



ARCHAEOLOGY - HERITAGE - MEDIATION - ARBITRATION

# Cowra Hospital Redevelopment

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## Aboriginal Archaeological Assessment

December 2022

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Report to: Health Infrastructure

LGA: Cowra Shire Council

Version: D.2022



## ACKNOWLEDGEMENT OF COUNTRY

We acknowledge the Traditional Custodians of the land that we live and work on.

We pay our respects to the Elders, past, present and emerging, for they hold the memories, the traditions, the culture and hopes of Aboriginal people.

We honour and acknowledge the stories, traditions and living cultures of Aboriginal and Torres Strait Islander peoples on this land and commit to building a brighter future together.

A better understanding and respect for Aboriginal and Torres Strait Islander cultures develops an enriched appreciation of Australia's cultural heritage and can lead to reconciliation. This is essential to the maturity of Australia as a nation and fundamental to the development of an Australian identity.

## DOCUMENT CONTROL

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## EXECUTIVE SUMMARY

The NSW Government proposed the redevelopment of the Cowra Hospital. The Project includes construction of new facilities to deliver contemporary, integrated models of health care to support and improve the health of residents in Cowra and surrounding districts including Grenfell, Canowindra and Woodstock. The current Cowra Health Service facilities are approximately 60 years old and located on the same site as earlier hospital buildings. The existing buildings are aged and have a number of functional and structural problems that need to be addressed. Full details of the proposal are contained in Section 5 of this report.

To ensure that the Aboriginal archaeology and cultural heritage of the site is not adversely impacted upon by the proposal, Comber Consultants was commissioned to undertake this Aboriginal archaeological assessment. The assessment and this report have been undertaken in accordance with Heritage NSW's *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW*.

Due to the highly disturbed nature of the study area, including hospital buildings, benching to level the site for the hospital development, basements and underground services, it is not expected that any Aboriginal objects will remain within the study area. Archaeological monitoring, testing or salvage is not required. It will not be necessary to apply for an Aboriginal Heritage Impact Permit, nor will it be necessary to prepare an Aboriginal Cultural Heritage Assessment Report (ACHAR). However, consultation with the Metropolitan Local Aboriginal Land Council should continue.

This report makes the following recommendations:

### **Recommendation 1: Consultation**

Aboriginal consultation should continue with the Cowra Local Aboriginal Land Council in respect of the proposed redevelopment of the site.

### **Recommendation 1: Induction**

An Aboriginal heritage induction should be provided to all employees, contractors and subcontractors engaged on the project on the significance of the Aboriginal heritage, that it is an offence to harm Aboriginal objects and be advised of their responsibilities under the *National Parks and Wildlife Act 1974* in respect of Aboriginal heritage. This should be provided by a member of the Cowra Local Aboriginal Land Council.

### **Recommendation 2: Unexpected Finds and Human Remains Procedure**

**Aboriginal Objects:** If any Aboriginal objects are unexpectedly uncovered during the redevelopment of the site, all work must cease in the vicinity of the object and an area of at least one metre around the Aboriginal object secured and cordoned off using fencing and/or appropriate barriers. The archaeological consultant must be immediately contacted for further advice. The consultant will assess the object and provide further advice. In addition, the consultant will liaise with the Cowra Local Aboriginal Land Council. No-one should enter the secured area and work can only recommence when advised by the consultant.

**Human Remains:** If any skeletal remains are uncovered during the redevelopment of the site, all work must cease in the vicinity of the human skeletal remains and an area of at least one metre around the skeletal remains secured and cordoned off using fencing and/or appropriate barriers. The archaeological consultant must be immediately contacted and must attend immediately. The consultant will inspect the skeletal remains to confirm that they are human. If the remains are human, the consultant will contact and liaise with the Police, Cowra Local Aboriginal Land Council and Heritage NSW, all of whom will most likely attend the site. Work will not be able to recommence within the secured area until suitable management procedures are in place. It could take several months to determine an appropriate course of action.



## 1 INTRODUCTION

### 1.1 Project Background

The NSW Government proposed the redevelopment of the Cowra Hospital. The Project includes construction of new facilities to deliver contemporary, integrated models of health care to support and improve the health of residents in Cowra and surrounding districts including Grenfell, Canowindra and Woodstock. The current Cowra Health Service facilities are approximately 60 years old and located on the same site as earlier hospital buildings. The existing buildings are aged and have a number of functional and structural problems that need to be addressed. Full details of the proposal are contained in Section 5 of this report.

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### 1.2 Location

Cowra Hospital is located at 65 Liverpool Street, Cowra and is known as Lot 2, DP1169527. It is located within the Cowra Shire Council and falls within the boundaries of Cowra Local Aboriginal Land Council. Figure 1 shows the location of Cowra and Figure 2 shows the location of the hospital.

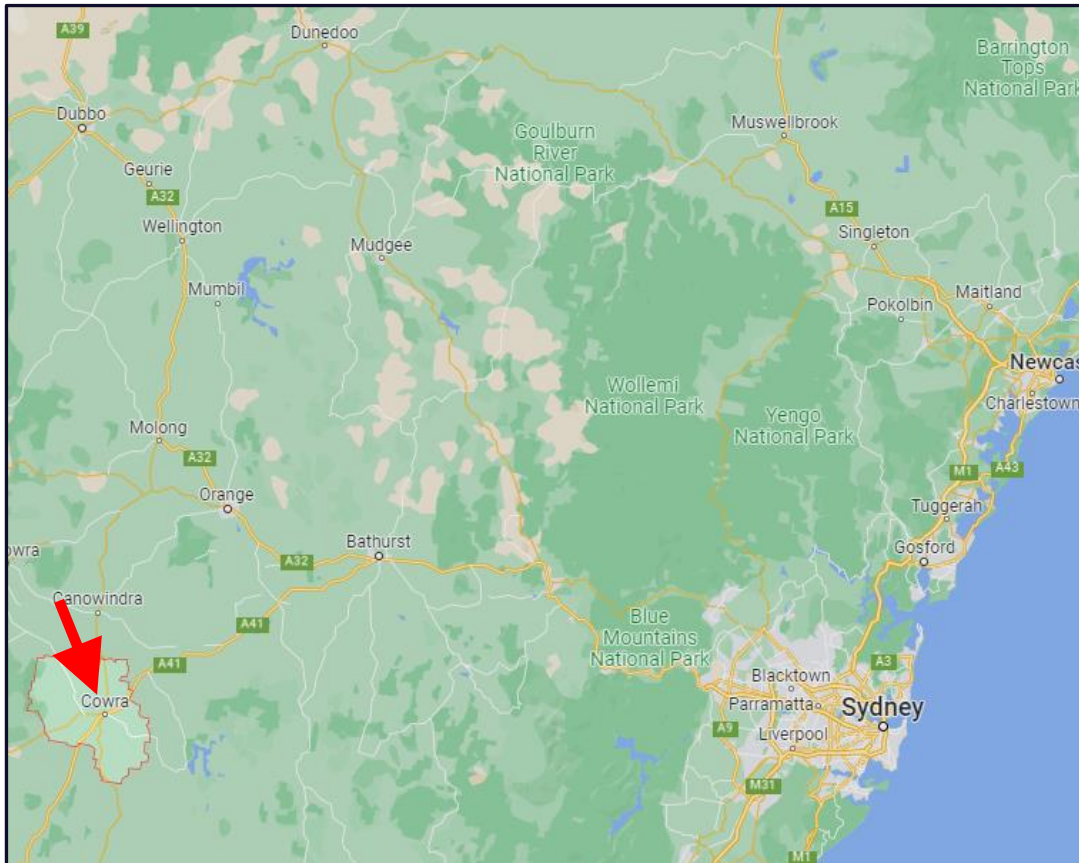
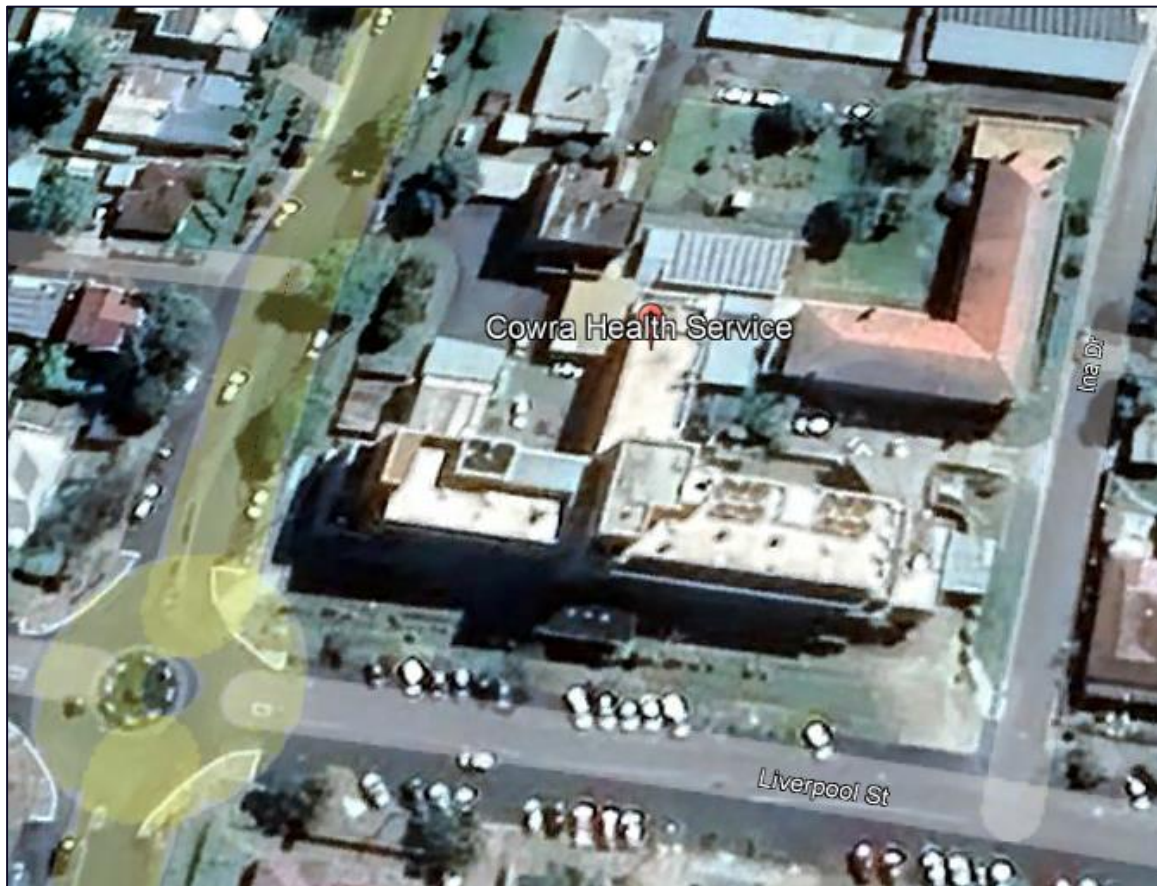


Figure 1: Location of Cowra indicated by red arrow (Google Maps)



**Figure 2:** Location of Cowra Hospital in Liverpool Street (Google Earth)



**Photograph 1:** Cowra Hospital



## 2 LEGISLATION

### 2.1 National Parks & Wildlife Act 1974

The *National Parks & Wildlife Act 1974* (NPW Act) provides statutory protection to all Aboriginal sites within New South Wales. Heritage NSW is the State Government agency responsible for the implementation and management of this Act.

Part 6 of the NPW Act protects all “Aboriginal objects” and “Aboriginal Places” which are defined as:

**Aboriginal Object:**

*Any deposit, object or material evidence (not being a handicraft made for sale) relating to the Aboriginal habitation of the area that comprises New South Wales, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction and includes Aboriginal remains.*

**Aboriginal Place**

*A place that, in the opinion of the Minister, is or was of special significance with respect to Aboriginal culture, to be an Aboriginal place for the purposes of this Act.*

Part 6 of the Act states that it is an offence to harm or desecrate an Aboriginal object or Aboriginal place, without an Aboriginal Heritage Impact Permit (AHIP).

As it is not anticipated that redevelopment of the Cowra Hospital will harm an Aboriginal object an AHIP will not be required.

### 2.2 Heritage Act 1977

*State Heritage Register*

s31 of the *NSW Heritage Act 1977* provides for the establishment and maintenance of the State Heritage Register by the Heritage Council. s32 allows the Minister to direct the listing of an item which is of State heritage significance and sets out the procedure for listing an item. Aboriginal places can be listed on the State Heritage Register (SHR) if they are of State heritage significance. Such places can include Mission sites and cemeteries.

The Cowra Hospital is not listed on the State Heritage Register.





### 3 METHODOLOGY

This project was conducted in four stages, being background research, field survey and report preparation, as detailed below.

#### **Stage 1: Background Research**

Prior to the field component of this project, the Aboriginal Heritage Information Management System (AHIMS) was searched on 14<sup>th</sup> July 2022. A copy of the extensive search is attached at Appendix A. Site data, associated documents and archaeological survey reports held by AHIMS were reviewed. Environmental information relating to Aboriginal land use was also researched. Such research facilitated an understanding of the potential nature of sites and site patterning in the region, which enabled a predictive statement to be made. It also provided an archaeological and environmental context within which a significance assessment could be made, if any Aboriginal sites were located during the field survey.

#### **Stage 2: Site Inspection**

The archaeological site inspection was undertaken on Wednesday 27<sup>th</sup> July 2022 by the following:

- Jillian Comber, Archaeologist, Comber Consultants
- David Nutley, Archaeologist, Comber Consultants
- Supriya Singh, Archaeologist, Comber Consultants
- Glenn Suey, Archaeologist, Comber Consultants

The whole of the site was inspected on foot and notes and photographs taken.

#### **Stage 3: Aboriginal Consultation**

Consultation was undertaken with the Cowra Local Aboriginal Land Council as detailed in Section 4 of this report.

#### **Stage 4: Report Preparation**

Further archaeological research was conducted, where necessary, to clarify the results of the survey. This report was then compiled and provided to CWPM on behalf of Health Infrastructure and the Cowra Local Aboriginal Land Council.





## 4 ABORIGINAL CONSULTATION

Aboriginal culture is dynamic and continuous. It includes the tangible and intangible and links people over time to their community and Country. It is important to recognise that Aboriginal people have the right to protect, preserve and promote their cultural heritage. In recognition of that right, consultation was undertaken with the Cowra Local Aboriginal Land Council (CLALC).

The consultant met with Nioka Coe, CEO of the CLALC whilst in Cowra on 27<sup>th</sup> July, 2022. Details of the development of the hospital were discussed. Nioka advised that Esther Cutmore, the Chair of the CLALC, had attended a community meeting in respect of the hospital redevelopment. In addition, Esther and members of the CLALC had met with Annabelle Dunlop from Health Infrastructure in respect of the hospital redevelopment. Management recommendations for Aboriginal archaeology and culture were also discussed with Nioka.

Nioka advised that the site of the hospital was significant to the Wiradjuri as it was the highest location in Cowra with views to the Calare (Lachlan) River, which connects to other waterways. Waterways are extremely important providing life sustaining resources such as fresh water, fish, eels, crustaceans, plants, bird life etc. They also provided a travelling route. The rivers are associated with Baiame, the creator and sky father. Baiame created the rivers, skies, mountains and forests. He provided the Wiradjuri with their law, lore, songs and culture.

Nioka asked that relevant information and this report be forwarded to her and she would present it to the CLALC Board and would provide the consultant with their requirements for archaeology and cultural heritage management. Once the Board's written comments have been received they will be forwarded to Health Infrastructure. This report was forwarded to Nioka on 26/08/2022.



## PROPOSAL

### 5.1 Project Background

The NSW Government has allocated a total of \$110.2M towards the redevelopment of the Cowra Health Service. The Project includes construction of new facilities to deliver contemporary, integrated models of health care to support and improve the health of residents in Cowra and surrounding districts including Grenfell, Canowindra and Woodstock.

The current Cowra Health Service facilities are approximately 60 years old and located on the same site as earlier hospital buildings. The existing buildings are aged and have a number of functional and structural problems that will need to be addressed in the near future. Major redevelopment of the Cowra Health Service was identified in the 2017 Western NSW LHD Asset Strategic Plan as a priority for future capital investment.

The Cowra Hospital and Health Service Clinical Services Plan 2020-2030 (CSP) v1.5 was endorsed by the Ministry of Health in May 2021. The services to be included in the Cowra Redevelopment include:

- Emergency Services
- Acute and Subacute Medical and Surgical Inpatient and Day Services
- Peri-operative Services
- Maternity Services
- Paediatric and Child Health Services
- Ambulatory Care Services
- Cancer Services
- Aged Care and Rehabilitation
- Mental Health, Drug and Alcohol
- Primary and Community Health
- Oral Health
- Clinical support services including Medical Imaging Unit, Pathology Services and Pharmacy.

Master Planning for the project commenced in July 2021. Three redevelopment options were considered during Master Planning:

- Option 1: Extend and refurbish the existing hospital
- Option 2: A new hospital on the existing site
- Option 3: A new hospital on a greenfield site

The preferred option nominated by the District for Feasibility Development is construction of a new hospital on the existing site (Option 2). Please see Appendix B for the schematic design.

### 5.2 Project objectives

The Clinical Services Plan identifies the need for new fit for purpose infrastructure to allow the expansion and implementation of new and effective models of care. An integrated service delivery arrangement will help address the long-term health needs of the population into the future. This will allow Cowra Hospital and Health Service to:

- Meet the projected increased demand from an ageing population combined with the increased prevalence of long-term disease.
- Contribute to NSW Health and District strategic priorities to provide prevention, early intervention and alternatives to in-hospital treatment
- Provide safe, reliable, urgent, emergency and acute health care
- Deliver integrated care to manage continuity of care across health disciplines and life course
- Develop, implement and evaluate models of care that promote health service delivery in a range of settings including community based, non-admitted and admitted settings
- Focus on value-based health care
- Improve the patient experience including that of vulnerable communities seeking health care Project Vision for the Cowra Health Service:

*Project Vision:*

“A patient focused health service that is integrated, equitable and sustainable for Cowra and the surrounding communities.”

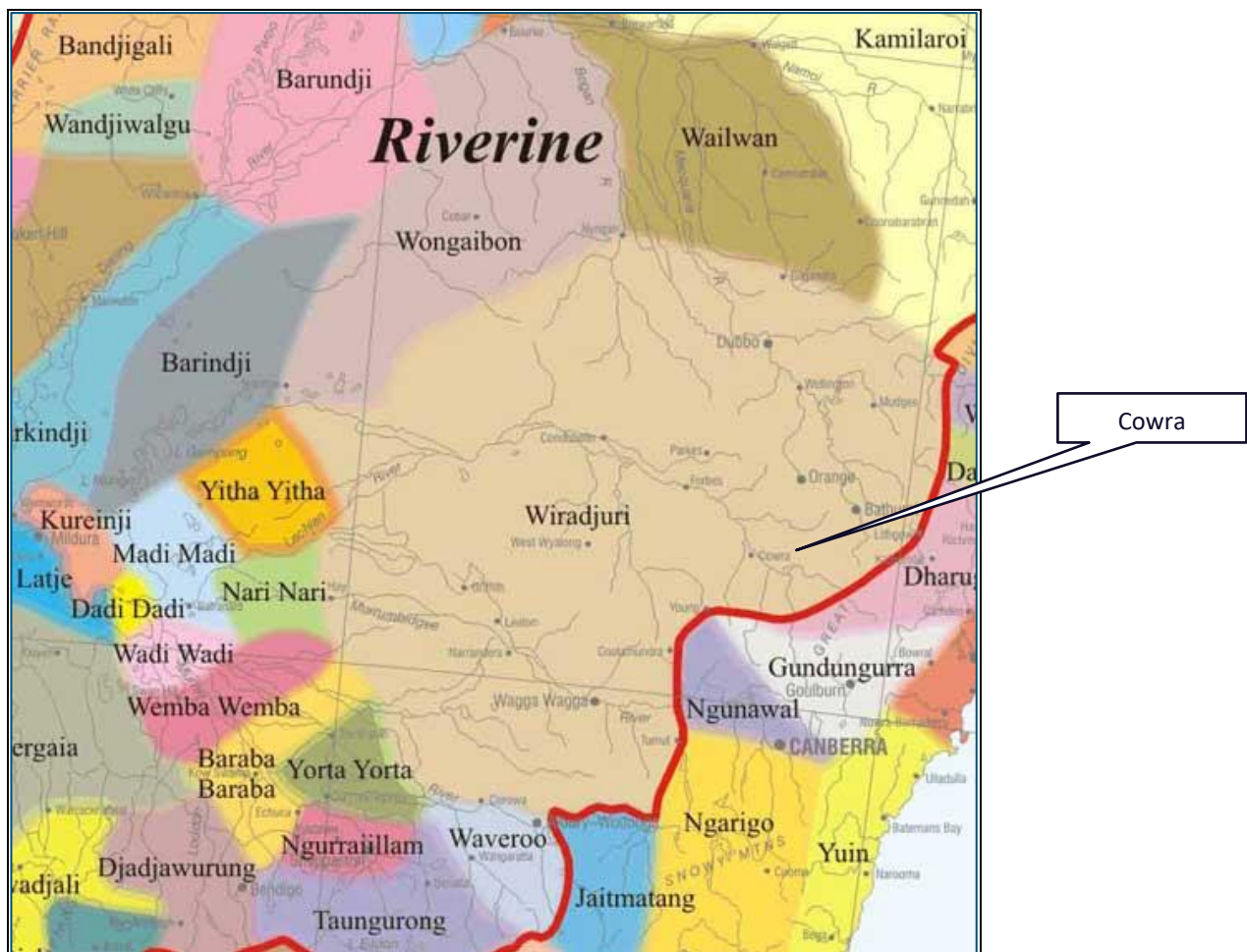


*Project Objectives for the Cowra Hospital Redevelopment:*

- New infrastructure to replace existing outdated facility.
- Consistency and efficiency for provision of new models of care.
- Consistency for provision of safe and reliable services.
- Maintains C2 hospital status.
- Building partnerships, better value and sustainability of health services.
- Located in close proximity to population and to other services; builds on existing precinct for health services.
- Sustainable facility to attract staff, stabilizing workforce and provision of services.
- Sustainable treatment spaces to ensure return visitation by consumers.
- Culturally accessible and welcoming.

## 6 ABORIGINAL HISTORY

The study area is located within Wiradjuri country which is one of the largest Aboriginal language regions in Australia, encompassing over 80 000km<sup>2</sup>. Wiradjuri country includes part of the Riverine region on the central west slopes and plains of New South Wales and extends from Nyngan to Albury, and Bathurst to Hay (Figure 3). Wiradjuri people refer to their land as “The Country of the Three Rivers”, with the watershed of the Macquarie, Lachlan and Murrumbidgee Rivers forming the boundaries. The Macquarie River in the north is known to the Wiradjuri as “Wambool”; the Lachlan River, which is known as “Calare”, is to the west and the Murrumbidgee, which retains its traditional Wiradjuri name, flows to the south. The Macquarie meets the Barwon and flows west into the Darling River and then flows south. The area around the Lachlan, Macquarie, Murrumbidgee and Darling Rivers is the area traditionally inhabited by Wiradjuri speakers prior to the invasion and continues to be regarded as Wiradjuri country today. This rich riverine environment contributed to a highly developed economy for the Wiradjuri and continues to nurture Wiradjuri lifeways (Comber 2020:15)



**Figure 3:** Extent of Wiradjuri country with Cowra indicated (Horton 1996)

The Wiradjuri language was essentially an oral tradition. However, combined with other forms of communication such as hand signals, subtle body language and signs/symbols engraved or painted on surfaces within the landscape, on possum skin cloaks and human bodies, a very rich and detailed method of communication was developed (Green 2002:63). The spoken language is rich in vocabulary, grammar and structure with its own sounds and words (Grant & Rudder 2001). As with law and spirituality, language carries the culture of the Wiradjuri. They merge into one to provide the basis for communication, group cohesion, identity and security (Comber 2020:15).

Despite sharing a language, the Wiradjuri were not a single political unit ruled by a Chief. Rather, they were a confederacy of clans or family groups who shared a language, albeit with some local differences or dialects as detailed above, and a system of common beliefs. Politics operated at a local level and was informed by local senior men and women who had developed a broad and extensive range of skills and cultural knowledge. “Clever” men or women were those skilled in ritual knowledge and practices who would have been respected over a wide area but they were not





Chiefs (Macdonald 2004). Leadership of a particular activity was undertaken by the person most qualified, such as the best speaker or warrior. As people's expertise and reputations increased with age, they may have exerted influence over a broader area of networks cultivated throughout their life (Macdonald 2004:22). Descent passed through the female line with a "two moiety matrilineal social system" that is, a person's totem was different to their mother, but the same as their grandmother (Read 1983a:8; Comber 2020:16).

The Wiradjuri language speakers lived in family groups of husband and wife (or wives), their children and grandparents, adult sons and their wives and children. They were part of a larger autonomous clan group who had rights over a defined area or "home territory" within the broader Wiradjuri country. This was usually near permanent water (Pearson 1984:86; Pearson 1981; Read 1983a:6; Matthews 1906:941;). Each clan often identified themselves by the river around which they camped and which provided sustenance. Individuals would identify themselves as a "Lachlan woman" or "Boganer", or from the Murrumbidgee (Macdonald 2001:2). Three major clans were recorded by Mathews (1906:941) as centering on Wellington, Mudgee-Rylstone and Bathurst. Howitt (1904:56) recorded three major clans at Narrandera, "Kutu-mundra" (now Cootamundra) and "Murring-balla" (now Murrumburrah). The Land Commissioner for the Lachlan region described three major clan groups on the south bank of the Lachlan, on the north bank of the Murrumbidgee and on the Booroowa River (Beckham 1853). Other clans included the Lachlan clan to the south-west of the Bathurst-Mudgee area, the Lower Macquarie clan to the north west, the Castlereagh clan to the north, and the Bogan clan to the west (Pearson 1984:66). The clan territories were estimated to contain a radius of approximately 40-48km (Mathews 1906:941; Pearson 1987:86). Each of these clans divided into smaller family groups for every day food procurement and living. Occasionally the men of these clan groups fought their neighbours, whilst at other times they combined to fight a common enemy. These conflicts were mainly caused by boundary disputes and abduction of women (Pearson 1984:68). Marriage rules were strict and if a couple eloped or married the wrong person, family members would track them down and punish them (Howitt 1996:208-2011; Comber 2022:16)).

Traditionally, these small self-contained family groups used the river flats and waterways as travelling routes to access resources on a seasonal basis. Their land provided all their economic and spiritual nourishment. It contained the water and food resources, shelter and the sacred sites necessary to their religious and ceremonial life. Small bough shelters were constructed for protection from the elements and used by family groups whilst travelling. They contained a simple frame of boughs or saplings placed upright in the ground in a semi-circular shape. The upper sections were tied together and covered with leaves, bark or grass (Kabaila 1999:120). Huts made of sheets of bark attached to timber supports were observed in the Yass area. A small fire was lit at the entry for heating and cooking and wind breaks were erected (Green 2002:57-58). Evidence of Wiradjuri occupation can still be seen in the form of open artefact scatters, scarred and carved trees, hearths and bora grounds (AHIMS) (Comber 2022:16-17).

Availability of water and resources dictated movement, the location and intensity of occupation camps. The large rivers were the prime camping locations, however, wetlands provided good food resources and fresh water, whilst springs at various locations were suitable for localised seasonal camps. Rock holes also provided water as did "puddled stumps", where a tree stump was hollowed out by fire and lined with clay and layered with small stones, to hold water. Boughs, bark or hollowed tree logs were placed into both the rock holes and puddled stumps to direct water into them (Gilmore 1935:36; Green 2002:72; Comber 2022:16)).

The men of the Wiradjuri caught fish, yabbies, platypus and fresh water mussels from the rivers and creeks and hunted snakes, lizards, kangaroos and birds (Bell 1992:2). Women collected berries, seeds, roots, bulbs and shoots from the local trees and plants, including the acacia gum, which was a sweet nutritious food source, and acacia seeds which were dried and ground between stones and baked as bread or damper (Low 1992:86). Early European accounts of the traditional communities suggest that there were two types of settlements: small camps of extended households and larger village-like community camps (Green 2002:57).

The men of the Wiradjuri used spears made out of reed, which were carried in great numbers which were thrown "with the boomerang to a great distance and with unerring precision, making them to all intents and purposes as efficient as the bow and arrow" (Sturt 1982:55) to catch kangaroos, snakes, lizards and fish (Bell 1992: 2). The Wiradjuri men also made large fishing nets measuring more than 90 feet in length (Sturt 1982: 89).

The first incursions by Europeans into Wiradjuri territory were by explorers George Evans in 1813 (Evans & Turpin 1913), John Oxley in 1817 (Oxley 1964), Hamilton Hume and William Hovell in 1824 (Bland 1965), Charles Sturt in 1828-9 (Sturt 1982) and Mitchell 1835-1845 (Mitchell 2009).



Governor Macquarie claimed the site of Bathurst at a ceremony in 1815. According to Macquarie's journal of 4<sup>th</sup> May 1815, the ceremony was watched by three adult Wiradjuri males and four boys.

*They were all clothed with mantles made of the skins of opossums which were very neatly sewn together and the outside of the skins were carved in a remarkably neat manner. (Macquarie 1956:97)*

Charles Sturt (1982) wrote:

*The old men had lofty foreheads and stood exceedingly erect when standing or walking. They extract the front tooth, lacerate their bodies, to raise flesh, cicatrices being their chief ornament.*

The ongoing settlement (or theft) of land within Wiradjuri country continued rapidly with the Wiradjuri forcibly incarcerated on Missions or Reserves. They were placed under the control of the *Aborigines Protection Act 1909-1969* which sanctioned the removal of Aboriginal children and denied Aboriginal people basic human rights. The Act provided the Aborigines Protection Board the power to remove children from families, to dictate where Aboriginal people could live, controlled freedom of movement and personal finances, and decided who could enter or leave a Reserve. This meant that Aboriginal people could not enter or leave the Reserve without approval. They could not visit family or friends without permission; their wages were paid to the Board and used to maintain the Aboriginal reserves; the Board had the power to apprentice children and send them anywhere in the State, without the parent's permission and despite their parents' protest; Aboriginal people were not allowed to live with or associate with a non-Aboriginal person; the provision of alcohol to Aboriginal people was prohibited; the Board could forcibly move any Aboriginal person or people who camped near a town or Reserve or were about to camp on or near a Reserve and the Board had the power to inspect the home of an Aboriginal person living on a Reserve at any time. They were not allowed to speak traditional languages or initiate or take part in traditional ceremonies or culture. The Board was responsible for the "control" of the Reserve, so they could impose any punishment or strict regime they considered necessary and a Manager could be appointed to enforce the rules (*Aborigines Protection Act 1909*). In short, the Board had absolute control over all aspects of Aboriginal people's lives (Comber 2020:64-65). See Comber (2020) for full details of this horrendous period in the lives of all Aboriginal people and particularly the impact that the invasion had on the Wiradjuri.

Despite the restrictions imposed by the Government and the denial of basic human rights the Cowra Wiradjuri, through perseverance, determination and resilience, have survived and maintained their culture and lore. They are now represented by a number of organisations including the Cowra Local Aboriginal Land Council

## 7 ENVIRONMENTAL CONTEXT

### 7.1 Preamble

The landscape context is important in understanding Aboriginal land use and occupation and the manner in which they interact with it. Describing the physical setting of the area being assessed and the resources within enables a predictive statement to be made about the potential for the area to contain Aboriginal archaeological potential.

### 7.2 Topography

The study area is located within the developed city of Cowra NSW, approximately 1km east of the Calare (Lachlan) River and below Bellevue Hill Reserve Lookout. The land slopes north-east to south-west and the site has an approximate elevation range of 322m, in the southwest of the site and 338m, in the north-east (Australian Height Datum: SMEC 2022:13). See Figure 4 below.

The local topography of the area is characterised as undulating to rolling hills, with elevations ranging from 340-605m. Slopes are generally between 8-20%, with the slope lengths varying from 500-1600m. Local reliefs range from 100-160m (Murphey & Lawrie 1990:100). The drainage lines range from 400 to 700m apart, however some are up to 2000m (Murphey & Lawrie 1990:100).

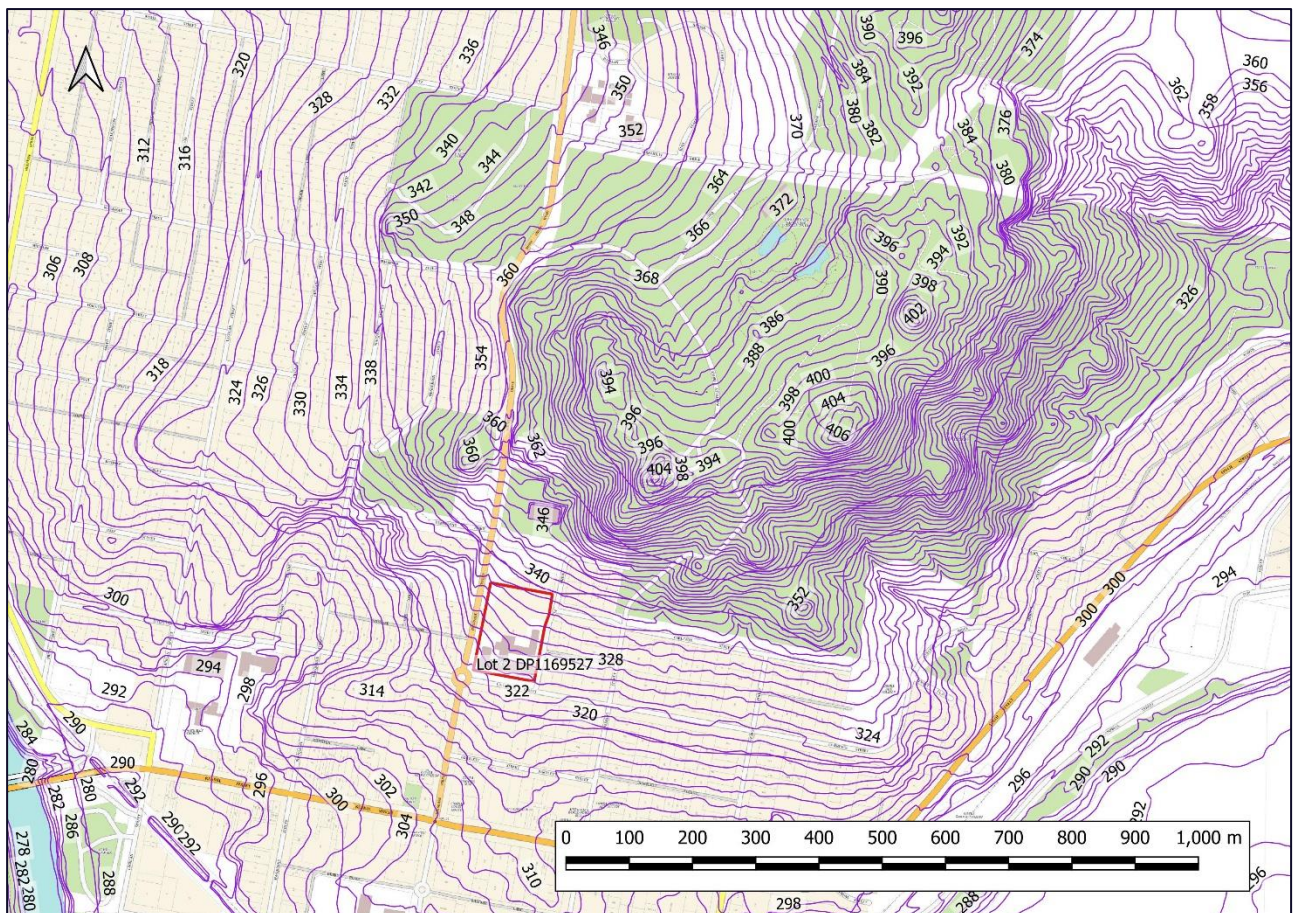


Figure 4: Showing the topography of the site and surrounds

### 7.3 Geology

The study area is located on the Cowra Granodiorite which is a subvolcanic intrusion. This intrusion is 95km<sup>2</sup> in area, approximately 3-4km wide and 25km long and the study area is located on its southern end. Cowra Granodiorite intruded its volcanic equivalent Canowindra Volcanics at the northern end of pluton (Pogson & Watkins 1998:169-170)

Granodiorite is a coarse-grained, mafic, cordierite granodiorite rock, similar to granite. This makes it unsuitable for small stone tool manufacture. However, it could be used for making ground edge axes (Pogson & Watkins 1998:113-114 & 169-170).





To the northeast of the study area is the Canowindra Volcanics. This is comprised of rhyolitic porphyry outcrops in various locations northeast of the study area. The unit also contains fine and coarse grained volcanoclastic sediments, which, in places, includes interbedded horizons consisting of conglomerate and cobble beds. There is a matrix of fine and coarse grained tuff which contains high concentrations of volcanic material. Some horizons are very fine grained blue-green coloured cherty siliceous vitric tuff (Comber 2006:9). This fine grained rhyolite, chert and tuff would have provided suitable lithic material for small tool manufacturing.

#### 7.4 Soils

The study area is surrounded by alluvium. To the west and northwest of the study area, Cainozoic alluvium covers most of the area. From the north and south of the Lachlan River the unit forms gently undulating to level plains (Pogson & Watkins 1998:281). Surface level of the unit consists of dark reddish brown sandy loam to light sandy clay loam. South of the study area contains recent alluvial deposits by modern meandering fluvial systems. These deposits consist of mostly sand, gravel, and minor clays (Pogson & Watkins 1998:283).

The study area is located approximately 1km east of the Lachlan River and is on the boundary between two soil types. Towards the northeast of the site the dominant soils are red podzolic with siliceous sands on steep crests and non-calcic brown soils and red-brown earths, these occur on gentler slopes. Granite outcrops are also common in this area (Murphy & Lawrie 1990:100). Southwest of the study area the dominant soils on the mid-slopes are non-calcic brown soils (Dr2.21) and red-brown earth. Further down slope yellow podzolic soils occur. Along the terraces red-brown earth soils occur. Within the drainage lines the dominant soils are yellow podzolic soils and alluvial sands and loams (Murphy & Lawrie 1990:152). Due to a large portion of the landscape in the southwest being derived from old alluvial deposits it is subject to waterlogging ((Murphy & Lawrie 1990:152).

#### 7.5 Vegetation

Historically, the vegetation of the drier slopes of the surrounding Cowra area would once have been characterised by an Inland Greybox Woodland which consisted of *Eucalyptus microcarpa* which is often found in association with *Eucalyptus populnea* subsp. *bimbil* (Bimbil Box), *Callitris glaucophylla* (White Cypress-pine), *Brachychiton populneus* (Kurrajong), *Allocasuarina luehmannii* (Buloke) or *Eucalyptus melliodora* (Yellow Box), and with *Eucalyptus albens* (White Box). This community would have occurred as an open woodland 15–25 m tall. Shrubs would have been sparse or absent. A ground layer of native grasses and herbaceous species would have been present (NPWS).

However extending along the floodplains of the Calare (Lachlan) River the vegetation would have included a Riverine Woodland consisting of *Eucalyptus camaldulensis* (River Red Gum), *Eucalyptus largiflorens* (Black Box), *Eucalyptus moluccana* (Grey Box), *Callitris glaucophylla* (White Cypress Pine) and *Acacia dealbata* (Silver Wattle) and various native grasses.

Such a vegetation community would have provided a variety of edible plant species and plants suitable for artefact manufacture. For example, the tall Grey Box and Red Gums would have provided bark to make coolamons, shields or canoes, whilst the leaves from the long grasses would have been used for basket weaving. Acacia gum was a sweet nutritious food source and the acacia seeds were a valuable source of protein. The dried seeds were ground between stones and baked as a bread/damper and the green seeds eaten like peas (Low 1992:86). In addition this vegetation would have provided habitat for a variety of marsupials and birds whilst the River would have provided fish and yabbies.

However, the nature and composition of the study area has been altered by past clearance and European land management activities, including construction of the hospital.

#### 7.6 Current Land Use and Disturbance

The study area has been highly disturbed as the site is located within a cleared developed area and is now the location of Cowra Hospital which was first established in 1885. Since that time the hospital site has been extended with additional building being constructed which includes basements. Underground sewer, water and electrical services have also been included. The site also includes hardstand, areas of parking and a small grassed area located in the north-west of the study area.

Prior to construction of the hospital it is possible that the land was cleared for grazing/rural purposes (SMEC 2022:17; Comber 2006:10). The surrounding area of the study area is a mix of residential and commercial structures.





## 8 ARCHAEOLOGICAL BACKGROUND

### 8.1 Lachlan Valley

Two major studies have been undertaken within the region that provide useful background information. Pearson's (1981) PhD Thesis "Seen through Different Eyes: Changing Land Use and Settlement Patterns in the Upper Macquarie River Region of NSW from Prehistoric Times to 1860", whilst approximately 150km to the north east and within a different river valley could provide useful comparisons. Similarly Witter's (1992) PhD "Regions and Resources" undertaken in the Boorowa-upper Lachlan River region (approximately 60km to the south east) provides relevant information.

Pearson (1981) investigated Aboriginal land use and settlement patterns in an area which contains similar landforms to the Lachlan Valley region. He identified a number of geographic land systems which corresponded to Aboriginal archaeological land systems. He designated these areas as "sub-regions" based on their distinctive environmental characteristics. He found that the sub-regions with the evidence of greatest population density occurred along major and generally perennial water courses. In addition, he recorded that quartz was the dominant lithic material found at open campsites. Pearson also recorded that Aboriginal population density within the Macquarie River region was relatively low.

Witter (1992) also observed that the major lithic material found at open campsites across his study area was quartz. Witter noted that occupation sites occurred along most of the region's perennial water courses, as well as at springs and soak areas.

Archaeological surveys conducted in relation to environmental impact assessments also provide useful data. Those with the most relevance include Barber (1990), Kelton (1995, 1996, 1998 & 1999) and English & Gay (1995).

Barber (1990) undertook an undergraduate research study in the vicinity of Darbys Falls and Woodstock which is to the east of the present study area. He examined site location in relation to landform units. He recorded 25 sites: 23 open campsites and two scarred trees. All of these sites were located in close proximity to river and creek banks.

English & Gay (1995) surveyed an area in the lower Abercrombie and upper Lachlan River areas to the east of the current study area. They found evidence to suggest a higher population density than that argued by Pearson for the Macquarie River region. All of the sites recorded by English & Gay (1995) were located well above the original banks of the Lachlan and Abercrombie Rivers. All of the sites recorded by them were found in association with water. Occupation sites were recorded near spring or soak areas in steep to hilly granite country more than a kilometre from the original course of the rivers. The majority of sites were located on the top of low ridgelines adjacent to creeklines. These sites contained extensive evidence of occupation. Sites were also located at all of the ephemeral and spring fed tributaries in the vicinity of the junction of the Lachlan and Abercrombie Rivers. Chert predominated at the open campsites whilst quartz was also observed.

Kelton (1995, 1996, 1998 & 1999) has undertaken a broad range of archaeological surveys in the region and also concluded that site location was related to landforms. In particular, he identifies the alluvial creek/riverbanks and the alluvial and colluvial terraces adjacent to creek banks as archaeologically sensitive.

### 8.2 Cowra

Kuskie (1997) surveyed an area on the northern outskirts of Cowra in relation to a proposed landfill site. He located an artefact scatter on a gently sloping hill.

In 2000, Kelton undertook a study of an area at North Cowra. He recorded 22 scarred trees and three open artefact scatters. The location of the scarred trees conforms to occupation patterns previously stated, ie the trees were located in close proximity to the Lachlan River. However, two small open artefact scatters were located on the crest of a ridgeline and the third was located on the slope of a hill. None of these sites were close to water. Kelton (2000:42) suggested that these three small sites reflected transient use of an area related to movement across the area or seasonal resource exploitation.

Comber 2006 undertake an assessment in respect of the augmentation of the Cowra Sewerage Treatment Plant. They recorded one artefact scatter and two isolated finds. This site was located on a small ridge overlooking the Lachlan River. Due to the two isolated finds being within the area for the proposed augmentation it had been recommended that sub-



surface archaeological test excavation be undertaken under a s87 permit (Comber 2006). This excavation was undertaken by Comber in June 2009 (Comber 2009). During the investigation 34 artefacts were uncovered.

Stening (2009) undertook a detailed analyses of the artefacts uncovered during the excavation by Comber (2009) for her Master's Thesis. Her dissertation focused on the impact that European land management practices had upon artefact deposits, retention and whether any cultural information could be gained from the assemblage collected from the Cowra site (Stening 2009:1). She concluded that evidence could be gathered from sites which had undergone geomorphological changes as a result of European land practices. Her analyses determined that the site had been occupied in the mid to late Holocene, no later than 7,000 BP. The assemblage belonged to the Australian small tool tradition and the Bondaian phase of the Eastern Regional Sequence. The artefacts retrieved most likely belonged to a larger site.

### 8.3 AHIMS

A search of the Aboriginal Heritage Information System (AHIMS) indicates that there are 14 sites registered within a 1km radius of the study area, as shown in Table 1 below. Figure 5 shows the location of these sites.

Site Number	Site Name	Site Type
44-4-0106	BGH-ST 3; Billy Goat Hill Scarred Tree (3)	Scarred Tree
44-4-0130	CTC-ST 16 Cowra town common	Scarred Tree
44-4-0030	Cowra tip Rd 1	Scarred Tree
44-4-0033	Cowra tip Rd 4	Scarred Tree
44-4-0046	Billy Goat Hill_(bgh-st1); Scarred tree 2	Scarred Tree
44-4-0129	CTC-ST 15 Cowra town common	Scarred Tree
44-4-0354	YAIF1 (Cowra)	Artefact Scatter
44-4-0107	BGH-ST 4; Billy Goat Hill Scarred Tree (4)	Scarred Tree
44-4-0361	Scar tree Cowra caravan park	Scarred Tree
44-4-0045	Billy Goat Hill_(bgh-st1); Scarred tree 1	Scarred Tree
44-4-0001	Gooloogong Goodwins Lookout Cowra Carved Tree	Carved Tree
44-4-0340	Billy goat hill scared tree 1	Scarred Tree
44-4-0131	CTC -ST 17 Cowra town common	Scarred Tree
44-4-0369	CPP01	Isolated Find

**Table 1:** Sites registered on AHIMS within a 1km radius of the study area.



**Figure 5:** Location of sites registered on AHIMS

## 8.4 Study Area

There are no registered Aboriginal sites within the study area and the study area is not an Aboriginal Place.

## 8.5 Site Prediction

The study area has been developed since 1885 with hospital buildings. Ongoing development on the site has occurred with additional buildings which include basements and underground services. Given this disturbance it is highly unlikely that Aboriginal objects will occur on the site. However, if they do, they would most likely be:

- Open artefact scatters
- Isolated Finds

The site has been cleared of original vegetation, so scarred or carved trees are not expected and the site inspection did not reveal any stone outcrops that could include rock art, carvings or shelters.



## 9 DESCRIPTION, RESULTS & MITIGATION

### 9.1 Description

The study area has been highly disturbed as the site is located within a cleared developed area and is now the location of Cowra Hospital which was first established in 1885. Since that time the hospital site has been extended with additional buildings being constructed which includes basements. Underground sewer, water and electrical services have also been included. The site also includes hardstand, areas of parking and a small grassed area located in the north-west of the study area.

The main hospital building extends along Liverpool Street between Brisbane Street and Ina Drive (Photograph 2). A wing of the main building runs northward and parallel to Brisbane Street and another wing also runs northward from around the centre of the main building.



**Photograph 1:** View of the Liverpool frontage of Liverpool Hospital





**Photograph 3:** Current buildings on the hospital site:

- (1) Main building at base of photograph with its two extensions
- (2) Reversed L-shaped building at centre right
- (3) The rectangular, grey-roofed Special Needs building and adjacent gravel carpark near intersection with Ina Drive
- (4) Cluster of buildings in the upper centre of photograph
- (5) Free-standing buildings along Brisbane Street to the left, and
- (6) Open, grassed and garden areas in centre.

A free standing reversed 'L' shaped building runs along Ina Drive (Item 2 in Photograph 3). An additional, rectangular building, with a crushed gravel car park, fronts onto Ina Drive and near the junction of Ina Drive and Carleton Street (Item 3 in Photograph 3). A cluster of seven smaller buildings occupy the centre of the hospital site to the west and north of this rectangular building (Item 4 in Photograph 3 and photographs 12-14). A couple of free standing structures are also set along Brisbane Street (item 5 in Photograph 3 and Photographs 15-16).

In the centre of the hospital site is an open area which is partially grassed. At the time of the survey, portions of this area, apparently former garden beds, had been recently dug up (Item 6 in Photograph 3 plus Photograph 10-11).

The footings of the built structures on the site have been accommodated by a series of terraces cut into the slope. There are three main terraces as well as a number of minor terraces (Photographs 4-8).



**Photograph 4:** View to south along Ina Drive showing 1 in 11 slope



**Photograph 5:** View to west from Ina Drive showing terracing of the slope to accommodate footings of (a) Main hospital building (left) and 'reversed L-shaped' building (right)





**Photograph 6:** Another view of the reversed L-shaped building showing how it is set into the terrace, cut down slope



**Photograph 7:** Benching between the L-shaped building and the Cowra Special Needs unit to it north along Ina Drive.



**Photograph 8:** Terracing for the benching of the gravel carpark on northern side of the Cowra Special Needs unit



**Photograph 9:** Detail of terracing below gravel car park



**Photograph 10:** Open area in centre of the site



**Photograph 11:** Benching on southern side of open area





**Photograph 12:** Buildings in the central cluster



**Photograph 13:** Buildings in the central cluster



**Photograph 14:** Buildings in central cluster



**Photograph 14:** One of the buildings along Brisbane street (possibly one of the original hospital buildings)



**Photograph 15:** Further benching for terraces along Brisbane Street.

Visibility was nil due to the presence of buildings, paved areas and grass cover. The evidence of extensive benching for indicated a high level of disturbance to the site.

## 9.2 Results

Due to the nil visibility no Aboriginal objects were observed. However, as the site is highly disturbed including benching to level the site for the hospital development, basements and underground services, it is not expected that any Aboriginal objects will be located within the study area.

The study area is located on a slope below the summit of Bellevue Hill, which would not have been an ideal camping location. People would have occupied the summit of the hill but not the slope. Any objects that may once have existed within the study area that may have been the result of discard of loss if people walked down the slope would have been removed during development of the hospital.



### **9.3 Mitigation**

As it is not expected that Aboriginal objects will be uncovered during the redevelopment of the hospital, no specific mitigation measures are required. Archaeological monitoring, testing or salvage is not required. It will not be necessary to apply for an Aboriginal Heritage Impact Permit (AHIP). As an AHIP is not required it is not necessary to prepare an Aboriginal Cultural Heritage Report. However, Aboriginal consultation must still be undertaken in respect of the proposed development.

If any Aboriginal objects are unexpectedly uncovered all work must cease in the vicinity of that object and the consultant contact for further advice. Please see recommendations in the following section of this report.





## 10 RECOMMENDATIONS

The following recommendations are made based on:

- Legal requirements under the terms of the *National Parks & Wildlife Act 1974* (as amended).
- Research into the archaeological record for the Cowra region and the study area.
- Results of the assessment as outlined in this report.

### **Recommendation 1: Consultation**

Aboriginal consultation should continue with the Cowra Local Aboriginal Land Council in respect of the proposed redevelopment of the site.

### **Recommendation 2: Induction**

An Aboriginal heritage induction should be provided to all employees, contractors and subcontractors engaged on the project on the significance of the Aboriginal heritage, that it is an offence to harm Aboriginal objects and be advised of their responsibilities under the *National Parks and Wildlife Act 1974* in respect of Aboriginal heritage. This should be provided by a member of the Cowra Local Aboriginal Land Council.

### **Recommendation 3: Unexpected Finds and Human Remains Procedure**

**Aboriginal Objects:** If any Aboriginal objects are unexpectedly uncovered during the redevelopment of the site, all work must cease in the vicinity of the object and an area of at least one metre around the Aboriginal object secured and cordoned off using fencing and/or appropriate barriers. The archaeological consultant must be immediately contacted for further advice. The consultant will assess the object and provide further advice. In addition, the consultant will liaise with the Cowra Local Aboriginal Land Council. No-one should enter the secured area and work can only recommence when advised by the consultant.

**Human Remains:** If any skeletal remains are uncovered during the redevelopment of the site, all work must cease in the vicinity of the human skeletal remains and an area of at least one metre around the skeletal remains secured and cordoned off using fencing and/or appropriate barriers. The archaeological consultant must be immediately contacted and must attend immediately. The consultant will inspect the skeletal remains to confirm that they are human. If the remains are human, the consultant will contact and liaise with the Police, Cowra Local Aboriginal Land Council and Heritage NSW, all of whom will most likely attend the site. Work will not be able to recommence within the secured area until suitable management procedures are in place. It could take several months to determine an appropriate course of action.



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## APPENDIX A: AHIMS SEARCH

# AHIMS Web Services (AWS)

## Extensive search - Site list report

Your Ref/PO Number : Novus

Client Service ID : 667359

<u>SiteID</u>	<u>SiteName</u>	<u>Datum</u>	<u>Zone</u>	<u>Easting</u>	<u>Northing</u>	<u>Context</u>	<u>Site Status **</u>	<u>SiteFeatures</u>	<u>SiteTypes</u>	<u>Reports</u>
45-6-2738	James Ruse Reserve Open Camp 1	AGD	56	316000	6256000	Open site	Valid	Potential Archaeological Deposit (PAD) : -		102196,10378 2
	<u>Contact</u>	<u>Recorders</u>	Jim Wheeler					<u>Permits</u>	2018,2187	
45-6-2863	Cumberland Press Site	GDA	56	315913	6256448	Open site	Valid	Artefact : 89		103782
	<u>Contact</u>	<u>Recorders</u>	Ms.Laila Haglund,Ms.Tory Stening					<u>Permits</u>	2865,3307,3509,3816	
45-6-2950	Macquarie St PAD 2	GDA	56	315835	6256410	Open site	Destroyed	Potential Archaeological Deposit (PAD) : -		102144,10378 2
	<u>Contact</u>	<u>Recorders</u>	Doctor.Jillian Comber,Comber Consultants Pty Limited					<u>Permits</u>	3238,3366	
45-6-3068	GS PAD 1 184-188 George Street	GDA	56	315899	6256375	Open site	Destroyed	Potential Archaeological Deposit (PAD) : 1		103962
	<u>Contact</u>	<u>Recorders</u>	Mr.Dominic Steele					<u>Permits</u>	3584	
45-6-3118	Clay Cliff Creek Levee	GDA	56	315801	6256294	Open site	Valid	Artefact : 1, Potential Archaeological Deposit (PAD) : 1		102992,10299 7,102998
	<u>Contact</u>	<u>Recorders</u>	Ms.Fenella Atkinson					<u>Permits</u>	3788	
45-6-3158	Robin Thomas Reserve	GDA	56	316100	6256300	Open site	Partially Destroyed	Aboriginal Resource and Gathering : -, Potential Archaeological Deposit (PAD) : -, Artefact : -		
	<u>Contact</u>	<u>Recorders</u>	Doctor.Jillian Comber,Extent Heritage Pty Ltd - Pyrmont - Individual users,Extent H					<u>Permits</u>	4439	
45-6-3180	21 Hassall Street	GDA	56	315761	6256247	Open site	Partially Destroyed	Potential Archaeological Deposit (PAD) : 1		103758
	<u>Contact</u>	<u>Recorders</u>	Ms.Ngaire Richards					<u>Permits</u>	3906,3975	
45-6-3214	Wigram & Hassall St AS	GDA	56	315825	6256231	Open site	Valid	Artefact : 1, Potential Archaeological Deposit (PAD) : 1		
	<u>Contact</u>	<u>Recorders</u>	Extent Heritage Pty Ltd - Pyrmont - Individual users,Mr.Alistair Hobbs					<u>Permits</u>	4043	
45-6-3895	PLR Macquarie St PAD	GDA	56	315787	6256398	Open site	Valid	Potential Archaeological Deposit (PAD) : -		
	<u>Contact</u>	<u>Recorders</u>	GML Heritage Pty Ltd - Surry Hills,Doctor.Tim Owen					<u>Permits</u>		

Report generated by AHIMS Web Service on 15/03/2022 for Rivers Mcewen for the following area at Address : 39-41 HASSALL STREET PARRAMATTA 2150 with a Buffer of 200 meters..

Number of Aboriginal sites and Aboriginal objects found is 9

This information is not guaranteed to be free from error omission. Heritage NSW and its employees disclaim liability for any act done or omission made on the information and consequences of such acts or omission.



# AHIMS Web Services (AWS)

## Extensive search - Site list report

Your Ref/PO Number : Novus

Client Service ID : 667359

<u>SiteID</u>	<u>SiteName</u>	<u>Datum</u>	<u>Zone</u>	<u>Easting</u>	<u>Northing</u>	<u>Context</u>	<u>Site Status **</u>	<u>SiteFeatures</u>	<u>SiteTypes</u>	<u>Reports</u>
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### **\*\* Site Status**

**Valid** - The site has been recorded and accepted onto the system as valid

**Destroyed** - The site has been completely impacted or harmed usually as consequence of permit activity but sometimes also after natural events. There is nothing left of the site on the ground but proponents should proceed with caution.

**Partially Destroyed** - The site has been only partially impacted or harmed usually as consequence of permit activity but sometimes also after natural events. There might be parts or sections of the original site still present on the ground

**Not a site** - The site has been originally entered and accepted onto AHIMS as a valid site but after further investigations it was decided it is NOT an aboriginal site. Impact of this type of site does not require permit but Heritage NSW should be notified

Report generated by AHIMS Web Service on 15/03/2022 for Rivers Mcewen for the following area at Address : 39-41 HASSALL STREET PARRAMATTA 2150 with a Buffer of 200 meters..

Number of Aboriginal sites and Aboriginal objects found is 9

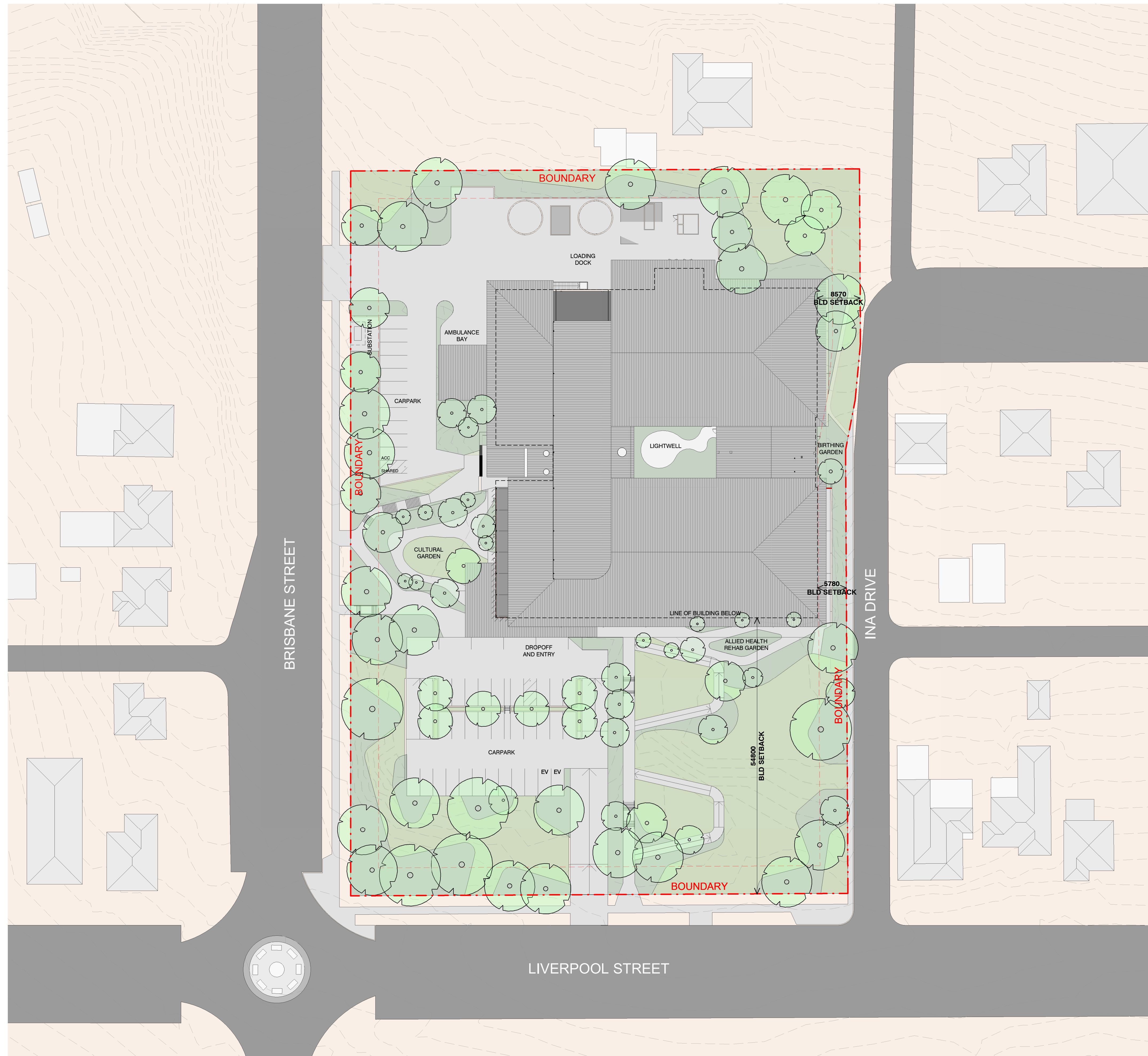
This information is not guaranteed to be free from error omission. Heritage NSW and its employees disclaim liability for any act done or omission made on the information and consequences of such acts or omission.



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## APPENDIX B: PLANS





This drawing should be read in conjunction with all relevant contracts, specifications and drawings. Dimensions are in millimetres. Levels are metres. Do not scale off drawings. Use figured dimensions only. Check dimensions on Site. Report discrepancies immediately.

PROJECT No	DRAWING No	REVISION
130734-DJR	REF 01	C