



PEABODY

**WILPINJONG COAL
HISTORIC HERITAGE MANAGEMENT PLAN**

WI-ENV-MNP-0044

August 2017

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CONTENTS

1	Introduction	1
1.1	Purpose	1
1.2	Consultation	1
1.3	Suitably Qualified and Experienced Persons	3
1.4	Staged Submission of HHMP	3
2	Statutory Requirements	4
2.1	Development Consent (SSD-6764) Requirements	4
2.2	General Management Plan Requirements	5
2.3	Other Relevant Legislation	6
2.3.1	Environmental Planning & Assessment Act, 1979	6
2.3.2	Heritage Act, 1977	6
3	Historic Heritage	7
3.1	Previous Assessments and Investigations	7
3.2	Historic Heritage Items	8
3.3	Historic Heritage Values	11
4	Management Measures	12
4.1	Specific Management Measures	12
4.1.1	Historic Shale Oil Mine Complex, Slate Gully (Site 1)	12
4.1.2	Road Embankment (Site 4)	13
4.1.3	Pine Park (Site 5)	14
4.1.4	William Carr's Hut (Site 11)	14
4.2	Annual Monitoring	15
4.3	New Site Recording Protocol	15
4.4	Protocol for the Management of Human Remains	16
4.5	Ground Disturbance Permits	17
4.6	Historic Heritage Component of Site Induction	17
4.7	Management of Historic Heritage Items in Wollar and Wider Surrounds	17
4.8	Storage of Heritage Items Salvaged	18
5	Measurement and Evaluation	19
5.1	Performance Indicators	19
5.2	Contingency Plan for Unpredicted Impacts	19
6	Complaints Response Protocol	20
7	Reporting	21
7.1	Incident and Non Compliance Reporting	21
7.2	Annual Review	21
7.3	Independent Environmental Audit	22
7.4	Website Updates	23
8	Review and Improvement of Environmental Performance	24
9	Responsibilities	25
10	References	26

TABLES

Table 1	WCPL's Statutory Approvals
Table 2	Development Consent (SSD-6764) Requirements
Table 3	General Management Plan Requirements
Table 4	Known Historic Heritage Items
Table 5	Heritage Values of Known Historic Heritage Items
Table 6	Historic Heritage Performance Indicator
Table 7	Historic Heritage Management Plan Responsibilities

FIGURES

Figure 1	Regional Location
Figure 2	Relevant Historic Heritage Items

PLATES

Plate 1	Historical Shale Oil Mine Adit (Niche, 2015)
Plate 2	Road Embankment (Niche, 2015)
Plate 3	Pine Park Grain Silo and Shed (Niche, 2015)
Plate 4	William Carr's Hut (Niche, 2015)

APPENDICES

Appendix 1	Program for Test and Salvage Excavation at the Potential Caretakers Cottage Site (Site 1G)
Appendix 2	Historic Heritage Items in Wollar and Surrounds

1 Introduction

The Wilpinjong Coal Mine is owned and operated by Wilpinjong Coal Pty Limited (WCPL), a wholly owned subsidiary of Peabody Energy Australia Pty Ltd (Peabody).

The Wilpinjong Coal Mine is an existing open cut coal mining operation situated approximately 40 kilometres north-east of Mudgee, near the Village of Wollar, within the Mid-Western Regional Local Government Area, in central New South Wales (NSW) (**Figure 1**).

The Wilpinjong Coal Mine produces thermal coal products which are transported by rail to domestic customers for use in electricity generation and to port for export. Open cut mining operations are undertaken 24 hours per day, seven days per week.

The Wilpinjong Coal Mine originally operated under Project Approval (PA 05-0021) that was granted by the Minister for Planning under Part 3A of the NSW *Environmental Planning and Assessment Act, 1979* (EP&A Act) on 1 February 2006. Modification of the Project Approval subsequently occurred six times¹ with the most recent modification (Modification 7) approved in August 2016.

On 24 April 2017, WCPL was granted Development Consent (SSD-6764) for the Wilpinjong Extension Project that provides for the continued operation of the Wilpinjong Coal Mine at rates of up to 16 million tonnes per annum of run-of-mine coal, until 2033, and access to approximately 800 hectares of open cut extensions. The Development Consent (SSD-6764) has superseded the Project Approval (05-0021). This Historic Heritage Management Plan (HHMP) has been prepared to satisfy the relevant conditions in Development Consent (SSD-6764).

1.1 Purpose

The HHMP has been prepared to address the conditions relating to historic heritage management contained within WCPL's relevant approvals. Consistent with Condition 49, Schedule 3 of Development Consent (SSD-6764), the HHMP includes a program and description of the measures/procedures that would be implemented for historic heritage management at the Wilpinjong Coal Mine.

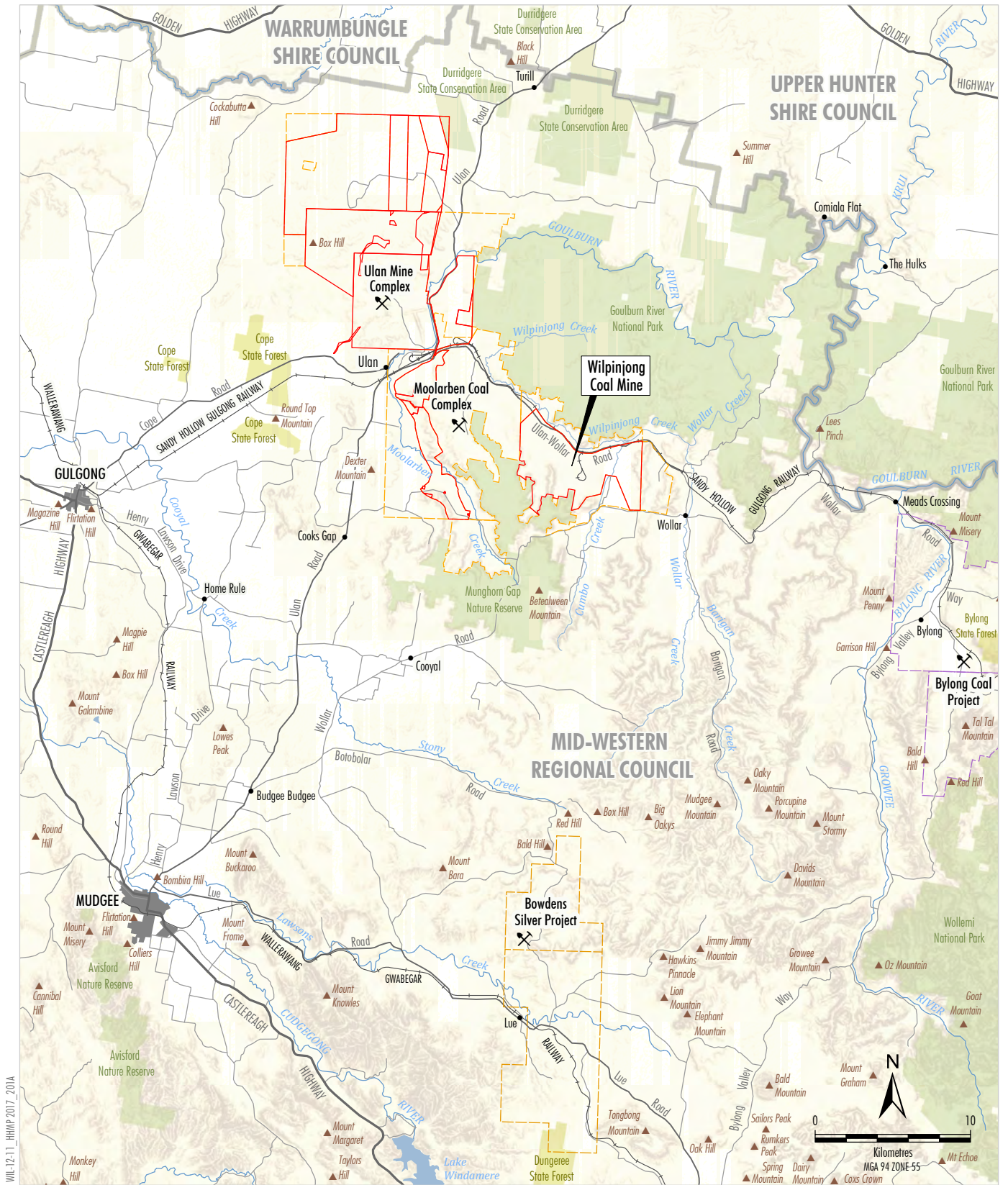
1.2 Consultation

Consultation was undertaken with a variety of regulators throughout the assessment and approval of the Wilpinjong Extension Project including with the NSW Office of Environment and Heritage (OEH).

The HHMP has been prepared in consultation with the OEH – Heritage Division, the Mid-Western Regional Council and relevant landholders², as required by Condition 49(b), Schedule 3 of Development Consent (SSD-6764).

¹ Mod 2 was withdrawn.

² WCPL is the landholder of all items the subject of management measures described in this HHMP and therefore no additional landholders require consultation.



WIL-12-11 - HHWP 2017 - 201A

LEGEND

- Mining Lease Boundary
- Exploration Licence Boundary
- Authorisation Boundary
- Local Government Boundary
- NSW State Forest
- National Park, Nature Reserve or State Conservation Area
- ⚡ Mining Operation

Source: NSW Land & Property Information (2015);
NSW Dept of Industry (2015); Geoscience Australia (2011)

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WILPINJONG COAL MINE
Regional Location

Figure 1

1.3 Suitably Qualified and Experienced Persons

The Secretary of the NSW Department of Planning and Environment (DP&E) approved Mr Jamie Reeves and Fiona Leslie of Niche Environment and Heritage Pty Ltd (Niche) for the preparation/review of the HHMP on 24 May 2017. This HHMP was prepared in consultation with Jamie Reeves and Fiona Leslie.

1.4 Staged Submission of HHMP

This initial HHMP does not include the Archaeological Research Design (ARD) for the test and salvage excavation required at the potential caretaker's cottage site in Pit 8.

During preparation of the initial draft HHMP, Niche identified some further research requirements in relation to the potential caretaker's cottage site (Site 1G), that are currently being actioned prior to development of an ARD.

As agreed with DP&E, Following the completion of the required research, WCPL proposes to provide the ARD to the relevant consultees for review and comment. Following finalisation (including addressing any comments) the ARD would be provided to the DP&E for subsequent separate approval by the Secretary in accordance with Condition 6, Schedule 5 of Development Consent (SSD-6764). It is anticipated this would be completed by 31 December 2017. Following approval of the ARD, WCPL would append the ARD to the approved HHMP.

It is noted that WCPL does not propose to undertake any works in the vicinity of the potential caretaker's cottage site until all necessary heritage management works in accordance with the ARD have been completed.

2 Statutory Requirements

This HHMP has been prepared to fulfil the requirements of the Development Consent (SSD-6764), recommendations documented in relevant studies, assessments and investigations, and relevant legislation, standards and guidelines.

Table 1 summarises WCPL’s main statutory approvals, relevant to the HHMP.

**Table 1
WCPL’s Statutory Approvals**

Approval Licence No.	Description	Date of Approval	Agency
SSD-6764	Development Consent	24 April 2017	DP&E
05-0021*	Project Approval	1 February 2006	DP&E
	MOD 1	30 November 2007	DP&E
	MOD 2	Withdrawn	-
	MOD 3	8 September 2010	DP&E
	MOD 4	24 August 2012	DP&E
	MOD 5	7 February 2014	DP&E
	MOD 6	21 November 2014	DP&E
	MOD 7	11 August 2016	DP&E

* Project Approval (PA 05-0021) is now superseded by Development Consent (SSD-6764).

2.1 Development Consent (SSD-6764) Requirements

This HHMP has been prepared in accordance with Condition 49, Schedule 3 of Development Consent (SSD-6764). **Table 2** presents these requirements and indicates where they are addressed within this HHMP.

**Table 2
Development Consent (SSD-6764) Requirements**

Development Consent (SSD-6764) Condition	HHMP Section
<p>Historic Heritage Management Plan</p> <p>49. Prior to carrying out any development under this consent, unless the Secretary agrees otherwise, the Applicant must prepare an Historic Heritage Management Plan for the development to the satisfaction of the Secretary. The plan must:</p> <p>(a) be prepared by suitably qualified and experienced persons whose appointment has been endorsed by the Secretary;</p> <p>(b) be prepared in consultation with the Heritage Division, Council and relevant landowners; and</p> <p>(c) include the following for the management of historic heritage:</p> <ul style="list-style-type: none"> ensure any workers on site receive suitable heritage inductions prior to carrying out any project on site, and that suitable records are kept of these inductions; 	<p>Section 1</p> <p>Section 1.2</p> <p>Section 4.7</p>

**Table 2 (Continued)
Development Consent (SSD-6764) Requirements**

Development Consent (SSD-6764) Condition	HHMP Section
<ul style="list-style-type: none"> • a program and description of the measures/procedures that would be implemented for: <ul style="list-style-type: none"> ○ photographic and archival recording of any impacted heritage items; ○ where reasonable and feasible, designing, constructing and operating ancillary infrastructure to avoid direct impacts on historic heritage items; ○ undertaking test and salvage excavation at the Potential Caretakers Cottage Site (Site 1G); ○ monitoring and managing the effects of blasting on potentially affected heritage items; ○ managing the discovery of any new historic heritage items during the development; and ○ additional archaeological excavation and/or recording of any significant heritage items requiring demolition; and • a strategy for the storage of heritage items salvaged on site, both during the development and in the long term. 	<p align="center">Section 4.1</p> <p align="center">Section 4.1</p> <p align="center">Section 4.1.1 and Appendix 1</p> <p align="center">Section 4.2 and Blast Management Plan</p> <p align="center">Section 4.3</p> <p align="center">Section 4.1</p> <p align="center">Section 4.8</p>

2.2 General Management Plan Requirements

Condition 3, Schedule 5 of Development Consent (SSD-6764) outlines general management plan requirements that are applicable to the preparation of the HHMP. **Table 3** presents these requirements and indicates where they are addressed within this HHMP.

**Table 3
General Management Plan Requirements**

Development Consent (SSD-6764) Condition	HHMP Section
Management Plan Requirements	
<p>3. The Applicant must ensure that the management plans required under this consent are prepared in accordance with any relevant guidelines, and include:</p> <p>(a) detailed baseline data;</p> <p>(b) a description of:</p> <ul style="list-style-type: none"> • the relevant statutory requirements (including any relevant approval, licence or lease conditions); • any relevant limits or performance measures/criteria; • the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures; <p>(c) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;</p> <p>(d) a program to monitor and report on the:</p> <ul style="list-style-type: none"> • impacts and environmental performance of the development; • effectiveness of any management measures (see c above); <p>(e) a contingency plan to manage any unpredicted impacts and their consequences;</p> <p>(f) a program to investigate and implement ways to improve the environmental performance of the development over time;</p>	<p align="center">Section 3</p> <p align="center">Section 2</p> <p align="center">Sections 4 and 5</p> <p align="center">Section 5</p> <p align="center">Section 4</p> <p align="center">Sections 4 and 7</p> <p align="center">Section 4</p> <p align="center">Section 8</p>

**Table 3 (Continued)
General Management Plan Requirements**

Development Consent (SSD-6764) Condition	HHMP Section
<p><i>(g) a protocol for managing and reporting any:</i></p> <ul style="list-style-type: none"> • <i>incidents</i> • <i>complaints</i> • <i>non-compliances with statutory requirements; and</i> • <i>exceedances of the criteria and/or performance criteria; and</i> 	Section 7
<p><i>(h) a protocol for periodic review of the plan.</i></p>	Section 8

2.3 Other Relevant Legislation

2.3.1 Environmental Planning & Assessment Act, 1979

The EP&A Act requires that consideration be given to environmental impacts as part of the land use planning process. In NSW, environmental impacts are interpreted as including historic or non-indigenous heritage impacts.

Development Consent (SDD-6764) for the Wilpinjong Extension Project was sought, and granted, under the State Significant Development provisions (Division 4.1) under Part 4 of the EP&A Act. The Wilpinjong Coal Mine is therefore classified as a ‘State Significant Development’ under Part 4 of the EP&A Act.

2.3.2 Heritage Act, 1977

The NSW *Heritage Act, 1977* was enacted to conserve the environmental heritage of NSW. Under section 32, places, buildings, works, relics, moveable objects or precincts of heritage significance are protected by means of either Interim Heritage Orders (IHO) or by listing on the State Heritage Register (SHR). Items that are assessed as having State heritage significance can be listed on the SHR by the Minister on the recommendation of the Heritage Council.

Archaeological relics are protected by the provisions of section 139 of the *Heritage Act, 1977*. Under this section it is illegal to disturb or excavate any land knowing or suspecting that the disturbance or excavation will, or is likely to, result in a relic being discovered, exposed, moved, damaged or destroyed. In such cases, an excavation permit under section 140 of the *Heritage Act, 1977* is required. Note that no formal listing is required for archaeological relics; they are automatically protected if they are of local significance or higher. Note that excavation permits under section 139 of the *Heritage Act, 1977* are not required for a State Significant Development approved under Part 4 of the EP&A Act.

Proposals to alter, damage, move or destroy places, buildings, works, relics, moveable objects or precincts protected by an IHO or listed on the SHR require an approval under section 60 of the *Heritage Act, 1977*. Demolition of whole buildings will not normally be approved except under certain conditions (section 63 of the *Heritage Act, 1977*). Some of the items listed on the SHR or on Local Environmental Plans may either be ‘relics’ or have relics associated with them. In such cases, a section 60 approval is also required for any disturbance to relics associated with a listed item.

3 Historic Heritage

3.1 Previous Assessments and Investigations

Heritage Management Consultants (2004) conducted a historic heritage assessment for the original Wilpinjong Coal Project. The assessment identified nine items of local heritage significance in the vicinity of the Wilpinjong Coal Mine. No items of regional or state significance were identified (Heritage Management Consultants, 2004).

Archaeological investigations have also been undertaken for the Moolarben Coal Complex, located adjacent to the Wilpinjong Coal Mine. These include studies undertaken by Veritas Archaeology and History Service (2005), Heritas Architecture (2008) and EMGA Mitchell McLennan (2013).

A Historical Heritage Assessment for the Wilpinjong Extension Project was undertaken by Niche (2015). The assessment was prepared in consideration of the relevant principles and articles contained in the *Burra Charter* (Australia ICOMOS, 2013), the *NSW Heritage Manual* (NSW Heritage Office and NSW Department of Urban Affairs and Planning, 1996) and *Statements of Heritage Impact* (OEH, 1996). The assessment included the following (Niche, 2015):

- Searches of the following online databases were undertaken for historic heritage items within the proposed development area:
 - The Australian Heritage Database – a combined search of the Commonwealth Heritage List, National Heritage List and Register of the National Estate archive. No registered items were located within, or adjacent to, the Wilpinjong Extension Project.
 - The NSW State Heritage Register and State Heritage Inventory. No registered items of state significance were listed within, or adjacent to, the Wilpinjong Extension Project.
 - The *Mid-Western Regional Council Local Environmental Plan 2012*. Two landscape areas and four historical heritage items located in the Village of Wollar were identified (three of which were also listed in the National Trust Register). All items were located outside of the Wilpinjong Extension Project open cut extension and infrastructure areas.
 - A search of the National Trust Register (a non-statutory register). Four registered items were identified within the Village of Wollar.
- Historical research was undertaken to provide a contextual history of the Wilpinjong Extension Project area and to determine specific histories for heritage items identified. The following repositories and online sources were utilized:
 - The National Library of Australia's TROVE online discovery service.
 - The State Library of NSW, Mitchell Library.
 - NSW Department of Finance, Lands and Property Information (LPI).
 - The NSW Heritage Branch report library.
- Additional historical information was also sourced from the following:
 - Lynne Robinson and John Broadley from the Mudgee Historical Society.
 - The Mid-Western Regional Council Library.
 - Interviews with Gai and Brian McDermott (local residents).

- A field survey was undertaken by Lydia Sivaraman and Balazs Hansel (Niche), on 1 and 2 July 2014.
- Assessment of significance of any potential historic heritage items identified.
- Preparation of an impact assessment for the potential historic heritage items identified.
- Provision of recommendations for the management and mitigation of potential impacts on identified historic heritage items.

3.2 Historic Heritage Items

The historic heritage assessment conducted for the Wilpinjong Coal Project (Heritage Management Consultants, 2004) identified nine items of local heritage significance in the vicinity of the Wilpinjong Coal Mine. Archival recording was undertaken for the following items of local heritage significance (Niche, 2015):

- *Cumbo Creek* (stone cottage);
- *Hillside* (property with multiple buildings);
- *Keylah* (slab building);
- *Warrawong* (slab cottage);
- Atcheson's Cottage (Wyangle Portion 19, Parish of Wilpinjong);
- Loy's Cottage;
- *Pine Park* Woolshed;
- Post and Rail Fence (Portion 106, Parish of Cumbo); and
- Road Embankment (Portion 26, Parish of Cumbo).

As a result of the site investigation conducted by Niche (2015), a total of 24 items were documented in the vicinity of the Wilpinjong Coal Mine, including 21 items of local historical heritage significance and three items with no historical heritage significance.

Of the identified 21 items of local heritage significance, four have the potential to be impacted by the Wilpinjong Coal Mine. These items are listed in **Table 4**. One site, namely the Historic Shale Oil Mine Complex (Site 1) is located in Slate Gully, partially within the approved open cut (Pit 8) boundary. The Historic Shale Oil Mine Complex (Site 1) is comprised of multiple items. Two items associated with the Historic Shale Oil Mine Complex (Site 1) are located within the open cut extension areas (the Retort [Item 1B] and the Potential Caretakers Cottage Site [Item 1G]), and are likely to experience direct impacts. A number of other items that are a part of the Historic Shale Oil Mine Complex (Site 1) are also potentially within ancillary development areas and may potentially experience direct or indirect impacts associated with the Project (Appendix H). The Road Embankment (Site 4) is located within the construction area for the realignment of the TransGrid Wollar to Wellington 330 kilovolt (kV) electricity transmission line (ETL).

A further two items (Pine Park [Site 5] and William Carr's Hut [Site 11]) are located in relatively close proximity to the Wilpinjong Coal Mine (**Table 4**). The locations of these four items are shown on **Figure 2**.

The remaining 17 identified items are located away from the Wilpinjong Coal Mine, within the Village of Wollar and the broader surrounds.

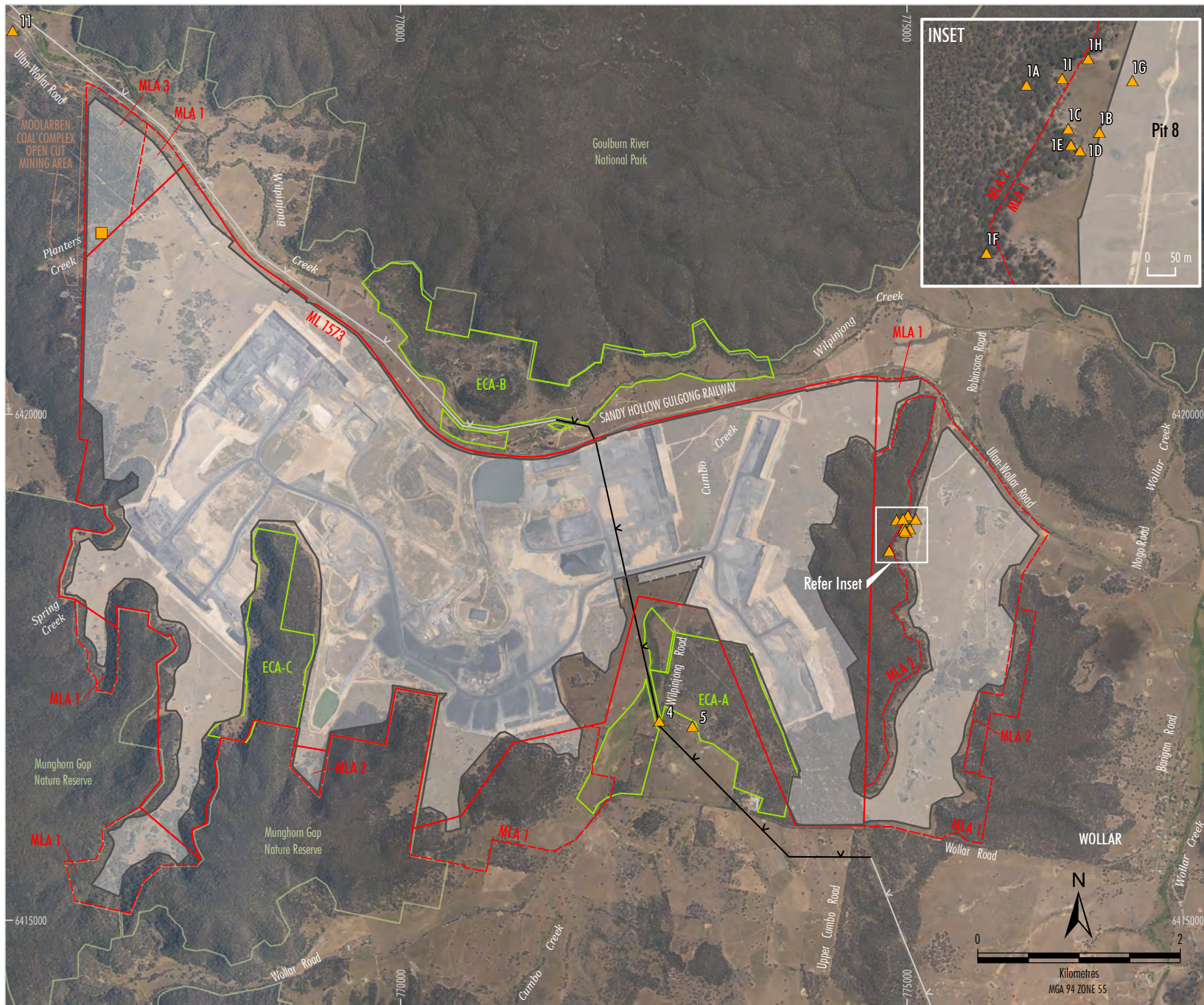
**Table 4
Known Historic Heritage Items**

Site Number ¹	Historic Heritage Item	Description ²	Easting (Zone 56 GDA)	Northing (Zone 56 GDA)
1	Historic Shale Oil Mine Complex		-	-
	1A – Adit	Abandoned historical shale oil mine adit, reinforced with timber beams.	774898	6418956
	1B – Retort	Large concrete blocks lying next to a concrete slab.	775029	6418871
	1C – Ramp leading to Retort	Gravelled ramp extending partway between the adit and ramp.	774973	6418877
	1D – Post and Rail Fence Remains	Collapsed timber post and rail fence.	774994	6418838
	1E – Glass Bottles	Three discarded glass bottles, located near the post and rail fence.	774978	6418848
	1F – Ventilation Shaft	Vertical shaft, much smaller than the mine adit, most likely used for ventilation.	774826	6418654
	1G – Possible Location of Caretaker's Cottage	Level area of land with brick fragments.	775088	6418963
	1H – Fireplace Remains	Cement and stone fireplace. The only obvious remains of the potential Caretaker's Cottage.	775009	6419003
	1I – Cut Timber Stockpile	A cut hardwood timber stockpile near the entrance to the mine adit.	774962	6418968
4	Road Embankment	The downslope retaining wall of the road, built with un-coursed stone to create an embankment.	772555	6416975
5	Pine Park	Comprised of a homemade grain silo, a large open pole shed and a woolshed.	772883	6416919
11	William Carr's Hut	A c1883 hut with multiple extensions.	766167	6423798

Source: after Niche (2015).

¹ The item number correlates with the numbers presented on **Figure 2**.

² A detailed description of each item is provided in Niche (2015).



LEGEND

- Mining Lease Boundary
- Mining Lease Application Boundary
- Approved/Existing Open Cut and Contained Infrastructure Area
- Relocated Block Bank and Cumbo Creek Disturbance Area
- Enhancement and Conservation Area
- Approved Relocated TransGrid 330 kV ETL
- Existing TransGrid 330 kV ETL
- Heritage Items**
- ▲ Relevant Historic Heritage Item
- Former St James Church Allotment

Source: WCPL (2017); Niche Environment and Heritage (2015); South East Archaeology (2015); NSW Dept of Industry (2015)
 Orthophoto: WCPL (Dec 2015)

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 WILPINJONG COAL MINE
 Relevant Historic Heritage Items

Figure 2

3.3 Historic Heritage Values

All previously identified historic heritage items were assessed to be of local heritage significance (Heritage Management Consultants, 2004; Niche, 2015). A description of the heritage values for each of the identified historic heritage items that may be subject to impact are summarised in **Table 5**.

Table 5
Heritage Values of Known Historic Heritage Items

Historic Heritage Item	Relevant Values/Characteristics
<p>Historical Shale Oil Mine Complex (local significance)</p>	<p><i>“The shale oil mining industry was important in the course of NSW as a way of obtaining crude oil for fuel. The Shale Oil Mine at Wollar reflected this industry, and contributed to the growth of the Wollar Village where many of the miners lived”</i> (Niche, 2015).</p> <p><i>“The Shale Oil Mine has strong associations with the renowned prospector Mancq who worked on many oil mine sites internationally, and in the local area with associations to the Mudgee Imperial Shale Oil Company that ran the operations of the Wollar mine and the operations of other shale mines in the region. The Shale Oil Mine contributed significantly to the shale oil industry in the local area and the long continued history of mining in the wider area”</i> (Niche, 2015).</p> <p><i>“The construction of the mine adit, vent shaft and the retort and oil refinery equipment were instrumental in the daily operations of the Shale Oil Mine. The refinery machinery at Wollar was part of a new Australian-made process that extracted greater quantities of oil. The engineering demonstrates a high degree of technical achievement of oil extraction during the early 1930s”</i> (Niche, 2015).</p> <p><i>“Archaeological investigation of the Caretaker’s cottage could potentially reveal some information which could contribute to the understanding of the caretaker’s role in operations of the mine, and of the daily life of the caretaker and his family that lived at the mine site”</i> (Niche, 2015).</p> <p><i>“Shale mines were not particularly rare or uncommon in the area during the early 1930s. An earlier and larger shale mine operated at nearby Barrigan. However, the status of the former Barrigan mine is uncertain and there are no shale mines listed on the Mid Western Regional LEP. As shale is rarely mined these days, physical evidence of this once common activity is becoming increasingly rare”</i> (Niche, 2015).</p> <p><i>“The mine adit, ventilation shaft, the remains of the retort and evidence of the Caretaker’s cottage demonstrate the principle characteristics of shale mine sites in the early 1930s”</i> (Niche, 2015).</p>
<p>Road Embankment (local significance)</p>	<p><i>“The Road Embankment is one of the few nineteenth century (approximate) notable civil works in the area. It demonstrates changes to the local road network as a result of patterns of European settlement of the Wilpinjong area, whereby locals required decent access through the area and to their properties”</i> (Niche, 2015).</p>
<p>Pine Park (local significance)</p>	<p><i>“The woolshed demonstrates settlement patterns of the Wilpinjong area. It is the best preserved older shed in the Project area and is representative of shearing (as being the main industry in the Project area) and the nature of small-farm shearers”</i> (Niche, 2015).</p> <p><i>“The woolshed and Pine Park, in general, is typical of shearing sheds of small-holdings, and is a good example of its type”</i> (Niche, 2015).</p>
<p>William Carr’s Hut (local significance)</p>	<p><i>“The slab cottage was built in the 1880s during a period of population decline after a surge in the late 1870s. It reflects the economic hardship in the area and the shortage of affordable access to building materials. It represents a period in the Wilpinjong area when slab constructed housing was a common form of housing vernacular”</i> (Niche, 2015).</p> <p><i>“Archaeological excavation of artefact deposits at the site would contribute to the understanding of daily life of early settlers in the area, such as the Carr family. Such deposits may be found in places such as a well, a privy or a rubbish dump which would have been associated with the hut”</i> (Niche, 2015).</p>

Source: Niche (2015).

4 Management Measures

4.1 Specific Management Measures

The Historic Heritage Assessment (Niche, 2015) prepared for the Wilpinjong Extension Project provided management recommendations for the identified historic heritage items. These recommendations have been incorporated into this HHMP in the subsections below.

In addition to the measures outlined below, it is noted that ancillary development at the Wilpinjong Coal Mine is subject to final design, and where practicable, infrastructure would be located to avoid direct impacts to historic heritage items.

4.1.1 Historic Shale Oil Mine Complex, Slate Gully (Site 1)

WCPL will engage a suitably qualified heritage consultant to conduct archival recording³ of all the features of the Historic Shale Oil Mine Complex (Plate 1) prior to the commencement of any mining works associated with the open cut in Pit 8. Copies of the archival record will be lodged with the Mudgee Historical Society, Mudgee Library and the NSW Heritage Branch Library.



Plate 1 Historical Shale Oil Mine Adit (Niche, 2015)

³ The OEH Heritage Branch (2006) stated guidelines in the 'Photographic Recording of Heritage Items Using Film or Digital Capture'. The record would include, as a minimum, a photographic record with notes and cross-referencing to base plans.

Further archaeological investigation of the Potential Caretaker's Cottage Site (Site 1G) will also be undertaken to verify the presence of subsurface archaeological material. This investigation will be conducted by a qualified historical archaeologist in accordance with an Archaeological Research Design and will occur prior to surface disturbance activities at the inferred location of the cottage. If relics are located, their discovery will be reported in accordance with Section 146 of the *Heritage Act, 1977*.

In accordance with Condition 49(c), Schedule 3 of the Development Consent (SSD-6764), a detailed test and salvage excavation program for the Potential Caretakers Cottage Site (Site 1G) is provided in **Appendix 1**.

4.1.2 Road Embankment (Site 4)

Avoidance of the Road Embankment (Plate 2) will be considered during detailed design of the TransGrid Wollar to Wellington 330 kV ETL realignment.

If impacts to the Road Embankment cannot be avoided, no further historic heritage assessment is required as a photographic recording of the item has already been completed and provided to the Mudgee Historical Society. WCPL would notify the Mid-Western Regional Council of any unavoidable impacts, prior to impacts occurring.



Plate 2 Road Embankment (Niche, 2015)

4.1.3 Pine Park (Site 5)

The item (Plate 3) is located approximately 1 km outside the Wilpinjong Coal Mine boundary and may experience continued indirect impacts from blasting, however no further historical heritage assessment is required as a photographic record has already been produced and provided to the Mudgee Historical Society.



Plate 3 Pine Park Grain Silo and Shed (Niche, 2015)

4.1.4 William Carr's Hut (Site 11)

Moolarben Coal Operations Pty Ltd has advised WCPL that archival recording of William Carr's Hut (Plate 4) has already been undertaken in accordance with Moolarben Coal's Project Approval (08_0135). No further measures are required.



Plate 4 William Carr's Hut (Niche, 2015)

4.2 Annual Monitoring

Condition 14, Schedule 3 of Development Consent (SSD-6764) requires that the Blast Management Plan “*evaluates and reports on blast vibration and overpressure at the Shale Oil Mine Adit...*”. Monitoring of the Shale Oil Mine Adit site in relation to blasting (i.e. impacts from ground vibration) is outlined in the Blast Management Plan.

The results of the monitoring will be reported by WCPL in the Annual Review.

4.3 New Site Recording Protocol

In the event that a previously unidentified historical heritage items (including relics) are discovered during the life of the Wilpinjong Coal Mine, the following procedure is to be adopted:

- All works must cease immediately in the area to prevent any further impacts to the site/relics.
- Notify the Environment and Community Manager (or relevant equivalent) immediately. The Environment and Community Manager (or relevant equivalent) will determine whether works can continue in the area with safeguards in place.
- Engage a suitably qualified heritage specialist to determine the nature, extent and likely significance of the site/relics.

- Based on the advice of the heritage specialist regarding heritage significance and impact assessment, determine and implement appropriate mitigation measures (e.g. further assessment, excavation, archival recording etc.).
- Depending on the findings of the heritage specialist, notify DP&E and OEH of the discovery in accordance with section 146 of the *Heritage Act 1977*.
- Update the Wilpinjong Coal Mine Historic Heritage Site Database (maintained by WCPL) with the relevant information.
- Revise and update the HHMP (if necessary) in accordance with the protocols outlined in Section 8. This revision would incorporate any newly identified items and their management, but it is not required to occur prior to the implementation of the agreed management approach.

4.4 Protocol for the Management of Human Remains

In the event that operations reveal possible human skeletal remains, the following procedure is to be followed:

- When suspected human remains are exposed, all work is to cease immediately in the near vicinity of the find location.
- The Environment and Community Manager (or relevant equivalent) is to be notified immediately.
- The Environment and Community Manager (or relevant equivalent) will contact the police immediately.
- The Environment and Community Manager (or relevant equivalent) is to contact the OEH's Environment line to identify that possible skeletal remains have been discovered and that the police have been notified. OEH will provide details on the current processes involved in best dealing with archaeological skeletal remains.
- Under the instructions of the Police, the immediate area (approximately 50 metre radius) will be cordoned off by barricading around the exposed human remains site – work can continue outside of this area as long as there is no risk of interference to the human remains or the assessment of human remains.
- A physical or forensic anthropologist would be commissioned by WCPL to inspect the remains in situ (unless otherwise directed by the Police) and make a determination of ancestry (Aboriginal or non- Aboriginal) and antiquity (pre-contact, historic or modern):
 - If the remains are identified as modern, liaise with the Police and/or the Coroner's Office and/or NSW Health with respect to the exhumation of the remains.
 - If the remains are identified as Aboriginal, liaise with OEH and Aboriginal stakeholders as per the Aboriginal Cultural Heritage Management Plan.
 - If the remains are identified as non-Aboriginal (historic) remains, liaise with OEH.
 - If the remains are identified as not being human, then work can recommence without delay.

In particular, in the unlikely event that grave cuts, or unusual features including human remains, are identified during excavation in the area of the former St James Church allotment (no historic heritage significance) (**Figure 2**) site work will stop immediately in the vicinity and the procedure described above would be implemented.

4.5 Ground Disturbance Permits

A Ground Disturbance Permit (GDP) is required to be completed prior to the commencement of new projects or activities requiring ground disturbance at the Wilpinjong Coal Mine. The GDP must be approved by the Environment and Community Manager (or relevant equivalent) prior to works commencing. Ground disturbing activities are not authorised to proceed without an approved GDP. Pre-clearance surveys will be undertaken as required, in accordance with WCPL's Pre-clearance Protocol.

WCPL will not undertake any ground disturbance activities except in accordance with the terms of this HHMP and following the issuing of an internal GDP. Archaeological investigations will only be undertaken by archaeologists qualified and experienced in historic heritage, and will occur prior to any development impacts occurring to a specific area or site of identified heritage significance.

Regular inspections will be undertaken by respective project managers and environmental representatives to ensure adequate controls are implemented and maintained during the disturbance activity. Inspection frequency will be determined based on the scale of the disturbance and with consideration to the environmental risks.

Controls may need to be amended to accommodate changes in construction activities, disturbance areas, drainage paths and other conditions. Such changes are to be approved by the Environment and Community Manager (or relevant equivalent).

4.6 Historic Heritage Component of Site Induction

As part of all full site inductions, a historic heritage component will be included. This will outline current protocols and responsibilities with respect to conducting works in the vicinity of and the management of historic heritage items. It will also provide an overview of the historic heritage items present and procedures for reporting the previously unidentified historic heritage items. A register of all persons having completed inductions will be maintained.

WCPL will maintain an accurate record of all employee and contractor inductions in accordance with Condition 49(c), Schedule 3 of Development Consent (SSD-6764).

4.7 Management of Historic Heritage Items in Wollar and Wider Surrounds

In addition to the historic heritage items described elsewhere in this HHMP, it is noted that a number of items of local heritage significance were identified in the Village of Wollar and the broader surrounds. A summary of these items is provided in Appendix 2. There would be no impacts caused by the Wilpinjong Coal Mine (in particular blasting) to these historic heritage items. However, items that are located on Peabody-owned land may be subject to demolition in accordance with relevant Mid-Western Regional Council approvals (e.g. for workplace health and safety reasons).

In the event that any of these items are proposed to be demolished, WCPL will engage a suitably qualified heritage consultant to conduct an archival recording prior to any disturbance and assess whether further archaeological investigation is warranted. Further, WCPL would seek to offer any salvageable materials from the historic heritage items to the Mudgee Historical Society during the demolition process.

4.8 Storage of Heritage Items Salvaged

Condition 49(c), Scheduled 3 of Development Consent (SSD-6764) requires a strategy for the storage of heritage items salvaged on site, both during the development and in the long term.

WCPL does not anticipate that the storage of any heritage items will be required at the Wilpinjong Coal Mine. Notwithstanding, if items are salvaged during the excavations described in this HHMP (refer Appendix 1), they would be offered to the local historic society and/or managed in accordance with recommendations made by a suitably qualified archaeologist at the time of the salvage.

5 Measurement and Evaluation

5.1 Performance Indicators

In accordance with Condition 3(b), Schedule 5 of Development Consent (SSD-6764), WCPL has proposed a performance indicator to judge the performance of, and guide the implementation of, the management measures discussed within this HHMP. The proposed performance indicator is detailed in **Table 6**.

Table 6
Historic Heritage Performance Indicator

Aspect	Indicator
Management of Historic Heritage Items	<ul style="list-style-type: none">Further archaeological investigation of the Potential Caretakers Cottage Site (Site 1G) is undertaken in accordance with an Archaeological Research Design prepared by a suitably qualified historical archaeologist prior to any disturbance at the site (Appendix 1).
Archival Recording	<ul style="list-style-type: none">Archival recording of all the features of the Historic Shale Oil Mine Complex is completed prior to the commencement of any mining works associated with the open cut in Pit 8.
Incidents and Non-compliances	<ul style="list-style-type: none">No incidents or non-compliances recorded regarding historic heritage at the Wilpinjong Coal Mine.

5.2 Contingency Plan for Unpredicted Impacts

WCPL has a good understanding of historic heritage surrounding the Wilpinjong Coal Mine and has established a comprehensive system to monitor and respond to heritage management issues. In the event that unpredicted impacts occur to heritage as a result of mining activities at the Wilpinjong Coal Mine, WCPL will:

- Review the current HHMP (controls and monitoring), to ensure it is effective and criteria is being met;
- Develop and implement additional management or mitigation measures;
- Undertake follow-up inspections to assess the effectiveness of the additional measures; and
- Report any exceedances and non-compliances in accordance with Section 7.1.

6 Complaints Response Protocol

WCPL operates a Community hotline (1300 606 625) for the purpose of receiving complaints from members of the public in relation to mining activities at the Wilpinjong Coal Mine. The hotline number is advertised on the WCPL Website.

WCPL has developed a Complaint Response Protocol to reply to community concerns that relate to noise and other matters.

Response to a noise complaint will include:

- Accurately recording all relevant details regarding the complaint in a Complaints Register, including:
 - The date and time of the complaint;
 - The method by which the complaint was made;
 - Any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect;
 - The nature of the complaint;
 - The action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and;
 - If no action was taken by the licensee, the reasons why no action was taken;
- Undertaking investigations into the likely cause of the complaint using relevant information at the time of the complaint;
- Assessing and implementing additional control measures, if required; and
- Monitoring and assessing the effectiveness of the additional controls.

Records of all complaints will be kept for at least four years after the complaint was made. Records will be produced to any authorised officer who asks to see them.

The Complaints Register will be uploaded to the WCPL website and updated monthly.

7 Reporting

The following external reporting will be undertaken by WCPL in accordance with the conditions of the Development Consent (SSD-6764), Environmental Protection Licence (EPL) and Mining Leases:

- Incident and Non-Compliance Report;
- Annual Review;
- Independent Environmental Audit;
- EPL Annual Return;
- Annual Compliance Report; and
- Website updates.

A copy of this HHMP will be made available to the WCPL Community Consultative Committee (CCC) and Mid-Western Regional Council. In addition, a copy will be made available for viewing to members of the public at the Wilpinjong Coal Mine and on the WCPL website.

7.1 Incident and Non Compliance Reporting

WCPL will immediately notify the DP&E and any other relevant agencies of any incident that has caused, or threatens to cause, material harm to the environment, in accordance with the Pollution Incident Response Management Plan. All other non-compliances will be reported to DP&E and any other relevant agencies as soon as practicable.

Within seven days of the date of an incident, WCPL will provide a detailed report to the DP&E that:

- Describes the date, time, and nature of the incident;
- Identifies the cause (or likely cause) of the incident;
- Describes what action has been taken to date; and
- Describes the proposed measures to address the incident.

7.2 Annual Review

At the end of March each year, WCPL will review the environmental performance of the Wilpinjong Coal Mine over the previous calendar year and submit an Annual Review report to the DP&E. This report will:

- Describe the development (including any rehabilitation) that was carried out in the past year, and the development that is proposed to be carried out over the next year.
- Include a comprehensive review of the monitoring results and complaints records of the Wilpinjong Coal Mine over the past year, which includes a comparison of these results against the:
 - Relevant statutory requirements, limits or performance measures/criteria;
 - Monitoring results of previous years; and
 - Relevant predictions in the Environmental Impact Statement.
- Identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance.

- Identify any trends in the monitoring data over the life of the Wilpinjong Coal Mine.
- Identify any discrepancies between the predicted and actual impacts of the Wilpinjong Coal Mine, and analyse the potential cause of any significant discrepancies.
- Describe what measures will be implemented over the next year to improve the environmental performance of the Wilpinjong Coal Mine.

A copy of the Annual Review will be made publicly available on the WCPL website and provided to DP&E, in accordance with the ML conditions.

7.3 Independent Environmental Audit

Within a year of commencing development under the Development Consent, and every three years thereafter, unless the Secretary directs otherwise, WCPL will commission an Independent Environmental Audit of the Wilpinjong Coal Mine. This audit will:

- a) Be conducted by a suitably qualified lead auditor and suitably qualified, experienced and independent team of experts in any field specified by the Secretary, whose appointment has been endorsed by the secretary;
- b) Include consultation with the relevant agencies;
- c) Assess the environmental performance of the development and assess whether it is complying with the requirements in the Development Consent and any relevant EPL or ML (including any assessment, plan or program required under these approvals);
- d) Review the adequacy of strategies, plans or programs required under the abovementioned approvals;
- e) Recommend appropriate measures or actions to improve the environmental performance of the development, and/or any strategy, plan or program required under the abovementioned approvals; and
- f) Be conducted and reported the satisfaction of the Secretary.

Within three months of commissioning this audit, or as otherwise agreed by the Secretary, WCPL will submit a copy of the audit report to the Secretary, together with its response to any recommendation contained in the audit report, and a timetable for the implementation of these recommendations as required. WCPL will implement these recommendations, to the satisfaction of the Secretary.

A copy of the audit report (and WCPL's response to any recommendations) will be made publicly available on the WCPL website.

7.4 Website Updates

A comprehensive summary of historic heritage monitoring results will be made publicly available at the Wilpinjong Coal Mine and on its website and will be updated every three months.

WCPL will also ensure that any information relevant to historic heritage management is uploaded to the website (and kept up to date). This includes:

- Current statutory approvals;
- Approved strategies, plans or programs required under the Project Approval;
- A complaints register (updated monthly);
- Minutes of CCC meetings;
- The last five Annual Reviews;
- A copy of any Independent Environmental Audits and WCPL's response to any recommendations in any audit; and
- Any other matter required by the Secretary.

8 Review and Improvement of Environmental Performance

Within three months of the submission of:

- The Annual Review;
- An incident report;
- An Independent Environmental Audit; and
- Any modification to Development Consent (SSD-6764),

WCPL will review, and if necessary revise, this HHMP (and its appendices).

WCPL will also review, and if necessary revise, this HHMP in response to a relevant and material change in technology, legislation, or operations.

WCPL will comply with any reasonable requirement/s of the Secretary arising from the Department's assessment of:

- Any reports, strategies, plans, programs, reviews, audits or correspondence that are submitted in accordance with Development Consent (SSD-6764); and
- The implementation of any actions or measures contained in these documents.

Where amendments to this HHMP are made as a result of the review process, WCPL will submit the revised HHMP to the DP&E for approval within four weeks.

9 Responsibilities

Responsibilities in relation to the HHMP are provided in **Table 7**.

Table 7
Historic Heritage Management Plan Responsibilities

Responsibility	Task	Timing
General/ Mine Manager	Ensure that adequate resources are available to effectively implement requirements of this HHMP	Ongoing and during budget planning
Environment and Community Manager	Engage suitably qualified experts to prepare and review this HHMP	As required
	Undertake stakeholder consultation for this HHMP	As required
	Notify DP&E and OEH (Heritage Division) of any historic heritage related incidents	Immediately (for incidents that have caused or threaten to cause material harm to the environment) or as soon as practicable (for any other non-compliance)
	Ensure that all historic heritage related complaints are responded to in accordance with the Complaints Response Protocol	Following a complaint
	Ensure that all auditing and regulatory reporting is undertaken in relation to this HHMP	As required
	Coordinate relevant reviews of this HHMP	As required
	Ensure that all employees and contractors are given adequate training in environmental awareness, legal responsibilities, and historic heritage-related control methods	Within 3 months of approval of this HHMP, and as required
	Liaise with the environmental management teams at the Moolarben and Ulan Coal mines to minimise cumulative impacts of the Wilpinjong Coal Mine on the surrounding area	On-going
Environmental Representative	Prepare all statutory reports relating to this HHMP	As required
	Report on Continuous Improvement opportunities in the Annual Review when identified	Annually (Annual Review)
	Update the WCPL website	As required
Maintenance Manager	Maintain all machinery and plant used on site in a proper and efficient condition	As required
All employees and contractors	Operate all machinery and plant used on site in a proper and efficient manner	As required

10 References

- Australian International Council on Monuments and Sites (2013) *Burra Charter*.
- EMGA Mitchell McLennan (2013) *Historic heritage Impact Assessment Moolarben Coal Project Stage 1. Optimisation Modification*. Report for Moolarben Coal Project.
- Heritage Management Consultants (2004) *Wilpinjong Coal Project – Non-Aboriginal Heritage Impact Assessment*. Prepared for Wilpinjong Coal Project.
- Heritas Architecture (2008) *Stage 2 Moolarben Coal Project, Ulan, NSW. European Heritage Assessment*. Report for Moolarben Coal Project.
- Niche Environment and Heritage (2015) *Wilpinjong Extension Project Historical Heritage Assessment*.
- NSW Heritage Office and NSW Department of Urban Affairs and Planning (1996) *NSW Heritage Manual*.
- Office of Environment and Heritage (1996) *Statement of Heritage Impact*.
- Office of Environment and Heritage – Heritage Branch (2006) *Photographic Recording of Heritage Items Using Film or Digital Capture*.
- Veritas Archaeology and History Service (2005) *Moolarben Coal Project Non-Aboriginal Heritage Assessment*. Prepared for Moolarben Coal Project.

APPENDIX 1

**PROGRAM FOR TEST AND SALVAGE EXCAVATION AT THE POTENTIAL
CARETAKERS COTTAGE SITE (SITE 1G)**

[TO BE PROVIDED SEPARATELY]

APPENDIX 2

HISTORIC HERITAGE ITEMS IN WOLLAR AND SURROUNDS

Historic Heritage Items in Wollar and Surrounds

Site Number ¹	Historic Heritage Site	Description ²	Easting (Zone 56 GDA)	Northing (Zone 56 GDA)
2	Archer's Cottage Ruins (Plate A2-1)	The site is comprised of an orchard, a stockyard and the ruins of a cottage.	768791	6422807
6	Mara Cottage Ruin, Castle View (Plate A2-2)	There is no structural evidence of the house, but fragments of brick and stone are scattered across the site.	772009	6416085
7	Barton's Cottage Ruin, Binggarra (Plate A2-3)	The main feature is an in situ sandstone fireplace and chimney.	769543	6414369
8	Hillview (Plate A2-4)	The sandstone shed is constructed of stone and mortar with a corrugated iron gabled roof. All that remains of the house is the concrete floor and remnant brick rendered walls.	769588	6414747
10	Wandoona, Wollar (Plate A2-5)	The sandstone Wandoona Homestead is situated on the top of a rise with commanding views. Constructed in three stages, the Homestead consists of a Victorian Georgian style main house, a separate sandstone kitchen and a Queen Anne style gabled roof room, built between the two earlier buildings linking them together.	777390	6414447
12	St Laurence O'Toole Catholic Church, Wollar (Plate A2-6)	Gothic style sandstone church.	777323	6415739
13	Former Mason's Store (Plate A2-7)	Originally used as a store. Timber building with a corrugated iron roof.	777547	6415655
14	St Luke's Anglican Church and Cemetery, Wollar (Plate A2-8)	1914 sandstone church with Romanesque influence, cemetery is located behind the church with sandstone headstones.	777652	6415377
15	Wollar Cemetery (Plate A2-9)	Situated to the north-west of Wollar, there are 250 known graves at this cemetery.	777212	6416587
16	Former Butcher and Garage, Wollar (Plate A2-10)	Two semi-detached cottages constructed of weatherboard each with a corrugated iron roof. Formerly a butcher and garage.	777506	6415668
17	Lynch's House, Wollar (Plate A2-11)	Federation timber bungalow with a corrugated iron gable roof, c1890-1915.	777446	6415673
18	King's House, Wollar (Plate A2-12)	Victorian Georgian timber cottage with a corrugated iron hipped roof, c1890.	777555	6415890
19	Kirkland's Hut, Wollar (Plate A2-13)	Originally of slab construction, c1880-1890, clad with fibro c1960s.	777573	6415914
20	Old General Store, Wollar (Plate A2-14)	The Old General Store comprises of two semi-detached buildings originally constructed of timber, with corrugated iron gabled roof and skillion veranda awning.	777630	6415772
21	Slab Hut, Wollar (Plate A2-15)	Timber slab constructed hut with a corrugated iron pyramidal roof.	777583	6416116
22	Wollar School, Wollar (Plate A2-16)	Weatherboard building with a corrugated iron gable roof.	777557	6416181
23	Former Police Station, Wollar (Plate A2-17)	The Former Police Station is a 1936 inter-war Georgian Revival weatherboard building with a corrugated iron hipped roof.	777679	6416052

Source: after Niche (2015).

¹ The site number correlates with the numbers presented in Niche (2015).

² A detailed description of each site is provided in Niche (2015).



Plate A2-1 Archer's Cottage Ruins (Niche, 2015)



Plate A2-4 Hillview (Niche, 2015)



Plate A2-2 Mara Cottage Ruin, Castle View (Niche, 2015)



Plate A2-5 Wandoona, Wollar (Niche, 2015)



Plate A2-3 Barton's Cottage Ruin, Binngarra (Niche, 2015)



Plate A2-6 St Laurence O'Toole Catholic Church, Wollar (Niche, 2015)



Plate A2-7 Former Mason's Store (Niche, 2015)



Plate A2-10 Former Butcher and Garage, Wollar (Niche, 2015)



Plate A2-8 St Luke's Anglican Church and Cemetery (Niche, 2015)



Plate A2-11 Lynch's House, Wollar (Niche, 2015)



Plate A2-9 Wollar Cemetery (Niche, 2015)



Plate A2-12 King's House, Wollar (Niche, 2015)



Plate A2-13 Kirkland's Hut, Wollar (Niche, 2015)



Plate A2-16 Wollar School, Wollar (Niche, 2015)



Plate A2-14 Old General Store, Wollar (Niche, 2015)



Plate A2-17 Former Police Station, Wollar (Niche, 2015)



Plate A2-15 Slab Hut, Wollar (Niche, 2015)