aboriginal Archaeological Sites Recorded in the Auburn area	24
4.4 Assessment of Aboriginal Archaeological Potential & Sensitivity	25
5.0 THE INVESTIGATION - EUROPEAN OCCUPATION	28
5.1 Early Historic Land Grants & Development.....	28
5.2 Area 1 - Hospital.....	32
5.3 Area 2 - Arthur Stone Annex	36
5.4 Area 3 – Water St Residences	39
5.5 Historic Site Formation and Predictive Modelling	39
6.1 Evaluation	42
6.2 Statement of Cultural Significance.....	44
7.0 IMPACT OF THE DEVELOPMENT	45
8.0 PROPOSED ARCHAEOLOGICAL WORK	46
8.1 Conclusion & Summary of Key Findings	46
8.2 Recommendations	47
8.3 Archaeological Management Plan	48
8.3.1 <i>At the Start of and During Demolition of the Arthur Stone Annex.....</i>	48
8.3.2 <i>Required Archaeological Excavation</i>	48
8.3.3 <i>Recommended Archaeological Monitoring.....</i>	50
8.3.4 <i>Following Archaeological Excavation and Site Clearance</i>	51
REFERENCES.....	53

Executive Summary

Multiplex Constructions Ltd is to re-develop Auburn Hospital as part of a State Government initiative to rationalise the provision of health care services. The redevelopment project will be undertaken on behalf of the South West Area Health Service, a division of NSW Health.

Auburn Hospital was first opened as the "Granville Electorate Cottage Hospital" in November 1907. The name was changed to Auburn District Hospital in 1920 and the cottage hospital continued to serve the community until July 1963 when all patients were transferred to a new building built directly behind it.

The Major Project Application for the redevelopment of Auburn Hospital has received approval on condition that:

- *An archaeological assessment of the site will be undertaken prior to the commencement of works on the site; and*
- *The successful tenderer (Multiplex) will be required to engage a historical archaeologist to undertake any excavations in the proximity of listed items. All recorded archaeological work on site will be submitted to the NSW Heritage Council for information. In the event that any historical or Aboriginal relics are uncovered during excavations, all excavation and disturbance to the area will stop immediately and the Department of the Environment will be informed in accordance with Section 91 of the National Parks and Wildlife Act 1974.*

This document satisfies Condition 1.

The key findings of the assessment are as follows:

- There are two localities within the study area with low potential to contain remnants of the soil profile that existed prior to 1788 and therefore some potential to contain remains of Aboriginal occupation. These localities comprise the allotments with frontages to Water and Hargrave Street and the grassed area near the corner of Norval and Water Streets.
- There are three localities in the study area, which have some potential to contain archaeological remains of the footings associated with earlier buildings. These include the Hospital Cottage and appended buildings in Area 1b, the 1943 "Nurses Quarters" in Area 1a, and the outbuilding and original northern wall of the Arthur Stone Annex.
- Across the study area there is a potential for archaeological remains other than those associated with buildings to be present.
- The significance of potential Aboriginal sites and/or objects (if any exist) in the above areas cannot be determined on the basis of available information.
- The potential historic archaeological remains indicated at the site are considered to have local heritage significance.
- The proposed development at the Hospital has some potential to disturb and/or expose the above-mentioned remains, however, the extent to which such remains will be disturbed and/or exposed is contingent upon the depth to which excavation is required below existing grade. This (i.e. the required finished levels for excavation) varies across the site.

The recommended mitigation measures to be undertaken to satisfy the heritage related conditions are detailed in Sections 8.2 and 8.3 of this report.

1.0 INTRODUCTION

1.1 Background

Auburn Hospital was first opened as the "Granville Electorate Cottage Hospital" in November 1907. The name was changed to Auburn District Hospital in 1920 and the cottage hospital continued to serve the community until July 1963 when all patients were transferred to a new building built directly behind it.

Multiplex Constructions Ltd now proposes to re-develop Auburn Hospital as part of a State Government initiative to rationalise the provision of health care services. The redevelopment project will be undertaken on behalf of the South West Area Health Service, a division of NSW Health.

The development area is bounded by Norval, Water, Auburn and Hevington Streets in the suburb of Auburn, NSW. It spans part of two suburban blocks divided by Hargrave Street. Figure 1 shows the general location of the development area. Figure 2 (overleaf) shows the current configuration of allotments and buildings distributed cross the site.

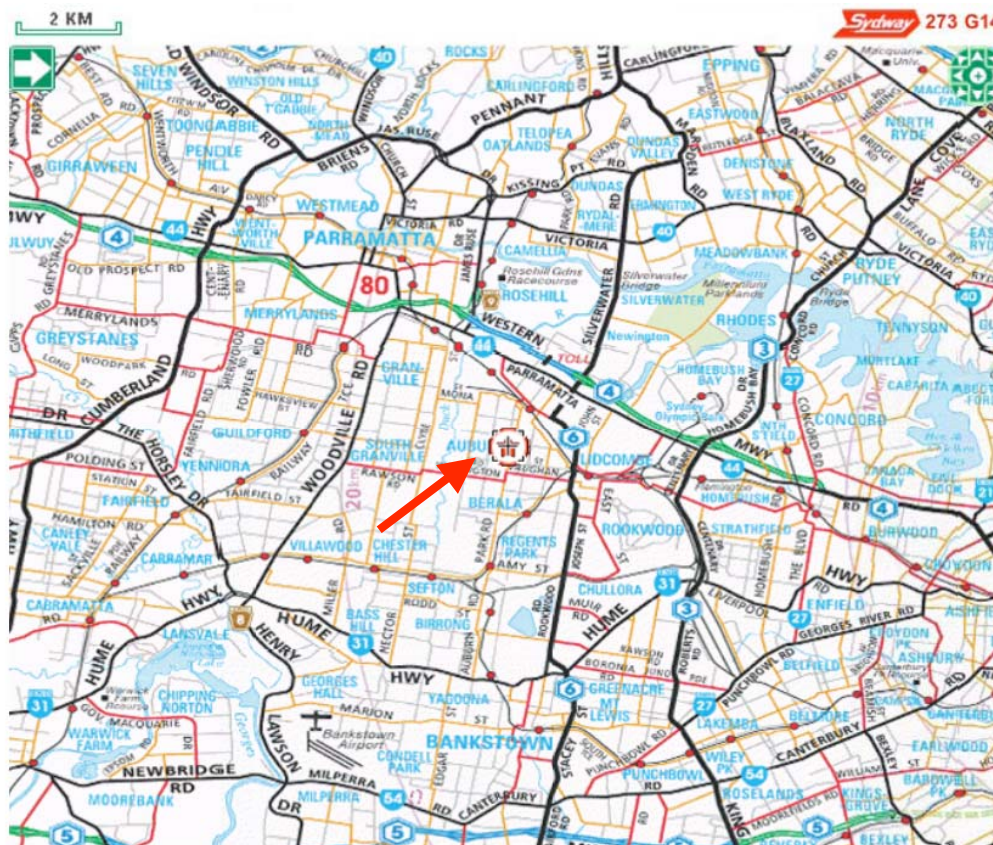


Figure 1: Auburn Hospital Location (base map reference: [http:// www.street-directory.com.au](http://www.street-directory.com.au))

The redevelopment is a Major Project that has received approval from the Minister of Planning following an application made under Part 3A of the *Environmental Planning & Assessment Act 1979* (Major Project 06_0129).

Part 3A of the Act essentially makes provision for a single assessment and approval process by incorporating relevant matters to be addressed within an assessment of the project, thereby removing the need to seek subsequent approvals, pursuant to the Minister for Planning's determination.

In regards to planning processes relevant to Historic and Aboriginal heritage, Section 75U of the Act states that an approval under Part 4, or excavation permits under section 139 and section 60 of the Heritage Act 1977 and section 87 of the National Parks & Wildlife Act 1974 are not required for projects assessed under Part 3A. Notwithstanding this, matters and issues relevant to compliance with the spirit and intention of these pieces of heritage legislation are to be addressed during development planning for a project subject to determination under Part 3A of the EP & A Act to ensure that unacceptable and/or adverse environmental impacts do not occur.

In regards to heritage management requirements, the Major Project Application for the current development proposal received conditional approval with the following conditions attached:

1. *An archaeological assessment of the site will be undertaken prior to the commencement of works on the site.*
2. *The successful tenderer (Multiplex) will be required to engage a historical archaeologist to undertake any excavations in the proximity of listed items. All recorded archaeological work on site will be submitted to the NSW Heritage Council for information. In the event that any historical or Aboriginal relics are uncovered during excavations, all excavation and disturbance to the area will stop immediately and the Department of the Environment will be informed in accordance with Section 91 of the National Parks and Wildlife Act 1974.*

Multiplex Constructions Ltd commissioned Cosmos Archaeology Pty Ltd to undertake the assessment and excavation work required to satisfy these conditions of approval.

This report has been prepared to address Condition No. 1.

1.2 The Study Area

For the purposes of this assessment, the proposed development area has been divided into three portions as shown in Figure 3. These are as follows:

1. The Main Hospital Site – Areas 1A and 1B - bounded by Hargraves, Hevington, Water and Norval Streets.
2. Arthur Stone Annex – Area 2 - on Water Street between Auburn Rd and Hargrave St.
3. Residences near the corner of Water (no. 84 and 86) and Hargraves St (no. 20).

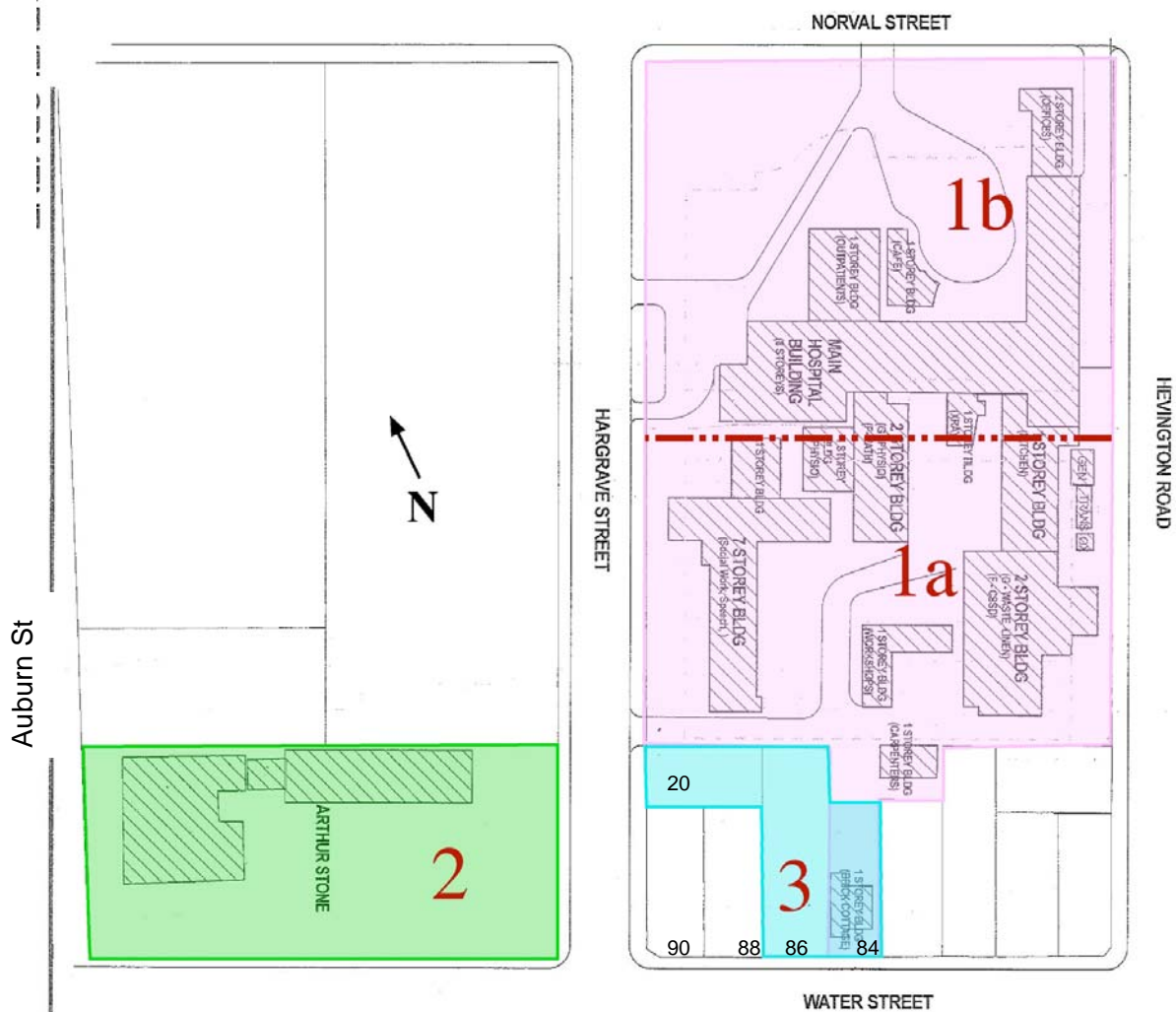


Figure 2: The study area and assessment subdivisions (base map reference: Concept Plan – Auburn Hospital: Auburn Hospital Re-development: Site Plan SK100/. Aurora Projects 6-Jan-06).

1.3 Proposed Development

Figure 3 (overleaf) shows proposed development at the Hospital overlaid upon the assessment subdivisions described in Section 1.2. The proposal within each of these areas is as follows:

Area 1a

It is understood that existing buildings within this area are to be demolished to make way for the new hospital building which when completed will occupy most of the area. The generator buildings and oxygen tanks on the Hevington Road side of the site are to be retained until the new hospital building is operational.

The new hospital building will have a basement car park, for which the depth of required excavation will be 4 m below existing grade on the western (Hargrave St) side of the site.¹ On the eastern side of the site the depth of excavation will be 1 m below

¹ Andrew Debeck, Site Engineer, Multiplex Constructions Pty Ltd, pers. comm., 21/2/07

existing grade. The remainder of the area is to be landscaped for vehicle and pedestrian traffic.

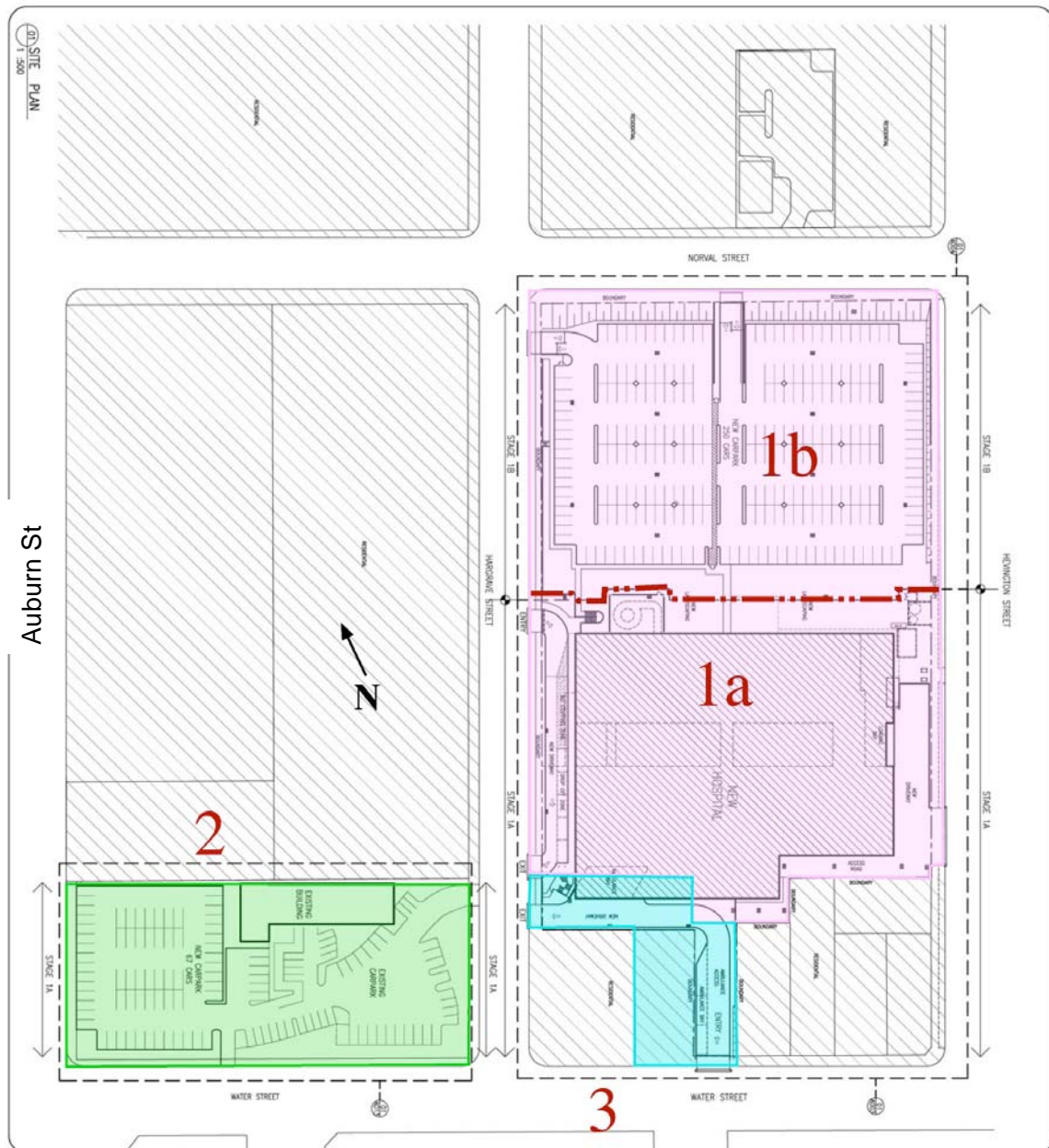


Figure 3: Proposed Development (Site Plan – Master Plan. Suters 8731_A-002.dwg. June 2006).

Area 1b

It is understood that the existing buildings within this area are to be demolished to make way for a new car park at or about existing grade. At the time of assessment the client was unable to provide details of this aspect of the proposal beyond concept, but in general terms it is reasonable to assume that some excavation below existing grade may be undertaken to landscape the area. The depth of any such excavation cannot be determined at present but it is expected that the foundations of the existing buildings would be removed.

Area 2

The Arthur Stone Annex building is to be demolished and the allotment containing the building will be re-surfaced to form a car park. There will be no re-grading or establishment of new services during this work however the foundations of the Arthur Stone Annex building will be removed.²

Area 3

It is understood that the three residences occupying the proposed development area will be demolished. A strip along the northern side of this area falls within the footprint of the south west corner of the new hospital building. The remainder of the area will be landscaped and re-surfaced to provide vehicular and pedestrian access and there will be some garden landscaping around the south west corner of the area. Around the boundary of 88 Water St

1.4 Assessment Scope & Objectives

The scope of work for the study included assessment of the proposed development area's Aboriginal and non-Aboriginal archaeological potential. Assessment of built heritage values in the proposed development area was undertaken by Weir & Phillips Pty Ltd as part of a previous study³.

The objectives of the assessment are to:

1. Identify and assess the cultural significance of any relics (as defined in the *NSW Heritage Act 1977*) and any Aboriginal sites and/or objects (as defined in the *National Parks & Wildlife Act 1974*) identified by research and predictive modelling for the proposed development area;
2. Assess the impact of proposed development on any such relics, sites and/or objects identified by research and predictive modelling; and where necessary
3. Prepare a plan for the mitigation of identified impacts and any further archaeological investigations warranted at the site in accordance with best practice archaeological methods.

1.5 Conduct of the Study

The investigation was conducted in the following manner:

1. *Archaeological Site Inspection*

An archaeological site inspection was undertaken to identify and record site formation processes, such as filling, cutting and excavation for footings slabs and establishment of services, that may have affected the extent and condition of any remains of cultural occupation prior to construction of the existing buildings (**Section 3.0**).

2. *Assessment of Aboriginal archaeological potential within the study area*

² *Ibid.*

³ *Weir & Phillips Pty Ltd September 2006*

This component of the study was undertaken through research of Aboriginal site registers and secondary sources held at the NSW Department of Environment and Conservation (DEC) and the consultant's private library; environmental information and geotechnical reports previously prepared for the study area; and field data gathered during the site inspection. The results of the research and assessment are presented in **Section 4.0**.

3. *Preparation of a history of European land use within the study area*

This component of the study is based upon information presented within Weir and Phillips built heritage assessment of the site. Where necessary, this history was augmented by analysis of relevant maps and plans gathered during additional secondary source research and review of material gathered from the NSW State Library – Mitchell Library, NSW State Records / Archives Office, NSW Department of Lands and documents supplied by the client.

Archival plans from Sydney Water were not obtained as the organisation has recently withdrawn this invaluable heritage resource from public access.

The historic research and field data obtained during the site inspection were analysed to prepare a GIS based "model" of archaeological potential across the proposed development area (**Section 5.5**).

4. *Assessment the cultural heritage significance of the potential historical archaeological resource*

The significance assessments made in this report conform to the NSW Heritage Office publication 'Assessing Heritage Significance' (2001). The process of assessing significance is described in **Section 2.3**. The assessment of the significance for the proposed development area is presented in **Section 6.0**.

5. *Impact Assessment.*

This was achieved by undertaking comparison of the predictive archaeological model and plans showing the proposed development. Details of excavation required to implement the proposal were identified in areas where proposed development intersected with known sites or potential sites, thereby allowing assessment of the extent of potential development impacts. The impact assessment is presented in **Section 7.0**.

6. *Mitigation Strategy*

The proposed scope of archaeological works presented in **Section 8.0** has taken into consideration the cultural significance of the potential archaeological resource and the scale and nature of impacts that will ensue from implementation of the proposal.

2.0 METHODOLOGY & APPROACH

2.1 Aboriginal Archaeological Investigation

The Aboriginal archaeological investigation involved several components;

- 1/ Examination of the NSW Department of Environment and Conservation (DEC) Aboriginal Heritage Information Management System (AHIMS) to ascertain whether any previously identified Aboriginal sites occur within the study area;
- 2/ Research of environmental information to obtain an understanding of landscapes within the Auburn area;
- 3/ Examination of archaeological research and prehistoric Aboriginal land use modelling in order to prepare an Aboriginal site predictive model within the study area based on landform units;
- 4/ Archaeological site inspection to identify site formation and ascertain possible levels of modern cultural impacts post European occupation;
- 5/ Examination of geotechnical reports previously prepared for the study site to obtain an understanding of documented subsurface conditions within the study area;
- 6/ Assessment of the potential for Aboriginal archaeological sites and deposits to survive within the study area, and the predicted extent and condition of any such deposits.

2.2 Historical Archaeological Investigation

The historical investigation involved two main components;

- 1/ Summary overview of the historical use of the study area; relating specifically to the physical development of the site, both stated and inferred from the sources.
- 2/ Review of archival maps, plans, aerial images, photographs and illustrations relating to physical developments within the study area.

The purpose of the overview of the historical use of the area is to predict the type, condition, frequency and extent of the products of European cultural behaviour that may be found within the study area. The aim of the investigation of archival maps, plans, photographs and illustrations is to obtain clear evidence of the possible presence and location of historical structures and elements within the study area.

2.3 Significance Assessment – Historical Cultural Heritage

An assessment of cultural significance or heritage significance seeks to understand and establish the importance or value that a place, site or item may have to select communities and the general community at large. The Australian ICOMOS *Charter for the Conservation of Places of Cultural Significance* (the *Burra Charter* 1979, most recently revised in 1999), the standard adopted by most heritage practitioners in Australia when assessing significance, defines cultural significance as;

“Aesthetic, historic, scientific or social value for past, present or future generations”⁴

This value may be contained in the fabric of the item, its setting and relationship to other items, the response that the item stimulates in those who value it now, or the meaning of that item to contemporary society.

Accurate assessment of the cultural significance of sites, places and items is an essential component of the NSW heritage assessment and planning process. A clear determination of a site's significance allows informed planning decisions to be made for place, in addition to ensuring that their heritage values are maintained, enhanced, or at least minimally affected by development.

Assessments of significance are made by applying standard evaluation criteria.

Historic Cultural Heritage Significance Criteria (NSW Heritage Office Guidelines)

- b.** *An item is important in the course or pattern of NSW's cultural or natural **history** (or the cultural or natural history of the local area);*
- c.** *An item has strong or special **associations with the life or works of a person, or group of persons, of importance in NSW' cultural or natural history** (or the cultural or natural history of the local area);*
- d.** *An item is important in demonstrating **aesthetic characteristics** and/or a high degree of **creative or technical achievement** in NSW (or the local area);*
- e.** *An item has strong or special **associations with a particular community or cultural group** in NSW (or the local area) **for social, cultural or spiritual reasons**;*
- f.** *An item as **potential to yield information** that will contribute to an understanding of NSW's cultural or natural history (or the cultural or natural history of the local area);*
- g.** *An item possesses **uncommon, rare or endangered** aspects of NSW's cultural or natural history (or the cultural or natural history of the local area);*
- h.** *An item is important in **demonstrating the principal characteristics of a class of NSW's cultural or natural places**; or cultural and natural environments.⁵*

The archaeological significance of a site may be seen as directly linked to the scientific or research value of the relics that are present. In Australia this concept is commonly defined as a set of questions that are used as a means of assessing the significance of an archaeological site within a relative framework;

- i.** *Can the site contribute knowledge that no other resource can?*
- ii.** *Can the resource contribute knowledge that no other site can?*
- iii.** *Is this knowledge relevant to general questions about human history or other substantive questions relating to Australian history, or does it contribute to other major research questions?*

⁴ Australia ICOMOS Inc. (1999) *The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance 1999: Article 1.2*

⁵ NSW Heritage Office, July (2001) *Assessing Heritage Significance:8*

3.0 Study Area Configuration

The study area is located on a low north-south ridge between Haslam's Creek and Duck River. The land slopes gently downhill to the north east, from the Arthur Stone Annex Site towards and beyond the main Hospital Site. Residences, mostly single dwellings on single allotments, surround the study area.

3.1 Area 1 – Hospital

This area is dominated by the Main Hospital building, which is situated in the northern half of the site (Figure 4). Ancillary buildings are situated to the north and south of the Main Hospital building with the remainder of the site being mostly composed of concrete and bitumen surfaces for vehicular access and car parking. A grassed area has been established under the temporary building built on brick piers in the northwest corner of the site (corner of Norval and Hargrave Streets). This area was, until recently, reserved as a small park on the hospital grounds.



Figure 4: View of northern face of Main Hospital Building.

The Main Hospital building is aligned east - west with one of its eight stories being below ground level. Due to the presence of a basement level, it is expected that no archaeological remains survive within the footprint of this building. The depth of the cut into the original ground surface for the construction of this building - and for the East Hospital Block which projects from it – extends well into the B-horizon subsoil as shown in Figure 5.

It would appear that the former park in the northwest corner of the site retains something close to its original contours as the ground at this location gradually slopes downwards towards the north (Figure 6). The ground level from Norval Street to the Main Hospital building rises gradually; the gradual incline interrupted by the Kiosk and the Neo-Natal Outpatients Building (see Figure 4).



Figure 5: View looking southwards along Hevington Street showing depth of cut into the original ground for the foundations of the Main Hospital.



Figure 6: View to southeast of temporary buildings on the former park in the hospital grounds.

Projecting southwards from the Main Hospital are two building wings/clusters, which are aligned along the eastern and western borders of the site. It is not known whether there are basements associated with these buildings but it is assumed that they have sub-grade levels. There is a tunnel connecting the Main Hospital building with the eastern wing/cluster.

Between these wings is a narrow open space of car parking areas connected by a road that provides access to Hargrave Street. Another driveway from Hargrave Street enters the site close to the western end of the Main Hospital building.

The ground level of the southeastern portion of the site appears to have been raised considerably by filling, whereas the ground level to the southwest does not appear to differ substantially from that observed in Area 3 (Figures 7 and 8 and see below). There are some locations where the original slope has been cut into to form car parking spaces (Figure 9). As a result of these high impact development episodes at various locations across this part of the site most, if not all of Area 1 appears to have been extensively disturbed and has little or no potential to contain remains of occupation prior to construction of the main Hospital buildings.

The exception to this general observation is the area occupied by a grassed lawn or park near the corner of Norval and Hargrave Streets. This appears to be the least disturbed part of Area 1.



Figure 7: View looking southeast over the southeast quadrant of Area 1. Note the difference in ground level of the foreground with a residence fronting on Water Street in the background.



Figure 8: Looking across the front lawn of the Hargrave Street residence (Area 3) to the Hospital entrance and carpark in the south west quadrant of Area 1.



Figure 9: looking southwest along road separating the eastern and western building wing/clusters of the Hospital. Note the gradual slope eastwards and the cut into the slope to form the carpark spaces. Area 3 in the background.

3.2 Area 2 – Arthur Stone Annex

Two buildings situated along the northern edge and western corner of the site dominate the Arthur Stone Annex site. The two storey brick Arthur Stone Annex building is the largest structure on the site (Figure 10). The central core of the original building dating to c1888 is still discernable amongst the single storey buildings that have been attached to it over the last 100 years. The other free standing structure on the site is a single storey brick building which currently serves as an aged day care centre.



Figure 10: The front of the Arthur Stone building looking west.

The ground floor of the Arthur Stone Annex is divided into a number of small rooms with a mixture of tongue and groove flooring (Figure 11) and concrete floors under the remaining vinyl and tiled walking surfaces. The timber flooring is likely to be associated, but not exclusively so, with the original layout of the building. No evidence of an entrance to a cellar, or cellars, was observed.



Figure 11: Exposed floorboards in one of the eastern rooms on the ground floor of Arthur Stone Annex.

The aged day care centre was not inspected, as it will not be impacted by the development.

It can be expected that with the many alterations to the Arthur Stone building over time, that the brick strip footings of interior walls would be present under the existing floors. External wall footings could also be expected under the present floors in the northern half of the building.

The ground between the western and northern walls of the Arthur Stone building, is grassed. It would appear that in this part of the site there is little topsoil as there are bare patches of clay visible in places (Figure 12). It is very likely that the clay has been introduced to build up the ground level around the western side of the house and remnants of the original soil profile may exist below this fill.

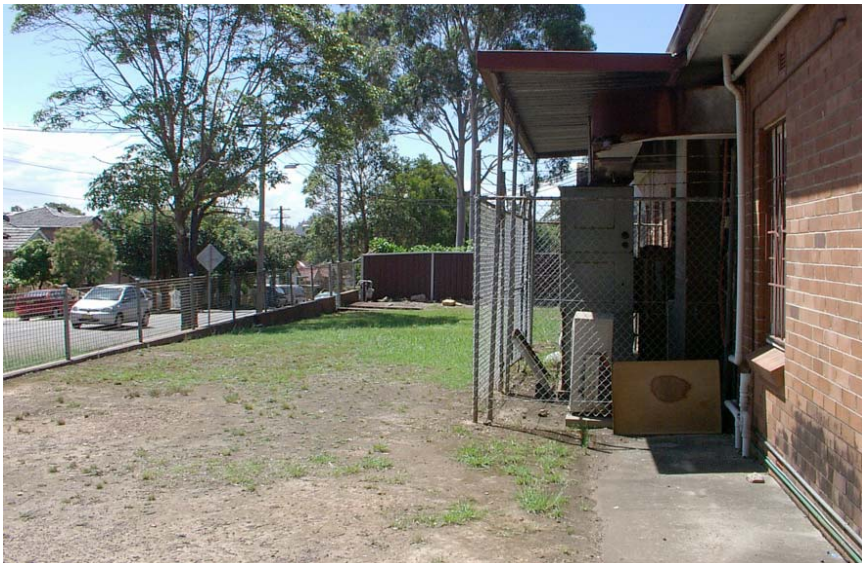


Figure 12: Grassed area between the Arthur Stone building and Auburn Road, looking north.

The remainder of the site to the south and east of the Arthur Stone building is open bitumen carpark interspersed with raised garden beds and trees (Figure 13). In front of the Arthur Stone building there is a circular garden bed built on grade. A bitumen road loops around this feature separating it from the house (see Figure 10). This is most likely the original carriageway that formerly linked the house with surrounding public roads.



Figure 13: Carpark area looking east from Arthur Stone building.

The highest point of the site is in the southwest corner (junction of Auburn Road and Water Street). The ground level at this point is almost equivalent with the footpath and road. The ground surface within the site slopes downwards in an easterly direction at gentler gradient than can be observed for Water Street. At the southeast corner of the site (corner of Water and Hargrave Streets) the ground level within the site is over 1 m above that of the bordering footpaths (Figure 14). A similar, but smaller configuration is visible in the north west corner of the site suggesting that the carpark area has been increasingly filled towards Hargrave Street (see Figure 12).



Figure 14: Raised ground level of southeast corner of Area 2. Looking north west, corner of Water and Hargrave Streets.

Further to this, it appears that the car park and area to the west of the Arthur Stone building has also been filled. The fill along the eastern and southern borders of the site is retained by a horizontal log retaining wall, while a low brick wall was established along the western border. The date at which these filling episodes were undertaken cannot be determined on the basis of available information but it probably was probably during the last 30 to 40 years at a time when the Annex site was incorporated within the Hospital grounds.

3.3 Area 3 – Residences

This area contains four allotments, each occupied by a single storey dwelling. Three of the dwellings front Water Street; the other Hargrave St. The house on the corner of Water and Hargrave Streets is of brick construction while two of those fronting Water St are constructed from fibro and weatherboard respectively. The fourth residence is a small fibro house built on brick piers which fronts on to Hargrave Street (Figure 15). These premises were not entered during the site inspection.



Figure 15: Rear of the Hargrave Street residence.

Small trees, sheds, brick and concrete paths, clothes line and permanent barbeques have been established across the rear yards of these dwellings. Ground levels of the front lawns of houses fronting Water Street are slightly higher than the adjacent footpath suggesting that they may have been filled to provide a level surface (Figure 16). The ground levels at the rear of each of the four allotments do not appear to have been substantially modified by excavation or filling since they were subdivided and occupied. In other words, they are likely to contain remnants of the original surface stratigraphy (Figures 8 and 15).



Figure 16: Water Street residences.

It appears that apart from fill being introduced along the southern edge of the Water Street allotments, limited ground disturbance has been undertaken in Area 3 with the exception of superficial modification of the original surface soil deposit during construction of the dwellings.

4.0 THE INVESTIGATION – Aboriginal Cultural Heritage

The following section presents an assessment of the proposed development areas potential to contain Aboriginal sites and / or objects.

4.1 Physical Landscape

The study area is situated within the Cumberland Lowland physiographic region which forms the centre of the Sydney Basin. The topography of the Cumberland Lowlands is generally characterised by low lying, gently undulating plains and low hills with broad rounded crests and ridges with gently inclined slopes. Local relief is of ten to thirty metres AHD with slopes generally less than 5%. Crests and ridges are broad (200-600m) and rounded with convex upper slopes grading into concave lower slopes.⁶

The proposed development area is situated on a low north-south ridge, with the Arthur Stone Annex site on the western boundary of the study area forming the highest point in the locality. Ground surfaces slope gently down towards the north-east and south-east portions of the study area.

The study area is underlain by the Wianamatta Shale Group, one of the two major geological formations within the Cumberland Plain. The Wianamatta Shale Group is divided into two subgroups; the Ashfield Shales consisting of dark grey to black laminate and siltstone, and the Bringelly Shales consisting predominantly of shale with occasional calcareous claystone, laminate and infrequent coal. Geological maps of the Sydney region indicate that the study area is located close to a geological boundary between the Ashfield and Bringelly Shale groups.⁷

Both formations typically weather in the upper zones to produce moderately to highly reactive clays. Specifically, soil landscape maps of the Sydney region indicate that the study area is situated within the residual Blacktown Soil Landscape (bt) which occurs extensively on the Cumberland Lowlands between the Georges and Parramatta Rivers in the south-west. Soils are shallow to moderately deep (<100-200 cm), with Red and Brown Podzolic Soils on crests, upper slopes and well-drained areas; deep (150-300 cm) Yellow Podzolic Soils and Soloths on lower slopes and in areas of poor drainage.

The dominant soil materials in this landscape typically include;

- **bt1 – friable brownish black loam to clay loam:** occurring as topsoil (A1 horizon), usually up to 30cm in depth in all landform units but is occasionally absent on ridges and upperslopes;
- **bt2 – hardsetting brown clay loam to silty clay loam:** commonly occurs as an A2 horizon, usually between 10-20cm in depth on ridges, upper slopes and midslopes and 10-30 cm on lower sideslopes;
- **bt3 – strongly pedal, mottled brown light to medium clay:** usually occurring as a subsoil (B horizon), usually between 40-100cm in depth in all landform units;
- **bt4 – light grey plastic mottled silty to heavy clay:** usually occurring as a deep subsoil above shale bedrock (B3 or C horizon), usually up to 100cm on upper slopes and midslopes and can exceed 100cm in depth on lower sideslopes.⁸

Geotechnical investigations previously conducted within the study area have generally confirmed the above geological and soil landscape mapping data.⁹ However, field data

⁶ Chapman, G.A. & C.L. Murphy (1989) *Soil Landscapes of the Sydney 1:100 000 sheet*. Soil Conservation Service of NSW, Sydney.

⁷ Herbert, C. (ed.), 1983. *Geology of the Sydney 1:100,000 sheet*. Department of Mineral Resources.

⁸ *Op cit*, Chapman, G.A. & C.L. Murphy (1989)

indicates that varying levels of ground disturbance have occurred across the site due to historic land use and development episodes.

The site inspection conducted for this assessment revealed significant disturbance of the surface stratigraphy that existed prior to the establishment of the hospital (discussed in detail in **Section 3.0** of this report).

Geotechnical testing undertaken as part of the pre-construction work for the current development indicates that most areas of the site are surfaced by a layer of concrete or bitumen, overlying roadbase gravel, clay, slag, sand and crushed concrete filling to depths of 0.3m-0.65m. In most test locations, residual silty clay was encountered immediately underlying the fills and extending to depths of between 0.7m-2.7m. The clay is typically firm to very stiff with some ironstone gravel and grades into a very stiff to hard shaly clay below depths of 0.5-1.5m in some areas. This residual clay is underlain by weathered shale and laminite, which are in turn underlain by sandstone bedrock in some parts of the site.¹⁰

It should be noted that the geotechnical investigations were conducted on the main hospital site only (Area 1). The Arthur Stone Annex site (Area 2) and the residences fronting Water and Hargrave Streets (Area 3) were not included in the geotechnical testing and may display different subsurface conditions to those described above.

The study area is situated on between the catchments of two watercourses that flow into the Parramatta River to the north; Duck River, which passes approximately 1.6 km to the west of the study area; and Haslam's Creek, which is fed by several tributaries, one of which flows in a broadly northerly direction approximately 700 m east of the study area. European activity, such as the construction of dams, reservoirs and channels have served to significantly alter the natural flow of the watercourses in the region – particularly the tributaries feeding Haslam's creek. It is possible that several additional small drainage channels, lagoons and swamps previously existed but are now obscured or destroyed by European land use practices.

4.2 Archaeological Research & Aboriginal Land Use Model

Aboriginal populations are known to have inhabited the greater Sydney region for at least 20,000 years, and possibly longer.¹¹ Archaeological sites excavated in the Blue Mountains and the Hawkesbury/Nepean River system have provided the earliest firm evidence of occupation; evidence at Shaws Creek KII rockshelter on the western bank of the Nepean River, north of Penrith, has yielded a radiocarbon date of c. 13,000 years BP¹² while occupation evidence at the Kings Tableland site in the Blue Mountains has yielded a radiocarbon date of c. 22,000 years BP.¹³

Archaeological sites on the south coast of New South Wales in the Illawarra region provide complementary dates; Pleistocene occupation has been identified at a rock shelter at Burrill Lake, dated to c. 20,000 years BP¹⁴ and an open shell midden site at

⁹ Douglas Partners Pty Ltd (2006) Report on Geotechnical Investigation, Proposed New Hospital Building, Auburn Hospital, Auburn. Prepared for Suturs Architects.

¹⁰ *Ibid.*

¹¹ see Nanson *et al.* (1987) "Chronology and paleoenvironment of the Cranebrook Terrace (near Sydney) containing artefacts more than 40,000 years old." *Archaeology in Oceania*. Vol. 22 (2): 72-78.

¹² Kohen, J. *et al.* (1984) "Shaws Creek KII Rockshelter: a prehistoric occupation site in the Blue Mountains piedmont, eastern New South Wales." *Archaeology in Oceania*. Vol. 19: 57-93.

¹³ Stockton, E. D. & W. N. Holland (1974) "Cultural sites and their environment in the Blue Mountains." *Archaeology and Physical Anthropology in Oceania*. Vol. 9: 36-64.

¹⁴ Lampert, R. J. (1971) "Burrill Lake and Currarong." *Terra Australis* 1. Department of Prehistory, Australian National University, Canberra.

Bass Point, date to c. 17,000 years BP.¹⁵ During the Pleistocene, these sites would have been situated within hinterland areas some distance from the sea. With the melting of the continental ice sheets during the Post Glacial Marine Transgression, a rise in sea level occurred over several thousand years. The sea reached its present level approximately 6-7,000 years BP and has not fluctuated more than approximately one metre since the Holocene stillstand.¹⁶ As a consequence, the majority of sites situated on the south east coast of New South Wales date to within this time period. It is likely that a considerable number of Pleistocene sites once existed along the coast but have been submerged and / or destroyed by sea level changes that occurred during the Pleistocene-Holocene transition.

Archaeological evidence within the greater Sydney region generally suggests that early occupation was relatively sporadic and the population levels fairly low. However, by approximately 5,000 years BP, there appears to have been increasing and continued use of many sites within the Sydney region and evidence for the use and occupation of the Sydney region during this period is certainly more archaeologically visible than earlier periods.¹⁷

The recorded Pleistocene and early Holocene occupation sites largely appear to have been continuously occupied and have thus provided valuable information regarding technological and economic change in the Aboriginal archaeological record. Changes in stone tool technology – reflected by changes in raw materials and the types of artefacts manufactured – have been observed, particularly in assemblages dating to the last 5-8,000 years BP, and temporal markers have been established by numerous previous archaeological studies.

Archaeological investigations undertaken during the last twenty five years have also provided a large body of data about the nature of Aboriginal land use and occupation of the greater Sydney region and has thus allowed the development of Aboriginal archaeological site type and distribution models based on different topographies and sub-areas. One of the largest and most comprehensive studies involves a series of ongoing excavations of a range of sites within a variety of environmental land units in Sydney's outer west.¹⁸ Data obtained during these investigations has been used to prepare a broad-scale predictive model for Aboriginal site distribution on the Cumberland Lowlands. While these studies have shown that Aboriginal sites may be distributed across many different types of landforms across the Cumberland Plain, patterns have been identified and these can be broadly summarised as follows;

- The size (density and complexity) of archaeological features will vary according to permanence of water (ascending stream order), landscape unit and proximity to stone resources;

¹⁵ Bowdler, S. (1970) Bass Point: the excavation of a south-east Australian shell midden, showing cultural and economic change. Unpublished BA (Hons) Thesis, Sydney University.

¹⁶ Thom, B. G. and P. S. Roy. (1983) "Sea-level change in New South Wales over the past 15,000 years." In D. Hopley (ed.), *Australian Sea-Levels in the Last 15000 Years: A Review*, pp. 64–84. Occasional Papers 3. Townsville: Department of Geography, James Cook University of North Queensland.

¹⁷ Attenbrow, V. (1987) The Upper Mangrove Creek Catchment: a study of quantitative change in the archaeological record. Unpublished PhD Thesis. University of Sydney.

¹⁸ see McDonald, J. J. & E. Rich. (1993) Archaeological Investigations for the Rouse Hill Infrastructure Project (Stage 1). Works along Caddies, Smalls, and Second Ponds Creeks. Rouse Hill and Parklea, New South Wales. Final report on Test Excavation Program Vol. 1. Report to Rouse Hill (Stage 1) Pty Ltd.; Jo McDonald Cultural Heritage Management Pty Ltd (2002) Archaeological Assessment of Indigenous Cultural Heritage Values, Rouse Hill Development Area Sewerage Master Plan. Report prepared for GHD.; Jo McDonald Cultural Heritage Management Pty Ltd 2005 Salvage Excavation of Six Sites along Caddies, Second Ponds, Smalls and Cattai Creeks in the Rouse Hill Development Area, NSW. (2005) Australian Archaeological Consultancy Monograph Series 1. St Lucia: Australian Association of Consulting Archaeologists Inc.

- Sites adjacent to permanent water courses are more complex (either as a result of the focus by large groups of people and / or as the focus of repeated visitations by small groups of people over a long period of time) than sites on ephemeral or temporary watercourses. Prime site locations tend to be on major confluences;
- Alluvial areas and some intact lower-mid hill slope zones possess the greatest potential to retain intact archaeological deposits, often extending to a depth of 70cm, and;
- Upper hill slopes, ridge top zones and ephemeral or temporary watercourses generally show evidence for limited occupation only, likely to be characterised by single visits by small groups. Low artefact densities are common and deposits usually only extend to a depth of 20-30 cm.¹⁹

Stone artefact scatters and isolated finds represent the most prevalent type of Aboriginal archaeological site identified in the Cumberland Lowlands region. Quarry sites (exposures of geological raw materials where evidence for human collection, extraction and/or preliminary processing has survived) may be found where suitable rock formations occur – such as cobble concentrations along creek beds or specific lithic outcrops. Scarred trees (where bark has been removed as a direct or indirect result of the manufacture of various goods and implements or the making of foot holes in a tree to collect food) can be expected to occur in all landscapes where remnant old growth timbers (at least 100 years old) remain, however these sites are not common within the Cumberland Lowlands, largely due to the extensive land clearance that has occurred since European occupation and settlement.

Other Aboriginal site types, including middens containing waste materials resulting from the exploitation of marine resources, rock shelters, engravings and axe/hatchet grinding grooves are rare across the Cumberland Lowlands, primarily due to the lack of suitable landscapes; i.e. coastal and littoral zones and sandstone exposures, shelving or cavernous overhangs. Aboriginal burial sites are also rare within the residual clay landscapes of the Cumberland Lowlands; the majority of Aboriginal burial sites identified in the greater Sydney region were as primary interments made within deep, soft sediments such as aeolian sands or alluvial silts. Ceremonial sites have also only been infrequently recorded. Traces of such sites are generally unlikely to survive in areas subjected to significant disturbance through European settlement and development.

4.3 Aboriginal Archaeological Sites Recorded in the Auburn area

A search of the NSW Department of Environment and Conservation (DEC) Aboriginal Heritage Information Management System (AHIMS), conducted on the 22nd of February, 2007 for a 6 km (E-W) x 5 km (N-S) block of land surrounding and incorporating the current study area²⁰ demonstrated that a total of ten (10) Aboriginal sites have previously been identified and registered with the DEC. **None of these sites, however, fall within the boundaries of the study area.**

Nine of the ten recorded sites comprise open stone artefact scatters located in close proximity (c. 100-200m) to Duck River, which runs broadly south-north over 1.5 km to the west of the study area. The tenth site comprises an open artefact scatter located

¹⁹ *Ibid.*,

²⁰ AGD search co-ordinates Zone 56, Eastings 315000-321000, Northings 6249000-6254000

on the banks of a tributary of Haslam's Creek, over 1.5 km to the east of the study area.

These site locations conform to previous archaeological observations and site prediction models within the Cumberland Plains; i.e. evidence of Aboriginal occupation is likely to be focused around permanent or semi-permanent water sources. The level of land use and alteration following European occupation may also be a factor as all sites were located within open recreational reserves.

It should be noted that the records contained within the DEC AHIMS database reflects only formally identified and registered Aboriginal sites within NSW. The absence or paucity of certain site types does not necessarily mean such sites are not present within the study area as large areas of NSW have not been the subject of systematic survey or the recording of Aboriginal history.

4.4 Assessment of Aboriginal Archaeological Potential & Sensitivity

The assessment of the potential Aboriginal archaeological resource; i.e. the likelihood of undetected cultural heritage material and deposits to occur within the study area and the predicted condition and extent of any such archaeological remains, involves the consideration of various factors including;

- Known (previously recorded or identified during inspection) Aboriginal cultural heritage sites, items or places;
- Features of the natural landscape, including topography, geology and hydrology in conjunction with previous relevant Aboriginal archaeological studies relating to predictive modelling, site location and land use patterning;
- Land use history and site formation and disturbance processes.

Results of the consideration of these factors during the current study may be summarised as follows:

1. No Aboriginal archaeological sites, items or deposits were identified during the site inspection conducted for this assessment.
2. Based on the natural topography and hydrology of the general study area, in conjunction with previous archaeological research and prehistoric Aboriginal land-use modelling, it is predicted that prehistoric Aboriginal occupation of the area would have been limited.
3. Material cultural heritage that may have been deposited within the study area is likely to comprise low density stone artefact scatters.
4. No old growth native trees that may once have shown evidence of Aboriginal use through marking and scarring remain on the site.
5. Traces of other Aboriginal site types, such as midden, engravings etc., are not expected to exist within the study area based on the landform units within the site.
6. Site formation and disturbance processes caused by European occupation and land use – including vegetation clearing, rural / residential development, excavation, filling and construction of modern buildings and services etc. – are likely to have significantly altered, removed and / or destroyed any Aboriginal archaeological sites and deposits that may have existed in the study area.

7. Surface and subsurface soils have been variously disturbed across the study area through visible episodes of cutting and excavation to provide levels surfaces and trenches for building footings and underground services.
8. Geotechnical testing indicates that the natural upper soil horizons that would be expected within the local landscape – loam - silty clay loam top soil / biomantle – have been largely removed across the main hospital site – **Area 1a** and **1b**. Documented subsurface conditions within the hospital site generally comprised 0.3m-0.65m of pavement materials and filling overlying firm to very stiff residual red/grey/brown mottled silty clay; likely to represent residual, although possible somewhat mixed, natural subsoil / B horizon. Consequently, the natural upper soil layers appear to have been largely stripped and either removed or partially re-deposited with artificial materials as mixed fill.
9. Archaeological research across the residual clay landscapes of the Cumberland Lowlands has demonstrated that subsurface Aboriginal deposits generally extend only to a depth of 20-30cm in the upper loam-clay loam soil units. Stratigraphic position of artefacts can be influenced by several factors, including surface rainwash and bioturbation, however, within residual landscapes, artefacts tend to accumulate at the lower limits of the upper soil levels / biomantle as a stone layer and are very rarely encountered within the subsoil clay horizons. It is therefore considered unlikely that significant Aboriginal archaeological deposits will remain within the main hospital site – **Area 1a** and **1b** as subsoil residual clay layers appear to represent the uppermost surviving natural soil layers; i.e. likely artefact bearing deposits have largely been removed.
10. There are, however, portions of the hospital site that appear to retain something close to their original contours and where little development and / or subsurface disturbance appear to have occurred. The north-west corner of the hospital site near the corner of Norval and Hevington Streets is the most notable example of this.
11. It is thus proposed that while Aboriginal archaeological potential across **Area 1a** and **1b** is generally assessed as **nil-very low**, the north-western corner represents a discrete location where there may be a low possibility of sparse or isolated Aboriginal archaeological deposits.
12. Geotechnical testing has not been conducted for the Arthur Stone Annex site – **Area 2**, however, the site inspection conducted for this assessment indicated that episodes of topsoil and subsoil disturbance through excavation for building foundations and the introduction of fill – both re-deposited clay and artificial materials underlying bitumen surfaces – have occurred across the site. While subsurface profiles across the site may contain areas or patches of upper soil horizons (A1 and A2), the location and extent of the proposed development within this area is likely to disturb only artificial and re-deposited clay fill layers.
13. The residences fronting Water and Hargrave Streets – **Area 3**, have not been the subject of geotechnical testing. These premises were not entered during the site inspection, however, evidence of small scale surface and subsurface disturbance was identified through visible cut and / or fill events and the presence of houses and associated structures. However, it appears that there has not been any significant ground disturbance within these allotments and it is likely that upper soil horizons (A1 and A2) exist in areas across these residential lots. The potential for these soil layers to contain evidence of

Aboriginal occupation of the region is considered to be quite low. Based on topography, hydrology and previously observed land use and occupation patterns, any Aboriginal sites within the local landscape are expected to comprise only low density artefact scatters.

14. Based on such modelling and the fact that the frequency and size of areas containing intact or relatively intact upper soil horizons appears limited across the proposed development footprint within the housing allotments, it is concluded that the Aboriginal archaeological potential in **Area 3** is ***low-nil***.

5.0 THE INVESTIGATION - European Occupation

5.1 Early Historic Land Grants & Development

Liberty Plains was the original name for the locality and the Parish incorporating the Hospital site. It was bounded on the north side by the Sydney - Parramatta Road, on the west by a line running south from near Irish town (now Bankstown) to the Liverpool Road, on the south side by Liverpool Road and Cook's River to the Rev. Richard Johnson's farm at Canterbury and on the eastern side by Johnson's, Lucas' and Captain Piper's farms to Iron Cove Creek and thence up to Parramatta Rd.²¹

In Liberty Plains, five original grants, of between 60 and 120 acres, were made by Lieutenant-Governor Grose on 7th February 1793 to Thomas Rose, Frederick Meredith, Thomas Webb, Edward Powell and Joseph Webb. Preparations for cultivation probably began immediately because by December 1793 22 bushels per acre of wheat, sown in April was submitted to the government stores in Sydney. Numerous subsequent land grants were issued in Liberty Plains between 1806 and 1823 as shown in Figures 17 and 18. The site of Auburn Hospital is outlined in red.

Although there generally appears to have been an initial period of agricultural activity on the grants made in Liberty Plains, the extent to which the locality was cleared, occupied and farmed is somewhat indeterminate. Contemporary records for the period between c1800 and the 1860's provide sketchy details. For example, a plan of the area in 1867 (Figure 19) displayed a near complete absence of recorded dwellings, however, properties boundaries, fence lines, area under cultivation and bush land were clearly depicted.

The locality certainly appears to have been quite sparsely populated through to at least the mid-19th century. The 1851 Census recorded only 270 people living in 49 dwellings in the area comprising Granville, Auburn, Lidcombe and Homebush.²² This changed rapidly after 1855 when a railway line was established between Sydney and Parramatta, however, contemporary accounts noted a lack of dwellings or other structures:

*Near the junction of the Burwood and Liverpool roads was Seale's Inn and opposite it, on the Burwood-road, an old upstairs house, I think occupied by Mr. Garland. The country between this place and what is now Croydon station did not contain one house, and on the west side of Burwood-road, south of the railway, it would be hard to find a dwelling till Parramatta or Liverpool were reached, except a few along the Liverpool-road.*²³

²¹ Liberty Plains A History of Auburn NSW Centenary Edition 1992, Auburn Municipal Council, 11-12.

²² Liberty Plains, A History of Auburn NSW, Centenary Edition 1992, Auburn Municipal Council, 66.

²³ Journal of The Royal Australian Historical Society, Volume 8, 1923, Recollections of Mr. C.A. Henderson, 356.

Figure 18: Peter Lewis Bemis Plan, September 1831. The study area falls mostly with the allotment owned by William White. (Mitchell Library, 811.133/1831).

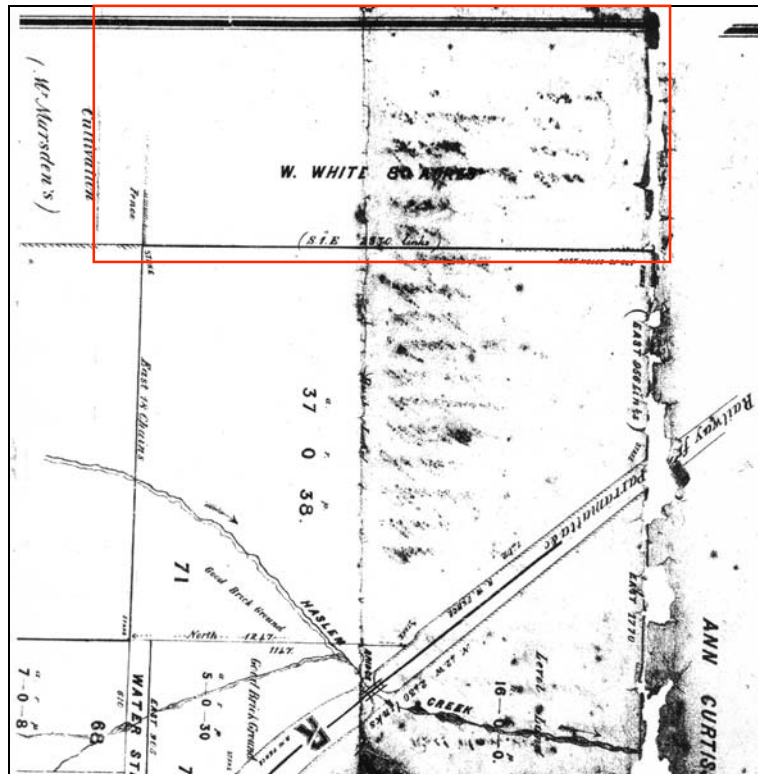


Figure 19: Township of St Joseph around Haslam Creek railway station, from a survey of February and March, 1867, by F.W. Birmingham. (Mitchell Library 811.1338.1867).

A railway station was established at Auburn in October, 1876, and the first sub-division plans for Auburn are recorded in 1877.²⁴ The area incorporating the current Auburn hospital site was located between the sub-division estates of Woodburn Park and Grassmere Estate as shown in Figure 20.

The township of Auburn developed relatively slowly over the next ten years, however, by 1886 the first public school, an Anglican church (St Phillips) and nine grocery stores had been established in the locality.²⁵

Older residents of Auburn remembered large areas covered by bush and scrub as late as 1900.²⁶ According to the Sand's Sydney and Suburban directory for the streets surrounding the present day hospital site, Water Street was not established until 1884. At that time, there were only two residents (P. Donnelly and Thomas Kemp, both in Water Street) recorded in eight subdivided blocks stretching from Chiswick Street to Railway Parade. By 1890, Hargrave Road and Hevington Road were named in Sand's Directory. Hargrave Road between Water Street and Queen Street, had one occupant, Frederick Lejendre, a butcher, who remained there up until 1900. No residents were recorded in Hevington Road, adjacent to the current Hospital site, between 1880-1900, and only three were recorded there between 1890 and 1900.²⁷

²⁴ Liberty Plains, A History of Auburn NSW, Centenary Edition 1992, Auburn Municipal Council, 71.

²⁵ *Ibid.*, 89.

²⁶ *Ibid.*, 66.

²⁷ Sand's Sydney and Suburban Directory.

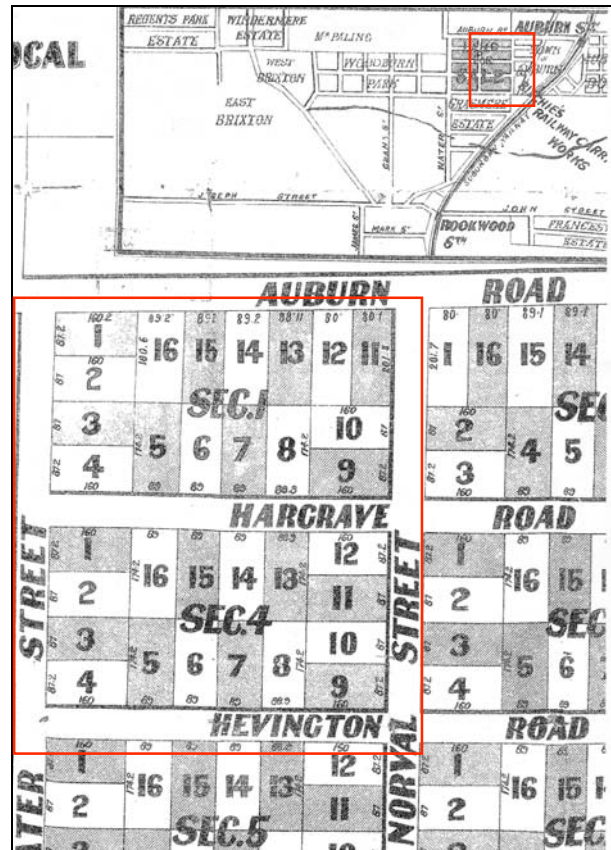


Figure 20: Sub-division plans from late 1880's. (Mitchell Library A10/33).

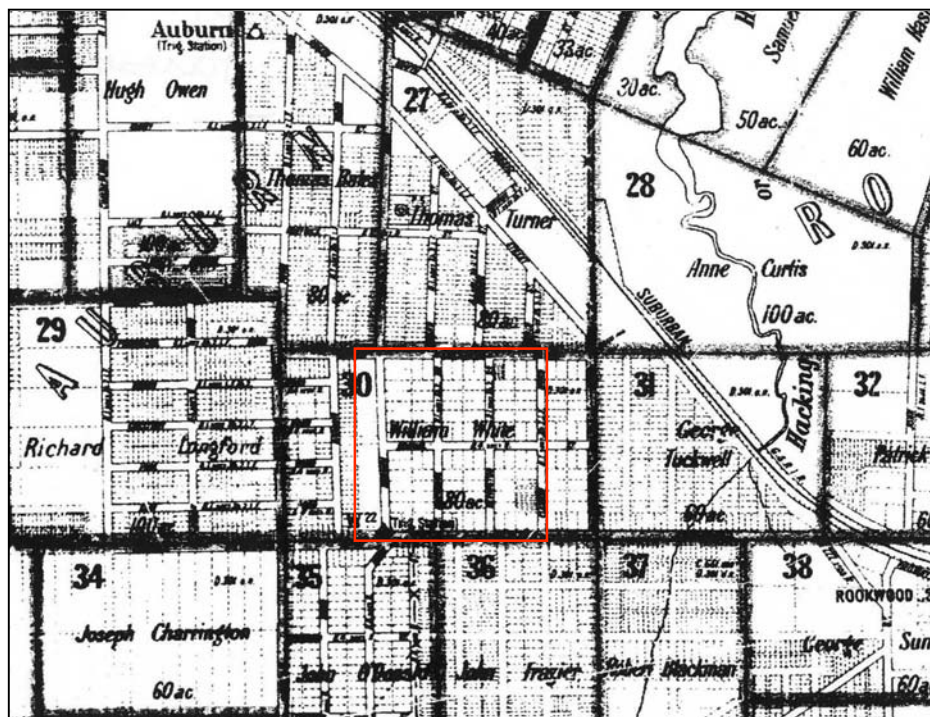


Figure 21: 1902 sub-division plan depicting streets within land grants. Note that plan still referred to the locality incorporating the hospital study area as being part of William White's 80 acres which had been granted in 1823 - see also Figures 18 and 19. (Mitchell Library, Z1902).

The obvious exception to this late, low density settlement pattern was, of course, the establishment of a substantial residence known as 'Moolabin' in 1888. The history of this building, which now forms part of the Arthur Stone Annex, is discussed in detail in subsequent sections of the report, but in brief, the building is the first residence known to have been constructed on the proposed development area.

It was built on land formerly part of an eighty acre Crown Grant made to William White in June 1823 (see Figures 18, 19 and 21). Sixty-two years later, in 1885, Harriet Jane Oxley, wife of the surveyor John Oxley, acquired the two allotments on which the building now stands from a subdivision of part of this original grant.²⁸

5.2 Area 1 - Hospital

Granville Electorate Cottage Hospital: 1905 - 1963

In 1905, a meeting was held at the home of Mr. George Somerville to discuss the need for a second hospital in the Auburn area. The first hospital was St. Joseph's Hospital in Normanby Street, Auburn, opened by the Sisters of Charity in 1892. The 1905 meeting resulted in a public meeting held in the Auburn Town Hall to obtain support and approval for the building of a local hospital. An executive committee was elected comprising eleven men, and a Ladies Auxiliary committee was created with fund raising organised through bazaars, sales of work, socials, dances and concerts. Two years later, in 1907, £5,600 had been raised and the Committee was able to buy land for the hospital in Norval Street, Auburn:

*'Through the good offices of Mr. J. Ritchie, a site was procured. Mr. J.B. Clamp was entrusted with the preparation of plans, specifications, etc., and in 1907 Mr. R. Lightfoot began the work of building – portion only, it is true – of the approved design of the hospital.'*²⁹

The foundation stone for the Granville Electorate Cottage Hospital, so named as it would service the districts surrounding Auburn, 6, was laid on 21st November, 1907 by the Premier of NSW, the Hon. C.G. Wade, K.C.

The hospital, with a capacity of eighteen beds, was officially opened on the 23rd May, 1908 by the wife of the President of the Executive Committee, Mrs. Gibbons.

In 1909, a book of *Rules & By-Laws* for the Granville Electorate Cottage Hospital was released. The objectives of the hospital were given as follows:

- (a) *The reception and treatment of such cases of accident and illness as may be suitable for treatment within the Hospital, and which may occur among the poor of the following suburbs of Sydney, viz., Auburn, Rookwood, Flemington, Homebush, Strathfield, Bankstown, Clyde, Granville, Merrylands, and Guildford (which are hereinafter referred to as the district).*
- (b) *The enlargement of or addition to the Hospital as the needs of the district from time to time require, and the purchase of additional lands and buildings if required.*³⁰

²⁸ John Sands Suburban Directory. Mitchell Library, Card Catalogue, 328.91/N.

²⁹ Extract from the Annual Report of 1916 of the Auburn District Hospital, cited in Weir and Phillips Auburn Hospital Heritage Report, May 2006, 8

³⁰ The Granville Electorate Cottage Hospital Rules & By-Laws, NSW, n.p., 1909, 1. Mitchell Library.

If patients could afford it, they were expected to pay £2 for the first fortnight and £1 per week after, or what they could reasonably afford.

The Hospital was enlarged in 1911 when a cottage, again opened by Mrs. J.R.H. Gibbons on the 10th June 1911, was built for the matron and nurses. The cost of the cottage was £500, £200 of which was granted by the Government. The opening celebrations took the form of a Furnishing Tea, where people donated items to furnish the quarters. One of the rooms in the hospital vacated by the staff was made into a private ward.³¹

Further works, entailing '*heavy expenditure in building and purchasing new ground*', took place in 1912. In that year, a dining room and a covered walkway to the nurses' quarters were constructed. The Committee also:

*...purchased a cottage facing Hargreave [sic] Road and an allotment immediately behind it facing Hevington Road, which now gives a frontage of 350 feet by about 360 feet.*³²

Despite these improvements, further works were considered essential to the hospital. In his medical report in the *Granville Electorate Cottage Hospital Annual Report*, 1913, Medical Superintendent O.E. Bruce Withers made a plea to the Committee:

*I would like to call your attention to the fact that during the past five years your Medical Staff has been working under very serious disadvantage in having only a temporary operating theatre. This room is entirely inadequate, and seeing that during the past year more than half the patients admitted have been surgical cases, we feel sure that you will see your way clear to give us better facilities for carrying on this important branch of our work, and would urge you to let this be your first consideration when contemplating further additions to your Hospital.*³³

In 1914, the hospital was visited by the Minister for Health, Hon. Fred Flowers, who saw, due to the increase in patients, the need for extra accommodation for the women's and men's wards, an isolation ward and, most pressingly, a new operating theatre. The outbreak of World War I, however, disrupted plans for expansion.

In 1916, the construction of the operating theatre finally commenced. The room previously used for this purpose became a waiting room for referred patients. Dr Withers was happy with the progress of the operating theatre, stating that '*it would be one of the finest in the state*'; he then turned his attention to the need for an extension to the women's ward.³⁴ The operating theatre was completed and opened on 31st March, 1917 by the Hon. J.D. Fitzgerald, the Minister of Health.

During 1918, the hospital had to obtain extra beds and put patients on the verandahs. The Committee approached the Minister for Health to ask for funding to build a new women's ward:

*'We feel that with the rapid growth of this district provision should be made to cope with consequent needs of the population for Hospital treatment.'*³⁵

In 1920, the Hospital name was changed to the Auburn District Hospital though new wards had still not been constructed. The new women's ward was constructed in 1925

³¹ Granville Electorate Cottage Hospital, 3rd Annual Report, NSW, n.p., January 1912, 1.

³² Granville Electorate Cottage Hospital, 4th Annual Report, January 1913, 1.

³³ Granville Electorate Cottage Hospital, 4th Annual Report, January 1913, 1.

³⁴ Granville Electorate Cottage Hospital, 7th Annual Report, January 1917, 3.

³⁵ The new Senior Medical Officer, W.C. Grey cited in the Granville Electorate Cottage Hospital, 9th Annual Report, January 1918, 7.

and officially opened by Miss Charles Fairfax. The new men's ward was not completed until 1936; when it was officially opened by the Hon. J.T. Lang, M.L.A. (Figure 22).



Figure 22: 1930's upgraded Auburn Hospital. Liberty Plains. (A History of Auburn NSW, Centenary Edition 1992:138).

By the 1940s, there was talk about a new hospital being built in Auburn on the site of the existing one. The buildings and extent of the hospital in the 1940s can be seen from an aerial photograph taken in 1943 (Figure 23). In this image, the original Hospital Cottage can be seen with later additions extending from the building to the northwest and southeast. Towards the south of the then Hospital precinct there is a large rectangular building. It is possibly a residence for the hospital staff, probably for the nurses. A path links this building to the main hospital complex. Immediately to the north of the unidentified building and adjacent to Hargraves Street is a cleared rectangular patch of ground. It is most likely a tennis court. The irregular linear features between the 'tennis court' and the main hospital complex could not be identified.



Figure 23: Aerial photograph of the study area in 1943. (From the Skies: Aerial Photographs of Sydney 1943. RTA 2005).

The Auburn Citizens Development Committee had been lobbying for improved hospital facilities, including a maternity wing, at Auburn Hospital for sometime. The Hospitals Commission provided £350,000 in its estimates of 1946-47 for the construction of a new two hundred bed hospital at Auburn. The new hospital was to include a maternity ward, X-ray and pathology departments, as well as quarters for the surgical and nursing staff. The secretary of Auburn District Hospital, Mr. A.J. Gould, met with the Hospitals Commission and reported to the Development Committee that:

*...he was confident that the work would be started soon, as the Commission realised the urgent need for a modern hospital at Auburn. He knew that it was an extremely high priority.*³⁶

Construction of the new hospital, however, would not begin until the early 1960s.

Auburn Hospital: 1961-2004

The foundation stone for the new hospital was laid by the Minister for Health on 4th March 1961. The old hospital continued to be used during construction.

On 1st July, 1963, the old hospital buildings were vacated for demolition and the new hospital was opened with an initial capacity of 61 beds. On 13th October, 1963 the maternity wing was opened by Mr. T.V. Ryan M.L.A with a capacity of 19 beds. When the hospital was officially opened in March 1964 by Mr. W.F. Sheahan Minister of Health, 22 additional obstetrics beds and a further 20 general beds had been put into use and the Out-Patient Department building completed.³⁷ The new hospital was described soon after opening as:

*Of pleasing conventional brick design incorporating extensive use of glass and open railed balconies running full length of the wards, the whole scheme comprises a main block of seven floors, a six-storey 200-room nurses' home, a double-storey pathology wing and a single storey block containing kitchen, laundry and ancillary facilities, all interconnected by a system of tunnels and internal ramps obviating the necessity for any outside transit. Construction has proceeded on a plan surrounding the existing 50 bed cottage hospital which, when demolished, will be replaced by a new out-patient department and an attractive garden area*³⁸

In more recent times there have been a number of changes to the hospital buildings. The majority of changes have been to the interior of the buildings or separate extensions, leaving the 1960s exteriors relatively intact. These changes included a brick veneer addition to the Social Work Department building, new kitchen appliances and an upgrade of facilities in the Maintenance Department, completed in 1984.³⁹

By 1992, the hospital had undergone major refurbishments. These included a new surgical wing, an Intensive/Coronary Care Unit, refurbishment of the maternity services and an upgrade and expansion of the Accident and Emergency Department.⁴⁰ Even

³⁶ 'Modern Hospital for Auburn', The Argus 5th June 1946. Auburn Library Newspaper Clippings, Auburn Hospital.

³⁷ Typescript of Auburn District Hospital, Opening of new Hospital 1964, 7. Extract from file at Auburn Library.

³⁸ Typescript of Auburn District Hospital, Opening of New Hospital 1964, 10. Extract from file at Auburn Library.

³⁹ The Auburn District Hospital 75th Annual Report, 1984, 10. Auburn Library

⁴⁰ 'Auburn Municipal Council and Review Pictorial to Celebrate the Centenary of Auburn 1892-1992.' Newspaper Lift out from Review Pictorial, 15. Mitchell Library.

with these refurbishments there were rumours of the hospital closing. At the end of the 1990s local people protested the possible downgrading or closure of Auburn Hospital:

*To people who have lived here for many years, some all their lives, and those persons from the 100 different language groups who having arrived as immigrants and refugees and now reside in Auburn, the hospital and the personnel who work there are an essential health service for the community.*⁴¹

The Shadow Health Minister, Mrs. Jillian Skinner, stated that there were five proposals being considered for the future of Auburn Hospital:

*Under two of them, the hospital will close and under all five of them, it will be downgraded. I have never suggested that the hospital will close but I believe, along with other community representatives and hospital staff, that the hospital could end only as a day surgery facility.*⁴²

Auburn Hospital continues to provide a range of services to the region, including acute surgical, acute medical, obstetrics, radiology, emergency and social work.

5.3 Area 2 - Arthur Stone Annex

‘Moolabin House’: 1888-1911

The first evidence of a building on the site is provided by the *John Sands Suburban Directory* of 1888, when John N. Oxley is recorded as residing at ‘Moolabin House’ on Auburn Road. *Sands Directories* continue to list Oxley at the site until 1892. John Norton Oxley, son of the explorer and surveyor John Oxley, was the Member of the Legislative Assembly for the Western District of Camden at its first sitting.⁴³

Listings in *Sands Directories* indicate that ‘Moolabin House’ was leased in 1894-5 to Alban Gee, the manager of The Sydney Meat Preserving Co. Ltd, who had been elected Mayor of Lidcombe in 1893.⁴⁴ Harriet Jane Oxley took out a mortgage on the house with Charles Clarence Gale, a solicitor from Moss Vale. Gale sold the property to John Nobbs, a conveyancer and politician from Granville in 1900. Nobbs served as Mayor of Granville, was founder and president of the Fruitgrowers’ Union of NSW, a founder of the Royal Australian Historical Society, president of the NSW Football Association, a leading freemason and a member of the Australian Protestant Defence Association.⁴⁵

Between 1903 and 1911, the property changed ownership three times before being bought by William Marcus, Dill Macky, Richard B. Orchard, Thomas Henley, Richard John Charles Ferguson and Robert Booth as joint tenants. The new owners were all members of the Board of Directors of the King Edward VII Home for Orphans.⁴⁶

⁴¹ ‘Fight to Save Hospital’, in, Review Pictorial, 18 August 1999, 5.

⁴² ‘Hospital Outrage’, in, Review Pictorial, 24th November 1999, 1.

⁴³ Dinner of the Surviving Members of the first Legislative Assembly- May 23rd 1887. Mitchell Library

⁴⁴ Council of the Municipality of Auburn, op cit., 1992, 137.

⁴⁵ Geoffrey Serle (gen.ed.), Australian Dictionary of Biography, Volume 11: 1891-1939, Carlton, Melbourne University Press, 1981, 32.

⁴⁶ John Sands Suburban Directory 1887-1932 and Land Titles Office, Certificate of Title, Vol. 769 Fol. 234. NSW Land and Property Information.

King Edward VII Home for Orphans: 1911-1913

The King Edward VII Home for Orphans was owned and operated by the Australian Protestant Orphans Society. It was officially opened in September 1911 (Figure 24). It was one of many charitable homes run by church organisations during the first half of the nineteenth century.⁴⁷ The motto of the Protestant Orphans Society was 'A Real Home for every Orphan or Homeless Child.'⁴⁸



Figure 24: The King Edward VII Home for Orphans. (Australian Protestant Orphans' Society, Ye Old Engishe Faire, 1911. Mitchell Library).

The King Edward VII Home for Orphans was renamed Dr Dill Mackey Memorial Protestant Home for Orphans in 1913, after the death of the founder and chairman of the Australian Protestant Orphans Society was Dr W.M. Dill Macky (1849-1913). Few records survive for the Home. The cover of the 1918 Annual Report depicts the Home (Figure 25). The 1918 Annual Report provides the only information for this period relating to the structure. It simply reveals that:

*...no extraordinary expenditure has been required for repairs, etc., all the property being now in a good state of preservation.*⁴⁹

Mr. Richard Dill Macky, son of Dr W.M. Dill Macky, took over as trustee of the Protestant Orphans' Society. During 1917 the Home had thirty-four children; twenty-one boys and thirteen girls, sixteen children being admitted that year and thirteen departing.

The 1943 aerial photograph of the study area possibly shows the original ground plan of 'Moolabin House' (Figure 23). A small outbuilding, possibly a kitchen or toilet, is situated to the immediate north of the building. The rest of the allotment appears is grassed. A well defined wall is evident around the property.

⁴⁷ Australian Protestant Orphans' Society Absolutely Undenominational Ye Old Engishe Faire, 1911,11. Mitchell Library.

⁴⁸ Australian Protestant Orphans' Society Absolutely Undenominational Ye Old Engishe Faire, 1911, 11, Mitchell Library.

⁴⁹ Australian Protestant Orphans' Society Annual Report 1918, 6.

It is not clear when the property stopped being used as a children's home. It is also not clear when the extensions and renovations to the original 'Moolabin House' were made. In 1951, however, ownership of the property was transferred to the Perpetual Trustee Company Ltd, who transferred it in the same year to William Carter (a printer of Crows Nest), Annie McFarland (a widow of Haberfield), May Hobday (a married woman from Hurstville) and Clifford Bingham

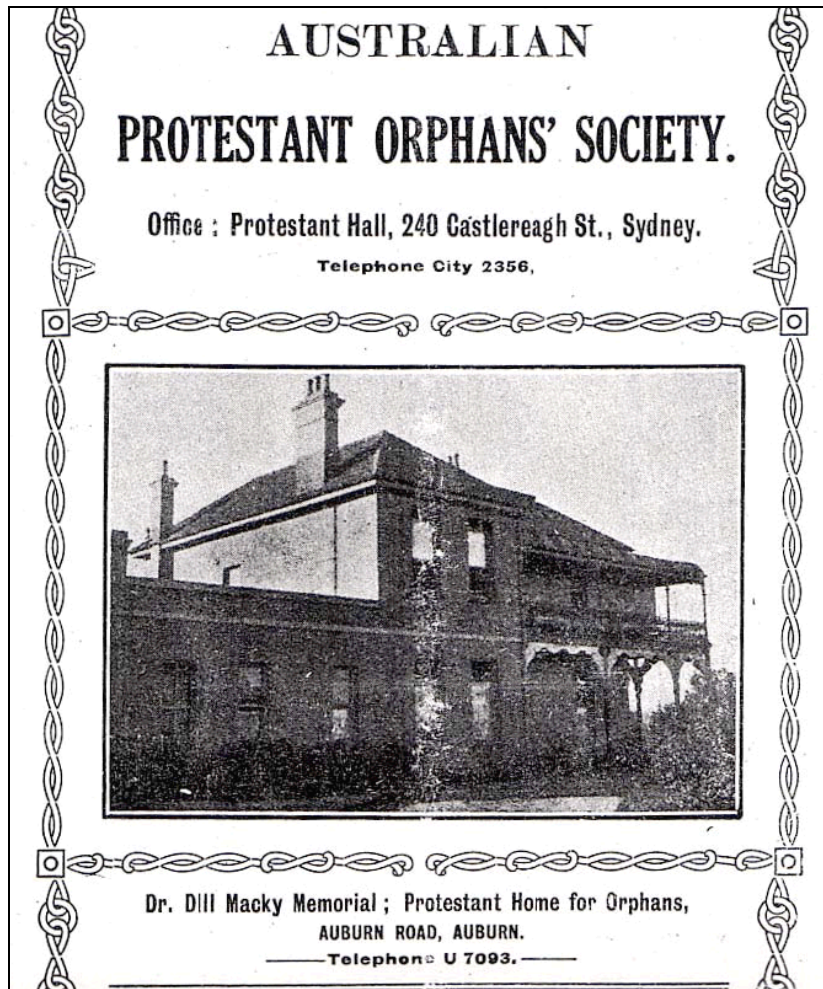


Figure 25: Australian Protestant Orphans' Society Annual Report 1918. (Mitchell Library, 362.7306/1).

(a commercial traveller from West Ryde), as joint tenants. In 1970 May Hobday was listed as the sole surviving tenant. The following month, May Hobday, Leslie Thomas William Heble (a retired compositor from Bondi Junction) and Frank Douglas Smith (a printer from Regents Park) were listed as owners. On 4th March, 1971, the property was transferred to the Auburn District Hospital.⁵⁰

When the former children's home became part of Auburn Hospital it was renamed the Arthur Stone Annex, in commemoration of Arthur Stone, the President of the Hospital Board when the new Auburn Hospital was opened in 1964.⁵¹ The property was used until 1988 as a post-natal facility of twenty-eight beds. Part of the building was also

⁵⁰ Certificate of Title, Vol. 6400 Fol. 88. NSW Land and Property Information.

⁵¹ 'From Cottage to 2m. Mansion' in The News, Auburn, 9th September 1964,1.

used during this period as a dental clinic.⁵² It was after 1964 that the aged care centre was constructed and the car park was established.

5.4 Area 3 – Water St Residences

Little is known of the residences other than that the three fronting Water St appear in the 1943 aerial photograph of the site (Figure 26). Their construction unlikely pre-dates 1943 by many years. No information was found on residences in this immediate area in the Sands Directory search for the years between 1890 and 1900.

5.5 Historic Site Formation and Predictive Modelling

Historical research for this site indicates that land incorporating the hospital was granted to private citizens between the 1790's and the 1820's. Initially at least, there appears to have been a burst of agricultural activity, no doubt preceded by large-scale bush clearance. There are no available records to indicate that substantial dwellings or farming complexes were established in the area during this early historic period; in fact there are no indications of any intensive settlement in the area until after the original grants were subdivided in the 1870's and 1880's.

The event that stimulated subdivision and late 19th century settlement in the area appears to have been the establishment of a rail link between Sydney and Parramatta in 1855. This provided access for local residents and farmers to the markets and social centres at either end of the rail line and conversely it encouraged people in the urban centres to explore the possibility of owning their own land and homes in the adjacent countryside. In other words, transport infrastructure provision created potential, then demand drove subdivision and construction on new land releases. This is a common historical pattern of development for Sydney.

As a result of this process, the marginal agricultural hinterland between the towns of Sydney and Parramatta remained occupied until mid 20th century by small-scale farming operations, where it was progressively 'infilled' by housing and industry.

Review of this occupation sequence suggests that the spread of the suburbs and industry emanated from nodes around the railway stations, such as at Auburn, with the most desirable areas being either near the emerging suburban centres and near permanent water courses such as Haslam's and Duck Creeks.

In regards to the current site and its historic occupation sequence, there are clear indications that settlement and subdivision was undertaken quite late in the 19th century because the immediate locality lacked water resources and was some distance from the rail line. Consequently, it had a very low population density until after 1905-07 when the Hospital was established on its current site. Construction and occupation of the substantial dwelling known as 'Moolabin House', probably for the noted surveyor John Oxley, by about 1888, supports this interpretation of the late 19th century settlement pattern. This residence, now part of Area 2, was a high status semi-rural house established on a high point within capacious grounds, but by the 1920's as Auburn developed into a residential suburb the former country residence was surrounded by houses on smaller allotments until finally absorbed by Auburn Hospital.

⁵² Typescript – History of Auburn District Hospital, Auburn Library Local Studies File.

The site location, on the top of a low eroding knoll within an undulating shale-derived landscape and at a distance from permanent water indicates the existence of a thin surface soil profile and sparse bush cover at the time of initial European occupation. This, combined with the likelihood that the bush cover was cleared rapidly suggests that that deflation or stripping of topsoil units that could have contained remains of previous Aboriginal occupation would also have occurred quite early in the historic period; perhaps by around 1820-30.

Thereafter, we know that the locality contained farms, but we do not know the extent to which agricultural tilling and other farming processes contributed to modification of the relict surface stratigraphy at the Hospital site. Similarly, we have no information regarding the location and extent of any structures (if any) that were constructed on the site until the establishment of 'Moolabin House' in the late 1880's.

At this time it is likely that the house and its associated outbuildings, fences, etc were the only built feature on site; the remainder of the land being cleared open paddock, possibly with surveyors pegs marking out the surveyed roads and allotments of the subdivisions that followed.



Figure 26: Overlay of relevant structures from the 1943 aerial (Figure 23) onto a recent aerial photograph

The above discussion can be summarised as follows:

- There is very low-nil archaeological potential of European occupation pre-dating the Hospital redevelopment of the 1960s of being present under the current buildings – with the exception of the temporary building near the corner of Norval and Hargrave Streets.
- The historic-period relics likely to be present under present road and carpark surfaces as well as under the temporary building are:
 - modified soil profiles, drainage features and fence posts associated with 19th century farming activity;

- footing remains of the building of the first Hospital phase and their associated paths, services and garden features.

In Area 2, development after the 1960s, when the site was incorporated into the Auburn Hospital, comprises the construction of a series of annexures to the former 'Moolabin House' (part of the Arthur Stone Annex), the re-configuration of the ground floor layout of the original building and the deposition of shallow fill layers to form both new building platforms and level areas for vehicular access and parking around the core of the complex.

With the exception of deeply excavated trenches for modern service lines and recent building footings this relatively low-impact development sequence appears likely to have resulted in preservation of the basal remains of internal and external walls as well as the outbuildings associated with the historic house. Beyond the footprint of the present building complex and the aged day care centre there would be more or less a complete retention of a variety of features associated with occupation of the site between c1888 and the 1960s. These features may include remains of services, garden features, a carriageway or access roads to the house, a well or cistern, fence lines, a privy or water closet and rubbish pits containing discarded domestic occupation. It is likely that most of these features are under fill of varying thickness, those features furthest away from the Arthur Stone Annex building being more deeply buried.

A similar development sequence and archaeological landscape to that described for the Arthur Stone Annex site is indicated for the four allotments occupied by small single storey dwellings in the southern part of the proposed development area (**Area 3**).

This part of the proposed development area appears to have formed part of an open field system created by 19th century land clearance and farming activity possibly as late as late as the inter-war period in the 20th century.

The identifiable development sequence on all four allotments was characterized by low-impact construction of dwellings and associated features such as sheds, paths and services on or near grade. As a result, the upper portions of the soil profile in existence before construction of the dwellings appears likely to exist in a superficially modified condition.

Retention of a soil profile with potential to contain cultural deposits and features associated with 19th century farming activity is indicated within Area 3, although it is noted that this potential is limited by the absence of recorded site-specific historic occupation.

6.0 ASSESSMENT OF SIGNIFICANCE

6.1 Evaluation

The following evaluation identifies the cultural significance of potential archaeological remains indicated at the site by research, physical inspection and predictive modelling. Significance assessment of potential Aboriginal deposits, in compliance with the Department of Environment and Conservation Interim Guidelines for Aboriginal Cultural Heritage Assessment, has not been undertaken for two reasons. Firstly, the assessment concludes that the sites potential to contain Aboriginal sites is low to nil, with this potential being confined to localised parts of the site that may contain disturbed remnants of the soil profile in existence at the time of European settlement. Secondly, this report is an archaeological assessment rather than a detailed cultural heritage assessment. As a result, the following detailed evaluation is limited to historic heritage issues.

Section 2.3 of this report contains detailed description of the criteria employed to make the evaluation.

- a.** *An item is important in the course or pattern of NSW's cultural or natural **history** (or the cultural or natural history of the local area);*

Potential relics indicated at the site comprise isolated features and modified soil deposits associated with 19th century farming in addition to remains of late 19th century and/or early-mid 20th century domestic occupation.

Remains associated with occupation of 'Moolabin House' would be significant for their associations with early historic occupation of the Auburn district in addition to their associations with the first known occupation on the wider Hospital site.

- **Accordingly, any such remains within the Arthur Stone Annex site (Area 2) are considered to have local heritage values in terms of this criterion.**

Assessment of the significance of remains associated with early historic farming activity tends to be problematic because the remains are often ephemeral, disturbed and isolated elements of formerly extensive historic activity. For example, remains of fence lines, drainage ditches and tracks associated with sites such as Elizabeth Farm at Parramatta or the Government farms established during the convict period at Sydney or Castle Hill would clearly be highly significant reminders of the history of those places, but as isolated items that are chronologically and spatially separated from their original context, they have little contemporary heritage value and limited capacity to demonstrate the complexity of the history of such sites.

Archaeological remains of historic farming activity at Auburn share the limitations of comparable remains on historically important sites in addition to lacking associations with significant occupation.

- **Accordingly they are not considered to meet the guidelines for inclusion under this criterion.**

Archaeological remains indicated in Area 1 that are associated with development of the hospital, particularly remains of the first Hospital built on site, would be significant as reminders of the history of health care provision in the district.

- **Accordingly, any such remains are considered to have local heritage values in terms of this criterion.**

- b. *An item has strong or special **associations with the life or works of a person, or group of persons, of importance in NSW' cultural or natural history** (or the cultural or natural history of the local area);*

The Arthur Stone annex site contains remains of 'Moolabin House' and this building has clear historical associations with three notable people – John Norton Oxley, Mr. Alban Gee and Mr John Nobbs.

John Norton Oxley lived in the house until about 1892. He was the son of the explorer and surveyor John Oxley and was Member of the Legislative Assembly for the Western District of Camden.

Alban Gee, who leased the house after Oxley was a locally prominent businessman, being the manager of The Sydney Meat Preserving Co. Ltd, one of the largest abattoirs in the district and one of the first meat processing works to introduce automated canning. Gee was Mayor of Lidcombe in 1893.

John Nobbs, a conveyancer and politician from Granville, purchased the property in 1900. He served as Mayor of Granville, was founder and president of the Fruitgrowers' Union of NSW, a founder of the Royal Australian Historical Society, president of the NSW Football Association, a leading freemason and a member of the Australian Protestant Defence Association.

This sequence of residents confirms the local significance of 'Moolabin House' as a high status residence in the late 19th century and early 20th century.

- **Accordingly the Arthur Stone Annex site (Area 2) is considered to be locally significant in terms of this 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);*

- **While the relics indicated at the site have some archaeological potential in addition to moderate heritage values for their historical associations they are not considered to meet the guidelines for inclusion under this criterion for creative and technical achievement.**

- d. *An item has strong or special **associations with a particular community or cultural group** in NSW (or the local area) **for social, cultural or spiritual reasons**;*

The hospital has serviced the inhabitants of Auburn and the wider community since 1911. It has been a feature of the history of this site that the **local community organisations have at various times lobbied for, or raised substantial funds for the construction, improvements and continuation of the Hospital.**

- **Accordingly the earliest remains of the Hospital site (Area 1) may be of local significant in terms of this criterion.**

- e. *An item as **potential to yield information** that will contribute to an understanding of NSW's cultural or natural history (or the cultural or natural history of the local area);*

If they were the subject of archaeological investigation, potential remains indicated at the Arthur Stone Annex site (Area 2) have a potential to yield information unavailable from other sources regarding the sequence of development of the house and its surrounding land. Depending on their extent, integrity and type, the remains may also have potential to augment existing information regarding the notable residents who occupied the building in the late 19th century, particularly in regards to their levels of disposable income and their access to high quality goods and food.

The remains (if any exist) associated with early farming activity in the area may have research potential to yield new information regarding the development of the local agricultural base, particularly in regard to the types of crops grown in the locality and changes through time in agricultural technology.

- **As such the remains are assessed as being locally significant in terms of this criterion for their relevance to research on the NSW State Heritage Themes of Agriculture, Accommodation and Towns Suburbs and Villages.**

- f. *An item possesses **uncommon, rare or endangered** aspects of NSW's cultural or natural history (or the cultural or natural history of the local area);*

In the absence of regional studies that examine domestic sites in the hinterland behind Sydney and institutional sites associated with health care provision it is not possible to determine the comparative rarity of remains indicated across the hospital site or the extent to which they are endangered.

- **Accordingly, it is not possible to assess the site's significance in terms of this criterion**

- g. *An item is important in **demonstrating the principal characteristics of a class of NSW's cultural or natural places**; or cultural and natural environments.*

Archaeological remains indicated at the site are part of a locally important government health care facility with strong attachments to the community over the last century.

- **Accordingly the earliest remains of the Hospital site (Area 1) may be of local significant in terms of this criterion.**

6.2 Statement of Cultural Significance

The buried remains of past occupation within the study area are likely to comprise the possible remains of 19th century farming activity, late 19th century domestic occupation and the earliest buildings of the Hospital. Such remains are considered to be locally significant for their historic heritage values, their associations with formerly notable business persons and politicians and their potential to yield new information about site specific occupation, the development of the hospital and the development of the local area.

7.0 IMPACT OF THE DEVELOPMENT

The impact of the development on the identified archaeological resource will be discussed according to the four development zones within the study area:

Area 1a

Previous development in this area has disturbed or completely removed any archaeological remains of past occupation with the possible exception of footings associated with the 1943 building referred to as the 'Nurses Quarters' near the southern boundary. Demolition of the existing buildings within this area and excavation of a new basement car park will result in complete removal of footings associated with the 1943 Nurses 'Quarters'.

Area 1b

The existing buildings within this area are to be demolished to make way for a new car park at or about grade. While the details of excavation required to construct the car park are currently unavailable it is assumed that some excavation would be undertaken to remove foundations of the existing buildings and to regrade or landscape the area for public health and safety reasons. Depending on the depth of excavation required, this work may reveal and/or disturb remains of the first 'Cottage' Hospital established at Auburn in addition to disturbing deposits with some potential to contain material remains associated with Aboriginal occupation (in the north western corner of the site).

Area 2

The Arthur Stone Annex building is to be demolished and the allotment containing the building will be re-surfaced to form a car park. There will be no re-grading or establishment of new services during this work, however, the foundations of the Arthur Stone Annex building will be removed. This excavation will result in the disturbance of the locally significant remains of the building. In addition, and depending on the depth of excavation required as part of the re-surfacing work for the new car park, it is possible the work may result in disturbance or exposure of locally significant features and deposits created in the former yard areas around the house during the late 19th and early 20th centuries.

Area 3

Development proposed in this area requires demolition of the four residences, excavation to depth below grade for the south west corner of the new hospital building and landscaping for vehicular and pedestrian access. This work has some (low) potential to result in the discovery of remains associated with Aboriginal occupation and remains associated with early historic farming activity.

8.0 PROPOSED ARCHAEOLOGICAL WORK

8.1 Conclusion & Summary of Key Findings

The Major Project Application for the redevelopment of Auburn Hospital has received approval on the condition that:

- *An archaeological assessment of the site will be undertaken prior to the commencement of works on the site; and*
- *The successful tenderer (Multiplex) will be required to engage a historical archaeologist to undertake any excavations in the proximity of listed items. All recorded archaeological work on site will be submitted to the NSW Heritage Council for information. In the event that any historical or Aboriginal relics are uncovered during excavations, all excavation and disturbance to the area will stop immediately and the Department of the Environment will be informed in accordance with Section 91 of the National Parks and Wildlife Act 1974.*

This report satisfies Condition 1. The key findings of the assessment are as follows:

- There are two localities within the study area with a low potential to contain remnants of the soil profile that existed prior to 1788 and therefore some potential to contain remains of Aboriginal occupation. These localities are the allotments with frontages to Water and Hargrave Street (Area 3) and the grassed area in the north west corner of Area 1a.
- Three localities within Areas 1 and 2 have some potential to contain archaeological remains of the footings associated with earlier buildings. These include the Hospital Cottage and appended buildings in Area 1b, the 1943 “Nurses Quarters” in Area 1a, and the outbuilding and original northern wall of the Arthur Stone Annex.
- Across Areas 1 to 3 there is a potential for archaeological remains other than those associated with buildings to be present.
- The significance of potential Aboriginal sites and/or objects (if any exist) in the above areas cannot be determined on the basis of available information.
- The potential historic archaeological remains indicated at the site are considered to have local heritage significance.
- The proposed development at the Hospital has some potential to disturb and/or expose the above-mentioned remains, however the extent to which such remains will be disturbed and/or exposed is contingent upon the depth to which excavation is required below existing grade. This (i.e. the required finished levels for excavation) varies across the site and is currently indeterminate in Areas 1a (north side), 2 and portions of Area 3.

Figure 27 shows the locations of the areas within Auburn Hospital that are considered to have potential to contain Aboriginal and/or historical archaeological remains.

8.2 Recommendations

The term 'relics' used in Condition 2 of the approved development consent is taken to refer to the provision of the NSW *Heritage Act 1977* which defines a 'relic' as:

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

(b) which is 50 or more years old.

The potential historical archaeological remains identified in this assessment (Sections 5.5 and 8.1) can be considered to be 'relics' as defined under the NSW *Heritage Act 1977* and Condition 2 of the approved development consent.

8.3 Archaeological Management Plan

This plan should be implemented by establishing a Consultation Roster between the Multiplex Project manager, the Archaeologist and Demolition/ Excavation Contractors. This roster should include:

1. A start-up meeting to discuss the proposed method statement and make necessary changes that would improve its efficiency and/ or product;
2. Involvement of the Archaeologist at the start of on-site demolition work; and
3. Verification of compliance with the plan via photographic documentation at the conclusion of demolition of the Arthur Stone Annex, the cottages fronting Water Street and the Café and Outpatients building at the northern end of the hospital site.

8.3.1 At the Start of and During Demolition of the Arthur Stone Annex

Demolition and Excavation Contractor(s) will work with Multiplex and the Archaeological Consultant to effect the following method statements:

1. Do not undertake excavation below existing grade in, and within the vicinity of, the Arthur Stone Annex site without the archaeological consultant being in attendance – this includes removal of footings;
2. Where timber floors are removed, fill the voids with demolition rubble to establish a pad at least 300mm thick to create a surface to enable movement of machinery. This pad will form a protective buffer for any archaeological remains buried below ground;
3. The archaeologist, following consultation with Multiplex regarding the required end levels for excavation in all areas of identified archaeological potential, is to direct the demolition and/or excavation contractors work from this point onwards.

8.3.2 Required Archaeological Excavation

Archaeological excavation is required in the proximity of the Arthur Stone Annex site. The focus of the excavation would be, but not confined to, the:

- The small outhouse to the rear of the 'Moolabin House' as shown in the 1943 aerial photograph (see Figure 23, 26 and 27)

As discussed above, the investigation will involve an excavation and recording in areas where archaeological remains are indicated by historic plans and images. It is proposed to use a combination of machine and manual excavation at the site.

Standard archaeological excavation, recording and artefact processing techniques will be used.

Further details on recording and storage methods for collected / excavated material are provided in following subsections. The general methods that will be used during this work are as follows;

Initial Site Establishment

- Current modern surface deposits and demolition will be removed using a machine excavator (up to 20 tons);
- The work will be undertaken under the supervision of the Excavation Director, and;
- The excavation work will be undertaken to the level of the archaeological remains and/or the former natural ground level, if no remains are present.

Manual Excavation

- If no occupation deposits or intact structural remains are revealed, the area will then be examined by manual testing to depth within the subsoil. If intact occupation deposits are identified, these remains will be recorded, covered with geo fabric and/or clean sand, and left *in situ*;
- Recent fill materials (if any are identified) will be removed manually until earlier/more significant occupation deposits and features, or natural ground is revealed;
- As with the initial manual scraping described above, these remains will be recorded and left *in situ* for removal by machine at the completion of the excavation.

Recording

Standard recording methods will be adopted during the course of work on site.

- A survey datum will be established in order to record the levels of extant deposits and features;
- Scaled site plans and profile or cross-section drawings showing the location of all archaeological deposits and features revealed by excavation will be prepared as required. These will be keyed to the site datum;
- Photographic recording of all phases of the work on site will be undertaken;
- A standard context recording system will be employed, namely the location, dimensions and characteristics of all archaeological features and deposits will be recorded on sequentially numbered *proforma* context recording sheets. This form of written documentation will be supplemented by preparation of a Harris Matrix showing the stratigraphic relationships between features and deposits;
- The photographic record of the excavation will involve recording of archaeological features before and after excavation using an appropriate photographic scale;

- Cultural artefacts retained for analysis will be cleaned on site, sorted according to their fabric classes, bagged and boxed with reference to the context from which they were recovered.

Excavation will be conducted until site clearance is achieved to the satisfaction of the Excavation Director.

Post Excavation Analysis & Finds Curation

All significant cultural material recovered during the excavation program will be catalogued and analysed for presentation and inclusion in the final project report. During the work on site, artefact processing will be undertaken as follows:

- Artefacts will first be cleaned at a washing station and dried;
- Items will then be divided into categories according to their type and fabric and in the case of glass and ceramics, by colour. These will be further divided into those which are non-diagnostic and those which require more close consideration.
- Items such as unmarked broken glass, shells, small wooden fragments, metal fragments etc. will be weighed and recorded, then discarded;
- Remaining items will be retained for analysis and research at a later date.
- Short term conservation measures will be carried out to stabilise items if required as they are catalogued. Recommendations on the need for long term conservation will be made for each individual artefact or group of artefacts as appropriate.

Staff

Project management will be undertaken by Cosmos Coroneos of Cosmos Archaeology Pty Ltd.

The nominated excavation directors for the project are Cosmos Coroneos of Cosmos Archaeology Pty Ltd and Peter Douglas of Archaeological & Heritage Management Solutions Pty Ltd (as co-directors). Up to two archaeologists will undertake the archaeological test excavation and will be drawn from the Cosmos Archaeology Pty Ltd and AHMS staff roster and/or pool of regular sub-consultants.

8.3.3 Recommended Archaeological Monitoring

This assessment has found that archaeological remains are likely to be found in areas beyond the proximity of the Arthur Stone Annex building. Selected archaeological monitoring during the construction phase across Areas 1 to 3 is seen as the best way to comply with the section of Condition 2 which states *in the event that any historical or Aboriginal relics are uncovered during excavations, all excavation and disturbance to the area will stop immediately and the Department of the Environment will be informed in accordance with Section 91 of the National Parks and Wildlife Act 1974,....*

The areas that should be the focus of archaeological monitoring are presented in the following order of priority (Figure 28):

- M1. The remains of the footings of the Cottage Hospital.

- M2. Area 3.
- M3. The northwest corner of Area 1b.
- M4. The carpark area in front of Arthur Stone Annex house.
- M5. The appended buildings associated with the Cottage Hospital.
- M6. The footings of the 1943 'Nurses Quarters'.
- M7. The footings of the unidentified building between the Main Hospital building and Hargrave Street.

If Aboriginal artefacts or Historical relics are found during the course of construction outside these monitoring areas, and the area assigned to the test excavation at Arthur Stone Annex, excavation and disturbance in the immediate vicinity of the uncovered relic is to stop immediately and the archaeologist notified.

Archaeological monitoring will take the form of an archaeologist being present when the ground in any one of the monitoring areas is excavated below current ground level. In monitoring areas M2 and M3, where there is an assessed low-nil possibility of Aboriginal archaeological deposits, a representative of Metropolitan Local Aboriginal Land Council should also be present.

Recording will take the form of manual cleaning exposed footings and other archaeological features exposed during the excavation. These features are to be photographed and described before they are removed. With respect to monitoring areas M2 and M3, soil profiles and spoil heaps will be examined for Aboriginal relics.

The archaeological project manager Cosmos Coroneos of Cosmos Archaeology Pty Ltd, is to be advised of the proposed stages and timings of excavation for each of the monitoring areas. Cosmos Archaeology Pty Ltd will subsequently advise the Metropolitan Local Aboriginal Land Council of all proposed stages and timings of excavation and archaeological investigation. The archaeological project manager, or delegated archaeologist, is to be given reasonable notice (one week) by the Site Foreman as to when excavation is to commence in any of the monitoring

8.3.4 Following Archaeological Excavation and Site Clearance

Three reports on the archaeological investigations are to be prepared:

- A report after the completion of the Arthur Stone Annex archaeological excavation.
- A report after the completion of archaeological monitoring in Areas 1a, 2 and 3.
- A report after the completion of archaeological monitoring in Area 1b.

The reports will be prepared by the project archaeologist and will outline the scope of works as well as presenting and interpreting the results of the investigation.

Copies of each of the reports are to be sent to the NSW Heritage Council and the Auburn City Council Library.

The artefacts recovered during the excavation will be returned to the custody of the client, individually bagged and labelled.



Figure 28: Proposed focus of archaeological monitoring

REFERENCES

Plans & Maps – relating to the proposed development

Concept Plan – Auburn Hospital: Auburn Hospital Re-development: Existing Site Plan SK100/. Aurora Projects 6-Jan-06

Site Plan – Master Plan. Suters 8731_A-002.dwg. June 2006

Archival Plans, Maps and Photographs

1902 sub-division plan depicting streets within land grants. (Mitchell Library, Z1902).

Land grants in the Parish of Liberty Plains (AO Map 3334, NSW State Records).

Peter Lewis Bemis Plan, September 1831. (Mitchell Library, 811.133/1831).

Sub-division plans from late 1880's. (Mitchell Library A10/33).

The King Edward VII Home for Orphans. (Australian Protestant Orphans' Society, Ye Old Englishe Faire, 1911. Mitchell Library).

Township of St Joseph around Haslam Creek railway station, from a survey of February and March, 1867, by F.W. Birmingham. (Mitchell Library 811.1338.1867)

Secondary Sources – Publications

Australia ICOMOS Inc. (1999) *The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance 1999*.

Australian Protestant Orphans' Society Annual Report 1918. (Mitchell Library, 362.7306/1).

Chapman, G.A. & C.L. Murphy (1989) *Soil Landscapes of the Sydney 1:100 000 sheet*. Soil Conservation Service of NSW, Sydney.

Chapman, G.A., Murphy, C.L., Tille, P.J., Atkinson, G. and Morse, R.J. (1989) *Soil Landscapes, Sydney 1:100,000*. Soil Conservation Service of NSW, Sydney.

From the Skies: Aerial Photographs of Sydney 1943. RTA 2005

Herbert, C. (ed.), (1983). *Geology of the Sydney 1:100,000 sheet*. Department of Mineral Resources, NSW.

Granville Electorate Cottage Hospital, Annual Reports

Journal of The Royal Australian Historical Society, Volume 8, 1923, 'Recollections of Mr. C.A. Henderson'.

Kohen, J. *et al.* (1984) "Shaws Creek KII Rockshelter: a prehistoric occupation site in the Blue Mountains piedmont, eastern New South Wales." *Archaeology in Oceania*. Vol. 19: 57-93.

Lampert, R. J. (1971) "Burrill Lake and Currarong." *Terra Australis* 1. Department of Prehistory, Australian National University, Canberra.

Council of the Municipality of Auburn *Liberty Plains - A History of Auburn, NSW Centenary Edition* (1992), Council of the Municipality of Auburn.

Jo McDonald Cultural Heritage Management Pty Ltd (2002) Archaeological Assessment of Indigenous Cultural Heritage Values, Rouse Hill Development Area Sewerage Master Plan. Report prepared for GHD.;

Jo McDonald Cultural Heritage Management Pty Ltd (2005) *Salvage Excavation of Six Sites along Caddies, Second Ponds, Smalls and Cattai Creeks in the Rouse Hill Development Area, NSW*. (2005) Australian Archaeological Consultancy Monograph Series 1. St Lucia: Australian Association of Consulting Archaeologists Inc.

McDonald, J. J. & E. Rich. (1993) *Archaeological Investigations for the Rouse Hill Infrastructure Project (Stage 1). Works along Caddies, Smalls, and Second Ponds Creeks. Rouse Hill and Parklea, New South Wales. Final report on Test Excavation Program Vol. 1. Report to Rouse Hill (Stage 1) Pty Ltd.*

Nanson, G. C. *et al.* (1987) "Chronology and paleoenvironment of the Cranebrook Terrace (near Sydney) containing artefacts more than 40,000 years old." *Archaeology in Oceania*. Vol. 22 (2): 72-78.

NSW Heritage Office, July (2001) *Assessing Heritage Significance*.

Review Pictorial.

Sand's Sydney and Suburban Directory.

Serle, G. (gen.ed.), (1981) *Australian Dictionary of Biography, Volume 11: 1891-1939*, Carlton, Melbourne University Press,

Stockton, E. D. & W. N. Holland (1974) "Cultural sites and their environment in the Blue Mountains." *Archaeology and Physical Anthropology in Oceania*. Vol. 9: 36-64.

The Auburn District Hospital 75th Annual Report, (1984)

Thom, B. G. and P. S. Roy. (1983) "Sea-level change in New South Wales over the past 15,000 years." In D. Hopley (ed.), *Australian Sea-Levels in the Last 15000 Years: A Review*, pp. 64–84. Occasional Papers 3. Townsville: Department of Geography, James Cook University of North Queensland.

Secondary Sources – Unpublished Reports

Attenbrow, V. (1987) *The Upper Mangrove Creek Catchment: a study of quantitative change in the archaeological record*. Unpublished PhD Thesis. University of Sydney.

Bowdler, S. (1970) *Bass Point: the excavation of a south-east Australian shell midden, showing cultural and economic change*. Unpublished BA (Hons) Thesis, Sydney University.

Coffey Geosciences Pty Ltd (2003) *Auburn Hospital Master Plan, Stage 1 Preliminary Geotechnical and Contamination Assessment*. Prepared for LFA (Pacific) Pty Ltd.

Douglas Partners Pty Ltd (2006) *Report on Geotechnical Investigation, Proposed New Hospital Building, Auburn Hospital, Auburn*. Prepared for Suturs Architects.

Jo McDonald Cultural Heritage Management Pty Ltd, (2002) *Archaeological Assessment of Indigenous Cultural Heritage Values, Rouse Hill Development Area Sewerage Master Plan*. Report prepared for GHD.

McDonald, J. J. & E. Rich. (1993) *Archaeological Investigations for the Rouse Hill Infrastructure Project (Stage 1). Works along Caddies, Smalls, and Second Ponds Creeks. Rouse Hill and Parklea, New South Wales. Final report on Test Excavation Program Vol. 1. Report to Rouse Hill (Stage 1) Pty Ltd.*

Weir & Phillips Architects & Heritage Consultants (2006) *Heritage Report, Auburn Hospital*.

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