APPENDIX G

Historic heritage assessment

AMPYR

Shell ENERGY

EMM creating opportunities

Wellington South Battery Energy Storage System

Historic Baseline Assessment

Prepared for AMPYR Australia Pty Ltd

October 2022

Wellington South Battery Energy Storage System

Historic Baseline Assessment

AMPYR Australia Pty Ltd

J210534 RP4

October 2022

Version	Date	Prepared by	Approved by	Comments
V1		Kerryn Armstrong – Senior Archaeologist	Pamela Kottaras	
V2		Kerryn Armstrong – Senior Archaeologist	Pamela Kottaras	
V3	31 May 2022	Kerryn Armstrong – Senior Archaeologist	Pamela Kottaras	
V4	20 October 2022	Kerryn Armstrong – Senior Archaeologist	Pamela Kottaras	

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1 Introduction

1.1 Background

AMPYR Australia Pty Ltd (AMPYR) and Shell Energy (Shell) proposes to develop the Wellington Battery Energy Storage System (the project). The project involves the development of a large-scale battery energy storage system (BESS) with a discharge capacity of 500 megawatts (MW) and a storage capacity of 1,000 megawatt hours (MWh). The project also incorporates an on-site substation and connection infrastructure to facilitate transfer of energy to and from the electrical grid, and ancillary infrastructure. The project will be operated by Shell Energy Australia (Shell) who is jointly funding the development of the project.

The project will be developed within privately owned land (Lot 32 DP 622471) and will incorporate either an overhead or underground transmission line and upgrade works to Wellington substation in the adjoining TransGrid owned landholding (Lot 1 DP 1226751). Physical infrastructure associated with the BESS will occupy an area of approximately 13 ha, however during construction, the project will require a disturbance area of approximately 19 ha.

The regional setting is presented in Figure 1.1 and the site and its surrounding local context is shown in Figure 1.2.

The site is located within the New South Wales (NSW) Government declared Central-West Orana Renewable Energy Zone (CWO REZ) and will complement nearby existing and proposed renewable energy generation assets, including the Wellington Solar Farm (located opposite Goolma Road) the Uungula Wind Farm and the proposed 3 GW of additional generation to be delivered as part of the CWO REZ, by smoothing out fluctuations in electricity supply from these new intermittent power sources, providing system security and other network services. In operation, the project will be one of the largest battery storage projects in NSW and will contribute to the overall storage capacity and reliability of the National Electricity Market (NEM). The project also supports state and Commonwealth emission commitments by facilitating renewable energy input into the grid network.

1.2 Location and context

The project is located in the Dubbo Regional LGA on Goolma Road, approximately 2.2 km north-east of the township of Wellington and 44 km south-east of Dubbo.

The locality surrounding the project contains a variety of landscapes within an agricultural setting. Most of the local and sub-regional setting has been cleared for grazing and/or cultivation. There are no major National Parks, nature reserves, conservation areas or State forests close to the project. The closest State Park is Lake Burrendong State Park, approximately 20 km south-east of the site (see Figure 1.1).

Key land uses surrounding the site include:

- cropping and grazing activities;
- correctional centres including the Macquarie Correctional Centre and Wellington Correctional Centre north of the site;
- renewable energy generating facilities including the Wellington Solar Farm immediately north of the site;
- electricity infrastructure including the TransGrid Wellington Substation and associated transmission lines; and
- residences along Goolma Road, Twelve Mile Road, Cadonia Drive, and Cadia Place.

Land surrounding the project is relatively flat, apart from a hill approximately 600 m east of the project, which rises about 100 m above the majority of the site. The project is directly south of the Wellington Solar Farm and adjacent and east of the TransGrid Wellington substation.

1.3 Assessment framework

The project is State significant development (SSD) pursuant to Schedule 1 of the State Environmental Planning Policy (Planning Systems) 2021 (Planning Systems SEPP) and is described in Section 4.1. Accordingly, approval for the project is required under Part 4 of the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act).

The assessment was prepared in accordance with the requirements of the *NSW Department of Planning, Industry and Environment* (DPIE), which are set out in the *Secretary's Environmental Assessment Requirements* (SEARs) for the project, issued on 1 October 2021. The SEARs identify matters which must be addressed in the project Environmental Impact Statement (EIS). This report follows SEARs relating to historic heritage. Table 1.1 lists the requirements for the project relevant to this assessment and references where they are addressed in this report.

Table 1.1 SEARs for the assessment of Aboriginal cultural heritage

Requirement	Section addressed
Historic Heritage -	
– assess the impact on historic heritage having regard to the NSW Heritage Manual.	This report

Note: This report only includes matters relating to historical heritage and not Aboriginal cultural heritage, which is addressed in Section 6.2 and Appendix F of the environmental impact statement (EIS).

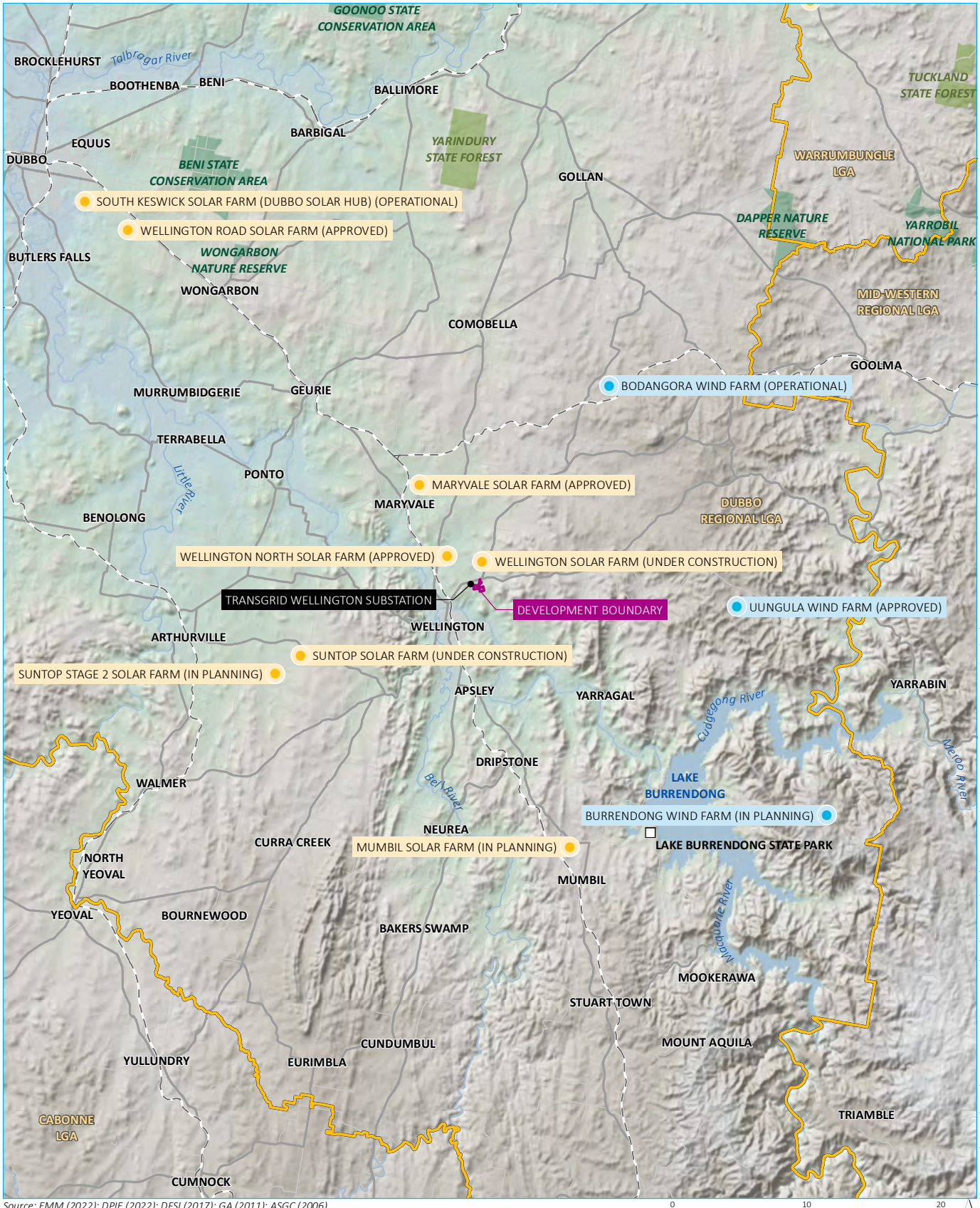
The NSW *Heritage Act 1977* (Heritage Act) is the primary piece of State legislation affording protection to items of environmental and/or archaeological heritage (natural and cultural) in NSW and under the Heritage Act, 'items of environmental heritage' include places, buildings, works, relics, moveable objects and precincts identified as significant based on historical, scientific, cultural, social, archaeological, architectural, natural or aesthetic values are afforded protection. State significant items are listed on the State Heritage Register (SHR) and are given protection under the Heritage Act against any activities that may damage an item or affect its heritage significance. Permits to disturb or excavate 'relics' are issued by Heritage NSW under Section 140 (for relics not protected by an SHR listing) or Section 60 (for relics protected by an SHR listing) of the Heritage Act. Exceptions or exemptions to these permits are applicable under certain conditions.

1.4 Authorship

This report was authored by Kerryn Armstrong (EMM Senior Archaeologist). The report was reviewed by Pamela Kottaras (National Technical Lead – Historical Heritage).

1.5 Report limitations

This document is a baseline assessment, which utilised publicly available information about the site and local area. The purpose of this report is to identify if the potential for significant and complex sites exists in the project area, which would require more detailed research.



Source: EMM (2022); DPIE (2022); DFSI (2017); GA (2011); ASGC (2006)

0 10 20 km

GDA 1994 MGA Zone 55

N

KEY

- Development boundary
- Lake Burrendong State Park
- Rail line
- Major road
- Minor road
- River
- Named waterbody
- Local government area
- NPWS reserve
- State forest

Renewable energy project

- Solar farm
- Wind farm

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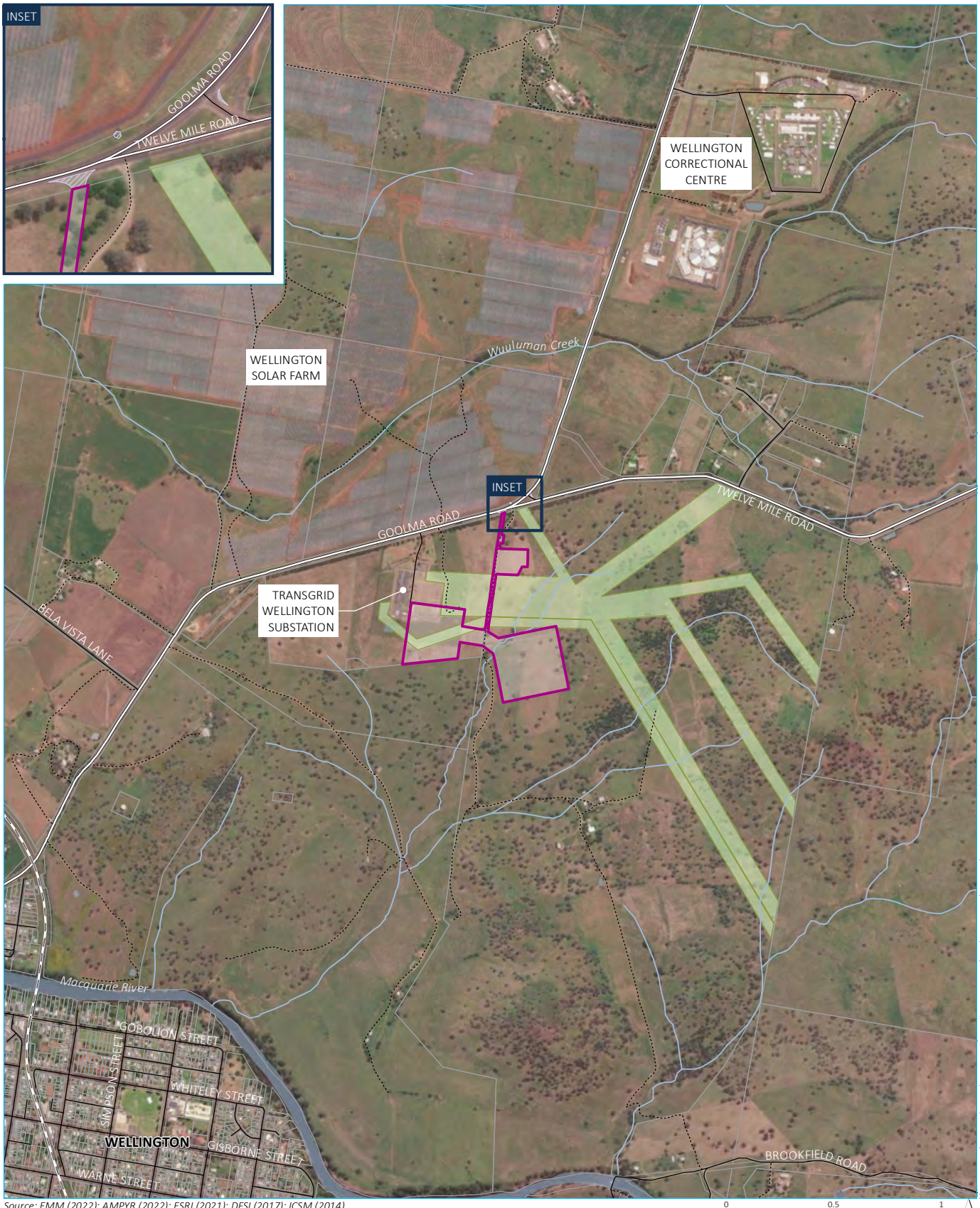
Regional setting

Wellington Battery Energy Storage System
Historic baseline assessment
Figure 1.1

EMM
creating opportunities



Source: EMM (2022); AMPYR (2022); ESRI (2021); DFSI (2017); ICSM (2014)

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GDA 1994 MGA Zone 55

N

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KEY

- Development boundary
- Impact area associated with road upgrades
- Rail line
- Major road
- Minor road
- Vehicular track
- Watercourse/drainage line
- Waterbody
- Cadastral boundary
- Freehold easement

Local setting

Wellington Battery Energy Storage System
Historic baseline assessment
Figure 1.2

EMM creating opportunities

2 Project description

2.1.1 Project overview

The project consists of the construction and operation of a major grid-scale battery project immediately south-east of the TransGrid Wellington Substation. The project will involve the following components:

- construction and operation of the BESS compound, comprising between 1,400–6,200 pre-assembled battery enclosures housing lithium-ion battery packs and related control equipment, and transformers and inverters with a peak maximum generation capacity of 500 MW/1,000 MWh;
- construction and operation of an on-site BESS substation, comprising two 330 kilovolt (kV) transformer bays, 33/0.440 kV auxiliary transformers, and an auxiliary services building to house supporting equipment and systems;
- connection to the adjoining TransGrid Wellington Substation by way of an underground or aboveground transmission line and associated easement;
- upgrade of the TransGrid Wellington Substation, which may include an additional 330 kV switch bay with power transformers (which would be installed as an alternative to the transformer bays being located on the BESS site), switchyard bench extension to the south of the existing bench and relocation of security fencing; and
- ancillary infrastructure to facilitate construction and operation of the project, including improvements to the existing access road, a washdown bay for incoming vehicles, and a control and office building.

The project also involves a subdivision in order to separate the BESS from the remainder of the site which will continue to be used for farming and grazing.

A summary of the key aspects of the project is provided in Table 2.1. A more detailed description for the project is provided in this chapter. The works described in these sections are subject to detailed design.

Table 2.1 Key aspects of the project description

Key aspects	Description
Project area	
Address and legal description	6773 Goolma Road, Wuuluman (battery energy storage system and transmission line) described as Lot 32 DP 622471 and 6909 Goolma Rd, Wuuluman (transmission line and Wellington Substation upgrade) described as Lot 1 DP 1226751.
Development/disturbance boundary	The development boundary, including permanent infrastructure and temporary construction disturbance, covers approximately 19 ha.
Operational boundary	Permanent project infrastructure will occupy an operational footprint of approximately 13 ha.
Historic heritage assessment study area	The local and regional area considered to identify local and regional historic heritage context, of the order of 50 km beyond the development boundary.

Table 2.1 Key aspects of the project description

Key aspects	Description
Environmental constraints near the project area	The following constraints are present within the site: • nearby sensitive receivers, the closest of which being a resident along Twelve Mile Road, approximately 800 m north-east of the site; • the presence of a tributary to Macquarie River and associated riparian vegetation; • the presence of native vegetation and its associated ecosystem and species values; and • a portion of the site is within a designated bushfire prone area. The project has been designed to avoid these constraints.
Physical layout and design	
Layout	The proposed BESS will generally comprise the following components: • lithium-ion (Li-ion) batteries inside battery enclosures; • power conversion systems (PCS) incorporating inverters and transformers; • an aboveground or underground transmission line to the Wellington Substation; • an on-site substation comprising two 330 kilovolt (kV) transformer bays and ancillary infrastructure; • cabling and collector units; and • an Asset Protection Zone (APZ).
Mitigation measures	The project has been sited to avoid environmental constraints within or near the site while minimising distances to the TransGrid Wellington Substation. Key mitigation measures considered in the project design include: • Avoidance of higher condition native grassland and woodland in project siting and selection of disturbance area. • Suitable APZs incorporated in design of proposed infrastructure and disturbance area. • Construction of noise attenuation barriers (wall/retaining wall and batter or earth mounds) four metres in height to the north, east, south and west as a means of reducing potential noise impacts on nearby residential receivers. • Planted landscaping around project infrastructure to minimise visual impacts.
Ancillary infrastructure and upgrades	The project will include the following ancillary components and upgrades: • an upgrade to the existing site access (currently at the intersection of Goolma Road and Twelve Mile Road) to facilitate safer connection to roadway network and to facilitate the entry of larger construction vehicles; • upgrades to existing access tracks within the project boundary; • connection to the switchyard in adjoining TransGrid Wellington substation; • upgrade of the TransGrid Wellington Substation, which may include an additional 330 kV switch bay with power transformers (which would be installed as an alternative to the transformer bays being located on the BESS site), switchyard bench extension to the south of the existing bench and relocation of security fencing; • control and office building and associated parking; • drainage and stormwater management; • ancillary infrastructure including security fencing, lighting and closed-circuit television; and • connection to utilities (telecom, sewerage, etc).
Built design, materials and finishes	Project enclosure components and cabinets will be light in colour to assist with heat management and made of steel. The control and office building will be a prefabricated building comprising a lunch room, office and ablutions room. The building will be assembled onsite and built to a height of 5 m tall. The building will be made of Trimclad steel or similar and grey in colour. Upgrade of the Wellington substation will comprise an extension to the existing infrastructure elements on that site.

Table 2.1 Key aspects of the project description

Key aspects	Description
Design elements subject to change during detailed design	Detailed design for the project has yet to be completed. The following design elements may be amended throughout the detailed design process: • the layout of the BESS units and substation infrastructure; • the transmission line alignment and arrangement (ie either above ground on steel lattice tension structures and poles, or underground); • the control and office building (material, finishes); • works at the TransGrid Wellington substation and switchyard to accommodate project connection; and • the location of attenuation features (noise wall/bunds) and fencing.
Plans and figures illustrating the layout and design in plan-view and cross-section	An overview of the project layout is provided in Figure 4.1.
Specifications	
Discharge capacity	Up to 500 MW.
Storage capacity	Up to 1,000 MWh or two hours of maximum discharge capacity.
Typical operating cycle	One to two cycles per day.
BESS compound components	Specific component requirements are subject to selection of the potential technology provider. The BESS compound will comprise: • 1,400–6,200 pre-assembled battery enclosures incorporating power conversion systems, thermal management systems, and safety systems; • 150–300 inverters/transformers; and • ancillary infrastructure (eg electrical switchroom, a control and office building, security fencing). Battery enclosures will be 3 m tall.
BESS substation components	An on-site substation will comprise: • two 330 kV transformer switch bays; and • 33kV indoor switchgear housed in portable substation containers. The tallest component of the substation will be the tips of bushings, approximately 11 m tall, however the bulk of the unit will be 9 m tall.
Connection infrastructure	An approximate 500 m 330 kV transmission line will extend from the BESS substation. TransGrid has advised that the Wellington Substation upgrade works may incorporate installation of one new 330 kV switch bay and multiple transformers (which would be installed as an alternative to the transformer bays being located on the BESS site) and may be installed in stages to coincide with the staged construction of the BESS should a staged approach be adopted.
Construction	
Capital investment value	$545 million AUD.

Table 2.1 Key aspects of the project description

Key aspects	Description
Construction activities	Construction of the project will involve: • civil and enabling works; • structural, mechanical and electrical works; • commissioning; and • demobilisation. The project is anticipated to take approximately 12 months to construct. Construction of the project will require an area of approximately 12 ha to facilitate the movement of plant and equipment (disturbance footprint). This area will incorporate a temporary laydown area near the site access for the storage of materials and infrastructure prior to installation at the site.
TransGrid connection works	The project will connect to the Wellington Substation switchyard either via overhead or underground cables extending from the on-site substation. TransGrid has advised that the Wellington Substation upgrade works may incorporate the installation of one new 330 kV switch bay and multiple transformers (which would be installed as an alternative to the transformer bays being located on the BESS site) and may be installed in stages to coincide with the staged construction of the BESS should a staged approach be adopted.
Construction workforce	The project will create up to approximately 100 construction employment opportunities, many of which are expected to be sourced from the Dubbo region and other surrounding regional areas.
Construction scheduling and staging	Construction of the project will be undertaken over a minimum of 8 months and up to a maximum of 12–18 months under normal circumstances. Construction of the project may be undertaken as a single stage, or over two stages. For the staged construction scenario, Stage 1 would likely include 300 MW installed discharge capacity, all civil and enabling works, installation of batteries, one transformer and switchgear and associated structural, mechanical and electrical works, and connection to the substation. Stage 2 would consist of 200 MW, including the installation of a second transformer and associated switchgear and batteries. It is anticipated that construction of Stage 2 would commence approximately 6–12 months following completion of Stage 1 works.
Construction hours	Construction of the project will be undertaken in accordance with the recommended standard/normal hours as defined by the *Interim Construction Noise Guideline* (DECC 2009) and *Draft Construction Noise Guideline* (EPA 2021) being: • Monday to Friday: 7.00 am to 6.00 pm; • Saturday: 8.00 am to 1.00 pm; and No work on Sundays and public holidays. Some exceptions may be made for low impact works and extraordinary circumstances.
Vehicle movements	The following maximum vehicle movements are predicted (subject to detailed design): • an average of up to 100 passenger vehicles per day (100 in and 100 out) during the construction works phase; • an average of up to 60 heavy vehicles per day (60 in and 60 out) during the construction works phase; and • up to 20 oversize overmass (OSOM) vehicles during the construction works phase. Average daily heavy vehicle movements during the construction phase will generally be significantly lower than outlined above as the delivery of enclosures is anticipated to occur in batches.

Table 2.1 Key aspects of the project description

Key aspects	Description
Transport	Project components (batteries, enclosures, PCS components and substation components) will be transported to the site from Sydney/Newcastle via the Mitchell Highway and Goolma Road, an approved B-double route. Construction materials sourced from surrounding concrete batching plants and hard rock quarries. Construction labour, equipment and plant will likely be sourced from Dubbo and other surrounding regional centres.
Water demand	Water used directly on site for construction is estimated at 10 mega litres (ML) used predominantly for dust suppression purposes. Water sources will be confirmed during detailed design but are likely to include a combination to be sourced from bore water located on the participating landholder's land, municipal water supply (in agreement with the relevant authority) and/or imported water in portable tanks.
Operation	
Operational activities	Operation of the project will involve: • maintenance and cleaning of equipment; • general office activities; and • waste removal.
Operational employment	The project will contribute to the employment of up to two employees during operation.
Operational life expectancy	The BESS is expected to operate for 20 years. At the end of operational life, this may be extended subject to the replacement of components.
Operational hours	The BESS will operate 24 hours a day, 7 days a week and be operated remotely.
Vehicle movements	Up to 4 trips per day (4 in-bound and 4 out-bound), compromising: • staff vehicles up to 3 per day (3 in-bound and 3 out-bound); and • heavy vehicles up to 1 per day transporting replacement parts and equipment as required. Vehicle movements to and from the site will occur infrequently during operations, primarily for scheduled maintenance.
Decommissioning	
Decommissioning timing	At the end of the operational life of the BESS the project will either be replaced and upgraded or built infrastructure will be removed and the site rehabilitated.
Decommissioning works	Works undertaken during decommissioning will not exceed intensity associated with construction works and is expected to take up to 8 months.

2.1.2 Project area and location

The project will be developed within privately owned Lot 32 DP 622471 and will incorporate either an overhead or underground transmission line and upgrade works to Wellington substation in the adjoining TransGrid owned landholding (Lot 1 DP 1226751). The Wellington Substation is located approximately 300 m west of the proposed location of the BESS substation.

Lot 32 DP 622471 is proposed to be subdivided from the remainder of the landholding which will continue to use for grazing and agricultural purposes.

The 'project area' referenced throughout this report comprises the development boundary, along with the minor additional impact area associated with proposed site access and road upgrade works as recommended in the traffic impact assessment report (refer Appendix L of the EIS) as shown in Figure 1.2.

2.1.3 Physical disturbance

Permanent project infrastructure will occupy an area of approximately 13 ha. During construction, the project will require a disturbance area of approximately 19 ha (referred to as the development boundary).

Vegetation clearing, cut and fill and bulk earthworks will be required to establish desired design levels to facilitate project infrastructure. Gravel cover will be established to allow for a managed surface that is partially permeable. Project infrastructure and equipment will either be established on concrete pads or mounted on skids affixed to the concrete pads. Depending on further detailed design, piled foundations may be required in certain areas to accommodate project infrastructure. The existing access track will be improved (road base), realigned and extended to the project infrastructure area.

Limited ground disturbance may also be required to facilitate a temporary construction compound/laydown area and washdown area at the site entrance. The siting of this area will be clear of established trees and located mostly within previously disturbed areas.

Areas disturbed during construction and not required for the operation of the project will be rehabilitated following completion of construction. An asset protection zone will be established and maintained on an ongoing basis for bushfire protection purposes.

3 Assessment methods

3.1 Introduction

This assessment considers the historic heritage opportunities and constraints to be considered as part of the project. It takes into consideration, the historical heritage values that have been previously registered and provides guidance on where the potential for heritage values may exist.

3.2 Historical baseline assessment

This historical baseline assessment includes the following searches undertaken on 26 July 2021:

- a search of relevant heritage registers including:
    - the National Heritage List (NHL);
    - the Commonwealth Heritage List (CHL);
    - the State Heritage Register (SHR);
    - government agency heritage and conservation registers (s170 Register);
    - Schedule 5 to the Dubbo Regional Local Environmental Plan 2022 (Dubbo LEP);
    - the National Trust of Australia (NSW; non-statutory); and
    - the Register of the National Estate (non-statutory);
- identification of the known historic heritage assets within the project area, and their applicable constraints and opportunities; and
- recommendations for future steps for the appropriate management of historic heritage within the project area.

4 Historical summary

4.1 Register searches

4.1.1 Identifying listed heritage items

Listing on statutory registers provides a basis under which the item or place is protected, and change is managed through project approval. Statutory listings provide legal protection for heritage items under the legislation outlined above.

Statutory registers reviewed as a part of this assessment include:

- World Heritage List (WHL) – the register is managed under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act);
- National Heritage List (NHL) - the register is made under the EPBC Act;
- Commonwealth Heritage List (CHL) - the register is made under the EPBC Act;
- State Heritage Register (SHR) - this register is made under Part 3A of the Heritage Act;
- s170 register - this register is made under Section 170 of the Heritage Act;
- Schedule 5 to the Dubbo LEP; and
- State Heritage Inventory (SHI), which was cross-checked with Schedule 5 of the Newcastle LEP 2012 and the s170 register. The SHI is not a single statutory register, but a central collection of locally listed statutory heritage items maintained by Heritage NSW.

Non-statutory listing is an acknowledgment of a site or place's importance to sections of the community. Listings on such registers do not place legal requirements on development, but nevertheless influence the future of such listed items. Non-statutory registers reviewed as a part of this assessment include:

- National Trust of Australia, NSW (NT) - the NT is made up of autonomous state chapters. Each chapter is a community-based and non-government organisation, with a mandate to conserve and promote Australia's natural and cultural heritage. Classification by NT is a strong acknowledgment of heritage significance and while statutory constraints are not applicable, classification offers protection through visibility and community action.
- Register of the National Estate (RNE) - the RNE is an archived list of heritage items that were protected under the now repealed Commonwealth *Heritage Commission Act 1975*, which was replaced by the EPBC Act. While many items were transferred from the RNE to the NHL or CHL, those that were not remain on the RNE as an indication of their heritage value.

4.1.2 Results of the register searches

These searches were undertaken to understand previously documented heritage that may be present within or near the project, to help build an understanding of the historical background and to identify the potential for direct and indirect impacts to existing heritage values.

Table 4.1 and Figure 4.1 identifies heritage listings in proximity to the project area.

Table 4.1 Summary of registered items in proximity of the project area

Item Name	Register	Item ID	Direction and distance to the project
Noonee Nyrang homestead	Dubbo LEP	I11	2.6 km north
Narrawa homestead	Dubbo LEP	I49	1.4 km north
Keston homestead	Dubbo LEP	I50	1.4 km west
Nanima Homestead	Dubbo LEP	I51	1 km west
Strathraye homestead	Dubbo LEP	I52	2 km west
Nanima	RNE	498	1 km west
Blacks Camp	SHR	01865	3.5 km south
Blacks Camp	Dubbo LEP	I144	3.5 km south
Wellington District Hospital (former) (Hermitage Hill)	Dubbo LEP	I112	1.3 km south-west
Old Wellington District Hospital and Surrounds	RNE	100331	1.3 km south-west

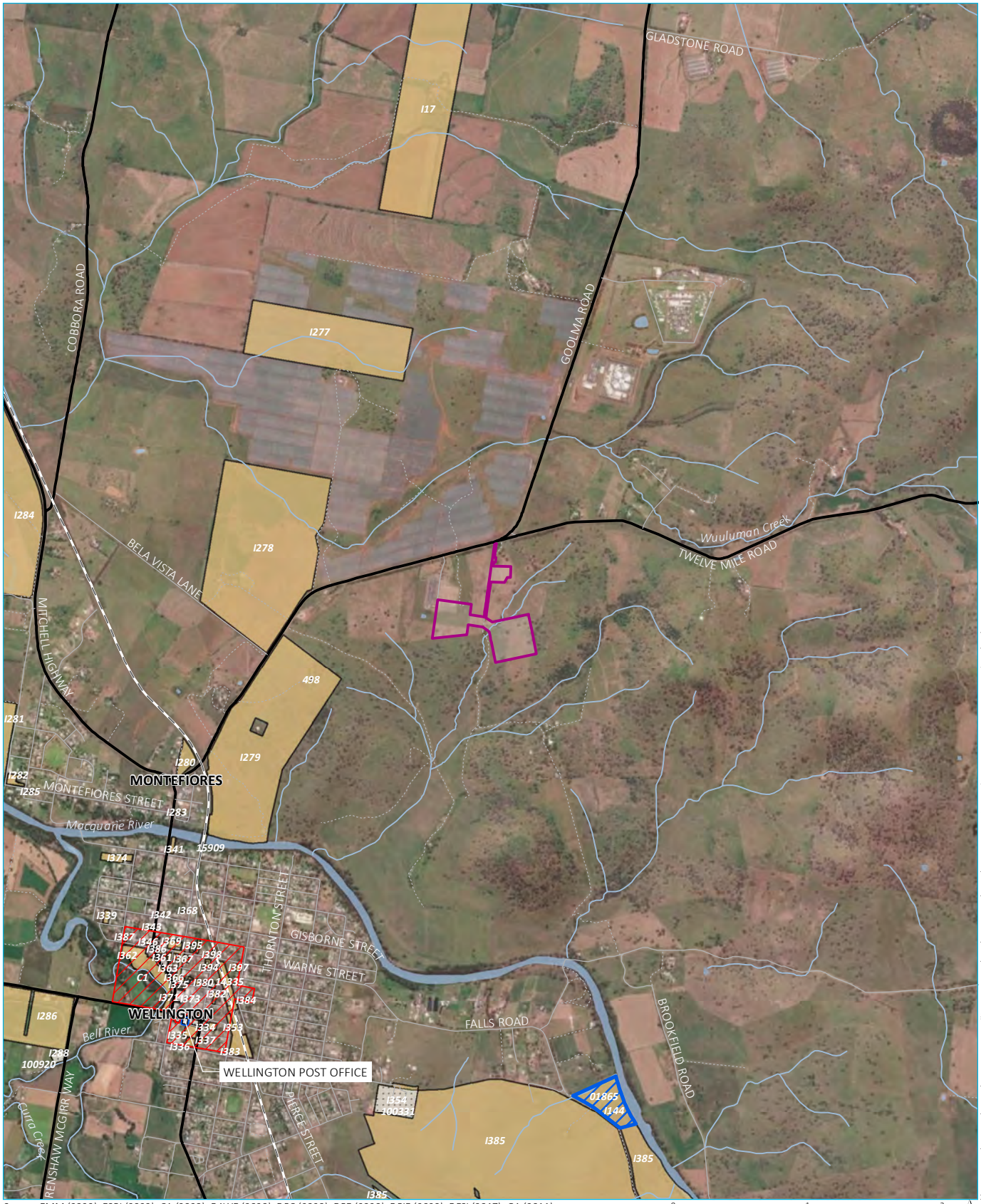
4.2 Regional history

4.2.1 Wellington

Wellington and the surrounding land were first explored by John Oxley in 1817, and in late 1822 Europeans began to occupy the land. Initially the area was slated as a convict settlement with Lieutenant Simpson having been appointed to transfer the convicts and solders to the area. The convicts were immediately put to work for approximately 8.5 hrs per day and supplied with rations which consisted of 7 Lbs (3.17kg) of meat and 12lbs (5.44 kg) of flour. One of the first jobs at hand was to prepare the ground for crops (particularly wheat), which the rich red soil was well suited too. By all accounts Lieutenant Simpson was well liked and took his job as peacemaker with the First Australian's very seriously and allowed any Aboriginals who wish to live in the community, join them ("The discover and occupation of Wellington Valley," 1950).

Like many convict settlements at the time, the camp lacked skilled labour such as stonemasons, brick layers, sawyers and carpenters. Due to this shortage of skills the settlement lacked adequate housing and fencing, this led to sheep eating the wheat and wandering free, and houses to leak and become sodden. The situation didn't improve until 1826 when the settlement started to yield tobacco, barley, potatoes, oats and maize. By 1831 Wellington was no longer being used as a convict establishment, however it continued to be occupied as a Government stock station ("The discover and occupation of Wellington Valley," 1950).

As Wellington grew and more of the area was explored, a complex cave network was discovered. These caves were explored by Sir Thomas Mitchell for fossils, of which there was an abundance of. The fossils were sent back to England where the French naturalist Georges Cuvier identified the fossils in the area as belonging to elephants (although we now know these were Diprotodon and Procoptodon fossils) ("Wellington," 1847).



Source: EMM (2022); ESRI (2022); CA (2020); DAWE (2020); DPC (2020); DPE (2020); DPIE (2020); DFSI (2017); GA (2011)

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GDA 1994 MGA Zone 55

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KEY

- Development boundary
- Rail line
- Major road
- Minor road
- Vehicular track
- Watercourse/drainage line
- Waterbody

EPBC Act

- Commonwealth Heritage List (Wellington Post Office)

Heritage Act

- State Heritage Register

LEP listings

- Conservation Area - General
- Item - General

Non-statutory listing

- Register of the National Estate

Registered items in proximity of the development boundary

Wellington Battery Energy Storage System
Historical baseline assessment
Figure 4.1

EMM creating opportunities

4.2.2 Montefiores

In 1829 Joseph Barrow Montefiores established a private village, just north of Wellington known as Montefiores after he obtained 5,059 ha (12,502 acres) within the area. A small township grew and those who spent time there noted its beauty. One visitor wrote about Montefiore in the Sydney Morning Herald in 1847 that the town was as deserving of admiration of the country side in Italy or France ("WELLINGTON." 1847). The author went on to describe the landscape as:

> …It is a perfectly level plain, of a rich soil, about four miles in length, and in most places two or three in breadth, bounded on the easy by ridgy forests, and of the west by a rocky range of rather elevated hills, which is thickly covered with ever-gloomy pines, producing, after a few days of rain, an agreeable contrast with the flat, then resplendent with the verdure, the Bell River, with her majestic but dull looking oaks, adding to its beauty by gracefully winding through it…

In the 1840s most of buildings were noted to be bark, except the '*Lion of Waterloo Hotel*' which still stands today and the four shops in the village ("WELLINGTON." 1847).

4.3 Historical land use

The project is located on Portion 10 of Parish of Nanima, County of Bligh (Figure 4.2) granted to Joseph Barrow Montefiore. Originally this consisted of 1,035 ha (2,560 acres), which made up the eastern portion of the Nanima Estate. Montefiore also owned 2,071 ha (5,120 acres) to the west (and north of Wellington) which included the private township of Montefiores.

4.3.1 Nanima Estate (Station)

Joseph Barrow Montefiore was granted Portion 10 on 10 March 1829 (HLRV 2021). In the lower central portion of the plot stood Mount Nanima (or Diehard). To the east and south of Nanima Estate were the gold fields, however Nanima estate was predominately used for pastoral pursuits.

Portion 10, consisting of 2,560 acres (1,035 ha) was granted to Joseph Barrow Montefiore on 10 March 1829 (HLRV 2021). Montefiore held the original Nanima Run but in 1849 he filed for bankruptcy at which time 'Nanima Estate' was put up for auction by his attorney, Mr Mort. The advertisement placed in the Sydney Morning Herald on Monday 15 January 1849 ("Advertising" 1849) listed the contents of the estate. Aside from approximately 14,000 sheep and 16,000 acres the property was said to include:

- the mansion and out offices;
- a good garden;
- kitchen and laundry;
- 5 stall stable;
- cart shed and harness room;
- good barn and skillion;
- large horse paddock;
- two cultivation paddocks;
- stock and milking yads;
- horse stock yard;

- wool shed;
- sheep yards;
- men's huts;
- blacksmith's shop; and
- hut and all proper conveniences at all the outstations.

Joseph Aarons took possession of the property in 1849 and held it until 1893. Aarons also experienced money problems and in 1893 Nanima was largely subdivided and sold off at auction. The south-east portion of the station (Lot 10), which included the homestead and woolshed was not subdivided.

The project area lies within Lot 10, and as can be seen in Figure 4.3, much of this lot was used for growing lucerne and the only structures present at the time of the auction were along the southern boundary (and still appear on aerial imagery today).

Eventually the bank sold the property to C.H Barton in 1899 ("The story of historic Nanima," 1952). Michael Barton (C.H Barton's grandson) eventually sold the family lot in 1996 to Tim and Jeanie Woods. The Woods sold the property in 2016, all the while the property continued to operate as an agricultural farm (Austin 2018).

4.3.2 Historical aerial photographs

A series of historical aerial photographs were sourced from 1959 to 2019, these photographs were used to understand the landscape changes over the last 60 years and to see if any remnant structures were present in the project area during that time. As can be seen in Table 4.2, the project area does not appear to have undergone any large changes over throughout the years. When this is compared with Figure 4.3, it appears the project area has always been used as pasture or paddock without any structures present.

Table 4.2 Historical aerial photographs

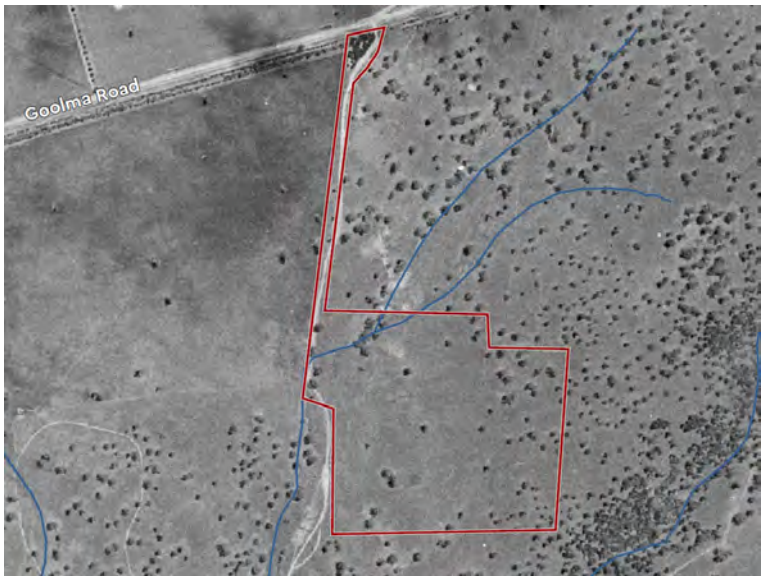
Date of aerial photograph	Aerial photograph
1959	

Table 4.2 Historical aerial photographs

Date of aerial photograph	Aerial photograph
1969	
1988	

Table 4.2 Historical aerial photographs

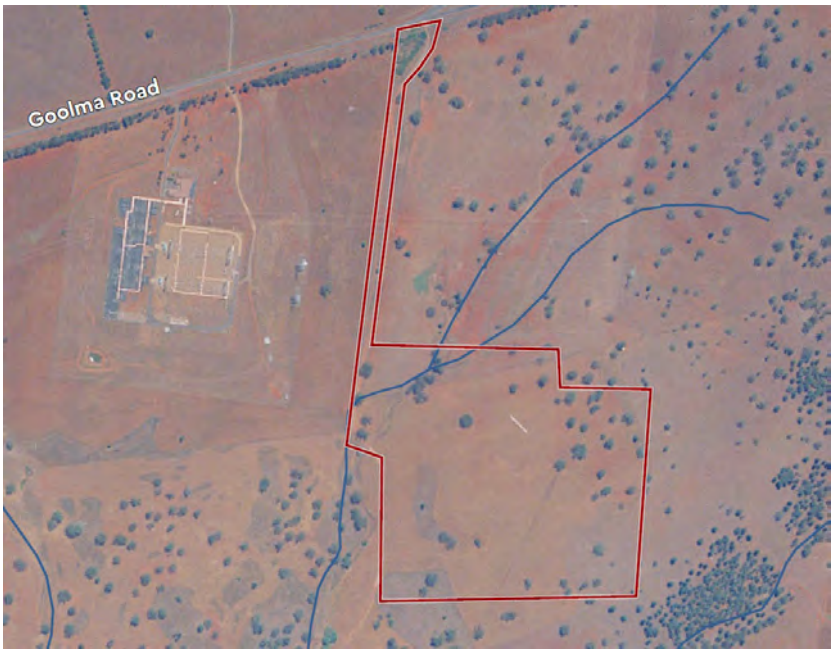
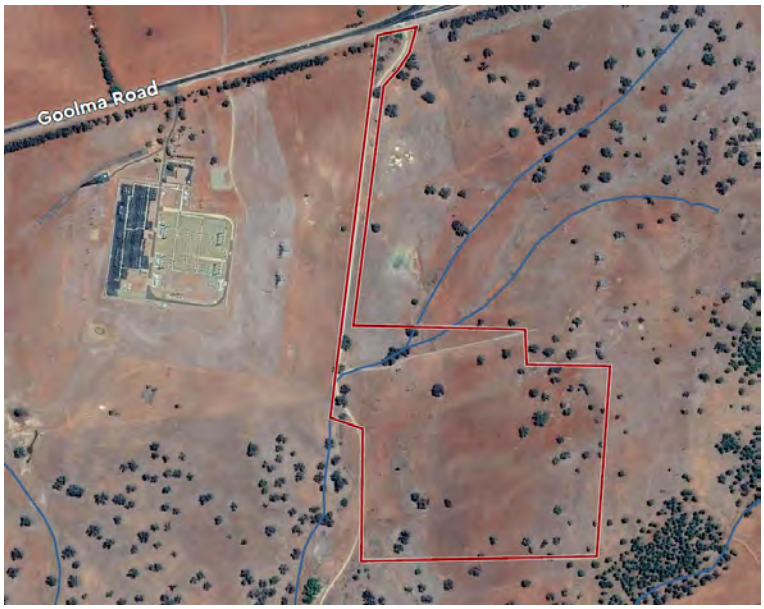
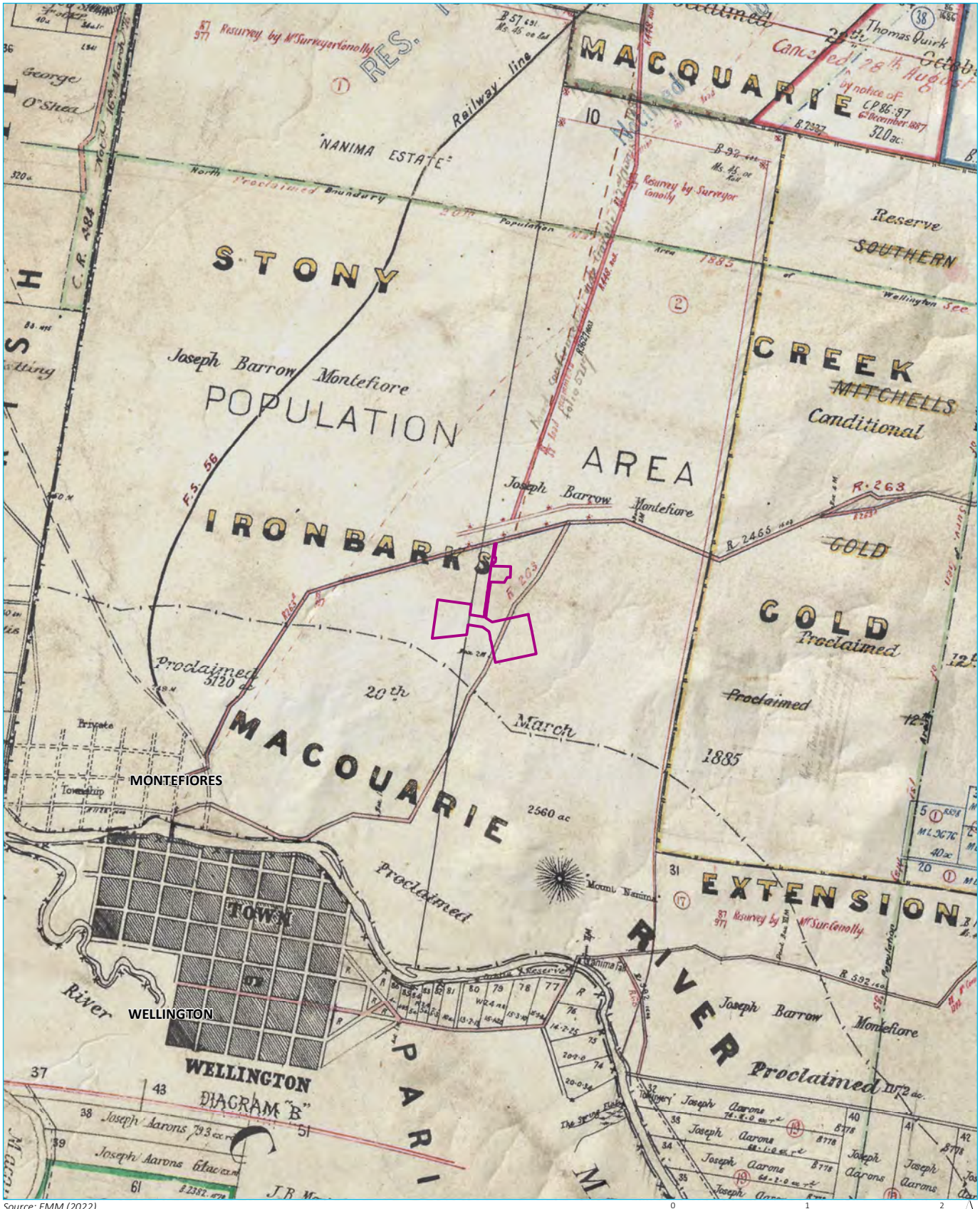
Date of aerial photograph	Aerial photograph
1995	
2007	

Table 4.2 Historical aerial photographs

Date of aerial photograph	Aerial photograph
2019	



Source: EMM (2022)

0 1 2 km

GDA 1994 MGA Zone 55

N

\\emmsvr1\EMM3\2021\J210534 - Wellington BESS\GIS\02_Maps_HH\HH002_ParishMap_20221020_05.mxd 20/10/2022

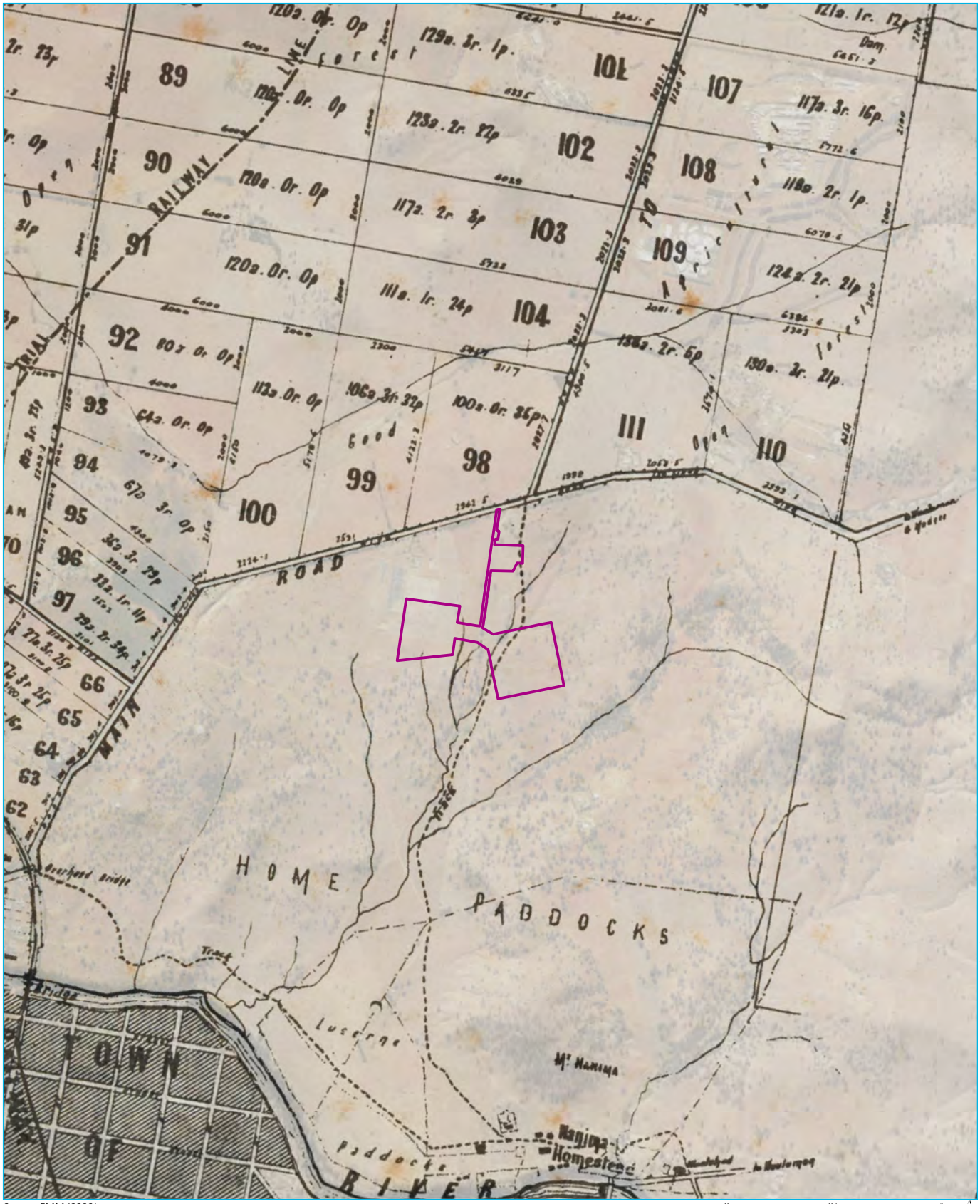
KEY

Development boundary

1889 parish map

Wellington Battery Energy Storage System
Historical baseline assessment
Figure 4.2

EMM
creating opportunities



Source: EMM (2022)

0 0.5 1 km

GDA 1994 MGA Zone 55

N

\\emmsvr1\EMM3\2021\J210534 - Wellington BESS\GIS\02_Maps_HN\HH003_NanimaEstate1893_20221020_05.mxd 20/10/2022

KEY

Development boundary

1893 Nanima Estate Auction Map

Wellington Battery Energy Storage System
Historical baseline assessment
Figure 4.3

EMM
creating opportunities

5 Field inspection

5.1 Overview

Kerryn Armstrong (EMM Senior Archaeologist) undertook a field inspection on 26 and 27 July 2021. The objectives of the field inspection were to understand the landscape, verify the desktop results and identify if there were any sites or items of historical significance within or near the boundary of the project. The survey was undertaken during clear weather, with good visibility.

The survey covered the driveway and the eastern project elements including the disturbance and development areas (refer to Figure 1.2). The western portion of the project area, including the indicative transmission connection corridor and the Wellington substation upgrade area were not surveyed.

5.2 Results

The field inspection included a pedestrian survey of the project area in 5 m transects. The site included a make-shift driveway that ran from Twelve Mile Road, through two pastures to the main homestead. Both pastures were surveyed at which time they were examined for any evidence of footings, wells, European plantings, or any other object which would indicate occupation; no evidence was identified.

The project area was noted to be located on a slight hillslope which sloped east to west toward the dry creek bed along the western edge (Plate 5.1). At the time of inspection, the pastures were not cropped, and visibility and exposure was good. The site was noted to be littered with naturally occurring volcanic geology, that had also been gathered in piles during crop season to prevent issues with farm equipment (Plate 5.2).

During the inspection no evidence of occupation was identified in the project area, reinforcing the desktop assessment that all buildings were located south, closer to permanent water.

Plate 5.1 View: South toward Mt Nanima, indicative landscape of the project area.

Plate 5.2 **View: South-east showing natural occurring rock piles in the pasture.**

6 Conclusion

6.1 Conclusion

Field survey on the eastern side of the project area, including the driveway and the disturbance associated with the BESS infrastructure indicates that the potential for the presence of historical heritage values, including relics, is low across the entire project area.

The results of this baseline assessment and the impacts of the proposed development indicate that the risk of disturbing relics is low. The background research and fieldwork indicated the built structures of concern were located outside the project area to the south. The pasture has been utilised for grazing and crops since the 1830s and although the landscape remains largely unchanged from that time, it does not hold any historical significance.

Provided that the proposed development is carried out in accordance with the expected design, work can proceed with caution.

6.2 Recommendations

Additional historic heritage assessment is not considered to be required as the project area has been assessed to be of low archaeological potential. Should ground disturbance be planned outside the study area, further assessment/inspection maybe required.

6.3 Management and mitigation measures

A suite of management measures are recommended to reduce the risk of inadvertently impacting historic heritage values that have not been recorded elsewhere. These management measures are summarised in Table 6.1.

Table 6.1 Historical heritage management and mitigation measures

Impact/risk	ID	Measure	Timing
Unexpected finds	HER1	If unexpected finds of historical nature are discovered during any work, work within 5 m of the find must cease and the following steps taken: • an archaeologist will be contacted to assess the find, where relevant, and determine if it is clearly a relic or has moderate to high potential to be a relic (this may require additional research); • if the find is determined to be a relic, a s146 (of the Heritage Act) is to be forwarded to the Heritage Council who will be consulted on the appropriate management measure; and • if the find is assessed and is not a relic, work inside the area that was made a no-go area can re-commence.	Construction and operation

Table 6.1 Historical heritage management and mitigation measures

Impact/risk	ID	Measure	Timing
Human remains	HER2	In the event that known or suspected human remains (generally in skeletal form) are encountered during the activity, the following procedure will be followed immediately upon discovery: • all work in the immediate vicinity will cease and the find will be immediately reported to the work supervisor who will advise the Environment Manager or other nominated senior staff member; • the Environment Manager or other nominated senior staff member will promptly notify the police (as required for all human remains discoveries); • the Environment Manager or other nominated senior staff member will contact Heritage NSW for advice on identification of the human remains; • if it is determined that the human remains are Aboriginal ancestral remains, the Local Aboriginal Land Council will be contacted, and consultative arrangements will be made to discuss ongoing care of the remains; and • if it is determined that the human remains are not Aboriginal ancestral remains, further investigation will be conducted to determine if the remains represent a historical grave or if police involvement is required.	Construction and operation

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