

lightsource bp

GOULBURN RIVER SOLAR FARM

Historical Heritage Assessment

FINAL

April 2023

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Prepared by Umwelt (Australia) Pty Limited on behalf of Lightsource bp

Project Director: Malinda Facey Project Manager: Jessica Henderson-Wilson Technical Director:Tim Adams Technical Manager:Melissa Moritz Report No.: 21507/R16 Date: April 2023



75 York St Teralba NSW 2284



This report was prepared using Umwelt's ISO 9001 certified Quality Management System.



Acknowledgement of Country

Umwelt would like to acknowledge the traditional custodians of the country on which we work and pay respect to their cultural heritage, beliefs, and continuing relationship with the land. We pay our respect to the Elders – past, present, and future.

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1.0 Introduction

1.1 Project Background

Lightsource Development Services Australia Pty Ltd (Lightsource bp) proposes to develop a solar farm in the Upper Hunter region of New South Wales (NSW), approximately 28 kilometres (km) south of the township of Merriwa within the Upper Hunter Local Government Area (LGA).

The proposed Goulburn River Solar Farm (the Project) includes the construction, operation and decommissioning of approximately 550-megawatt peak (MWp) of solar photovoltaic (PV) generation as well as a Battery Energy Storage System (BESS) with 280 MWp / 570 megawatt hour (MWh) capacity. The Project will also include a substation and connection to an existing 500 kilovolt (kV) transmission line. The Project will include various associated infrastructure, including road repairs and upgrades to Ringwood Road, temporary construction facilities, operation and maintenance buildings, internal access roads, civil works and electrical infrastructure to connect the Project to the existing transmission line which passes through the Project Area. The road repairs include resealing regrading and re-sheeting various sections along Ringwood Road, totalling 1.8 km of road.

Culvert upgrades are proposed at two locations on Ringwood Road for the crossings at Bow River and Killoe Creek, including installation of new culverts (7 m width) to accommodate two-way heavy vehicles, including B doubles and various farm machinery with associated suitable guardrail and signage.

The Project location and regional context are shown in Figure 1.1.

The Project Area is located between Merriwa (to the north-east) and Coggan (to the south-east) NSW, surrounded by the Goulburn River National Park as shown in **Figure 1.1**. The main Project Area is located on freehold land, while parts of Wollara Road which provides access to the site, are located on Crown land (refer to **Figure 1.2**). The Project Area comprises two freehold properties that span across multiple lots, covering an area of approximately 2,000 ha with the Development Footprint occupying approximately 799.5 ha.

1.2 Purpose of this Assessment

This Historical Heritage Assessment (HHA) has been prepared by Umwelt Australia Pty Ltd (Umwelt) in accordance with the Secretary's Environmental Assessment Requirements (SEARs) issued by the former Department of Planning, Industry and Environment (DPIE) on 1 February 2022. This report identifies and assesses:

- listed heritage items located within or in proximity to the Project Area
- items, buildings, structures or other elements of potential historical heritage significance (i.e., those which are not listed) located within the Project Area
- any areas of historical archaeological potential within the Project Area
- the likelihood, extent and nature of potential impacts to any listed or unlisted items of heritage within or in proximity to the Project Area, including impacts to areas of historical archaeological potential.



Additionally, this report provides appropriate measures to avoid, manage and/or mitigate any identified impacts.

1.3 Methodology

This HHA has been undertaken in accordance with 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 best practice principles contained in the:

- The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance 1999 (Australia ICOMOS. 2000) (the Burra Charter).
- NSW Heritage Branch (now Heritage NSW), Department of Planning, 2009, Assessing Significance for Historical Archaeological Sites and 'Relics'.
- NSW Heritage office (now Heritage NSW), Department of Planning, 2006, The Historical Archaeology Code of Practice.

1.4 Limitations

This report focuses on the assessment of historical heritage within the Project Area. Although a brief discussion of the Aboriginal history of the Project Area is provided in this report, the Project Area's Aboriginal cultural heritage and archaeology is assessed in a separate report prepared by OzArk Environment and Heritage (Appendix 8 of the Environmental Impact Statement).

1.5 Report Authorship

This report has been prepared by Melissa Moritz, Senior Heritage Consultant. Review and input has been provided by Tim Adams, Principal Heritage Consultant.

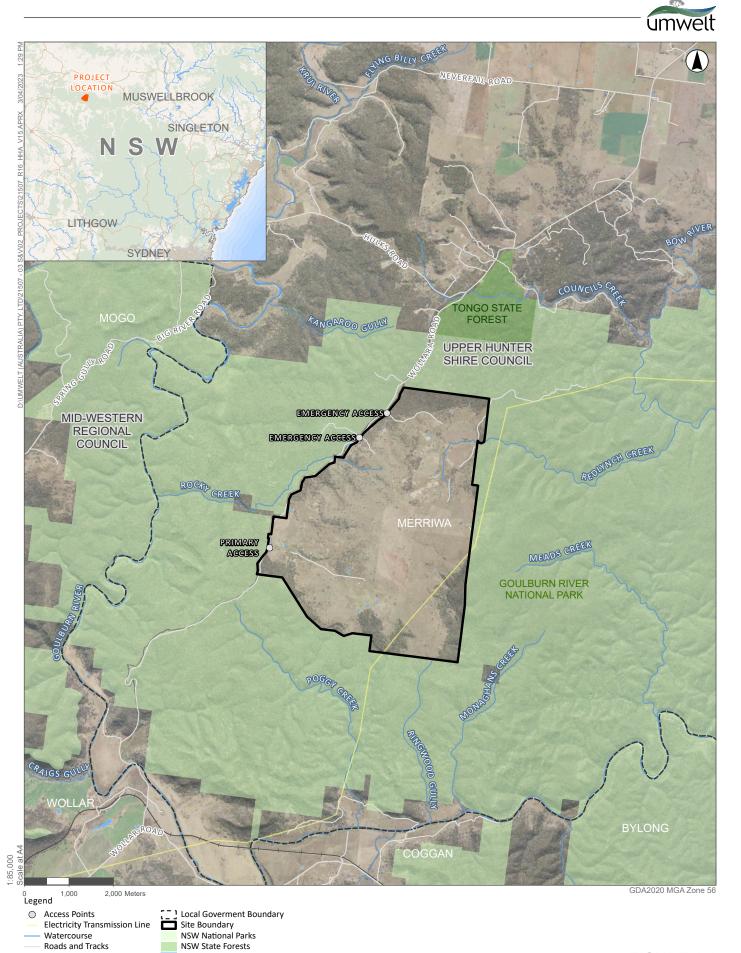
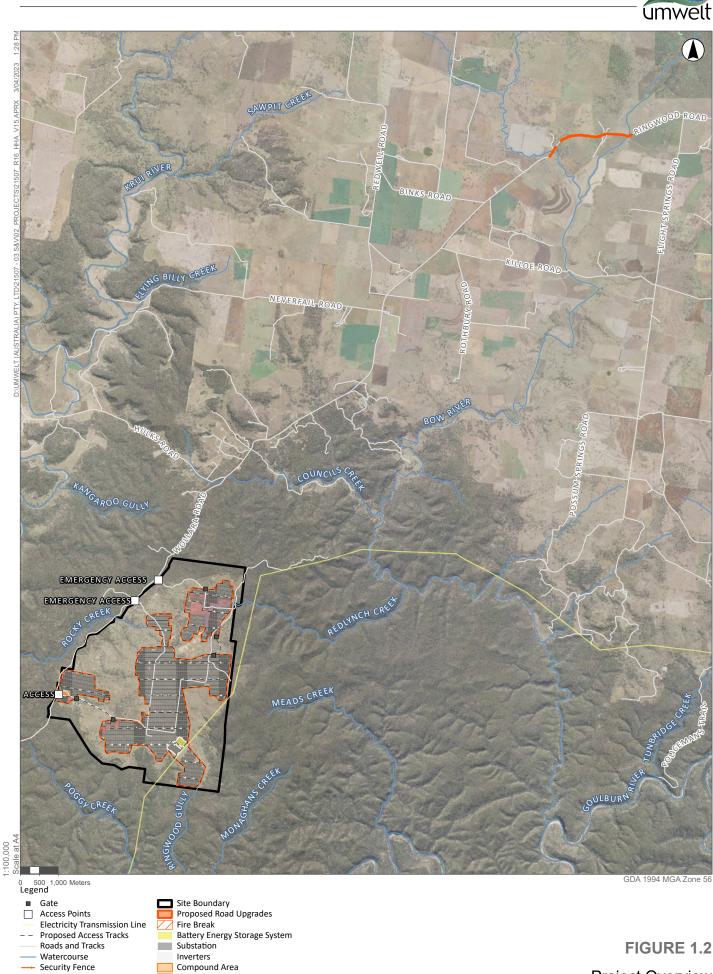


FIGURE 1.1 Location and Regional Context

Waterbodies

--+ Railway



Development Footprint Solar Panel Footprint

Exclusion Zones - Environmentally Sensitive Areas



2.0 Statutory Context

2.1 Statutory Listings

2.1.1 Commonwealth Legislation and Policies

The Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) is the Australian Government's environment and heritage legislation. This Act is triggered by developments or actions that will have a significant impact on Matters of National Environmental Significance (MNES), including world heritage areas, Commonwealth marine areas, nationally threatened species and communities and migratory birds. The EPBC Act includes a process for the assessment of proposed actions that have, or are likely to have, a significant impact on MNES. These actions require approval from the Australian Government Minister for the Environment.

A new national heritage system was established in January 2004 under the EPBC Act. This led to the introduction of the National Heritage List, which recognises and protects places of outstanding heritage to the Nation, and the Commonwealth Heritage List, which includes Commonwealth owned or leased places of significant heritage value.

No heritage items of National or Commonwealth heritage value are located within the Project Area.

2.1.2 State Legislation

2.1.2.1 Heritage Act 1977

The *Heritage Act 1977* (Heritage Act) is administered by Heritage NSW. The purpose of the Heritage Act is to ensure cultural heritage in NSW is adequately identified and observed. The Heritage Act is the primary item of state legislation affording protection to items of environmental heritage (natural and cultural) in NSW. Under the Heritage Act 'items of environmental heritage' include places, buildings, works, relics, moveable objects, and precincts identified as significant based on historical, scientific, cultural, social, archaeological, architectural, natural, or aesthetic values. State significant items are listed on the NSW State Heritage Register (SHR) and are given automatic protection against any activities that may damage an item or place or affect its heritage and/or archaeological significance.

The Heritage Council of NSW, appointed by the Minister, is responsible for heritage in NSW, as constituted under the Heritage Act. The Council is a cross-section of heritage experts, with Heritage NSW being the operational arm of the Council.

No heritage items listed on the NSW State Heritage Register are located within the Project Area.

2.1.2.2 Relics Provision of the Heritage Act 1977

The Heritage Act affords automatic statutory protection to 'relics' which form part of archaeological deposits (except where these provisions are suspended by other prevailing legislation). The Heritage Act defines a 'relic' as any deposit, object, or material evidence that:

- relates to the settlement of the area that comprises NSW, not being Aboriginal settlement, and
- is of state or local heritage significance.



Sections 139–145 of the Heritage Act prevent the excavation or disturbance of land known or likely to contain relics, unless in accordance with an excavation permit. Section 60 excavation permits are required for disturbance to relics within SHR items/places, while Section 140 permits are required for items/places that are not listed on the SHR.

As part of a Section 60 Application that involves the disturbance and/or archaeological investigation of 'relics', an Archaeological Research Design and Methodology, as well as the nomination of a suitably qualified Excavation Director, will be required.

Section 57(2) Exemptions and Section 139 Exceptions may also apply if it can be demonstrated that the proposed works will result in no, or only minor, impact to a potential archaeological resource. An assessment of impacts, prepared by a suitably qualified archaeologist, is required to demonstrate this.

In 2001 the Heritage Council issued the Revised Assessing Significance guidelines and in 2009 the Assessing Significance for Historical Archaeological Sites and 'Relics' guidelines which outline specific criteria for addressing the significance of an item or archaeological site. These guidelines are applicable to assessing all historical archaeology in NSW, including State Significant projects, where they are applied as a best practice approach.

2.1.2.3 Environmental Planning and Assessment Act 1979

The Environmental Planning and Assessment Act 1979 (EPA Act) governs strategic planning and development assessment processes undertaken by State and Local Government in NSW. The Act requires that Local Governments prepare planning instruments (such as Local Environmental Plans [LEPs] and Development Control Plans [DCPs]) in accordance with the Act to provide guidance on the level of environmental assessment required.

The Project will require development consent under Part 4 of the EP&A Act.

2.1.2.4 Mid-Western Regional Local Environmental Plan 2013

The Project Area falls within the Mid-Western Regional Local Government Area (LGA). It is therefore subject to the planning provisions of the *Mid-Western Regional Local Environmental Plan 2013* (LEP).

Part 5 Clause 5.10 of the LEP provides the statutory framework for heritage conservation. The objectives of this clause are:

- (a) To conserve the environmental heritage of the LGA
- (b) To conserve the heritage significance of heritage items and conservation areas, including associated fabric, setting and views
- (c) To conserve archaeological sites
- (d) To conserve Aboriginal objects and Aboriginal places of heritage significance.



2.2 The Burra Charter

The Burra Charter is a set of best practice principles and procedures for heritage investigations and conservation. The charter was developed by the Australian group of the international professional organisation for conservation; the International Council for Monuments and Sites (ICOMOS). Although this is not a statutory document, the Burra Charter provides a best practice standard for heritage management in NSW and Australia. The policies and legislative guidelines of the Heritage Council of NSW and Heritage NSW are consistent with and guided by the Burra Charter.

2.3 Relevant Heritage Listings

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

- the Commonwealth Heritage List
- the National Heritage List
- the NSW State Heritage Register
- Heritage Act Section 170 Heritage and Conservation Registers (where publicly available)
- relevant Local Environmental Plans (LEPs).

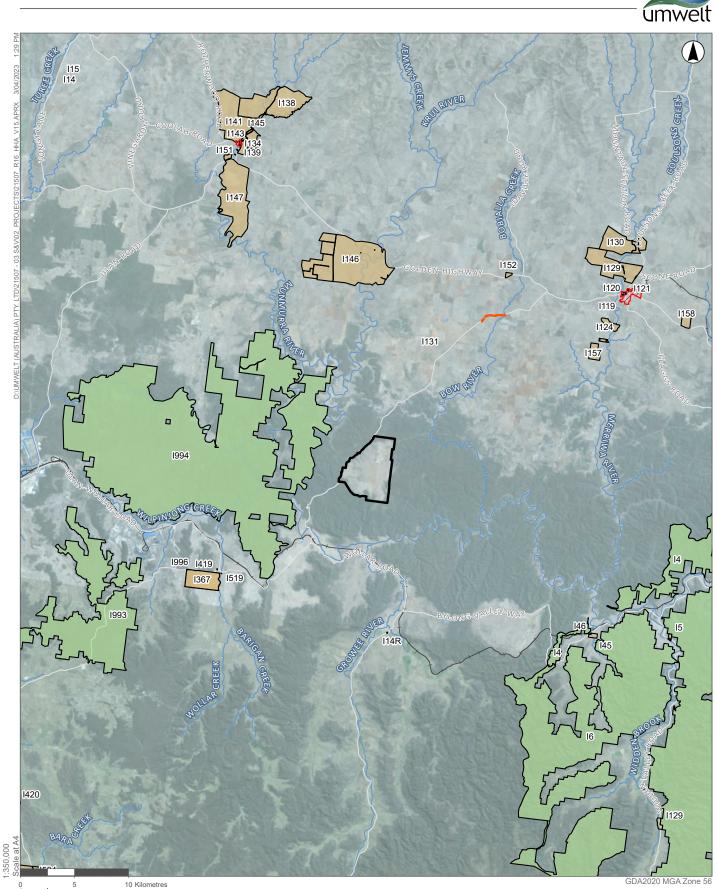
As a result of these searches, it has been identified that:

- no Commonwealth or National heritage items or places are located within the Project Area
- no items listed on the NSW State Heritage Register are located within the Project Area
- no items listed on any Section 170 Heritage and Conservation Register (NSW State Agency heritage registers) are located within the Project Area.

No item listed on Schedule 5 of an LEP is located within the Project Area.

However, there are several local heritage items in the region surrounding the Project Area.

The nearest local heritage item is part of the 'Goulburn River National Park', listed as landscape item 1994 on the Mid-Western Regional LEP 2012. This heritage item is located 2.6 km to the west of the Project Area. The next closest heritage item listed on an LEP is 'Redwell Cemetery', listed as item 1131 on the Upper Hunter LEP. This is located approximately 5 km north of the proposed road upgrades and approximately 11 km north of the Project Area.







Heritage Conservation Area - General Item - General Item - Landscape

FIGURE 2.1 Heritage Context



3.0 Historical Context

3.1 European Settlement of Goulburn River Region

The Project Area is located well beyond the original reaches of the European settlement of Sydney Cove, located some 320 km away. Although the Hunter River was reached by Lieutenant John Shortland in 1797, the inland reaches of the Goulburn River region were not surveyed until the early 1820s, when Lieutenant William Lawson set out in 1822 on an expedition from Bathurst into the Goulburn River Area. The area was initially known as Gummum Plains, after the river which was then referred to as the Gummum Creek (*Sydney Morning Herald*, 2004). It is believed that Allan Cunningham was the first European to settle in the area, camping near the river in the 1820s, before the first pastoral runs were taken up around and after 1824. By 1830 land distribution was officially occurring across the Gummum Plains, with the early settlers in the area including John Blaxland (son of explorer Gregory Blaxland), JB Bettington (Brindley Park), George Hall (Gundibri), Henry Dutton (Terragong) (Upper Hunter Shire Council, Undated).

The open plains of the area were highly suited for the pastoral pursuits of the early settlers, with wool being the principal industry in the area. Generally, new settlers occupied the more fertile lands along the various watercourses. The earliest buildings were simple slab huts, however more substantial sandstone buildings followed once it was realised that the land would support pastoral land holders.

The town of Merriwa was surveyed in 1839, prior to its official gazettal on 22 January 1840. At this time advertised prices for parcels of land around the village were £8 per acre (Upper Hunter Shire Council, Undated). Within 10 years, Merriwa included 30 houses, not counting the houses on the numerous stations and homesteads which were established in the region (Coassociates Pty Ltd, 2007).

Merriwa continued to grow and as with the other towns in the region, like Cassilis, the growth in population was reflective in the growth of the wool industry in regional NSW, with churches, schools, inns and blacksmiths being established in the area to meet the need of the pastoral communities in the Upper Hunter and mid-west regional NSW. In 1858 the first courthouse and Catholic church were constructed in Merriwa, joining three inns, five stores and two blacksmiths (Coassociates Pty Ltd, 2007).

Residents of Merriwa and surrounding districts had begun agitating for rail services to Merriwa from as early as 1887 but it wasn't until 1910 that a branch line of 46 miles 40 chains from Muswellbrook was recommended by the Public Works Committee of the NSW Government. The Enabling Act was passed in November 1911 and work commenced on the new line in June 1912. The branch line was constructed using day labour, reaching Denman in April 1915, but did not reach Merriwa for another two years, being completed and opened in October 1917 (Heritage NSW, 2009).

3.2 Poggy Station

Poggy Station (also referred to as Poggie) is the historical name of the pastoral property within the Project Area. It is unknown when this property was first occupied by early settlers in the area, however by 1866 government records show that sheep brands were registered under J. Mead for a property in the Wollar area, referred to as Poggy.



1882 parish maps show ownership of the Project Area as being between J. Mead and M. O'Brien, who would own various parcels of the Project Area for the next 40 years. The O'Brien family have held the title to approximately a quarter of the land at Poggy since 1889.

Poggy originally consisted of a cleared pasture for raising sheep and cattle, with a timber slab hut providing a home for the O'Brien family. It is reported that this hut was used until 1900 when it was abandoned for fulltime use after the murders of Mrs Elizabeth O'Brien and her son James in the hut (Britton, 2013).

A second dwelling was constructed in the north of the Project Area, in the vicinity of Redlynch Creek in c.1900, where it is believed that M O'Brien resided following the death of his family. The 1900s dwelling was added to at multiple points, prior to being abandoned in the late twentieth century.

In 1929, newspapers in the region suggested the 'Poggy' and associated 1,300 acres of land were sold by O'Brien (*Muswellbrook Chronicle*, 1929). W T Collins is shown as the owner of a parcel of land in the north of the Project Area on 1932 parish plans, with the Mead and O'Brien families also retaining part of the Project Area.

A third dwelling was constructed in the mid-twentieth century at the southwest of the Project Area, and this remains in use as a private residence.

3.3 Jimmy Governor and the Poggy Murders

In July of 1900 a tragedy struck the Poggy station, with the murder of Mrs Elisabeth O'Brien and her 15-month-old son, James, and attempted murder of Mrs T. Bennet, the nurse visiting the O'Brien hut at the time (*Braidwood Dispatch and Mining Journal*, 1900). Mrs O'Brien and James were killed in the original slab hut at Poggy station by Jimmy Governor and his two accomplices.

Jimmy Governor was an Aboriginal man who worked as a labourer for rations on many different properties across the region, and sometimes worked as a tracker for the Cassilis Police. The murders at the Poggy station were two of several perpetrated by the Governor brothers over a period of 14 weeks, beginning with the murder of women and children at the Mawbey property following what is thought to be a dispute over payment as well as insults to Jimmy's wife Ethel (Britton, 2013). Jimmy, his brother Joe, and Jacky Underwood went on the run following the deaths at the Mawbey property; and set about to seek revenge on all others in the area who had wronged him and his family – including the O'Brien's (Australian National University, 1983). Although Underwood was quickly captured, Jimmy and his brother Joe spent the 14 weeks as bushrangers, committing several robberies as far north as Narrabri and the Quirindi district. Exulting in outwitting their pursuers, the Governors blatantly broadcast their whereabouts and wrote derisive notes to the police (Australian National University, 1983). The Government, having enough of their behaviours, offered a reward of £1000 on 3 October 1900, for their capture.

After several close escapes Jimmy was shot in the mouth by Herbert Byers, a hunter, on 13 October 1900 and he was finally captured by a party of settlers at Bobin, near Wingham, on 27 October 1900. Joe was shot dead by John Wilkinson north of Singleton on 31 October 1900 (Australian National University, 1983).

Jimmy stood trial on 22-23 November 1900 in Sydney for the murder of Helen Kerz, one of the first victims of the Governors and Underwood; and was shortly convicted and sentenced to death. An appeal was dismissed, and he is reported to have spent his last days reading the Bible, singing Indigenous songs and blaming his wife for his situation. He was hanged at Darlinghurst Gaol on 18 January 1901 and buried in an unmarked grave in the Anglican section of Rookwood cemetery; Underwood had been hanged in the Dubbo gaol four days before (Australian National University, 1983).



4.0 Project Area Description

The Project Area is located on the east side of Wollara Road, surrounded by the Goulburn River National Park. The Project Area is irregularly shaped and consists of approximately 2,000 hectares of land. The north-western to western portion of the Project Area is located adjacent to Wollara Road, whilst the northern, eastern and southern portions are bound by dense forestry.

A visual inspection of the Project Area was undertaken by Umwelt in September 2022. This inspection was intended to confirm the setting and context of the Project Area and to identify if any potential heritage items were located within the Project Area.

The Project Area largely consists of undulating plains, rolling hills and flat terrain, which has been extensively cleared due to the agricultural/pastoral and residential use of the land. Some clusters of mature, dense vegetation remain in the north-east and west, and isolated trees or shrubbery can be found throughout the landscape (**Photo 4.1**). Minor tributaries and drainage lines are dispersed across the landscape, with a higher density of vegetation found along the banks or in the immediate surrounds. Due to the pastoral use of the land, many of the creek lines have been extensively impacted as a result of cattle movement. Similarly, many of the creek lines were visibly subject to erosional damage.

Two extant residential dwellings (Post- War House and 1900 house) are located within the Project Area, one of which remains a family home. Both dwellings are directly related to the agricultural use of the land and have associated auxiliary structures, such as sheds.

The contemporary homestead, labelled 'Post-War House' on **Figure 4.1**, is located at the west side of the Project Area, and is still utilised today. The dwelling consists of a single story post-war residential dwelling with a domestic garden, and multiple large sheds utilised for agricultural purposes (Photo 4.2 and Photo 4.3). The dwelling is constructed of weatherboard cladding (or equivalent), with a hipped roof clad in corrugated sheet metal and north facing verandah. The dwelling is largely void of decorative features, with the exception of faux Corinthian plaster columns supporting the verandah roof. A double roller door garage is located to the east of the dwelling, constructed in a similar style. A timber plank fence encloses the residential portion of the area, with a cattle grate at the base of the entrance gate. This feature highlights the contemporary agricultural nature of the property. The dwelling is accessed via a private unsealed road and is situated on relatively flat terrain.

The second residential dwelling, labelled as '1900 house' on **Figure 4.1**, is no longer occupied and appears to have been abandoned in the recent past. This dwelling consists of a single-story building constructed c.1900 with a north-western facing verandah (**Photo 4.4**). The façade of the dwelling is obscured by a now dead non-native tree, which would have served as a prominent feature of the dwelling (**Photo 4.5**). The structure is constructed of corrugated sheet metal on the gable roof and cladding to the original walls, including the gable end. Plaster/asbestos boarding was used to construct additions and modifications to the original dwelling (**Photo 4.6**). The southern portion of the dwelling has been enclosed with glass louvre windows set into fibro/asbestos sheet clad walls. Natural timber sleepers support a skillion roof (**Photo 4.7**). It is likely that this portion of the dwelling was originally an open style verandah, which has been partially enclosed. An extension has been added to the southern side of the dwelling, consisting of a corrugated skillion roof and plaster walls. This extension served as an attached bathroom and was likely constructed in the mid-20th century (**Photo 4.8**).



A broken metal windmill, elevated water tank and the remnants of a timber framed structure are located to the south (**Photo 4.9**), and a small shed is located to the north of the dwelling, on the northern side of Redlynch Creek (**Photo 4.10**). The terrain is gently sloped, however transitions to a moderate incline descending to Redlynch Creek. A small water hole is found to the north of the dwelling, with a prominent mature tree growing at the bank. The tree has been supported by timber posts and likely served as a decorative landscape feature (**Photo 4.11** and **Photo 4.12**).

In addition, the remains of a 19th century slab hut, labelled 'Slab Hut' on **Figure 4.1**, are located in the central portion of the Project Area. This is likely the original slab hut for Poggy Station. These remains consist of five erect timber posts, dismantled burnt timber sleepers and worked stone blocks (**Photo 4.13** and **Photo 4.14**). The stone elements are scattered, however likely formed a chimney structure to the north of the dwelling (**Photo 4.15**). Two of the erect timber posts show evidence of joinery work, with some handmade nails identified in situ (**Photo 4.16** and **Photo 4.17**). The timber posts do not align or form a conventional square shape. Naturally occurring knots are visible in the timber posts, in addition to minor curvature in shape, suggesting they were felled from wild growth. Minimal vegetation is found in proximity to the remains, with grass and low shrubbery dominating the landscape. Due to the extensive grass growth, no further structural elements or landscape features associated with the former slab hut are visible (**Photo 4.18**). The terrain is gently sloped towards a minor tributary of Rocky Creek to the south-west of the remains.

The proposed road upgrades are located to the north of the Project Area on Ringwood Road. These works occur at and between Bow River and Killoe Creek and include culverts upgrades, regrading and other upgrades of the road. The location is characterised by typical rural road conditions, with clearly defined road corridors flanked on both sides by private land. No curbs or footpaths are located in the area, with grasses or other vegetation located adjacent to the road surface on either side. Several access roads to private properties are located off the road, generally unpaved. Where the road crosses water courses, different types of causeways are currently in place, in varying conditions. The culverts at Bow River and Killoe Creek include concrete pipes set below the existing concrete road surfaces, with grass and some stands of trees in the vicinity. The culverts and roads appear to have been damaged by flooding in multiple locations, with no houses, structures or other elements of potential heritage significance located in the vicinity.





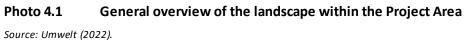




Photo 4.2 Primary residential dwelling (Post War House)





Photo 4.3 Auxiliary sheds located to the east of the primary dwelling (associated with Post War House)

Source: Umwelt (2022).



Photo 4.4 Secondary abandoned residential dwelling (1900 house)





Photo 4.5 Prominent plant growth dominating the front façade of the dwelling (1900 house) *Source: Umwelt (2022).*



Photo 4.6 Materiality of the secondary dwelling (1900 house)





Photo 4.7 Southern enclosed portion of the dwelling (1900 house)

Source: Umwelt (2022).



Photo 4.8 Mid 20th century bathroom extension (1900 house)





Photo 4.9 Water tank, windmill and timber remains to the south of the dwelling (1900 house) Source: Umwelt (2022).



 Photo 4.10
 Shed structure located to the north of Redlynch Creek (likely associated with 1900 house)

 Source: Umwelt (2022).





 Photo 4.11
 Waterhole located in proximity to the secondary dwelling (1900 house)

 Source: Umwelt (2022).





Photo 4.12 Decorative tree showing evidence of timber support (now dead)





 Photo 4.13
 Timber post remnants of 19th century dwelling (Slab Hut)

 Source: Umwelt (2022).



Photo 4.14 Dismantled and burnt timber sleepers (Slab Hut)





Photo 4.15 Potential remnants of a stone chimney (Slab Hut)





Photo 4.16 Evidence in joinery work (Slab Hut)





 Photo 4.17
 In-situ hand forged nails, note the warped form (Slab Hut)

 Source: Unwelt (2022).





Photo 4.18 Landscape surrounding the timber remains, illustrating low visibility and grass growth (Slab Hut)



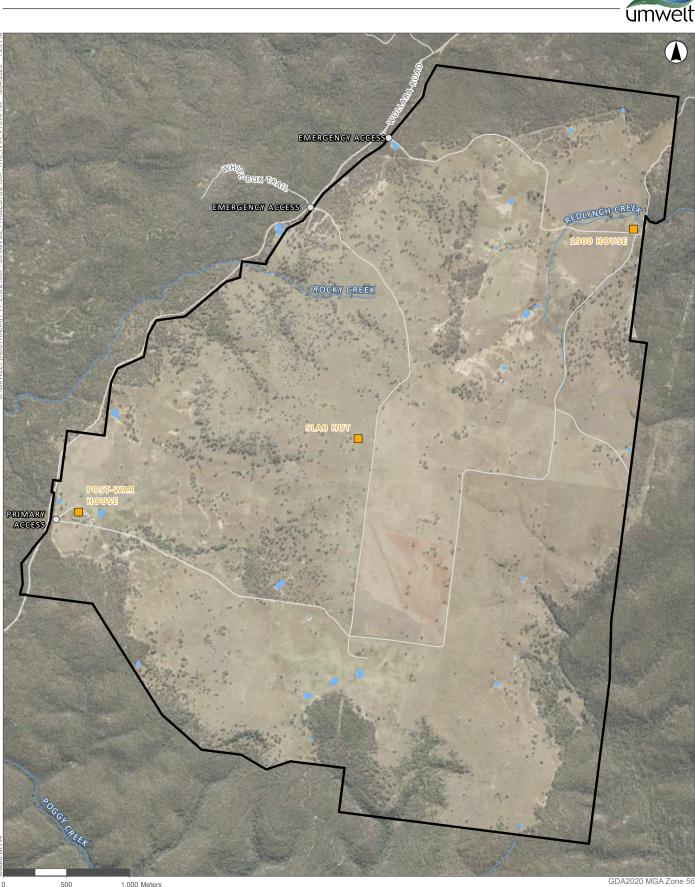


Photo 4.19 Ringwood Road – Causeway crossing at Bow River





Photo 4.20 Ringwood Road Killoe Creek road crossing and causeway proposed to be upgraded



1,000 Meters



GDA2020 MGA Zone 56

FIGURE 4.1

Location of Three Identified Residential Structures within the Project Area



5.0 Assessment of Historical Heritage

5.1 Assessing Heritage Significance

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 materials (Australia ICOMOS 2000).

5.1.1 Heritage Significance Criteria

The NSW Heritage Manual (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 former Heritage Division, OEH, 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:

- Criterion (a) an item is important in the course, or pattern, of NSW's cultural or natural history.
- **Criterion (b)** an item has strong or special association with the life or work of a person, or group of persons, of importance in NSW's cultural or natural history.
- **Criterion (c)** an item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in NSW.
- **Criterion (d)** an item has strong or special association with a particular community or cultural group in NSW for social, cultural or spiritual reasons.
- **Criterion (e)** an item has potential to yield information that will contribute to an understanding of NSW's cultural or natural history.
- Criterion (f) an item possesses uncommon, rare or endangered aspects of NSW's cultural or natural history.
- **Criterion (g)** 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 that local area. An item has state heritage significance when it is of importance to the people of NSW. Most heritage in NSW is of local significance.



5.1.2 Identified Potential Heritage Items

As discussed in **Section 4.0** above, a visual inspection of the Project Area was undertaken by Umwelt in September 2022 to confirm the setting and context of the Project Area and to identify if any potential heritage items were located within the Project Area.

The Project Area consists generally of undeveloped or agricultural landscape, with limited built elements or structures. The structures identified during the visual inspection and historical research included:

- c.1900 house (abandoned) (1900 House)
- ancillary structures and sheds of varying ages and conditions associated with the agricultural use of the land
- post-war house currently used as the primary residence for the Project Area (Post War House).

Upon visual inspection and review of the historical context of the Project Area, the two structures – 1900 House and Post War House – were not identified as having potential significance and do not warrant a detailed assessment against the NSW State heritage criteria set out above.

It should be noted that the remains of the original slab hut for Poggy station (Slab Hut) were also identified, however due to the nature of these remains, they are assessed as an archaeological item under **Section 5.2**.

5.2 Discussion of Historical Archaeological Potential

Historical archaeology in Australia generally relates to the study of the past using physical evidence in conjunction with historical sources. Historical archaeology is generally defined as comprising the period since European arrival in Australia in 1788. An archaeological resource is the physical evidence of the past and may comprise sub-surface evidence including building foundations, occupation deposits, features and artefacts. Archaeological resources are irreplaceable and have the potential to contribute to our knowledge and understanding of early history using information that is unavailable from other sources (Department of Urban Affairs and Planning, 1996:2).

The historical archaeological potential of the project area refers to the likelihood that there may be physical evidence relating to the early development and occupation of the Project Area beneath the current ground surface.

5.2.1 Historical Archaeological Potential

Archaeological potential is defined as "the degree of physical evidence present on an archaeological site, usually assessed on the basis of physical evaluation and historical research" (Heritage Office and Department of Urban Affairs and Planning, 1996).

Archaeological research potential of a site is the extent to which further study of relics likely to be found is expected to contribute knowledge about the history of NSW which is not demonstrated by other sites or archaeological resources. The archaeological potential of the Project Area, and its immediate surrounds is assessed using the following gradings:



- Low Potential: land use history suggests limited development or use, or there is likely or known to have been quite high impacts in these areas. However, deeper sub-surface features such as wells, cesspits and their artefact-bearing deposits, and deeply embedded footings or piles may survive at depth.
- **Moderate Potential:** land use history suggests limited phases of low to moderate development intensity, or that there have been impacts in this area. A range of archaeological remains may survive, including building footprints and shallower remains or deposits as well as deeper sub-surface features.
- High Potential: substantially intact historical archaeological remains could survive in these areas.

The assessment of potential is dependent upon the extent of disturbance that has occurred in the area of the assessment. This has been considered in the following section.

5.2.2 Disturbance

In order to assess the extent of disturbance, the following classifications are used:

- Low disturbance: the area or feature has been subject to activities that may have had a minor effect on the integrity and survival of archaeological remains.
- **Moderate disturbance:** the area or feature has been subject to activities that may have affected the integrity and survival of archaeological remains. Archaeological evidence may be present; however, it may be disturbed.
- **High disturbance:** the area or feature has been subject to activities that would have had a major effect on the integrity and survival of archaeological remains. Archaeological evidence may be greatly disturbed or destroyed.

The historical overview presented in **Section 3.0** demonstrates that the Project Area has been used solely for pastoral activities, such as sheep and cattle raising since the late 1800s and would likely have been subject to few activities which would have resulted in high levels of disturbances across the landscape. Activities which would have resulted in a level of disturbance within the landscape would include:

- modification, infilling or construction of creek and drainage lines and dams around the property
- clearing of land
- frequent or high intensity stock animal movements (i.e. cattle and sheep)
- construction of new dwellings or structures, including any grading or excavation for footings.

5.2.3 Archaeological Potential of the Project Area

As outlined in **Section 3.0**, the Project Area has remained largely undeveloped as pastoral land since at least the 1880s. Historical records and visual inspection of the Project Area show three residential dwellings (being the Slab Hut, 1900 House and Post-War House) were constructed in the Project Area at different times, all with ancillary structures associated with the sheep and cattle rearing on the property.



The earliest known structure within the Project Area is the original slab hut which housed the O'Brien family until 1900 (Slab Hut). Although the majority of the structure has been removed, remnants of the timber structure mark the location of the former hut. As shown in **Photo 4.14** and **Photo 4.15**, remains of a stone chimney or wall base are also present at the former slab hut.

It is also likely that other remains of the slab hut, and/or material evidence of the O'Brien family's occupation of the hut remain in this location and the immediate surrounds. These archaeological remains could be partially or completely buried, or within the long grass surrounding the slab hut remains which obscures visibility in the area. These archaeological remains could include:

- structural remains of the slab hut which indicate the original form and function of any different spaces of the hut
- foundations of any outbuildings associated with the slab hut
- cesspit, rubbish pits or other artefact deposits which indicate the available material goods within a rural pastoral run between 1830s–1900s
- isolated artefacts on the ground surface
- fence post holes associated with a garden or boundary fence around the slab hut.

It is unknown to what level the slab hut was intentionally cleared and demolished once it was abandoned, and this may affect the level of artefacts and structural remains which survive. Additionally, the slab hut is located within a section of the Project Area which has been heavily utilised for grazing cattle and sheep, resulting in unfettered access for these animals through the remains of the slab hut. This has likely resulted in damage and disturbance of any archaeological remains at surface level. Deeper deposits within the area of the slab hut however are unlikely to have been impacted by the agricultural land use.

There is therefore high potential for archaeological remains associated with the original slab hut of Poggy station to survive within the Project Area. The archaeological remains associated with the original homestead are likely of local significance, for their historical value with the early settlement of the area, and their association with the O'Brien family and the Jimmy Governor murders of the 1900s. It is likely that the remains have research potential to provide evidence for the material remains available to the early settler in rural NSW from the 1830s, particularly in a domestic setting on a remote pastoral property. This area of high archaeological potential, shown of **Figure 5.1** is located within the centre of the Project Area, and covers an area of approximately 0.33 ha.

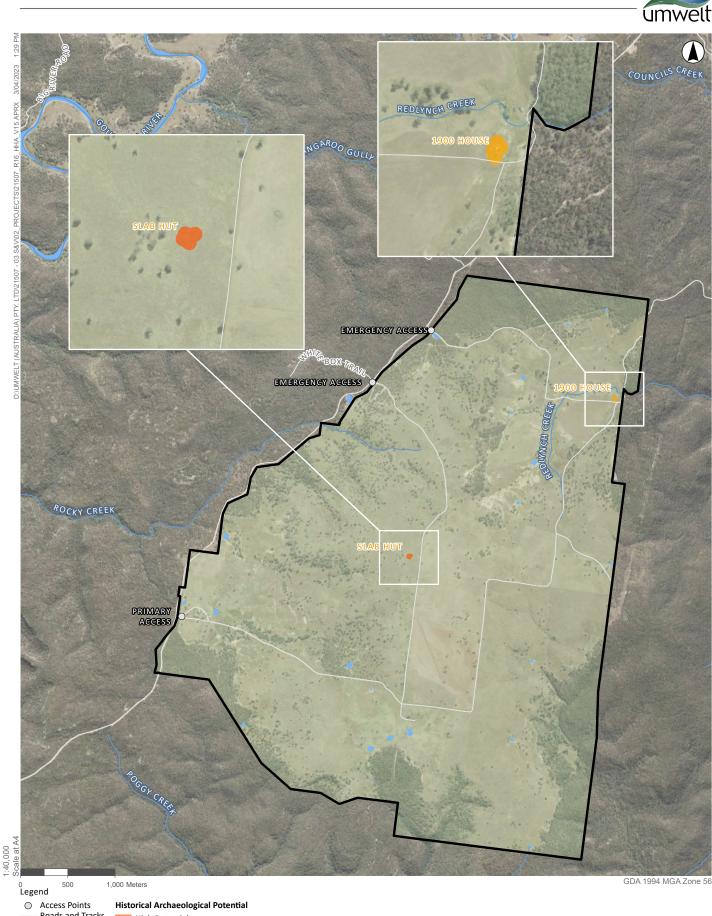
In addition to the slab hut, there is an extant c.1900 house located in the north-east corner of the Project Area (1900 House). This house was used as the primary dwelling for approximately 40 years; however, the exact length of occupation is unknown. The area surrounding the remaining structure may contain archaeological evidence of a cesspit or outbuildings and artefact deposits associated with early development and use of the house, prior to the construction of the internal toilet and laundry in the mid twentieth century. There is low to moderate potential for these archaeological remains to be present within the vicinity of the c.1900 house. It is unlikely that these archaeological remains would meet the threshold for local significance based on the available information for the property. This area of low-moderate archaeological potential is located in the north-east corner of the Project Area, encompassing an area of approximately 0.32 ha.



In addition to the archaeological potential identified above, the Project Area has some potential to retain evidence of undocumented structures associated with the rearing of sheep on the property. This could be ephemeral structures or camps used seasonally or for short periods of time by workers on the property. The archaeological remains may include the remains of structures, such as stone chimneys, cladding, remains of timber posts or post holes. However, given the low intensity use or temporary nature of these structures, and limited availability of materials during early development of the region, it is likely that significant structural remains were removed or were significantly impacted by the continued pastoral activities across the site. The potential for these archaeological remains to survive is therefore considered low; this includes the area of the Post-War house.

Figure 5.1 shows the historical archaeological potential of the Project Area.

The proposed road and culvert upgrades are located within established road reserves which have likely provided access from Merriwa to the Project Area as well other properties located within the area since early settlement of the Merriwa area. Development adjacent to the road corridor, in the rural context of the project, would have been limited to the establishment and subsequent upgrades to the roads. The historical information available for the region does not indicate there is likely to be buildings or other structures previously located within the area of proposed upgrades. The archaeological potential for the area of proposed road and culvert upgrades is considered to be nil.





Historical Archaeological Potentia High Potential Moderate-Low Potential Low Potential

FIGURE 5.1

Historical Archaeological Potential



6.0 Heritage Impact Assessment

This section assesses the likely impacts of the works included in the Project on the potential heritage items identified in **Section 5.2**, heritage items in vicinity of the Project Area and any assessed areas of historical archaeological potential identified in **Section 5.2.3**.

The impact assessment has been undertaken using the heritage impact gradings included in **Table 6.1**. The gradings have been developed in accordance with the Heritage NSW guidelines and the Burra Charter.

Grading	Definition
Major Adverse	An action which will have a severe, long term and possibly irreversible impact on the heritage item. Major adverse impacts include the partial or complete demolition of a heritage item or addition of new structures in its vicinity that would destroy the visual setting of the items. The action will have a substantial impact on the fabric and or values of the heritage item.
	Actions of a major adverse impact cannot be fully mitigated.
Moderate Adverse	An action that will have an adverse impact on a heritage item. Moderate adverse impacts include the modification of a heritage item, including partial removal of significant fabric or elements, altering the setting of a heritage item or landscape and construction of new structures which alter the visual setting of the heritage item. Actions of a moderate adverse impact may be able to be reduced through appropriate mitigation measures.
Minor Adverse	An action that will a minor adverse impact on a heritage item. This may include an action affecting only a small element of the heritage item, or a small or partial impact on the setting of a heritage place. The action may be temporary or reversible. Actions of a minor adverse impact are able to be minimised or reduced through use of appropriate mitigation measures.
Negligible Impact	Actions which do not affect the heritage values of a place, or do not affect significant elements, fabric, views, or the setting of a heritage item.
Minor Positive	An action which will bring a minor benefit to a heritage item, such as improving an item's visual setting.
Moderate Positive	An action which will bring a moderate benefit to a heritage item, such as the removal of an intrusive element or fabric, or a substantial improvement to the heritage items setting or reinstatement of obscured views.
Major Positive	Major positive impacts include actions which include a major benefit to the heritage item and add to or increase the heritage values of the item. This includes actions such as the reconstruction of significant elements, removal or substantial intrusive elements or structures in the curtilage or reinstatement of a heritage items visual curtilage or setting. This can also include the reintroduction of former uses of an item which are key to demonstrating its heritage significance.

Table 6.1 Heritage Impact Gradings



6.1 Assessment of Heritage Impacts

6.1.1 Impacts to Heritage Items

As identified in **Section 2.3**, there are no items listed on a statutory heritage register within the Project Area. Additionally, no potential heritage items have been identified within the Project Area based on the review of historical background and site inspection undertaken as part of this assessment. The Project would therefore not impact any heritage items within the Project Area.

The Project Area is located within the vicinity of the Goulburn River National Park, part of which is a locally listed landscape heritage item. Due to the topography of the surrounding area, and distance (>2.5 km) between the Project Area and the heritage item, views to the Goulburn River National Park will be maintained and the character and setting of the heritage item will not be impacted. Additionally, no physical impacts to the Goulburn River National Park are proposed as part of the Project.

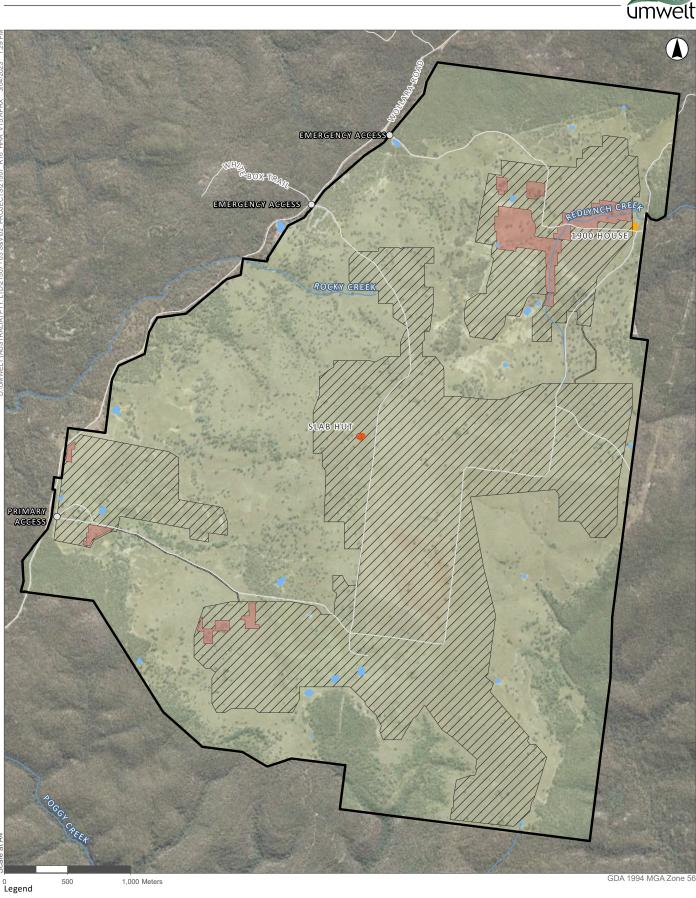
The proposed road and culvert upgrades are located greater than 5 km from the nearest listed heritage item; and are not located in the vicinity of any potential heritage items. They would not result in visual or physical impacts to listed or potential heritage items in the vicinity of the proposed works.

6.1.2 Impacts to Historical Archaeology

The proposed construction activities associated with the Project include significant ground disturbing works for the establishment of the Project construction site and the installation of the solar panel arrangement, BESS, substation and associated infrastructure.

The development footprint for the Project includes works within areas of the site identified as having moderate to low archaeological potential (**Figure 6.1**). The construction impacts associated with the Project would require ground disturbance for the preparation of the site (such as regrading, removal of topsoil and establishment of access tracks) and subsequent construction of the solar panels and associated components of the Project. This would likely result in significant impacts to, or total removal of, any historical archaeological remains within the Project impact footprint. This includes the removal of archaeological evidence associated with the use of the c.1900 house in the north-east corner. However, these archaeological remains are unlikely to be of local significance or meet the definition of a 'relic'. Their removal would be a minor to negligible heritage impact.

An exclusion zone around the area of historical archaeological potential associated with the Slab Hut has been included within the layout for the Project. Therefore, no ground disturbing works are proposed within this area of high archaeological potential. This will avoid significant impacts to, or removal of archaeology associated with the Slab Hut and its use by the O'Brien family resulting from the project.



1:30,000 Scale at A4

Development Footprint

Access Points

Roads and Tracks

Watercourse

High Potential Moderate-Low Potential Low Potential Site Boundary Exclusion Zones - Environmentally Sensitive Areas Waterbodies

FIGURE 6.1

Impacts to Historical Archaeology

Historical Archaeological Potential



7.0 Conclusion and Management Measures

7.1 Conclusions

The Project Area has been assessed as having potential to contain historical archaeological remains associated with the early pastoral land use and O'Brien family, who have owned and operated the pastoral property since at least the 1880s. In particular, there is potential to encounter archaeological remains in the location of the original slab hut located near the centre of the Project Area.

The Project has been assessed as having a minor to negligible archaeological impact through the significant impact or total removal of the historical archaeological remains associated with the 1900 House.

No listed or potential heritage items were identified within the Project Area. No heritage impacts would result from the demolition of the 1900 house or any other ancillary structures within the Project Area.

The proposed road and culvert upgrades outside of the Project Area are not located in the vicinity of any heritage items, nor in areas of historical archaeological potential. No heritage or archaeological impacts would result from these proposed works.

7.2 Recommended Management Measures

The following management measures are recommended to be implemented through the design and construction phase of the Project to minimise and/or manage impacts to historical archaeology within the Project Area.

- Impacts to the areas of high historical archaeological potential should be avoided wherever possible. An exclusion zone of at least 20 m should be maintained around identified areas of high historical archaeological potential associated with the Slab Hut.
- If impacts to areas of high historical archaeological potential cannot be avoided, due to modifications to the proposed design, further assessment and investigation would be required prior to the commencement of construction activities. This would include the preparation of an archaeological research design and test excavation methodology to confirm the extent of historical archaeological remains present, and the likely significance level of any historical archaeological remains on the site.
- All contractors and project team for the Project should be made aware of the archaeological potential and heritage sensitivity of the site, through a heritage-specific induction which outlines their requirements under the *Heritage Act 1977* and the Project Approvals.
- An unexpected heritage finds protocol should be implemented for the construction works in the unlikely event that historical archaeological remains should be encountered during construction works.



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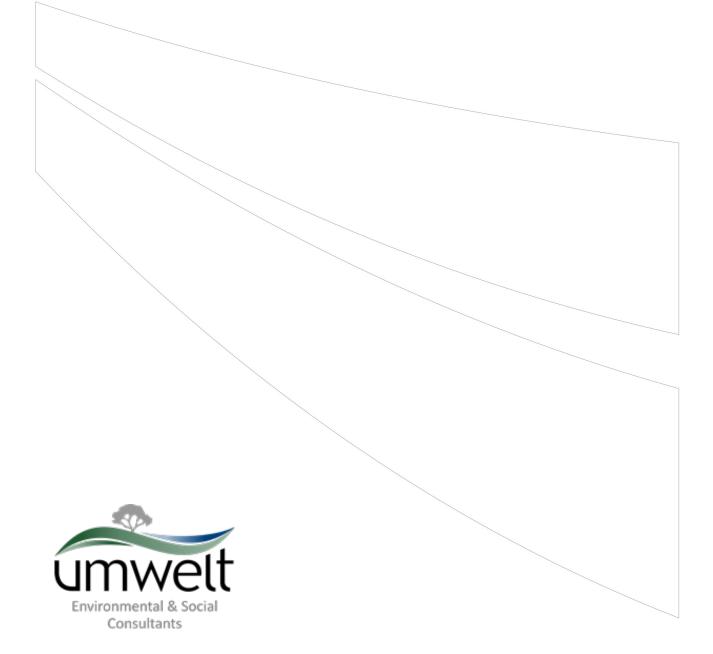
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