

## **Appendix E      Historic Heritage Assessment**

Our Ref: 4961/TA/13052021

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Dear Kate

**Re: Daroobalgie Solar Farm Historical Heritage Assessment**

Umwelt has been engaged by Pacific Hydro Australia Developments Pty Ltd (Pacific Hydro) to prepare a historical heritage assessment (HHA) for Daroobalgie Solar Farm and associated infrastructure. The development is a utility scale solar photovoltaic (PV) generation facility that will directly contribute to the state's renewable energy targets with an expected generating capacity of approximately 100 Megawatts (MW) and will provide enough electricity to power up to the equivalent of 34,000 homes each year. The Daroobalgie Solar Farm Project (the Project) has been classed as a State Significant Development (SSD 10387) under the *State Environmental Planning Policy (State and Regional Development) 2011*.

The HHA is a technical study that supports the Environmental Impact Statement (EIS) for the Project. The completion of this assessment is intended to address the historic heritage requirements established in the Planning Secretary's Environmental Assessment Requirements (SEARs) issued 19 December 2019, which state that the Environmental Impact Statement for the Project must include 'an assessment of the likely Aboriginal and historic (cultural and archaeological) impacts of the development...'. The Aboriginal heritage requirements are addressed in a separate Aboriginal Cultural Heritage Assessment report (Umwelt, 2021).

**1.0 Project Description**

The Daroobalgie Solar Farm is located in the Forbes Shire Council Local Government Area (LGA), approximately 11 km north-east of the Forbes township (refer to **Figure 1.1**). The Project is divided into two sections – the core development area and an Electricity Transmission Line (ETL). The core development area is approximately 300 hectares (ha) and will comprise approximately 420,000 ground mounted solar PV panels (refer to **Plate 1**). The new ETL will connect the solar farm into the National Electricity Market (NEM) grid. The ETL is approximately 8.5 km and connects into the existing 132KV powerline that runs between Parkes and Forbes located to the west of the core development area (refer to **Figure 1.1**).

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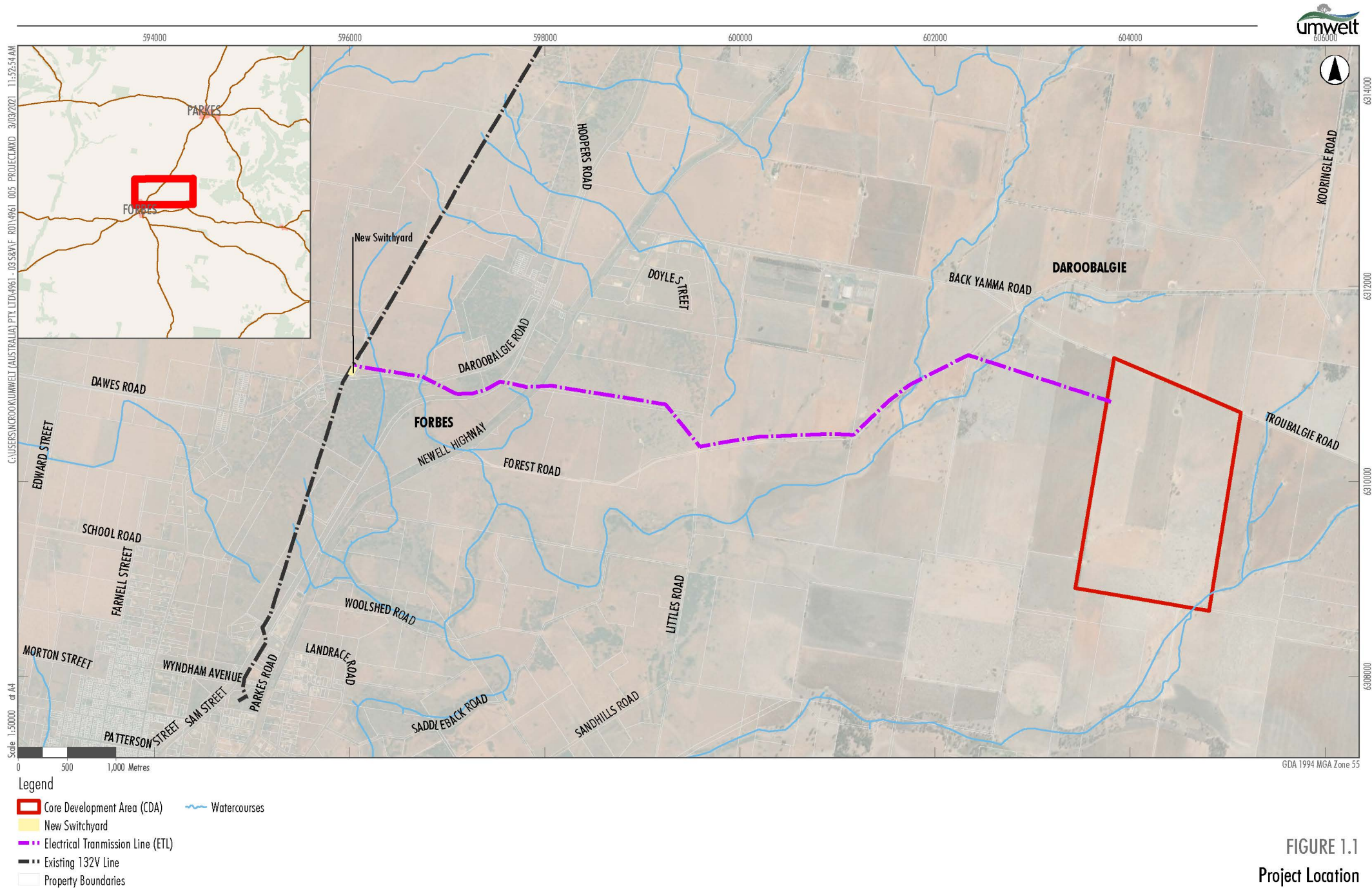
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The key features of the Project include:

- network of photovoltaic solar panel arrays and power conversion units (PCUs)(DC-AC inverters)
- battery energy storage system (BESS) with embedded storage capabilities of approximately 40MW/160MWh
- electrical collection systems, substation and control room
- temporary construction compound
- Operations and Maintenance (O&E) facility, including demountable offices, amenities, equipment sheds, storage and parking areas
- internal access tracks
- ETL infrastructure
- Switchyard.

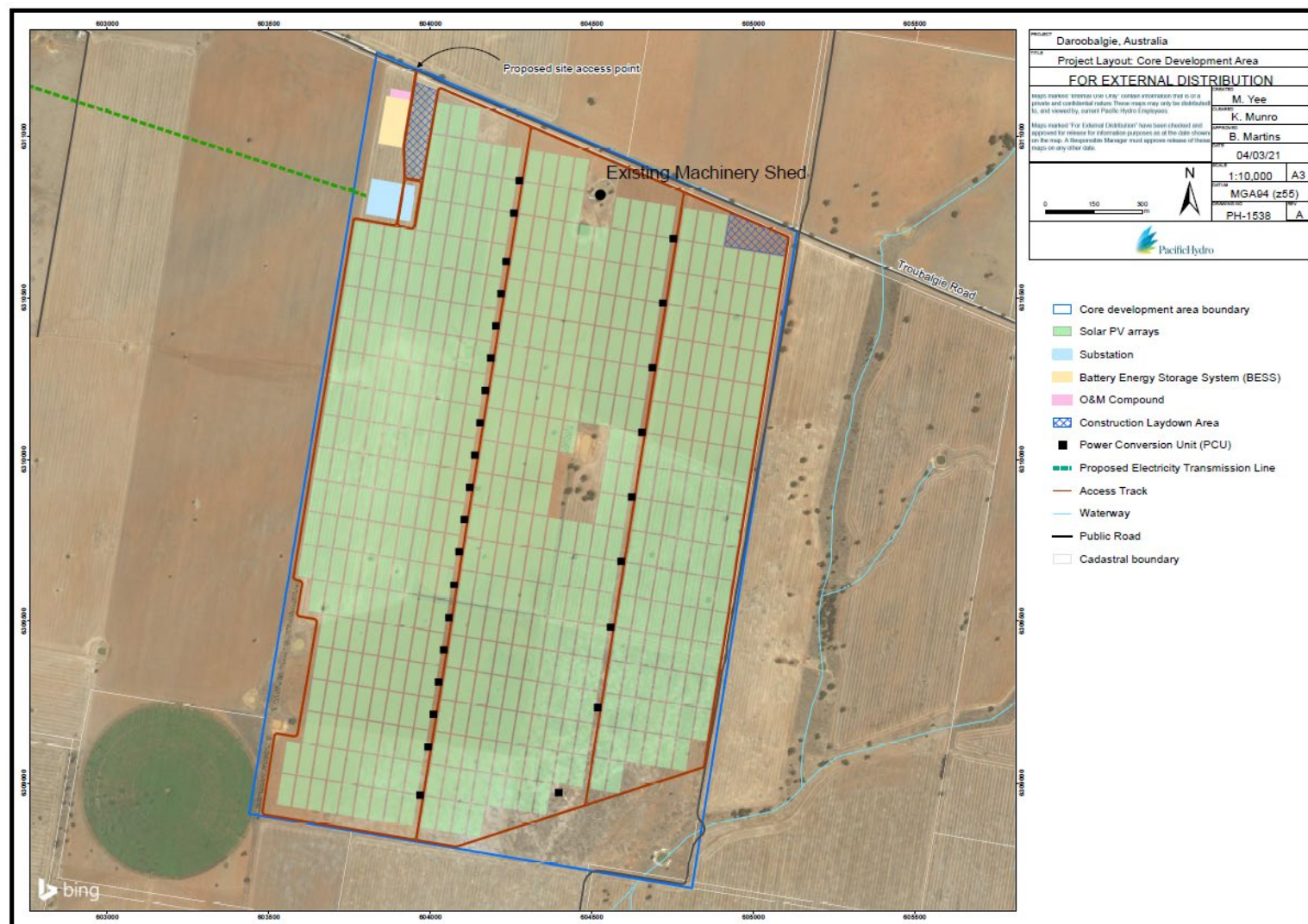


## 2.0 Project Area

The Project Area includes the core development area and the ETL alignment and approximately 100 m wide easement (refer to **Plate 1**).

The development footprint of the solar farm is being refined throughout the EIS preparation, based on the grid connection studies, environmental assessments, further engineering assessment and infrastructure design refinement. The assessment of the entire core development allows for design changes if required.





**Plate 1** Core development area with location of existing machinery shed

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### 3.0 Legislative and Regulatory Context

The Project has been declared to be an SSD project under the provisions of State Environmental Planning Policy (State and Regional Development) 2011 and will require Development Consent under Division 4.1 of Part 4 of the EP&A Act.

As the Project is classified as SSD, the provisions of the NSW *Heritage Act 1977* (Heritage Act) do not apply. It is noted, however, that the appropriate management of any historical heritage and/or archaeology will be required in accordance with this report and/or any relevant conditions of consent associated with the eventual approval.

In accordance with the relevant SEARs and best practice, the policies and guidelines referenced at **Section 3.1** have been considered in the preparation of this HHA.

### 3.1 Policies and Guidelines

This HHA has been prepared with reference to guidelines set out in the NSW Heritage Manual 1996 (Heritage Office and Department of Urban Affairs & Planning), including:

- Archaeological Assessments
- Assessing Heritage Significance
- Statements of Heritage Impact
- Heritage Terms and Abbreviations.

This HHA has also been prepared with consideration of the principles contained in the:

- *The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance 1999* (Australia ICOMOS. 2013)
- NSW Heritage Branch; Department of Planning, 2009, *Assessing Significance for Historical Archaeological Sites and 'Relics'*
- NSW Heritage Branch; Department of Planning, 2006, *The Historical Archaeology Code of Practice*.

### 3.2 Relevant Heritage Listings

To inform this assessment, searches of all relevant heritage databases were undertaken. This includes searches of:

- The Commonwealth Heritage List
- The National Heritage List
- The State Heritage Register
- s170 Heritage and Conservation Registers (NSW State agency heritage registers)
- relevant Local Environmental Plans (LEPs).

A review of available background information and previous heritage assessments that have been conducted in the area was also undertaken.

As a result of these searches and background review it has been determined that:

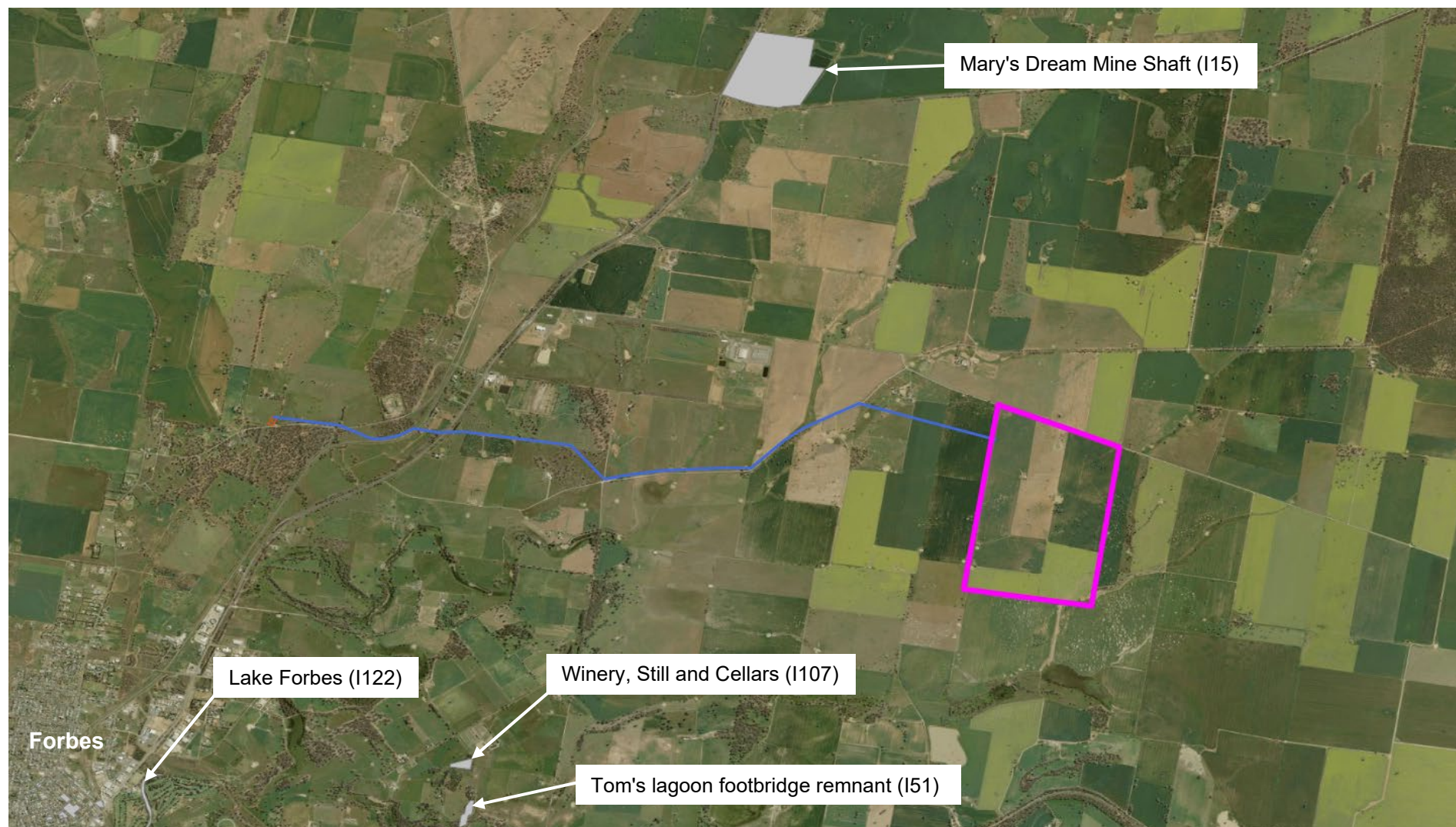
- No Commonwealth or Nationally listed heritage items or places are located within (or within the immediate vicinity of) the Project Area.
- No State listed heritage items are located within (or within the immediate vicinity of) the Project Area.
- No items listed on any s170 Heritage and Conservation Registers are located within (or within the immediate vicinity of) the Project Area.

The Forbes LGA has five items of state significance listed under the Heritage Act and an additional 178 items of local significance recorded on local and state government heritage registers, including four sites within approximately 5 km of the Project Area (refer to **Plate 2**):

- Mary's Dream Mine Shaft, Darroobalgie (Forbes LEP item I15 approximately 4 km north of ETL alignment and 4.3 km to the north-west of the core development area).
- Winery, Still and Cellars at Banderra Estate (approximately 4 km south of ETL alignment).
- Tom's lagoon footbridge remnant (Forbes LEP item I51 approximately 4.5 km south of ETL alignment).
- Lake Forbes (northern tip) ((Forbes LEP item I122 approximately 4.8 km south of ETL alignment).

It is noted that there are a number of Forbes LEP listed heritage items within Forbes itself; however, these are all over 5 km south of the Project Area.





**Plate 2** Heritage Listed items in the vicinity of the Project Area

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## 4.0 Historical Overview

The Project Area is located within the north-eastern boundaries of the territory of the Wiradjuri people. Known as being amongst Australia's largest tribes, their territory spreads from Bathurst, Goulburn and Tottenham to the Victorian border, covering an area of approximately 97,000 square kilometres (Tindale, 1974). Prior to European colonisation the Wiradjuri people lived a hunter gatherer lifestyle and utilised semi-permanent camps for at least 40,000 years (Go Green Services, 2002).

Disease followed the route of early European settlements and explorers as they travelled the waterways of Australia, with cases of smallpox decimating the Wiradjuri communities. As settlers spread across the territory for industry and resources, the resident Wiradjuri groups were displaced from their traditional lands. By the 1830s the Wiradjuri had adopted many European customs, including iron tools, cloth clothing, food practices and tobacco use. Furthermore many Aboriginal people were given or took on European family or property names.

The Project Area is located within a predominately rural/agricultural setting. The landscape has been highly modified by past activity such as land clearing, cropping, livestock grazing, and other practices associated with farming. The Forbes and Lachlan River region was first noted in written records in 1815 (Reed, 1969) and attracted squatters to the region from that time due to its grazing potential (London, 2004). It was settled by Europeans from the early 1830s (MDBA, 2019).

Daroobalgie is first mentioned in an 1848 gazette post, detailing individuals who had obtained licenses to pasture their stock, with Thomas Arkell mentioned as the land licensee (Trove 2020). In 1885, the land surrounding and including the Project Area was divided for pastoral use, with a secondary focus on wheat production. The Daroobalgie Freezing Works (established in 1897) sustained the small settlement and was considered a company town. By 1932 upwards of 10,000 sheep were processed weekly. The meat works experienced periods of inactivity through to 1948 and was sold to private buyers in 1968 (National Library of Australia, Accessed 2020). By 1972 the complex was undergoing demolition.

Gold was discovered in the region in 1861, which saw an influx of some 30,000 people to the area. A massive tent city was established and development began on hotels, churches, civic and other buildings. The incoming miners were culturally diverse and brought with them a number of faiths and religions, many of which continue to practice in the area. Early mining in the area suffered many hardships including a typhoid epidemic which killed between 10-20 people a day (London, 2004). Following the initial goldrush (1861 and 1862), the population began to steadily decline as miners moved on to other goldfields (London, 2004).

As mentioned in **Section 3.2**, Mary's Dream mine shaft is listed in the Forbes LEP. In 1903, several local newspapers reported the story of the 'Mary's Dream' property. A man named William Dawson was working in Wyalong when his wife, Mary, dreamt that they would make a fortune out of a gold mine. The dream was so vivid Mrs Dawson saw the hill where the mine was located, the battery at work and other details. The family immediately packed up and travelled across nearly every field between Gundagai and Forbes. They eventually came across an old mine shaft on a property to the north of Forbes and she was convinced that it was the location in her dream. Her husband began to clean out the shaft and after a few feet of driving 'hit on a body of stone which literally looked like a jeweller's shop.'

The 20th century saw the Forbes district change from predominately cattle, sheep and gold to wheat and sheep (wool and lamb). Dairying, cotton and rice growing in the region also developed during the 20th century (London, 2004).

The ETL crosses Crown Land that is designated Travelling Stock Reserve (TSR), that forms part of the network utilised for moving or grazing stock around the state of NSW (Department of Local Land Services, accessed 2021). It is noted that TSRs are now widely used for biodiversity conservation, cultural heritage or recreation.

#### **4.1 Previous Studies**

There are no known studies of the Project Area or within the suburb of Daroobalgie. Several studies have been completed for historical features within Forbes township and where relevant this information was incorporated in the historical overview above.

#### **5.0 Visual Inspection**

The purpose of the visual inspection/survey was to enable the identification and inspection of any listed heritage items and/or any unlisted items, elements or places of potential heritage significance and/or historical archaeological potential within and in immediate proximity to the Project Area. This includes potentially significant views and vistas, potentially significant landscape elements, including vegetation, trees and gardens, or potential archaeologically significant areas or relics.

##### **5.1 Methodology**

The historical heritage visual inspection was undertaken concurrently with the Aboriginal cultural heritage. The survey of the Project Area was carried out as a mix of pedestrian and vehicular survey. Any potential heritage items found were recorded using a handheld GPS and photographed.

Attempts were made to inspect as much of the Project Area as was feasible, noting that visibility was constrained in some areas by vegetation cover and there was significant disturbance across the Project Area. For the pedestrian survey, participants were generally spaced between 5 to 20 metres apart dependent on ground surface visibility, topography and vegetation. On occasion, e.g. along fence lines, it was necessary for survey participants to walk in single file or close proximity due to the denseness of vegetation and/or ground disturbance. Vehicle transects were spaced approximately 50 metres apart.

The survey was completed over three days by Umwelt Senior Consultant, Stephanie Howden. Since the historical heritage survey was undertaken concurrently with the Aboriginal heritage survey members of the Aboriginal community also participated. Participants included Anthony 'Bones' Wilson, Lyn Bell, Jolene Smith and Steve Johnson.

##### **5.2 Results**

As a result of the three-day survey, only one potential historical heritage item was identified. A horse/cattle drawn cart was located at 604492E 6310826N adjacent to a machinery shed within the core development area (refer to **Plates 3 to 5**).





**Plate 3** Cart located during inspection of the Project Area

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**Plate 4** Cart located during inspection of the Project Area

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**Plate 5** Cart located during inspection of the Project Area

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## 6.0 Significance Assessment

The Australian ICOMOS Burra Charter 1999 (the Burra Charter) defines cultural significance as meaning ‘aesthetic, historic, scientific or social value for past, present or future generations’ (Article 1.2). The Burra Charter was written to explain the basic principles and procedures that should be followed in looking after important places.

Cultural significance is defined as being present in the ‘fabric, setting, use, associations, meanings, records, related places and related objects’. The fabric of a place refers to its physical material and can include built elements, sub-surface remains and natural material (Australia ICOMOS 2000).

### 6.1 Heritage Significance

The NSW Heritage Manual (NSW Heritage Office, 1996) published by the then NSW Heritage Office and Department of Urban Affairs and Planning, sets out a detailed process for conducting assessments of heritage significance. The manual provides a set of specific criteria for assessing the significance of an item, including guidelines for inclusion and exclusion.

The seven criteria defined by the (then) Heritage Division, OEH (now Heritage, Department of Premier and Cabinet (DPC)), and used by the NSW Heritage Council as an assessment format within NSW have been used in the preparation of this HHA. The seven criteria are:

<b>Criterion (a) Historical Significance</b>	an item is important in the course, or pattern, of NSW's cultural or natural history.
<b>Criterion (b) Associative Significance</b>	an item has strong or special association with the life or works of a person, or group of persons, of importance in NSW's cultural or natural history.
<b>Criterion (c) Aesthetic Significance</b>	an item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in NSW.
<b>Criterion (d) Social Significance</b>	an item has strong or special association with a particular community or cultural group in NSW for social, cultural or spiritual reasons.
<b>Criterion (e) Research Potential</b>	an item has potential to yield information that will contribute to an understanding of NSW's cultural or natural history.
<b>Criterion (f) Rarity</b>	an item possesses uncommon, rare or endangered aspects of NSW's cultural or natural history.
<b>Criterion (g) Representativeness</b>	an item is important in demonstrating the principal characteristics of a class of NSW's cultural or natural places or cultural or natural environments.

The Heritage Council of NSW recognises four levels of significance for heritage in NSW: local, State, National and world. An item has local heritage significance when it is important to the local area. An item has State heritage significance when it is important in NSW. Most heritage in NSW is of local significance.

It was assessed that the cart recorded during the survey ranks low (at best) on all seven criteria listed above due to the ubiquitous nature of horse/cattle drawn carts and the poor condition. As such, it is not considered to be of heritage significance.

## 6.2 Archaeological Significance

As a component of the holistic concept of significance, archaeological significance has traditionally been described as a measure by which a site may contribute knowledge, not available from other sources, to current research themes in historical archaeology and related disciplines (Bickford, A. and Sullivan, S., 1984).

Archaeological significance has traditionally been linked to archaeological research potential in that *'a site or resource is said to be scientifically significant when its further study may be expected to help answer questions...'*; that is, scientific significance is defined as research potential (Bickford, A. and Sullivan, S., 1984).



Following Bickford and Sullivan's work on archaeological significance (Bickford & Sullivan 1984) the following questions are generally used as a guide to assessing the significance of an archaeological site in terms of its research potential (Criterion I of the NSW Heritage assessment criteria):

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

In 2009 the Heritage Council of NSW endorsed the Heritage Branch Department for Planning (now Heritage, DPC) guideline *Assessing Significance for Historical Archaeological Sites and 'Relics'* which considers a broader approach to archaeological significance, rather than one focused on the research potential of an archaeological site only.

No areas of historical archaeological potential have been identified within the Project Area as a result of the visual inspection. The one item located during the survey, which was in poor condition and not considered to be of significance, would not contribute to an understanding of the archaeological context of the area. Based on the available information, including the background information presented in **Section 4.0** of this report, the historical archaeological potential of the Project Area is assessed as low to nil.

Based on the above assessment of historical archaeological potential, it is not considered warranted to undertake further assessment of the historical archaeological significance of the Project Area.

## 7.0 Impact Assessment

It is noted that based on the current site layout for the core development area (refer to **Plate 1**), the machinery shed and surrounding area where the cart is located will not be affected by the proposed Project.

## 8.0 Management Recommendations

As discussed above, the one identified potential heritage item has not been identified as being of significance. As a result of the current site layout for the core development area the item will not be impacted by the proposed development and can remain in situ. However, the cart can be removed from site if required. This report is considered an appropriate recording of the cart and no further recording or assessment needed.

The following general recommendations have been prepared in accordance with best practice.

- An unexpected finds procedure should be developed to manage the unlikely event that potential heritage items are uncovered during construction. The procedure should incorporate the requirements of Section 146 of the *Heritage Act 1977*, including notifying Heritage NSW as required. The procedure should be incorporated into the site induction for the relevant employees, contractors, and subcontractors for the Project.
- Based on the assessment presented in this report, there are no further requirements for investigation or assessment with regards to historical heritage in relation to the Project. However, relevant employees, contractors and subcontractors that work on the Project should be made aware of their obligations and requirements in relation to the relevant provisions of the *Heritage Act 1977*. This information can be most effectively provided within mandatory site inductions provided to employees, contractors and sub-contractors working on the Project.

We trust this information meets with your current requirements. Please do not hesitate to contact the undersigned on 1300 793 267 should you require clarification or further information.

Yours sincerely

A handwritten signature in blue ink that reads 'Tim Adams'.

Tim Adams  
Principal Archaeologist

# 1.0 References

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