

KEY

Study area detail

Survey results

---- Irrigation canal

Existing environment

Historic alignment of the Mulgoa irrigation canal

- Main road

---- Local road

Survey results

Archaeological research design - Chaffey Brothers Irrigation Scheme Canal Figure 3.1



GDA 1994 MGA Zone 56

Figure 3.1 Field survey results

4 Site evaluation

4.1 Overview

The site evaluation of the canal provides the item with spatial perspective and assists in developing research questions to frame the management measures in this report. The following section collates and analyses existing historical sources, uses evidence gathered from the site inspections and uses comparative archaeological and standing sites to aid in overall predictions of archaeological potential for the inn site.

4.2 Analysis of historical sources

4.2.1 Written sources

There are historical accounts describing the general design and layout of the MIS, including the canals. The canal is described in the Mulgoa Irrigation Company Booklet:

The principal irrigation works begin with a weir in the Nepean, above its junction with the Warragamba, thus creating an immense natural reservoir. This throws the water into a billabong, quarter of a mile in length. From the billabong the water runs through a tunnel for 500 feet to the pumping shaft, an oblong, 18 feet by 12 feet, and 47 feet in depth. From the pumps the water is conveyed through 22-inch pipes to the receiving basin at the beginning of the main channel, and 180 feet above the river. The receiving basin is at the southern extremity of the township of Mulgoa and at the commencement of the irrigation area. Close to the receiving basin is the reservoir, with a capacity of 4,000,000 gallon for the domestic supply of the township (Mulgoa Irrigation Company 1892).

The plan was to have the water redistributed across the Nepean region as far north as St Marys through a network of canals. One reporter, who attended a site inspection for the Mulgoa Irrigation Scheme presented by the Chaffey Brothers in 1890, wrote:

There will be 30 miles of main canals, and another 60 or 70 miles of subsidiary channels. The main canals will be 4ft deep; that is to say, they will be 2ft in the ground, while the earth taken out in making them will form embankments 2ft high. They will be 20ft wide at the top and 12ft at the bottom. (Sydney Morning Herald 1891)

The description provided above is valuable as it provides the envisaged design features of the canals. However, as noted in the historical summary, the canal was never completed and therefore the actual construction of the canal would not have resulted in the design described above. Notably, the site inspection results do not reflect the intended design of the canal in the study area; that is, the embankments above ground level are either deflated or have been removed and they are not 20ft (approximately 6 m) wide. However, the smaller shallow linear feature to the south can be seen clearly and consistently on current aerial imagery and may be a construction phase of the canal that was abandoned (refer to Figure 5.1). From edge to edge, the combination of these two features measures approximately 7 m. As such, it is surmised the remnants of the canal are a mixture of a semi-completed design and post-construction site formation processes such as soil aggradation and erosion. It is unlikely that the surviving width of the canal has been modified through natural erosional processes because it is of a consistent width on the ground (where observed) and in historical and current aerial imagery. Archaeological excavation will shed more light on the level of completion of the canal in this area.

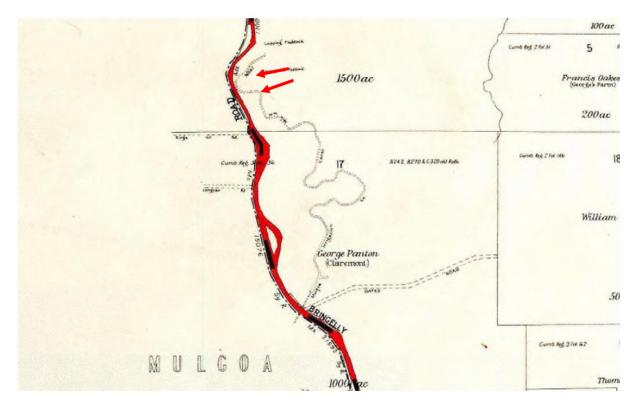


Plate 4.11972 Claremont parish map showing the canal which is labelled as Mulgoa Irrigation Co.
Canal. The red arrows point to the general location of the affected portion of the canal

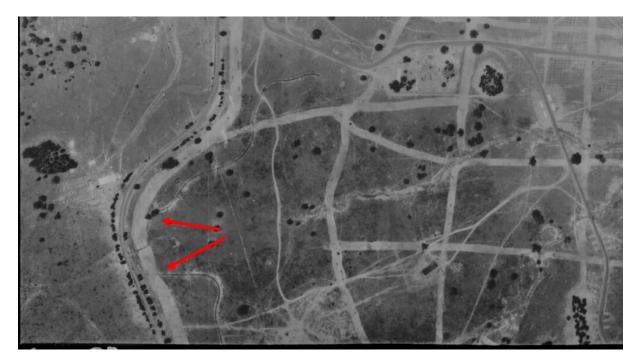


Plate 4.2 1947 aerial photography of Orchard Hills showing the canal alignment partially obscured by cleared paddock sections

4.2.2 Historical plans and aerial imagery

Historical plans and aerial imagery are a reliable source of information that provides the location and alignment of the canal. The 1972 Claremont parish map shows the extent of the alignment of the canal which formed a horse shoe shape within the project boundary (Plate 4.1).

The earliest aerial photography from 1947 clearly shows that the canal alignment was mainly intact (Plate 4.2). However, the 'U' shaped portion of the canal that partially falls within the construction footprint is obscured by a cleared alignment, probably used for paddock access.

Current aerial imagery shows that the canal within the vicinity of the construction footprint has been impacted by:

- the realignment of the existing The Northern Road which is likely to have destroyed any traces of the canal;
- the construction of an access track to the east of The Northern Road which is used by Defence; and
- the development of houses and a shed which may have destroyed a small portion of the canal outside the construction footprint.

4.3 Comparative analysis

4.3.1 Overview

The Defence Establishment Orchard Hills HMP includes a comparative analysis of the canal with the Upper Nepean Scheme and the Murray River Irrigation Schemes. Both of the schemes are contemporary in date and nature with the Mulgoa Irrigation Scheme. Sections of the following comparative analysis have been extracted from the HMP (GML 2013):

The Murray River Irrigation Schemes (Victoria and South Australia)

The Murray River Irrigation Scheme is listed on the Victorian Heritage Register and the RNE (Register of the National Estate), in connection with Rio Vista. The following details have been taken directly from the online listings and available information on the Chaffey brothers. The Murray River Irrigation Scheme established the settlements of Mildura, in Victoria, and Renmark, in South Australia, in the late 1880s. The schemes were intended to irrigate lands which had little natural productive capacity and where settlement was not previously possible on a large scale. The two irrigation schemes were based on irrigation schemes in the United States, which had been developed by the Chaffey brothers. The Australian schemes were implemented by the Canadian born Chaffey brothers-George and William Chaffey-and are considered rare examples of an overseas socio/economic system being brought to Australia and reproduced from scratch in an entirely new settlement context. Prior to their work in Australia, the Chaffey's [sic] were developing an irrigation settlement in Ontario, California. At the time, Victorian Cabinet Minister, Alfred Deakin, had been appointed by the Victorian parliament to visit the United States of America on a fact finding mission. The Chaffey's heard of his visit to their region and organised to meet. The Chaffeys' model irrigation settlement impressed Deakin, who in turn impressed them with the potential for irrigation from the Murray River in Australia. In order to implement the two schemes, extensive negotiations and contracts with the Victorian and South Australian governments were drawn, including the sale of extensive quantities of Crown land on 'favourable' terms (GML 2013, p.82).

Despite the eventual failure of the Chaffey's company and scheme, the Mildura irrigation system resulted in the construction of a large amount of functioning infrastructure, including channels, lochs

and the Psyche Pump Station (built in 1891) which pumped water from the Murray River to Kings Billabong and then distributed it throughout the area via a series of channels. 13 Once completed, the Chaffey's scheme resulted in the irrigation of an area of 33,000 acres (which functions to this day) and the permanent establishment of Mildura and Renmark (GML 2013, p.83).

The Upper Nepean Scheme (NSW)

The Upper Nepean Scheme is listed on the Water NSW Heritage and Conservation Register (s170 Heritage Act) in its entirety. Components of the Upper Nepean Scheme are also listed on the SHR.

The Upper Nepean Scheme was constructed between 1880 and 1888, and was developed from the late 1880s to meet Sydney's water supply needs. The Upper Nepean Scheme comprises a system of three dams, weirs, tunnels, aqueducts and a 64km canal system that moved water from the three supply dams to Prospect Reservoir. The significance assessment for the Upper Nepean Scheme states:

The dams and other works are important examples of early Australian civil engineering and were all "State of Art" for their time. The catchment area and system is considered to provide one of the world's purest sources of water for human consumption.

The Upper Nepean Scheme has functioned as part of the main water supply system for Sydney for over 120 years, and apart from development in supply and improvements has changed little in its basic principles since the day it was completed, except for the decommissioning of the Lower Canal in the 1990s.

The Upper Nepean Scheme is an excellent example of the ingenuity of late nineteenth century hydraulic engineering, illustrating the techniques of canal building (often at extremely small grades), the progressive improvements in both pipe manufacture and pipeline construction, and the construction, even by present day standards, of a large earth fill and rock dam. Of particular note is the way in which it was designed to supply a large area of Sydney by gravity.

The Upper Nepean Scheme provides detailed and varied evidence of engineering construction techniques prior to the revolution inspired by reinforced concrete construction. Although concrete was later used to improve the durability of the system, much of the earlier technology is still evident along the Canal.

It also provides extensive evidence of the evolution of engineering practice, such as the replacement of timber flumes by wrought iron flumes to be followed by concrete flumes. The early utilisation of concrete for many engineering purposes in the system, also demonstrates the growing emergence of an engineering technology based upon man-made materials.

The Upper Nepean Scheme made the big advance from depending on local water sources to harvesting water in upland catchment areas, storing it in major dams and transporting it to the city by means of major canals and pipelines.

It is highly significant that the initial Scheme, completed in 1888, lent itself to progressive development over a period of over 120 years to meet Sydney's increasing water supply needs. Many of the original control installations such as the stop logs, penstocks and gate valves, are still in service and continue to illustrate the technology of the time.

This is extremely unusual for an item of technology. Although some of the features of the Upper Nepean Scheme are used elsewhere in the water supply system, nonetheless many of the structural elements are unique to the Upper Nepean Scheme. Apart from the decommissioning of the Lower Canal, which nonetheless still remains a distinct entity, the whole of the Upper Nepean Scheme remains largely intact and performs the same functions as originally intended.

4.4 Statement of archaeological potential

This section relates to the archaeological potential of the canal within the construction footprint. The results of site analysis indicate that remnants of the canal exist within the construction footprint. However, because the construction of the canal was terminated prior to its completion, the envisaged design of the canal was not created. The archaeological features of the canal are likely to include the following on the eastern side of the Northern Road within Defence-owned property:

- evidence of the cut and trench for the canal;
- ephemeral, deflated or truncated evidence of the embankments on either side of the trench;
- evidence of natural sediment build-up post-construction; and
- evidence of imported fill to level the ground for vehicle access.

The remnants of the canal on the western side of the Northern Road were not accessed during the site inspection. However, aerial imagery indicates that the canal alignment has been in filled and possibly had a small portion destroyed by the development of house and sheds.

The archaeological potential of the canal is illustrated on Figure 4.1.



Source: EMM (2017); DFSI (2017)

Figure 4.1 **1947** aerial imagery on current aerial imagery

Main road Local road Project impact area

> 1947 aerial imagery on current aerial imagery

Archaeological research design - Chaffey Brothers Irrigation Scheme Canal Figure 4.1

GDA 1994 MGA Zone 56





Source: EMM (2017); DFSI (2017)

0 25 50 GDA 1994 MGA Zone 56

KEY Historic alignment of the Mulgoa irrigation canal

- Main road
- Local road
- Project impact area

Area of archaeological potential

Archaeological research design - Chaffey Brothers Irrigation Scheme Canal Figure 4.2



4.5 Assessment of significance

4.5.1 Defining heritage significance

In NSW the assessment of heritage significance is based on the *Burra Charter* (Australia ICOMOS 2013) and further expanded upon in the Heritage Manual's "Assessing Heritage Significance" (Heritage Office 2001). It lists seven criteria to identify and assess heritage values that apply when considering if an item is of state or local heritage significance as set out in Table 4.1.

The heritage significance of the Mulgoa Irrigation Scheme has previously been assessed by GML against the CHL criteria in 2013 for the Defence Establishment Orchard Hills HMP which is provided in Table 4.1. Jacobs have related the canal to the SHR criteria which is also reference in Table 4.1.

Table 4.1Assessment of heritage significance (Lot 1 DP 623457)

CHL/SHR Criterion	Assessment
CHL A – Importance in the course, or pattern, of Australia's natural or cultural history A - Importance in the course, or pattern, of Australia's natural or cultural history	The Mulgoa Irrigation Scheme is important in the course and pattern of New South Wales and the Mulgoa/Orchard Hills districts because of its place as an attempt to irrigate pastoral lands and allow farming of areas which were otherwise unsuitable for agriculture. The scheme contains important engineering elements that provide an understanding of hydrological systems, including movement of water upslope to a reservoir and distribution through a planned distribution network. The Mulgoa Irrigation Scheme was comparable with two other irrigation schemes, implemented in Victoria and South Australia, which resulted in the establishment of Mildura and Renmark respectively. As such, the Mulgoa Irrigation Scheme provides evidence for one of the New South Wales government's economic aims in Western Sydney, prior to Federation. The ultimate failure and abandonment of the Mulgoa Irrigation Scheme in 1895 provides evidence of the financial difficulties encountered by the Mulgoa Irrigation Company in New South Wales, along with their comparable sister companies in Victoria and South Australia; as well as the general economic situation in New South Wales, where the government was unwilling to fund and complete the scheme following the withdrawal of the Mulgoa Irrigation Company (GML 2013:91-92).
 B – Uncommon, rare or endangered aspects of Australia's natural or cultural history F – Uncommon, rare or endangered aspects of NSW cultural or natural history 	The Penrith Heritage study (Paul Davies Pty Ltd 2007) noted that the LEP listed section of the Chaffey Brothers irrigation scheme (situated outside the CHL boundary) met the requirements of this criterion, but no further detail of that assessment was available for the current assessment. As the canal situated in the construction footprint is part of the same overall irrigation scheme, it also meets this criterion.
 C – Potential to yield information that will contribute to an understanding of Australia's natural or cultural history E - Potential to yield information that will contribute to an understanding of NSW cultural or natural history 	Further study of the Mulgoa Irrigation Scheme could yield new information on the planned subdivision and establishment of the township of Mulgoa. Investigation of the remains of the Mulgoa Irrigation Scheme could provide further insight into the mode of canal construction, landscape modification and technology for a gravity-fed water canal (GML 2013:93).

CHL/SHR Criterion	Assessment		
 D – Principal characteristics of: 1. A class of Australia's natural or cultural places; or 2. A class of Australia's natural or cultural environments 	The remnant archaeological remains for the Mulgoa Irrigation Scheme are located within, and are a component of, a rural cultural landscape. The Mulgoa Irrigation Scheme represents an attempt to modify the rural landscape to allow more intensive agricultural purposes, in a similar manner to that undertaken in Mildura and Renmark. The cultural landscape is characterized by undulating low bills: a patural landscape		
G - Important in demonstrating the principal characteristics of a class of NSW cultural or natural places or cultural or natural environments	landscape is characterised by undulating low hills; a natural lands suitable for development of a gravity-fed irrigation canal (GML 2013:		
E – Particular aesthetic characteristics valued by a community or cultural group	No values are provided for this criterion in the CHL listing.		
C - Important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in NSW			
 F – High degree of creative or technical achievement at a particular period C - Important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in NSW 	The Mulgoa Irrigation Scheme demonstrates a high degree of technical achievement, where water needed to be raised from the Nepean River (through a pumping station and a series of pipes) to be held in a reservoir (Square Dam). From this storage point the Mulgoa Irrigation Scheme was to move and distribute water through the landscape by a gravity fed system of canals with a low gradient. The canal distribution network demonstrates considerable technical understanding of topography, planning and hydrological engineering (comparable to that undertaken for the contemporary Upper Nepean Scheme) (GML 2013:95).		
 G – Strong or special association with a particular community or cultural group for social, cultural or spiritual reasons D - Strong or special association with a particular community or cultural group in NSW for social, cultural or spiritual reasons 	No values are provided for this criterion in the CHL listing.		
 H - Special association with the life or works of a person, group of persons of importance in Australia's natural or cultural history B - Strong or special association with the life or works of a person, or group or persons, of importance in NSW cultural or natural history 	The Mulgoa Irrigation Scheme was conceptualised and implemented by George and William Chaffey in 1890. In the 1880s the Chaffey brothers came to Australia on the invitation of Alfred Deakin (a Victorian Cabinet Minister), and establishment of the towns of Mildura (Victoria) and Renmark (South Australia) around comparable irrigations schemes took place. The Chaffey brothers' initial success in Victoria and South Australia led to an invitation to develop a similar scheme in New South Wales – the Mulgoa Irrigation Scheme. Following an initial period of construction, when parts of the Mulgoa Irrigation Scheme infrastructure was built, the scheme failed as a consequence of the economic situation in New South Wales and Victoria/South Australia, combined with the Chaffey brothers' personal monetary difficulties. The residual evidence of the Mulgoa Irrigation Scheme provides a direct connection to the Chaffey brothers, who visualised and engineered it (GML 2013:96).		
I - Importance as part of Indigenous tradition	No values are provided for this criterion in the CHL listing.		

4.6 Statement of significance

The Mulgoa Irrigation Scheme HMP (GML 2013) provides a suitably detailed history and succinct assessment of significance for the item. Additional research was not undertaken for the report other than the site survey and analysis of plans and aerial photographs as it the information in the HMP is of a suitable detail to inform the archaeological research design and excavation method. As a result, the following statement of significance has been extracted from the HMP:

The Mulgoa Irrigation Scheme was conceptualised and implemented by George and William Chaffey in 1890. In the 1880s the Chaffey brothers came to Australia on the invitation of Alfred Deakin (a Victorian Cabinet Minister), and establishment of the towns of Mildura (Victoria) and Renmark (South Australia) around comparable irrigations schemes took place. The Chaffey brothers' initial success in Victoria and South Australia led to an invitation to develop a similar scheme in New South Wales – the Mulgoa Irrigation Scheme. Following an initial period of construction, when parts of the Mulgoa Irrigation Scheme infrastructure was built, the scheme failed as a consequence of the economic situation in New South Wales and Victoria/South Australia, combined with the Chaffey brothers' personal monetary difficulties. The residual evidence of the Mulgoa Irrigation Scheme provides a direct connection to the Chaffey brothers, who visualised and engineered it (GML 2013, p.96).

5 **Research design and excavation methods**

5.1 Introduction

An archaeological research design is a theoretical framework to support archaeological field investigations with the aim of extracting information that is relevant to the development and function of the site. The research design is based on the outcomes of the archival and documentary research and the existing environment and seeks to develop questions that will contribute to current and relevant knowledge about a place, a theme and perhaps individuals that documentary sources cannot contribute to. These questions should be compatible with the nature of the predicted archaeological resource and realistic in terms of their ability to produce relevant answers.

The questions in Section 5.2 are influenced by the results of the fieldwork and the historical summary.

5.2 Research questions

- 1. What is the extent of the canal and its remnants within the project area?
- 2. Is the gradient of the slope discernible within the project area?
- 3. What condition is the canal in within the project area where it has not been filled-in?
- 4. How has the vehicle track that has been built over it affected the structure?
- 5. What condition is the canal in within the project area to the west of the vehicle track where it has been filled in?
- 6. What is the relationship of the shallow depression to the south of the canal with the canal?
- 7. Is there evidence of introduced materials such as brick or concrete in the construction of the canal?

5.3 Management of Aboriginal objects

The Aboriginal cultural heritage values of the site have been addressed in a separate report (Kelleher Nightingale 2017), which has developed management measures to address the Aboriginal statutory constraints in the project area. The Aboriginal cultural heritage report has identified archaeological site location (described in this report as an area of potential archaeological deposit (PAD)) with artefacts, across part of the current study area (Kelleher Nightingale 2017, Figure 7, p.26).

TNR AFT 11 has been recorded as AHIMS Site ID 45-5-4780. It consists of two surface artefacts, one of which is a silicified tuff retouched medial flake fragment and one which is a retouched silcrete flake fragment. The spatial extent of Site TNR AFT 11 is defined by the upper contours of the hill top overlooking the headwaters of several tributaries of Blaxland Creek and Mulgoa Creek. The western extent of the site, which is bound by The Northern Road, has been extensively modified by the construction of a road, which required vegetation removal, and grading and the effects of vehicle usage resulting in erosion.

TNR AFT 11 was assessed at moderate significance and will be partially impacted by the project. Measures to manage impacts to this site are:

- barrier fencing to be erected on the project approval boundary for the extent of the site to ensure that no construction impact extents into the portion of the site outside the project boundary;
- the portion of the site area outside the project boundary should be identified on the construction environmental management plan (CEMP) as an environmentally sensitive no-go zone to ensure no impacts occur;
- archaeological salvage excavation of impacted portion of site to be undertaken; and
- relevant project approval required prior to the commencement of works affecting the site.

In the event that Aboriginal objects are encountered, the historical excavation team will consult with Roads and Maritime and address the issue in accordance with the project approval and the Aboriginal heritage management plan.

The combined management of Aboriginal and historical archaeological values will occur concurrently with archaeological test excavation for Aboriginal values commencing around the historical site. The historical archaeology excavation director will confer with the Aboriginal archaeology excavation director to determine which team will start and where. The soil profile trenches (refer to Section 5.5) will potentially be excavated by the Aboriginal archaeology team. The focus of the collaboration will be to ensure that impacts to the Aboriginal and the historical archaeological values are controlled and comply with project approval.

5.4 Field program

5.4.1 Introduction

Two small areas of the former canal will be impacted by the proposal (Figure 5.1). It is intended that both of these areas will be photographed to digital archival standards (refer below) and both sections will be archaeologically investigated. The rationale for archaeologically investigating different areas of the same feature is to measure gradient to understand how water was, or would have been, transported along the length.

The southern section comprises, from west to east, an obscured part of the canal, a vehicle track where the canal has been in filled followed by a small of approximately 19 linear metres of the relatively intact canal that will be impacted by the proposal. All three parts have been subject to varying levels of disturbance and will be investigated and recorded archaeologically. The archaeological recording will be completed to archival quality standards with photography complying with current heritage practice standards.

The locations of the canal that will be recorded are shown in Figure 5.1.

5.4.2 Recording

i Photography

As the site will be archaeologically recorded, photography will be undertaken in accordance with the NSW Heritage Council "Heritage Information Series" *Photographic recording of heritage items using film or digital capture* (Heritage Office 2006).

Photographs will be taken of the relevant sections of the canal in its present form and during each stage of the archaeological program (refer to Section 5.5.1).

ii Survey

The sections of the canal that will be removed by the project will be recorded by a surveyor and tied into an appropriate grid reference such as the Universal Transverse Mercator (UTM) or the Map Grid of Australia (MGA) to accurately place it in its spatial context. The horizontal and vertical dimensions of the canal in its present form will be recorded.

5.5 Archaeological excavation

5.5.1 General excavation method

i Aims

The aim of the archaeological excavation is to record elements of the canal that are currently obscured. The anticipated outcomes will be a clearer understanding of the construction methods used.

The general locations of the archaeological trenches are shown in Figure 5.1; all will be within the project area in locations that will be impacted by the project. It is proposed that four trenches will be excavated as part of the testing program. This comprises:

- one trench in the northern section of the canal (to record gradient); and
- three trenches in the southern section of the canal which will sample the canal in various conditions.

The question of gradient will be addressed by a trench that will be machine and hand-dug on the northern arm of the canal that survives in the project area

ii The existing canal (northern and southern section)

- A section of the canal, 3 m in length will be cleared of vegetation by hand.
- Using picks, shovels and trowels, topsoil and overburden will be removed to reveal the form and structure of the canal as it was first constructed.
- Using an excavator with a smooth-edged mud bucket, a section the width of the mud bucket and adjacent to the hand-excavated trench will be removed to reveal the canal in section.
- The excavation director will determine if any of the trenches are too disturbed to provide data and will decide whether to abandon it and excavate in another location.

iii The canal in the vehicle track

- Using a smooth-edged mud bucket, a section the width of bucket will be removed.
- The section will be cleaned up and recorded photographically with orthographically corrected photographs for the creation of section drawings.
- Based on the results of the section excavation of the canal beneath the vehicle track, the excavation director will determine if archaeological excavation of the buried canal will answer relevant questions. These may include questions related to the impact of creating vehicle tracks over cultural landscape features.

5.5.2 Artefact management

While it is not anticipated that artefacts will be recovered from the excavation of the canal, if they exist they will be collected as described below. Unprovenanced artefacts and other material assessed as being of low significance or future research potential will be discarded upon delivery of the final report.

- all artefacts that are retained will be catalogued by using a system that identifies and allows easy retrieval of the item;
- the specialists' cataloguers will produce reports on the artefacts outlining issues of importance;
- important artefacts will be the subject of materials conservation which would include the gluing of pottery or the conservation of important metal or leather materials; and
- artefacts which are the subject of materials conservation may be used in artefact displays in interpretation of the stations.

The excavation report will contain an analysis of artefacts and their deposits and contexts; the analysis will be illustrated using tables in the final report.

5.6 Field program management

The field program will employ at least two experienced trench supervisors who will be responsible for a small team of archaeologists with varying levels of site expertise.

The excavation will be directed by a suitably qualified and experienced archaeologist consistent with NSW jurisdiction requirements by the Heritage Division of OEH criteria.

5.7 Excavation report

A detailed excavation report will be produced describing the methods and results of the archaeological program. The report will include the artefact analysis and response to research questions and a Harris matrix to illustrate the relationship of the contexts to one another.

The excavation report will be prepared as a separate stage to the field program.





Indicative excavation plan

Archaeological research design - Chaffey Brothers Irrigation Scheme Canal Figure 5.1

GDA 1994 MGA Zone 56



Figure 5.1 Indicative excavation plan

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The Northern Road Upgrade

Item 9 - Miss Lawson's Guesthouse archaeological site | Research design and excavation methods

Prepared for Roads and Maritime Services | 9 October 2017

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The Northern Road Upgrade

Final

Report J17228RP1 | Prepared for Roads and Maritime Services | 9 October 2017

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Document Control

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Executive Summary

EMM Consulting Pty Limited has been engaged by the Roads and Maritime Services to prepare an archaeological research design and excavation method to archaeologically investigate the site of the former Miss Lawson's Guesthouse.

The site was discovered during the preparation of the environmental impact statement for The Northern Road Upgrade between Mersey Road, Bringelly and Glenmore Parkway, Glenmore Park. The report *Appendix N – Technical working paper: Non-Aboriginal heritage* was prepared by Jacobs (15 May 2017). This report is part of the response to submissions report and addresses the issues raised by the Heritage Division of the Office of Environment and Heritage.

The site of Miss Lawson's Guesthouse is at 26 Adams Road Luddenham, in the Liverpool local government area, in the County of Cumberland, Parish of Bringelly. Access to the site however, is from Eaton Road directly adjacent to 40 Eaton Road. The legal description is Lot 1 DP 90157.

When operating in its early years (c 1907), the guesthouse was located opposite the former Lawson's Inn, which by this date was being used as a private residence. The proprietor, Caroline (Carrie) Lawson, was the daughter of the owner of the inn and she inherited the property on the north side of The Northern Road (the study area) from her father, John Lawson.

The guesthouse operated from before 1907 when it was mentioned in a newspaper article, and as Carrie Lawson inherited the land in 1897, it may have been built any time in the ten intervening years. It is likely that by the time that Carrie Lawson died (1930), the guesthouse was being used as a private residence by Daniel Lawson (brother) and John William Vickery (brother-in-law).

The site of Miss Lawson's Guesthouse has been assessed as possessing *local* heritage significance. The site fulfils the criteria for historic (a), associative (b), scientific (e) value and is also rare (f) as an archaeological site of its type. Archaeological excavation will reveal if the site is representative (g) of guesthouses.

An archaeological research design has been prepared to provide a theoretical framework with which to physically investigate the relics. The research questions that have been posed aim to provide answers that it is predicted the archaeological resource can answer, and which will contribute to the understanding of the development of the road, the locality, the individuals that lived there and about the guesthouse itself.

It is proposed that archaeological excavation program is undertaken with consideration of the following:

- management of Aboriginal objects;
- site recording using accepted archaeological techniques;
- removal of vegetation;
- electronic survey for the preparation of plans;
- soil profile recording;
- initial clearing of topsoil;
- manual archaeological excavation;

- artefact management; and
- public access

The results of the archaeological excavation will be reported in a detailed excavation report in accordance with the conditions of project approval.

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1 Introduction

1.1 Background

EMM Consulting Pty Limited (EMM) has been engaged by the Roads and Maritime Services (Roads and Maritime) to prepare an archaeological research design and excavation method to archaeologically investigate the site of the former Miss Lawson's Guesthouse.

The site was discovered during the preparation of the environmental impact statement for The Northern Road Upgrade between Mersey Road, Bringelly and Glenmore Parkway, Glenmore Park. The report *Appendix* N – *Technical working paper: Non-Aboriginal heritage* was prepared by Jacobs (15 May 2017). Submissions made to the Department of Planning and Environment included the preparation of:

...detailed excavation methodology and research design by the nominated excavation director for the full mitigation of these sites, where the detailed design cannot avoid impact to them. The Excavation program must be undertaken by a person who can demonstrate open area salvage of local and potentially state significant sites in NSW under the Heritage Council of NSW Excavation Director criteria. These documents must be prepared and submitted for review of the Heritage Council of NSW or its delegate and the approval of the Secretary of the Department of Environment and Planning [sic].

OEH project submission 2 August 2017

This report fulfils that requirement.

Jacobs engaged JCIS Consultants to undertake additional research and have prepared a memorandum (Jacobs 2017b) in response to the submissions received by the Office of Environment and Heritage (OEH), Liverpool City Council and the Community. This additional research and the memorandum have also informed this report.

1.2 Project description

Roads and Maritime propose to upgrade 16 km of The Northern Road between Mersey Road, Bringelly and Glenmore Parkway, Glenmore Park (the project).

The project generally comprises the following key features:

- A six-lane divided road between Mersey Road, Bringelly and Bradley Street, Glenmore Park (two general traffic lanes and a kerbside bus lane in each direction). A wide central median would allow for an additional travel lane in each direction in the future, if required;
- An eight-lane divided road between Bradley Street, Glenmore Park and just south of Glenmore Parkway, Glenmore Park (three general traffic lanes and a kerbside bus lane in each direction separated by a central median);
- About eight kilometres of new road between Mersey Road, Bringelly and just south of the existing Elizabeth Drive, Luddenham to realign the section of The Northern Road that currently runs through the Western Sydney Airport site;
- About eight kilometres of upgraded and widened road between the existing Elizabeth Drive, Luddenham and just south of Glenmore Parkway, Glenmore Park;

- Access to the Luddenham town centre from north of the realigned The Northern Road and the existing The Northern Road;
- Twin bridges over Adams Road, Luddenham;
- Four new traffic light intersections and new traffic lights at existing intersections;
- Local road changes and upgrades to current access arrangements for businesses and private properties; and
- A new shared path for pedestrians and cyclists on the western side of The Northern Road and footpaths on the eastern side of The Northern Road where required.

A detailed description of the project, including design refinements since exhibition of the EIS is provided in Chapter 5 of the Submissions Report for the project.

1.3 Site location

The study area is the site of the former Miss Lawson's Guesthouse is described as being at 26 Adams Road Luddenham but access is from Eaton Road Luddenham. The legal description is Lot 1 DP 90157 (Figure 1.1) in the Liverpool local government area, in County of Cumberland, Parish of Bringelly. It is one site that has been identified as possessing archaeological value within the larger project area of the Project.

This report makes the distinction between 'study area', which is the Miss Lawson's Guesthouse site under investigation, and 'project area', which is specifically the area that will be modified to build the new road and upgrade the existing alignment. The project area includes lay down and stockpile areas and any other area that is associated with the upgrade.

1.4 Proposed impacts

The study area comprising of the archaeological site of the former Miss Lawson's Guesthouse will be removed by the project. The guesthouse site is located where the road alignment is proposed. Reference should be made to Jacobs 2017a for details.

1.5 Author identification

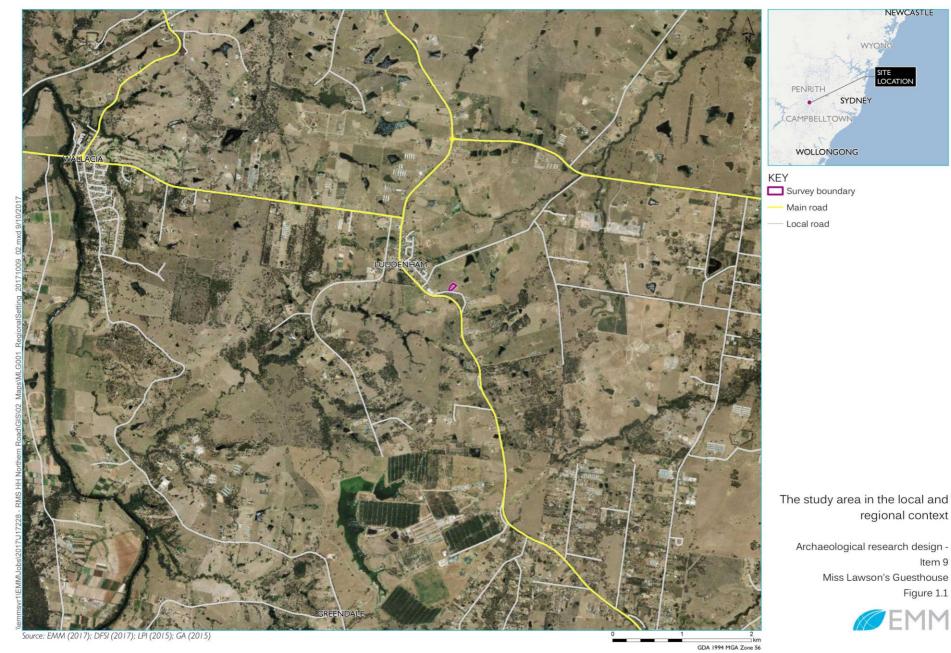
The research design was prepared by Pamela Kottaras (Heritage Services Manager EMM). Ryan Desic (Senior Archaeologist EMM) provided assistance and quality assurance. Roshni Sharma (GIS Analyst EMM) created the mapping and figures.

1.6 Acknowledgments

This report was prepared with the assistance of Suzette Graham and Denis Gojak (Roads and Maritime), Kelly Thomas, Jennifer Chandler and Karen Murphy (Jacobs) and Iain Stuart and Jane Cummins Stuart (JCIS). Particular thanks to Ms Leanne Sales for accompanying Pamela Kottaras on site and providing her recollections of the site; to Mr Gregory Sales for additional information and also to Mrs Nancy Sales (landowner) for permission to access the site.

1.7 Limitations

The limitations associated with this report are associated with timeframes for the response to submissions to the environmental impact statement (EIS). Background research was conducted by Jacobs and JCIS Consultants, with minor additions by EMM.







- - Compound boundary
- --- Operational boundary

Study area

Archaeological research design -Item 9 Miss Lawson's Guesthouse Figure 1.2



Figure 1.2 Study area

J17228RP1

2 **Historical summary**

2.1 Sources

The historical summary in this report is either verbatim or paraphrased from research completed by JCIS Consultants who were engaged by Jacobs to undertake additional research for the non-Aboriginal heritage technical memorandum (Jacobs 2017b). The additional research was for the Response to Submissions and Preferred Infrastructure Report. The historical research was provided to EMM on 26 September 2017.

The historical summary is based on research undertaken on land titles information for the site from the Land and Property Information, and newspaper articles source from Trove. The references used in the historical summary have been reproduced in this report. Some original research was undertaken by EMM.

The Aboriginal heritage context of the site has been addressed in a separate report and has been considered in the excavation method (Section 6).

2.2 The study area

Aboriginal people lived on the Cumberland Plain prior to its occupation by the British Government. With the settlement at Sydney Cove the British Government allowed Governor Phillip, through the second letter of instructions to him, "full power and authority" to dispose of lands to "any person or persons" for "such terms and under such moderate quit rents services and acknowledgments to be thereupon reserved" as set out in his instructions (George Rex III 1786).

These instructions were considerably expanded in 1794 when Governor Hunter arrived, as they covered the question of land grants to free settlers as opposed to convicts (George Rex III 1794). These instructions allowed a second phase of post-contact settlement of the Cumberland Plain focusing on the alluvial soils of the Hawkesbury-Nepean River. Later under Lieutenant-Governor Patterson (c1809) settlement was encouraged to move away from the flood prone areas into what was termed forest land (Perry 1963, p23–25).

These changes also reflected the change in attitudes to settlement about whether Australia or, more particularly NSW, should be a convict settlement or develop as a free society. If a free society then the question of how land was to be disposed of became an important one. Small land grants were given to former convicts to encourage agriculture. Larger grants were given to Government Officials as a reward for services or compensation for losses. However with the development of free settlement in NSW came a new class of individuals eligible for grants incipient capitalists.

2.3 John Blaxland

The first of this new type of free settlers were the Blaxland brothers – John Blaxland and Gregory (the Blaxland Lawson and Wentworth one). Their arrival was preceded by the following dispatch from Lord Castlereagh to Governor King,

It being deemed expedient to encourage a certain number of Settlers in New South Wales of responsibility and Capital, who may set useful Examples of Industry and Cultivation, and from their property and Education be fit persons to whose Authority the Convicts may be properly entrusted, Permission has been given to Mr. John Blaxland and his Brother Mr. Gregory Blaxland to establish themselves and their Families in the Colony.

... I am induced to flatter myself that the exertions of these Gentlemen will not only Answer the Sanguine Expectations they have themselves formed, but will also contribute in an essential Degree to the benefit and prosperity of the Colony.

(Castlereagh to King, 13th July, 1805 HRA, Series 1, Vol V p.490)

A brief summary of the agreement with John Blaxland was enclosed as follows:

MEMORANDUM that an agreement has been entered into at Lord Camden's Office by James Chapman, Esq., that, provided John with John Blaxland engages a Capital of £6,000 in the Colony of New South Wales, he is to have his passage out for himself, his wife, four or five children, and two or three servants, in the same manner as his Brother, Gregory Blaxland, is now going out; that he is to be allowed fifteen tons to take out necessaries for himself and family; when he arrives there, that he is to have a Grant of Land given him of eight thousand acres, with one convict for every hundred acres to clear and cultivate it; to be Cloathed and Victual'd for eighteen months according to the custom of the Colony; but provided he should not be possessed of so large a sum he is then to have Land and Convicts in proportion to the capital advanced.

(Castlereagh to King, 13th July, 1805 HRA, Series 1, Vol V p491)

In the event Castlereagh was wrong; the Blaxland's arrived with more or less the required capital but also with a sense of entitlement and querulous natures.

John Blaxland arrived on the 4th of April, 1807, on the ship *Brothers*, belonging to himself and the Messrs. Hullets, which was also used for whaling and sealing ventures. His arrival coincided with the arrival of Governor Bligh. His brother, Gregory Blaxland, arrived in Sydney the previous year on the *William Pitt* on 14th April 1806, and was immediately involved in legal action with the ship's Master. Nevertheless Governor King allowed Gregory Blaxland to purchase livestock from the Government as well as granting him land and access to convict labour.

For a while Bligh socialised with Blaxland but Blaxland's attitudes quickly alienated him from Governor Bligh. In particular Bligh objected the Blaxland pursuing grazing cattle rather than cultivating land and noted,

The Blaxland's, in a partnership, seem to turn their minds principally to grazing and selling the Milk of their Cows and Butcher's Meat, which is attended to by Mr. J. Blaxland, in a House at Sydney where he resides, while his brother remains in the Country purchasing Live Stock from those who can be tempted to sell it. The former is very discontented with what Government has granted him, although it is in itself a Fortune.

(Bligh to The Right Hon. William Windham, 31st October, 1807, HRA, Series 1, Vol VI p144)

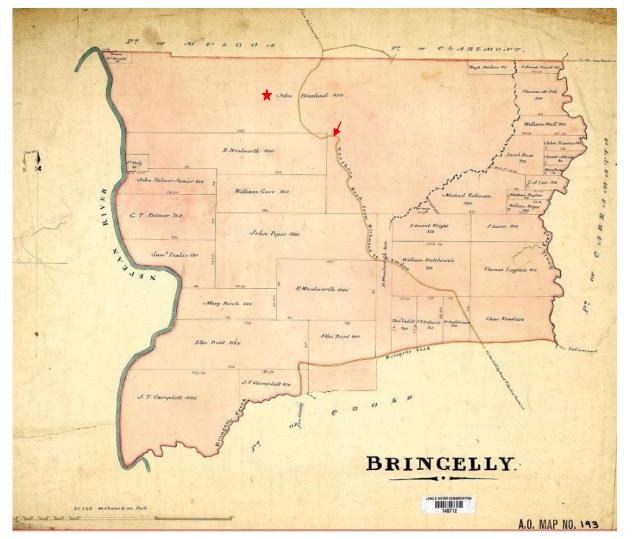
In a later dispatch to Windham, Bligh stress his compliance with his instructions regarding the Blaxland's noting, regarding his land grant, that he had received twelve hundred and ninety acres of land, "The remaining quantity of Land I have ordered to be measured out for him" (Bligh to The Right Hon. William Windham, 31st October, 1807, HRA, Series 1, Vol VI p182).

Blaxland joined the groups agitating against Bligh and was a strong supporter of the overthrow of Bligh by the Rum Corp officers but then fell out with them as well and in 1808 began to travel to Great Britain to seek redress for his wrongs. He was arrested on the orders of Governor Bligh and was transported to Great Britain as a witness in the court martial of Major Johnston. He returned to Sydney in 1812 (Irving 1996).

Blaxland's arrival was followed by a dispatch from Lord Liverpool to Governor Macquarie reaffirming the British Government's commitment to honouring its original agreement (Liverpool to Macquarie 26 July, 1811 HRA, Series 1, Vol VII p 367-368).

Macquarie, like his predecessors as Governors, found it difficult to deal with the Blaxland's particularly when it came to determining whether the Blaxlands has indeed provided the capital they claimed to have. He eventually got them to swear affidavits and once they did so provided the remaining resources commenting to Lord Liverpool,

With the Services of 120 men from Government, and the command of a still more unlimited extent of soil than even that number of men could cultivate, the Messrs. Blaxland have continued a burthen on the Government, restless and dissatisfied notwithstanding all they have derived from its liberality.



(Macquarie to Liverpool 17 Nov 1812, HRA, Series 1, Vol VII p557-560)

Plate 2.1 Parish of Bringelly, c1850 (based on style), County of Cumberland. The red star is in John Blaxland's grant. The red arrow points to the location of the future Miss Lawson's Guesthouse. Source: Land and Property Information.

2.4 The Luddenham Estate

Blaxland had some substantial land grants prior to 1812 but it appears that these were not properly surveyed – this was a function of the poor quality of the Surveyor Generals Department rather than a reflection on Blaxland. In 30th May, 1812 Blaxland wrote to Macquarie:

Having, Sir, met with much difficulty and expense in selecting a tract of land that would suit the purposes of Agriculture and grazing, and also having sustained considerable losses in its not being confirmed to me by Grant, I hope and trust that you will not object to my taking that which was marked out by Mr. Maihan [*sic*], previous to my leaving the Colony, for which I applied when in England, and was informed it was left for your Excellency's determination.

(Macquarie to Liverpool 17 Nov 1812. HRA, Series 1, Vol VII p561

This may have been the land that Bligh referred to. However it was clearly not the Luddenham Estate for on 1st June, 1812 Blaxland wrote to Macquarie:

In the course of my excursion up the country, I have seen some Land which appears unappropriated, lying at a place called Cobbotty, and a further tract at Mulgowe and Stony range, at which place I hope your Excellency will not object to my taking what remains due to me, having already expended £15,000 in this Colony.

(Macquarie to Liverpool 17 Nov 1812. HRA, Series 1, Vol VII p562)

It seems that the land at Cobbitty was already set aside for the location of a Common (a cause of yet another dispute between the Governor and Blaxland) but the land at Luddenham was granted to John Blaxland on the 30th November 1813.

Curiously though on his tour of inspection of the interior which covered the settlements on the edges of the Cumberland Plain in 1810, Macquarie had passed what appears to have been the Luddenham Estate. On the 28th November 1810 Macquarie and a small party which included Gregory Blaxland set out from Parramatta and after visiting Badgery's farm

Thence we proceeded to Mr. Blaxland's own Farms, about 5 or six miles distant from the South Creek in a westerly direction. — This is entirely as yet a grazing Farm, with only a miserable Hut for the Stock keepers, and Stock-Yards for the Cattle. — The Land in some parts is tolerably good, and pretty well watered, but is better adapted to grazing than Tillage. We rode back, a different way to what we came, to Mr. G. Blaxland's Farm on the South Creek, through his second large Farm, and a Farm belonging to Doctor Wentworth in the Bringelly District; the Country through this last ride was pretty to look [at] but the Soil generally bad; at 1. P.M. arrived at Mr. Blaxland's Hut, where we rejoined our Friends again.

(Macquarie 28th November 1810)

It is likely that the second large farm is the Luddenham estate due to its proximity to Wentworth's farm.

The survey of the grants consisted of simply marking boundaries and roads. It seems likely that the Northern road was not formerly surveyed until the mid-1820s. None of the early surveys have buildings or structures marked on them. This is typical of the times and of Crown Plans generally covering land grants. The location and size of the estates belonging to John Blaxland, D'Arcy Wentworth and John Blaxland Jnr are shown on early parish maps (Plate 2.1). On the northern boundary of the Luddenham estate was a 600 acre grant to John Blaxland Jnr which dates to 31st August 1819.

John Blaxland focused on the development of his estate on the banks of the Nepean River at what is now Wallacia after developing his Newington Estate on the Parramatta River with a salt works, distillery, blanket factory and meatworks as well as building his own residence. At Luddenham, Blaxland built a water powered flour mill by 1834 and by 1839 had established a brewery (O'Sullivan 1977, p.4). These were located on the Nepean River near the Warragamba River junction so that Blaxland could use water power.

Sullivan reproduced an 1840's inventory of Blaxland's assets (sourced from the Blaxland papers in the State Library of NSW). The inventory lists the buildings at Wallacia and described the remaining land at Luddenham as grazing land (O'Sullivan 1977, p.3). If the land had been subdivided into tenanted farms by this time then they would have been listed in the inventory. It seems therefore, unlikely that buildings dating from the period of Blaxland's ownership occur within the study are.

The early 1840s was a period of economic depression in Australia brought on by a severe drop in the wool market combined with drought which caught speculators in the pastoral industry which has expanded rapidly. Thus all pastoralists were under pressure as were the banks that provided finance. There was a great rush of insolvencies (see Abbott 1971, Butlin 1968). So from c1840 the Blaxland enterprises began to falter.

John M Blaxland (Jnr) Blaxland oldest son died on the 29th May 1840 and his property was administered by his family but remained separate from the Luddenham Estate.

In 1842 Blaxland mortgaged his properties to the Australian Trust Company. In 1851 The Australian Trust Company conveyed the Luddenham Estate to Sir Charles Nicholson. This much is established by the Old System Titles. John Blaxland died in August 1845 but there is little readily available information about how his estate was managed but presumably they defaulted on the mortgage allowing the Australian Trust Company to sell the Estate to Nicholson.

2.5 Nicholson's sale of the Luddenham Estate

In around 1858 Nicholson had the Luddenham Estate surveyed and subdivided by Surveyor Samuel Jackson. The plan of the Estate was widely circulated and several copies have survived. Importantly the lithograph was used by the Land Titles Office as a carting plan of the Estate – Roll Plan 4 which covers the Eastern part of the Estate (Plate 2.2 and Plate 2.3). The plan shows existing buildings and structures as well as the subdivision superimposed on them. It appears that the land in this area was leased for small farms presumably by Nicholson, and the buildings and structures are shown on Jackson's plan.

The auction of the Luddenham Estate was extensively advertised in September 1859:

The EASTERN DIVISION, containing upwards of 4000 acres, extending from Badgery Creek to the Bringelly Road, and subdivided into Farms, containing from 30 to 320 ACRES EACH, a great proportion of which are cleared, fenced, and in cultivation; with good homesteads thereon.

In this division also the VILLAGE OF LUDDENHAM has been laid out and most eligibly situated on the high road, about equidistant between Penrith and Camden, opposite LAWSONS, INN and STORE.

("Advertising" The Sydney Morning Herald, 8 September 1859, p.7)

Close study of the plan that the Village of Luddenham reveals a private village was mostly a few scattered building along the road, which included for the Chapel, School and Lawson's Store and Inn. Buildings on the site of Miss Lawson's Guesthouse are not shown in the 1859 plan, as presumably, the land was vacant.



Plate 2.2 The Eastern Division of the Luddenham Estate 1859. The study area is indicated by the red arrow. Lawson's Inn is on the south side of the road. Source: National Library of Australia.

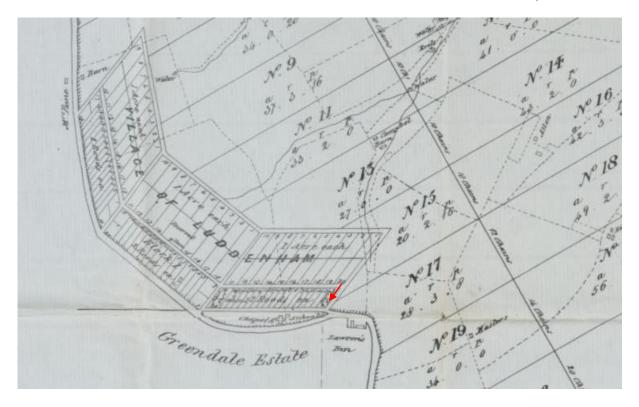


Plate 2.3 Detail of the map Eastern Division of the Luddenham Estate 1859. The study area is indicated by the red arrow. Source: National Library of Australia.

Despite the Luddenham Estate being a "magnificent and truly valuable agricultural property" sales were not particularly vigorous and the land was slowly sold off in small lots. Perhaps the description was overstated as Macquarie had previously described the soil as 'tolerably good...but is better adapted to grazing than Tillage" (refer to Section 2.4).

Blaxland's holdings had been subdivided by 1859.

2.6 Miss Lawson's Guesthouse

This land was part of the land John Lawson purchased from Abraham Meyers on 13 September 1862 (Con No 224 Book 87). Meyers purchased the land from Sir Charles Nicholson but there are various transactions from 1860, which seem to cover a large amount of property and which are poorly described and difficult to read.

John Lawson made a will on the 13 December 1881 leaving his estate to his wide Anne Lawson and his six young children namely: William, James Lachlan, Daniel, Caroline (Carrie), Alice Lawson (later Alive Vickery) and Rose Ross (later Rose Ross Petith). He also stipulated that his wife should not sell the land but, after her death, the land should be unequally divided with the sons getting double the quantity of land than the daughters – an unsurprising distribution of assets of the day.

Lawson died on 22 June 1885 and letters of administration were granted to Anne Lawson, his widow, and James Lachlan Lawson, one of his sons. James Lachlan Lawson died on the 16th April 1893, intestate and his mother Anne Lawson died, also intestate, on the 31 October 1894. (Con No 129 Book 604).

James Lachlan Lawson's widow Kate Megarity (she had remarried) was granted administration of his estate on 12 April 1892.

Meanwhile Daniel Lawson became bankrupt in the 1890s and after one administrator of his estate died another, Norman Frederick Gilliam, was appointed in 1895. Gilliam and Megarity seem to have conveyed Daniel's share of Lawson's estate to Gilliam in 1895. At the same time the children petitioned the Supreme Court to appoint Kenneth Campbell as administrator of John Lawson's estate (Campbell was a leading member of the Methodist Church in Luddenham which the Lawson family was part of). The letters of administration were given on 23 June 1897, and Campbell set to his task (Con No 129 Book 604).

Campbell transferred 12 acres 2 rods and 25 perches to Carrie Lawson on 3 August 1897. The land transferred to Carrie Lawson was held in trust on her behalf and includes the study area (Con No 129 Book 604). This lot was covered by the map of the manoeuvre area Liverpool NSW published in 1906 (Byrnes 1906). A building is not shown in the same area as the study area. It is assumed that the current building was not constructed at the time this map was compiled.

Reminiscences in 1907 by William Freame in *The Nepean Times* mentions the guesthouse being opposite the former 'Lawson's Inn'. The inn (called *The Thistle Inn* in the article) is described as a an "old house", opposite a neat cottage, where decent travellers may be provided with comfortable and clean bed and board at reasonable charge by Miss Lawson, (*The Nepean Times*, 10 August 1907, p.7). The mention of Miss Lawson's Guesthouse appears in the second of a three-part series submitted by Freame called "A round trip – over historic ground", which begins with:

Every man to his own pleasure is a maxim as old as the hills, and my idea of a holiday is to roam around the country with a note-book and camera, and thus make myself familiar with old-time scenes and make acquaintances with interesting associations.

The Nepean Times, 20 July 1907, p.6

Carrie Lawson made a will on the 4 May 1911 appointing her brother Daniel Lawson as her Executor. She died on the 1 January 1930. Daniel however, became of unsound mind and the Public Trustee took over administration in August 1938. Daniel died in the same month and by his will Frank Vickery and Wilfred Cecil Vickery became administrators of his estate and affairs (Con No 381 Book 1854). Vickery sold the land to Henry Lewis Sales in August 1939 (PA 40157).

This lot was covered by the Liverpool inch to the mile topographic map dating from around 1927 (Great Britain, War Office, General Staff, Australian Section, 1927). A building is shown in the same area as the study area fronting the road which may have been a portico or garage related to the guesthouse.

This lot was covered by the Liverpool inch to the mile topographic map dating from around 1955 (Australia Army Royal Australian Survey Corps 1955). A building is shown in the same area as the study area but not otherwise identified.

The study area and the site of the former Lawson's Inn were held as a single parcel by Henry Lewis Sales which he brought under the provisions of the Real Property Act by Primary Application No 40157 on 12 February 1963 (CT 83440 Fol. 7). The title wasn't issued until 1967 and the land was passed to Gloria Loraine Boots [*sic*] and Harry Colin Jessie Sales in 1971 [*sic*] (CT 8340-6) and the land remains with the Sales family. Note that the correct names are Gloria Lorraine Roots (née Sales) and Henry Colin Jesse Sales.

The historical evidence points to a building on the site from before 1920 and presumably this was where Caroline Lawson lived. A search in Trove for more information about her life yielded little information. However this may reflect the lack of visibility of Luddenham in the activities reported in NSW newspapers.

3 Field survey

3.1 Introduction

Field survey was conducted for site familiarisation purposes to assist with the preparation of this research design. This builds on field survey undertaken for the preparation of the technical report (Jacobs 2017).

The site of Miss Lawson's Guesthouse was inspected on Monday 18 September 2017 in the presence of Ms Leanne Sales, the daughter of the owner, Ms Nancy Sales. The archaeologist on site was Pamela Kottaras, EMM Heritage Services Manager. A number of features were recorded, including those recorded in the EIS technical report (Table 4-1 pp. 27-28 Jacobs 2017b).

3.2 Method

The inspection was conducted on foot from the gate on Eaton Road to the approximately 120 m along the boundary fence and 50 m across the paddock (to the north-west).

Ground visibility was moderate to poor depending on the nature of the structure. The site is a paddock that appears to have been grazed in the recent past, but which retains long grass and sedge-like grasses growing in clumps across the paddock. No areas of exposed soil were noted and in some places, where sandstone blocks were visible in the ground, they were partially obscured by long grass and sediment build-up. Ground visibility is estimated to have been approximately 2%.

The site survey was undertaken in the area shown in Figure 3.1 and Figure 6.1. This location was surveyed because it is anecdotally known as "Carrie Lawson's" (pers. comm. Ms Leanne Sale); it is in this location that Jennifer Chandler (Jacobs) recorded two wells, peppercorn trees, a road alignment and sandstone gate post bases (Jacobs 2017b, p.27); and it is within the impact area of the project.

It is evident on entering the property from the gate on Eaton Road that the landscape has been modified. Comparison, after the site visit, with historical aerial photography confirms that a building and areas of disturbance exist in the surveyed area (Figure 4.1).

During the site visit, family history from Leanne Sales and her brother Greg Sales was recorded. Leanne Sales has responded to additional requests for information, which is included in this report.

3.3 Results

An archaeologically sensitive zone was recorded in the south-east corner of the paddock. This zone is where the guesthouse is believed to have been located. The features recorded are consistent with what would be expected of overnight accommodation outside of a main town centre. The features recorded during the site visit for this report are shown in and described in summary in Table 3.1.

Table 3.1	Site features: Miss Lawson's Guesthouse

Feature #	Description	Coordinates (GDA)	Interpretation
1. Entrance blocks	Group of sandstone blocks on eastern side of driveway (Plate 3.1). The blocks are no larger than 60 x 60 cm and embedded in the ground.	287062E; 6248398.00N	Boundary markers or field clearance.
2. Driveway	Depression in paddock (Plate 3.2). Approximately 5 m wide and 123 m in length.	287027E; 6248339N 287081E; 6248386N 287084E;6248419N	Driveway
3. Gate posts	Timber gate posts to rear of site. Retain iron latch (Plate 3.3).	287083E; 6248430.60N 287086 E; 6248429.00N	Gateway at the end of the driveway, possibly into rear of guesthouse yard.
4. Well 2 & peppercorn tree	Circular depression directly adjacent to peppercorn tree. Dressed sandstone blocks scattered across the depression. Approximately 3 m diameter (Plate 3.4).	287063; 62483980N	Well or cistern for water
5. Well 1	Circular depression south of a second peppercorn tree and north of Well 2. Dressed sandstone blocks scattered across the depression. Loose timber boards lay adjacent to the hollow on its western side. These boards have the appearance of a dismantled lid. Approximately 2 m diameter (Plate 3.8).	287068E; 6248415.30N	Well or cistern for water
6. Platform 1	Sandstone platform comprising dressed sandstone block and a small amount of sandstock or wet press brick fragments. Includes what appears to be on in situ threshold stone with wear. While not the usual orange colour of sandstock bricks from the Liverpool area, these items fragments had the impression of other stacked bricks on their stretcher side. Approximately 4 x 4 m (Plate 3.5).	287071E; 6248400N	Kitchen/laundry/storeroom
7. Platform 2	Small platform comprising sandstone blocks with some small sandstock brick fragments. This feature is in close proximity to another circular depression (Plate 3.8 and Plate 3.9), which may be a well or a cistern.	287097E; 6248425N	Kitchen/laundry/storeroom
8. Platform 3	Small platform comprising sandstone blocks with some small sandstock brick fragments (Plate 3.11).	287079E; 6248389N	Kitchen/laundry/storeroom
9. Platform 4	Small platform comprising steel sheets, some small sandstock brick fragments and a broken sandstone millstone. Approximately 2 m x 1 m (Plate 3.12).	287090E; 6248405N	Rubbish dump including the remains of an old bus. Broken millstone probably from site and used to weight down the steel sheets.

Feature #	Description	Coordinates (GDA)	Interpretation
10. Dead fruit tree	Small fruit tree, approximately 2 m high, low branching (Plate 3.14 and Plate 3.15).	287045E; 6248415N	Fruit tree
11. Peppercorn tree	Mature peppercorn tree, similar size (and therefore age?) to peppercorn tree by Well 2.	287069E; 6248434.11N	Live peppercorn tree.
	Western side of ground worn down, probably by livestock. No other features visible (Plate 3.16)		
12. Platform 5	A large circular raised area at the base of a eucalypt near the entrance to the site.	287027E; 6248355N	Unknown

Notes: 1. The numbering system used by Jacobs has been used in this report.



Plate 3.1 Feature 1 — sandstone block group in the south-east corner of the property.



Plate 3.2 Feature 2 — indented alignment marking the driveway from the entrance on Eaton Road.





Survey results

Archaeological research design ltem 9 Miss Lawson's Guesthouse Figure 3.1



Survey results Figure 3.1



Plate 3.3 Feature 3 — timber gate posts. View south-east.



Plate 3.4 Feature 4 — Well 2. View east.



Plate 3.5 Feature 6 – Platform 1 directly north-east and adjacent to Well 2.



Plate 3.6 Component of Feature 6, which appears to be a threshold block with wear in the centre. East at top.



Plate 3.7 Component of Feature 6, one of the few bricks on site.



Plate 3.8 Well 1 (Feature 5) with timber boards in the bottom left corner of the photograph. View east.



Plate 3.9 Feature 7 — Platform 2 located at the northern end of the identified archaeological site. Note the sandstone blocks sitting flush in the ground surface. This feature is directly adjacent to a small circular depression (Plate 3.10).



Plate 3.10 Small circular depression directly north of Feature 7.



Plate 3.11 Feature 8 — Platform 3



Plate 3.12 Feature 9 — Platform 4. Steel sheeting left over from a dilapidated bus. Bricks and a millstone fragment were used to weight the sheets down (per. comm Mr Gregory Sales).



Plate 3.13 Detail of Feature 9 showing the millstone fragment and brick thrown over the top of the steel sheets.



Plate 3.14 Feature 10 – the dead fruit tree on the western side of the site.



Plate 3.15 The dead fruit tree (Feature 10 in the mid-ground) with the peppercorn tree beside Well 2 (Feature 4). View south-west.



Plate 3.16 Feature 11 – peppercorn tree not associated with any other visible features on the site.

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4 Site evaluation

4.1 Introduction

The evaluation of a site's heritage values is prepared to predict the potential for archaeological resources of State or local significance, that is, relics, to survive. An evaluation assists with the level of the anticipated extent and intactness as well as the type of spatial arrangement that could be expected; it is a prediction of archaeological sensitivity.

This evaluation has been prepared through an analysis of the existing information, which includes the historical summary (JCIS 2017; Jacobs 2017b), the results of the site survey and historical aerial photography. Other factors that have informed the site evaluation are structures and elements that would be expected to form part of an establishment providing lodging and food to guests. The 'expected' structures have been identified through comparative analysis of guesthouses and like-sites such as inns (refer also to the comparative analysis of Lawson's Inn, EMM 2017). Site plans and photographs of the guesthouse were not found.

4.2 Written sources

The historical summary (Section 2) suggests that the study area, that is, the location of the former Miss Lawson's Guesthouse, was vacant in the period when it was in the ownership of John Blaxland and later, Charles Nicholson. It was purchased by John Lawson from Abraham Meyers in 1862 and remained undeveloped, it seems, until the guesthouse was built

William Freame's reminiscences place the guesthouse on site in 1907 (refer to Section 2.6). The guesthouse and Lawson's Inn, which by this time was a private residence, appear in one of three articles published in 1907. While no date is provided for the round trip, each one is published alongside current notices and advertisements. The articles have thus been interpreted in this report as being a contemporary description of Freame's travels, give or take a few months. The important point to note is that the guesthouse was operating in 1907, and the inn was by this time, being used as a private home.

4.3 Oral history

Information was provided to EMM by Leanne Sales, the daughter of the current co-owner Nancy Sales. The generational relationships of the individuals mentioned in this report are provided in Plate 4.1 for clarity. The family tree below is not complete but the relationships are correct.

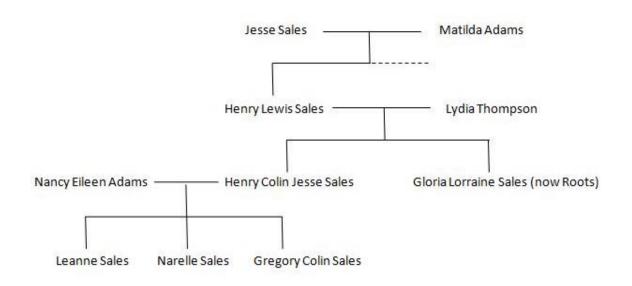


Plate 4.1 The Sales' family tree (abridged)

Henry Colin Jesse Sales (Colin) told his wife, Nancy, and his children about his youth on the property. Nancy Sales, has been able to provide additional information and confirmation of some of the stories told by her husband. The information presented in this report was provided, and checked, by Leanne Sales verbally or via email. Gregory Sales also assisted by providing information over the telephone to his sister Leanne. The oral history has enhanced some parts of the historical development of the site or confirmed documentary sources.

Henry Lewis (Harry) Sales, born in the 1894, was the local blacksmith. He also owned a horse-drawn bus with which he would pick guests up from St Marys Station on Friday afternoons to take to Miss Lawson's Guesthouse, returning them to the station the following Sunday. In about 1920, prior to purchasing Carrie Lawson's property, Harry Sales lived and worked on the land bounded by Adams Road, The Northern Road and Eaton Road (where the IGA supermarket and four houses now stand) and this is where he built the blacksmith's forge and corner store. As a child, Harry lived approximately 1 km to the south with his parents, Jesse Sales and Matilda Adams, and his siblings.

A side-story that illustrates the remoteness of the place and the life of the early Sales': to get to work, Jesse Sales would walk to the Nepean River, undress and with his clothes and boots held aloft, would cross the river, re-dress and continue his way to work. This would be repeated on his way home from work, presumably for the time he worked on the other side of the Nepean River.

As a young man, Colin worked on the property after his father purchased it in 1939 (refer to Section 2.6) and he also had memories of visiting the place when Daniel Lawson (Carrie's brother) and Jack Vickery (brother-in-law) lived there. Colin had recollections that Daniel and Jack lived in the guesthouse until their deaths, after the guesthouse closed (possibly on the death of Carrie). Colin told his wife, Nancy, that one time he was asked to cut one of the men's hair but the clippers got tangled and he had to run to his father's blacksmith workshop to get tools that would break them apart. When the property was purchased by Harry Sales, the wells were filled to stop stock from falling in (pers comm. Leanne Sales as told to her by her father Colin Sales).

4.4 Historical aerial photography

Aerial photographs were sourced that cover the years 1955, 1961, 1966, 1970, 1975, 1979, 1984, 1989, 1991, 1994, 1998, 2002, 2004 and 2005. The most recent aerial photographs are current and have been used in the production of project figures in this report. The relevant historical aerial photographs for the current study are from the years 1955 to 1979 as they show a large building, smaller structures and surrounding vegetation and the changes that occurred over 24 years. The photographs below are of the study area and only a small portion of the larger image.

The earliest aerial photograph that was found for this study is dated to 1955 (Plate 4.2), by which time the guest house was unoccupied and falling into disrepair. Only one building appears to be still standing, and the surrounding buildings have been removed. This may be the kitchen that Colin Sales remembered being on site in the 1940s. A tree is growing in the location of the dead fruit tree and what is presumably the peppercorn tree next to Well 2 is visible.

In 1961 (Plate 4.3), holes are appearing in the roof of the surviving building. The tree in the location of the dead fruit tree is flourishing. The peppercorn tree next to Well 2 appears to be a sapling, which suggests it self-seeded after the guesthouse ceased operations. The driveway might be visible turning north in front the surviving building in the 1961 aerial photograph.

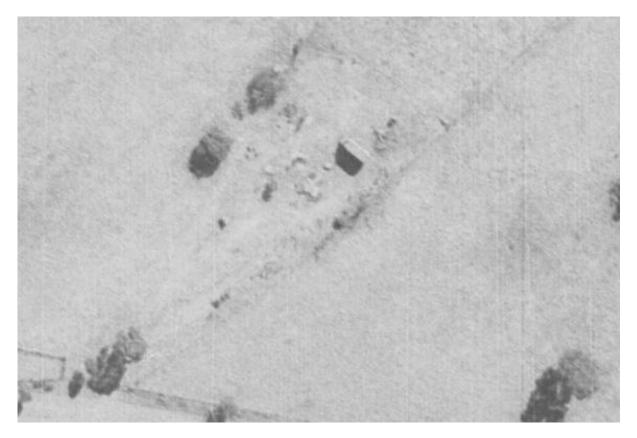


Plate 4.2 1955 aerial photograph. Source: Land and Property Information (233_19_153).

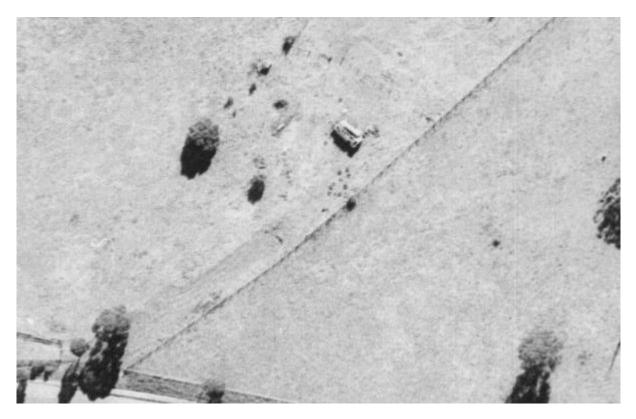


Plate 4.3 1961 aerial photograph. Source: Land and Property Information (1058_35_142).

Nine years later, in 1970, the structure is still standing, but is starting to look more dilapidated. Damage to the roof is clearly visible, but the remainder of the site does not appear to have changed significantly. The paddock appears to have thicker grass, which may be the result of rainfall but the time of day could also play a part in what the photograph captured. Judging by the long shadows cast to the south, this photograph was taken in winter and while the tree shown where the dead fruit tree is now looks large, the size is due to the shadow. The driveway is partially visible but loses definition in all the photographs as it heads north-west so it is difficult to tell if it turned to the north in front of the surviving building or behind. The gate posts are not clearly visible in any of the photographs but their placement in the landscape suggests that the driveway passed in front of the surviving building. More animal tracks are visible in the landscape in 1970.

By 1975 the dilapidated structure has either been removed or only a small portion of it survives on site. Four years later in 1979, the house and a shed on the property to the east have been built. The dead fruit tree has leaves and the peppercorn tree by Well 2 has grown. No other features are clear because the photograph is grainy and the remaining structures have been removed.



Plate 4.4 1970 aerial photograph. Source: Land and Property Information (1909_18_068).

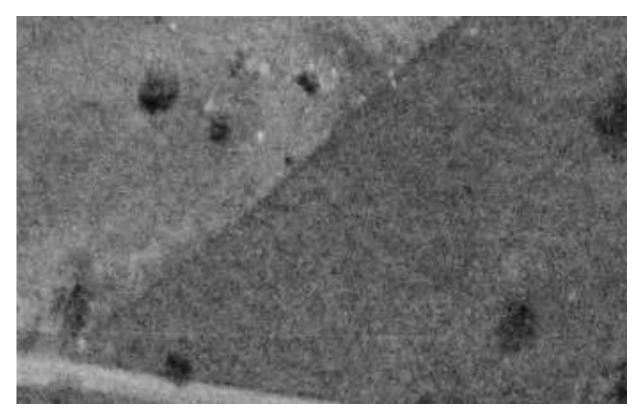


Plate 4.5 1975 aerial photograph. Source: Land and Property Information (2299_07_055).

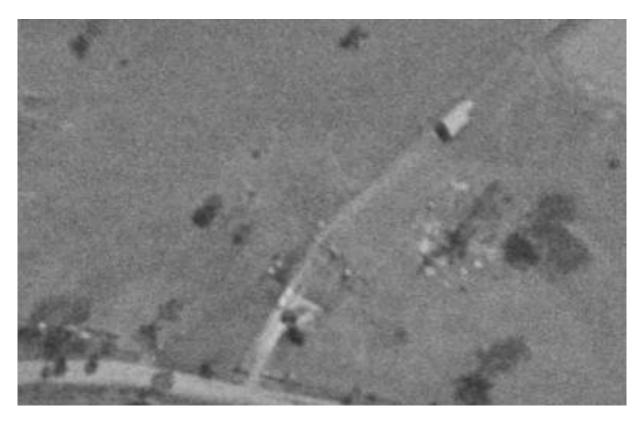


Plate 4.6 1979 aerial photograph. Source: Land and Property Information (1909_18_068).

4.5 Historical plans

Plans of the guesthouse were not located but the study area has taken recognisable form by at least c 1850, probably earlier when the road was formally surveyed (1820s). A parish map dated to c1850 (Plate 2.1) shows the size of John Blaxland's grant in which the guesthouse would eventually be built.

Buildings are shown on the 1859 Eastern Division of the Luddenham Estate plan but these are not in the study area. Lawson's Inn is shown to the south-east of the guesthouse site, and a chapel appears to the south-west. Structures are shown across this plan away from The Northern Road, and presumably accessible via the tracks shown (Plate 2.3). It is reasonable to assume that with the slow development of local area and since no buildings are shown in the study area, the site had not been developed in 1859.

Only one plan was found to show a building in or close to the study area. The plan is the "Liverpool inch to the mile topographic map" dating from around 1927 (Great Britain, War Office, General Staff, Australian Section, 1927) (Plate 4.7 and Figure 4.1).

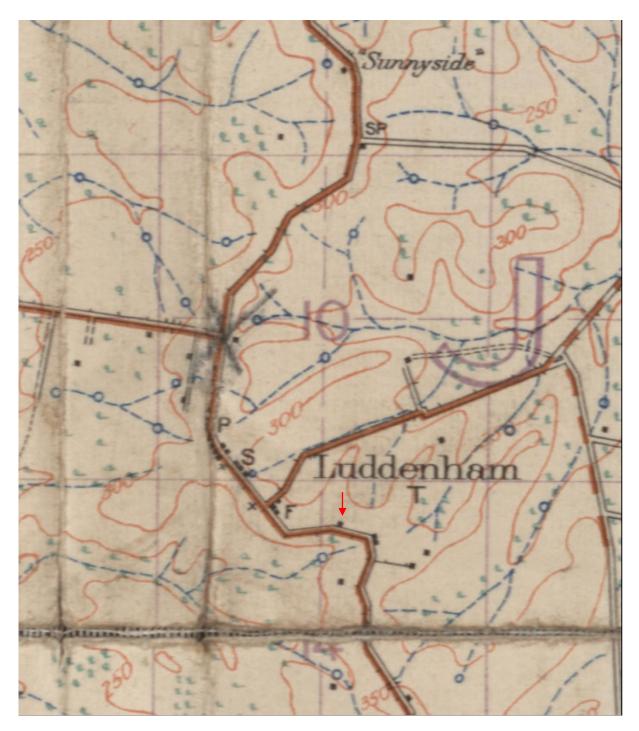


Plate 4.7 Detail of the 1927 "Liverpool inch to the mile" topographic map. A building that may be in the study area is indicated by the red arrow. Source: JCIS 2017.



Survey boundary

1955 aerial imagery on overlay

Archaeological research design -Item 9 Miss Lawson's Guesthouse Figure 4.1

GDA 1994 MGA Zone 56



1955 aerial imagery on current aerial imagery Figure 4.1

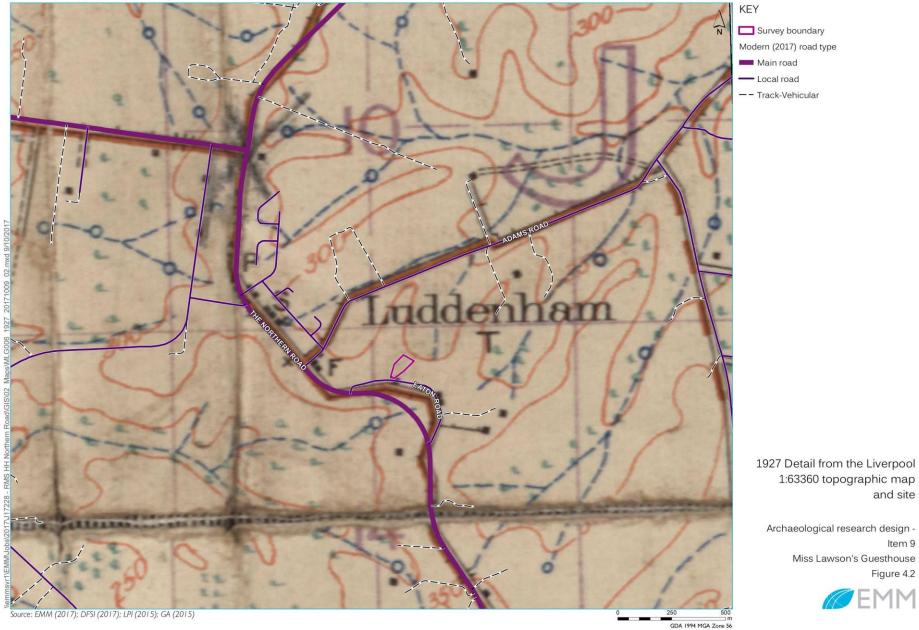


Figure 4.2 1927 Detail from the Liverpool 1:63360 topographic map and site

35

Item 9

4.6 Comparative review

4.6.1 Introduction

A review of comparable sites assists with understanding factors such as rarity, representativeness, which inform the assessment of a place's significance. A comparative analysis can also be valuable in predicting the layout of the establishment by comparing it to like sites as it could be easily assumed that what made one place successful would be replicated by other places. For some places, such as wayfarer inns that were situated between towns, this principle is more likely to apply as each place had have a certain level of self-sufficiency, which would leave an archaeological fingerprint that could be compared to other inn sites. Infrastructure such as housing for beasts, wells and cisterns for water, kitchen gardens, slaughter rooms and food storage would be expected.

Guesthouses are generally not in the same category as inns because they were used as destinations to get away from the city. As the idea of getting away from unhealthy cities started to gain popularity, the infrastructure of the urban centres they were situated in catered to the requirements of the guests. Water was reticulated, food for the kitchen could be purchased by the guesthouse kitchen and entertainment was available in the surrounding area. The focus of guesthouses was comfort, views and clean air.

While it is easy to assume that guesthouses replaced the function of earlier eighteenth and nineteenth century inns, this is not borne out by comparisons to other guesthouses. Unlike inns which were waypoints where travellers could rest on the way to somewhere, guesthouses were destinations in themselves.

The gold mining boom initially encouraged the construction of inns across the mountain range but the same boom played a major role in the extension of the railway to replace the Western Road (Silvey 1996, p.1). Many inns closed down with when rail travel was introduced because no longer were horses necessary to take people to their destination and travel was significantly faster.

In the late nineteenth century, Australia's colonial gentry made it fashionable to spend summer in the hills, such as the Blue Mountains (Inglis 2007). Aesthetic values and ideas about health developed out of the late Victorian idea of clean mountain air and majestic views to treat illnesses of the lung such as tuberculosis. This view, expounded by physicians such as Dr Malcolm Sinclair and Sir Philip Sydney Jones, resulted in the establishment of a number of sanatoria, including *The Queen Victoria Sanatorium* (LEP WF025) was the first and was built in Wentworth Falls. *Bodington* (WF047) also in Wentworth Falls and the *RT Hall Home* at Hazelbrook (H002) are three prominent and heritage listed sanatoria (SHI 1170824).

New establishments were purpose-built, and old estates were converted into guesthouses (Thorpe 1986 p.88). Guesthouses provided affordable accommodation and a respectable income, particularly for "spinsters" and "widows" (Jackson-Stepowski 2001, p.8).

As with the placement of sanatoria, the locations of guesthouses were chosen for aesthetic and natural qualities, such as views and other amenities (tennis courts, manicured gardens). From the 1870s many the Blue Mountains attracted wealthy families who could afford to stay in them and to take time off work and guesthouses are integral to this trend (Jackson-Stepowski 2001, p.3). Homes and guesthouses were built to be aesthetically romantic and picturesque to blend in with the sublime views (Karskens 1990, p18) and which often recreated nostalgic, fashionable European styles. The Ritz is a good example of this (refer to Section 4.6.2).

While rail heralded the demise of the roadside, or wayfarer's inn), it drove the development of guesthouses by providing affordable access to holiday destinations in New South Wales. The Blue

Mountains, the seaside and lakes, were marketed as scenic and healthy holiday destinations. James Foy and Sir James Joynton Smith were influential in opening up the Blue Mountains to tourism in the early twentieth century. Foy built the landmark Hydro Majestic and Joynton Smith, the proprietor of the *Smiths Weekly* ran well-known hotels such as the *Carrington* at Katoomba and the *Imperial* at Mount Victoria (Silvey 1996, p.2). Presumably Joynton Smith used his publication to advertise the benefits of Blue Mountains holidays. Foy and Smith were also responsible for bringing electricity to the mountains, which coincided with the installation of sewage services in Katoomba in 1913, both of which were major tourist drawcards.

In the early twentieth century guesthouses tended to be more modest in form and materials and have consequently been largely overlooked in heritage studies (Jackson-Stepowski 2001, p.3). The annual holiday became increasingly attainable for middle and working class people and accommodation was often developed and extended in somewhat haphazard ways (Jackson-Stepowski 2001, p.26). Federation era guesthouses tended to be timber, often in a chalet style but in the interwar period buildings were less adorned and in the bungalow style. One element that remained constant was the verandah which often provided a place for guest to contemplate the view.

Bundanoon in the Southern Highlands of NSW once had over 64 guesthouses; numbers peaked during the interwar period as the town became a popular holiday and honeymoon destination. People made the easy train trip from Sydney seeking fresh air and the views. After WWII, improved roads and motorcars made day trips more popular and the number of guesthouses dwindled (Bundanoon History Group 1989).

A guesthouse is described in the Oxford Dictionary "a private house offering accommodation to paying guests". They were associated with changing modes of transport (primarily trains) and the development of the local tourism industries. Guesthouses were built from the late nineteenth century, but the heyday of the guesthouse was during the early inter-war period (inter-war period 1919-1939) during the economic prosperity that followed the end of WWI. When the depression arrived in the 1930s, incomes could no longer stretch to frivolous holidays and guesthouses began to close. The key characteristics of late nineteenth and early twentieth century guesthouses are:

- location in association with an aspect of nature;
- social operational routine (eg shared bathrooms and meal schedules);
- communal services, provisions and recreational activities;
- stays longer than one night but not with permanent 'lodgers'
- largely seasonal business;
- unlicensed premises; and
- accessibility (Jackson-Stepowski 2001, p.9–10).

At the commencement of the twenty first century, purpose-built early to mid-twentieth century guesthouses are rare (Jackson-Stepowski 2001, p.3).

4.6.2 The Ritz

(Blue Mountains LEP 2015, item La012)

The earliest, grandest and longest-lived of all Leura tourist establishments, the Ritz (203-223 Leura Mall, Leura) was built in 1892. It was designed by Sydney architect Ernest Bonney. It had a croquet lawn, tennis court, and manicured gardens. The main building is 2-3 storeys with pitched gabled roofs, attic rooms and long two story verandahs. Also on site are a boiler house, a single-storey cottage (c.1910) and historic plantings.



Plate 4.8 The Ritz, Leura. Image source: SHI 1170453

4.6.3 The Cecil Guesthouse

(Blue Mountains LEP 2005 Item K094)

The Cecil Guest House (23-27 Lurline St, Katoomba) was built in 1910 and is a representative example of an early twentieth century guesthouse in the Blue Mountains. It was originally named Mount View and leased to Miss Lumsden from 1912 -1925 by Sydney merchant William Henry Miles. It was renamed The Cecil around 1934. The asymmetric building has a stone basement with brick walls to the main floor and fibro cladding on the upper floor, a later addition. There is a two-storey verandah along the front. It is situated to take advantage of views over Leura and the Jamieson valley. Amenities for guests include terraced gardens and a tennis court.



Plate 4.9 The Cecil Guesthouse, Katoomba. Image source: SHI 1170401

4.6.4 Katoomba Mountain Lodge

(Blue Mountains LEP 2015, item K104)

In 1925–6, Mrs C Finch bought the property at 31 Lurline St and built a brick boarding establishment with cement walls and 25 bedrooms. Initially called Belfast House, it is a 2-3 storey gabled brick building with a three story verandah and low pitched roof.

4.6.5 Lurline Street Precinct Conservation Area

(Blue Mountains LEP 2015, Item K053)

This group of early to mid twentieth century guesthouses on Lurline Street between Gang Gang Street and Church Lane are representative of the development of guesthouses and the tourist industry in the upper Blue Mountains. It includes *The Cecil Guesthouse* (4.6.2) and *Katoomba Mountain Lodge* (4.6.4).

The Metropole (11-15 Gang Gang Street) is a two-storey brick building with a later, third storey clad in pressed metal to simulate shingles, hipped roof and cantilevered verandahs.

5 Lurline Street is a three-storey brick building with a three-storey verandah and hipped roof.

Eldon (9 Lurline Street) is a three-storey rendered brick building constructed above a sandstone retaining wall.

4.6.6 Wallawa

(Blue Mountains LEP 2015, item Ln023)

Wallawa (25 Honor Ave, Lawson) was built in 1893 and run as a boarding house by proprietors such as Mrs MacDonald and Mrs Thompson. It is a single-storey Federation building with weatherboard cladding, a hipped roof and bullnosed veranda. It has catered for tourists since the late nineteenth century.

4.6.7 Glenella, 56–-60 Govetts Leap Road, Blackheath NSW

(SHI 1172015; Blue Mountains LEP – BH095)

Glenella, built 1905, is a predominantly single-storey Federation Queen Anne building. It was built as a family home by George Phillips who brought his family to the Blue Mountains due to the ill-health of one of his children. By 1915, the house was being run as a guesthouse and a two-storey wing was added in 1917 to cater for the increasing holidaymaker trade in the Blue Mountains. The addition allowed for *Glenella* to accommodate 60 guests and was run by Mrs Elizabeth Phillips and her five daughters. After the death of Elizabeth and George Phillips (1948), the guesthouse was run by one of their daughters, Leila, and then by one of their daughter-in-laws, Laurel.

The State Heritage Inventory description of the guesthouse is as follows:

The building has a hipped roof, apart from the wing that projects from the western end of its front, which has a gabled roof. The roof is covered with corrugated iron and walls are lined with rusticated timber weatherboards. A verandah with a bullnosed corrugated iron roof painted in contrasting bands of colour runs across the full length of the southern side of the building. The verandah roof is supported on turned timber posts, and has a turned timber valance running beneath the beam supporting the roof. Window joinery is of timber.

Surrounding buildings that would have been associated with the guesthouse are not described but it is possible that a guesthouse in the Blue Mountains, which was catering to holidaymakers and day-trippers, would not have had to be self-sufficient. When the number of guests that *Glenella* is considered, it becomes highly unlikely that the establishment would have included many of the structures that a guesthouse may have required in a less established town.

Glenella is of local significance for its associations with the Phillips family and as a focal point in the tourist economy in Blackheath (and the Blue Mountains. It is a significant part of a group of buildings at 40 to 68 Govetts Leap Road and architecturally is representative of the Federation Queen Anne style.

4.6.8 Yabba Yabba and Garden, 179–181 Wentworth Street, Blackheath NSW

(Blue Mountains LEP - BH045)

Yabba Yabba is a single-storey dwelling, now converted to a family home after a long history of being a guesthouse (or leasing property). Built in around 1888 it was modified up to 1926 during its use as a guesthouse. The larger guesthouse building extended a smaller weatherboard cottage that had a hipped slate roof, double-hung windows and a bullnosed verandah. The chimneys are rendered (likely to be brick but not described in the SHI data) with heavy corbels and terracotta pots.

When the guesthouse was extended to the north and east, modifications were in the bungalow style with roofs that were low pitched, hipped, gabled and jerkin headed and in corrugated steel. Cladding was splayed weatherboard and the gables were timber-shingles. *Yabba Yabba* featured a substantial garden with pine borders along the Wentworth Street boundary.

The land was originally granted to George Cousins in 1880. In 1885 Cousins, a publican in Mount Victoria, sold the undeveloped land to Anne Cripps, (presumed to be the wife of John Cripps, owner of the *Hydora Hotel* in Blackheath. Anne Cripps entered into a mortgage agreement in 1888, so it is possible that the guesthouse was built using the funds made available by the agreement. She also established an orchard in the adjacent lot. In 1903 Mrs Spark of Roseville in Sydney was advertising it for lease; from 1912 to 1946 Rebacca [sic] Page and Laura Dash operated it as a guesthouse.

Yabba Yabba is significant as one of Blackheath's earliest guesthouses, and for its continuous operation until 1972 after which it became a home for intellectually disabled people and then a private family home in the 1980s. It is also significant for its well-established garden (SHI 1170056).

4.6.9 Former hotels/inns

The Victoria and Albert Guesthouse (19-29 Station St, Mount Victoria) was built c.1914 by William Lees on the site of an 1860s hotel called the *Royal*. Known as the Hotel Mount Victoria, the two-storey cement rendered building is sited on a corner block with a well established garden (Blue Mountains LEP, Item Mv016).

Bolands Inn (8-9 Ferguson Rd, Springwood) was the earliest inn at Springwood. It changed to a guesthouse called *Looranna* by the 1890s (Blue Mountains LEP, Item Sp007) and was demolished in the 1940s.

4.6.10 Chateau Napier site (archaeological site)

(Blue Mountains LEP 2015 La026)

The Chateau Napier guesthouse (31 Great Western Highway) was built in 1910 by Justin McSweeney and run by Mrs McManus. It was a two and three-storey timber building with wings extending to the rear. The second, two-storey brick building was added in 1914. It is marked by mature cypress trees and the standing remains of what was once one of the "largest and best appointed houses for guests on the Mountains" (*Blue Mountains Echo* 16 Dec 1910, p.6). Features include a rough cast archway, steps and a large sandstone retaining wall. There are also burnt out remains of two main wings of the guesthouse, comprising of partly intact brick walls, concrete foundations, and concrete paving (possibly a tennis court). The guesthouse was destroyed by fire in 1957.

Archaeologically, the site has little research value but the surviving fabric is of *local* significance (SHI 1170822).

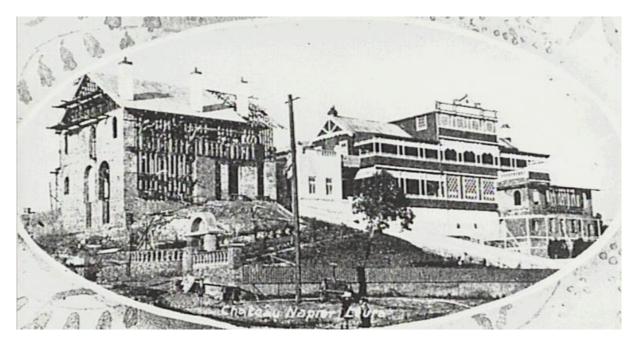


Plate 4.10 c1914 Chateau Napier, Leura by photographer Harry Phillips (Blue Mountains City Library LS002\002113)

4.7 Comparative analysis

A comparison of guesthouses for the purposes of assessing the spatial arrangement, and thus archaeological potential and the significance of Miss Lawson's Guesthouse has provided insights into some aspects of this type of accommodation but not into others. As many guesthouses were built in tourist locations, they were close to the services that they would need to supply: food procurement, beverages, potable piped water, toilet and bathing facilities were all either provided by the guesthouse or accessible nearby. In an urbanised area, a guesthouse did not need to run as a self-sufficient economy. Miss Lawson's Guesthouse, on the other hand, was located in what was, and is, still a rural setting without a reticulated water supply or sewerage system.

By virtue of its position along The Northern Road and between main towns, Miss Lawson's Guesthouse is likely to have taken over the function of the inn. It is likely to have catered to "destination" guests who

came for the clean air and mountain views as well as passing travellers. It is actually described by William Freame as supplying "decent travellers" with "comfortable and clean bed and board" (*The Nepean Times* 10 August 1907). An alternative but compatible view is that it *also* catered to those less well-off than the clientele who travelled to the Blue Mountains health retreats. Despite the views to the Blue Mountains from the property, the location of the guesthouse is more likely to be an artefact of the historical ownership of the land, the professional history of the Lawson family and the unmarried Carrie Lawson.

A strong theme evident through the comparative analysis is that many guesthouses were run by women. Could running guesthouses, unlicensed as most of them appeared to be, be seen to be a more acceptable profession for a single woman? Certainly in Carrie Lawson's case, it is likely that she would have learned the hospitality trade from her family and this would seem like a natural niche to fill. It is also likely that Carrie was a Methodist (generally abstaining from alcohol), but the effect of this on the archaeological record will need to be interrogated.

From an archaeological perspective, Miss Lawson's Guesthouse is more likely to have an archaeological fingerprint that is comparable to inns than to other guesthouses. The remoteness of the place would have necessitated some services be provided by the guesthouse – water, toilet and bathing facilities, perhaps stables for people travelling through, a garden that supplied some of the foodstuffs and possibly food and beverage storage.

If the guesthouse was operating in 1907, it is likely to have been built prior to that and after Carrie Lawson inherited the land in 1897 (refer to Section 2.6). Stylistically, this could place the main building in the Federation Queen Anne style, but photographs and descriptions have not been found to confirm this. Oral history describes the detached kitchen as "slab" (Colin Sales via pers. comm. Ms Leanne Sales). The kitchen may have been timber slab or weatherboard over slab.

The comparative analysis also highlighted the lack of archaeological information associated with guesthouses. The listings reviewed above did not include an archaeological component and a search through the grey literature on *NSW Archaeology online* (refer to the bibliography) did not return any comparable matches.

The comparison indicates that guesthouse sites with potential for archaeological deposits in the local area are rare. Miss Lawson's Guesthouse is also more likely to be representative of the transition between inns and guesthouses because of location, the probable necessity for remote-area facilities and the family's professional history.

4.8 Historic themes

The historic themes relevant to the archaeological investigation of the study area were taken from the NSW Heritage Branch website (www.environment.nsw.gov.au/heritage/index.htm). These have been used as a source and starting point in the formulation of research questions for the proposed archaeological program.

The national historic themes relating to the inn site are:

- working;
- developing Australia's cultural life; and
- developing local, regional and national economies.

The NSW historic state themes relating to the study area are:

- accommodation;
- commerce;
- leisure;
- transport;
- domestic life;
- land tenure;
- environment cultural landscape;
- persons; and
- agriculture.

4.9 Archaeological potential

The combination of documentary research, site survey and comparisons with other guesthouses assisted with the assessment of potential for the site. A visual inspection confirms that features exist on the site – a driveway, gateposts, depressions that are either wells or cisterns and confirmation through family history that these features were wells that were filled in to stop stock from falling in. Dressed sandstone blocks, handmade bricks and what appear to be cultural plantings (peppercorn trees and dead fruit tree) are situated within 50 m of each other.

Historical aerial photographs also show a brief period where structures are visible between 1955 and 1975; in particular one structure that is large enough to be a kitchen or shed.

Historic plans are not as useful in illustrating the site components but they assist with focusing in on development in the study area. No buildings are shown in the study area in early plans, although Lawson's Inn appears on the *Eastern Division of the Luddenham Estate 1859* plan (Plate 2.3). It can be argued that Lawson's Inn is shown because it was a local landmark but careful review of the same plan shows a number of small buildings scattered across the landscape. It can be assumed that buildings did not appear in the study area until the guesthouse was built (it may not have been initially as a guesthouse however). This assumption should be tested during the archaeological excavation program.

The Sales family oral history is supported by historical aerial photography and the site visit. Colin Sales told his children that as a young man, he worked in the paddock where the old slab kitchen stood.

The site survey located a number of features in a concentrated area. These features, combined with research undertaken for the technical report (Jacobs 2017b) and this research design, have provided direction for archaeological investigation.

The archaeological potential of the site can be attributed to three main points:

- 1. The site remained unmodified from the end of the guesthouse period and was used only for grazing stock.
- 2. The wells/cisterns were filled in to protect stock, when the property was purchased by HF Sales.
- 3. Cultural material is visible in the ground in areas where the ground cover permits visibility.

The archaeological resource will yield features that are likely to be related to:

- the main house;
- the kitchen;
- a laundry;
- water procurement and storage;
- food storage in the form of a cool room or cellar;
- a kitchen garden;
- a ornamental garden;
- animal housings, possibly stables or stockyards;
- manufacturing spaces such as a brick clamp;
- a recreational space; and
- private/public spaces within the complex.

If they exist, these features would be visible in the form of footings and flagging, deeper deposits containing artefacts that indicate use, soil deposits for pollen analysis and possibly with identifiable seeds. A small number of bricks were noted on the surface; these bricks had stacking impressions on their stretcher sides indicating that they were made and stacked to fire, and also indicating that they were hand-made, suggesting a local manufacture site. There was no evidence of brick making noted on site during the survey but it is a consideration for the research design.

Other significant information that the archaeological resource is likely to contribute to is the spatial arrangement of the guesthouse buildings and the facilities provided. This should provide information about the micro-economy of the guesthouse and its relationships to the surrounding community.

Other possible but less likely relics that may survive on site include "miserable" huts and "stock yards" for cattle (refer to Macquarie's diary entry reproduced in Section 2.4).

4.10 Assessment of significance

4.10.1 Defining heritage significance

In NSW the assessment of heritage significance is based on the *Burra Charter* (Australia ICOMOS 2013) and further expanded upon in the Heritage Manual's "Assessing Heritage Significance" (Heritage Office 2001). It lists seven criteria to identify and assess heritage values that apply when considering if an item is of state or local heritage significance as set out in Table 4.1.

This assessment of significance builds on the assessment prepared by Jacobs in the Memorandum prepared for the Response to Submissions and Preferred Infrastructure Report. The assessment has been informed by the historical information and site evaluation presented in this report and the report prepared by Jacobs.

Table 4.1 Assessment against the NSW assessment criteria

Criteria		Assessment
a)	An item is important in the course or pattern of NSW's (or the local area's) cultural or natural history (Historical Significance).	The archaeological site of Miss Lawson's Guesthouse is of significance for its ability to demonstrate change in the way people travelled in the late nineteenth and early twentieth centuries. It shows the adaptations made by the hospitality industry with changes to travel from horse to train to motor car. The changing nature of hospitality is particularly evident in this situation as Miss Lawson's Guesthouse provided a modified version to the establishment her father ran, which was an inn, catering to those travelling through and serving food and alcohol.
		The guesthouse is also a symbol of social change representing the creation of disposable incomes and increasing leisure of the working classes, and a change in attitudes about health. Miss Lawson's Guesthouse was operating during the peak of the 'health retreat' period, that is, during the late Victorian and Inter-War period, where getting out of the city to breath clean air and take in nature's views was becoming fashionable.
		The item is of <i>local</i> significance.
b)	An item has strong or special association with the life or works of a person, or group of persons of importance in NSW's (or the local area's) cultural or natural history (Associative Significance).	The guesthouse is also associated with the Lawson family, a well-respected family who had ties to the local area throughout the late nineteenth and early twentieth century. The item is of <i>local</i> significance.
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) (Aesthetic Significance).	The item does not meet this criterion.
d)	An item has a strong or special association with a particular community or cultural group in NSW (or the local area) for social, cultural or spiritual reasons (Social Significance).	The site does not have a strong or special association with a particular community or cultural group. However, the current owner, Mrs Nancy Sales and her children consider the site of significance to themselves and their family. Henry Lewis Sales purchased the property from Carrie Lawson's executor on the death of her brother Dan and his companion John William Vickery. The family oral history includes events that involved Dan Lawson and John Vickery, and the Sales family is a long-standing family in Luddenham with many ancestors buried in St James Anglican Church, Luddenham. The item does not meet this criterion.

Criteria		Assessment	
e)	An item has the potential to yield information that will contribute to an understanding of NSW's (or the local area's) cultural or natural history (Research Significance).	The site possesses the ability to yield information about the guesthouse, how it operated, who it catered to and its level or self-sufficiency through an analysis of spatial patterns and building/room functions.	
		The building was also used as a private residence at the death of Carrie Lawson, when her brother Daniel and John William Vickery used it as their residence. Archaeological evidence to supplement this information may be visible.	
		The item is of <i>local</i> significance.	
f)	An item possesses uncommon, rare or endangered aspects of NSW's (or the local	Archaeology likely to be rare in a local (western Sydney regional) context	
	area's) cultural or natural history (Rarity).	The item is of <i>local</i> significance.	
g)	An item is important in demonstrating the principle characteristics of a class of NSW's (or the local area's) cultural or natural places or environments (Representativeness).	May be a cross-over between guesthouses and inns. It may preserve evidence of the different supporting infrastructure required for guesthouses, which have been lost in sites that have been upgraded to modern standards.	
		The item is of <i>local</i> significance.	

4.10.2 Summary statement of significance

The site of Miss Lawson's Guesthouse (Item 9) is of *local* significance for its historical and associative values and for the research potential inherent in the predicted archaeological deposits and fabric.

Miss Lawson's Guesthouse is significant for its ability to demonstrate changes in travel on the outskirts of Sydney, from horse and horse-drawn vehicles to train, to motor vehicles. These changes represent the development of the colony in the local region, which heralded social change shown in a greater disposable income and a focus on health breaks away from cities.

The site is associated with the Lawson family, a well-respected family with ties to the local area through the late nineteenth and twentieth century, who also owned the other well-known landmark on the south side of the road (now Eaton Road), *Lawson's Inn* otherwise known as *The Thistle Inn*.

The site is also significant from a research perspective as it retains potential to answer questions that can only be answered by archaeological excavation. The infilled wells/cisterns, architectural/structural remains and anticipated deposits are anticipated to answer questions related the spatial arrangement of the guesthouse and the use of those spaces, There is potential for information to be obtained about the materials that people were transporting at the time, and the nature, scale and extent of the guesthouse.

There are very few guesthouses with archaeological potential remaining in the region that were operating at this time. The comparative analysis indicates that Miss Lawson's Guesthouse was not set out like other guesthouses in urbanised areas and may have had a layout that is more akin to wayfarers' inns. Representativeness will be determined through archaeological excavation and comparison to the site patterning of inns (as guesthouse archaeological excavations have not been found).

5 Research design

5.1 Introduction

An archaeological research design is a theoretical framework to support archaeological field investigations with the aim of extracting information that is relevant to the development and function of the site.

The research design is based on the outcomes of the archival and documentary research presented in Section 2 as well as the existing environment as recorded during the field survey (Section 3). It develops questions that will contribute to current and relevant knowledge about a place, a theme and perhaps individuals that cannot be sourced from documentary evidence. These questions should be compatible with the nature of the predicted archaeological resource and realistic in terms of their ability to produce relevant answers.

While the guesthouse was probably built in the late nineteenth century and operated until the late 1920s it possesses archaeological, that is, research value. In the major centres such as Sydney manufacturing was becoming mechanised, access to goods and services was improving. City life has been well documented by archaeologists and historians, in photographs and in maps and plan but it should not be assumed that the outskirts of Sydney have been as well researched and documented. What was life like in Luddenham, which at the time was far enough from Sydney to be an overnight holiday destination? How did people go about their daily lives when they did not have access to the number and variety of shops that Sydneysiders, or even those in nearby Liverpool had access to?

The questions in Section 5.2 are influenced by the assessment of potential in the archaeological assessment and statement of heritage impact (Jacobs 2017b and Section 7.3 Jacobs 2017a). Potential has been determined through the analysis of documentary sources and the results of the site surveys (a separate site visit was undertaken on Monday 18 September and is described in Section 3.3).

Elements of the guesthouse that are still visible in the landscape include dressed sandstone blocks, a driveway that is approximately 5 m wide starting at the gate on Eaton Road, approximately 123 m in length and defined to the north-west by two timber gate posts. Other features on site include what appear to be building platforms, two wells or cisterns, two peppercorn trees (live) and one fruit tree (dead) of unknown species (possibly a peach tree) (Plate 3.15). Family oral history indicates that the main building was constructed of timber and may have been slab or weatherboard, or weatherboard on slab. A small number of sandstock, or handmade bricks were recorded on the site, possibly having come from fireplaces and/or footings.

There is a small chance that building materials were re-used in other construction in the local area, but this appears to be unlikely as the guesthouse passed in ownership from the Lawson family to the Sales family (via the administrators of Daniel Lawson's will) and the oral tradition within the family is that Colin Sales (the son of the first Sales to own the property), remembered the building on site when he worked on the property as a young man. Mr Sales told his children that the guesthouse was constructed in timber slab. Mr Gregory Sales (son) remembers that some sandstone blocks were removed from the site and placed on another part of the property outside of the project area close to Adams Road.

The site has experienced a low level of impacts since the demolition of the guesthouse, being used only for stock grazing, and so is likely to retain fabric and deposits that survived the initial demolition. It represents three phases of European use, being the guesthouse phase (c1920 - c. 1930) followed by preparation of the site for grazing (1939-1976), during which time the wells were filled and the building and surrounding elements fell into disrepair and later removed off site and the final phase 1976 during which the site has been left unchanged.

As the site will be removed in total, the questions will be focused on extracting the maximum information from the removal. One obvious avenue of investigation is the connection between Miss Lawson's Guesthouse and Lawson's Inn (Item 10, approximately 75 m south over Eaton Road); for instance, how did the inn access fresh water? Was it from one of the wells identified on the guesthouse site? The archaeological research design for Lawson's Inn is a separate report (EMM 2017).

5.2 Research questions

The research questions begin with a broad scope and focus in where they have been guided by the research and the field survey.

- 1. Does the archaeological resource support the documentary evidence and its analysis or can it provide information that is not available elsewhere?
- 2. What is the nature and extent of the archaeological resource? Can it shed light on the building materials used for the various buildings?
- 3. Does architectural fabric that could provide information on the style of the main house survive?
- 4. Does the building shown in the 1927 Liverpool to the inch topographic map occur in the study area? If so, can its function be discerned through archaeological excavation?
- 5. Can a relationship be established between Miss Lawson's Guesthouse and Lawson's Inn? That is, were structures that serviced Lawson's Inn on the property that was to later become the guesthouse?
- 6. Was it a guesthouse in the style that was fashionable in the Blue Mountains, that is, a health retreat and getaway or was it performing the function of the defunct Lawson's Inn?
- 7. Does the archaeological evidence indicate that bricks were made on site? Were the remains of a brick clamp found?
- 8. What were the spatial arrangements of the complex? Can the 'platforms' be ascribed a spatial function?
- 9. Can the establishment be reconstructed using archaeological evidence?
- 10. Are the depressions on site wells, cisterns or something else?
- 11. How was waste removed from site? Did the guesthouse have cesspits?
- 12. If the depressions are wells or cisterns, do they contain information about the place? Is one or both associated with Lawson's Inn 75 m to the south?
- 13. Does the archaeological evidence accord with the family memory?
- 14. What species of tree is the dead fruit tree? Was it part of the guesthouse garden?

- 15. How self-sufficient was the establishment, eg, did it possess a kitchen garden, animal pens, cool rooms and killing sheds?
- 16. Can the processes of abandonment and reuse be quantified in the archaeological resource?
- 17. Can a relationship to Sydney or other major centres be established through the archaeological evidence?

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6 **Proposed excavation method**

6.1 Introduction

Architectural fabric that is likely to be related to the guesthouse is visible in the ground and therefore more substantial relics are likely to also be shallow. It is proposed that the field program commences with manual excavation to determine the integrity and depth of the relics with the use of an excavator or backhoe to be determined once the archaeological resource has been exposed. A machine such as a backhoe or excavator can be introduced toward the end of the field program if warranted.

The initial focus of the excavation will be on the features identified during the site visits so the field program will start as an archaeological test excavation, that is, it will expose relics associated with each feature without removing them. They will be exposed by removing grass and topsoil to the extent of the square in which they are situated; that is, the surface will be cleared to a nominated grid-line. Each feature will be exposed and the decision to extend the trenches and excavate deeper deposits will be made based on the nature of the archaeological resource.

Salvage excavation will largely be guided by the nature and extent of the archaeological resources uncovered during the test excavation. The salvage excavation will aim to:

- retrieve a level of information relative to the significance and intactness of the archaeological resources; and
- answer the research questions developed for the project.

The layout of the site is shown in Figure 6.1. The grid has not been overlayed at this stage as it will be developed on site with the surveyor and the excavation director.

The excavation will be directed by Pamela Kottaras (EMM); the secondary excavation director will be Ryan Desic (EMM).

6.2 Management of Aboriginal objects

The Aboriginal cultural heritage values of the site have been addressed in a separate report (Kelleher Nightingale 2017), which has developed management measures to address the Aboriginal statutory constraints in the project area. Miss Lawson's Guesthouse is within an area of Aboriginal archaeological potential identified at TNR AFT 22, which is an artefact site of moderate significance. TNR AFT 22 will be partially impacted by the project and covers an area larger than and over the site of Miss Lawson's Guesthouse. Reference should be made to Kelleher Nightingale Figure 8 for details. Figure 8 has not been reproduced in this report to protect sensitive site information.

TNR AFT 22 (Aboriginal Heritage Information Management System number 45-5-4793) as is described:

Site TNR AFT 22 was situated on the crest and upper slopes of a northern spur adjacent to two north flowing tributaries of Cosgroves Creek (Figure 8). The site was located on the northern side of Eaton Road within Lot 1 DP250030, Lot 1 DP90157, Lot 21 DP614481, Lot 1 DP215715 and Lot 2 DP250030.

The site is well defined by hill top contours with silcrete artefacts visible in cuttings along Eaton Road: two silcrete flakes and two silcrete flake fragments. The hill top is part of the ridge facilitating the current road and was clearly a transit way for past Aboriginal people. The hill top soil structure is a closed system of erosion where soils deflate and erode relatively in situ, making the hill archaeologically valuable. Moderate depth of soil was evident across the landform and the site was assessed as having at least moderate archaeological value.

Kelleher Nightingale 2017, p.21

The significance of TNR AFT 22 has been assessed as *moderate* as this is one of 20 sites with good research potential as they are intact and further investigation would answer questions related to activities in a transitional landscape between the Cumberland Plain and the Nepean River (Kelleher Nightingale 2017, p.30).

Management of TNR AFT 22 is as follows:

- Barrier fencing to be erected on the project approval boundary for the extent of the site to ensure that no construction impact extends into the portion of the site outside the project boundary. Portion of site area outside of project boundary should be identified on the Construction Environmental Management Plan (CEMP) as environmentally sensitive no-go zone to ensure no impact.
- Archaeological salvage excavation of impacted portion of site.
- Relevant project approval required prior to commencement of works affecting the site including the non-Aboriginal archaeological salvage program.

The combined management of Aboriginal and historical archaeological values will occur concurrently with archaeological test excavation for Aboriginal values commencing around the historical site. The historical archaeology excavation director will confer with the Aboriginal archaeology excavation director to determine which team will start and where. The soil profile trenches (refer to 6.3.4) will potentially be excavated by the Aboriginal archaeology team. The focus of the collaboration will be to ensure that impacts to the Aboriginal and the historical archaeological values are controlled and comply with project approval.

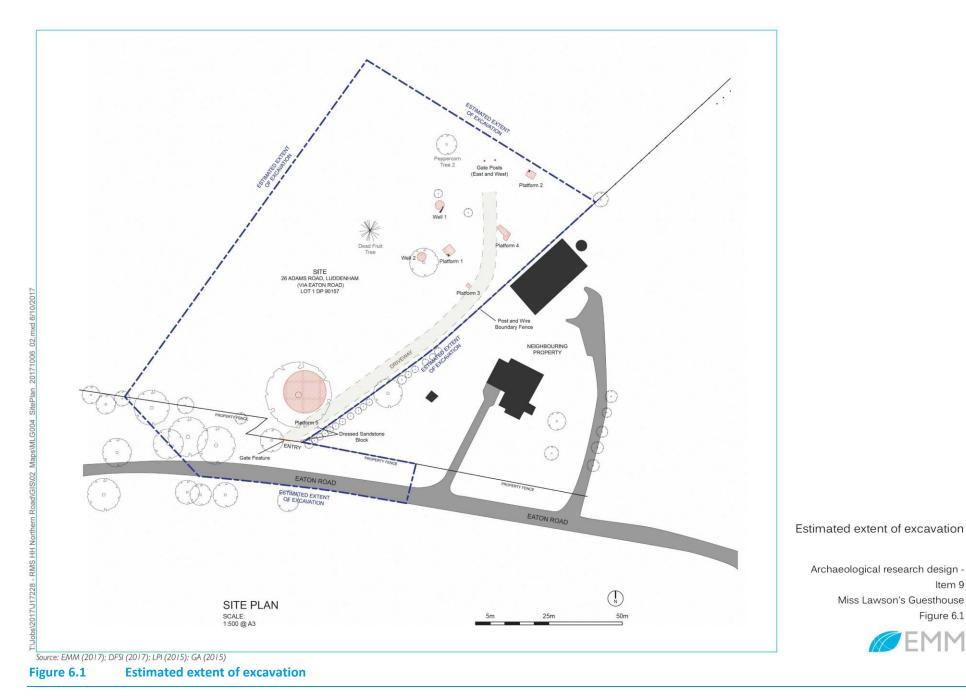
6.3 Field program

6.3.1 Recording

Recording will take place before, during and after the excavation program.

All recording will be undertaken using the following principles:

- the establishment of an appropriate site grid (refer Section 6.3.3);
- use of surveying techniques for location of remains;
- detailed archaeological scale plans or orthographic photographs;
- the use of context recording forms and context numbers to record all archaeological information;
- use of Harris matrix as part of the recording program;
- all structural remains, post holes and features will be planned using an established survey point;
- detailed archival photographic recording (ie in RAW and jpg format);
- collection, labelling, safe storage, washing, sorting and boxing of artefacts.



Item 9

6.3.2 Removal of vegetation

Where grasses in the paddock can be slashed safely without affecting the structures in the ground, this will be the first site activity.

During excavation of Well 2, which is in proximity to the tree, a determination will be made as to whether the tree will require removal for safety or archaeological access during the excavation.

6.3.3 Survey

The first step will be to accurately survey all visible features using a total station to create accurate squares in which to excavate. The site will be gridded to an appropriate datum such as the Universal Transverse Mercator (UTM) or the Map Grid of Australia (MGA) in 5 x 5 m squares, which will be further divided where necessary. This will be to locate features within a defined square, the size of which will be determined by the size of the exposed feature and the concentration of artefacts.

Excavation will only occur within the project boundary. The extent of the excavation is shown in Figure 6.1 but will be ultimately determined by the excavation director.

6.3.4 Soil profile test trench

Two 2 x 2 m trenches will be excavated, in locations that do not appear to contain archaeological fabric, so that the soil profile can be recorded. One trench will be in close proximity to the dead fruit tree so that archaeobotanical samples can be collected. The second will be in a location away from the features noted in the ground and determined by the excavation director while on site. This soil profile test trenches will be excavated stratigraphically and soil samples will be collected. If relics are encountered, the trench will be treated as those with predicted relics (below).

6.3.5 Initial clearing of topsoil

Each architectural feature will be cleared of overlying soil and grass and exposed as clearly as possible without the removal of deposits or intact fabric. If warranted, the surface of the ground will be cleared to join features in the landscape. The initial focus will be on Well 2 (well and peppercorn tree), Platform 1 (the platform approximately 3 m to the north-east and Well 1 (well with timber planks) and the excavation will be extended from there. The aim will be to remove grass to expose the archaeological landscape underneath before commencing with the removal of deposits and fabric.

If previously obscured features are uncovered during the initial clearing phase, they will be surveyed in as per Section 6.3.3.

6.3.6 Manual excavation

i Features and surrounding land

- 1. Using hoes and trowels, archaeologists will pull back the grass and soil to the top archaeological level be it structural or archaeological deposit.
- 2. A feature number will be assigned to each feature, cut or deposit; eg, wells, drains, buildings. It is likely that feature numbers will remain as they are eg Well 1, Platform 1 etc.

- 3. A context number will be applied to each element of each feature, cut and deposit; eg, footing strips, post holes, well components and subfloor deposit; the feature number (refer above) will be related to the context number assigned on site.
- 4. Archaeological features, deposits and cuts will be photographed, planned and sections drawn prior to removal by hand; all *in situ* artefacts will be collected for later analysis.
- 5. Features will be recorded by a qualified surveyor and the resulting plan will be tied into the appropriate datum (on advice from the surveyor). This will include recording reduced levels to establish the varying depths of phases across the sites. Orthographically corrected photographs and survey are the preferred option as this form of recording will save time without decreasing accuracy. In this instance, plans and sections will not be hand-drawn but sketches will be made as part of the site note-taking process.
- 6. If underfloor deposits are identified the relevant areas will be gridded, excavated stratigraphically and sieved to recover artefacts that may be linked to particular rooms or activity areas during post-fieldwork analysis.
- 7. Archaeologists will be mindful that the site may possess a kitchen and/or ornamental garden and soil within a profile that is dissimilar to the soil profile test trench will be examined and soil samples will be collected. Borders that would denote a garden boundary will be investigated.

ii Wells/cisterns

Two depressions have been identified as wells (Well 1 and Well 2), which were filled in by the Harry Sales who purchased the property from Carrie Lawson's estate managers. By this time the guesthouse had fallen into disrepair and the property was used to graze stock. The wells will be hand dug to clarify their structure and composition and if they prove structurally unstable or reach depths that do not permit manual excavation, they will be sectioned by machine and recorded. The nature of the deposit will guide decisions on full excavation or half section to begin.

Excavation of Well 1 will be started by hand to avoid damage to its structure, which at this stage is unknown. The presence of dressed sandstone block suggests that it is lined with sandstone but as those blocks are lying across the surface without any discernible pattern, they may belong to another structure and form part of the fill.

Well 2 will be divided into two parts and the western side will be manually excavated to clarify the form of the structure and deposit. A mature peppercorn tree has grown directly adjacent to Well 2 on the eastern side. The plan is to manually excavate the western half of the well away from the tree to (a) avoid damaging the tree if possible, and (b) to start the excavation by comparing each side. This will assist with exposing the well in section.

Both wells may require machine excavation if they are too deep to safely excavate close-up. The decision will be made on site by the excavation director in consultation with Roads and Maritime.

Due to the potential depths and associated safety issues, deep excavation of the wells, whether by hand or machine will be left until last.

iii Driveway

The driveway from the former alignment of The Northern Road (now Easton Road) is visible in the paddock. It starts at the gate on Eaton Road and travel in a north-easterly direction along the property

boundary for approximately 100 m (339 feet) where it turns north to the two timber gate posts. After the gate posts, the alignment is not clear.

Excavation of the driveway will occur towards the end of the excavation program to allow easy access into the site and to schedule it in with the expected timing for the excavator (which will be brought onto site during the second half of the program).

Test trenches will be placed in two areas along the driveway alignment: the first along the main stretch of the alignment; and the second will include the area of the gate posts to ascertain if evidence exists for the continuation of the drive. It is anticipated that the drive will be lined with bedding material such as a road base or the alignment will be more compact than the surrounding deposit. This may be all that is found.

The method will be:

- 1. Using a machine with a smooth-edged mud bucket, excavate a trench across the alignment from east to west to obtain a section of the driveway.
- 2. Manually excavate a 1 m to 2 m wide trench across the driveway from the section, following the contour of the land.
- 3. Record the results.

6.3.7 Machine excavation

The excavation director will determine when excavation will be assisted by machine and will make this decision based on the outcomes of hand clearing of site. There is scope to monitor the removal of grass and topsoil by excavator in areas away from recorded features. The purpose of monitoring by machine would be to test the area within the estimated extent of excavation closest to Eaton Road, where a building is shown in the 1927 topographic map (Plate 4.7).

Using a smooth-edged mud bucket, the excavator will be used for removing grass and deposit in open areas away from features. The excavator will also be used to assist with sectioning of the driveway and if necessary, the wells/cisterns.

6.3.8 Artefact management

Artefacts recovered from the site will be managed by a dedicated artefact manager and in accordance with the process below

- all artefacts that are retained will be catalogued by using a system that identifies and allows easy retrieval of the item;
- the specialists' cataloguers will produce reports on the artefacts outlining issues of importance;
- important artefacts will be assessed for materials conservation treatment the subject of materials conservation which would include the gluing of pottery or the conservation of important metal or leather materials; and
- artefacts which are the subject of materials conservation may be used in artefact displays in interpretation of the stations.

The excavation report will contain an analysis of artefacts and their deposits and contexts; the analysis will be illustrated using tables in the final report.

Artefacts will be categorised into three groups – special finds, reference collection and discard collection. This latter category will be used for those materials whose archaeological research potential has been realised and retention is no longer required. The final repository for special finds and reference collection will be determined in consultation with Roads and Maritime and may include donation to a local museum.

6.4 Public access

OEH will be invited to attend the site once the excavation has started, when features have been cleaned up and deposits are starting to be collected. There may be an opportunity for a public open day to showcase the archaeological site and the progress of the excavation.

6.5 Field program management

The field program will employ at least four experienced trench supervisors who will be responsible for a small team of archaeologists with varying levels of site expertise. An artefact manager will also be on site for at least four days per week and will be responsible for the collection as it is removed.

6.6 Excavation report

A detailed excavation report will be produced describing the methods and results of the archaeological program. The report will include the artefact analysis and response to research questions and a Harris matrix to illustrate the relationship of the contexts to one another.

The excavation report will be prepared as a separate stage to the field program. Where any Aboriginal artefacts are encountered these will be described in the Aboriginal archaeological investigation report and referenced in the historical archaeology excavation report.

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