Central Eyre Iron Project Environmental Impact Statement



CHAPTER 20 Non-Aboriginal Heritage



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20.1	Applica	ble Legislation and Standards	
20.2	Assessn	nent Method	
20.3	Existing		
	20.3.1	Port Site	
	20.3.2	Infrastructure Corridor	
	20.3.3	Proposed Long-Term Employee Village	
	20.3.4	Summary of Key Environmental Values	
20.4	Design	Measures to Protect Environmental Values	20-10
20.5	Impact Assessment		20-10
20.6	Control	and Management Strategies	20-10
20.7	Residua	I Risk Assessment	
20.8	Finding	s and Conclusion	

List of Figures

Figure 20-1 Non-Aboriginal Heritage (Infrastructure Corridor)	
Figure 20-2 Non-Aboriginal Heritage (Long-Term Employee Village)	

List of Plates

Plate 20-1 Hambidge WPA	
Plate 20-2 Darke Range Viewed from O'Connor Road	
Plate 20-3 Verran Methodist Church	
Plate 20-4 Port Neill Jetty	
Plate 20-5 Mount Wudinna	
Plate 20-6 Turtle Rock	

List of Tables

Table 20-1 Places of Heritage Significance (Infrastructure Corridor)	
Table 20-2 Places of Heritage Significance (Long-Term Employee Village)	20-8
Table 20-3 Residual Risk Assessment Outcomes: Non-Aboriginal Heritage	



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20 Non-Aboriginal Heritage

The first permanent European settlement on the Eyre Peninsula was established at Port Lincoln in 1839. By the 1870s, much of the Peninsula was utilised for primary production purposes, predominately grazing (Regional Development Australia 2011).

The majority of places exhibiting non-Aboriginal heritage significance are related to the early primary production industries, including sites established as support services. Establishment of the CEIP Infrastructure may impact the historical significance of sites. The degree of interaction between places of heritage significance and the CEIP Infrastructure will determine the level of impact to heritage and community values.

This chapter identifies recognised sites of non-Aboriginal heritage in the locality of the proposed CEIP Infrastructure, including items of listed heritage significance and other identified culturally significant sites, such as places of worship and cemeteries. It provides an assessment of impacts on identified items of heritage significance and the design modifications and management measures incorporated into the project to reduce impacts where necessary.

The impact of the proposed CEIP Infrastructure on Aboriginal Heritage is addressed in Chapter 19.

20.1 Applicable Legislation and Standards

Registered heritage places, sites or objects within South Australia are protected at various levels through Commonwealth and State legislation. Places registered on the World Heritage, National Heritage or Commonwealth Heritage Lists are protected by Commonwealth legislation, whereas State and Local Heritage places and historical shipwrecks are afforded protection at a State level.

The relevant operative legislative documents within South Australia are:

- Environment Protection and Biodiversity Conservation Act 1999
- Heritage Places Act 1993
- Development Act 1993
- Historic Shipwrecks Act 1981

An overview of the requirements and obligations of the relevant legislation is provided within Chapter 5. Specifically, proponents undertaking development must not interfere with or alter a registered heritage place, site or object without prior approval from the relevant authority.

20.2 Assessment Method

A desktop assessment of listed places of non-Aboriginal heritage significance was conducted by Jacobs in 2012, with a follow up assessment based on a realignment of the proposed infrastructure corridor conducted in 2014. The desktop study involved:

 Review of Commonwealth Heritage Registers (Department of the Environment 2014f); Register of the National Estate¹, World Heritage List, National Heritage List and Commonwealth Heritage List, all administered by the Department of the Environment.

¹ The Register of the National Estate is no longer a statutory heritage list requiring assessment under the EPBC Act; however the register indicates places that the local/regional community may value.



- Search of the following State and local databases (DEWNR 2014, SARIG 2014, DEWNR 2014a):
 - South Australia Heritage Register
 - State Heritage Areas
 - Local Heritage Places listed within local Council's Development Plan
 - Geological Monuments
 - Historical Shipwrecks

In addition, cemeteries and places of worship (not formally registered in any of the above databases) were identified based on information held by each of the relevant local councils (DC Cleve 2014a; DC Kimba 2014; DC Tumby Bay 2014; Wudinna DC 2014) and publically available information.

Places of heritage significance were considered relevant if they were located within 5 km of the proposed CEIP Infrastructure. Places are considered to be of non-Aboriginal heritage significance if they are listed on statutory heritage registers, or are a local heritage place, church or cemetery.

20.3 Existing Environment

This section provides an overview of the existing environment adjacent to, and within 5 km of the proposed CEIP Infrastructure in relation to non-Aboriginal heritage. Registered heritage places are identified, as well as any cemeteries or places of worship that may hold cultural value to the local community. Heritage places are identified based on their proximity to each of the key components of the proposed CEIP Infrastructure.

20.3.1 Port Site

A review of the Commonwealth, State, Local and Contributory Heritage Registers did not identify any heritage sites or objects listed within the proposed port site. Similarly, no places of worship or cemeteries were identified. A number of places of heritage significance were identified within the township of Port Neill. As the infrastructure corridor is the closest project component to Port Neill, these heritage places are discussed in Section 20.3.2 below.

No shipwrecks have been identified within 5 km of the proposed port. All shipwrecks located in the broader Spencer Gulf region have been avoided in determining approach routes and anchoring areas at the proposed port.

20.3.2 Infrastructure Corridor

A review of the Commonwealth, State, Local and Contributory Heritage Registers identified eight listed heritage sites or objects within 5 km of the proposed infrastructure corridor. In addition, one place of worship, three cemeteries and one geological monument (not otherwise listed on heritage registers) were identified within 5 km of the corridor.

The northern section of the proposed infrastructure corridor borders the Hambidge Wilderness Protection Area (WPA) (Plate 20-1) which is listed on the Register of the National Estate, which is a non-statutory archive.





Plate 20-1 Hambidge WPA

As the proposed infrastructure corridor continues south it does not traverse any places of non-Aboriginal heritage significance; however, Darke Range (Plate 20-2), Rudall Conservation Park and Arborville Scrub are all located within the 5 km of the proposed infrastructure corridor and are all listed on the Register of the National Estate.



Plate 20-2 Darke Range Viewed from O'Connor Road



The proposed railway line passes through the Verran township. No registered heritage places are recorded within Verran; however, a church (Plate 20-3) is located approximately 140 m east of the railway line and a cemetery has been identified on Pipeline Road, approximately 1 km west of the railway line.



Plate 20-3 Verran Methodist Church

A number of places of heritage significance are located within Port Neill, including the jetty (Plate 20-4), the Port Neill Hotel, the Uniting Church and the Lady Kinnard Anchor. Each of these places of heritage significance is located more than 2.5 km from the proposed infrastructure corridor. The closest place of heritage significance associated with Port Neill is the cemetery, approximately 2 km east of the proposed infrastructure corridor.



Plate 20-4 Port Neill Jetty



The Kalinjalia Mylonite Zone, a geological monument identified in the South Australian Resources Information Geoserver (SARIG 2014), is located on the coast, approximately 1 km north of Port Neill and 3 km east of the proposed infrastructure corridor. The Kalinjalia Mylonite Zone is not intersected by the proposed CEIP infrastructure.

Identified places of non-Aboriginal heritage significance within 5 km of the proposed infrastructure corridor are summarised in Table 20-1 and spatially represented in Figure 20-1.

Name	Location	Significance	Register ID
Hambidge WPA	14 km northeast of Lock and 14 km west of Darke Peak. Adjacent to infrastructure corridor.	Natural Heritage – Register of the National Estate	6671
Darke Range	Adjacent (west) to Darke Peak. 4 km east of infrastructure corridor.	Natural Heritage – Register of the National Estate	6674
Rudall Conservation Park	11 km northeast of Rudall. 3 km northeast of infrastructure corridor.	Natural Heritage – Register of the National Estate	6673
Arborville Scrub	11 km northeast of Rudall. 3 km northeast of infrastructure corridor.	Natural Heritage (Indicative) – Register of the National Estate	16481
Rudall Cemetery	Within Rudall township. 1 km north of railway line, 2 km south of transmission line.	Cemetery	N/A
Verran Methodist Church	Within Verran township. Approximately 140 m east of infrastructure corridor.	Church	N/A
Verran Cemetery	On Pipeline Road, outskirts of Verran. Approximately 1 km west of infrastructure corridor.	Cemetery	N/A
Port Neill Hotel	Within Port Neill township. 3 km east of infrastructure corridor.	Built Heritage – Local Heritage Place	16567
Lady Kinnard Anchor	Within Port Neill township. 3 km east of infrastructure corridor.	Built Heritage – Local Heritage Place	16568
Port Neill Jetty	Within Port Neill township. 3 km east of infrastructure corridor.	Built Heritage – Local Heritage Place	16569
Port Neill Uniting Church	Within Port Neill township. 3 km east of infrastructure corridor.	Built Heritage – Local Heritage Place	16570
Port Neill Cemetery	1.5 km south of Port Neill. 2 km east of infrastructure corridor.	Cemetery	N/A
Kalinjalia Mylonite Zone	1 km north of Port Neill. 3 km east of infrastructure corridor.	Geological monument	1261

Table 20-1 Places o	of Heritage Significan	ce (Infrastructure Corridor)
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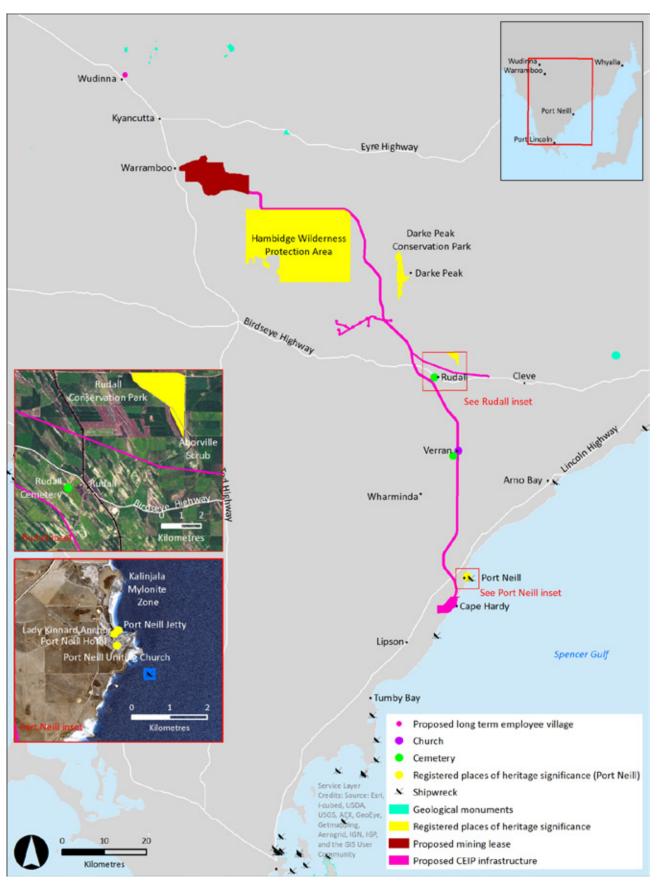


Figure 20-1 Non-Aboriginal Heritage (Infrastructure Corridor)



20.3.3 Proposed Long-Term Employee Village

A review of the Commonwealth, State, Local and Contributory Heritage Registers identified two listed heritage places within 5 km of the proposed long-term employee village. In addition, two places of worship and one cemetery (not otherwise listed on heritage registers) were identified within 5 km of the proposed location.

Mount Wudinna and the surrounding environment (Plate 20-5 and Plate 20-6) is listed on the Register of the National Estate as a State Heritage Place and as a geological monument. Turtle Rock and the Polda Rocks are two notable features located in the environment surrounding Mount Wudinna. Within the Wudinna township, two churches and a cemetery have been identified, none of which are formally listed on a statutory heritage register.



Plate 20-5 Mount Wudinna





Plate 20-6 Turtle Rock

Identified places of non-Aboriginal heritage significance within 5 km of the general vicinity of the long-term employee village site are summarised in Table 20-2 and spatially represented in Figure 20-2.

Name	Location	Significance	ID
Mount Wudinna and Environs	5 km northeast of Wudinna and long-term employee village site.	Natural Heritage – Register of the National Estate	6733
		Geological Site – State Heritage Place	16586
		Geological Monument	
Wudinna Lutheran Church	Within Wudinna township, approximately 1 km southwest of long-term employee village site.	Church	N/A
Wudinna Uniting Church	Within Wudinna township, approximately 1 km southwest of long-term employee village site.	Church	N/A
Wudinna Cemetery	Within Wudinna township, approximately 1 km southwest of long-term employee village site.	Cemetery	N/A

Table 20-2 Places of He	ritago Significano	o (Long Torm Em	nlovoo Villago)
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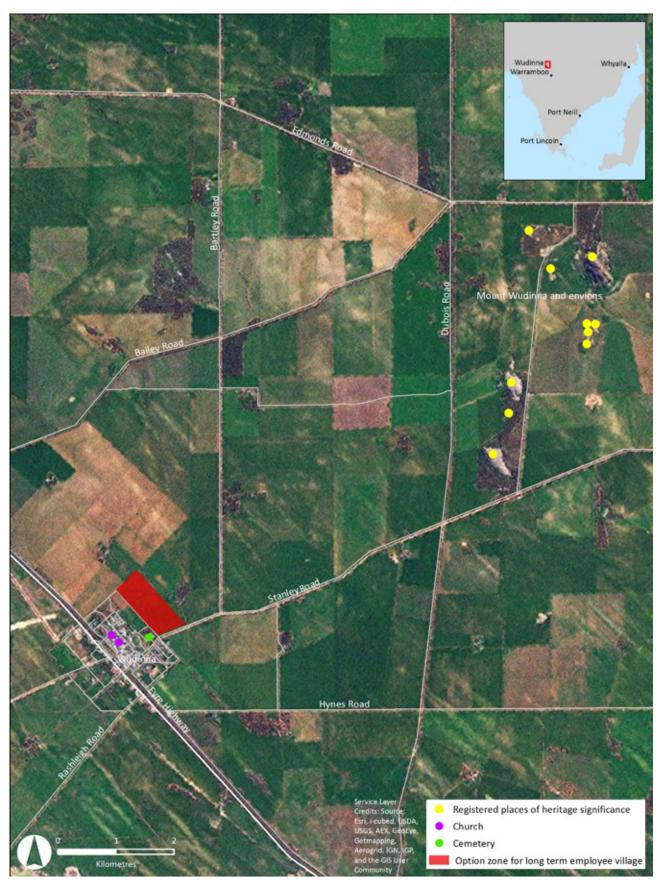


Figure 20-2 Non-Aboriginal Heritage (Long-Term Employee Village)



20.3.4 Summary of Key Environmental Values

The desktop assessment of non-Aboriginal heritage identified 17 places of heritage significance within 5 km of the proposed CEIP Infrastructure including nine places listed on current or former statutory registers, as well as three churches, four cemeteries and one geological monument not otherwise afforded statutory protection. None of the identified places of heritage significance are intersected by the CEIP Infrastructure. All places of heritage significance are more than 1 km from the CEIP Infrastructure with the exception of the Verran Church, which is approximately 140 m east of the railway line.

20.4 Design Measures to Protect Environmental Values

As detailed in Section 20.3, there are no places of non-Aboriginal heritage significance within the footprint of the proposed CEIP Infrastructure. However, there are 17 places of non-Aboriginal heritage significance within 5 km of the proposed CEIP Infrastructure. The design of the project has been undertaken to avoid aligning infrastructure with places of non-Aboriginal heritage significance. As such, no additional design modifications are proposed to control impacts to places of non-Aboriginal heritage significance during construction and operation of the CEIP Infrastructure.

20.5 Impact Assessment

Activities undertaken during construction and operation of the CEIP Infrastructure represent a number of potential impacts and risks to the existing environmental values of the area. As no places of non-Aboriginal heritage significance have been identified within the footprint of the CEIP Infrastructure, no credible impacts are identified. As such, a reduction in the cultural value of places of non-Aboriginal heritage significance is not anticipated, and is considered only as a risk as a result of the project (as discussed in Section 20.7).

20.6 Control and Management Strategies

As there are no known places of non-Aboriginal heritage significance expected to be impacted by the proposed CEIP Infrastructure, no specific design modifications or management strategies are proposed to protect non-Aboriginal heritage values.

20.7 Residual Risk Assessment

This section identifies and assesses risks associated with non-Aboriginal heritage that would not be expected as part of the normal operation of the project, but could occur as a result of faults, failures and unplanned events. Although the risks may or may not eventuate, the purpose of the risk assessment process is to identify management and mitigation measures required to reduce the identified risks to a level that is considered to be acceptable. A summary of the residual environmental risks after management and control strategies are applied is presented in Table 20-3. The non-Aboriginal heritage management and mitigation measures identified are presented in Section 20.6 and form the basis of the environmental management framework presented in Chapter 24.

Through the adoption of design modification or specific mitigation measures, all identified risks have been reduced to low, which is considered to be as low as reasonably practicable and therefore acceptable. The key environmental risks will be monitored through the environmental management framework.

Activities associated with the construction and operation of the proposed CEIP Infrastructure that have the potential to disturb places of non-Aboriginal heritage significance include:

- Vegetation clearance
- Earthworks and excavation
- Establishment of site infrastructure including buildings and haul roads
- Stockpiling activities



There is a risk that items of non-Aboriginal heritage significance which have not been identified are located within or adjoining the CEIP Infrastructure and that these may be impacted by construction. Given the historical use of the region, the likelihood of encountering a not previously identified item of non-Aboriginal significance is considered to be **rare**. Should an item of significance be encountered, work will cease, and appropriate notification procedures will be implemented. As such, any consequences are considered to be **minor**, with the overall risk of disturbing not previously identified sites of non-Aboriginal heritage significance therefore considered to be **low**.

Unanticipated effects on identified places of non-Aboriginal heritage significance could occur where mitigation or control measures fail. With the exception of the Hambidge Wilderness Protection Area (WPA) and the Verran church, all identified sites of non-Aboriginal heritage significance have a large separation distance to the proposed CEIP Infrastructure and no effects are anticipated.

Hambidge WPA is approximately 50 m south of the infrastructure corridor. As discussed in Chapter 12, noise and vibration from the proposed railway line will have a low impact on fauna within the WPA. No clearance of vegetation within Hambidge WPA is proposed. As such, the likelihood of affecting the cultural value of Hambidge WPA is considered to be **rare**, with any consequences **minor** in nature only. Therefore the overall risk of affecting the cultural values of Hambidge WPA is considered to be **low**.

The Verran church is located approximately 140 m east of the railway line. As discussed in Chapter 12, noise at the church as a result of the construction and operation of the railway line will be within legislated noise limits. Similarly, no impacts are anticipated as a result of vibration. No physical alteration to the church is proposed. As such, the likelihood of affecting the cultural value of the Verran church is considered to be **rare**, with any consequences within legislated noise limits and **minor** in nature. Therefore the overall risk of affecting the cultural values of Verran church is considered to be **low**.

A summary of each of the identified risks is provided in Table 20-3. All identified risks are determined to be low, which is considered to be as low as reasonably practicable and therefore acceptable.

Risk Event	Pathway	Receptor	Project Phase ¹	Likelihood	Consequence	Residual Risk
Disturbance to not identified sites/items of non-Aboriginal heritage significance	Construction of the proposed CEIP Infrastructure	Sites/items of non- Aboriginal heritage (not previously identified)	Construction Operation	Rare	Minor	Low
Disturbance to identified sites/items of non-Aboriginal heritage significance	Construction of the proposed CEIP Infrastructure	Sites/items of non- Aboriginal heritage (e.g. Hambidge WPA, Verran church)	Construction Operation	Rare	Minor	Low

Table 20-3 Residual Risk	Assessment	Outcomes:	Non-Aboriginal	Heritage
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20.8 Findings and Conclusion

A desktop assessment of non-Aboriginal heritage was conducted to identify places listed on statutory heritage registers, former statutory heritage registers, geological monuments, churches and cemeteries that are within 5 km of the proposed CEIP Infrastructure. No places of non-Aboriginal heritage significance were identified as being within the footprint of the CEIP Infrastructure; however 17 places were identified within 5 km.

Once design and management measures have been considered, no impacts to places of non-Aboriginal heritage significance have been identified. All risks associated with non-Aboriginal heritage are considered to be low and therefore acceptable.



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