



Australian Government

BUILDING OUR FUTURE

The Northern Road Upgrade – Mersey Road, Bringelly to Glenmore Parkway, Glenmore Park

Submissions and Preferred Infrastructure Report Volume 2: Appendices

Roads and Maritime Services | December, 2017



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Appendix D

Technical Memorandum: Non-Aboriginal heritage

Date 26 October 2017

From Jennifer Chandler

Subject **TECHNICAL MEMO – Non-Aboriginal Heritage**

1. Project description

Roads and Maritime Services (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
- 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 and preferred infrastructure report for the project.

2. Purpose and background

The Environmental Impact Statement (EIS) for the project was publicly displayed for information and comment between 21 June and 2 August 2017. The EIS considered a range of environmental, social and planning issues and nominated a number of measures to mitigate or manage these potential impacts.

In accordance with section 115Z(6) of the *Environmental Planning and Assessment Act 1979* (EP&A Act), Roads and Maritime is required to prepare a submissions and preferred infrastructure report to respond to any issues raised by stakeholders and the community received during the EIS exhibition. The Submissions and preferred infrastructure report also describes any refinements to the project's design and outlines revised environmental management measures identified in response to any changes and the submissions received. The submissions and preferred infrastructure report, including this Memorandum, will also inform the Final EIS to be prepared for the project in accordance with Part 8 of the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), to be finalised based on the submissions received during exhibition.

The purpose of this Memorandum is to address submissions in relation to non-Aboriginal heritage. This Memorandum should be read in conjunction with the EIS, Submissions and Preferred Infrastructure Report and any subsequent post-determination documentation.

The following sections are revised or supplementary sections of the non-Aboriginal heritage technical working paper displayed as part of the EIS: *The Northern Road Upgrade – Mersey Road to Glenmore Parkway. Non-Aboriginal Heritage Assessment* (Chandler and Waller 2017).

3. Additional historical background

Additional historical research and assessment has been carried out since exhibition of the EIS to provide further historical context to support significance assessment of potential heritage items assessed in the EIS. This Section also provides a response to submissions received during EIS exhibition, including a submission from the NSW Heritage Division, Office of Environment and Heritage (OEH).

This section incorporates the results of additional historical research undertaken for the project by JCIS consultants (JCIS), engaged by Jacobs for the purpose of this assessment (refer to Appendix A).

Historical background relating to heritage items

In response to the submission received from OEH, LCC and community members, the following additional background research for the project has been undertaken in relation to the following heritage items as per the EIS:

- Item 5: Weatherboard house, slab hut and old dairy, Luddenham
- Item 6: Weatherboard house and sheds, Luddenham
- Item 7: “Pleasantview” House 1, Luddenham
- Item 8: ‘Luddenham Village’ area
- Item 9: Miss Lawson’s Guesthouse
- Item 10: Miss Lawson’s Inn.

The following information is extracted from JCIS (2017), commencing with a discussion of the Blaxlands, the first European grantees of the land on which these sites are located. Updated histories and significance assessments relating to individual items can be found in Section 4 of this report.

John Blaxland

The first of the new type of free settlers were the Blaxland brothers – John and Gregory. 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 p490)

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 Blaxlands arrived with more or less the required capital but also with a sense of entitlement and querulous natures.

Gregory Blaxland arrived in Sydney on the *William Pitt* on 14 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.

John Blaxland arrived on 4 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. For a while Bligh socialised with Blaxland but Blaxland's attitudes quickly alienated him from Governor Bligh. In particular Bligh objected to 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 stressed his compliance with his instructions regarding the Blaxlands 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 1966).

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 Blaxlands particularly when it came to determining whether the Blaxlands had 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)

The Luddenham Estate

Blaxland clearly had some substantial land grants prior to 1812 but it seems clear that these were not properly surveyed – this was a function of the poor quality of the Surveyor Generals Department rather than any slight to Blaxland. On 30 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, 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 1 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 Cobbitty, 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 30 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 28 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)

Clearly the second large farm is most likely to be the Luddenham Estate due to its proximity to Wentworth's farm. It may seem odd that farms were occupied without formal grants. Apart from Blaxland, D'arcy Wentworth for example did not receive a formal grant until 1818.

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 map shown in Figure 3-1 is by far the best of the early roll plans in that it has survived more or less intact and is quite legible and it shows the sheer size of John Blaxland's grant and as well the grant to Darcy Wentworth immediately to the south of the Luddenham Estate. On the northern boundary of the Luddenham Estate was a 600 acre grant to John Blaxland Jnr which dates to 31 August 1819.

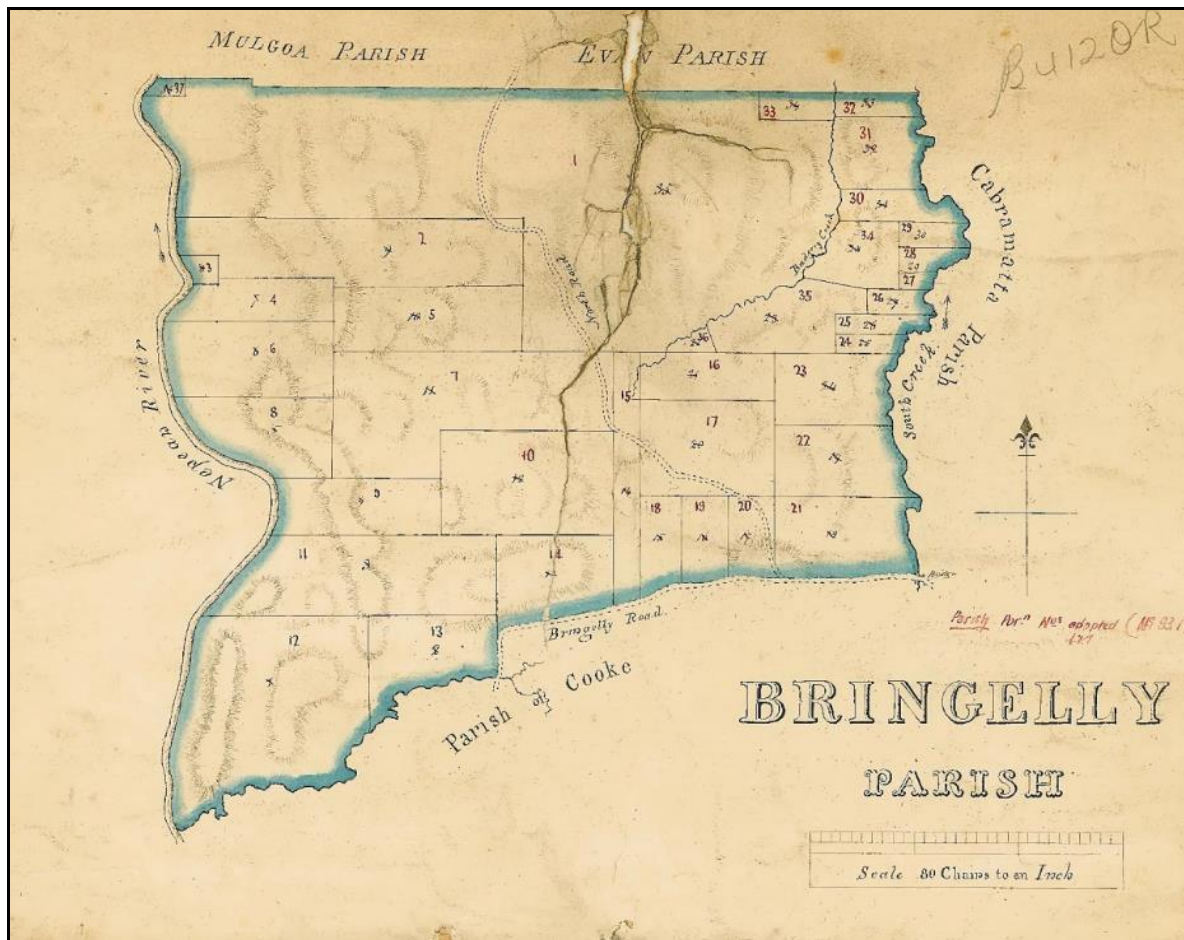


Figure 3-1: Parish of Bringelly 9 (c.1820) Plan B. 214or.

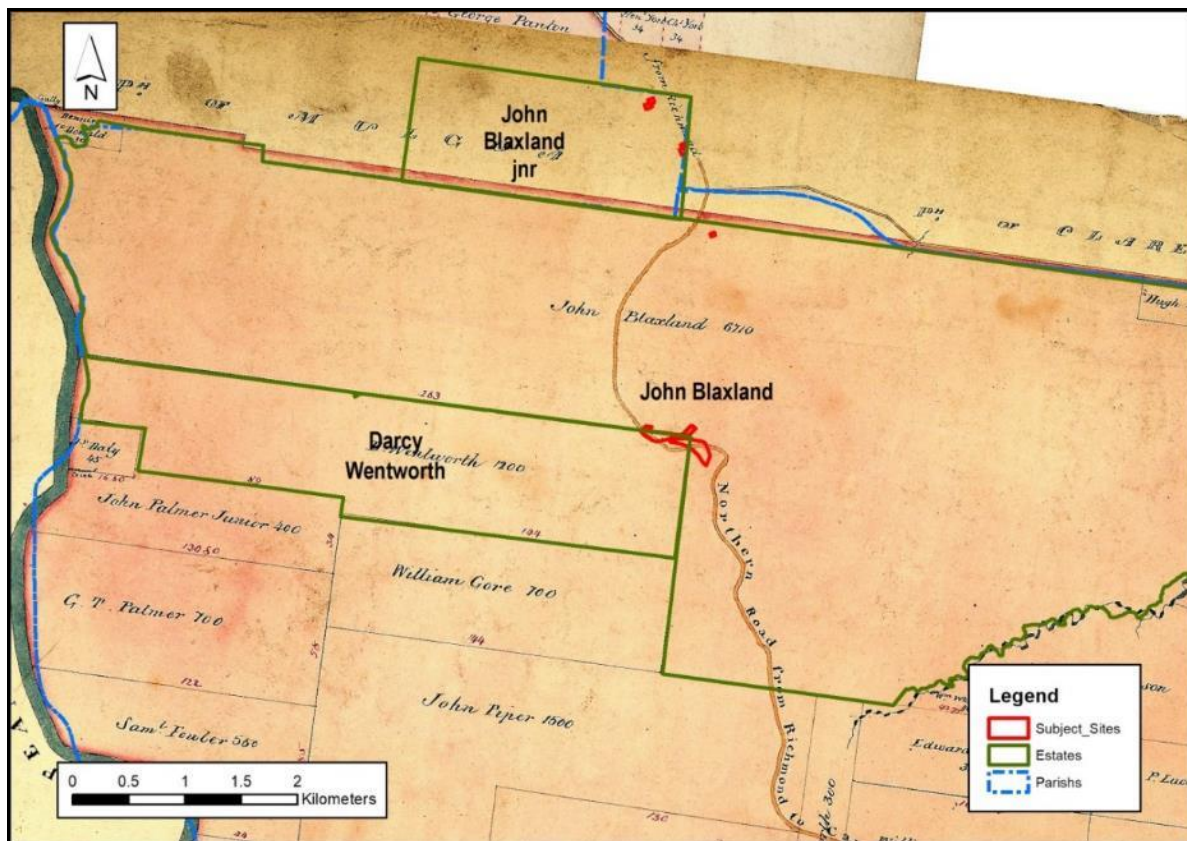


Figure 3-2: Location of the three Estates discussed in this report on an early plan of the Parishes of Bringelly and Mulgoa.

Except for a small section of land – part of Wentworth's Estate - all the land containing the properties which are part of this report was owned by the Blaxland family (Figure 3-2).

It seems from the research of O'Sullivan (1977) that John Blaxland was focusing the development of his estate on the banks of the Nepean River at what is now Wallacia. Blaxland had previously developed 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: 4). These were located on the Nepean River near the Warragamba River junction so that Blaxland could use water power.

Sullivan reproduced a 1840s inventory of Blaxland's assets (sourced from the Blaxland papers in the State Library of NSW). The inventory lists the buildings at Wallacia but also the remaining land at Luddenham as grazing land (O'Sullivan 1977: 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 any of the buildings that are part of this study date from the early part of Blaxland's ownership. This pattern is also shown in the map in Figure 3-3 which although it is general, shows the buildings being located at Wallacia.

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 had expanded rapidly. Thus all pastoralists were under pressure, and as well the banks that provided finance were also stressed. 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), John Blaxland's oldest son, died on 29 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; presumably they defaulted on the mortgage allowing the Australian Trust Company to sell the Estate to Nicholson.

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 charting plan of the Estate – Roll Plan 4, which covers the Eastern part of the Estate (Figure 3-4). 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 LAWSON'S, INN and STORE.

("Advertising" *The Sydney Morning Herald*, 8 September 1859: 7)

It appears from a close study of the plan (Figure 3-4) that the Village of Luddenham – a private village, was mostly a few scattered buildings along the road except for the Chapel, School and Lawson's Store and Inn.



Figure 3-3: Parish of Bringelly showing the location of Blaxland's establishment at Wallacia (Parish of Bringelly, County of Cumberland. s.n, [s.l, 1850)

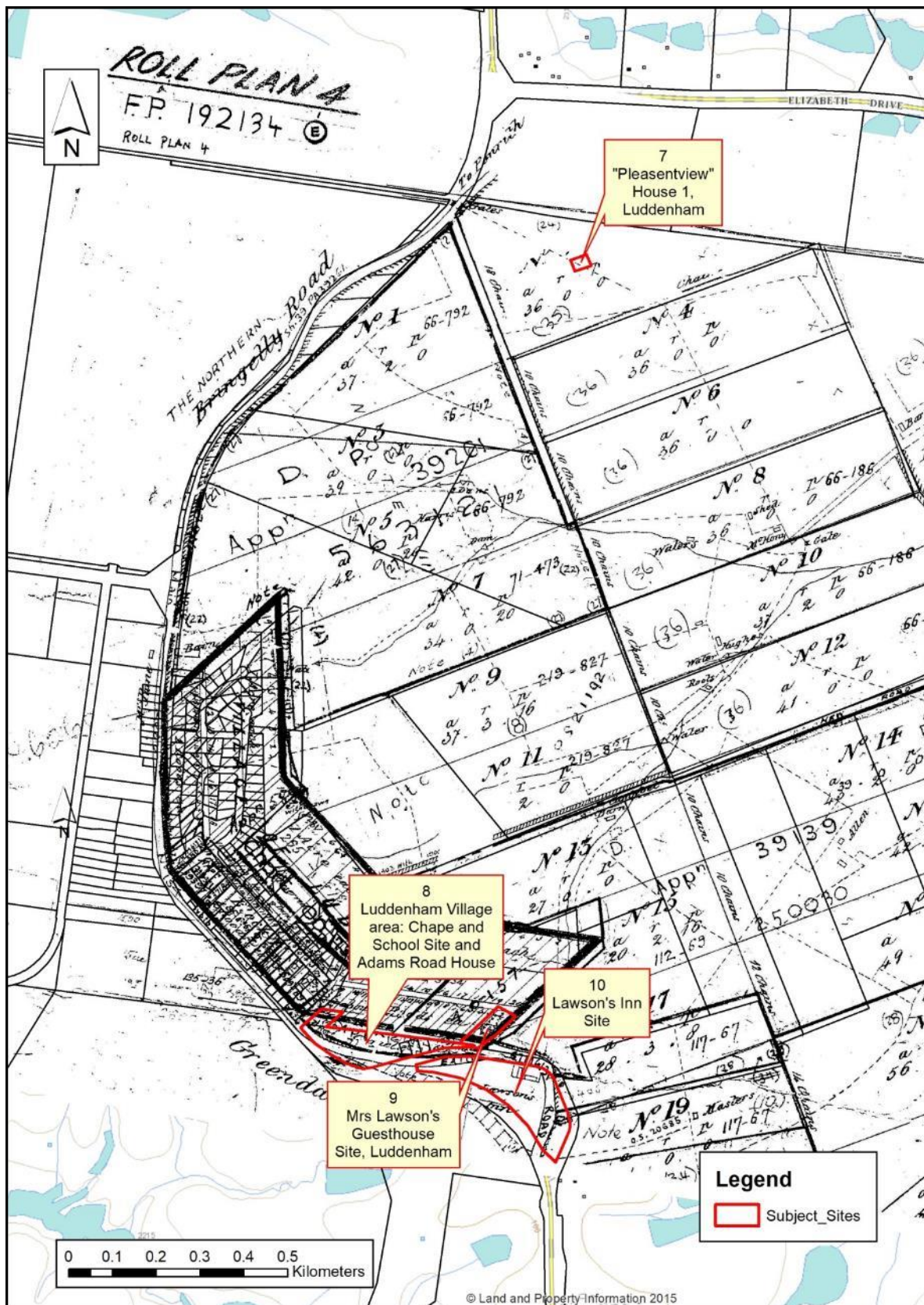


Figure 3-4: Detail from Roll Plan 4 showing the location of the study area

Details of the land subject to this study in 1859 are outlined in **Table 3.1** based on Roll Plan 4 and the Advertisement in the Sydney Morning Herald (8 September 1859).

Table 3.1 : Details of heritage items located in the Luddenham Estate area

Heritage Item No.	Area	Description (in 1859)
Item 7: Pleasantview	Lot 2	Cleared with some fences but no house is shown. It was described as 'clear and partly cultivated'.
Item 8: Luddenham Village	This land was not for sale as it was part of the Wentworth Estate	Chapel and School but these are located away from the land that is now Lot 21 DP614481. If there was more development it is likely it would have been shown to encourage buyers.
Item 9: Miss Lawson's Guesthouse site	Lot 2 Block 1, Luddenham Village	The land is vacant
Item 10: Lawson's Inn site	Not included	Lawson's Inn and Store is identified as a local landmark and noted on the plan

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.

The break-up of Blaxland's holdings by 1859 necessitates that the history of each lot to be researched independently, as completed for the purpose of this assessment.

The updated background history and significance assessments for each of these items (Item 5, Item 6, Item 7, Item 8, Item 9 and Item 10) is provided in Section 4 of this report, based on the additional historical context provided in this section.

Figure 3-4, Figure 3-5, Figure 3-6 and Figure 3-7 provide the historical mapping for each of these sites.

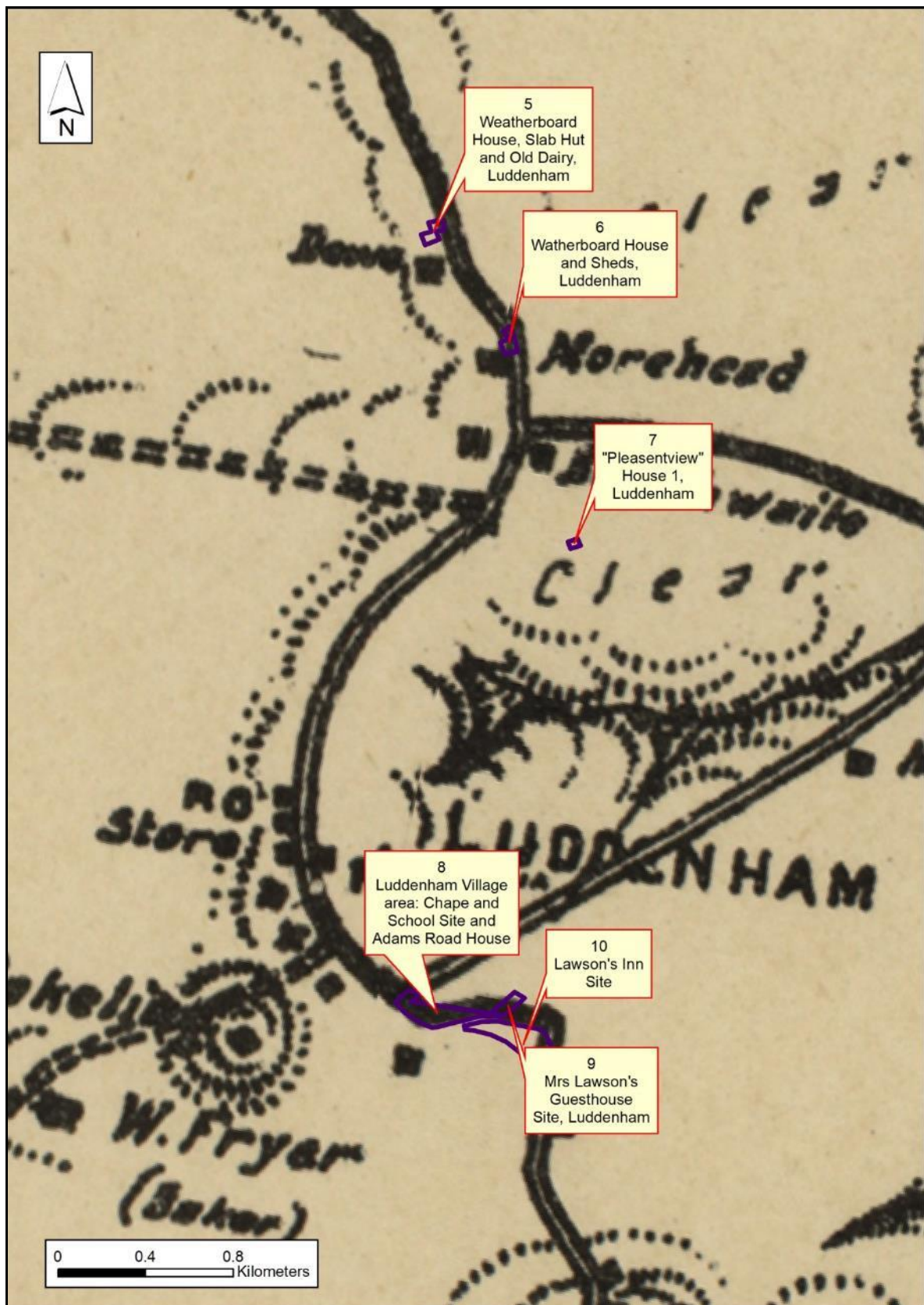


Figure 3-5: Detail from map of the manoeuvre area Liverpool

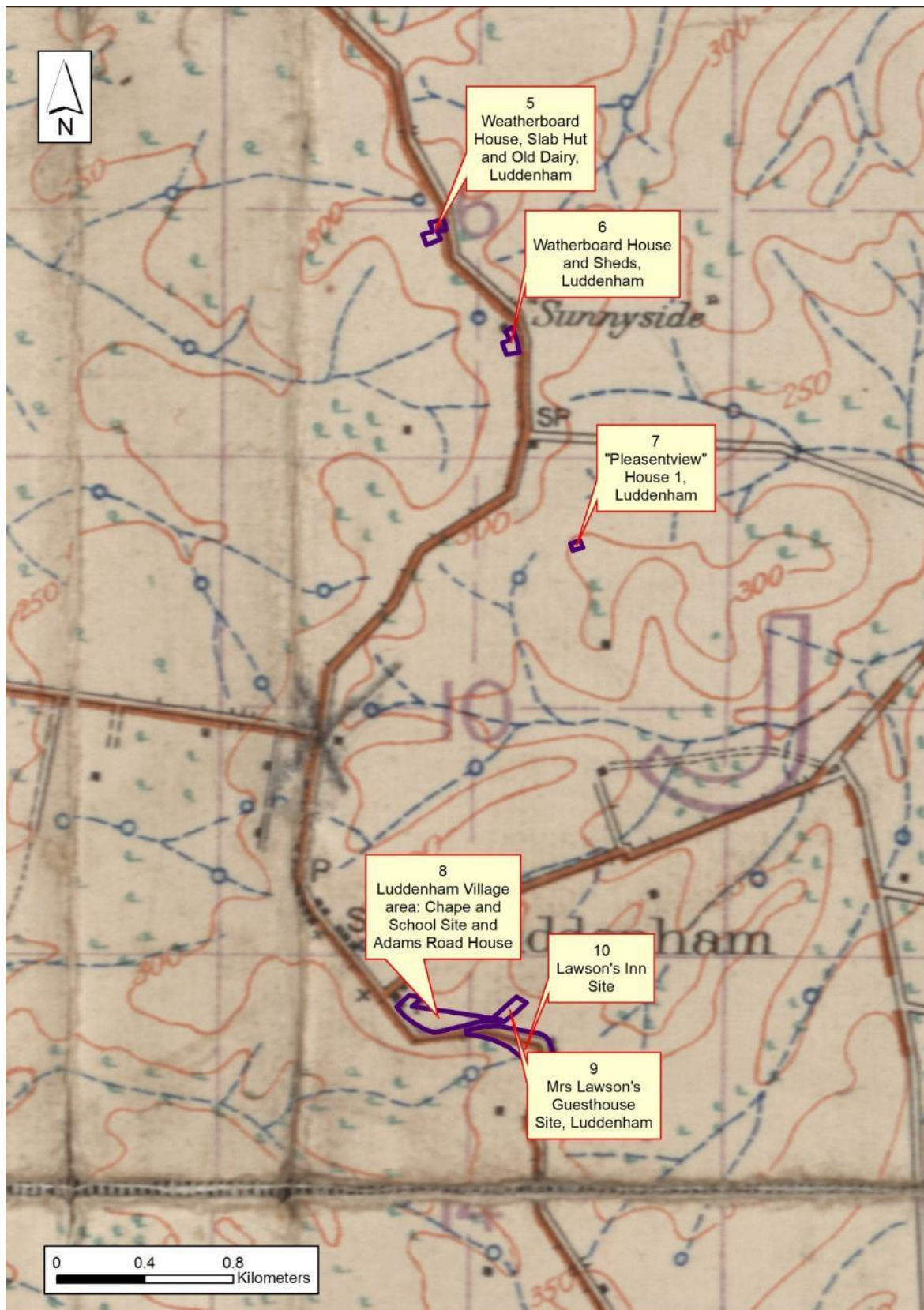


Figure 3-6: Detail from the Liverpool 1:63360 topographic map (1927). Please note base map is based on hand drawn historical maps which may not align with current curtilages.

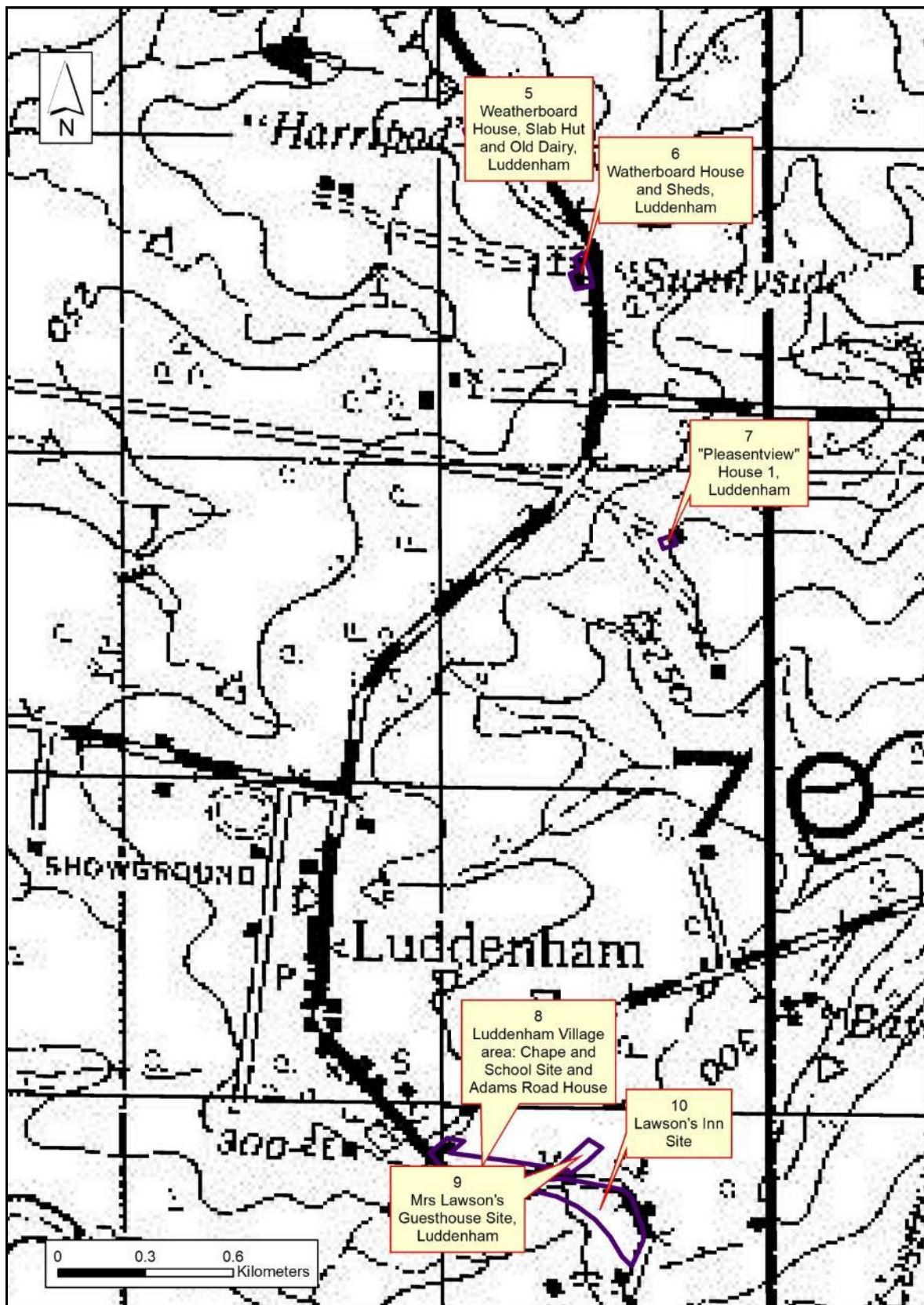


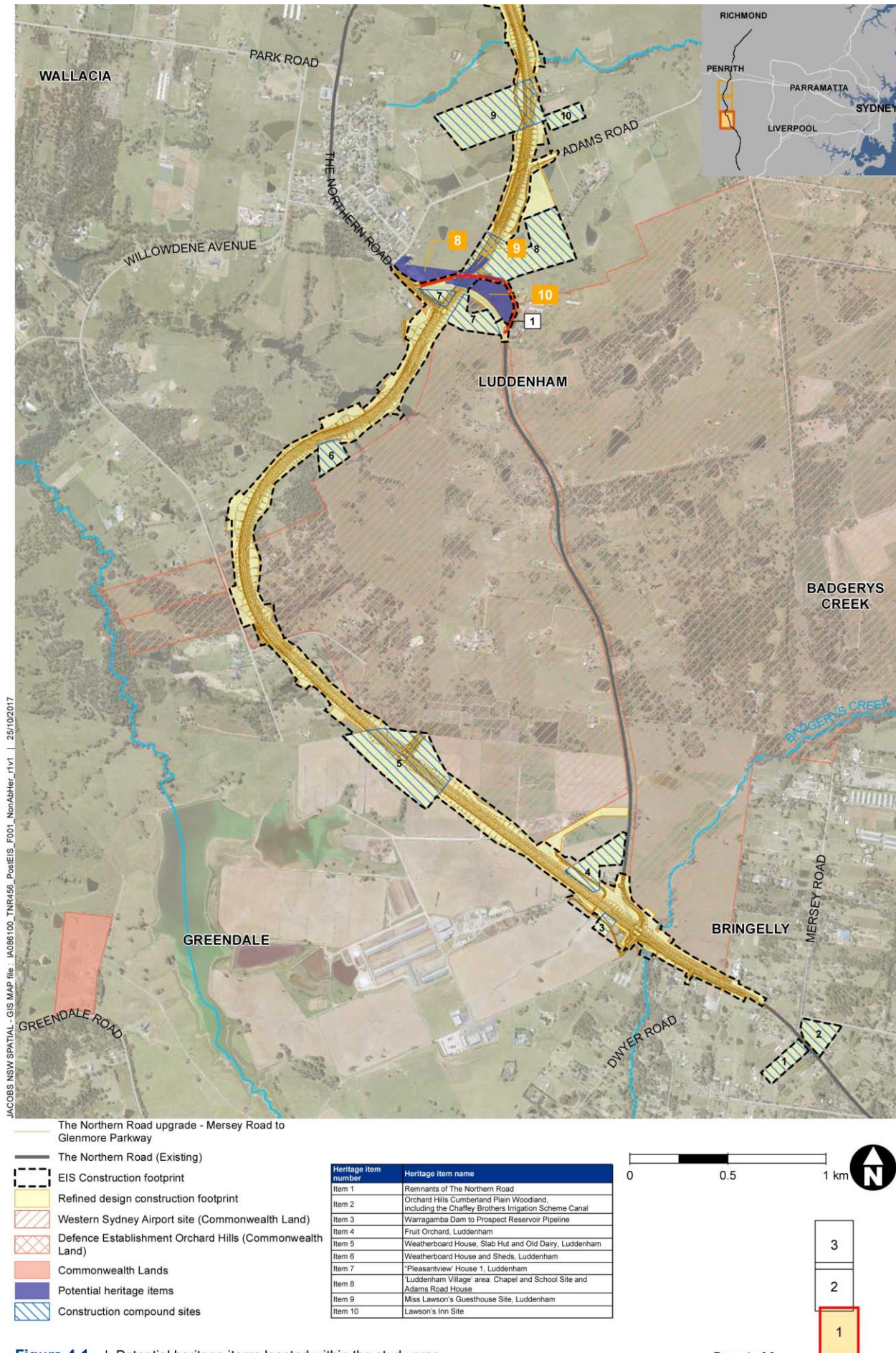
Figure 3-7: Detail of the Liverpool 1:63360 map (1955)

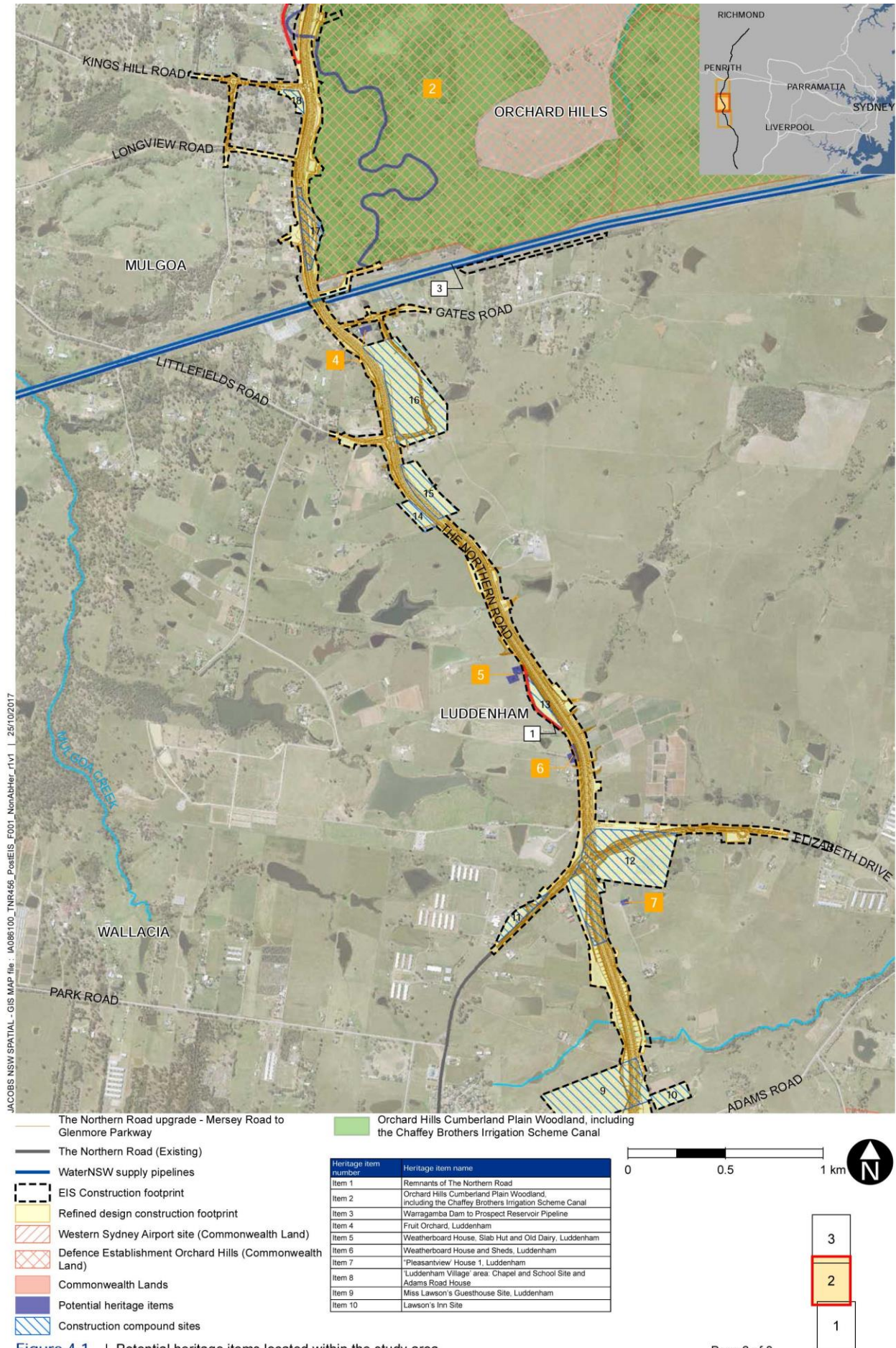
4. Updated histories and significance assessments

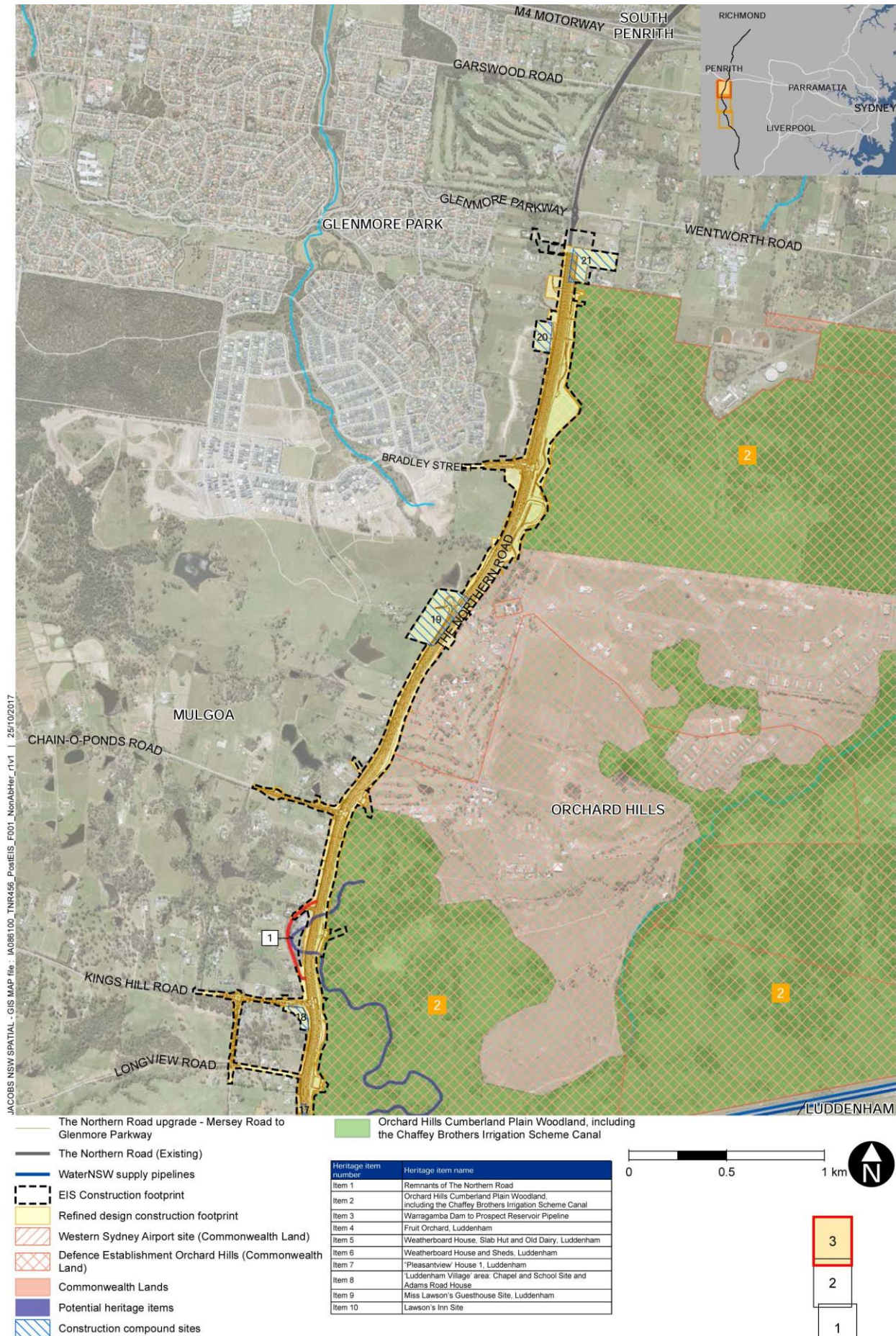
The following assessment of individual heritage items replaces those presented in Section 5 of the non-Aboriginal heritage technical working paper (Chandler and Waller 2017) and associated assessment as part of the EIS.

This section also responds to a number of submissions received during the EIS exhibition period by OEH, LCC and members of the community with local knowledge of the sites.

The updated histories and significance assessments of individual heritage items are provided directly below in this section. The potential heritage items considered for this significance assessment are mapped in Figure 4.1.







Item 3: Warragamba Dam to Prospect Reservoir pipeline

Description and history

The Warragamba Dam to Prospect Reservoir pipeline currently bisects the construction footprint immediately south of the Defence Establishment Orchard Hills (DEOH) (Figure 4.2, Figure 4.3) on Lot A DP341629 and Lot A DP341893. It was surveyed on 23 February 2016 (Survey Area No. 3S-5). No areas of archaeological potential were identified during the field survey of this heritage item. The pipeline and associated items are located above the ground surface and clearly visible. There is unlikely to be any associated archaeological deposits relating to the pipeline. The large steel pipeline is on an east/west alignment and located underground at The Northern Road. It emerges about 100 m from The Northern Road on either side.

A second survey was undertaken for additional study areas on 20 September 2016 (Survey Area No. 4-26 and 4-27) and two concrete culverts relating to the pipeline were recorded within the study area. Four cement building foundations were also recorded 5-10 m to the west of the study area. The concrete culverts were described as follows:

Survey Area No. 4-26: a concrete culvert covers a drainage channel. The culvert appears to have been built to allow access to four concrete building foundations (located approximately 14 m west of the project). The nearby building foundations are reported to have been a construction depot for the pipeline construction upgrade in the 1950s (pers. comm., Water NSW staff, 20 September 2016). The culvert was therefore likely to have been constructed in the 1950s (Figure 4.4)

Survey Area No. 4-27: a concrete block culvert is likely to be associated with the 1940s construction of the pipeline due to its location adjacent to the 1940s constructed pipeline (Figure 4.5).

The Warragamba Dam was constructed to supply water to Sydney. The dam was completed in 1960 and supplies water to the Prospect Reservoir via large-diameter steel pipelines between the two locations. The pipeline was originally laid in 1940 as part of an emergency scheme, with an upgrade of the pipeline undertaken in the 1950s. The Warragamba Water Scheme was part of a large scale plan over a century to establish a water supply to Sydney (Paul Davies Pty Ltd 2007:74). The Penrith Heritage Study (Paul Davies Pty Ltd 2007:206) noted that the pipeline demonstrates steel fabricating technology of the day, but concluded that the pipeline had no particular significance to the history of Penrith.

Construction of the pipeline began in 1940 and involved a substantial number of workers, not all of whom were Australian. The town of Warragamba, around nine km southwest of the study area, originated as a construction town to house around 3,500 people at its peak. Around 1,800 of the workers were post World War II immigrants with at least 25 nationalities (Sydney Catchment Authority nd). Strikes were held by workers during the construction and there were government inquiries into the use of foreign workers. As a result of World War II, large numbers of Chinese immigrants entered Australia due to Japan's involvement with China and in the Pacific. Some of these Chinese men were ship crew members who refused to go back to Japanese-held areas on their ships (Williams 1999:7). After the bombing of Pearl Harbour there were hundreds of Chinese seamen stranded at Australian ports. In 1942 the Chinese Seamen's Union was formed by the Chinese Youth League. The Union was associated with the Seamen's Union of Australia (Ward 2015).

It was reported that the Federal Government had made an agreement with the Chinese Government to find work for the stranded Chinese seamen. The work was to be either on ships or land, was subject to conditions determined by the Minister for Shipping (Mr Beasley) and would be temporary, with the men being repatriated afterwards. It was an offence for either employers or Chinese workers to engage in employment outside of these conditions (*The Advertiser*, 18 December 1943).

The *Evening Advocate* (5 May 1942) reported that a Chinese labour corps was recruited by the Sydney Metropolitan Water Board to begin work on the Warragamba Dam to Prospect Reservoir pipeline. Workers were to be paid Australian award rates and live in a community camp. The use of

Chinese workers by the Sydney Metropolitan Water Board was to be investigated by the Commonwealth Department of Labour and National Services in Canberra. If the investigation proved that the Water Board were using Chinese workers, work on the pipelines would be suspended pending a full inquiry by the Commonwealth Government. The man responsible for the investigation was Mr Ward, the Minister for Labour.

Some politicians expressed their concern at how the Government inquiry might be seen by 'our Chinese Allies' with Senator Poll (United Australia Party, Queensland) asking the Government to 'consider Mr Ward's impulsive action' in the Senate on 2 May 1942. A meeting was held between Mr M L Tuan, staff at the Chinese Legation, and Mr Ward. The meeting was reported as being 'most friendly' (*The West Australian*, 2 May 1942).

There were many delays and stoppages during the construction of the pipeline. On 3 June 1943 the *Northern Star* reported that 180 Chinese workers from the Warragamba Dam to Prospect Reservoir pipeline had been taken off the job by the Manpower Department as they were required for 'urgent war work'. The Chinese workers therefore only worked on the pipeline for a year. The Water Board experts believed there may be a water shortage in Sydney if the second pipeline was not completed by 1945 (*Sydney Morning Herald (SMH)*, 19 August 1944). Steel for the pipeline construction had been supplied to contractors but that they could not fabricate the pipes until labour was made available. The workers had been transferred to work on another project and work on the pipeline was suspended. Workmen on the pipeline had been on strike for almost a week when work resumed. A conference between the disputes committee of the Trades and Labour Council and engineering officers of the Water Board resulted in 450 men returning to work (SMH, 2 September 1947).

The Chinese workers on the Warragamba Dam to Prospect Reservoir pipeline included carpenters, fitters and stewards (*Newcastle Morning Herald and Miners' Advocate (NMHMA)*, 5 May 1942). The 200 Chinese workers were housed in a camp on Mulgoa Road (SMH, 5 May 1942). The Chinese labourers would camp separately to the other men 'because of special feeding conditions' (*Daily Advertiser*, 30 April 1942). They were also members of the Water Board Union and were told they would receive full pay rates (*Queensland Times*, 4 May 1942). Pipeline workers reportedly lived in open tents, with both theft and health (including pneumonia) being a problem (*Nepean Times (NT)*, 7 July 1949, 29 July 1943). The death of a pipeline labourer was also reported. The man, aged 40, was found deceased 'in his tent on the Warragamba Dam to prospect Reservoir pipeline site, six miles from Penrith'. The man had a fractured skull and was known to police from several violent crimes (NMHMA, 11 May 1948). An advertisement for labourers in the SMH (1 December 1945) stated that 'workers must have their own blankets and prepare their own meals. Camping facilities are provided, an adequate camping allowance is paid and transport to and from Rooty Hill railway station provided on Monday morning and Friday night'.

Workers stayed in tents in camps close to the pipeline with two being near the current construction footprint. No. 6 Camp was located on Luddenham Road, about three miles from Luddenham. There was a private pipeline road that ran from the camp to Mulgoa (NT, 22 October 1942). No. 5 Camp was located on Bringelly Road (NT, 4 November 1948).

Significance assessment

The Warragamba Supply Scheme is registered on the s. 170 NSW State agency heritage register (no. 4580161). The listing includes the Warragamba Dam, associated infrastructure and pipelines. The scheme is possibly one of the largest of any type of dam in the world constructed specifically for an urban water supply. The significance assessment in the listing relates to the entire scheme, focusing on the dam (NSW Office of Environment and Heritage 2009). The pipeline in the current study area is included in the overall scheme but as the existing significance assessment relates mainly to the dam, the significance assessment undertaken for this assessment will focus on the pipeline. Table 4.1 provides an assessment of the pipelines site against the relevant NSW Heritage Council criteria.

Table 4.1 : Assessment of significance for item 3: Warragamba Dam to Prospect Reservoir pipeline

NSW Criterion	Assessment
A – Important in the pattern of NSW's history	<p>The pipeline (as associated with the overall Warragamba Supply Scheme) has played a fundamental role in providing water to metropolitan Sydney. The pipeline (as part of the overall Warragamba Supply Scheme) was constructed during a time which was affected by periods of government financial stress during World War II. The pipeline (as part of the overall Warragamba Supply Scheme) was one of the major public works projects undertaken in NSW.</p> <p>The pipeline is associated with a significant historical trend – use of foreign labour while Australians were absent due to World War II. It also demonstrates the government response to Chinese men abandoning their ships due to Japanese occupation of China. Around 200 Chinese worked on the pipeline and lived in a camp for at least a year.</p>
B – Strong or special associations	Does not meet this criterion. The pipeline is not associated with any particular individual or group of particular importance to NSW's history.
C – Demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement	Does not meet this criterion. The pipeline is not a major work by an important designer or artist and does not demonstrate any particular degree of technical achievement as it used standard technology of the period.
D – Strong or special associations with a particular community or cultural group	<p>The pipeline (as part of the overall Warragamba Supply Scheme) may be of significance to members of the community involved with its construction and the development of nearby communities. The pipeline may be important to Chinese people with links to World War II dislocation. Detailed oral research and community consultation would be required to verify if the pipeline meets this criterion.</p>
E – Potential to yield information	<p>The pipeline demonstrates steel fabrication technology during the 1940s-1950s. While the two concrete culverts are associated with the construction of the pipeline over its history, they do not contribute to the historical significance of the site, nor demonstrate the technological significance of the pipeline.</p> <p>As the pipeline and associated items are intact structures situated above the ground surface and clearly visible there is unlikely to be any associated archaeological deposits relating to the pipeline.</p>

NSW Criterion	Assessment
F – Uncommon or rare	Does not meet this criterion. The pipeline does not possess uncommon, rare or endangered aspects of NSW's cultural or natural history.
G – Principal characteristics of a class	Does not meet this criterion. While the pipeline has the key characteristics of a utilities pipeline in terms of its structure, it does not demonstrate particularly important construction techniques, changing use of technology, or use of materials.

Statement of significance

The pipeline (as associated with the overall Warragamba Supply Scheme) has played a fundamental role in providing water to metropolitan Sydney. The pipeline is associated with an important historical trend relating to the use of foreign labour in Australia during World War II. The pipeline also has the potential to yield information about steel pipe construction techniques employed at the time. The item is therefore considered to have sufficient significance to fulfil the criteria for local listing. A Statement of Heritage Impact for this item is provided in Section 6 of this memorandum.



Figure 4.2 : Pipeline, facing east. Photo taken from gate on The Northern Road by Jennifer Chandler on 23 February 2016.



Figure 4.3 : Pipeline, facing west. Photo taken from gate on The Northern Road by Jennifer Chandler on 23 February, 2016.



Figure 4.4 : The concrete culvert in Survey Area No. 4-26.
Photo taken by Andrew Roberts on 20/09/16.



Figure 4.5 : The concrete culvert in Survey Area No. 4-27.
Photo taken by Andrew Roberts on 20/09/16.

Item 5: Weatherboard House, Slab Hut and Old Dairy, Luddenham

Description and history

The property Lot 502 DP580982 at 2787 The Northern Road, Luddenham was surveyed (Survey Area No. 4-2) on 24 February 2016.

This site comprised a late 19th to early 20th century weatherboard house with a wide, open verandah on three sides (Figure 4.6, Figure 4.7). There was a more recent extension at the rear of house, two brick chimneys on opposite sides of the house. The original verandah flooring had been replaced. The house has a gabled corrugated iron roof. Several trees in the garden are almost 50 years old. There was a wooden slab hut located at the back of the property (Figure 4., Figure 4., Figure 4.10). A concrete slab and a single wooden post remains from what the property owner identified as the coolroom/dairy (Figure 4.11). There was no evidence of ruins, bottle dumps, grass-covered mounds that would indicate any areas of archaeological potential. The potential for archaeological deposits is considered to be unlikely.

This property was originally part of a land grant to John Blaxland called Stockwood Farm. The land was 600 acres in size and granted on 31 August 1819.

The following section is extracted from JCIS (2017).

This land was part of John M Blaxland Jnr's 600 acres. After John M Blaxland Jnr died, on 29 May 1840, his executer appears to have been George Blaxland and they conveyed the land to John Blaxland and John Dobie on 18 June 1845. The transactions seem a little confused no doubt because of John Blaxland's death in August 1845, however it seems that the land remained in the Blaxland family until 1855 (PA24415).

The next series of transactions are difficult to understand as the land is not clearly described, but the land goes from the Blaxland family to Andrew McGaritty in 1856 and then to the McKnight family in 1868. After the death of Mrs Abigail McKnight on 1 October 1884 (she was described as a very old and respected resident by the Nepean Times 4 October 1884, p. 2) the land was sold to John Colwell in April 1885 (PA24415).

Colwell built up a successful business but moved out of the district for several years returning in c1902 at which point he seems to have sold his properties (PA24415).

This lot was covered by the map of the manoeuvre area Liverpool N.S.W. published in 1906 (Byrnes 1906). A building is shown in the same area as the study area. The owner/tenant's name is hard to read but may be Dove.

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.

It is not clear how he obtained title but a Mr William Wardell owned the land in the late 1930s. Wardell mortgaged the land to a Nellie Mary Hall, and in February 1941 she foreclosed on the property (Conveyance no 114 Book 1887). Prior to this in 1939 Wardell had a clearance sale:

HAVING received instructions from Mr Wardell, of "Harripool," BrIngelly Road, Luddenham, next door Mr Jim Roots, on SATURDAY, NOVEMBER 11, at 2 p.m., the following will be offered at Auction:

Furniture, Horses, etc.-2 Pony Mares, 4 and 6 years old; 1 Bay Gelding, 1> years (by Herico from Lady Lsa Curn); Three-piece Lounge Suite (good order), Double Beds,

Dressing Tables, Wardrobes, Chest Drawers, Overmantle, Sideboard, Wireless Set (world reception, excellent condition), Sofa, Kitchen Chairs and Table, Dining Room Chairs.

E. F. RULE, Auctioneer

("Advertising" Nepean Times (Penrith, NSW: 1882 - 1962) 2 November 1939: 5.)

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. The property name is identified as "Harripool".

This land was owned by a Reginald W Hamilton (Conveyance no 918 Book 2231). Other than the fact that his family came from nearby Wallacia little else has been enabled to be unearthed.

In 1976 the then owners Donald McKellar, David Nagle Asimus, Denis Mansour and Douglas MacLaren applied to convert the title to Torrens by way of a Part IVA action under the *Real Property Act*. Their application contains no detail of prior land ownership but notes that the property was called Hamilton's Cottage (IVA 18480).

The land was subdivided and the larger portion was sold to Chatris Pty Ltd in 1977.

The following information was obtained from the current property owner (Malcolm Turner, pers. comm, 24 February 2016). The original property owners were the Bouffier family.¹ The weatherboard house was constructed in the late 19th century. The property was then owned by the Orton family. There was another building to the north-west of the existing house which has been demolished. Either this building or the slab hut out the back was used by the Orton family for a kitchen. The property with the weatherboard house was bought from a consortium who subdivided the block. The farm used to operate as a dairy which included a cool house and a well. A date palm and an elm tree planted out the front of the house were probably original. The Orton family had three properties in the area and each one had palm and elm trees. There used to be music lessons in the front room of the house and people used to travel from Penrith by horse and cart. The driveway to the house was an older section of The Northern Road (Bringelly Road) (Malcolm Turner, pers comm. 24 February 2016).

It is unclear exactly why the oral history differs from that of the documentary evidence for this land, but perhaps the Bouffier and Orton families were occupiers or lessees of the land that was owned by those named in the documentary records.

Curtilage information

The curtilage of the Weatherboard House, Shed and Old Dairy includes the house, associated buildings and area of old dairy and is shown on Figure 4.1.

Significance assessment

No previous significance assessments have been undertaken for this item. Table 4.2 provides an assessment of the site against the relevant NSW Heritage Council criteria.

¹ The Bouffier family owned property to the east and west of The Northern Road from around 1900 to 1950 and were cattle dealers who supplied the market in Sydney (Paul Davies Pty Ltd 2007: 155).

Table 4.2 : Assessment of significance for item 5: Weatherboard House, Slab Hut and Old Dairy, Luddenham

NSW Criterion	Assessment
A – Important in the pattern of NSW's history	Does not meet this criterion. The property was part of Blaxland's original land holding, however the buildings and structures remaining do not appear to be related to this period, but instead are likely related to the 20 th century use of the land. While the property is associated with the important local industry of dairying, there is little physical evidence to demonstrate this connection.
B – Strong or special associations	Does not meet this criterion. The property was part of Blaxland's original land holding, and while he was an important historical figure, the buildings and structures remaining do not appear to be related to this period, but instead are likely related to the 20 th century use of the land. Subsequently, there are various owners of the property but overall the property does not demonstrate an association with a significant event, person or groups of people.
C – Demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement	Does not meet this criterion. The property demonstrates little aesthetic values and does not demonstrate any particularly creative or technical achievement.
D – Strong or special associations with a particular community or cultural group	Does not meet this criterion. The property has no strong or special associations with a particular community or cultural group.
E – Potential to yield information	Does not meet this criterion. The property has no archaeological or research potential.
F – Uncommon or rare	Does not meet this criterion. The property is not rare in this region. There are many properties in this region of a similar age. The property does not possess uncommon, rare or endangered aspects of NSW's cultural history.
G – Principal characteristics of a class	Does not meet this criterion. The property is not particularly representative of a dairying operation as much of the original is not present.

Statement of significance

While item 5 is associated with the important historical industry of dairying and early settlement of the area, the remains of the dairy (if any) and existing house have the potential to provide very limited information about the industry. The site has been associated with various families over the years including the Blaxland, McGaritty, McKnight, Colwell, Dove, Wardell families, with the location of the house documented since 1906. However, the item is considered to have insufficient significance to fulfil the criteria for State or local listing. As the item is not of heritage significance, there is no further consideration of impacts for this item.



Figure 4.6 : House, facing east. Photo taken by Jennifer Chandler on 24 February 2016.



Figure 4.7 : Front verandah of house, facing north. Photo taken by Jennifer Chandler on 24 February 2016.



Figure 4.8 : Slab hut, facing east. Photo taken by Jennifer Chandler on 24 February 2016.



Figure 4.9 : View inside slab hut, facing south-west. Photo taken by Jennifer Chandler on 24 February 2016.



Figure 4.10 : Window detail, slab hut, facing north-east. Photo taken by Jennifer Chandler on 24 February 2016.



Figure 4.11 : Location of previous dairy, facing south-west. Photo taken by Jennifer Chandler on 24 February, 2016.

Item 6: Weatherboard House and Sheds, Luddenham

Description and history

Item 6 is located on Lot A DP160890 at 2825 The Northern Road Luddenham and was surveyed on 24 February 2016 (Survey Area No. 4-4). No areas of archaeological potential were identified during the field survey at this item. There was no evidence of ruins, bottle dumps, grass covered mounds that would indicate any areas of archaeological potential. The potential for archaeological deposits is considered to be unlikely.

This site comprises an old weatherboard house, sheds and stockyards described as follows:

- The weatherboard house has a hipped corrugated iron roof, with a gabled roof at a section at the back of the house which is an extension. It appears that there were two front doors in the building. It has a wide front verandah and small verandah on the back extension. A carport has been added to one side of house. There is a chimney on the back extension. The house is in a poor condition (Figure 4.13, Figure 4.14)
- Sheds – There is one large shed with a smaller one to the south, immediately adjacent. Both sheds have timber internal frames and green corrugated iron walls and gabled roof. Both roof beams and the frame are hand sawn on both buildings (Figure 4.15, Figure 4.16).
- Stockyards – A set of timber stockyards are located to the east of both sheds.

This property was originally part of a land grant to John Blaxland called Stockwood Farm. The land was 600 acres in size and granted on 31 August 1819.

The following information was replicated from JCIS (2017):

As mapped, the study area covers two lots Lot A DP160890, which covers the weatherboard house and sheds and Lot 505 DP 581138 which covers the yards.

This land was part of John M Blaxland Jnr's 600 acres. After John M Blaxland Jnr died, on 29 May 1840, his executor appears to have been George Blaxland and they conveyed the land to John Blaxland and John Dobie on 18 June 1845. The transactions seem a little confused no doubt because of John Blaxland's death in August 1845, however it seems that the land remained in the Blaxland family until 1855 (PA24415).

The next series of transactions are difficult to understand as the land is not clearly described but the land goes from the Blaxland family to Andrew McGaritty in 1856 and then to the McKnight family in 1868. After the death of Mrs Abigail McKnight on 1 October 1884 (she was described as a very old and respected resident by the Nepean Times 4 October 1884, p. 2) the land was sold to John Colwell in April 1885 (PA24415).

Colwell built up a successful business but moved out of the district for several years returning in c1902 at which point he seems to have sold his properties (PA24415).

This lot was covered by the map of the manoeuvre area Liverpool N.S.W. published in 1906 (Byrnes 1906). A building is shown in the same area as the study area. The owner/tenants name is Morehead. The Nepean Times reported a gathering at 'Sunnyside' by Mr J Morehead and his family, ("Luddenham" *Nepean Times* 4 August 1906: 4).

Morehead seems to have been a leading character in the district although little is known about him. He was appointed a magistrate ("Government Gazette Appointments and Employment" New South Wales Government Gazette, 28 September 1900: 7649). A notice in the NSW Government Gazette of 1900 shows that he was a tenant elsewhere ("NOTIFICATION OF RESUMPTION OF LANDS UNDER THE PUBLIC ROADS ACT OF 1897." 10 January 1900: 235.). In 1913 a newspaper article gives his address as Ferndale Luddenham.

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. The property is identified as "Sunnyside".

By this time the property was owned by James Roots and his family. A report of a car and cyclist, accident in the *Sun* to James Root (son) identified that his residence was "Sunnyside" (*The Sun* 16 May 1932: 7).

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. The property name is identified as "Sunnyside".

Mrs Elizabeth Roots, wife of Mr James Roots died at "Sunnyside," Luddenham, on Saturday, 28 July 1945 at the age of 58 years. She was born at Luddenham, where she lived all her life, highly esteem by all who knew her. She was the daughter of the late William and Elizabeth Bray (*Nepean Times*, Thursday 2 August 1945, page 1).

The land was still in the Roots family at least into the 1950s but as the land was still held as an Old System title until quite recently there is little detailed information as the form of conversion to Torrens title (CA 23374) does not give an extensive list of dealings.

Overall it is established that there was a building on the property from at least 1906 and possibly earlier if Colwell resided on the land.

According to local Luddenham residents, a local butcher called Jim Roots is said to have lived in the house at this site (Nancy Sales, pers comm., 6 April 2016; Malcolm Turner, pers comm., 24 February 2016). A 1929 photo (Figure 4.12) shows JW Roots' slaughterhouse in Luddenham which Nancy Sales (Leanne Sales, pers comm, 2017) stated was on the same location as the current slaughterhouse. Details of the location of the current slaughterhouse were not provided with this information and the current slaughterhouse was not viewed as part of this survey.



Figure 4.12 : photo of J W Roots slaughterhouse, Luddenham (Penrith City Council 2016).

Curtilage information

The curtilage of Weatherboard House and Sheds includes the house, sheds and stockyards as described above and is shown on Figure 4.1.

Significance assessment

No previous significance assessments have been undertaken for this item. Table 4.3 provides an assessment of the site against the relevant NSW Heritage Council criteria.

Table 4.3 : Assessment of significance for item 6: Weatherboard House and Sheds, Luddenham

NSW Criterion	Assessment
A – Important in the pattern of NSW's history	Does not meet this criterion. There is no physical evidence to demonstrate a connection with historically important activities or processes. The property was part of Blaxland's original land holding, however the buildings and structures remaining do not appear to be related to this period, but instead are likely related to the 20 th century use of the land. While the property has potentially been associated with Colwell, an apparently well-known local figure, prior to the Roots, it is not known if Colwell resided on the land.
B – Strong or special associations	Does not meet this criterion. The property was part of Blaxland's original land holding, and while he was an important historical figure, the buildings and structures remaining do not appear to be related to this period, but instead are likely related to the 20 th century use of the land. While the property is also associated with the Roots family, a well-known butchering family with ties to the local area, this association is considered insufficient to meet the criteria.
C – Demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement	Does not meet this criterion. The property is not a major work by a designer or artist, and does not display any particularly aesthetic features.
D – Strong or special associations with a particular community or cultural group	Does not meet this criterion. The property has no strong or special associations with a particular community or cultural group.
E – Potential to yield information	Does not meet this criterion. The property has no archaeological or research potential.
F – Uncommon or rare	Does not meet this criterion. The property is not rare. There are many properties in this region of a similar age. The property does not possess uncommon, rare or endangered aspects of NSW's cultural history.
G – Principal characteristics of a class	Does not meet this criterion. The property does not demonstrate any particularly important characteristics of a farm house or butchery.

Statement of significance

Item 6 was part of Blaxland's original land holding, and while he was an important historical figure, the buildings and structures remaining do not appear to be related to this period, but instead are likely related to the 20th century use of the land. The property is also associated with the Roots family, a well-known butchering family with ties to the local area through much of the 20th century. The house is in poor condition, and the sheds do not appear directly associated with the activity of butchering. Therefore the item has limited potential to provide information about the activity of butchery and supply of meat to the local population. The item is considered to have insufficient significance to fulfil the criteria for State or local listing. As the item is not of heritage significance, there is no further consideration of impacts for this item.



Figure 4.13 : House front, facing north-west. Photo taken by Jennifer Chandler on 24 February 2016.



Figure 4.14 : House back, facing north. Photo taken by Jennifer Chandler on 24 February 2016.



Figure 4.15 : Shed, facing south. Photo taken by Jennifer Chandler on 24 February 2016.



Figure 4.16 : Inside of shed, facing south-west. Photo taken by Jennifer Chandler on 24 February, 2016.

Item 7: 'Pleasantview' House 1, Luddenham**Description and history**

Item 7 is located on Lot 100 DP846962 at 2422-2430 The Northern Road, Luddenham and was surveyed on 24 February 2016 (Survey Area No. 4-7). No areas of archaeological potential were identified during the field survey at this item. There was no evidence of ruins, bottle dumps, grass covered mounds that would indicate any areas of archaeological potential. The potential for archaeological deposits is considered to be unlikely.

There are three houses present on the 'Pleasantview' property. House 1 is located within the construction footprint (Figure 4.17, Figure 4.18). House 2 is modern and located outside the footprint and House 3 is the original homestead and also located outside the footprint. This assessment only includes House 1.

House 1 is of weatherboard construction with a gabled roof. The original roof was damaged in a storm and it now has a modern roof. There is a brick chimney on the southern side of the house. There is cement sheeting, louvre windows and a small enclosed verandah on the west side of the house.

The current property owner stated that he brought the building to the property in around the 1930s-1940s and that it was originally the Llandilo Hall (Kenneth Hughes, pers. comm, 24 February 2016). Background research has determined that there was a new hall built at Llandilo around the time that the owner says he transferred the hall to the 'Pleasantview' property. The original hall was called the Llandilo School of Arts. In 1915 the hall was still uncompleted with 'bare walls' (NT, 31 July 1915). No other historical information about either 'Pleasantview' or the Llandilo Hall was able to be found during this assessment.

House 1 is in moderate condition but has been subject to modification. House 1 appears to have the style of a residence, rather than the appearance of a community hall. There is little information on the history of the Llandilo Hall, and having been relocated to its current position does not add to the building's significance.

The following information is replicated from JCIS (2017):

This land was put up for sale as Lot 2 of the Luddenham Estate in 1859. It was described as "Clear and partly cultivated" (Roll Plan 4; "Advertising" The Sydney Morning Herald, 8 September 1859: 7).

The earliest mention of "Pleasantview" found to date is from the 1891 Census (District No. 32, Sub-District Penrith, County of Cumberland) that refers to Agnes Hughes (who was Edwin Hughes' mother) as being the owner of the locality Pleasantview. The Electoral Rolls of 1903 and 1930 list members of the Hughes family simply as living in Luddenham; however, the Electoral Roll of 1932 lists Agnes Lily Louisa Hughes as living at Pleasantview, Luddenham with other family members simply being listed as living in Luddenham.

This lot was covered by the map of the manoeuvre area Liverpool N.S.W. 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.

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 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.

In 1936 Edwin Victor Hughes, Alwyn James Hughes, John Rex Hughes and Norman Henry Hughes – who are all listed as being of Luddenham and dairy farmers – purchased land from the Executors of the Estate of the Late John Ratcliffe Parnell, Snr (who had run hotels around various parts of NSW)

(No. 639, Book 1964). There does not seem to be any indication that Parnell Snr. lived on the land or used it for any other purpose other than investment. The Old Systems deeds list earlier owners of the land without any indication that the land was owned for anything other than investment.

The Messrs. Hughes were the sons of Edwin Hughes (1867-1946) who is listed as being a farmer at Luddenham from the 1913 Electoral Roll and in the Sands Directories from at least 1919. Edwin and his wife, Adeline, had the four sons (listed above) and also four daughters who, for the most part married into Luddenham families. As regards the connection between the Hughes family and “Pleasantview”, it has proved difficult to assess whether the building Item 7: Pleasantview House was the residence of the Hughes family at the time they purchased the land, or whether their residence was a different building, or whether Pleasantview was the name of the property (which seems highly likely).

The Electoral Roll of 1934 describes the address of members of the Hughes family resident in Luddenham as being either Bringelly Road, Luddenham or Pleasantview, Luddenham.

From 1939 on there are numerous mentions of various members of the extended Hughes family of Pleasantview, Luddenham from engagements to weddings and births to deaths, and including the announcement in the Nepean Times that Mrs E V Hughes of Pleasantview, Luddenham has won Fletcher’s spelling competition prize of £2/2/- (2 February 1939).

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. The property name is not identified. It seems likely that the present building was constructed between c1927 and 1955.

In 1961, Edwin Victor Hughes bought out his brothers and became the sole owner of Pleasantview before, in January 1972 conveying the property to the family company of E V Hughes & Sons.

The current title for “Pleasantview” is Lot 100 in DP846962 with the owner being listed as Kenneth John Hughes (DP 846962 was created in May 1995). The prior title to the current title had been brought about after a conversion action which recorded the conversion of this land from Old Systems to Torrens Title.

Kenneth Hughes, described as being an auto electrician of Luddenham, had purchased the land from the family company, E V Hughes & Sons Pty Limited in February 1975 (No. 689, Book 3190). Previously, Edwin Victor Hughes had been the sole owner but had conveyed the land into the family company three years earlier (January 1972) (No.11, Book 3046).

The evidence from the historical research by JCIS supports the oral information provided by Kenneth Hughes that House 1 at ‘Pleasantview’ was brought to the property around the 1930s – 1940s.

Curtilage information

The curtilage of ‘Pleasantview’ House 1 is shown on Figure 4.1.

Significance assessment

No previous significance assessments have been undertaken for this item. Table 4.4 provides an assessment of the site against the relevant NSW Heritage Council criteria.

Table 4.4 : Assessment of significance for Item 7: ‘Pleasantview’ House 1, Luddenham

NSW Criterion	Assessment
A – Important in the pattern of NSW’s history	Does not meet this criterion. While the house is likely the original Llandilo Hall, it is not in its original location and has been heavily modified. It therefore does not demonstrate any particular aspect of NSW’s history.
B – Strong or special associations	Does not meet this criterion. The property does not demonstrate an association with a significant event, person or groups of people.
C – Demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement	Does not meet this criterion. The property does not appear to have any particular aesthetic or architectural characteristics of note.
D – Strong or special associations with a particular community or cultural group	Does not meet this criterion. There is no evidence that the property has strong or special associations with a particular community or cultural group.
E – Potential to yield information	Does not meet this criterion. The property has no archaeological or research potential.
F – Uncommon or rare	Does not meet this criterion. The property is not rare in this region. The property does not possess uncommon, rare or endangered aspects of NSW’s cultural history.
G – Principal characteristics of a class	Does not meet this criterion. The property does not demonstrate any principal features of a community hall.

Statement of significance

There is little information on the history of the Llandilo Hall and its importance to the original community, and having been relocated to its current position does not add to the building’s significance. House 1 does not demonstrate any principal features of a community hall. It also does not appear to have any particular aesthetic or architectural characteristics of note. The item is therefore considered to have insufficient significance to fulfil the criteria for State or local listing. As the item is not of heritage significance, there is no further consideration of impacts for this item.



Figure 4.17 : House 1, facing north-east. Photo taken by Jennifer Chandler on 24 February 2016.



Figure 4.18 : House 1, facing east. Photo taken by Jennifer Chandler on 24 February 2016.

Item 8: ‘Luddenham Village’ area: Chapel and School Site and Adams Road House

Description and history

Item 8 includes the following lots: Lot 21 DP614481, Lots 22-25 DP700302 and Lot 1 DP7136725 located at 12-26 Eaton Road and 5 Adams Road, Luddenham. Lot 25 DP700302, is a large area including several shops to the west of four houses on Eaton Road (2130 The Northern Road). The properties inside the construction footprint and also at 5 Adams Road were surveyed on 25 and 26 February 2016 (Survey Area No. 4-12 and 4-23).

A previous archaeological assessment (Artefact Heritage 2015: 44) found that there was potential for structural remains of buildings and for burials at the broader Luddenham Village site; however, the current field survey was confined to a small section of the area thought to be the Luddenham Village area and no areas of archaeological potential were identified. There was no evidence of ruins, bottle dumps, grass covered mounds that would indicate any areas of archaeological potential. The potential for archaeological deposits is considered to be unlikely.

Only the eastern-most section of the ‘Luddenham village’ area (Lot 21 DP614481) is located within the construction footprint. The ‘Luddenham village’ area contains four modern houses, shopping centre and open space. One of the four modern houses (Figure 4.20, Figure 4.21) is the only structure located within the construction footprint. An aerial image from 1965 shows the area with no houses (Australian Museum Consulting 2014: Figure 4-32). This item was identified as a chapel and school site in the previous heritage assessment by Artefact Heritage (2015:28). The Chapel and School site was associated with Luddenham Village. The house and thick vegetation obscured the ground surface and no historical heritage items were identified within the survey area.

Lot 1 DP7136725 corresponds to the alignment and arrangement of the lots of the Luddenham Village subdivision. It contains an old house (5 Adams Road) (Figure 4.22) which is located adjacent to the construction footprint. It is therefore included in this assessment. An aerial image from 1965 (Australian Museum Consulting 2014: Figure 4-32) shows the house within a rural area. This lot contains a house located about 30 m outside the construction footprint. It is of weatherboard and cement sheeting construction with a green painted corrugated iron roof and a hedge out the front. While appearing much modified, the style of the house with its verandah, indicates it may date to the late 19th or early 20th century.

All of the area for this item was originally part of a land grant to John Blaxland of 6,710 acres called Luddenham Estate, Eastern Division. In 1859 the land was subdivided into lots of one acre and half acres and called ‘Luddenham Village’. The subdivision made provisions for a church, school and public reserve (Australian Museum Consulting 2014:24). Apart from newspaper advertisements for the sale of the lots within the village no reference was found relating to a church and school being built at the site. The Penrith Heritage Study (Paul Davies Pty Ltd 2007: 153) appears to suggest that the church was built: ‘In the survey of 1859 a church reserve had been dedicated, but it was not until July 1871 that St James’ Anglican Church was completed (LU-06)’. However, St James’ Anglican Church is actually located to the west of The Northern Road on an entirely different block to that indicated in the 1859 plan (Figure 4.19).

Further information was provided by Nancy Sales (as per Comms Leanne Sales, 2017)) outlining the following information:

Mrs Susan Isabel Adams (nee Roots 1872-1966), who is buried in St James’ Anglican Church Luddenham, was the grandmother of Mrs NE Sales. Mrs Roots stated to Mrs Sales, that when she was a girl she attended the Primitive Methodist Chapel and school on the site and she recalled Aboriginal families walking past the buildings. The buildings were of slab construction. Land was procured further along The Northern Road for the

Methodist Church, its current location. The location of the original Primitive Methodist chapel and school was sited on land later owned by Mr HL Sales (Mrs NE Sales' father in law, blacksmith and corner store owner) approximately between 14-18 Eaton Road. The only use of this land from the time of his purchase (around 1920) was sheep grazing. It was sold on this death in the early 1970s.

The following information was replicated from JCIS (2017):

This land was part of a grant to D'Arcy Wentworth of 300 acres on 17 August 1818. The Wentworths built this up to a large estate initially called Elmshall Park but later Greendale. Wentworth's will was particular about inheritance and the land remained in the Wentworth family until 1902.

On 22 June 1902 the estate was purchased by John Thomas Colburn Mayne, a grazier living at Denham Court for £17, 030 (Con 1 Book 715). He in turn sold lot 'C:' – 4 acres of land to Henry Lewis Sales on 4 September 1916 for £38-320s (Con 101 Book 1097).

This lot was covered by the map of the manoeuvre area Liverpool N.S.W. 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.

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 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.

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 not shown in the same area as the study area.

The area that was to become Lot 21 was mapped as part of the construction of a new section of Bringelly Road on 20 December 1950 (MS 14004-3000). If a building or structure was located on the road frontage it would have been mapped – none were.

The land where Items 8 and 9 are located 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 the 12 February 1963 (CT 83440 Fol 7).

Lot 21 DP614481 was created in October 1971 when the land was purchased by Carmelo and Maria Cambareri (CT 14354 Fol 3). The land was later sold on 14 August 1988 to Vincenza and Giuseppe de Leo.

Given the mapping evidence that does not show a building in this location it is difficult to argue for there being a building on Lot 21 until the 1970s.

But what of the Chapel and School noted on the 1859 plan? According to a report in the *Nepean Times* "The new Primitive Methodist Church at Luddenham, which is almost complete, was formally opened by the Rev. J. B. Penman", on Sunday 14 November 1886. The *Nepean Times* reported the festivities and that "The young people, nothing daunted, then adjourned to another vacant plot and danced away to their hearts content. One or two of the young men had visited during the day a wine shop in the vicinity, and they were, to use a somewhat vulgar phrase, "slightly elevated," and their language was none of the choicest" ("Luddenham." *Nepean Times*, 20 November 1886: 4).

From the account this was the second Church and presumably the older church, the one on the 1859 plan was abandoned when the new one was eventually completed. Based on land titles information it is likely that the original church was simply on land leased from the Wentworths as no separate title was created.

Based on the historical research by JCIS, oral information from Nancy Sales, and survey of the site, it appears that the church has since been destroyed and was likely outside the construction footprint.

Curtilage information

The curtilage of the Luddenham Village Area: Chapel and School Site, and Adams Road House as described above is shown on Figure 4.1.

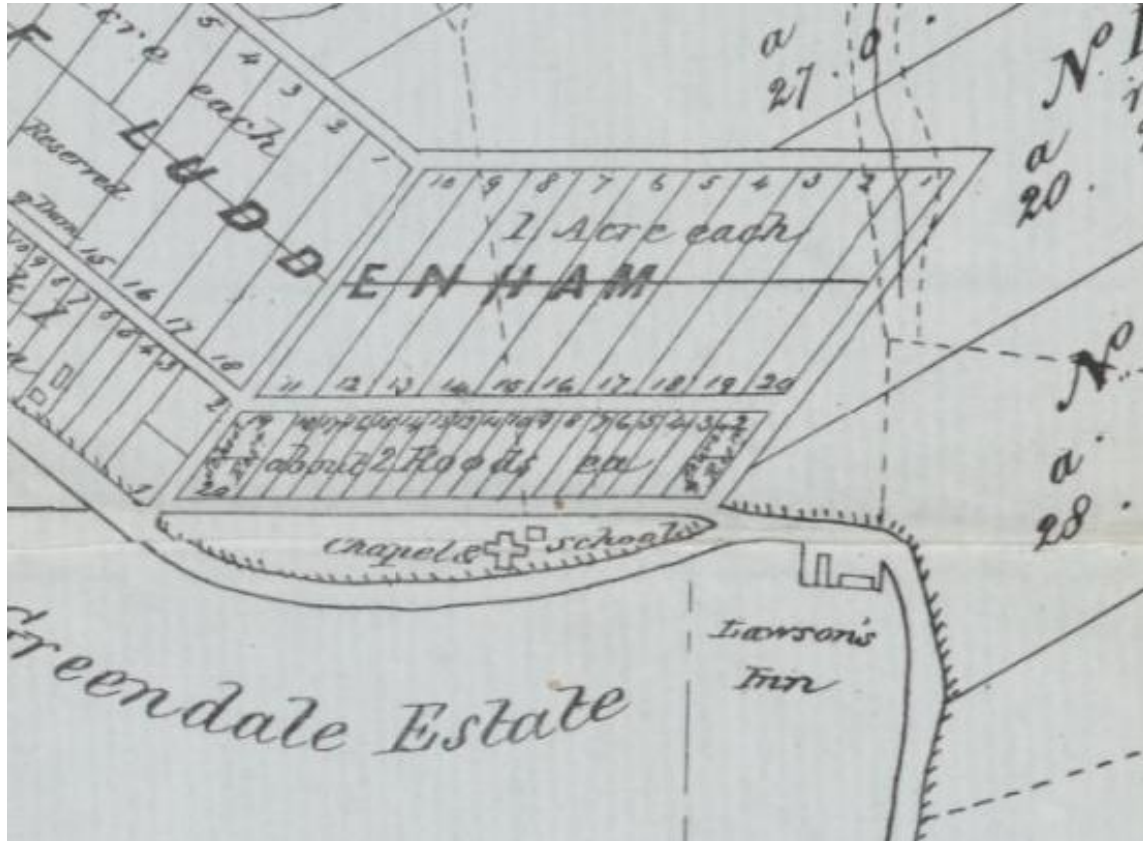


Figure 4.19 : Plan of the eastern division of the Luddenham Estate (cartographic material): to be sold by auction by Mr. R.P. Richardson/Samuel Jackson Surveyor. Source: National Library of Australia digitised item.

Significance assessment

No previous significance assessments have been undertaken for this item. Table 4.5 provides an assessment of the site against the relevant NSW Heritage Council criteria.

Table 4.5 : Assessment of significance for Item 8: ‘Luddenham Village’ area: Chapel and School Site and Adams Road House

NSW Criterion	Assessment
A – Important in the pattern of NSW’s history	Does not meet this criterion. No physical evidence of Luddenham village was identified by this assessment as only a small section is within construction footprint which overlaps with modern housing. Additionally, it is unclear from a titles search and viewing historical maps whether Luddenham Village was ever substantially developed. The location of the old Methodist Church is also inconclusive. Additionally, while the property was part of the Wentworths’ original land holding, the buildings and structures remaining are not related to this period.
B – Strong or special associations	Does not meet this criterion. The heritage item does not demonstrate an association with a significant event, person or groups of people as it is unclear whether Luddenham Village was ever substantially developed. Additionally, while the property is associated with the important Wentworth family, there is no physical evidence related to their occupation of the site.
C – Demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement	Does not meet this criterion. The heritage item demonstrates little aesthetic values and does not demonstrate any particular creative or technical achievement as it is unclear whether Luddenham Village was ever substantially developed.
D – Strong or special associations with a particular community or cultural group	Does not meet this criterion. The heritage item has no strong or special associations with a particular community or cultural group as it is unclear whether Luddenham Village was ever substantially developed.
E – Potential to yield information	Does not meet this criterion. The heritage item has no archaeological or research potential as there is modern housing at the site.
F – Uncommon or rare	Does not meet this criterion. The heritage item is not rare in this region and it is unclear whether Luddenham Village was ever substantially developed.
G – Principal characteristics of a class	Does not meet this criterion. The heritage item is not particularly representative and it is unclear whether Luddenham Village was ever substantially developed.

Statement of Significance

Item 8 is associated with the early settlement of Luddenham, however it is not known whether a chapel or school were ever built at the site. Additionally there is little or no physical or historical evidence that the Luddenham Village was ever actually substantially developed. Even if the chapel and school did exist, it is unlikely that there are subsurface remnants of a chapel and school as they would be under the modern housing at this location. The Adams Road house is in poor condition and has been modified, and it is unclear whether it actually even dates to the time of the Luddenham Village development (mid-19th century). The lots therefore have limited potential to contribute information about early settlement of the area. The item is considered to have insufficient significance

to fulfil the criteria for State or local listing. As the item is not of heritage significance, there is no further consideration of impacts for this item.



Figure 4.20 : Current housing on the site, facing north.
Photo taken by Jennifer Chandler on 25 February 2016.



Figure 4.21 : Vacant area of land to the east of housing, facing west. Photo taken by Jennifer Chandler on 25 February 2016.



Figure 4.22 : House located at 5 Adams Road, Luddenham, facing east. Photo taken by Amanda Goldfarb on 26 February 2016.

Item 9: Miss Lawson's Guesthouse Site, Luddenham

Description and history

Item 9 is located on Lot 1 DP90157 at 26 Adams Road, Luddenham and was surveyed on 25 February 2016 (Survey Area No. 4-13). Areas of archaeological potential were identified during the field survey and are outlined below, including figures showing the items identified during field survey. These items are also identified on Figure 6.4.

The site comprises:

- One shallow depression (well) with stone debris on the ground surface around the well, and several visible blocks inside the depression. About ten wooden planks (1.5 – 2 m long) located on the ground surface to the west of the depression (Figure 4.27, Figure 4.28)
- Another stone depression (well) with a nearby peppercorn tree (Figure 4.29)
- Cutting into the ground surface that is in line with the gate on Eaton Road on a north/south axis (Figure 4.30)
- Pieces of stone (squares/blocks) located near the gate on Eaton Road (Figure 4.31)

A second survey was undertaken by Pamela Kottaras (Heritage Services Manager, EMM Consulting) (Kottaras 2017a) on 18 September 2017 (refer to Appendix B). The following features were noted during the survey:

- Entrance blocks – group of sandstone blocks on eastern side of driveway. The blocks are no larger than 60 x 60 cm and embedded in the ground
- Driveway - depression in paddock. Approximately 5 m wide and 123 m in length
- Gate posts – timber gate posts to rear of site. Retain iron latch
- Well 2 and peppercorn tree – circular depression directly adjacent to peppercorn tree. Dressed sandstone blocks scattered across the depression. Approximately 3 m diameter
- 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
- Platform 1 – sandstone platform comprising dressed sandstone block and a small amount of sandstock 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
- Platform 2 – small platform comprising sandstone blocks with some small sandstock brick fragments. This feature is in close proximity to another circular depression
- Platform 3 – small platform comprising sandstone blocks with some small sandstock brick fragments
- Platform 4 – small platform comprising steel sheets, some small sandstock brick fragments and a broken sandstone millstone. Approximately 2 m x 1 m
- Dead fruit tree – small fruit tree, approximately 2 m high, low branching
- Peppercorn tree – mature peppercorn tree, similar size (and therefore age?) to peppercorn tree by Well 2. Western side of ground worn down, probably by livestock. No other features visible.
- Platform 5 – a large circular raised area at the base of a eucalypt near the entrance to the site (Kottaras 2017a:5-6)

This property was originally part of a land grant to John Blaxland of 6,710 acres called Luddenham Estate, Eastern Division. In 1859 the land was subdivided into lots of one acre and half acres and called 'Luddenham Village' (Australian Museum Consulting 2014:24).

Research from land records

The following information is extracted from JCIS (2017):

This land was part of the land John Lawson purchased from Abraham Meyers on 13 September 1862 (Con No 224 Book87). Meyers purchased the land from Sir Charles Nicholson but there are various transactions from 1860 which seem to cover a large amount of property but are poorly described and difficult to read.

John Lawson made a will on 13 December 1881 leaving his estate to his wife Anne Lawson and his six young children namely: William, James Lachlan, Daniel, Caroline, Alice Lawson (later Alice Vicary²) 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 males getting double the quantity of land than the females.

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. Anne Lawson died on 31 October 1894 intestate. James Lachlan Lawson died on 16 April 1893 also intestate (Con No 129 Book 604).

James Lachlan Lawson's widow Kate Megarity³ (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 him in 1895. At the same time the children partitioned 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 of which the Lawson family was part). 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 roods and 25 perches to Caroline Lawson on 3 August 1897 (assumed to be Miss Lawson). The land transferred to Caroline 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 N.S.W. published in 1906 (Byrnes 1906). A building is not shown in the same area as the study area. It is assumed that a building on the property was not constructed at the time this map was compiled.

Caroline Lawson made a will on 4 May 1911 appointing her brother Daniel Lawson her Executor. She died on 1 January 1930 and with probate granted Daniel because her Executor. However, Daniel 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 Vicary and Wilfred Cecil Vicary became administrators of his estate and affairs (Con No 381 Book 1854). Vicary 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.

² Note variation in spelling across different documents – Vicary and Vickery – however this refers to the same person/family.

³ Note variation in spelling across different documents – Megarity and Megarrity – however this refers to the same person.

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.

Sites 8 and 9 were held as a single parcel by Henry Lewis Sales which he bought under the provisions of the Real Property Act by Primary Application No 40157 on the 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 (sic) in 1971 (CT 8340-6) and the land remains with the Sales family.

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.

Clarification of confusion regarding location of Lawson's Inn and Miss Lawson's Guesthouse

The Lawson's Inn site heritage curtilage is shown on the LLEP at a location to the west of The Northern Road (Figure 4.23). Artefact Heritage (2015) undertook a previous assessment in which they concluded from preliminary research that the LEP-listed site of Lawson's Inn has been incorrectly located on the western side of The Northern Road (Artefact Heritage 2015: Figure 27). The site of Miss Lawson's Guesthouse was identified in their assessment as being the location of Lawson's Inn, which was operated by John Lawson between the 1830s and the 1880s:

A site inspection of the neighbouring property was undertaken on 10 September 2015 by Artefact Heritage. An area corresponding the location shaded in pink on Figure 27 contained a number of potential archaeological features, including the two in-filled stone lined wells or reservoirs, a number of European trees and worked sandstone blocks. A possible sandstone gatepost base and potential former road cutting were also identified. The landowner identified this as the location of Lawson's Inn, present on the site before demolition in the 1940s (Artefact Heritage 2015: 25).

The report (Artefact Heritage 2015: 28) also included a figure showing the location of what was described above (Figure 4.23).

Figure 27: Potential locations of the former Lawson's Inn site, the pre-1859 chapel and pre-1864 school buildings. Eaton Road is an earlier alignment of The Northern Road.

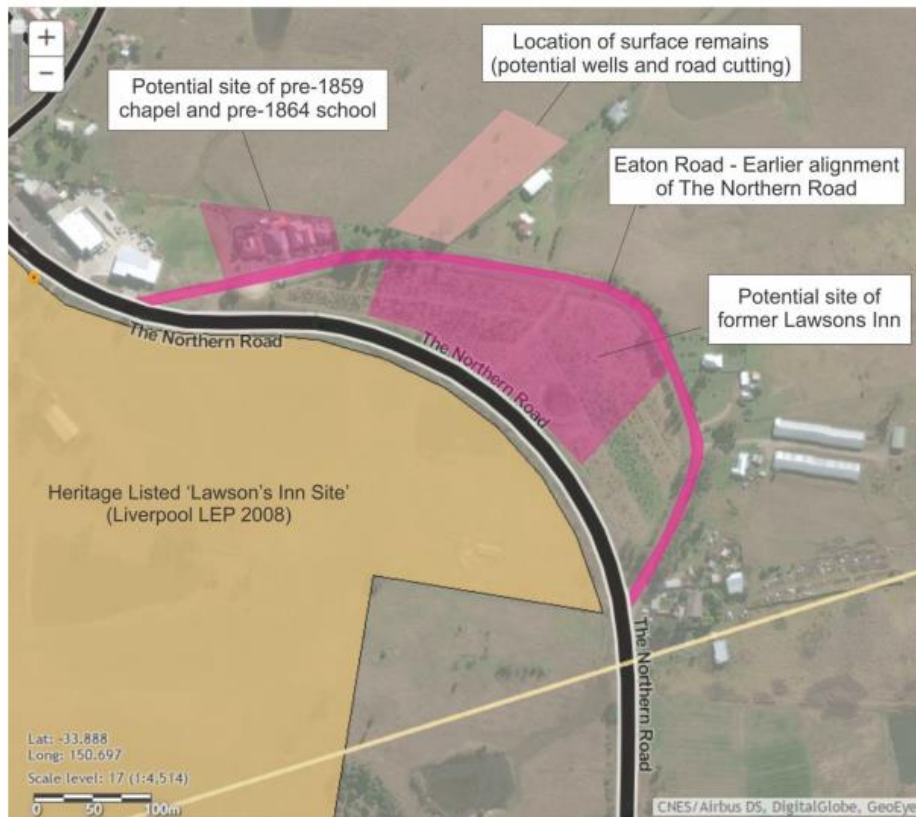


Figure 4.23 : Figure 27 from previous heritage assessment by Artefact Heritage (2015)

However, research undertaken for this assessment suggests that a woman called Miss Lawson (John Lawson's daughter) operated a guesthouse after Lawson's Inn had closed down, and was situated on the opposite side of The Northern Road to Lawson's Inn (shown in light pink on the Artefact Heritage figure (Figure 4.23), detailed in Section 5.11.1.3.

Further documentary and oral history evidence

Miss Lawson (John Lawson's daughter) operated a guesthouse after Lawson's Inn had closed down, and was situated on the opposite side of The Northern Road to Lawson's Inn:

I am glad to find myself contemplating the old house that for so many years was the village inn. I write 'was' because it was its day as a public house for the entertainment of man and beast have gone. No longer does 'The Thistle' [Lawson's Inn] beam across the roadway a welcome invitation to the tired traveller, with money in his purse. But the old house still remains a quaint memorial of the 'have beens' – a kind of architectural milestone on time's roadway reminding us of approaching old age. Opposite this house is a neat cottage, where decent travellers may be provided with comfortable and clean bed and board at reasonable charge by Miss Lawson – and thither I wended my way. The road takes a turn on passing Miss Lawson's, and the visitor may look across and see the whole of the remaining part of Luddenham at once, for most of the buildings front the roadway, and the majority of them face the east, and thus catch the morning sun, which imparts a cheerful aspect to the scene (NT, 10 August 1907).

Apart from demolition of the guesthouse building, the site would have been subject to only low levels of disturbance as it is located within a large paddock which has not been subject to recent construction from housing, roads or utilities. The paddock appears to have been used primarily for grazing. There was no evidence of archaeological deposits noted during the field survey but the entire ground surface was covered with thick, long grass which would have obscured any less obvious features. The grass was also thicker in the depression/stone block areas, making it difficult to determine whether the depressions were infilled with stone or shallow in original depth.

Information from the property owner, Nancy Sales, (pers. comm., 6 April 2016) indicated that the guesthouse kitchen was the only part of the building remaining when the property was bought by her father-in-law in the 1940s and that it was located near the existing peppercorn tree. Nancy Sales also confirmed that it was known to have been the 'inn' owned by Carrie Lawson (the Caroline Lawson identified in the land titles). Further information from Nancy Sales (as per Comms Leanne Sales, 2017) outlined that Miss Lawson's guesthouse had a slab kitchen. The guesthouse was still standing when Mr HCJ Sales (son of Mr HL Sales and husband of Mrs NE Sales) was a boy in the 1920s. Mr Jack Vicary and Mr Dan Lawson lived in the guesthouse in its final years. When they died the land was auctioned and bought by Mr HL Sales who used the land for sheep grazing. Following his death in 1970, the land has been used solely for grazing. The land was consolidated with a further purchase of which is now 7, 15 and 25 Adams Road by Mr John Adams (Mayor of Penrith and St Marys and Mrs NE Sales' uncle).

Comparative analysis

The comparative analysis section was contributed by Pamela Kottaras (Heritage Services Manager, EMM Consulting) (Kottaras 2017a) (refer to Appendix B).

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 18th and 19th 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. 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. Rail however, 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. New establishments were purpose-built, and old estates were converted into guesthouses (Thorp 1986: 88). Guesthouses provided affordable accommodation and a respectable income, particularly for "spinsters" and "widows" ((Jackson Stepowski Heritage Consultants 2001: 8).

In the late 19th 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 each played a role in where and how these resorts were established. 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 Heritage Consultants 2001: 3). Homes and guesthouses were built to be aesthetically romantic and picturesque to blend in with the sublime views (Karskens 1990: 18) and which often recreated nostalgic fashionable European styles. The Ritz (see below) is a good example of this.

However, in the early 20th century, guesthouses tended to be more modest in form and materials and have consequently been largely overlooked in heritage studies ((Jackson Stepowski Heritage Consultants 2001: 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 Heritage Consultants 2001: 26). Federation era guesthouses tended to be timber, often in a chalet style. 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". Guesthouses were built from the late 19th century, but the heyday of the guesthouse was during the interwar era (1919-1939). They were associated with changing modes of transport (primarily trains) and the development of the local tourism industries. The key characteristics of late 19th and early 20th 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 Heritage Consultants 2001: 9-10).

At the commencement of the twenty first century, purpose-built early to mid-20th century guesthouses are rare (Jackson Stepowski Heritage Consultants 2001: 3).

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.



Figure 4.24 : The Ritz, Leura. Image source: SHI 1170453

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 20th 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.



Figure 4.25 : The Cecil Guesthouse, Katoomba. Image source: SHI 1170401

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.

Lurline Street Precinct Conservation Area (Blue Mountains LEP 2015, Item K053)

This group of early to mid-20th 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 and Katoomba Mountain Lodge (both described above).

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.

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 verandah. It has catered for tourists since the late 19th century.

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.

State Heritage Register 172015

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.

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

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.

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).

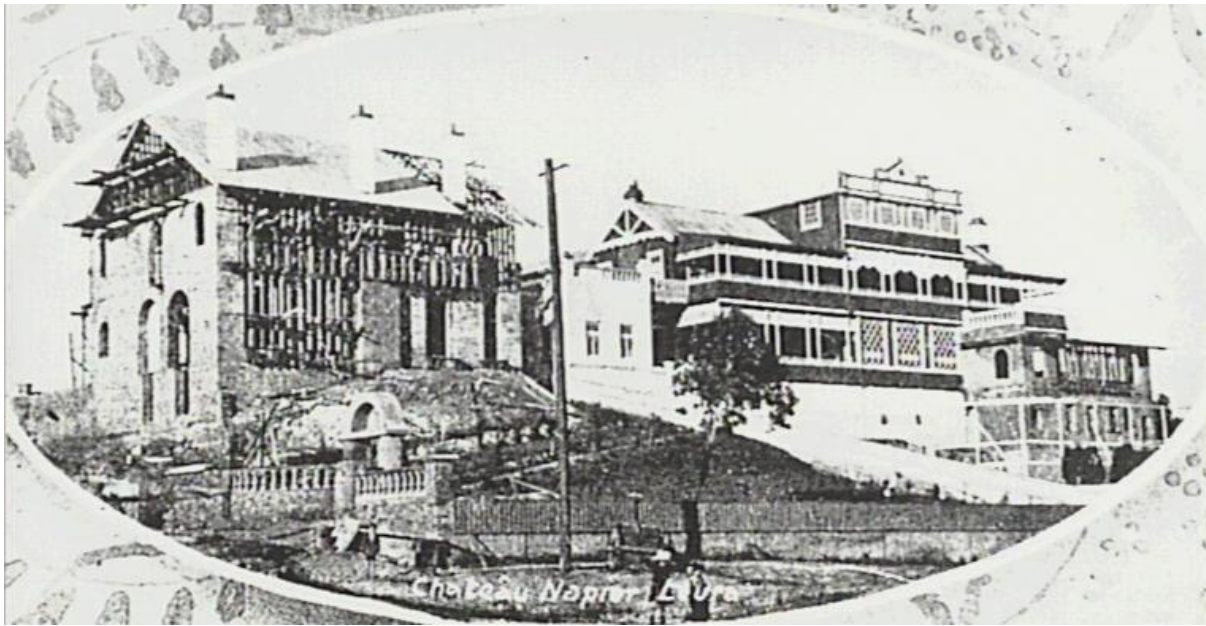


Figure 4.26 : c1914 Chateau Napier, Leura by photographer Harry Phillips (Blue Mountains City Library LS002\002113)

Comparative analysis summary

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. 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” (Henry 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* (NSW Archaeology Online 2017) 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.

Curtilage information

The curtilage of the Miss Lawson’s Guesthouse Site includes the wells, wooden planks, road cutting/driveway, gate posts, platforms and peppercorn trees as described above and is shown on Figure 4.1.

Significance assessment

No previous significance assessments have been undertaken for this heritage item. Table 4.6 provides an assessment of the site against the relevant NSW Heritage Council criteria, prepared by Jacobs (Chandler and Waller 2017) and updated by EMM Consulting (Kottaras 2017a).

Table 4.6 : Assessment of significance for Item 9: Miss Lawson’s Guesthouse Site, Luddenham

NSW Criterion	Assessment
A – Important in the pattern of NSW’s history	<p>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 19th and early 20th 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.</p> <p>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.</p> <p>The item is of local significance.</p>

NSW Criterion	Assessment
B – Strong or special associations	<p>The guesthouse is also associated with the Lawson family, a well-respected family who had ties to the local area throughout the late 19th and early 20th century.</p> <p>The item is of local significance.</p>
C – Demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement	<p>Does not meet this criterion. As there are no extant buildings or structure related to the original guesthouse the site does not demonstrate any design or technical integrity.</p>
D – Strong or special associations with a particular community or cultural group	<p>Does not meet this criterion. 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 Vickery⁴. 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.</p>
E – Potential to yield information	<p>The site possesses the ability to yield information about the guesthouse, how it operated, who it catered to and its level of self-sufficiency through an analysis of spatial patterns and building/room functions.</p> <p>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.</p> <p>The item is of local significance.</p>
F – Uncommon or rare	<p>Archaeology likely to be rare in a local (western Sydney regional) context</p> <p>The item is of local significance.</p>
G – Principal characteristics of a class	<p>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.</p> <p>The item is of local significance.</p>

⁴ Note variation in spelling across different documents – Vicary and Vickery – however this refers to the same person/family.

Statement of significance

The following statement of significance was prepared by Kottaras (2017a):

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 19th and 20th 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).

The item is considered to have sufficient significance to fulfil the criteria for local listing. A Statement of Heritage Impact for this item is provided in Section 6 of this memorandum.



Figure 4.27 : Well 1, facing north. Photo taken by Jennifer Chandler on 25 February 2016.



Figure 4.28 : Timber located near well 1, facing north. Photo taken by Jennifer Chandler on 25 February 2016.



Figure 4.29 : Well 2, facing east. Photo taken by Jennifer Chandler on 25 February 2016.



Figure 4.30 : Possible road cutting near Eaton Road, facing south. Photo taken by Jennifer Chandler on 25 February 2016.



Figure 4.31 : Stone blocks near gate on Eaton Road, facing north-east. Photo taken by Jennifer Chandler on 25 February, 2016.

Item 10: Lawson's Inn Site

Description and history

Clarification of location of Lawson's Inn site

The Lawson's Inn site is currently listed on the Liverpool LEP but as this assessment and previous heritage assessments (Artefact Heritage 2015; Australian Museum Consulting 2014) have determined, the location of the listing on the LEP (Lots 1 & 2 DP851626) is not the actual location of Lawson's Inn.

A search of the NSW Deeds Registration Branch by RD Williamson (Legal Searcher), on behalf of Jacobs, in July 2016 revealed details of the land titles information, up to Primary Application No. 56452 (Table 4.7) for Lot 2 DP623457, the land on which the Lawson's Inn site is situated. Lot 2 DP623457 has been identified as the correct location of Lawson's Inn, and is situated on the opposite side of The Northern Road, to the north of the LEP listed location.

Table 4.7 : Land titles for Lawson's Inn

Date	Event
30 November 1813	Land Grant of 6710 acres in the District of Bringelly to be known by the name of Luddenham to John Blaxland
17 May 1843	Indenture of Release (Conveyance) No. 27 Book 4 from John Blaxland also Harriet Blaxland to Francis Walker
14 January 1860	Conveyance No. 70 Book 65 from Francis Walker to John Lawson
22 June 1885	John Lawson died
3 rd August 1897	Conveyance No. 132 Book 604 from Kenneth Campbell (Administrator with the Will annexed of John Lawson) also others re said Will to Kate Megarrity ⁵ (formerly Kate Lawson, Widow of the deceased)
6 April 1915	Conveyance No. 979 Book 1057 from Kate Megarrity also others to John William Vicary
18 November 1947	Acknowledgement No. 62 Book 2040 from Cecil Wilfred Vicary (Executor of the Will of John William Vicary) to Cecil Wilfred Vicary (Devisee under the said Will)
17 July 1950	Conveyance No. 683 Book 2130 from Cecil Wilfred Vicary to Donald Lawson Vicary
27 September 1960	Conveyance No. 21 Book 2555 from Donald Lawson Vicary to AS Glugston (Luddenham) Pty Ltd

Physical description and oral history information

Lot 2 DP623457 was surveyed on 26 February 2016. Areas of archaeological potential were identified during the field survey and are outlined below and indicated in Figure 4.37 and Figure 4.44. These are also shown on Figure 6.5.

The property is currently used as a Christmas tree farm. There are existing rows of trees across the entire property with grass cover between the tree rows. Although most of the grass cover was long, there were some sections which had been slashed. There were some small areas of ground surface visibility located between the tree rows due to erosion by vehicle tracks. There is limited physical archaeological evidence related to Lawson's Inn on the ground surface of Lot 2 DP623457. However, ceramic and glass fragments, and several stone blocks were located on the property (Figure 4.44, Figure 4.45, Figure 4.46, Figure 4.47). The mostly glass fragments with lesser amounts of ceramic were found in a scatter about 100 m x 8 m with a maximum density of about 2 per square metre. The

⁵ Note variation in spelling across different documents – Megarity and Megarrity – however this refers to the same person.

dark green, blue, clear and brown glass appeared to be late 19th/early 20th century with some thick bottle base fragments noted. The scatter was located in the north of the block, near Eaton Road in areas of ground surface visibility, between tree plantings, in a location that corresponds with the vicinity of Lawson's Inn as marked on the 1859 plan (Figure 4.33). The stone blocks are painted white and currently mark out vehicle tracks on the Christmas tree farm and may not be associated with Lawson's Inn. Apart from demolition of the inn building the site would have been subject to only low levels of disturbance as it is located within a paddock which has not been subject to recent construction from housing, roads or utilities. The paddock appears to have been used primarily for grazing and Christmas tree production. Prior to its use as a Christmas tree farm the property was part of a dairy owned by Mr Don Vicary and used for dairy cattle grazing (Nancy Sales, (submission details, 2 August 2017). There was no evidence of deposits noted during the field survey but much of the ground surface was covered with grass and trees which would have obscured any less obvious features.

Documentary evidence

This property was originally part of a land grant to John Blaxland of 6,710 acres called Luddenham Estate, Eastern Division in 1813. In 1843 the land passed to Francis Walker and then to John Lawson in 1860. A plan of the Central and Western Divisions of Luddenham from 1859 clearly shows Lawson's Inn located to the south of The Northern Road (Bringelly Road) (Figure 4.33). A survey plan dated April 1859 shows the inn as 'Lawson's Store' (Figure 4.34). An undated plan and an undated Parish map show where the sharp corner at Lawson's Inn has been straightened and the old alignment of The Northern Road, now known as Eaton Road (Figure 4.35, Figure 4.36) is situated. Lawson's Inn (also known as The Thistle Inn) was likely constructed in the 1830s after The Northern Road was built in the 1820s. Lawson's Inn was owned by John Lawson and his wife, Ann Lawson. It was an inn and a store. A photograph (Figure 4.32) included in a local history book (Willmington 2013:8) about Luddenham reportedly shows the Lawson family in front of the inn although there is no source given for the photograph.

The site of Luddenham Village may have been chosen next to Lawson's Inn as it was already a popular place for travellers to stop. In the 1860s Lawson's Inn functioned as a public meeting place for locals as well as supplying goods. Lawson's Inn was demolished in the mid-20th century (Australian Museum Consulting 2014:55).

In 1907 what remained of the Lawson's Inn building, Luddenham village and a building opposite the Inn where travellers could stay which was run by Miss Lawson (John Lawson's daughter) was described as follows:

I am glad to find myself contemplating the old house that for so many years was the village inn. I write 'was' because it was its day as a public house for the entertainment of man and beast have gone. No longer does 'The Thistle' beam across the roadway a welcome invitation to the tired traveller, with money in his purse. But the old house still remains a quaint memorial of the 'have beens' – a kind of architectural milestone on time's roadway reminding us of approaching old age (NT, 10 August 1907).

The following information has been replicated from JCIS (2017):

John Lawson arrived in Sydney as a convict aboard the Guildford in 1822, having been convicted of larceny and sentenced to 14 years' transportation (although some registers list his sentence as being for life). He gained his freedom somewhere between 1834 and 1838.

He married Anne Freeburn, a widow, at Mulgoa in March 1854 and is described in the church register as being a bachelor of Bringelly. A list from an annual meeting to grant publican's licences shows the name John Lawson, Luddenham (*Sydney Morning Herald* Tuesday 3 May 1859, p8) and he is listed on the New South Wales, Australia, Certificates for Publicans' Licences as being the publican of The Thistle, in Luddenham and remains listed as the Publican until September 1875 at least.

Lawson became a respected member of the Luddenham community and his name is mentioned many times in various newspapers whether by writing to petition the government for financial relief for local farmers in time of drought to supporting the foundation of local Methodist church and being one of a list of local citizens petitioning the government for a local public school.

Lawson also seems to have built up a large land holding around the Luddenham Village owning most of the lots as well as larger areas of grazing land.

Lawson's Inn and Store is depicted on the 1859 subdivision plan but clearly was not included in the property for sale. This suggests that Lawson had previously purchased the land presumably from Nicholson although the details of the conveyance have not yet been found.

It has not been possible to determine the history of the Thistle Inn after John Lawson died, but an article from 1909 in the *Windsor and Richmond Gazette* notes that "Lawson's old 'Thistle Inn' has been long closed" which certainly implies that it was never known as anyone else's Thistle Inn ('A Ramble Through Yarramundi.', *Windsor and Richmond Gazette* 2 October 1909, p. 16).

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. Anne Lawson died on 31 October 1894 intestate. James Lachlan Lawson died on 16 April 1893 also intestate (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 Daniels share of Lawson's estate to him in 1895. At the same time the children partitioned the Supreme Court to appoint Kenneth Campbell as administration 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 23rd June 1897 and Campbell set to his task (Con No 129 Book 604).

Details of the transaction have not yet been searched but it is likely that this land was part of Lawson's inheritance obtained by Alice Vicary, his daughter, as Alice and Frank Vicary mortgage the land in 1900 (PA 56452).

This lot was covered by the map of the manoeuvre area Liverpool N.S.W. published in 1906 (Byrnes 1906). A building is not shown in the same area as the study area. This is in agreement with historical accounts that the Inn was demolished c1895.

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 not shown in the same area as the study area.

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 not shown in the same area as the study area and the area remains undeveloped.

The land was held in the Vicary family until 1960 and used for dairying. In December 1950 a new alignment of the Northern Road was surveyed (Ms 14004-3000) and the land was resumed for the road. This left the site of the Inn on a sort of island between the two roads.

In the 1960s the land was owned by A.S. Clugston and seemed to be used for dairying. Clugston became Blue Hills Investments in 1981 and the land is subsequently held waiting for development opportunities.

Although little is known in detail about Lawson's Inn and Store the site of the building is likely from the historical evidence to have been mainly grazing land since the building's demolition.

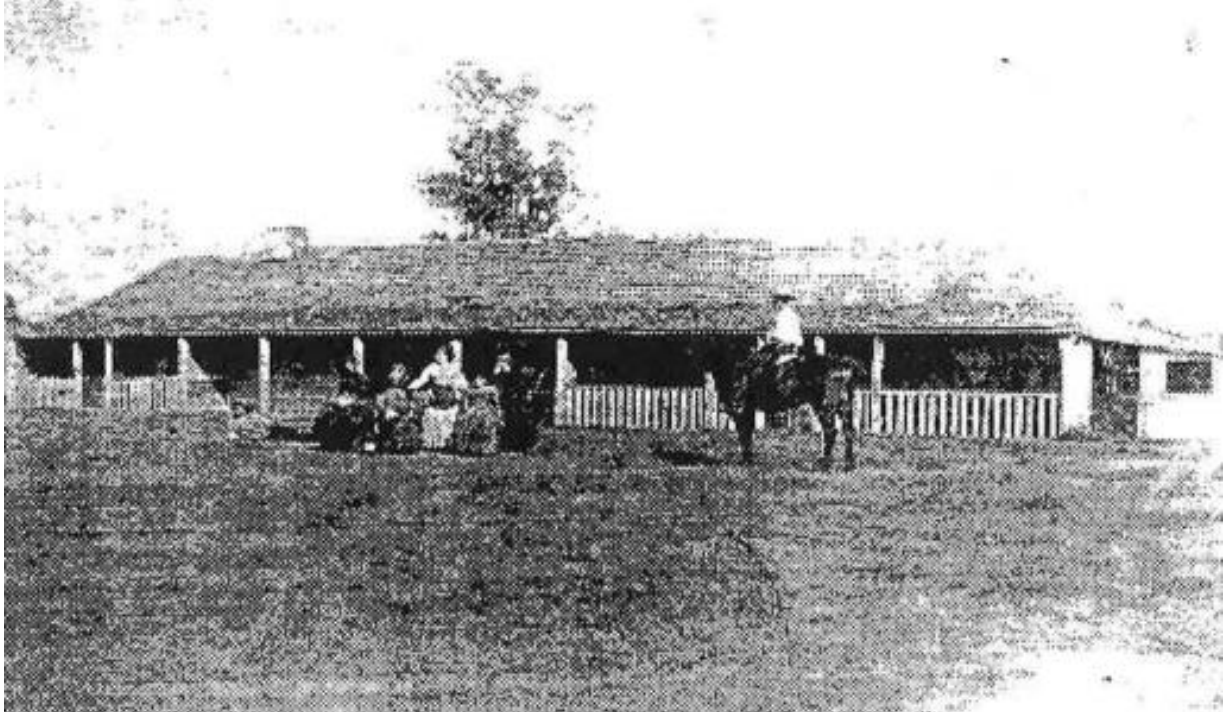


Figure 4.32 : Photo from Willmington (2013:8) titled 'The Thistle with the Lawson family'.

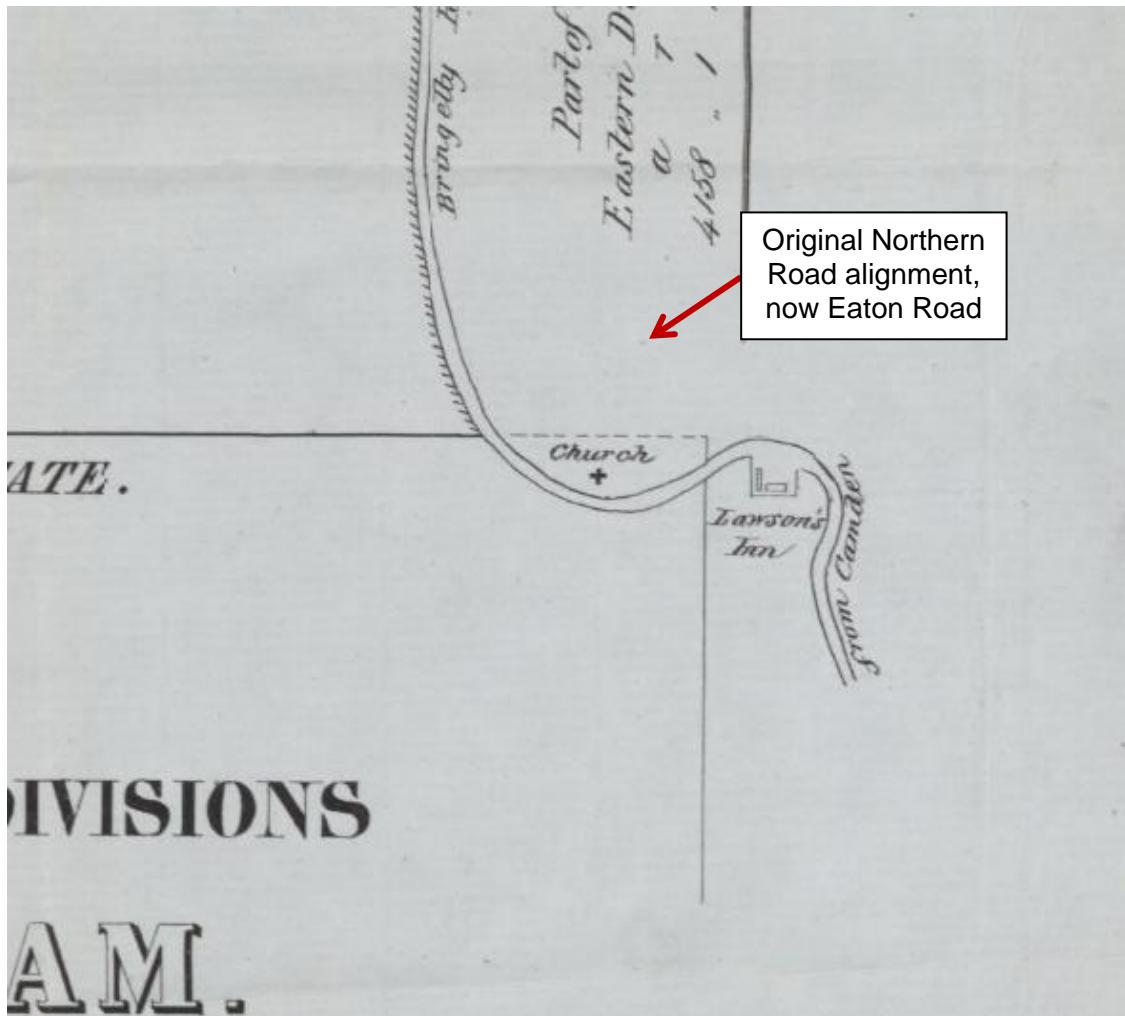


Figure 4.33 : 1859 Plan of the central and western divisions of Luddenham: to be sold by public auction by Mr. R.P. Richardson/Samuel Jackson Surveyor. Source: Trove, National Library of Australia 2016.

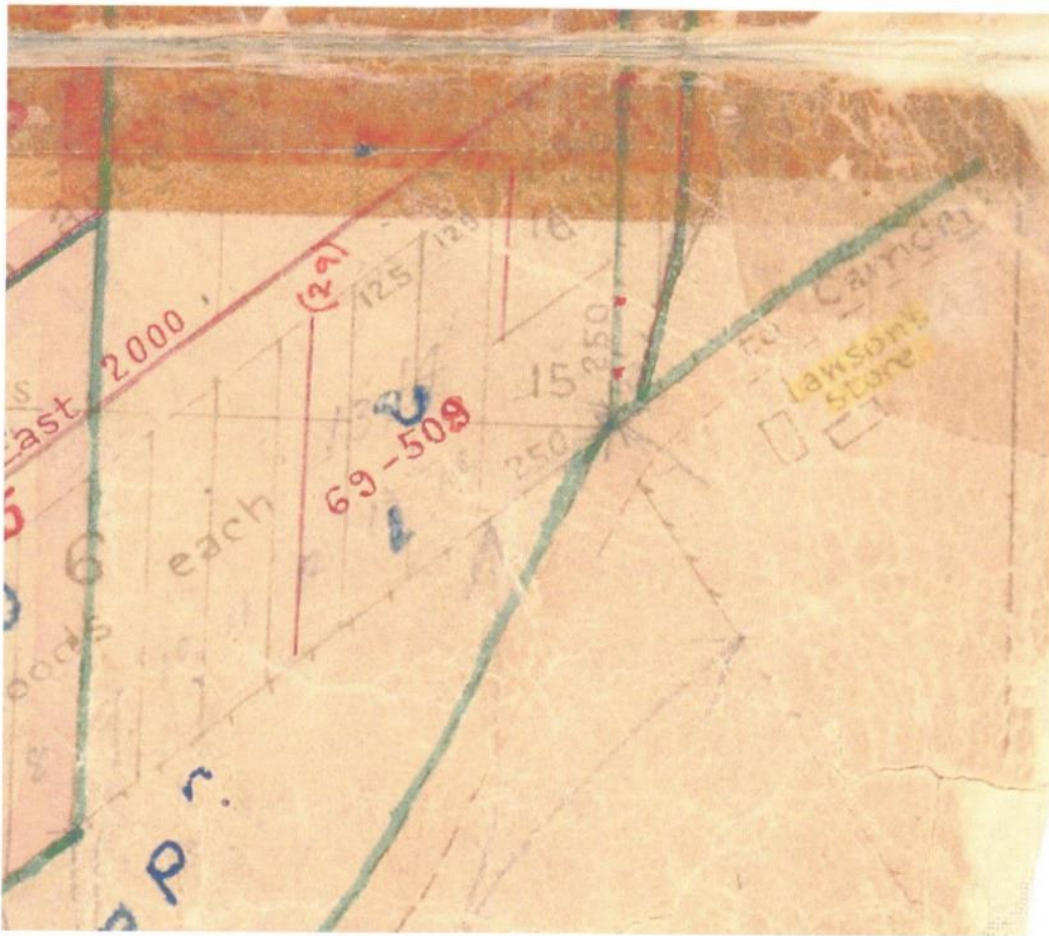


Figure 4.34 : Lithographic plan surveyed in April 1859 (173) Source: State Records Authority of NSW.

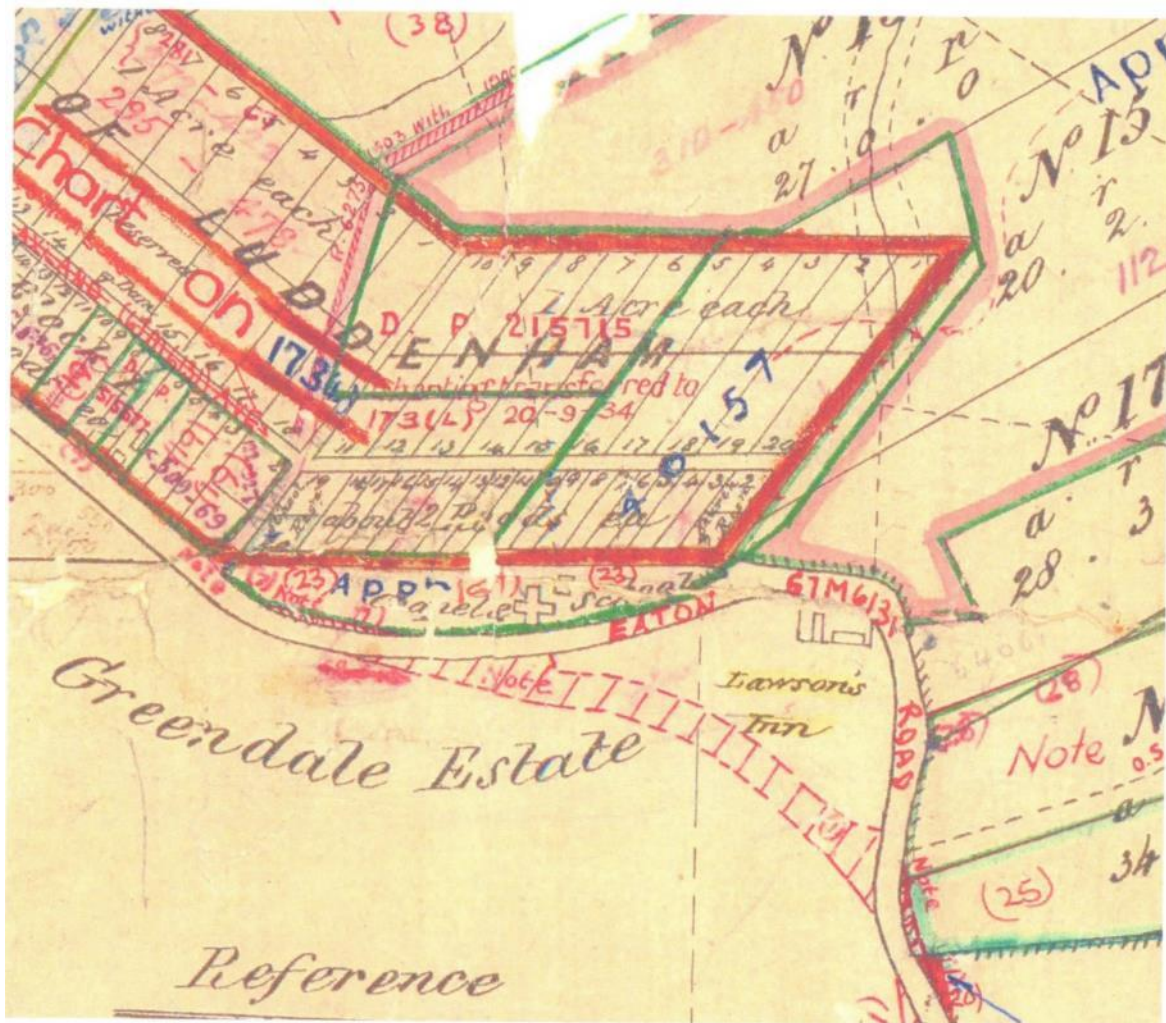


Figure 4.35 : Undated plan showing Lawson's Inn buildings and new section of The Northern Road. Roll Plan 4 (Source: State Records Authority of NSW).

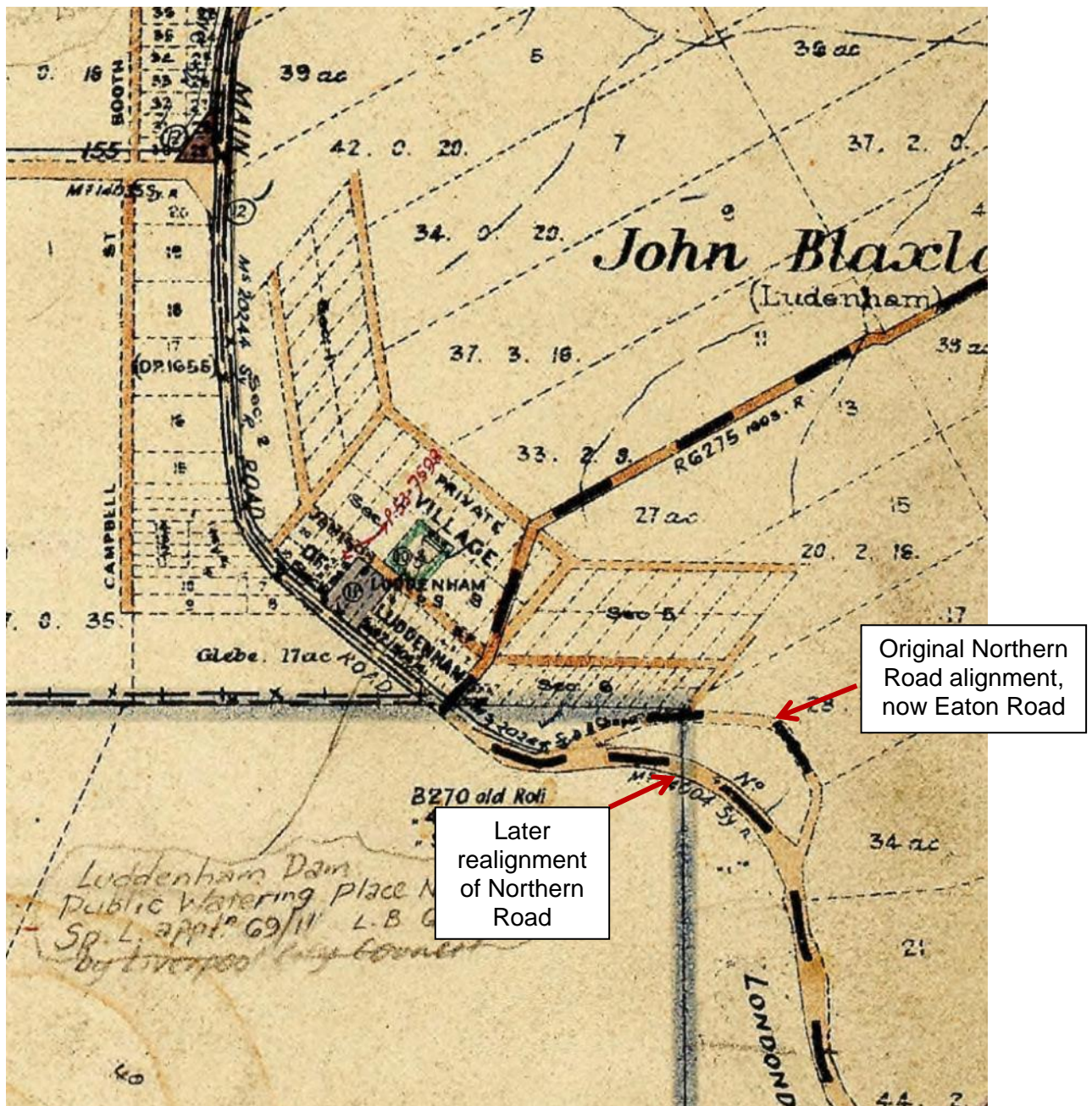


Figure 4.36 : Undated Parish map showing straightening/realignment of The Northern Road. Source: Extract from parish map, County of Cumberland, Parish of Bringelly.

The Lawson's Inn site has been used for Christmas tree production and has therefore been subject to ground disturbance associated with tree production. The Christmas tree farm does not appear to have been established until after 1986, as aerial images sourced by Australian Museum Consulting (2014: Figure 4-32) show no evidence of the farm at that time. It is uncertain what the property has been used for between the time of the removal of the Lawson's Inn building and the establishment of the Christmas tree farm. A black and white aerial image from 1965 (Australian Museum Consulting 2014: Figure 4.32) shows the property before the land was used for Christmas tree production. There is a lighter coloured area on the ground surface which corresponds with the predicted location for the inn. This may indicate a change in vegetation, soil or possible location of the previous building. A field survey failed to locate any building footings associated with the site but did identify fragments of late 19th/early 20th century ceramics and glass in the lighter coloured area (Figure 4.37). A plan superimposed onto an aerial of the property also indicates the location of Lawson's Inn (Figure 4.38).

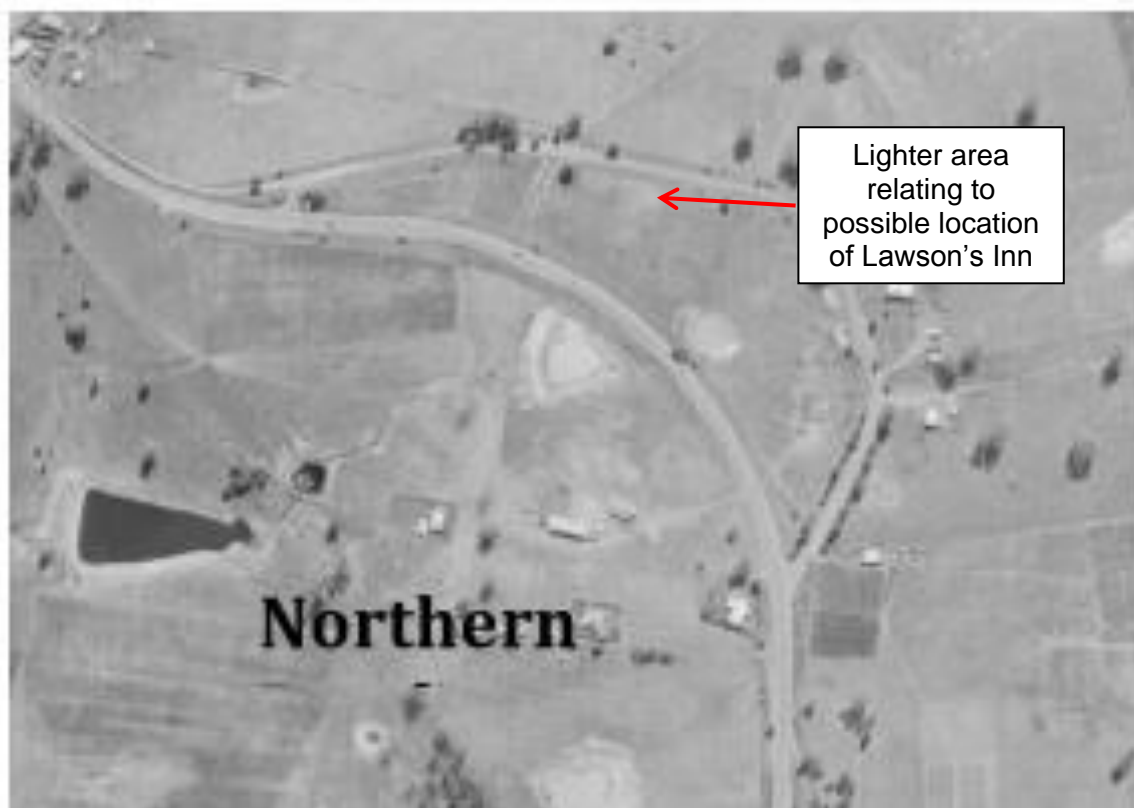


Figure 4.37 : 1965 aerial of the Lawson's Inn site. Source: Land and Property Information in Australian Museum Consulting 2014: Figure 4.32.

Previous heritage assessments

The Lawson's Inn site is currently listed on the LLEP (53) and is classed as an archaeological-terrestrial type of item on the OEH listing. While the location on the LEP is incorrect, the existing 2004 Statement of Significance (OEH 2016) is of relevance and states:

The site of Lawson's Inn at Luddenham demonstrates the history of the early settlement of the area. The Inn formed the nucleus of the development of Luddenham which was laid out adjacent to the site in 1864. The site's location beside a major road is indicative of the importance of the early transport networks in facilitating settlement and development and is representative of early Inn and Hotel sites throughout the Sydney region. There is potential to gain more information on the site from further archaeological and documentary research.

The recommended management for this heritage place is that 'prior to any redevelopment or subdivision of this area an archaeological assessment (both Aboriginal and non-Aboriginal) should be undertaken'.

Australian Museum Consulting (2014: 56) reviewed the LLEP listing for Lawson's Inn and viewed the LLEP site from The Northern Road and concluded that the site would be considered to be a State significant archaeological site:

The lack of extensive development in the local area indicates that the integrity of the archaeological resources associated with the site of Lawson's Inn, The Thistle, is likely to be good. In addition, the potential for the archaeological resources to provide information concerning the historic settlement and development of the local area that would not be available from any other source. As a focus for travellers, there is potential for the archaeological resources to provide information concerning the transport of goods and the mechanisms of the everyday lives of people living in a rural environment at a distance from urban centres.

However, a full significance assessment of Lawson's Inn against the NSW Heritage Council's criteria for heritage assessment, including a comparative analysis, was not undertaken as part of Australian Museum Consulting's report. The findings of Australia Museum Consulting were taken into consideration for this assessment which did include a full significance assessment.

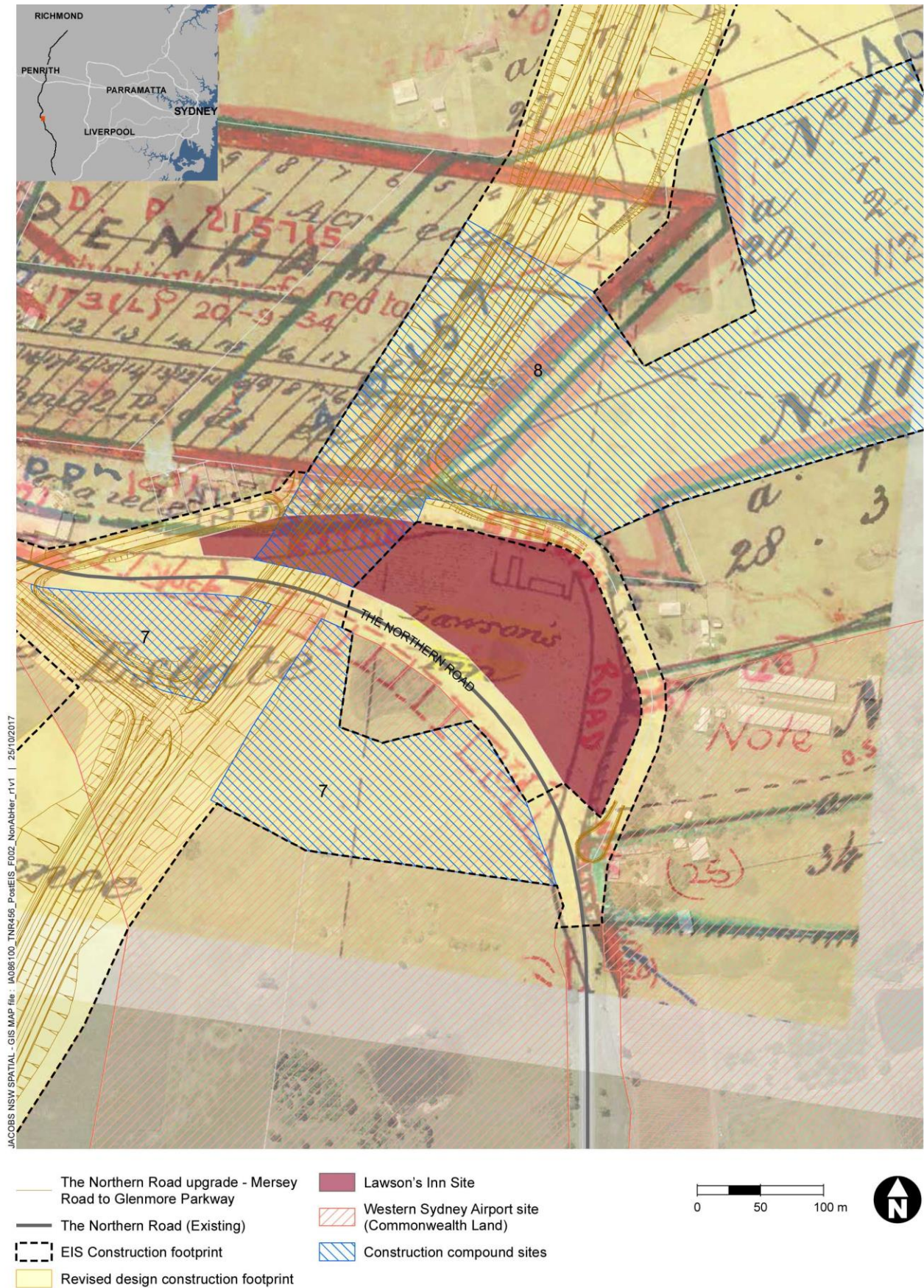


Figure 4-38 | Plan superimposed onto aerial showing location of Lawson's Inn

The Northern Road Upgrade - Mersey Road, Bringley to Glenmore Parkway, Glenmore Park
Submissions and Preferred Infrastructure Report

Comparative analysis

The comparative analysis section was contributed by Ryan Desic and Pamela Kottaras (EMM Consulting) (Desic and Kottaras 2017).

Introduction

Inns and inn keeping have a history in Australia that lasted just over 100 years, with the most popular period being the first fifty years. Following on from a type of accommodation that developed over centuries in England (Freeland 1966, p.4-5), the Australian inn fulfilled a need that was born out of long distances in a land was being explored and opened up by the new arrivals.

The establishment of inns (known as 'wayside' or 'wayfarer' inns) was largely a result of land grant conditions imposed by Governor Macquarie (Dawson Brown and Ackert Pty Ltd 1990, p.8; Freeland 1966, p.91). Their appearance followed explorers and farmers and they were often the first building in a district (Freeland 1966, p.91) and the dates of their construction along new tracks and roads can mark the expansion of the colony. Inns provided important and sometimes familiar rest stops, food and accommodation on long journeys around the colony.

Wayside inns which is what Lawson's Inn was, were once a regular sight on roads leading away from main towns throughout NSW as they were situated on routes radiating out from Sydney to the north, west and south. They were generally placed half a day's ride by horse or coach, which was, at the time the optimal distance for long-distance travel for the recuperation for people and beasts alike. While these types of establishments had their genesis in their English counterparts, the distances between destinations in the colony created a need for greater self-sufficiency so in addition to stables (which would be expected of any inn) colonial inns kept smithies and gardens amongst other facilities. Inn keepers chose prime locations on their properties, close to water, perhaps on an elevated landform, and in areas that provided good pasture for passing stock (Freeland 1966, p.91). They met the demands of trade and transport by providing workers and travellers with food and accommodation, along with stabling and storage for their horses and stock. They also provided dispersed farming communities with a focal point. Inns were also a strong part of the community, acting as courthouses, the venue for coronial enquiries and business transactions as well as other local administrative tasks and social functions (Kirkby 1997, p.30).

During the first half of the 19th century, wayside inns experienced a boom and competition was high. In the initial years, they catered to lone travellers and smaller transport vehicles, as well as catering to the surrounding residents. As the roads became more passable and reasons to travel became more prevalent, coaching routes were established and passenger transport began in earnest. During the 1820s a regular coach route from Sydney to Parramatta began, which inspired other coaching companies to do the same and by the 1830s, regular coach routes were servicing all the major centres (Freeland 1966, p.99-100). Then in 1853, Freeman Cobb arrived in the colony after hearing of the gold rush. Cobb, who was part of Adam and Co. in America, set up a coaching company with another three Americans and created Cobb and Co., which essentially took over all the coach transport routes of the colony. Despite the advances in travel times made by Cobb and Co., distances were still vast and overnight stops remained a necessity of long-distance travel.

Their earlier incarnations saw inns as single-storey vernacular buildings, generally built in timber slab and/or weatherboard. As the colony became more established and the condition of roads improved, inns were being built to be two-storey and constructed of brick or stone. Many inns were now including coffee rooms, parlours, full stables and undercover coach parking (Freeland 1977, pp.101–103).

By the 1860s the introduction of railway travel in Sydney was having an impact on coaching routes. Many inns in the rest of the colony were closed as a result of the growing railway network and the subsequent reduction in demand for coaching. Inns located on the edges of towns would have been able to adapt to service tourists to the area but many smaller inns would not have survived.

Many inns established in NSW during the mid 19th century still exist today. This assessment has considered extant inns and previous archaeological investigations of inns to understand the nature of the potential archaeological resources of Lawson's Inn site. It also uses descriptions by Freeland (1966) to consider possible outbuildings and architectural styles. Comparative analysis can provide an indication of a site's rarity or representative nature. This assessment has attempted to limit comparative analysis to inns constructed c.1800 –1860, which is a period capturing the construction of John Lawson's buildings.

While no date for the construction of Lawson's Inn has been confirmed, given that The Northern Road was built in the 1820s, and the alignment of Lawson's Inn faces the road, it is reasonable to assume that the buildings were constructed after the 1820s, and possibly in the 1850s when Lawson is listed as publican of the Thistle Inn on The Northern Road in Luddenham (Sydney Morning Herald Tuesday 3 May 1859, p.8; JCIS, 2017 p.15). The inn is included on an 1859 plan of Luddenham. By the 1860s Lawson's Inn served as a public meeting place for locals as well as supplying goods for Luddenham Village (Jacobs 2017, vol 5, p.85). The fact that the Lawsons were Methodists, a denomination of the Christian faith that generally abstained from alcohol, ran an inn and had a liquor license, is of interest.

In the Liverpool Council area, most inns and hotels listed as heritage items on the local environment plan (LEP) were built at the end of the 19th century (the Liverpool Arms Hotel 1882, the Commercial Hotel/Marsden's Hotel 1896 and the Collingwood Inn 1880s). Therefore, a comparative analysis of other inns that were constructed in NSW around the same time (c.1800s-1860s) is necessary to make predictions about possible archaeological resources.

Standing Inns

Red Cow Inn/Hotel (Penrith LEP 2010, I690, 565-595 High Street Penrith)

Red Cow Inn, Station St, Penrith was built by Thomas Smith in 1862. It was strategically located near the Penrith railway terminus (built 1863) and a departure point for coaches crossing the Blue Mountains. The inn is a two-storey plastered brick building (the second storey was added c.1882) with a verandah all around.

In 2005 Casey and Lowe Pty Ltd (Casey and Lowe Pty Ltd 2005) undertook an archaeological investigation of the Red Cow Inn. The site consisted of the extant Red Cow Inn and associated structures that had previously been demolished. The excavation, which focused on the areas of the inn that had been demolished, found evidence of an older phase and associated deposits. There was also evidence for rebuilding or additions including an early kitchen with footings built from large river cobbles and a later kitchen with a large stone fireplace. Other remains found included a blacksmith's shop to the south of the Red Cow Inn, a cistern and a second timber-lined well.

Artefacts associated with the Red Cow Inn demonstrated its use as a place providing meals and accommodation to travellers along the Western Road. Among these items were large transfer printed serving platters and plates and transfer-printed cups and saucers. The blacksmith's shop showed that the maintenance of rural transport and machinery was a major function of the Inn. Artefacts related to blacksmith's shop included horseshoes, buggy steps, a mould board for a plough, and tools for fixing equipment and shoeing horses.



Figure 4.39 : The Red Cow Inn c.1918 in its two-storey form. (Source: Casey & Lowe 2005, p.26).

Box Hill Inn (SHR 00724, 43 Boundary Road Box Hill (frontage on Windsor Road))

Box Hill Inn fronts Windsor Road although its address is 43 Boundary Road, Box Hill. It was built around 1840-42 by John Suffolk (or by John Terry who leased the land) originally as a residence, called Rummary Homestead, with a section set aside to sell liquor. In 1844 Joseph Suffolk obtained a liquor licence, probably to take advantage of passing traffic; it only functioned as an inn until 1848.

The building is a single-storey brick of Georgian design with attic rooms, a gabled roof and front verandah. The front wall is stuccoed and pointed to represent Flemish bond brickwork. There is also a cellar. Buildings associated with the inn include a separate kitchen, separate laundry and bathroom.

The inn is situated on the north side of Windsor Road in Box Hill. It is currently unoccupied and has been for a number of years; as a result, its condition is deteriorating but relics that exist are likely to survive intact as the site within the fence has not undergone any obvious development.

Collits Inn (SHR 00455; Lithgow LEP I012, Hartley Vale Road, Hartley Vale)

Initially known as The Golden Fleece, Collits Inn (Hartley Vale Road, Hartley Vale) was built c 1823 by Pierce Collits, and was the first wayside inn built west of the Blue Mountains. It is built in the old colonial Georgian style with a stone flagged verandah and a symmetrical facade. It is a single-storey building of weatherboard and brick nog construction. Surviving structures associated with the inn include stables, a barn, outbuilding, woolshed and toilets.

The archaeological resource is of local, state and national heritage significance for the research potential inherent on the site and for the rarity of an intact archaeological site dating from the early 19th century (SHR data sheet).

As a result of decreasing demand for the inn's services, it went into decline in the 1830s and was primarily used as a residence and farm. Collits managed to procure a grant in Hartley, where he built another inn in 1838. Today, Collits Inn at Hartley Vale is a bed and breakfast.



Figure 4.40 : Collit's Inn in 2001 prior to restoration works (Source: Christine and Russell Stewart 2002, Section 4).

Royal Oak Inn/ The Mean Fiddler (former), The Fiddler (currently) (SHR 00698; The Hills Shire LEP I185, 2 Commercial Road, Rouse Hill).

The Royal Oak Inn, adjacent to the Windsor Road at Rouse Hill, was built c 1829 and licensed as "White Hart" to William Cross (although this is likely to be an error). The inn is a single-storey building Georgian (early Victorian) style. The front facade is dressed sandstone blocks and the side walls are random coursed. A verandah runs along the front of the building across the front. Extensions at the rear of the inn are of sandstock brick. The inn has a former rear wing, previously incorporated within a tavern alteration and stone cellars.

Macquarie Arms Inn (former) (SHR 00282; Hawkesbury LEP I00282, 104 Bathurst Street Pitt Town)

The Macquarie Arms Inn (104-106 Bathurst St, Pitt Town) is a derelict collection of buildings and while still standing is more akin to an archaeological site at present. Also known as Blighton Arms and Flemings Place, the complex also includes a larger house called Mulgrave Place (by 1823).

The Macquarie Arms Inn site is situated at the edge of a ridge overlooking Pitt Town Bottoms. It was built by Henry Fleming (c 1816/17), who also ran it. Fleming was a convict arrived in Australia on the third fleet and one of the earlier settlers in Pitt Town (in the district of Mulgrave Place). Fleming was the brother-in-law to William Johnston, who was a member of a significant family in the area.

The Macquarie Arms Inn site consisted of the main house called Mulgrave Place (built prior to 1823) with a separate kitchen, barn/stables and a brick cottage (c 1805 or 1815). Other features on this site include what is described as a brick well with a domed roof, but which is more likely to be a cistern.

A part of the barn was used as an inn during the early period. It is single-storey with an attic, which is where the accommodation is thought to have been. The external walls are brick nogging (where brick is used to fill spaces in a wooden frame giving the impression of brick veneer) but may have originally been a slab building and later infilled with brick. The roof was jerkin-head (otherwise known as 'hipped-gable'). Cedar joinery in the bar was removed in the 1970s.

Each individual building is significant, but as a collection, this significance is elevated. The site is listed on the SHR, which makes it a significant item in the development of the state of NSW.

The site has probably shrunk from its original size through surrounding development but it is highly likely that the archaeological resource in the current SHR curtilage is intact and substantial. It is also of State significance.

Coach and Horses Inn, Berrima (Wingecarribee LEP I0133; 24 Jellore Street Berrima)

The Coach and Horses Inn is a good example of how inns evolved structurally throughout the 19th century. The inn site originally comprised of a single-storey, two-roomed rectangular building constructed in the late 1830s. Its Georgian architectural style was typical for buildings in the early years of the colony. The inn originally operated under the sign of the Mail Coach Inn from 1837 to 1839 as a licensed public house and staging post for travel and for the delivery of mail. Additions were made in the 1850s which included a detached kitchen. An eastern extension to the main building was added in the 1880s and included an outdoor privy. These additions to the inn affected the original Georgian symmetry of the building.

The White Horse Inn, Berrima (SHR 00106; Wingecarribee LEP I123, 3 Market Place Berrima)

The White Horse Inn is listed on the State Heritage Register (SHR 00106). This building, in Market Street Berrima, dates to 1834. It lacks the long veranda at the front but was renovated in the 19th century to include a verandah on the second level.

The building is constructed of dressed sandstone ashlar blocks and has fireplaces on either side. A timber veranda on the second storey provides an outdoor space upstairs. The inn has one entrance on the facade rather than a series of doors entering private rooms. A coach house was built against the western elevation of the main building in 1865.

The White Horse Inn has a detached kitchen of sandstone to the rear adjacent to a roofed courtyard.

The Berrima Inn, Berrima (SHR 00103; Wingecarribee LEP I132, 26 Jellore Street Berrima)

The Berrima Inn was purpose built as an inn in 1834 in the traditional Colonial Georgian cottage style. The inn was issued the first inn license in Berrima in 1834 and continued to run until 1848, when it then became a residential dwelling. An extension to mirror the original building was later added to the inn.

Goldfinders Inn, Kurrajong (SHR 01978; Hawkesbury LEP I357; 164 Old Bells Line of Road, Kurrajong)

Goldfinders Inn consists of three buildings being a single-storey timber cottage (c.1809), a two-storey sandstone building, originally the inn (c.1850) and a timber barn (vernacular but not dated). The inn was built by the third owner of the property, John Lamrock who called it the "Goldfinders Home", catering to gold-diggers travelling to and from the western goldfields. Its location on the Old Bells Line of Road (no. 164) put it in an excellent position to capture passing trade across the mountains. An addition for use as a post office has been demolished.

The group comprising the listing is represented by buildings that retain evidence of vernacular building techniques, with some adaptation to the fabric. It is significant for its ability to demonstrate successive occupancies in the physical evidence of the place and as a place that has been continually inhabited once established in 1809. Its significance is also inherent in its early construction, which as a surviving structure is rare in NSW.

A garden between the inn and cottage survives with camellias (*Camellia japonica* 'Variegata' and *Camellia japonica* 'Triumphans') may date from the 1850s as suggested by photographic evidence and information provided by Professor E G Waterhouse.

Other surrounding structures are not described in the listing but it is expected that the site has a well and/or cistern.

Dickygundi Inn (I175 Dubbo Local Environmental Plan 2011, 139 Narromine Road Dubbo)

The Dickygundi Inn is a single-storey, board and batten building with a shingle roof beneath a corrugated iron roof. The inn was opened in 1864 as a 'wine shanty' (SHI 1520484) and became a stop for the Cobb and Co. mail run. It has been used in this report as a comparison because it was built not long after 1859 and most importantly it is stylistically very similar to Lawson's Inn (although only one photograph of the Lawson's building has been found - Figure 4.32). In other online sources, the site is called the Rawsonville Inn. No other information is provided on ancillary buildings but the inn is in a large undeveloped paddock.



Figure 4.41 : The *Dickygundi Inn* on the Mitchell Highway in Dubbo. Photo: P Kottaras. View south.



Figure 4.42 : The eastern elevation of the *Dickygundi Inn*. Photo: P Kottaras. View west.

Archaeological sites

Bents Basin Inn (Liverpool LEP 2008 Item 28, Wolstenholme Ave Greendale)

Bents Basin Inn (Wolstenholme Avenue, Greendale) was built by the Rapley family in the 1860s and demolished in the 1950s. The building, described as an inn or hotel, was a timber slab structure with sandstone flagstone flooring. Huts that were built (date not provided on SHI datasheet) next to the main building but were demolished in the 1950s.

The site now is part of the Bents Basin Recreational Area and has archaeological potential. A mature pepper tree (peppercorn) marks the location of inn (SHI 1970075).

White Hart Inn (Unlisted, Windsor Road Beaumont Hills)

The White Hart Inn (Old Windsor Rd, Beaumont Hills) was built by James Gough in 1827 on the overland transportation route between Parramatta and Windsor. It was one of several inns along the road to Windsor that provided food and lodging to travellers.

Archaeological test excavations by EMM with Comber Consultants in 2014 revealed that the main inn building was constructed of brick and sandstone with substantial sandstone footings. The main inn building was described in historical accounts as being two-storey, which is supported by the footings; it had what has been interpreted as a dining room behind the main front-facing verandah, two small rooms at either end of the verandah (showing clear evidence of an extension to the southern end of the building) and small rooms, probably bedrooms also added to the southern end of the building. The complex included a cellar on the northern end of the building, a brick cistern and separate kitchen.

The test excavation determined that the White Hart Inn demonstrated at least two phases of development with evidence suggesting brick additions to the main accommodation building. The architectural style of the detached kitchen also indicated that it was a later addition to the main inn building.

The inn was assessed to be of State significance for its historic and representative values as well as its rarity as an archaeological site. It was a product of a period of exploration and expansion and representative of a class of enterprise that were micro-economies in the larger colonial framework (EMM 2015; SHR nomination form EMM 2017).

Woolpack Inn, Marulan (SHR 00172 as part of the listing for “Old Marulan Town”)

The building was erected in 1835 by Joseph Peters at the junction of two alignments of Mitchell's Great South Road. It was a two storey structure.

The building remained in service until the town was largely abandoned and relocated to a new railhead, which took over the town name, in the mid-1860s. The main building was destroyed by realignment of the main road. Archaeological investigations included excavating remains of a privy and several ephemeral structures and activity areas, indicating the former range of activities that were supported by the inn during its use.

The site was investigated in 2007 by Banksia Heritage + Archaeology/Umwelt.

Weatherboard Inn Archaeological Site (SHR 00595; Blue Mountains LEP 2005 Item WF019, 3-15 Matcham Ave Wentworth Falls)

Cox's Depot was established around 1814 and was used as a military post and a dining room for travellers who also camped and fed their stock there. The building burnt down in 1822 and was eventually replaced by a weatherboard inn, called 'Weatherboard Inn', between 1827 and 1829. Archaeological test excavation of this site (Wendy Thorp, 1985) unearthed sandstone blocks and sandstock brick as well as ceramic, glass and iron. The site was assessed as having a high level of research potential and was stabilised and reburied. Associated buildings included a kitchen, stores and stables (with stabling for 17 horses).

Weatherboard Inn (1-15 Matcham Avenue, Wentworth Falls) was built by John Mills and demolished sometime after 1867 when the inn closed.

Wollondibby Archaeological Site, Crackenback (Snowy River LEP I100, 785 Alpine Way, Crackenback)

The Wollondibby archaeological site is within the area listed on the Snowy River LEP 2013 as Wollondibby Cottage, the Green House – Also woolshed and grave. The listing does not include the archaeological potential of the site. The information in this section has been written partially from memory after a site visit (by Pamela Kottaras and Kerime Danis) in 2007 and is recorded in a report jointly prepared by Austral Archaeology and City Plan Heritage (2007).

Today the site consists of an existing stone cottage (c1860), which was the second dwelling built on the property, a woolshed, and a cemetery enclosed by a stone fence. The archaeological site, which is not included in the listing, is of particular interest as it dates to the early 1840s and was situated in a remote area. The archaeological resource is clearly evident as most of the structures were constructed of locally sourced granite and foundations and footings survive intact. This would indicate, along with the fact that the property in the location of the archaeological site was undeveloped (a Google Map search indicates that it remains undeveloped) that the site retains a high level of archaeological potential. The homestead (that operated as the inn in the 1860s for short period of time) was single-storey with wing rooms on either side (Figure 4.43). Bark shingles formed the roof and fireplaces flanked the building; one fireplace was described as “probably as large as has ever been built in this country” (Marden, Sydney Morning Herald, 18 March 1939, p.21).

The field survey was based around features listed in a report prepared by Brian Egloff (1988) and was undertaken to confirm the survival of those resources. The site was also described in an article in the Sydney Morning Herald (18 March 1939). In addition to the items of built heritage, the survey confirmed the existence of archaeological features, some of which have been attributed a function, others with known functions. The structures that were represented were the Wollondibby Homestead (known), which was converted to the inn for a short period of time to take advantage of the gold boom

in Kiandra, ablutions block (interpretation), laundry (interpretation), killing shed (interpretation), stock yards and animal pens (known), granite pathway to water pool/bathing pool (known) and a well (known). Anecdotal evidence exists for a roasting pit where the owners, the McEvoy's, put on an annual bullock roast for the local Aboriginal people who interacted with the McEvoy's. A large, stone lined pit was recorded by Egloff and City Plan Heritage/Austral Archaeology and it is this pit that is attributed with the function of roasting pit.

The site of the Wollondibby Inn/Homestead is significant for its early construction, one of the earliest pioneer properties in the region as well as its short-lived operation as an inn. It is also significant for its association with the McEvoy's who were an early pioneering family in the region and whose descendants still live in the area. Mary McEvoy (née Shell) is said to have been the first white woman to cross the Snowy River and their daughter Mary, was the first child of settlers in the region (Marden, Sydney Morning Herald, 18 March 1939, p.21). The site is also of considerable significance for the research value inherent in the archaeological resource that has the ability to answer question about life on the property, its relationship to nearby sites as well as important information on the spatial arrangement of a site of this nature. The layout of the place and the archaeological resource is likely to highlight the self-sufficiency of the inn, which would have also been of vital importance to the place as a homestead, being as remote as it was.

The homestead is associated with a mill house to the south of the main homestead and another house site called "Gammon Place" on the Moamba River

Wollondibby Homestead was demolished in 1954.



Figure 4.43 : A photograph of a photograph of the Wollondibby homestead, which operated as an inn for a period of time. Photo K Danis. Photograph on display at Jindabyne shopping centre.

Edward Powell's Halfway House

Edward Powell's inn was the earliest in the colony, adapted from his home when he realised the business opportunity his address provided. Powell built his home on the boundary next to the Sydney – Parramatta route, in present day Homebush in 1793. The inn was in a prime location to capture passing trade; even Governor Macquarie stopped in on one of his tours (Freeland 1966, p.90).

Initially Powell was granted eighty acres at Liberty Plains, only for the grant to be retracted. Soon after however, he was granted another eighty acres nearby where he built a home for his wife, Elizabeth Fish, and himself. The house was a single-storey brick and timber, weatherboarded building with a bark roof, which he and his wife ran as an inn soon after. Powell eventually obtained licence for spirits and wines in 1809.

The property boasted 500 acres (202 hectares), half of which was under cultivation, an orchard, outhouses, a granary, stables and plenty of water in addition to the inn building (Freeland 1966, p.90).

His widow took over the role of innkeeper on his death until the role went to her son-in-law in 1816 (Freeland 1966, p.90).

Comparative analysis summary

In his book, *The Australian Pub*, J M Freeland sums up the purpose of an inn:

At the wayside inn the peripatetic traveller going from town to town on business bent found shelter and refuge at the end of a long day's ride. At it the squatter on his way to new country could replenish his provisions, repair his broken equipment, shoe his horses, water and pasture his stock, and obtain a last taste of worldly comforts for his family.

Freeland 1966, p.89

But inns not only serviced those travelling though; they acted as a nucleus to a dispersed community, taking on the role of community hall, market place and courthouse.

From this comparative survey of inns that were built around the same time as Lawson's Inn, a number of patterns emerge. These can assist with making predictions about the types of archaeological resources that may survive, and their significance.

Quite often, residents took advantage of passing traffic and adapted their homes to accommodate travellers. Wing rooms were added, which were accessed from outside. Modifications included additional rooms and a second storey. Earlier inns were usually timber slab and/or weatherboard constructions and were a single-storey. Later, as roads were improved and destinations established, inns took on a more sophisticated character with buildings of stone or brick (or both), two-stories and expensive internal detailing (Freeland 1966, p.101).

The inns included in this study demonstrate that in the early days when routes away from Sydney were opening up there was shared style of architecture that existed in NSW. Where they were purpose-built inn typically constructed as single-storey Georgian style, that is, they were simple vernacular buildings often with verandahs and usually with multiple outbuildings. Rooms were accessed directly from the outside but food was provided in a dining room, possibly shared with the proprietor and family.

Purpose-built inns often had an entrance from the verandah to every room at the front and there may have been additional facilities for special guests (Freeland 1977, p.96). In some cases, inns were altered private homes (Freeland 1966, p.93), but the architectural style did not differ significantly from that of the private home. Most inns in the 19th century were not just a single building but a complex of

structures. Kitchens were usually constructed as a separate building and located behind the main building. Other buildings at could include a laundry, storerooms and privies granaries and toilet/bathing facilities. As most travellers arrived by coach, stables were needed for the horses, and sometimes a blacksmith's workshop was situated on the site or nearby. Other structures associated with water use and management could include wells, cisterns and drains as well as nearby creeks. In more remote places, such as in the Snowy Mountains, an inn and homestead would have had to provide most of the food by growing vegetables and slaughtering stock, although inns closer to main towns could also have had these facilities. Food storage in the form of cool rooms, dairies and dry stores is likely to have existed on remote sites as well as in less remote areas. Barns, sheds and yards to store animal feed, keep chickens and other small stock are all structures that should be anticipated on an inn site (as opposed to a purpose-built hotel in an urban area). The facilities and infrastructure of an inn would have reflected the facilities required by homesteads in remote locations, only on a larger scale. In their heyday, inns operated as a micro-economy within the larger economic framework of their local area.

The popularity of these businesses peaked between 1820 and 1850, with only the more established inns, and those away from the rail line, continuing to operate into the late 19th century. The notable decline in the number of operating inns is the result of growing settlements and railways which significantly reduced travel times. At their closure, usually around the time of lapsed licences, inn buildings were converted to private residences; this is a trend that is evident from the late 19th century. As buildings aged, they were also demolished. The mid to late 20th century saw extant inns regain some of their original function by being used as restaurants, pubs/hotels, or for accommodation.

The survey of former inns also highlights the history of adaptation, from home to inn and back to home again. As discussed, the first mention of The Thistle Inn is in 1859 – this does not mean the buildings date to that year as well.

The earliest likely date for John Lawson's occupation of the site, and possibly the construction dates of the building is around the late 1830s, when he gained his freedom but more likely after his marriage to Anne Freeburn in 1854 since he was registered as living in Bringelly at his marriage. The only photograph found of the inn confirms that it was a single-story vernacular structure, and while the timber verandah balustrades are clearly visible, the facade of the inn is not, and so the number of doors leading into the building cannot be seen. Perhaps, John Lawson and his family lived in this house before converting it to an inn, and later as a home again.

Curtilage information

The curtilage of Lawson's Inn is shown on Figure 6.5 and comprises the area of land between the old The Northern Road alignment (Eaton Road) and the new The Northern Road alignment which is where Lawson's Inn was located. A map showing specific areas of archaeological potential was developed by (Desic and Kottaras 2017) as part of the Research Design and Excavation Methodology, and is shown in Figure 6.5.

Significance assessment

The existing LEP significance assessment for Lawson's Inn meets criterion A, E and G. A subsequent assessment by Australian Museum Consulting indicated that the Lawson's Inn site may be of state heritage significance, however this was not supported by a systematic assessment against the NSW heritage criteria. The initial significance assessment for the Northern Road project, concurred with the LEP assessment and its level of local significance, but did not concur with the Australian Museum Consulting assessment of state significance. The significance assessment in Table 4.8 is an updated assessment prepared by EMM Consulting (Desic and Kottaras 2017) as a result of submissions. The updated significance assessment provides an assessment of the section of the site within the project construction footprint, and the actual site of Lawson's Inn (also known as the Thistle Inn).

Table 4.8 : Assessment of significance for Item 10: Lawson's Inn Site

NSW Criterion	Assessment
A – Important in the pattern of NSW's history	<p>Project construction footprint:</p> <p>The project area at Luddenham is part of a property that is significant in the historical development of Luddenham. If relics exist within the area to be impacted by the project in this location, they may be of local significance depending on their integrity, research value, representative values and rarity. However, the project construction footprint does not possess significance by virtue of its association with nearby heritage items.</p> <p>The project area does not fulfil this criterion.</p> <p>The Thistle Inn site:</p> <p>The site demonstrates the history of settlement within the area of Luddenham and reflects the importance of early major road networks in facilitating the development of such urban centres as well as providing an important resource for travellers.</p> <p>As the inn and store was a focal point to the surrounding residents as a well-known rest stop, it is likely to have been the reason for siting Luddenham village.</p> <p>The site of the former Thistle Inn would be of local significance.</p> <p>However, the site of the inn is not in the project area.</p>
B – Strong or special associations	<p>Project construction footprint:</p> <p>Owned by John Lawson but without material evidence of the lives of his family, the project area does not fulfil this criterion.</p> <p>The Thistle Inn site:</p> <p>The Lawson family was a well-known family in the Luddenham district from the mid-19th century to the mid-20th century. They were associated with proprietorship of inns/guesthouses and John Lawson was a well-known member of the Luddenham community, including the local Methodist community, who actively sought to bring attention to local farmers during difficulties.</p> <p>Evidence relating to the Lawson family would be of local significance.</p> <p>However, the site of the inn is not in the project area.</p>
C – Demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement	Does not meet this criterion.
D – Strong or special associations with a particular community or cultural group	Does not meet this criterion.

NSW Criterion	Assessment
E – Potential to yield information	<p>Project construction footprint:</p> <p>There is low to nil potential for evidence of The Thistle Inn to survive in the impact zone of the project area.</p> <p>There is low potential for evidence of other relics such as former huts to exist in the impact zone of the project area.</p> <p>The project area does not meet this criterion.</p> <p>The Thistle Inn site:</p> <p>There is the potential to gain more information on the site from further archaeological and documentary research, relating to the early use of inns in the region. While many inns have been partially excavated, complexes in their entirety are rare as archaeological sites. A number of extant inn complexes survive in regional NSW as well as in Sydney, and while many are in poor condition (Box Hill Inn – Box Hill, Dickygundi Inn – Dubbo are two examples), the lots they were built on have been protected to a certain spatial extent. It is likely that original curtilages have been reduced to accommodate subdivision and development resulting in the loss of some peripheral structures.</p> <p>Archaeological excavation of this site is likely to yield information on the aspects of the Lawson's lives including their importance in the surrounding community, their relationship to the Methodist church; it may provide information on individual members of the family, their socio-economic conditions and their preferences as individuals. Information about the store and what it held and sold is also likely to be embedded in the archaeological resource.</p> <p>Archaeological excavation is also likely to yield technological information about the buildings(s), the materials, sources of materials and quite importantly, the spatial pattern of the inn. It may be able to answer the following questions</p> <p>What facilities did it boast?</p> <p>Where was their water obtained from?</p> <p>Did they kill and butcher their own animals?</p> <p>Where there stabling and stock facilities</p> <p>Is there evidence of the transition from inn to home?</p> <p>All this information would provide information on the local area but could be compared to other sites across the state.</p> <p>The level of intactness of the relics relies on the level of impacts imposed by the Christmas tree farm.</p> <p>Evidence of the inn would be of local significance.</p> <p>However, the inn is not in the project area.</p>

NSW Criterion	Assessment
F – Uncommon or rare	<p>Project construction footprint: Does not fulfil this criterion.</p> <p>The Thistle Inn site: Archaeological sites are becoming rarer in Sydney and in particularly sites that operated as inns (or remote homesteads) have not been extensively excavated archaeologically. While many inns have been partially excavated, complexes in their entirety are rare as archaeological sites and will become rarer as Sydney and other historic urban centres expand. Evidence of the inn would be of local significance. However, the inn is not in the project area.</p>
G – Principal characteristics of a class	<p>Project construction footprint: Does not fulfil this criterion.</p> <p>The Thistle Inn: The site was representative of the location of many early hotel and inn sites, on a major road network, in the Sydney area. Relics associated with the inn would be representative of early to mid-19th century inns that were established in the outskirts of Sydney. Evidence of the inn would be of local significance. However, the inn is not in the project area.</p>

Statement of significance

The following statement of significance was prepared by Desic and Kottaras (2017) for the project construction footprint and the site of the actual Lawson's Inn (also known as the Thistle Inn):

Project area

The project area is not predicted to have archaeological evidence of the former Thistle Inn, which was owned and operated by John Lawson and his family.

It does not possess heritage significance without evidence of significant relics.

The Thistle Inn

The significance of the former Thistle Inn relies on the existence of relics with research potential. If this evidence survives, the archaeological site would be of local significance of the archaeological resource that would shed light on the functions of the buildings, the conversion of the inn to a home, life on the property, the spatial arrangement of ancillary structures and access to the necessities of life such as water and food. The site of the former inn is also significant at a local level for its rarity as a potentially intact archaeological site in the region, and for its association with the Lawson family, and the early growth of Luddenham. It is also valuable for the archaeological resource that when excavated may be able to provide comparable data on other similar sites across the state.



Figure 4.44 : Location of Lawson's Inn site, facing north. Photo taken by Jennifer Chandler on 26 February 2016.



Figure 4.45 : Area where ceramic and glass fragments are located, facing west. Photo taken by Jennifer Chandler on 26 February 2016.



Figure 4.46 : Some of the glass fragments located on the site. Photo taken by Jennifer Chandler on 26 February 2016.



Figure 4.47 : Painted stone block. Photo taken by Jennifer Chandler on 26 February 2016.

5. Updated summary of impacts

Table 5.1 provides an updated summary of the impacts of the project on identified heritage items in the EIS, including revised impacts based on the outcomes of this assessment.

Table 5.1 : Updated summary of impacts

Heritage item number	Heritage item name	Register number	Proposed activities	Potential impacts
Item 2	Orchard Hills Cumberland Plain Woodland	105317 (CHL) 102211 (RNE)	Clearing of vegetation and construction of carriageway and associated fill slope as well as associated drainage and flood retardation works	<p>Potential impacts to the Orchard Hills Cumberland Plain Woodland Commonwealth Heritage Place (CHP) as a result of the project include impacts to the natural heritage values of the site through native vegetation removal and associated habitat loss, as well as impacts to the historic heritage values of the site as a result of impacts to the Chaffey Brothers Irrigation Scheme Canal (the canal). These potential impacts are summarised below.</p> <p>The main impacts to natural heritage are as a result of clearing of around 9.28 ha of native vegetation within the western periphery of the CHP (Sectors B and H). However this is equivalent to only around 1.3% of the total 726.32 ha of native vegetation within the CHP. The majority of these areas are made up of a mix of regrowth natural vegetation communities identified in the HMP for the DEOH as being of moderate natural heritage significance, as well as grassland areas ranked as being of low natural heritage significance (Godden Mackay Logan 2013). There is also a small patch of relic native trees associated with two trees located within the north-western portion of the CHP that would also be impacted by the project. This area is identified as having moderate natural heritage significance (Godden Mackay Logan 2013). Of the impacted areas, none are identified as remnant vegetation communities which are ranked as high natural heritage significance in the HMP.</p> <p>The regrowth natural vegetation communities have been identified as having a reasonable tolerance for change, being that this element and its key attributes have relatively little heritage value, but may contribute to the overall significance of the site. In general, the element can be altered to a reasonable degree provided it does not impact the heritage values of the site (Godden Mackay Logan 2013). In the context of the CHP overall, impacts to regrowth natural vegetation communities as well as grasslands are expected to be minimal and are therefore considered reasonable. Given this and the moderate</p>

Heritage item number	Heritage item name	Register number	Proposed activities	Potential impacts
				<p>to low heritage significance of these elements, impacts as a result of the project are not expected to be significant.</p> <p>Relic native trees have been identified as having a low tolerance for change, being that this element and its key attributes embody heritage values, retaining a high degree of intactness with no major change or alterations, or only minor alterations that do not detract from the heritage values. In general, the element should be retained and conserved (Godden Mackay Logan 2013). Although impacts to relic native trees in the overall context of the CHP as a result of the project would be minimal, given their moderate natural heritage significance and low tolerance for change, impacts to this element as a result of the project are considered moderate.</p> <p>The aquatic environment within the CHP that is ranked in the HMP as being of moderate to high significance (Godden Mackay Logan 2013) is not expected to be impacted by the project due to the distance from the works and the proposed application of effective mitigation measures.</p> <p>Potential impacts to the historic heritage values of this item are related to impacts to the canal located within the south-western portion of the CHP (Sector H of the DEOH). The canal is ranked as high significance in the HMP (Godden Mackay Logan 2013). Construction would overlap with only 2.36% of the northern part of the canal, some of which is in poor condition as it is extremely shallow from erosion. The canal and the area in which it is situated (Sector H) has a low tolerance for change in relation to new development and demolition/remediation. However, given the project is impacting a small proportion of the overall canal on DEOH land, and that the section being impacted is of relatively poor quality due to erosion, the overall impact on the historic heritage values are not considered to be significant.</p> <p>Vibration is unlikely to impact the canal due to the structural nature of the canal and vegetation on the canal.</p>

Heritage item number	Heritage item name	Register number	Proposed activities	Potential impacts
Item 3	Warragamba Dam to Prospect Reservoir pipeline	-	Construction of carriageway and fill slope. Drainage infrastructure upgrades comprising a concrete drainage channel along the northern perimeter of the Water NSW Precinct (north of the pipeline) and an access track to the east of The Northern Road.	The Northern Road carriageway construction is confined to section of pipeline that is underground. No impact is expected. Proposed access track would impact on culvert located in Survey Area No. 4-26, but not on pipeline, as it is below the ground in this area.
Item 9	Miss Lawson's Guesthouse Site	-	Construction of dual carriageway, intersection and cut slopes	The full site would be directly impacted by construction.
Item 10	Lawson's Inn site	53 (LLEP)	Construction of dual carriageway, a cul-de-sac, an intersection, cut slopes and construction compound and laydown site	<p>The construction of The Northern Road upgrade would directly impact on around one quarter of the entire curtilage of the property (Lot 2 DP623457).</p> <p>The potential for substantial and intact relics related to Lawson's Inn has been assessed as low within the construction footprint and moderate to high adjacent to the construction footprint.</p> <p>It is not anticipated that the project would have a direct impact on the potential main archaeological features related to the former Inn as historical plans and photographs indicate the actual inn site is outside the project boundary. An area of low archaeological potential has been identified along the northern edge of the Inn site to account for any peripheral relics that may be associated with the Inn site.</p> <p>It is also unknown, without archaeological investigation, whether the area at the western end of the lot, containing the artefact scatter, is related to the use of the Inn. The area containing the artefact scatter is located within the project boundary. All areas within the project boundary have been designated as being of low archaeological potential (Desic and Kottaras 2017).</p>

6. Updated Statements of Heritage Impact

The following Statements of Heritage Impact have been updated in response to submissions. These replace the Statements of Heritage Impact in the non-Aboriginal heritage technical working paper as part of the EIS (Chandler and Waller, 2017).

Item 2: Orchard Hills Cumberland Plain Woodland Commonwealth Heritage Place (Lot 3 DP238092)

Proposed works

Proposed works that would interact with the Orchard Hills Cumberland Plain Woodland CHP include clearing of vegetation and construction of a carriageway to the east of the existing The Northern Road, including associated fill slope formations and alterations to existing drainage lines for road-serving drainage and flood retardation works. This would have potential impacts on the natural heritage values of the site (refer to Figure 6.1). These works would also overlap with the western-most section of the Chaffey Brothers Irrigation Scheme Canal (the canal) in two locations, which would have potential impacts on the non-Aboriginal heritage values of the site (Figure 6.2).

Impact Assessment

Potential impacts to the Orchard Hills Cumberland Plain Woodland Commonwealth Heritage Place (CHP) as a result of the project include impacts to the natural heritage values of the site through native vegetation removal and associated habitat loss, as well as impacts to the historic heritage values of the site as a result of impacts to the Chaffey Brothers Irrigation Scheme Canal (the canal). These potential impacts are summarised below.

The following aspects of the project respect or enhance the heritage significance of the item for the following reasons:

The natural heritage values of the site are mainly focused on its natural vegetation, which includes areas of original native vegetation (including very old relic trees) as well as the natural regrowth of these original plant communities (Godden Mackay Logan (2013). This includes small remnants and regenerating areas of Cumberland Plain Woodland, Castlereagh Ironbark Forest and Sydney Coastal Riverflat Forest (River Flat Eucalypt Forest), particularly in the eastern portion of the CHP. It is noted that impacts from the project would be limited to the western periphery of the CHP.

Cumberland Plain Woodland is listed as a critically endangered ecological community at both state (*Cumberland Plain Woodland in the Sydney Basin Bioregion*) and Commonwealth levels (*Cumberland Plain Shale Woodlands and Shale-Gravel Transition Forest*). As such, the CHP is considered a core biodiversity area for the conservation of these communities, and the place comprises the least disturbed and largest remaining remnant of Cumberland Plain Woodland (Godden Mackay Logan 2013).

Although around 9.28 ha of native vegetation would be removed by the project, this is equivalent to only around 1.3% of the 726.32 ha of native vegetation on the CHP. These areas are made up of a mix of regrowth natural vegetation communities identified in the HMP as being of moderate natural heritage significance, as well as grassland areas ranked as being of low natural heritage significance (Godden Mackay Logan 2013). There is also a small patch of relic native trees associated with two trees located within the north-western portion of the CHP that would also be impacted by the project. This area is identified as having moderate natural heritage significance (Godden Mackay Logan 2013).

Additionally of the 9.28 ha of the Cumberland Plain Shale Woodlands and Shale-Gravel Transition Forest (CPWSGTF) and River-flat Eucalypt Forest on Coastal Floodplains of the NSW North Coast, Sydney Basin and South East Corner Bioregions (REFCF) ecological communities that would be removed by the project, this would be equivalent to only around 1.5% of the total 610.60 ha of these communities within the CHP. None of the areas impacted by the project have been identified in the HMP as remnant vegetation communities of high natural heritage value.

Additionally since the area is already disturbed by fencing, roadside and edge effects, impacts to fauna within the CHP as a result of the project (eg edge effects, light pollution, etc.) are not considered to be significant. For impacts to fauna refer to the Biodiversity Assessment (Appendix I of the EIS).

The project would also result in an increase in the rate and volume of flow discharging to three Blaxland Creek tributaries and existing dams within the Blaxland Creek catchment within the DEOH site. As a result, the scour potential along these drainage lines would increase and ground conditions would become wetter. However, these impacts are not expected to extend to the aquatic areas mapped as moderate to high significance within the CHP, therefore the impact on these areas would be negligible. This is due to the distance of the works from these areas and the implementation of effective mitigation measures outlined in the Hydrology and Flooding Assessment (Appendix K of the EIS) and the Soils, water and contamination assessment (Appendix L of the EIS).

The entire length of the canal within the CHP is around 2,632 m and is ranked as being of high significance in the HMP (Godden Mackay Logan 2013). There would be minimal impact to the canal as much of its extent is situated outside the construction footprint. The construction footprint (and therefore, area of impact) only overlaps with around 2.36 % of the entire canal. Furthermore, around 36 m of the part of the canal located within the construction footprint is in poor condition as it is extremely shallow from erosion. The section within the construction footprint which is in better condition is very similar to those sections that are outside the construction footprint. The wooden features of the canal structure that have the potential to yield information about the construction of the canal are located outside the construction footprint.

The following aspects of the project could detrimentally impact on heritage significance. The reasons are explained as well as the measures to be taken to minimise impacts:

As identified above, although around 9.28 ha of native vegetation would be removed by the project, this is equivalent to only around 1.3% of the 726.32 ha of native vegetation on the CHP and is mainly made up of a mix of regrowth natural vegetation communities identified in the HMP as being of moderate natural heritage significance, as well as grassland areas ranked as being of low natural heritage significance (Godden Mackay Logan 2013). The small patch of relict native trees within the north-western portion of the CHP that would also be impacted by the project, which has been identified as having moderate natural heritage significance (Godden Mackay Logan 2013).

The key attributes of natural heritage elements on DEOH are the floristics and structure of the ecological communities, and the existence of the isolated relict trees. Therefore, they have different levels of tolerance for change. The regrowth natural vegetation communities have been identified as having a reasonable tolerance for change, being that this element and its key attributes have relatively little heritage value, but may contribute to the overall significance of the site. In general, the element can be altered to a reasonable degree provided it does not impact the heritage values of the site (Godden Mackay Logan 2013). In the context of the CHP overall, impacts to regrowth natural vegetation communities as well as grasslands are expected to be minimal and are therefore considered reasonable. Given this and the moderate to low heritage significance of these elements, impacts as a result of the project are not expected to be significant.

Relict native trees have been identified as having a low tolerance for change, being that this element and its key attributes embody heritage values, retaining a high degree of intactness with no major change or alterations, or only minor alterations that do not detract from the heritage values. In general, the element should be retained and conserved (Godden Mackay Logan 2013). Although impacts to relict native trees in the overall context of the CHP as a result of the project would be minimal, given their moderate natural heritage significance and low tolerance for change, impacts to this element as a result of the project are considered moderate.

The project could potentially introduce invasive weed and pest species. There may be regular mobilisation of typical roadside maintenance fertilisers, herbicides or other chemicals that may stunt the regrowth of native vegetation. However this would be managed through the implementation of effective weed and pest management measures as outline in the Biodiversity Assessment (Appendix I of the EIS).

The project would result in an increase in the rate and volume of flow discharging to three Blaxland Creek tributaries and existing dams within the Blaxland Creek catchment within the DEOH site. As a result, the scour potential along these drainage lines would increase and ground conditions would become wetter. However as identified above, impacts to the aquatic areas mapped as moderate to high significance in the DEOH site would be negligible due to the distance of the works from these areas and the implementation of effective mitigation measures.

In relation to the canal, which is ranked as being of high significance in the HMP (Godden Mackay Logan 2013), only 2.36 % of the entire canal extent associated with the DEOH is situated within the construction footprint and would therefore be subject to direct physical impact during construction. The remaining sections of the canal within the study area would potentially be subject to damage or destruction from the use of construction machinery and vehicles if not managed appropriately during construction; however this is not expected given the implementation of mitigation measures as outlined in Section 8.1 [of the Non-Aboriginal heritage assessment (Chandler and Waller 2017)].

Around 36 m of the canal within the construction footprint area is extremely shallow and eroded while the more intact section is similar to the other sections which would not be impacted. Overall the proposed works would have minimal impact to the significance of the site.

Furthermore, there are other remnants of the canal located to the west of The Northern Road about one kilometre south-west of the DEOH site which is listed on the PLEP as a locally significant archaeological heritage item (A-137).

The following impacts have been assessed as follows:

- vibration – vibration is unlikely to impact the canal due to the minimal structure of the canal and vegetation on the canal
- demolition – around 2.36 % of the canal extent associated with DEOH overlaps with the construction footprint and would likely be demolished. The remaining section of the canal outside the construction footprint is not expected to be impacted.
- archaeological disturbance – the section of the canal that would be impacted is similar to the other sections of the canal which would not be impacted. An archaeological excavation will be undertaken in the form of trenches cutting sections across the canal.
- altered historical arrangements and access – the canal is located on Defence land and is therefore subject to restricted access
- landscape and vistas – the landscape within the project would be altered by the construction of the dual carriageway; however, the vistas of the area would not be impacted as part of the area contains trees which obscure the vistas of the canal
- architectural noise treatment – not relevant to this heritage item

The Heritage Management Plan for the DEOH site (Godden Mackay Logan 2013:152-155) outlines management guidelines for the DEOH, including those related to managing impacts to the natural heritage values within Sectors B and H and historic heritage values associated with the canal in Sector H as follows:

- This New development in Sectors B and H should be located so as to avoid impacts on natural heritage. These sectors have a low tolerance for change in relation to new development
- New development in Sector H should not be planned for the southwest area where the Mulgoa Irrigation Scheme (the canal) is located. This southwest area of Sector H has a low tolerance for change in relation to new development.

- Demolition and remediation relating to whole of DEOH land – Remediation should aim to avoid all heritage items and values. If heritage sites cannot be avoided as a consequence of remediation, then heritage mitigation measures should be implemented. Remediation that impacts heritage values must be subject to assessment, development of a HIA, heritage impact mitigation and Defence approval.
- Demolition and remediation relating to Sector H (location of canal) - consideration of proposals for demolition of built elements should take into account the heritage value of the element and its tolerance for change, as well as its relationship to other, related elements of heritage value and the number of its type remaining. Demolition of elements of moderate and high heritage value should be avoided. Sector H has a low tolerance for change.

The management of historic heritage values of DEOH is supported by the following implementation guideline:

- Manage elements and structures of heritage value in accordance with its heritage value ranking and tolerance for change.

High heritage value: These elements should receive the highest priority for conservation and should be preserved, restored and reconstructed. Only minor adaptation of buildings would be appropriate (eg internal spaces only). Removal should be avoided.

As discussed above, some impacts would occur as a result of the project which are unavoidable. Additionally, given the project is impacting a small proportion of the overall canal on DEOH land, and that the section being impacted is of relatively poor quality due to erosion, the overall impact on the heritage values are not considered to be significant.

By implementing the relevant mitigation measures identified in the Biodiversity Assessment (Appendix I of the EIS), the Hydrology and Flooding Assessment (Appendix K of the EIS) and the Soils, water and contamination assessment (Appendix L of the EIS), impacts to the natural heritage values of the site are expected to be minimised and are not expected to be significant.

The Significant Impact Guidelines 1.2 (Department of Sustainability Environment Water Population and Communities 2013) (SEWPaC) provides a list of criteria that guide the assessment of actions that are likely to have a significant impact on the environment. These are relevant to the project for identifying the significance of potential impacts to the heritage values of the Orchard Hills Cumberland Plain Woodland CHP, as provided in Table 6.1. It is suggested in SEWPaC (2013) that where the answer to any of these questions is yes, a significant impact on the environment would be expected.

Where the project does not incur significant impacts to natural heritage values, a referral for the project to undergo further assessment by the Federal Department of the Environment is not required and, subsequently, the need to obtain offsets specific to natural heritage values is also not required. This is separate to the requirement for a referral under the EPBC Act due to biodiversity impacts, which has been assessed in the Biodiversity Assessment for the project (Appendix I of the EIS).

By implementing the following mitigation measures the potential impacts on the canal would be minimised:

- An archival photographic recording would be made of the extent of the canal to be impacted by the works, in accordance with the Heritage Division of the OEH guidelines (Heritage Council of NSW 2006) prior to its demolition.
- The sections of the canal that will be removed by the project will be recorded by a surveyor, including horizontal and vertical dimensions of the canal in its present form.
- Archaeological investigation of the sections of the canal to be impacted by the works would be undertaken. The investigation will include excavation of 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. Investigations will include clearance of vegetation, hand

excavation of topsoil/overburden, and mechanical excavation of trenches across the canal in various locations to reveal the cross-section, as detailed in *Mulgoa Irrigation Canal, Archaeological Research Design and Excavation Methods* (Kottaras 2017b) (Appendix B).

- The section of the canal outside the construction footprint would need to be protected from accidental or incidental damage during construction. Protective barrier fencing would be constructed along the construction footprint boundary in the vicinity of the canal prior to construction commencing and would remain in place until the conclusion of the works, at which time it would be removed.

Implementing these mitigation measures would reduce the impact of the significance of the canal as much as possible given the other constraints in this area of the project.

Additionally, given the project is impacting a small proportion of the overall canal on DEOH land, and that the section being impacted is of relatively poor quality due to erosion, the overall impact on the heritage values are not considered to be significant.

In summary, the project is not expected to have a significant impact on the natural or non-Aboriginal heritage values of the CHP given the heritage significance of these elements, their tolerance for change and proposed implementation of effective mitigation measures in accordance with this assessment (Section 8.1 [Chandler and Waller 2017]), the Biodiversity Assessment (Appendix I of the EIS), Hydrology and Flooding Assessment (Appendix K of the EIS) and the Soils, water and contamination assessment (Appendix L of the EIS).

Table 6.1 : Updated Item 2 – significant impact assessment

Significant impact criteria. Is there a real chance or possibility that the action will:	Assessment of impacts to the natural heritage values of the site	Assessment of impacts to the non-Aboriginal heritage values of the site (ie the canal)
<p>Permanently destroy, remove or substantially alter the fabric (physical material including structural elements and other components, fixtures, contents, and objects) of a heritage place</p>	<p>Approximately 9.28 ha of native vegetation would be removed by the project within the construction footprint. This is equivalent to 1.3% of the 726.32 ha of native vegetation on the CHP.</p> <p>Approximately 9.28 ha of the CPWSGTF and REFCF ecological communities would be removed by the project at the western edge of the CHP. The total area of these communities on the CHP is 610.60 ha. As such, the area removed would be equivalent to 1.5% of the total amount within the CHP. Using the severity guidelines provided in SEWPaC (2013), the Project is a Moderate severity impact. The action would permanently remove some of the components upon which the Orchard Hills Cumberland Plain Woodland CHP is based.</p> <p>However, of the impacted areas, none are identified as remnant vegetation communities which are ranked as high heritage significance (Godden Mackay Logan 2013), but rather would be limited to regrowth natural vegetation communities and a small patch of relic native trees ranked as moderate heritage significance in the HMP (Godden Mackay Logan 2013). In summary, the core vegetation areas in the centre and east of the Orchard Hills Cumberland Plain Woodland would not be affected, therefore impacts to the natural heritage values of the site as a result of vegetation loss are not expected to be significant.</p> <p>Construction of the project involves small scale native vegetation clearance that could potentially introduce invasive weed and pest species. There may be regular mobilisation of typical roadside maintenance fertilisers, herbicides or other chemicals that may stunt the regrowth of native vegetation. However this would be managed through the implementation of effective weed and pest management measures as outline in the Biodiversity Assessment (Appendix I of the EIS).</p> <p>Additionally since the area is already disturbed by fencing, roadside and edge effects, the impact to fauna as a result of the project (eg edge effects, light pollution, etc.) is not considered to</p>	<p>The proposed action would involve the demolition of a small section of the canal, which would permanently destroy, remove or substantially alter the fabric of the canal. However, an archaeological investigation in the form of salvage excavation of the extent of the canal to be impacted by the works and archival photographic recording for the entire canal would be undertaken to capture detailed information that has not previously been captured of a heritage item subject to ongoing environmental erosion.</p>

Significant impact criteria. Is there a real chance or possibility that the action will:	Assessment of impacts to the natural heritage values of the site	Assessment of impacts to the non-Aboriginal heritage values of the site (ie the canal)
	<p>be significant.</p> <p>The project would also result in an increase in the rate and volume of flow discharging to three Blaxland Creek tributaries and existing dams within the Blaxland Creek catchment within the DEOH site. As a result, the scour potential along these drainage lines would increase and ground conditions would become wetter. However, these impacts are not expected to extend to the aquatic areas mapped as moderate to high significance within the DEOH site, therefore the impact on these areas would be negligible. This is due to the distance of the works from these areas and the implementation of effective mitigation measures outlined in the Hydrology and Flooding Assessment (Appendix K of the EIS) and the Soils, water and contamination assessment (Appendix L of the EIS).</p> <p>The impact would be intense, involving vegetation removal and construction of a road. The impact would be permanent and irreversible. However the scale of the impact to the CHP is relatively small (considering the 610.60 ha area of the CPWSGTF and REFCF ecological communities on the CHP site) as the project impacts are limited to the vegetation on the western fringes, and the core biodiversity area for conservation which has been identified as high heritage significance in the HMP (Godden Mackay Logan 2013), would not be impacted.</p> <p>As such, this criteria is expected to be consistent with the heritage values of the CHP where mitigation measures are implemented.</p>	
Involve extension, renovation, or substantial alteration of a heritage place in a manner which is inconsistent with the heritage values of the place	<p>The project would result in an increase in the rate and volume of flow discharging to three Blaxland Creek tributaries and existing dams within the Blaxland Creek catchment within the DEOH site. As a result, the scour potential along these drainage lines would increase and ground conditions would become wetter. This does not accord with the heritage values of the CHP. However, these impacts are not expected to extend to the aquatic areas mapped as moderate to high significance within the DEOH site, therefore</p>	<p>The heritage values of the place relate to potential to yield information about early canal/irrigation practices and construction which can be obtained from the wooden structures and canal located outside the impact area. The historical significance would not be affected as the majority of the canal would not be affected and an archival photographic recording would be undertaken for the entire canal thereby capturing information about the heritage item in detail.</p>

Significant impact criteria. Is there a real chance or possibility that the action will:	Assessment of impacts to the natural heritage values of the site	Assessment of impacts to the non-Aboriginal heritage values of the site (ie the canal)
	<p>the impact on these areas would be negligible. This is due to the distance of the works from these areas and the implementation of effective mitigation measures outlined in the Hydrology and Flooding Assessment (Appendix K of the EIS) and the Soils, water and contamination assessment (Appendix L of the EIS). This would take account of the DEOH Land Remediation Plan and Soil Conservation Manual to take account of the natural at the CHP.</p> <p>Exposure of soils resulting from vegetation clearing and other earth works would create an opportunity for weed invasion which has the potential to be moderately severe in this type of environment due to medium-long term impacts of a small-medium scale. However, this impact would be minimised through the implementation of effective weed and pest management measures as outline in the Biodiversity Assessment (Appendix I of the EIS), which would incorporate relevant elements of the DEOH Weed Management Plan.</p> <p>The native vegetation removal has the potential to limit habitat opportunities and ecological function for native flora and fauna. This is not in accordance with the heritage values of the CHP. However, being that the vegetation loss is of a small area of low to moderate significance (Godden Mackay Logan 2013) and is spread in a linear fashion along an existing habitat edge, this impact is not considered to be significant, being of a small-scale/localised and low-intensity nature.</p> <p>As such, this criteria is expected to be consistent with the heritage values of the CHP where mitigation measures are implemented.</p>	

Significant impact criteria. Is there a real chance or possibility that the action will:	Assessment of impacts to the natural heritage values of the site	Assessment of impacts to the non-Aboriginal heritage values of the site (ie the canal)
Involve the erection of buildings or other structures adjacent to, or within important sight lines of, a heritage place which are inconsistent with the heritage values of the place	<p>The Project involves the construction of an (up to) eight-lane road corridor at the western periphery of the CHP. According to observations made during the biodiversity survey, the existing The Northern Road is likely to be visible from high points within the CHP. The Project alignment is similar to that of the existing roadway and, as such the vistas from the CHP are not anticipated to be substantially changed.</p> <p>This criterion is considered to be consistent with the current heritage values of the CHP.</p>	Unlikely. The proposed action would involve the demolition of a small section of the canal which is unlikely to result in visual impacts on the remainder of the canal.
Substantially diminish the heritage value of a heritage place for a community or group for which it's significant	<p>The CHP holds heritage value to a range of community groups, such as the Friends of the Cumberland Plains and the Department of Defence. However, the impact to the CHP is considered to be relatively small, involving the clearance of 1% of the available extent of CPWSGTF and REFCF ecological communities within the CHP site that is already disturbed by edge effects relating to the current The Northern Road corridor. Additionally these have been identified as native regrowth areas of low to moderate significance with a reasonable tolerance for change (Godden Mackay Logan 2013). This is not considered to be a significant reduction in the heritage value of the CHP for community groups.</p> <p>As such, this criterion is expected to be consistent with the heritage values of the CHP where mitigation measures are implemented.</p>	The significance assessment for the canal does not provide values for a strong or special association with any particular community group or cultural group associated with the canal.

Significant impact criteria. Is there a real chance or possibility that the action will:	Assessment of impacts to the natural heritage values of the site	Assessment of impacts to the non-Aboriginal heritage values of the site (ie the canal)
Substantially alter the setting of a heritage place in a manner which is inconsistent with the heritage values of the place	The Project would involve the loss of a relatively small area (1%) of the CHP. In the context of the CHP, this is not considered to be a substantial loss. Additionally these have been identified as native regrowth areas of moderate significance with a reasonable tolerance for change (Godden Mackay Logan 2013). The current setting includes the existing The Northern Road corridor. The Project would result in the widening of this corridor with a similar alignment. As such, the Project is not considered to substantially alter the setting of the existing CHP that would be inconsistent with the heritage values of the CHP. As such, this criterion is expected to be consistent with the heritage values of the CHP where mitigation measures are implemented.	Unlikely. The proposed action would involve the demolition of a small section of the canal which is unlikely to substantially alter the setting of the heritage place.
Substantially restrict or inhibit the existing use of a heritage place as a cultural or ceremonial site	Being that the CHP is currently used as an active Defence base and is restricted from public access, the Project is not anticipated to result in the CHP being more restricted as a cultural site. No ceremonial sites are present within the CHP site. This criterion is considered to be consistent with the current heritage values of the CHP.	No impact. The heritage place is not used as a cultural or ceremonial site.

