



**WAMBO COAL
WAMBO HOMESTEAD COMPLEX CONSERVATION
MANAGEMENT PLAN**

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Title	Wambo Homestead Complex Conservation Management Plan
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Revisions

Rev No	Date	Description	By	Checked	Signature
0	1994	Original CMP	Bernard Collins	WCPL	
1	2006	Review & update following development approval (DA305-7-2003)	EJE Heritage	WCPL	
2	July 2012	Review & update including history, development & assessment of significance & include conservation & management strategies.	Godden Mackay Logan Pty Ltd	WCPL	
3	October 2018	Major review & update including current condition reports, revised policies and indicative schedule for implementation. Incorporates comments from DP&E.	WCPL/ EJE Heritage	WCPL	
4	December 2018	Minor amendment to address further comments received from DP&E on the CMP and advice from OEH on the management of the peppercorn tree abutting the Butcher's Hut.	WCPL	WCPL	
5	March 2019	Minor amendment to address further comments received from DP&E on the CMP (dated 18 Dec 18).	WCPL	WCPL	
6	May 2019	Minor amendment to address further comments received from DP&E on the CMP	WCPL	WCPL	

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1.0 Introduction

1.1 Preamble

This Wambo Homestead Complex (WHC) Conservation Management Plan (CMP) has been developed to satisfy the conditions of Development Consent DA 305-7-2003 for the Wambo Coal Mine (the Mine).

A Conservation Plan for the WHC was developed by Bernard Collins in 1994. In 2006 EJE Heritage updated the Conservation Plan following approval of the Wambo Coal Mine and renamed it as a Conservation Management Plan. In 2012 WCPL commissioned Godden Mackay Logan Pty Ltd (GML) to review and update the 2006 CMP, as part of WCPL's planning for the ongoing conservation and management of the WHC and to meet the requirements of DA 305-7-2003. The focus of the 2012 review was to provide appropriate conservation policies for managing the significant heritage components and values of the WHC. The 2012 review also included a review/update of the site's history, development and assessment of significance as well as a review and recording of the condition and integrity of the physical fabric of the site.

In 2017 WCPL engaged EJE Heritage to undertake a review of the 2012 CMP. This review included a site inspection to record the current condition of the site as well as revised strategies for the conservation and management of the site. Version 3 of the CMP was developed by Wambo Coal Pty Ltd (WCPL), in consultation with EJE Heritage, using information contained within previous versions of the CMP. The CMP (Version 3) was submitted to the NSW Department of Planning and Environment (DP&E) and Office of Environment and Heritage (OEH) Heritage Council on 11 October 2018 for comment. Comments were received from DP&E on 12 November 2018 - Version 4 of the CMP addresses these comments. A response was received from OEH on 29 November 2018 advising that they do not provide comments on CMPs unless it is part of an "endorsement process" (refer to **Appendix A** to all relevant correspondence on the CMP).

WCPL acknowledges the contributions of Bernard Collins, GML, EJE Heritage and Professor Ian Jack from the University of Sydney (who researched and wrote the history of the WHC).

1.2 Summary of Approved Wambo Coal Mine

The Wambo Coal Mine (the Mine) is situated approximately 15 kilometres west of Singleton, near the village of Warkworth, New South Wales (**Figure 1**). The Mine is owned and operated by Wambo Coal Pty Limited (WCPL), a subsidiary of Peabody Energy Australia Pty Limited.

A range of open cut and underground mine operations have been conducted at WCPL since mining operations commenced in 1969. Mining under the current Development Consent (DA 305-7-2003) commenced in 2004 and permits both open cut, underground operations and associated activities to be conducted. Rail transport of coal is approved under Development Consent DA 177-8-2004.

The approved run-of-mine (ROM) coal production rate is 14.7 million tonnes per annum (Mtpa) and all product coal is transported from WCPL by rail. A summary of the approved Mine is provided in **Table 1**. WCPL's approved mine layout is shown in **Figure 2**.

Table 1: Summary of the Approved Wambo Coal Mine

Component	Approved Mine ¹
Life of Mine	Wambo Coal may carry out mining operations at the Wambo Mining Complex until 31 December 2039, except for open cut coal extraction, which may only be undertaken until 31 December 2020.
Open Cut Mining	Open cut mining at a rate of up to 8 Mtpa of ROM coal from the Whybrow, Redbank Creek, Wambo and Whynot Seams An estimated total open cut ROM coal reserve of 98 Mt Open cut mining operations under current approved MOP Open cut mining operations up to 31 December 2020
Underground Mining	Underground mining of up to 9.75 Mtpa of ROM coal from the Whybrow, Wambo, Woodlands Hill and Arrowfield Seams. Underground ROM coal reserves are estimated at 143.3 Mt. Underground mining operations up to 31 December 2039
Subsidence commitments and management.	The subsidence performance measures listed in Conditions 22 and 22A of the Development Consent (DA 305-7-2003)
ROM Coal Production Rate	Up to 14.7 Mtpa of ROM coal
Total ROM Coal Mined	259.1 Mt
Waste Rock Management	Waste rock deposited in open cut voids and in waste rock emplacements adjacent open cut operations
Total Waste Rock	640 million bank cubic metres (Mbcm)
Coal Washing	Coal handling and preparation plant (CHPP) capable of processing approximately 1,800 tonnes per hour (tph)
Product Coal	Production of up to 11.3 Mtpa of thermal coal predominantly for export
CHPP Reject Management	Coarse rejects and tailings would be incorporated, encapsulated and/or capped within open cut voids in accordance with existing Wambo management practices
Total CHPP Rejects	Approximately 40.3 Mt of coarse rejects and approximately 22.4 Mt of tailings
Water Supply	Make-up water demand to be met from runoff recovered from tailings storage areas, operational areas, dewatering, licensed extraction from Wollombi Brook and Hunter River
Mining Tenements	Coal Lease (CL) 365, CL374, CL397, Consolidated Coal Lease (CCL) 743, Mining Lease (ML) 1402, ML1572, ML1594, Authorisation (A) 444, Exploration Licence (EL) 7211

Note: ¹ Development Consent DA 305-7-2003 (as modified December 2017).

In accordance with Condition 58, Schedule 4 of DA305-7-2003, WCPL is required to prepare a Conservation Management Plan (CMP) for the Wambo Homestead Complex (WHC). This CMP has been prepared in accordance with Conditions 58 and 59, Schedule 4 of DA305-7-2003. Other conditions relevant to this CMP include Conditions 60-70, Schedule 4 of DA305-7-2003.

The applicable consent conditions and where they are addressed within the corresponding sections of this CMP are outlined in **Section 1.5**. All regulatory correspondence related to the CMP is included in **Appendix A**.

1.3 Purpose

This CMP has been developed to address the relevant requirements of DA305-7-2003. In accordance with Conditions 58 and 59, Schedule 4 of DA305-7-2003, WCPL have prepared this CMP to provide information on:

- The history and development of the WHC;
- The ongoing condition and integrity of the physical fabric of the WHC;
- The conservation policies and interpretation strategy for the WHC; and
- An indicative schedule for implementation of strategies for the WHC.

1.4 Scope

This CMP applies to the Wambo Homestead Complex (WHC). The WHC is described in detail in **Section 2.1** of this CMP. This CMP forms part of WCPL's Environmental Management System (EMS).

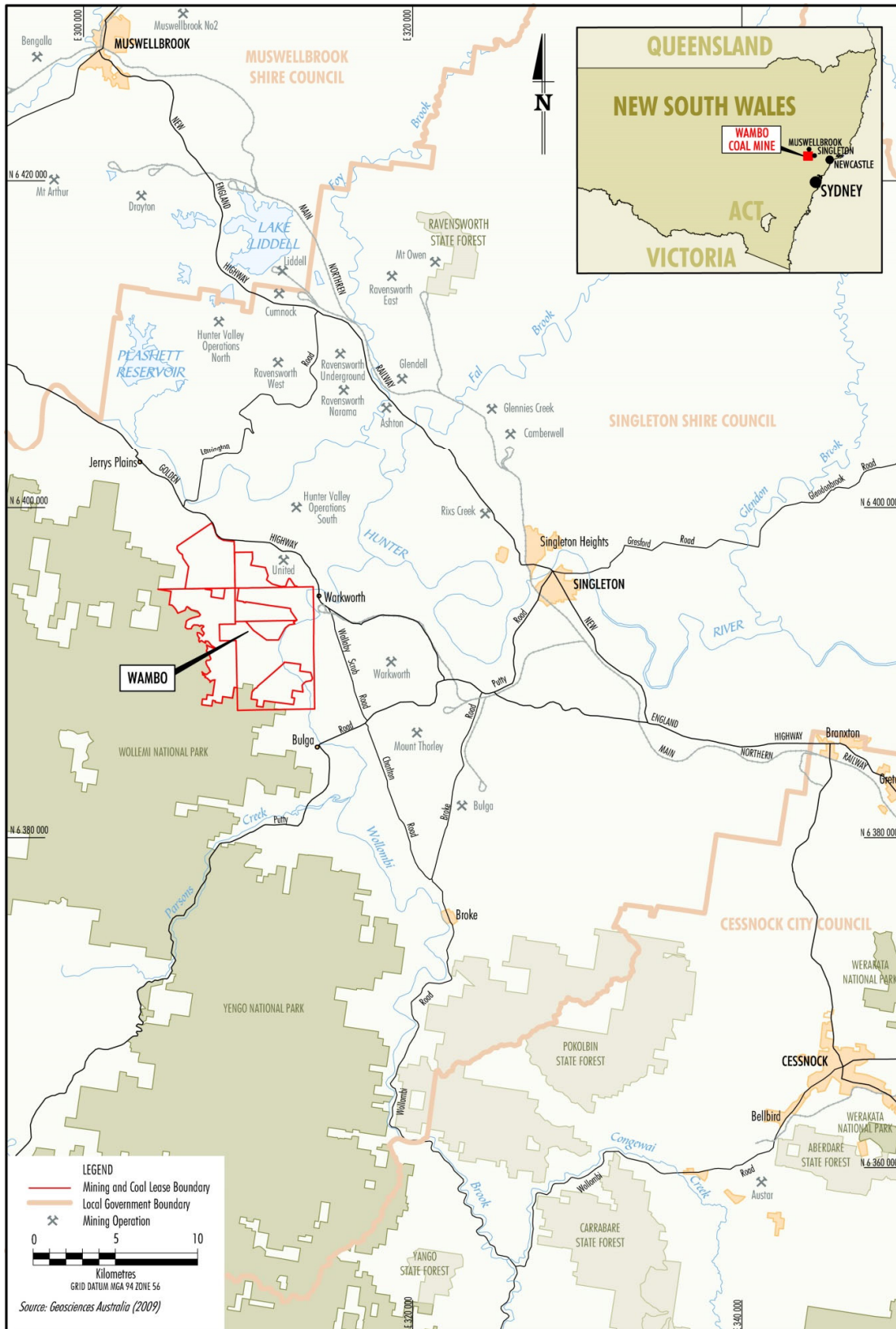
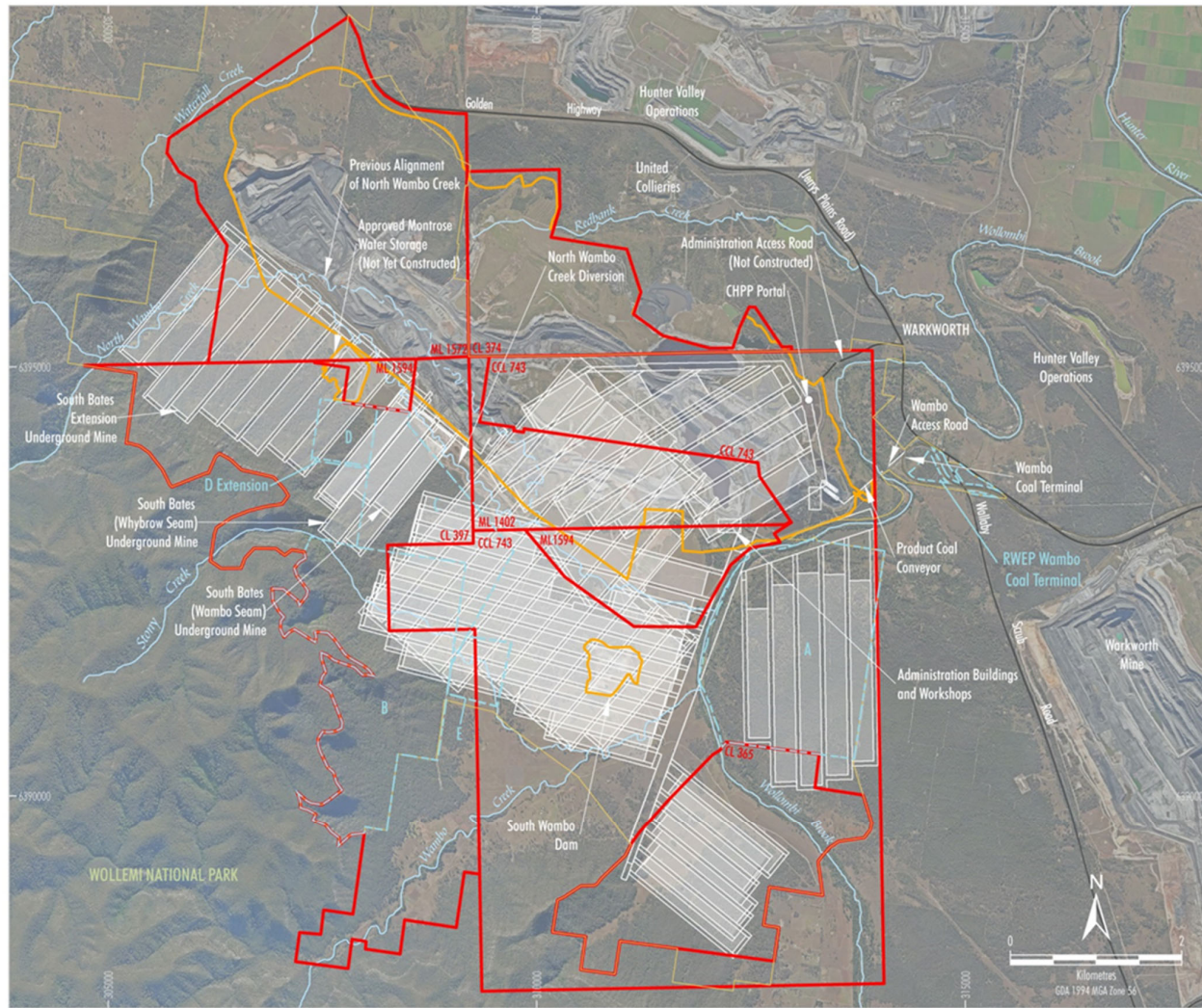


Figure 1: Wambo Coal Regional Location



LEGEND

- WCPL Owned Land
- Mining and Coal Lease Boundary
- Existing/Approved Surface Development Area
- Approved Underground Development
- Remnant Woodland Enhancement Program (RWEPP) Area

Source: Department of Lands (July 2017); WCPL (2018); WCPL Orthophoto (July 2016)

Peabody
WAMBO COAL MINE
 Approved Wambo Coal Mine Layout

Figure 2: Approved Wambo Coal Mine Layout

1.5 Statutory Requirements

1.5.1 Development Consent

This CMP has been prepared to fulfil the requirements of DA 305-7-2003. These requirements, and the section of the CMP where they are addressed, are shown in **Table 2**.

Table 2: DA305-7-2003 Requirements for the CMP

Schedule	Condition	DA 305-7-2003	CMP Section
4	57	<p>Section 60 Approval</p> <p>An application under section 60 of the Heritage Act must be submitted to and approved by the Heritage Council prior to the commencement of any development on land within the State Heritage Register listing boundary for the Wambo Homestead Complex [WHC]. In this regard a mine management plan shall be required to accompany the application which demonstrates that the proposed underground mining shall not have adverse heritage impacts on the WHC due to land subsidence.</p>	Section 6.1 & 7.1
4	58	<p>Conservation Measures</p> <p>Within 12 months of the commencement of this consent, the Applicant shall prepare a conservation management plan for the Wambo Homestead Complex in accordance with Heritage office guidelines for the consideration of the Heritage Council of NSW.</p>	This CMP
4	59	<p>The conservation policies and an interpretation strategy contained in the conservation management plan are to be implemented in accordance with a timetable to be contained in the conservation management plan.</p>	Section 7.2.4 and 7.3
4	60	<p>A suitably qualified and experienced consultant is to be engaged by the applicant to record an oral history of the Wambo Homestead Complex having regard to the strong associations of members of the local community with the site.</p>	Section 7.3.2
4	61	<p>In circumstances where safe access to the Wambo Homestead Complex is able to be provided, opportunities are to be offered to the local community to visit the site during and after its conservation.</p>	Section 7.3.2
4	62	<p>Prior to the commencement of mining operations, and then at yearly intervals prior to the approved structural engineers inspections, a photographic record is to be prepared of all elevations of all structures within the Wambo Homestead Complex. The photographs are to be of archival quality in accordance with the heritage Office guidelines "How to Prepare Archival Records of Heritage Items 1994", and Guidelines for Photographic Recording of heritage Items, 1994". The photographic record is to be lodged with the NSW Heritage Office, and a copy is to be submitted to the Department [of Planning] and the Council".</p>	Section 7.3.2
4	63	<p>Blasting</p> <p>Ground vibration and air blast levels are to be monitored and recorded at a blast monitoring station to be established within the Wambo Homestead Complex for each blast within 2 km of the Wambo Homestead Complex.</p>	Section 7.1
4	64	<p>A suitably qualified and experienced structural engineer, with expertise in vibration and blast monitoring is to be appointed to examine all monitoring records from the Wambo Homestead complex blast monitoring station. The appointment of the structural engineer is to be approved in writing by the Director of the NSW Heritage Office.</p>	Section 7.1

Schedule	Condition	DA 305-7-2003	CMP Section
4	65	Ground vibration and air blast levels experienced at the Wambo Homestead complex blast monitoring station are not to exceed the structural damage assessment criteria prescribed by Australian Standard AS 2187.2-1993 (or its latest version) 'Explosives – Storage Transport and Use for Sensitive and Heritage Structures' to prevent damage to the heritage items.	Section 7.1
4	66	The approved structural engineer is to report to the Applicant on the monitoring results each month for blasting within 2km of the Wambo Homestead Complex and 6 monthly for the remainder of the open cut mining operation and make recommendations to ensure the conservation and prevention of damage to the significant heritage structures. Copies of these reports are to be forwarded to the NSW Heritage Office.	Section 7.1
4	67	The approved structural engineer is to inspect the Wambo Homestead Complex structures annually and as soon as practical, but no later than 3 days after blasting monitoring which exceeds the structural damage assessment criteria prescribed by AS2187.2-1993 (or its latest version). During the period between blasting monitoring being recorded which exceeds the criteria in AS 2187.2-1993 (or its latest version) and the engineer's inspection, ground vibration from blasting is to be limited to a level which will prevent further blasting damage. The structural engineer is to advise the application and the NSW Heritage Office of any action required to repair the damage.	Section 7.1
4	68	The approved structural engineer is to make an assessment of whether blasting within 2km of the Wambo Homestead complex is to cease to be managed in order to stabilise or repair the damage, and so advise the applicant and the Director of the NSW heritage Office. If blasting has been required to cease, it is not to resume until the damage has been stabilised or repaired, and the written approval for resumption has been issued by the Director of the NSW Heritage Office.	Section 7.1
4	69	Rehabilitation Following the cessation of the use of the coal haulage road which traverses the Wambo Homestead Complex property, the land is to be returned to its former condition (pre 1999) and the half-palisade fence on the southern alignment of the mounting yard, which was removed, is to be reinstated as required by the approval of the Heritage Council for the construction of the road on 12 February 1999.	Section 7.3.2
4	70	Moveable Heritage Items The Applicant shall liaise with the Power House Museum and Museums and Galleries Foundation regarding the significance of moveable heritage which shall be displaced by the proposed open cut mining and suitable repositories for the conservation and storage of any significant items.	N/A – no moveable heritage items have been found within the WHC*

*The 2003 Non-Aboriginal Heritage Impact Statement (Appendix C of the Wambo Development Project EIS) (Resource Strategies, 2003) did not identify any moveable heritage items within the WHC therefore there is no requirement for WCPL to liaise with the Power House Museum and Museums and Galleries Foundation in regard to moveable heritage items for the WHC.

1.5.2 Statutory Heritage Listings

The Wambo Homestead Complex was made subject to a Permanent Conservation Order in 1982 while under the ownership of Joan Margaret Plesick. In 1987 the site was bought by Wambo Mining Corporation. In July of 1996 the site was heritage listed on the Singleton Local Environment Plan (LEP). The Wambo Homestead Complex PCO was converted to an entry on the SHR in April 1999. **Table 3** summarises the heritage listings pertaining to the WHC.

Table 3: Statutory Heritage Listings

Heritage Listing	Gazettal Date
NSW Heritage Act - Permanent Conservation Order (200)	3 September 1982
Singleton Local Environmental Plan (1996)	5 July 1996
NSW Heritage Act - State Heritage Register (00200)	2 April 1999

As an item listed on the SHR, approval is required from the Heritage Council for any of the activities listed under Section 57 of the Heritage Act (other than those activities covered by the standard exemption, suggested 2008). In regard to the management of the Wambo Homestead Complex, this means that any works to the buildings or within the curtilage of the listed area (unless exempted under the Heritage Act) will require the approval of the Heritage Council.

The WHC State Heritage Register listing can be found at:

<http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=5045018>

1.5.3 Approvals under Section 60 of the NSW Heritage Act

In 1999, approval was granted for the construction of a haulage road through the WHC, including partial dismantling of a fence to the Mounting Yard.

In 2010 WCPL received approval under Section 60 of the NSW Heritage Act for maintenance and repair works under a Voluntary Action Plan (VAP) for the WHC (refer to **Section 7.2.1** for more information on the VAP).

1.6 Stakeholder Consultation

Table 4 summarises the stakeholder consultation undertaken to date in relation to this CMP. Copies of correspondence relevant to this CMP are included in **Appendix A**.

Table 4: Stakeholder Consultation

Date	Stakeholder	Details
9 Nov 2006	NSW Heritage Office	WCPL submitted a copy of the Conservation Management Plan for the WHC to the Heritage Office for review.
11 May 2011	NSW Department of Planning (DoP)	WCPL submitted a letter to DoP applying for an extension for submission of a revised WHC CMP until 15 Aug 2011.
16 May 2011	DoP	DoP approved the application for an extension for submission of a revised WHC CMP until 15 Aug 2011.
8 July 2011	DoP	DoP emailed GML (WCPL's heritage consultants) confirming that WCPL would need to submit an addendum to the existing (2006) CMP incorporating a Schedule of Works for the next 12 months.

Date	Stakeholder	Details
		This email was forwarded to WCPL.
19 Jun 2012	NSW Department of Planning and Infrastructure (DoPI, formerly DoP)	WCPL emailed DoPI seeking an extension on the submission of the CMP for the WHC until 31 July 2012.
22 Jun 2012	DoPI	DoPI emailed WCPL approving extension on the submission of the CMP for the WHC until 31 July 2012.
25 Jun 2012	DoPI	WCPL emailed DoPI seeking confirmation that the revised CMP is to be submitted to DoPI and the NSW Heritage Branch (formerly the NSW Heritage Office) simultaneously. This was confirmed by DoPI via email on the same day.
Aug 2012	DoPI and NSW Heritage Branch	WCPL submitted a revised CMP to DoPI and the Heritage Branch.
15 May 2013	NSW Heritage Branch	The NSW Heritage Branch sent a letter to WCPL confirming that they had received a copy of the revised 2012 CMP in August 2012 and that they had reviewed the document. They noted that there were a number of outstanding matters to be addressed prior to their formal endorsement of the revised CMP.
26 June 2015	DoPI	WCPL emailed DoPI to provide an update on the Schedule of Works to be developed for maintenance and repairs to be undertaken at the WHC over the next two years. The email also confirmed that the CMP is due for review in July 2017.
29 Mar 2018	NSW Department of Planning and Environment (DP&E, formerly DoPI)	WCPL emailed DP&E to organize a site inspection of the WHC and advise that the CMP is currently in the final stages of review.
4 June 2018	DP&E	Inspection of WHC conducted by DP&E
22 June 2018	DP&E	WCPL submitted additional information as requested by DP&E relating to Conditions of Consent, the CMP (2012) and the Wambo Coal Heritage Management Plan (2017)
29 Aug 2018	DP&E	'Request for Action Plan' received from DP&E. (refer to Appendix A), to be submitted by 11 October 2018.
Oct 2018	OEH (Heritage Division)	Consultation for removal of tree abutting Butcher's Hut including phone calls and email to OEH on 5 Oct 2018.
11 Oct 2018	DP&E, OEH (Heritage Division)	Draft CMP (Rev 3) and Action Plan submitted for review and comment.
12 Nov 2018	DP&E	DP&E provided comments on the CMP and requested that the CMP be resubmitted by 12 Dec 2018.
21 Nov 2018	OEH (Heritage Division)	OEH provided advice via email regarding the management/removal of the tree abutting the Butcher's Hut.
29 Nov 2018	OEH (Heritage Division)	OEH advised via email that the Heritage Council does not provide comments or feedback on CMPs unless it is part of their endorsement process, for which there is a fee of \$2,200/endorsement.
4 Dec 2018	DP&E	WCPL sought clarification (via email) from DP&E on their expectation for endorsement of the CMP from the Heritage Council.
4 Dec 2018	DP&E	DP&E requested (via email) that WCPL "liaise with OEH directly and once their review/ feedback has been provided, please pass these on to DPE for our consideration".
12 Dec 2018	DP&E	Wambo responded to DP&E's request to seek clarification on OEH's endorsement of the CMP. The revised CMP (Ver 4) was also submitted for approval.
18 Dec 2018	OEH (Heritage Division)	OEH confirmed that they received the CMP (Ver 4) and that OEH was not required to endorse the CMP.

Date	Stakeholder	Details
15 Jan 2019	DP&E	DP&E acknowledged receipt of the revised CMP (Ver 4) and raised minor issues to be addressed.
13 Mar 2019	OEH	EJE discussed removal of the peppercorn tree with OEH (via telephone). EJE summarised the outcome of this discussion in an email to WCPL on the same day.
3 April 2019	DP&E, OEH (Heritage Division)	WCPL submitted the revised CMP (Ver 5) to DP&E for approval. A copy was also sent to OEH for their records.
21 May 2019	DP&E	Requested an update on the progress and status of the implementation schedule of Conservation Policy 5 and update the CMP as relevant.
29 May 2019	DP&E	WCPL submitted the revised CMP (Ver 6) for approval.

1.7 Methodology and Terminology

This CMP review uses the terminology, methodology and principles contained in *The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance*. It has been prepared with due regard to the methodology outlined in the NSW Heritage Manual 1996, produced by the NSW Department of Urban Affairs and Planning and the NSW Heritage Office, and the principles in the NSW Heritage Office publication *Assessing Heritage Significance* (2001).

A copy of the Burra Charter is included as **Appendix B** and should be referred to for the definitions of the following terms as used in this report:

place, cultural significance (this is used interchangeably with heritage significance which is used in the NSW Heritage Act), fabric, conservation, maintenance, reservation, restoration, reconstruction, adaptation, use, compatible, setting, related place, related object, associations, meanings and interpretation.

2.0 Background

2.1 Study Area

The study area is the Wambo Homestead Complex (WHC), located in the north-east corner of the larger Wambo mine site (refer **Figure 1**).

The WHC curtilage is defined by the property lot description adopted by State Heritage Register (SHR) listing, ie Lot 82 of Deposited Plan 548749. The boundaries of this area are shown in **Figure 3** together with the location of the main group of structures and their immediate setting which comprises the study area.



Figure 3: Location of WHC adjacent to mining activity

2.2 History

The historical development of Wambo was comprehensively researched (through primary and secondary documentary sources) by Professor Ian Jack of the University of Sydney as part of the 2012 CMP review. A brief summary of the site's ownership and heritage background is included below within a more detailed chronological history summary (including a table showing the incidence of the various themes in various periods and diagrammatic layouts of the site during its development, from 1892-2012) provided in **Appendix C**.

Professor Ian Jack was also involved in the Wambo Homestead Oral History project, undertaken by GML in 2014. The findings of this project, reported in the Wambo

Homestead Oral History Stages 1 and 2 Report (GML, 2015), were used to further understand the history of the WHC. A summary of the findings is included in **Section 7.2.6**.

2.2.1 Aboriginal Presence

The Wambo area lies close to the junction of the traditional boundaries of the Kamilaroi and the Wonaruah People, although many of the traditional groupings in the Hunter Valley had been broken before any systematic recording of the people had taken place. Contact between these groups and Europeans is recorded from the first expeditions trying to find a route over the mountains from Windsor.

A period of conflict between Europeans and the Wonaruah People from 1825 to 1826 had seen the imposition of martial law in the upper valley. In 1830 the surveyor, Felton Matthews visited a camp on the Wollombi Brook close to Broke where there were sixty men, women and children. Most were reported ill from lack of food and an eye disease. The presence of a large group in the area in 1830 may also add to the reports of the area being a traditional meeting ground.

On the Wambo site there is no reported contact with either the Kamilaroi or Wonaruah People from the early settlers here, but there are later records of Aboriginal people working on the estate for the Durham family. In 1863 a number of cattle were stolen from William Durham at Wambo. Durham testified in a hearing on the matter, that he asked Harbon, an Aboriginal man at the homestead to look for them and track them. The local police also used an Aboriginal tracker. This does provide evidence of an ongoing Aboriginal presence and attachment to the place beyond the arrival of Europeans and the alienation of the traditional land.

Archaeological surveys of the Wambo colliery, undertaken for Wambo Mining Corporation in 1992, also identified a number of Aboriginal camp sites across the mine site. Two open sites had been identified in 1981 by Len Dyall, one with over fifty waste flakes on the west bank of the creek, the other with several flaking cores and twenty waste flakes. A number of open sites were further identified in the 1992 report including artefact scatters and stone tools.

2.2.2 Ownership and Heritage Background

Wambo was established by emancipist entrepreneur James Hale and the eight buildings of the homestead complex were constructed c1833-1900. The homestead ceased pastoral activities in the 1970s and is overlaid by working coal seams and is in close proximity to the Wambo Coal Mine.

The Wambo Property was purchased by a small group of individuals with mining interests in 1969 and has had a range of owners. Underground operations in the vicinity of the property commenced in 1972. In 1974 open-cut mining began as a small-scale operation to supplement the underground production from the Wambo seam. Underground mining has been progressively expanded to include six mines - Wambo, Ridge Entry, Homestead, Wollemi and the latest in 2005 North Wambo.

Between 1982 and 1991 the property was owned by a combination of companies, including Panaroya, Hartogen, Total Australia, GIO and CdF Minerals. It was transferred to Sumito

Coal Mining Ltd (now Sumiseki) in 1991 who managed the site until it was purchased by Excel Coal in 2001. The current owners, WCPL, consist of 75% Peabody Energy and 25% Sumiseki, and have operated the site since October 2006.

The Wambo Homestead Complex was made subject to a Permanent Conservation Order (PCO) under the Heritage Act (PCO no.200 gazetted in 1982) and it was subsequently listed on the SHR following the 1998 amendments to the Act.

The pastoral pursuits of the property were initially continued by WCPL and the buildings were then used for storage purposes in association with the development of the mine. As the mining operations expanded and progressively surrounded much of the property it has become increasingly isolated from the public domain and the decay of the structures has meant that they are no longer accessible. This has created major constraints for the continued use of the property and consequently it has been vacant for the last decade.

WCPL has undertaken a regular annual maintenance audit and photographic record of the buildings within the Complex and supports a Community Consultative Committee which keeps the community informed of heritage and other environmental issues.

2.3 Previous Studies and Reports

There have been a number of studies undertaken and reports prepared for the WHC (in addition to the previous CMPs). These are summarised in **Table 5**.

Table 5: Previous Studies and Reports for the WHC

Date	Author	Description
	GML	Further advice regarding 9(a) (b) the Butcher's Hut and 12(a) temporary water shedding
1994	B.Collins	'Wambo Homestead - A Conservation Plan,' (University of Sydney thesis)
2001	EJE Heritage	Report on Physical Condition of Wambo Homestead, September 2001
2004	EJE Heritage	Wambo Inspection Report, July 2014
2005	EJE Heritage	Heritage Inspection Report Wambo Homestead, August 2005 (Doc Ref: 6664 -Inspection Report – 001)
2006	EJE Heritage	Archival Photographic Record Wambo Homestead, November 2006 (Doc Ref: APR – Wambo Homestead – 001)
2006	EJE Architecture	'Wambo Homestead, near Warkworth, NSW – A Conservation Plan', prepared for Wambo Mining Corporation Pty Ltd
2006	Bill Jordan and Associates Pty Ltd	Wambo Homestead: Structural Assessment Annual Report, 22 December 2006 (letter report ref N008)
2007	Vivian Dwyer	Illustrated history of the Wambo Homestead
2007	EJE Heritage	Wambo Homestead Application for Exemption through Sec. 57(2) of the Heritage Act, August 2007 (Doc Ref: 7447-S57-001) Draft
2008	EJE Heritage	Monitoring Report Wambo Homestead Near Warkworth Lot 82 DP548749, March 2008 (Doc Ref: 7609 - Condition - 001)
2009	EJE Heritage	Final Monitoring Report May 2009 Wambo Homestead Near Warkworth Lot 82 DP548749 (Doc Ref: 7609-Final Monitoring Report) 17 June 2009
2009	EJE Heritage	Wambo Expansion Project, Wambo Homestead Complex, Discussion Paper – 4 November 2009 (Doc Ref: WAM-09-15/310801) Draft
2010	WCPL and GML	Voluntary Action Plan (VAP) tier 1 and tier 2 works
2010	Bill Jordan and	Structural Engineer's report regarding blast monitoring results (2005-2010)

Date	Author	Description
	Associates Pty Ltd	ground vibration and blast air pressure levels
2010	EJE Heritage / GML	Archival photographic record (2005 to 2017)
2010	GML	Wambo Homestead Complex Heritage Strategy Preliminary Working Draft prepared for Wambo Coal, 25 August 2010.
2010	Peabody Energy	Section 38 Application under the Heritage Act 1977 (NSW) For the Removal of the Listed Wambo Homestead Complex from the State Heritage Register, 7 September 2010
2011	Bill Jordan and Associates Pty Ltd	Wambo Homestead: Structural Assessment Annual Report, 6 Jan 2011 (letter report Ref T020)
2011	GML	Wambo Homestead Complex Structural Inspection Structural Impacts from Termite Damage, 7 March 2011 (Report No: AA003491-03):
2011	Bill Jordan and Associates Pty Ltd	Vibration vulnerability assessment of Wambo Homestead, 15 December 2011 (letter report Ref U020)
2011	Bill Jordan and Associates Pty Ltd	Wambo Homestead: Annual Structural Assessment, 12 April 2018 (letter report Ref ZA03)
2011	Peabody Energy	s.60 application to OE&H for maintenance works nominated in the VAP.
2012	GML	Wambo Homestead Complex Conservation Management Plan Review Report prepared for Wambo Coal Pty Ltd, July 2012.
2012	Bill Jordan and Associates Pty Ltd	Wambo Homestead: Structural Assessment Annual Report, 27 February 2012 (letter report Ref U020)
2012	Bill Jordan and Associates Pty Ltd	Wambo Homestead Vibration Vulnerability Study, April 2012
2012	GML	Mine Management Plan: Underground Mining in the Vicinity of Wambo Homestead Complex Report prepared for Wambo Coal Pty Ltd, July 2012.
2012	Mine Subsidence Engineering Consultants	North Wambo Underground – Longwalls 7 and 8 Peer Review of Subsidence Monitoring Measures at the Wambo Homestead Complex Report, 2 October 2012
2013	WCPL	S60 Application for the Extension of Underground Coal Mining (Longwalls 9 and 10) at Wambo and in the vicinity of the Wambo Homestead Complex
2014	GML	Wambo Stud Master's Cottage Roof & Verandah Reconstruction Report on Completion, January 2014.
2014	Bill Jordan and Associates Pty Ltd	Wambo Homestead: Vibration assessment for period Jan 2014 – Aug 2014, 23 Sept 2014 (letter report Ref W027)
2015	EJE Heritage	Heritage Asset Management Plan Wambo Homestead Complex c. 1830 Peabody Energy Wambo Mine Via Warkworth, NSW, 30 October 2015 (Doc Ref: 10925 – Maintenance Plan – Issue B - Draft)
2015	EJE Heritage	Archival Photographic Record August 2015 Wambo Homestead Near Warkworth, (Doc Ref: 10904-APR-Issue A)
2015	GML	Wambo Homestead Oral History Stage 1 and 2 Report
2015	GML	Wambo Homestead Horse Yards Restoration Report on Completion
2015	Bill Jordan and Associates Pty Ltd	Wambo Homestead: Structural Assessment Annual Report, 11 December 2015 (letter report ref X018)
2016	Bill Jordan and Associates Pty Ltd	Wambo Homestead: Structural Assessment Annual Report, 16 December 2016 (letter report Ref Z008)
2017	Bill Jordan and Associates Pty Ltd	Wambo Homestead: Review of ground vibration records, Jan 2017 – June 2017, 22 August 2017 (letter report Ref ZA03)
2017	Bill Jordan and Associates Pty Ltd	Wambo Homestead blasting: event of 12 October 2017, 30 October 2017 (letter report Ref ZA03)
2017	EJE Heritage	Archival Photographic Record December 2017 Wambo Homestead Near Warkworth, (Doc Ref: Wambo2017-APR-001)
2018	Bill Jordan and Associates Pty Ltd	Wambo Homestead: Structural Assessment Annual Report, 12 April 2018 (letter report Ref ZA03)

2.4 History of Conservation Management

During the period 1992-1994 Wambo Homestead buildings and their immediate setting were surveyed and recorded as part of a 'Conservation Plan' (CP) - a thesis prepared by Barney Collins (1994). At this stage some of the Homestead Complex was used for mine-related functions, including offices in the main residence (New House) which was adapted and provided with a new carpark. By 1996 the Homestead Complex was no longer used for any functions and the expansion of mining operations in its vicinity increasingly isolated it from public access.

In 2004 Wambo Coal Pty Limited was granted approval for the development of open cut and underground mining operations at the Wambo coal mine subject to a number of conditions (DA 305-7-2003). These included various 'Conservation Measures' (such as the preparation of a conservation management plan) and the need for applications under Section 60 of the Heritage Act for 'any development on land within the State Heritage Register listing boundary'.

In 2006 a CMP was prepared by EJE Heritage in accordance with the DA requirements. This included various conservation policies for maintenance and repair of the structures, as well as consideration of relocation of all or part of the Homestead buildings. The CMP was recommended to be reviewed and updated after 5 years. Over subsequent years, photographic recording and structural engineer's inspections have been carried out annually in accordance with the DA requirements.

In 2010, following submission by Wambo Coal to NSW Heritage Council to seek removal of Homestead Complex from the SHR, GML assisted in the provision of additional information requested by the Council, including:

- Professional review of the history of the place/item to identify the key themes, events and people relevant to assessment of its heritage significance, including the significance of surviving components and attributes and relationship to comparative sites.
- Development of comparative analysis/assessment of the place/item in the context of comparative sites in the Hunter Valley, particularly surviving nineteenth-century homestead groups.
- Assessment of the philosophical issues, as well as the practical feasibility, of relocating key components of the Wambo Homestead Complex to provide public access and use, plus initial input/advice on heritage criteria relevant to any new site/location for the reconstructed elements.
- Preparation of initial Interpretation Strategy recommendations for incorporating and presenting the heritage values of the place as part of any future management and/or development, proposals.
- Provision of specialist heritage advice to direct stabilisation of existing significant structures. These works have included making structures watertight and upgrading drainage systems; providing support for structural components/fabric where required to prevent further collapse and/or make structures safe for ongoing inspection and maintenance; identifying and controlling white-ant infestations and securing fabric

from ongoing deterioration by appropriate protection methods (including removal and storage.)

The first four items were set out in the *Wambo Homestead Complex – Heritage Strategy* submitted to the Heritage Council in September 2010. The application for removal of the site from the SHR was subsequently withdrawn by WCPL.

During the period 2010-2012 site conservation works were carried out on the Homestead Complex, including implementation of maintenance works to prevent water entry and stabilise structures and investigation, recording and protection of significant features and fabric (refer to **Section 7.2.1** for more information on VAP).

The CMP was reviewed and updated in 2012 by GML. The revised CMP included conservation policies for managing the significant heritage components and values of the WHC.

Since 2012 WCPL have undertaken a range of conservation works at the WHC. These works are discussed in detail in **Section 7.2.1**.

3.0 Physical Analysis

This section utilises the previously adopted precinct boundaries and naming for buildings, structures and elements of the Wambo Homestead Complex. This section reviews the current character and condition of the physical fabric of the study area, updating the findings of the CMP 2012 (and CMP 2006). The initial review of precincts is followed by a more detailed examination of the buildings and fences. A summary of the building's current condition and integrity, compared with the condition and integrity observed during the 2012 GML inspection, is provided in **Table 6** (at the end of this section).

3.1 Site Inspection

The study area was inspected by the EJE Heritage project team on 8 August 2017. The inspection was undertaken to identify and document its current layout, components and physical character. The aim of this work was to provide input for appropriate conservation policies for care and management of the place, in both the short and longer term, as set out in **Sections 6.0** and **7.0**.

The inspections were carried out with the assistance of WCPL staff and within the safety and access constraints required on a working colliery site. The condition of the buildings and/or safety requirements limited access to some areas, so only readily accessible areas were able to be inspected. This limited close examination of some building exteriors as well as various interior spaces where structures were not safe to enter and/or working heights precluded all but specifically trained personnel.

No opening up of fabric was carried out as part of the inspection, but some areas that had been investigated as part of recent maintenance and stabilisation works by WCPL were able to be commented on using the information previously collected.

3.2 Study Area and its Context

The study area is located in the northeast corner of the SHR listed precinct (**Figure 3**). To the south, east and west of the study area the immediate context is characterised by open river flats and gently undulating land - mostly former pastoral and agricultural holdings - with scattered stands of remnant woodland vegetation, particularly towards the creeks and distant hills. With its location on the south side of a low rise marking the north edge of the Wollombi/North Creek flood plain, the New House (Homestead) faces south across the flood plain towards North Wambo Creek with distant views to Mount Wambo and the Bulga Mountains.

Immediately north of the New House (Homestead) within the study area, the other site structures nestle into the landscape without intruding on views towards, or out from, the Homestead. This 'visual subservience' is essentially due to the setback of these service/outbuilding structures, their siting on topographically lower areas and/or being screened by plantings. The Wambo Homestead Complex is not able to be viewed from publicly accessible vantage points, however, because of the extent of the colliery land-holding around it.

Immediately north of the study area, the landscape is characterised by open cut and underground mining landscape features, together with the road/rail transportation routes, storage facilities and other infrastructure associated with modern colliery facilities.

3.2.1 Layout of Study Area

As noted in **Section 3.1**, the site analysis in this review has adopted and adapted the precincts used in the 2006 CMP (and 2012 CMP) to help present and explain the layout, components and characteristics of different parts of the site. These precincts are defined by a combination of functional use and surviving evidence of earlier boundaries, including fences, plantings, roads and paths, etc. There are four precincts in the WHC, as shown in **Figure 4**:

- Precinct 1: Home Compound;
- Precinct 2: Stable Yards
- Precinct 3: Stock Yards; and
- Precinct 4: Studmaster's Cottage.



Figure 4: Precincts 1 to 4

The key components of the study area include the New House (main homestead) and attached two-story Kitchen Wing (which includes the original residence), a one and half storey Servant's Block to the rear, a large Carriage (or Coach) House with Stable and Granary, Stud Master's Cottage, various timber slab service buildings (including Horse Boxes and Butcher's Hut), a circular Mounting Yard and numerous fences (to precinct boundaries and former stock yards). Key landscape features are also shown in the survey plan including mature trees (indigenous and exotic species), established hedges, roads and paths. Further detail of the layout and components of the study area is shown in the survey plan included as **Figure 5**.



Figure 5: Survey Plan of Study Area showing Key Components (GML, 2012)

3.3 Existing Conditions by Precinct

This section contains information on each of the four Precincts, including:

- A general site description;
- A description of landscaping within the precinct; and
- A detailed description of each building or structure in the precinct and a summary of its current condition and integrity (compared to conditions observed during the previous site inspection, which was undertaken by GML in 2012 i.e. **Table 6**).

Detailed condition reports from the 2012 and 2017 site inspections are included in **Appendix D**.

3.3.1 General Site Description

Precinct 1 – Home Compound

This precinct, in the southwest corner of the site, is centred on the New House (Homestead) and associated service buildings including a two-storey Kitchen Wing (attached to the northwest corner of the New House), a separate one-and-a-half-storey Servant's Wing, and a small timber slab Butcher's Hut.

Post and wire fences and/or the remains of former fence lines mark the boundaries of the precinct, following alignments that date, in most cases, at least to the mid-twentieth century. The oldest is the front/south boundary which appears to follow its earliest recorded alignment (shown in the 1892 survey plan) and may even date to earlier in the nineteenth century (ie not long after the construction of the New House). The fabric of the fences is a mix of materials from different periods, with modern galvanised wire and steel star pickets mixed with dressed and slab timber posts.

Paved areas are generally restricted to high pedestrian traffic areas, such as paths around the Kitchen Wing and the north east courtyard. The current concrete finish of these areas generally appears to date from the mid-to late twentieth century but may cover earlier paving (of as yet unknown nature and extent). A traditional steel-framed windmill is located just west of the Kitchen Wing, probably dating to the early to mid-twentieth century. Though currently bent at ninety degrees over the adjacent lean-to verandah roof, this structure and adjacent elevated tank provide evidence of both the site's early operation and potential sub-ground water source (from an adjacent well or cistern).

Precinct 2 – Stable Yards

This precinct, in the southeast corner of the site, shares its western boundary with the Home Compound, and is largely enclosed with post and wire fences of the same mix of materials and periods as Precinct 1. Within this area, however, near the northwest corner, are remains of an earlier split timber post and rail fence (with mesh infill at the bottom), no doubt associated with previous 'stable yard' uses of the area to the east; that is, to prevent animals trespassing into the adjacent private garden and entrance driveway.

No above-ground structures currently remain within the precinct, even from the 'previous tennis court' near the south end of the area that is depicted in the 2006 CMP. Potential archaeological evidence of driveways and paths (from various periods) and the twentieth-century tennis court was, however, identified within this area. Also of potential interest is the site of the former Barn adjacent to the east boundary of the precinct which documents show to have survived into the 1970s.

Precinct 3 – Stock Yards

This precinct, to the north of the study area, is defined in character and extent by the remaining structures of its former 'stock yard' use. The term 'mounting yard' is also applied to components of this area in the 2006 CMP, but it appears to be used interchangeably with 'stock yard'.

The structures and remains of structures in this area date to 1905-1907, being erected by Reginald Allen and Frank McDonald as part of their significant horse stud facilities. These currently include the distinctive circular 'mounting yard' (or corral) constructed of timber slabs butted vertically together, various sections of fencing to yards and holding pens (including remains of post and rail and post and wire construction) and two former sheds with stabling and storage facilities. Another similar timber outbuilding/shed is located adjacent to the northwest corner of the precinct boundary. Though this is not included within the Stock Yards precinct, as defined in the 2006 CMP, the historical and physical evidence point to it being a related part of this facility and thus it has been included within the study area.

Along the southern edge of the precinct is a modern graded/bitumen paved road constructed in 1999 to provide access for gravel haulage access through the site. This work required partial dismantling of the fences on the boundary). Under the conditions of the s60 approval for this work (see **Section 7.2.1**), these fences were required to be dismantled and set aside for reconstruction once the road was no longer required.

Precinct 4 – Stud Master's Cottage

This precinct includes the remaining area and structures previously 'left over' between the Home Compound and Stock Yards. On its north boundary the precinct is defined by the southern edge of the 1999 through-site haulage road (described above) while to the south, east and west it is largely delineated by post and wire fences similar to the Home Compound. A similar fence completes the enclosure of the precinct running parallel with, but set well back (ie south) from, the through-site haulage road. This provides the current vehicular access via locked gate to the main group of buildings within, and adjacent to, the Home Compound.

The main structures within this precinct include the Stud Master's Cottage (at the west end), a timber slab Horse Boxes building (between the through-site road and adjacent fence) and the large Coach House and Stables in the southeast corner (adjoining the boundaries of Precincts 1 and 2).

Between these structures the site is relatively open with a undoubtedly due to a whole host of factors, including randomly placed (but now quite old) 'rubbish/spoil' heaps, localised settlement due to stormwater run-off or animal activity, the erection and removal of various structures over the history of the site, etc. Around the Stud Master's Cottage in particular, in-situ remains of the former verandah and water tank can be readily discerned.

3.3.2 Landscaping

Indigenous Vegetation

Surviving remnants of the original surrounding woodland dominated by *Eucalyptus crebra* (Ironbark) and *Casuarina luehmannii* (Bull Oak) and including *Angophora floribunda* (rough Barked Apple), *Brachychiton populneum* (Kurrajong), *Eucalyptus albens* (White Box) and *Eucalyptus moluccana* (Grey Box) can still be found on outer areas of the land holding. Closer to Wambo Creek, the vegetation has changed less, with indigenous species including *Casuarina cunninghamiana* (River She Oak), *Casuarina glauca* (Swamp Oak) and scattered *Eucalyptus trerticonis* (Forest Red Gum).

Within the study area, a few surviving remnants of the original surrounding woodland can also be found, most notably, some of the Eucalyptus species (identified above).

Precinct 1 – Home Compound

The informal layout, character and features of the precinct's landscaping - including open lawn in front of the house, boundary hedging, remnant garden, arbour and rockery plantings in the northeast corner - reflect a combination of both the site's previous residential use and farming functions, and awareness of its wider rural setting. Existing plantings are generally informal and confined to the edges of the precinct.

The north, west and south boundaries feature mature hedges of *Olea Africana* (African Olive) which have recently been trimmed back to open up views, as when first planted. The excessive spread of Olive seedlings throughout the site, together with *Grevillia robusta* suckers, has however, been a problem, though recent maintenance works have improved this by pruning and/or removing invasive plantings causing damage to site structures. The front/south hedge also includes *Tecomaris capensis* (Cape Honeysuckle) and *Plumbago auriculata* (Plumbago) in a somewhat ad-hoc mix.

Closer to the New House, the rustic timber-framed bush-pole and wire mesh pergola is less intact than in 2006 but surviving remains, having collapsed in situ, are still able to identify its site and construction. The adjacent rockery is similarly still evident but overgrown with a mix of original succulents and invasive weeds. The 'garden beds' and 'edging' along the south elevation of the Homestead recorded in 2006 are no longer extant.

The largest specimen trees in this precinct, located between the house and these garden areas, are the *Lagunaria patersonii* (Norfolk Island Hibiscus) and *Ulmum parvifolia* (Chinese Elm). More generally, the mature trees tend to be mainly remnant Eucalypts and *Schinus areira* (Pepper Corns) which are traditionally associated with nineteenth and early twentieth century rural properties.

Precinct 2 – Stable Yards

The landscaping character of this area varies from the shared 'domestic garden' shrubs and other plantings along the southern half of the west boundary and tall hedge screening (mostly Olives) along the north (road) edge to the wilder mix of exotic weeds and scattered scrub plants scattered over the disturbed former paddock areas to the south and east of the precinct.

Comparing the current landscaping with the 2006 record, this area has generally become more overgrown, with indigenous species regrowing. No remains of the 'abandoned orchard' in the southeast corner of the precinct were found.

Precinct 3 – Stock Yards

The uneven and significantly overgrown terrain prevented inspection of all parts of this precinct, however various piles of building materials or 'dumps' covered with plant growth were noted throughout the area, pointing to collapsed structures and/or relocated building components and materials. Around the northern edge of the circular mounting yard there is

also a build-up of excavated spoil, probably associated with the modern 'drainage line' which marks the northern boundary of the study area.

Tree plantings generally comprised indigenous Eucalypts, particularly around the perimeter of the precinct, and Pepper Corns planted close to buildings and yards.

Precinct 4 – Stud Master's Cottage

The landscaping of this area is again characterised by open grassed areas with few trees other than Pepper Corns (near the Cottage), scattered indigenous Eucalypt species and Olive hedging along the fence lines.

3.3.3 Buildings

The New House (Main Homestead)

The New House, constructed in 1844, is a distinctive single- storey rendered (stucco) structure, obviously conceived as an architecturally ambitious Regency style villa. Rigorously designed to impress as a tasteful, spare, symmetrical grand homestead residence, it was placed to present to the valley floor and ranges to the south, turning the 'old house' into an impressive supporting kitchen and service wing.

The four principal rooms are arranged as pairs either side of an axial central flagged hall, are covered by a low transverse hipped main roof. These are surrounded by a lower skirt of verandahs and verandah rooms, set at a lower pitch but similarly roofed originally with hardwood shingles, later covered with corrugated-iron sheeting. Damaged in a storm, the main roof is now covered with modern corrugated steel.

The boxed eave and fascias to the main roof support an Ogee pattern galvanized-steel gutter which also surrounds the verandah roof. Across the front verandah the roof is supported by turned timber columns in the Tuscan order. These have been wrought with entasis in the column shafts and fine turned capital and integral neck mouldings, but the original column bases (which might have been anticipated given the quality of what does survive) have been replaced at some later date with rough octagonal bases due to rot of the originals. Ten columns support the edge of the front verandah, with pairs placed each side of the central front door. The return verandahs on each side employ hexagonal timber posts similar to those of the Kitchen Wing's verandahs at the rear. These posts also re-appear in the rear verandah of the New House which abuts the Kitchen Wing east verandah, giving covered access from the main house to the full ground floor Kitchen Wing. The western side verandah return has been partially enclosed with stud-framed weatherboarding to form a 'weather porch' outside the verandah room later fitted out as a kitchen.

The columns sit upon a bullnose kerbed, flagged front verandah, which sits above sandstone ashlar base walls, distinct from the false ashlar, ruled stucco brick walls of the house proper. The front of the house features a fine central six-panelled (bolection and bead-butt moulded) door with elaborate transom light above and under a moulded false flat-arch stone lintel) on either side are two fine 12-pane double-hung sash windows, with plain stone lintels and sills. A four-panelled door, set under a moulded lintel similar to the front door lintel, gives into each side verandah room set back from the front verandah. Three

broad stone stairs, each composed of single length moulded treads, are also located symmetrically disposed to the centre and the southeast and southwest corners of the verandah.

All the building's sash windows retain early glass and feature finely made external louvered shutters. The side verandah room windows are further sheltered by tinsmith's window hoods of galvanized steel sheet, with cut fleur-de-lis patterned edges.

Internally, asymmetrical placement of the front and back doors to the central hall reconciles the external symmetry of the front and rear elevations across the dissimilar width of the room pairs each side the eastern rooms being wider east-to-west than the western rooms. The generous principal rooms feature lath and plaster ceilings with solid run cornices and ceiling roses, and restrained moulded joinery, including six panelled doors, skirtings and architraves.

Along the rear (south) of the residence are a pair of narrower, 'secondary rooms' that have been joined into one space (during some period of change around the mid- twentieth century) to provide a service/kitchen space.

A summary of the building's current condition and integrity, compared with the condition and integrity observed during the 2012 GML inspection, is provided in **Table 6** (at the end of this section).

The Kitchen Wing (former House)

The Kitchen Wing is undoubtedly the most complex part of the Wambo Homestead Complex, being built in a number of distinct stages (in 1830, 1837 and 1906) and reflecting in its fabric key phases of the development history of the site. The building is mostly two-storied above a large Basement but with later (ie twentieth century) single-storey additions on the western side. The roof is corrugated steel, in some areas laid over the remains of the original timber shingles.

The main ground floor structure and cellar are of sandstone ashlar construction and thought to be the adapted first house of the property. Two rooms are formed by the dressed stone walls, the larger being a sitting room whose floor level is 500mm lower than the dining room to its north, and two steps below the outside eastern verandah floor surface. Each of these rooms has a large fireplace and hearth, and under the larger sitting room is a substantial flagged cellar, entered via a stone stair on the eastern face. The eastern facade of the building is sheltered by a ground floor skillion verandah, supported on an integrated upper wall plate (let into the wall surface) and hexagonal timber posts and a flat, beaded verandah plate which has been cut and stepped out around the cellar access stair, at a later date.

Above the stone ground floor rooms, an upper floor of two large rooms ceiled on the rake has been added in brickwork, with low eaves and plate height springing a hardwood framed and shingled roof, now clad in corrugated iron. External timber stairs at each end of the building have allowed access to the upper level, but each has been rebuilt, the north in bush timber, the south in modern sawn scantlings. At the rear of the old stone house, a new kitchen, pantries and bathroom have been added in salvaged stone and brick, with a later laundry addition in rendered brick (1906) and a slab skillion lean-to.

A summary of the building's current condition and integrity, compared with the condition and integrity observed during the 2012 GML inspection, is provided in **Table 6** (at the end of this section).

The Servant's Wing

The Servant's Wing, conjectured to have been built c1840-1844 as a 'new' kitchen is a one-and-a-half-storey brick building sited close to, and immediately north of, the Kitchen Wing. It comprised a ground floor kitchen with substantial hearth and chimney, and a separate, externally entered store - with, above them, an attic level of two rooms approached by an external stair at the southern end of the building (now lost). The attic and ground floors have log joists.

The substantial solid brick walls employ an unusual mixture of Flemish and English Bond, with stone lintels to openings and stone sills. The original gable roof of bush timbers and shingles was covered with a later corrugated-iron sheet roof, and the longer east and west elevations were sheltered by verandahs, pitched from below the main roof eaves, and now lost. Record photos (Collins, 1994) show that on the eastern side, the verandah sheltered the chimney base and Store access door and employed hexagonal timber posts similar to those of the Kitchen Wing.

The western façade features four fine sliding sash windows, three to the kitchen and one to the Store, but the former western skillion, of slab wall construction with a shingle roof, would have deprived these of view and visibility. The attic of two rooms was divided by a central boarded partition wall, thus making the north room with single north-facing sash window, enterable only from the southern room. The surviving external doors appear original and are well made, ledged and vertically boarded, using handsome wide boards of random width.

A summary of the building's current condition and integrity, compared with the condition and integrity observed during the 2012 GML inspection, is provided in **Table 6** (at the end of this section).

The Butcher's Hut

The Butcher's Hut is a small one-roomed building located to the west of the Kitchen Wing and New House and was traditionally used for preparing meat for use in the house. It is thought to date to c1900 and is constructed of pole framing with double timber slab walls and corrugated-iron roof with open gables for ventilation. Rammed earth is used as insulation within the wall and ceiling cavities.

Like other outbuildings at Wambo, it is of slab construction but of a more sophisticated design and type than the others using a different combination of techniques to suit its use. Six main posts firmly embedded in the ground provide support for horizontal slabs which were adzed (reduced) at both ends for fixing with spike nails and battens. These slabs are placed as inner and outer layers with a pugged mix of rammed earth filling between, to act as insulation.

The earth mix continues over the slab ceiling of the Hut, above which the gabled roof of corrugated iron on saplings is open at both ends, to allow air flow above the ceiling. The

main frame timbers are half-lapped and bolted while the slabs, battens and bush timbers are fixed with spikes and nails of varying age.

A single ledged and sheeted door gives access to the interior; iron pintle hinges hint at earlier support than the present hinges. The interior is lined out with corroding, now-fragile fine wire mesh. Three horizontal window openings, spaced into the arrangement of the slabs provided light and air to the interior two of them arranged contiguously with the cutting table and its former location, with galvanised steel sheeting tacked across the reveals and sills.

Galvanised tubes and openings for ventilation are incorporated in the walls and ceiling, along with a narrow floor drain included within the later thin concrete floor poured inside the hut. Hooks indicate how meat was hung.

A summary of the building's current condition and integrity, compared with the condition and integrity observed during the 2012 GML inspection, is provided in **Table 6** (at the end of this section).

Carriage House and Stables

A two-storey 'barn' structure constructed c1840 comprising a ground floor carriage house with adjacent stables, and an attic grain store above. The structure comprises bush-pole framing with timber slab walls, weatherboard upper walls and a corrugated iron roof over the remains of the original timber shingles.

Aligned north-south, the building's eastern side, where the stables and carriage doors are located, is sheltered by an integrated skillion pitched from the main roof plate. On the western side of the building a later skillion/lean-to has been added, with an open work area in its northern part and enclosed vehicle bay to the south.

The main framing of the building is comprised of massive squared hardwood posts embedded in the ground and tied together into a frame with similarly massive hardwood beams. The slab walls of the ground floor toe into massive round bed-logs which are set upon earth and rubble foundations and which also retain the sandstone flagged floors to the carriage bays and stables.

The upper floor store area is more lightly framed on pit-sawn timbers, clad externally with splayed weatherboards (still showing traces of 'red rattle' paint) and lined internally with pit-sawn lining boards, and a tongue-and-grooved floor. The roof retains its shingle cladding on rough battens over which corrugated-iron sheeting has been secured with roofing screws.

While the integrated eastern verandah is carefully built, the later western skillion is sparsely framed in sapling timbers with a corrugated-iron roof. The posts are notched/checked to receive boards (rails) probably to secure animals within the work area, which has an unreinforced concrete floor. An apparent garage space at the south end is enclosed with corrugated iron sheeting.

The eastern side of the building retains handsome ledged braced and sheeted carriage doors and stable door. The more northern carriage door has been adapted to form a weatherboard store enclosure under the east skillion. The stable retains its fine flagged floor with integrated drain, timber stall partitions, hay frames and feed troughs, and smaller details (eg saddle/harness pegs).

A summary of the building's current condition and integrity, compared with the condition and integrity observed during the 2012 GML inspection, is provided in **Table 6** (at the end of this section).

Stud Master's Cottage

This single-storey brick building of three rooms dates to the 1830s-1840s and originally featured a steeply pitched, hipped roof, surrounded on all sides with lower-pitch roofed verandahs. This configuration was recorded in the 1994 CP for the site (by Barney Collins). By 2006 the roof and verandahs of the Cottage had been sufficiently damaged by a storm to require dismantling, with building materials stockpiled on site (refer to 2006 CMP, Section 4.5, pp103-5).

The building underwent a major re-roofing programme circa 2013-4 which reconstructed the roof framing reusing original members where possible and new heavy duty galvanised corrugated iron with lead flashings was applied to the structure. A small number of sheets of the original roof material, whose condition was still acceptable, were reinstated into the roof in the north east corner for reference to earlier periods. Other works undertaken at the time were to repair the building structure, such as Verandah posts and rafters, and the reconstruction of the top courses of brickwork and the chimney. A new swale was created to direct water runoff around the building. An earlier brick path was rediscovered and reinstated and a new rainwater tank and stand were constructed.

Arranged with its long axis running east-west, the accommodation comprises a single eastern bedroom entered via a single door from the eastern verandah, while the central kitchen, from which the western bedroom is entered, has entry doors in its north and south walls, the north door being a later modification.

The 230 mm solid brickwork walls are laid in Flemish Bond and sit on a sandstone base course slightly wider than the wall. A low dado (about 1m high) of cement render on the external and internal walls appears to date to the early to mid-twentieth century period, an unsuccessful attempt to deal with damp that has exacerbated salt-damp deterioration in the masonry.

The window openings no longer have their original windows but most of the timber frames and sills remain. The openings are in filled with plywood panels to keep out weather. Some early four-panel doors remain in situ. The floor features bush-pole bearers laid directly on the ground with a mix of tongue and groove and butted boards on top. The flooring appears to have been replaced/added to at various stages.

The remaining roof framing comprises bush-pole ceiling joists laid across the width of the building to which are fixed the cypress pine boards used for the ceilings below. As in the Kitchen Wing, these ceilings are previous (twentieth century) replacements for the original.

The two internal fireplaces, connected to the remains of the twin-flued chimney, retain their layout and openings but have no surrounds or thresholds. A timber board and timber bracketed mantle shelf exists above the fireplace in the central room of the building.

A summary of the building's current condition and integrity, compared with the condition and integrity observed during the 2012 GML inspection, is provided in **Table 6** (at the end of this section).

Slab Horse Boxes (The Stallions' Box)

This building appears to have been purpose-built as two horse boxes. Dating from 1900-1906, the structure is pole framed with timber slab walls and a corrugated iron roof over timber shingles. Rectangular in plan, the structure comprises six principal posts driven into the ground, with a heavy bush pole 'ring plate' from which the bush pole rafters spring.

Three planes of the roof (north, east, and west) retain their shingle battens and cladding under the later corrugated iron roof, fixed with roofing screws and lead washers into the original structure. The south roof plane has been rebuilt/repaired losing its shingles/battens.

The walls are vertical slabs, held by the top plate and driven into the ground at base. The slabs are adzed down at their tops to present less thickness for nailing (or restraint by battens). The slabs show various holes and checks for receiving various unknown external attachments.

Half-round bead edge galvanized sheet gutters are secured by brackets spike fixed to the top plate. A round downpipe leads roof water to a round galvanised iron tank set upon a timber tank-stand against the north wall. The water tank displays a lean towards the east and is also partly concealed from view by substantial plant growth believed to be self-seeded.

The western wall includes two door openings which are fitted with recent (post 1994) ledged and sheeted stable doors, fitted on older iron hinges. These have replaced doors described in the 1994 survey. There is also one surviving window opening, to the north box, fitted with eight square timber bars. Another narrower window to the south box has been sheeted over.

Internally the building is divided into the north and south boxes by a slab wall, stopped back from the east side to allow a common timber manger to serve both boxes. This is a fine craft item, complete with iron hitching ring. A thin un-reinforced concrete floor has been poured inside the building, against its walls, at a later date.

A summary of the building's current condition and integrity, compared with the condition and integrity observed during the 2012 GML inspection, is provided in **Table 6** (at the end of this section).

Mounting Yard, Horse Boxes and Stock Yards

These structures dating to the 1906 horse-stud development at Wambo by Allen and MacDonald and are most usefully assessed as an interrelated group. Located away from the residential and domestic core of the site, these historically and functionally linked

structures are unlike the other structures on the site, featuring lighter timber framing (of stripped sapling bush-poles) with splayed weatherboard walls/infill panels. Internal partitions used to form the horse stalls are lined with thicker, close fitting boards for greater strength.

The main surviving Horse Box structure is a large open shed building of bush pole and sapling framing with a corrugated galvanised iron roof. The steeply pitched gable roof is sheeted with corrugated iron which continues at a lower-pitch over the attached open-sided verandah. The remains of part of the floor show that it was log bearers laid in the ground with timber slab planks. The rear area is unreinforced concrete.

The smaller timber-framed shed (and Horse Box) immediately adjacent is currently little more than a collapsed pile of building components partially covered by established trees, such as early Pepper Corns, and more recent weeds and suckers, rendering it unsafe for inspection.

Northwest of this pair of early buildings is another small shed structure which though shown in the 2006 CMP was not described or included in the study area. With its traditional 'rural out-building' form and materials, however - including timber framing and corrugated iron to roofs (to main gable and skillion lean-to) and walls - this structure contributes to both the visual and historical/functional character of the Mounting Yard group.

In the northeast corner of the precinct is the circular Mounting Yard (Stockyard or Corral), one of the more unusual and rare elements of the site. This structure essentially comprises vertical timber slabs set out in a large circular plan, braced along the top with horizontal slab rails. Over the years, however, as slabs broke, deteriorated or fell, 'fencing wire' repairs were carried out to retain the slabs in place. Connecting the Mounting Yard to the Horse Boxes are the remains of the former stockyards, which largely comprise sections of traditional slab timber post and rail fencing along the alignments of the former holding pens and chutes, as shown in the early plans and aerial photos.

A summary of the building's current condition and integrity, compared with the condition and integrity observed during the 2012 GML inspection, is provided in **Table 6** below.

Table 6: Condition and Integrity of Buildings at the WHC (2017 versus 2012)

Building	Summary of current condition (2012)	Comparison of current condition (2017)
<p>New House (Main Homestead)</p>	<p>Floors: Verandah base moving / settling – props installed</p> <p>Walls: Salt / damp attacked masonry near base of walls. Some cracking in masonry arches – props installed in both situations</p> <p>Ceilings: Lath and Plaster ceilings cracking and partially collapsing – props installed</p> <p>Roof: roofing re-secured, flashings checked especially at building junctions, chimneys and other penetrations. Ogee guttering all retained.</p> <p>Joinery: Deteriorated timber verandah posts and bases dismantled and stored. Zinc awning removed and stored.</p> <p>Other: Timber propping installed. PVC piping and acrylic water chutes used to direct rainwater away from the building base.</p>	<p>Floors: Deterioration of verandah base (and stone flagging) appears to have been slowed. Northeast corner verandah room floor has been removed (though not mentioned in 2012 CMP)</p> <p>Walls: Cracks in masonry in north, east and west elevations, cement rich render repairs for damp attack have failed, Cracking apparent in most internal plastered walls. Saw-cut control joints in walls have covered areas in red brick dust.</p> <p>Ceilings: Cracks still apparent though propping is effective in supporting ceilings. Large portions of ceiling in the Northwest verandah room have collapsed. Sections of plaster cornice mouldings have dropped away. Eaves soffit requires re-fixing and, in some places, replacing.</p> <p>Roof: Guttering has failed on the northern side. Roof repairs otherwise appear to be keeping water out of the building albeit inspection was on a day after prolonged dry spell. Hip cappings and all fascia and gutters need attention. Junction between north verandah roof and south roof of kitchen wing needs clearing.</p> <p>Joinery: Shutters missing from windows. Awning stored inside building. Door hardware removed from front door. Fire place surrounds, inserts and mantle pieces have all been removed from front rooms. Skirtings removed in some rooms. Fixtures and fittings of modern bathroom fit-out have been removed from northeast corner verandah room.</p> <p>Other: Extensive propping used in verandahs and most rooms. External propping, particularly that on southern verandah is graying from age and exposure to weather. Acrylic rain chute to southeast corner has lost all sheeting and no longer performs its intended function.</p>
<p>The Kitchen Wing (former House)</p>	<p>Floors: Extensive floor replacement has occurred in the past. Propping has been installed in the basement to support ground level floor.</p> <p>Walls: Upper floor brickwork appears to be in relatively sound condition and free of cracks. Chimneys are likewise. Salt / damp attacked masonry near base of walls – props installed.</p> <p>Ceilings: No mention.</p> <p>Roof: Upper floor roof and gutters appear to be in largely sound condition.</p>	<p>Floors: T&G boards are in reasonable condition. Termite damage is visible in four floor joists above northern room. Steps to the cellar are seriously eroded.</p> <p>Walls: Brickwork in upper floor appears in fair condition only with deterioration either side of window sills to east elevation. Serious damage is noted to sandstone bases of ground floor walls in places 3-4 courses above the ground or higher if cement render repairs have been made to the wall previously. Sandstone</p>

Building	Summary of current condition (2012)	Comparison of current condition (2017)
	<p>Flashings at building junctions have been made watertight.</p> <p>Joinery: Upper floor windows appear to be in largely sound condition. Deteriorated verandah posts have been removed – propping installed.</p> <p>Other: Timber propping installed. PVC piping and acrylic water chutes used to direct rainwater away from the building base. Modern debris and intrusive modern linings have been removed improving ventilation and revealing earlier fabric.</p>	<p>eroded so far that daylight is visible through the wall in many places. Walls in cellar are also seriously eroded by damp. Metal arch bars have corroded above openings of the laundry and have caused cracks in the brickwork.</p> <p>Ceilings: Eaves linings are coming loose and detaching from framing in places. Roof mostly appears to be holding water out of the building as water damage is limited to the northwest kitchen T&G ceiling lining adjacent to the laundry.</p> <p>Roof: Upper roof and gutters appear sound. Lower roof has been patched with clear corrugates acrylic at sheet junctions. Junctions between roofs lack drainage capacity made worse by collection of leaf litter. Gutters are missing on many elevations on the lower level. What drainage is available is funneled away with a clear acrylic rain chute.</p> <p>Joinery: Some louvred timber shutters are missing, others are fixed closed.</p> <p>Other: Windmill structure has been bent over and is resting on the roof of the West Verandah.</p>
The Servant's Wing	<p>Floors: No mention is given.</p> <p>Walls: Internal and External brickwork and chimney have all been affected by salt damp attack over many decades. Applied cement render has aggravated the erosion. Mortar has fretted from brickwork in a number of places and bricks have come loose. Walls have rotated outwards and north gable wall is unsupported. Propping has been applied to shore up the structure.</p> <p>Ceilings: No ceilings exist.</p> <p>Roof: The east and west verandahs have already collapsed. The main roof is progressively collapsing into the attic rooms. Flashings at chimney junction have been replaced to prevent entry of moisture into chimney structure.</p> <p>Joinery: Window joinery has collapsed but remains to assist interpretation.</p> <p>Other: A self-sown Grevillea Robusta (Silky Oak) has grown up in the footprint of the former verandah.</p>	<p>Floors: Plywood sheeting has been fixed to the upper floor framing and floor closing up gaps in the existing flooring.</p> <p>Walls: The walls especially North, west, internal divider, corners and chimney are badly eroded and / or fretted losing both brick and mortar. West wall near the northern corner has partly collapsed bringing down brickwork from above. The external corner of the chimney has also collapsed. The top four courses of the external skin are mostly missing. The southern gable has been badly re-bricked with cement rich mortar. Cracks appear in a number of walls</p> <p>Ceilings: No ceilings exist</p> <p>Roof: The main roof structure has been strengthened with propping, but sheeting is still missing, and rainwater still enters building directly causing deterioration of interior.</p> <p>Joinery: Original door remains in good condition. Window condition varies due to partial collapse of adjacent walls. Small shelf exists on inside of northern wall located at head height.</p> <p>Other: Building is highly dependent on installed timber propping.</p>
The Butcher's Hut	<p>Floors: No mention</p> <p>Walls: Timber slabs from walls have been restored to their original locations</p>	<p>Floors: Photograph but no mention</p> <p>Walls: Further timber slabs have dropped away from the walls (particularly south wall</p>

Building	Summary of current condition (2012)	Comparison of current condition (2017)
	<p>particularly on the north and west elevations. Mud mortar has been reinstated into the wall cavity.</p> <p>Ceilings: No ceilings exist</p> <p>Roof: Supplementary framing and propping supplied. Surviving corrugated iron sheeting re-fixed. Roof has been supplemented with clear acrylic roof sheeting.</p> <p>Joinery: Single ledged and sheeted door has hinges replaced. Fine mesh lines interior. Cutting table sits below windows with galvanized steel sheeting tacked across the reveals.</p> <p>Other: Invasive tree and vegetation growth has contributed to rotational movement of building. External timber propping has been introduced to stabilize the structure.</p>	<p>and south east corner) and are stored within the building. These require re-fixing. Further mud mortar has been lost from the wall where slabs have dislocated.</p> <p>Ceilings: No ceilings exist</p> <p>Roof: Measures to protect and secure building stability require maintenance. Clear acrylic supplementary sheeting requires re-fixing in places.</p> <p>Joinery: Photographs but no mention.</p> <p>Other: A self-seeded Peppercorn Tree is applying pressure to the building causing it to lean to the north. Timber propping will require adjustment. Additional termite protection will be required for the building due to its construction.</p>
Carriage House and Stables	<p>Floors: Original stone flagging exposed to view once again.</p> <p>Walls: Some cladding reinstated. Clear corrugated sheeting fixed over opening particularly west wall and attic gable ends.</p> <p>Ceilings: No ceilings exist</p> <p>Roof: Reinstatement of some roof members has been assisted with supplementary propping.</p> <p>Joinery: Clearing out of carriage bays has allowed the exposure of previously hidden components.</p> <p>Other: Invasive tree and vine plantings have been removed and have assisted with stabilization of structure.</p>	<p>Floors: Timber wall slabs have fallen over and have disturbed the stone flagging. The disturbance under the stone flagging requires investigation and action</p> <p>Walls: Many timber wall slabs are loose. Some have fallen over but others have not yet.</p> <p>Ceilings: No ceilings exist</p> <p>Roof: The roof appears to be providing protection. Roof fanning includes supplementary plywood bracing sheets at the ridge. Earlier roof shingles are protected by later corrugated roof sheeting.</p> <p>Joinery: The stalls area is in very good condition.</p> <p>Other: Nearby ground level scrub (a fire hazard) should be cut back. Additional termite protection is required due to building construction.</p>
Stud Master's Cottage	<p>N.b: The condition report from the 2012 CMP predates the extensive re-roofing project undertaken in 2013-4.</p> <p>Floors: Flooring appears to have been replaced / added to at various stages. Framing consists of bush-pole bearers laid directly on the ground.</p> <p>Walls: High water table has contributed to salt damp attack on footings and masonry walls. Application of cement rich render has exacerbated both the rate and extent of the damage.</p> <p>Ceilings: Cypress pine boards used for ceilings</p> <p>Roof: Roof had suffered storm damage and had been removed with the exception of some framing.</p>	<p>Floors: No mention</p> <p>Walls: Top courses of wall brickwork reconstructed. Brick chimneys reconstructed. Reused bricks were desalinized prior to re-bricking. Lime mortar was used. Building still exhibits severely eroded brickwork above the cement rendered dado line and immediately below window sills. Dado is breaking away in places. Red brick dust is accumulating on the floor.</p> <p>Ceilings: No mention</p> <p>Roof: Main roof framing has been reinstated and reconstructed on original plate. Verandah beams and posts reinstated, some replaced, New heavy duty galvanized corrugated iron sheeting installed almost throughout with lead</p>

Building	Summary of current condition (2012)	Comparison of current condition (2017)
	<p>Joinery: Window sashes are missing though window frames typically exist. Some early four-panel doors remain in situ.</p> <p>Other: Tarpaulin used for temporary weather protection.</p>	<p>flashing and new ogee guttering.</p> <p>Joinery: Window frames remain. A timber mantle exists in the central room of the building.</p> <p>Other: A drainage swale was constructed. A new water tank and base were constructed. An earlier brick pathway was uncovered and retained.</p>
<p>Slab Horse Boxes (The Stallions' Box)</p>	<p>Floors: The later concrete slab has cracked and broken up.</p> <p>Walls: No obvious termite damage in the walls or frame. The structure relies on the complete frame for stability as there is no bracing.</p> <p>Ceilings: No ceilings exist</p> <p>Roof: There may be termite damage in roof shingles</p> <p>Joinery: Recent ledged and sheeted stable doors are fitted to older iron hinges.</p> <p>Other: The slab horse boxes are in the best overall condition of all the structures within the Wambo Homestead Complex. The adjacent water tank has corroded, and the base has collapsed.</p>	<p>Floors: No mention</p> <p>Walls: A new bush round tie beam has been installed with a steel plate thus reinstating a tie beam across the building.</p> <p>Ceilings: No ceilings exist</p> <p>Roof: The bottom edge of the lapped roof sheeting has rusted, allowing rain into the building.</p> <p>Joinery: No mention</p> <p>Other: The building is in comparatively good condition. Materials that appear to belong to the building have been stacked inside. Additional termite protection is required due to building construction.</p>
<p>Mounting Yard, Horse Boxes and Stock Yards</p>	<p>Floors: No mention</p> <p>Walls: The walls of the horse boxes are vulnerable to movement and possible collapse.</p> <p>Ceilings: No ceilings exist</p> <p>Roof: The roofs of the horse boxes are vulnerable to movement and possible collapse.</p> <p>Joinery: Many recorded features such as the log feed trough have either deteriorated, collapsed or have been covered over by planting growth.</p> <p>Other: Horse Box buildings have all lost fabric and or partially collapsed resulting in poor condition and low integrity. Stock yard and Mounting Yard have suffered from similar deterioration and are in a vulnerable state.</p>	<p>Floors: In the Barn, a bearer has dropped causing a wall plate to deflect.</p> <p>Walls: The Main Horse Box remains standing though the smaller Loose Horse Box is nearly completely on the ground. Works to straighten and restore the rails in the Mounting Yard and Stock Yard together with the introduction of supplementary bracing have significantly improved the integrity of the Yards and holding areas.</p> <p>Ceilings: No ceilings exist.</p> <p>Roof: As per the walls.</p> <p>Joinery: The chutes, race and loading ramp have also benefitted from recent stabilization works in the Yards.</p> <p>Other: The Horse Boxes have lost a significant degree of integrity. The integrity of the Yards has improved. The Barn is in surprisingly good condition.</p>

3.4 Overview Historical Archaeological Assessment

3.4.1 Background

The site's historical archaeological potential was not addressed as part of the 1994 CMP.

In 2012 GML completed an historical archaeological assessment of the WHC. This assessment considered the potential for the Wambo Homestead site to contain historical archaeological remains associated with its historical use and development. This assessment built on the site and historical information provided in the 1994 CMP,

supplemented by a site inspection by GML archaeologists in February 2012, to take note of current site conditions (at the time), as well as archaeological analysis of the available historical information.

This review of the CMP does not include a review by an archaeologist however the archaeological monitoring and recording of reconstruction works to the Stud Master's Cottage and its immediate surrounds (the shallow cut to create a swale) in August – September 2013 resulted in the identification of minor archaeological remains, consistent with historical evidence.

The significance of the site's potential historical archaeological resources is discussed in **Section 5.0** of this report, as part of the broader heritage significance of the site.

3.4.2 Site Analysis

During the 2012 site inspection, various aspects of the study area were noted, including the general character of the site and its landscape, evidence for known or potential disturbance across the site, and areas where previous site elements or activities had been recorded.

The study area retains its rural character and is dominated by standing structures associated with its historical use and development. Since the establishment of the estate in the 1830s, the study area has remained the domestic hub of the Wambo property, and most of the core buildings associated with the site's historical use and development are still standing. The rural uses of the property (agriculture and animal husbandry, particularly horses) have continued and evolved throughout the site's history, from the 1830s until the late 1980s.

Given the continual operation of the site and its general evolution, the site's historical archaeological potential could be generally characterised as material evidence associated with the standing buildings and their occupation, as well as physical evidence associated with the operation of the estate, particularly the horse stud.

Parts of the study area have been identified as having potential to contain archaeological remains associated with specific former built elements or other infrastructure. Areas of the site also have potential to contain accumulated material (deposits and artefacts) associated with the use of the site over time, including general occupation and specific activities within and around the buildings and yards. The site's archaeological resources have potential to provide information about the operation of the Wambo Estate throughout its historical occupation, including information about the estate's residents and workers.

The study area was divided into operational precincts as part of the 1994 CMP. These precinct boundaries were developed without consideration of the site's archaeology. This archaeological assessment refers to these boundaries, where relevant, including where areas of archaeological potential cross these boundaries. The site's archaeological potential could inform future realignment of these boundaries, to ensure that the precincts better reflect the operational and historical uses of the site.

3.4.3 Physical Disturbance

There have not been major physical modifications to the site or substantial changes in its operation that would have significantly impacted on the site's potential to retain historical

archaeological remains associated with former elements of the site. The main physical impacts to the site that may have disturbed areas of archaeological potential include:

- Construction of the coal haulage road that cuts through the study area;
- Vehicle tracks across the site;
- Installation of underground services across the site, including trenching for water supply, drainage and sewer pipes and utility connections;
- Construction and extension, as well as demolition and removal, of built elements and other features that may have disturbed evidence associated with previous elements and activities in these areas; and
- Modifications within standing buildings that have disturbed associated evidence (eg upgrade or modifications to flooring and installation of services within buildings).

3.4.4 Historical Context

While the historical use and development of study area dates back to the 1830s, the earliest known plan dates to 1892. Based on historical research, it is believed that the first building of the Wambo Homestead was a single-storey stone building with a cellar, which would have served as home for James Hale and his family. Between 1835 and 1845, Hale continued to add buildings to the Wambo Estate. A new house was constructed by 1845. The first building was converted into the kitchen wing and extended through the addition of several rooms including a kitchen, bathroom and an upper level constructed from brick. A servant's quarters, stud master's cottage, and a carriage house with stables were also constructed around this time. All of these buildings remain standing at the site.

After the death of William Durham (Hale's stepson and heir to Wambo) in 1892, the Wambo estate was purchased by Benjamin Richards, a dominant figure in the cattle industry. While Richards and his family never lived at Wambo and his ownership was for a period of 4 years, it is possible that the slab butcher's hut, horseboxes and the mounting yards were constructed around this time.

In 1905, Wambo was acquired by Reginald Allen and Frank MacDonald for the intention of developing a thoroughbred horse stud and this involved the construction of more horseboxes and mounting yards. The round yard was also built at this time. In 1908, Wambo was advertised for subdivision and included in the description of estate was 'There are also at the back of the homestead, on splendid ground, 30 Loose Boxes, 18 Stalls and Yards attached' (Maitland Mercury, 21 April 1905).

There site contained a number of former built elements, which are noted in the historical record but are no longer standing. The site may have also contained other former items, such as minor outbuildings, yard/farm elements and other infrastructure, and associated deposits, which were not recorded and of which no visible surface elements survive.

Aerial photographs of the estate taken in the mid-to-late twentieth century (1951, 1974 and 1991) show all of the buildings currently standing at the site, as well as a number of built elements that have since been removed. The 1974 aerial shows a barn within the Stable Yard precinct, possibly the same shown on the 1892 plan, and a milking shed, located north

of the barn. Within the Stock Yard precinct, the horse mounting building extended further north than the current structure, with four yards attached to the western side of the building. To the east of the horse mounting building were three enclosed yards and three smaller buildings to the north. By the time the 1991 aerial was taken, the barn and milking shed had been demolished. The horse mounting building had also been partially removed, as well as the yards to the east. Two of the three buildings to the north had also been removed by this time.

The mid-to-late twentieth century aerial photographs also show how access to and across the site has changed in this period, with various tracks shown, with changes in alignment that reflect changes in the use of the site over time. Most recently, the sealed coal haulage road associated with the mining operations now cuts through the study area, with access points off this main route.

3.4.5 Potential Historical Archaeological Evidence

The potential historical archaeological evidence that may be present within the study area (as identified by GML during the 2012 CMP review) is identified in **Table 7**. The integrity of these remains (their likelihood of survival) is assessed as either low, moderate or high. The information presented in this table is summarised in **Figure 6** which shows areas of the site that have historical archaeological potential, with the location of specific archaeological remains identified, where possible.

Table 7: Likely integrity of potential historical archaeological evidence

Site Element	Precinct	Date	Potential Evidence	Likely Integrity
Evidence of former buildings and other structures (domestic and farm-related)				
Possible early outbuildings associated with the first house, such as a detached kitchen and outhouse/privy (location and form unknown)	Home Compound	c1830-1847	Structural remains (stone or brick foundations, and/or post holes) Occupation deposits containing domestic artefacts Possible paved or compacted floor surfaces Deeper subsurface remains of privy	Low -Moderate
Former verandah surrounding the existing Stud Master's Cottage	Stud Master's Cottage	c1837	Structural remains (post holes) Possible paved or compacted floor surface Artefacts associated with occupation of cottage	High* NOW VERIFIED
Small structure (unidentified function), next to the Stud Master's Cottage	Stud Master's Cottage	Pre-1892	Structural remains (stone or brick foundations, and/or post holes) Occupation deposits containing artefacts Possible paved or compacted floor surface	Low- Moderate
Small structure (unidentified function-possible Slab Horse Box), located northeast portion of Stud	Stud Master's Cottage	Pre-1892	Structural remains (stone or brick foundations, and/or post holes) Occupation deposits containing artefacts Possible paved or	Low- Moderate

Site Element	Precinct	Date	Potential Evidence	Likely Integrity
Master's Cottage			compacted floor surface	
Barn	Stable Yards	Pre-1892 Demolished 1974-1991	Structural remains (stone or brick foundations, and/or post holes) Occupation deposits containing artefacts Possible paved or compacted floor surface	Moderate
Milking shed	Stable Yards	Pre-1951 Demolished 1974-1991	Structural remains (stone or brick foundations, and/or post holes) Occupation deposits containing artefacts Possible paved or compacted floor surface	Moderate
Northern portion of the existing horse mounting building	Stock Yards	Pre-1951 Demolished 1974-1991	Structural remains (post holes) Remnant concrete, paved or compacted floor surface Occupation deposits containing artefacts	Moderate
Two small structures to the north of the horse mounting building. One of structures appears to have a small attached paddock.	North of Stock Yards	Pre-1951 Demolished 1974-1991	Structural remains (stone or brick foundations, and/or post holes) Occupation deposits containing artefacts Possible paved or compacted floor surfaces	Low
Chicken coop	Home Compound		Structural remains (post holes) Organic deposits Associated artefacts	Low -Moderate
Evidence of former farm-related infrastructure				
Possibly additional stock yards (it is not clear if the stockyard shown on the 1892 plan represents the existing stockyard elements as the plan does not correlate to the current location of these elements)	East of Stock Yards	Pre 1892 Demolished Pre-1951	Post holes Associated artefacts and deposits	Low
Milking yard (possibly located southwest of the existing Stock Yard elements, based on 1892 plan, so location and dimensions of this feature may be indicative only)	Stock Yards, extends into Stud Master's Cottage	Pre 1892 Demolished Pre-1951	Post holes Associated artefacts and deposits	Low -Moderate
Yards adjacent to the horse mounting	Stock Yards	Pre-1951 Demolished	Post holes Associated artefacts and	Low- Moderate

Site Element	Precinct	Date	Potential Evidence	Likely Integrity
building		1974-1991	deposits	
30 loose horseboxes and 18 stalls. The exact location of these features is unknown, but they could have been located among the existing horse box and mounting buildings	Probably Stock Yards	Pre-1908	Post holes Associated artefacts and deposits	Low -Moderate
Occupation deposits associated with buildings and outbuildings (former and existing), that may contain artefacts related to the use, occupation and operation of the site and its elements				
Underfloor occupation deposits within the building footprints of former and existing buildings, especially those that have or previously had timber flooring	Home Compound Stud Cottage Stable Yards	c1830 to late twentieth century	Domestic and/or agricultural-related artefacts, including ceramic, glass, fabric, leather, faunal remains, metal objects, organic material, building materials etc associated with the occupation, construction and/or demolition of the structures	Moderate
Yard occupation deposits, including artefact scatters, rubbish dumps and pits (eg the 1994 CMP identified the series of mounds and ponds to the west of the Home Compound precinct as a 'House Tip')	All	c1830 to late twentieth century	Domestic and/or agricultural-related artefacts, including ceramic, glass, fabric, leather, faunal remains, metal objects, organic material, building materials etc associated with the occupation and operation of the estate.	Moderate
Deposits within deeper subsurface features, such as privies, cisterns and wells	Home Compound Stud Cottage Possibly other precincts	c1830 to mid-twentieth century	Domestic and/or agricultural-related artefacts may have accumulated inside these features, including ceramic, glass, fabric, leather, faunal remains, metal objects, organic material, building materials etc associated with the occupation and operation of the estate.	Moderate-High
Deposits and artefacts within and around agricultural-related structures, yards and other elements of the stock yards and stables	Stable Yards Stock Yards	c1830 to late twentieth century	Agricultural-related artefacts, such as metal and timber objects associated with agricultural activities.	Moderate

Site Element	Precinct	Date	Potential Evidence	Likely Integrity
Evidence of other site elements				
Depression to the west of the New House (identified in the 1994 CMP as a 'Well/Cistern')	Home Compound		Structural remains (brick or stone) Domestic and/or agricultural-related artefacts associated with the occupation of the house and operation of the estate may have accumulated inside this feature, when it was in use or after they were decommissioned.	High
Other wells, cisterns or privies	All		Structural remains (brick or stone) Occupation or refuse deposits, as noted above	
Early services or drainage elements	All		Trenches, ditches, pipes or lined channels	Moderate
Former tracks and driveways into and across the study area	All		Compacted surfaces, possibly with introduced fill Linear depressions	Low-Moderate
Former fencelines	All		Post holes	Low- Moderate
Former garden features and landscaping, including paths, garden beds, plantings and other features (such as a path along the south side of the New House and terracotta garden edging along the south and east side of the New House, as identified in the 1994 CMP)			Paths or paved areas (eg former path along southern side of New House) Gardens beds/edging (eg terracotta garden edging along southern and eastern sides of New House) Botanical evidence of former plantings Structural remains (stone or brick foundations or post holes) of former garden structures (eg greenhouse, gazebo)	Moderate Moderate Low Low
Tennis court	Stable Yards	Twentieth century	Levelled court surface Postholes from former fenceline Associated landscaping	High

* Archaeological monitoring and recording of reconstruction works to the Stud Master's Cottage and its immediate surrounds (the shallow cut to create a swale) in August – September 2013 resulted in the identification of minor archaeological remains, consistent with historical evidence. The archaeologists concluded that 'given the limited extent and nature of the identified archaeological remains, the research potential of the site has not been fully realised.' The report also noted, 'any future ground disturbance works scheduled for the areas of archaeological potential within the State heritage curtilage of the site should be undertaken pursuant to an Excavation Approval under section 63 or Exemption under section 57(2) of the NSW Heritage Act.'



Letter	Site Element
A	Former verandah surrounding the existing Stud Master's Cottage
B	Small structure (unidentified function), next to the Stud Master's Cottage
C	Small structure (unidentified function, possibly Slab horse box), in north east in Stud Master's Cottage Precinct
D	Barn
E	Milking shed
F	Northern portion of the existing horse mounting building
G	Two small structures (one with a small fenced yard) to the north of the horse mounting building
H	Chicken coop
I	Possibly additional stock yards
J	Milking yard
K	Yards adjacent to the horse mounting building
L	Underfloor occupation deposits
M	Mounds and Ponds ("House Tip")
N	Depression ("Well/Cistern")
O	Known former fencelines
P	Tennis court

	None
	Low
	Low-Moderate
	Moderate
	High
	Potential for domestic related occupational deposits and artefacts
	Potential for remains of former gardens and landscape features
	Potential for agricultural related deposits and artefacts
	Potential for remains of horse boxes & stalls
	Former features
	Standing structures

Figure 6: Archaeological Zoning Plan (from 2012 CMP)

4.0 Comparative Assessment

4.1 Introduction

4.1.1 Scope

This section examines the Wambo Homestead Complex and the context of places and groups of places with which it shares key features, characteristics and/or historic themes including:

- Early country/regional homestead complexes, including a main residence and group of outbuildings (in this instance dating from the early nineteenth century into the early twentieth century) that have survived to the present day;
- Early free-holdings/rural sites associated with the early convict and emancipist history of NSW;
- Places retaining links/associations with the early land grants of the Hunter Valley; and
- Sites retaining comparable evidence of the substantial agricultural and pastoral activities from the early years of settlement and agrarian enterprise in the Hunter Valley.

The discussion also touches on particular attributes which contribute to notable and/or unusual aspects of significance, including:

- Unusual attributes (architectural, technical, construction/materials, etc) of particular elements/structures within the complex; and
- The character of the wider visual setting of the place.

4.1.2 Approach

The following assessment builds on the initial foundations provided by the *Comparative Study Wambo Homestead Complex Heritage Strategy* included as Section 4.0 in the '*Wambo Homestead Complex Heritage Strategy*' by GML (dated September 2010). In this earlier study, an extensive collation and review of readily available descriptive, historic and assessment data of potentially comparable sites was prepared for cross referencing with the Wambo Homestead Complex. Specialist historical and architectural input helped identify and assess the extent to which components and historic themes of these places compared with Wambo. Further information on individual sites (including photographs and historical data) is included in the September 2010 report.

Since the 2010 report, additional historical research and investigation of surviving sites has been carried out to more finely tune both:

- The list/inventory of sites that may be judged in some manner 'comparable' to Wambo; and
- The key attributes and characteristics relevant to this comparative assessment, including places with assemblages of interrelated components, similar architectural genealogies, traditional rural architectural forms and materials, and historic associations with the people and activities of early Hunter Valley settlement.

A comparative assessment of the Wambo Homestead Complex in its early setting, entitled *'European Settlement of the Hunter Region up to 1850'*, was then prepared by Professor Ian Jack (University of Sydney) for WCPL, based on the additional research and site inspection material. The following section provides an edited version of the major conclusions of this report, divided by sub-headings which identify the key attributes and characteristics being compared.

4.2 Wambo in a Comparative Setting within the Hunter Region

4.2.1 Hunter Region Land Grants

Wambo is one of approximately two dozen estates still well known today that were acquired and consolidated by significant families - for agriculture and pastoral/stockbreeding activities - from the nearly 300 foundation land-grants in the Hunter region in the 1820s.

Wambo is a rare example in the Hunter region of ex-convict ownership of a significant regional land holding. The place provides evidence of the means by which the original owner and developer, James Hale, prospered and established links with free settlers, joining the more notable Squatter society of the early colony.

Wambo is one of the small group of substantially sized early holdings whose owners (in this case James Hale) trace their roots to the significant families of the Hawkesbury. The other notable examples include George Bowman of Arrowfield and Archerfield and William Cox senior at Negoa. Most of the other Hawkesbury settler properties in the Hunter Region (including Benjamin Singleton or the Eathers) were of a much smaller scale.

4.2.2 Rural Homestead Complexes

Wambo is one of the few remaining rural complexes within the Hunter Region, having retained both an early (1840s) homestead and a number of early out-buildings dating from the nineteenth to the early twentieth centuries, though it has lost its early, substantially sized barn. The core group of five buildings dating to the 1830s - 1850s retain important early components and fabric.

Of comparable rural homestead complexes in the Hunter Region, Tocal is the most outstanding example and Dunmore is also impressive, though on a more restricted scale, Wambo's assembly of buildings stands out as relatively rare among the generally more compromised building groups. (As an example, the historically comparable site Bolwarra, across the river from West Maitland, retains only its homestead, in much altered form, while its one remaining barn is now on a separate title.)

Wambo retains much of the early visual character of its wider setting from within the Homestead Complex, with its combination of rural paddocks surrounded by the more distant natural landscape of the Wollom National Park.

Wambo enjoyed an unusual stability of ownership throughout the nineteenth century, firstly under James Hale from the 1820s to his death in 1857, and then under members of his step- family, the Durhams, until 1905. In this regard it has particularly strong historical associations with the life stories and activities of this dynasty.

4.2.3 Main Homestead

Wambo's main homestead is unusual/ rare within the Hunter Region because:

- The original early 1830s homestead still survives, albeit in altered form as an adapted, two storey service wing to a later single storey residence; and
- The single-storey main house was built at the height of the Depression of the 1840s and, on currently available information, it is the only homestead in the region to have been built around 1844.

Comparable sites were generally not completed until after the Depression (ie 1850 or later), including William Arnold's Stradbroke House, near Woodville, (started in 1840 but not built until 1850) and Andrew Lang's Dunmore (with its earlier homestead at right angles to the second house but each building dating almost a decade earlier than the comparable section of Wambo).

The main homestead also features some unusual architectural features, including the asymmetrical internal plan layout (most notable in the main entry hall) behind the conventionally symmetrical 'Victorian Georgian' front façade and this elevation's timber verandah columns. Given the era of its construction during the 1840s Depression and the origins of its first owner/builder, the ex-Convict James Hale, these details can be seen as practical expediencies by a pragmatic and successful man.

4.2.4 Association with Horse Breeding

Wambo has been strongly associated with horse breeding for much of the nineteenth and early twentieth century, and while its surviving evidence is from a variety of periods and owners, the range of its outbuildings effectively evokes this important aspect of its history. In this respect it is comparable to Segenhoe, Potter McQueen's famous stud, which still breeds horses and retains some of its earlier buildings, but, as at Wambo, these structures reflect more than one phase over more than 180 years of change and development. At Plashett, which was the major Singleton stud in competition with Wambo in the mid-nineteenth century, the early out-buildings have all been removed. (The complete comparative picture cannot, however, be drawn until more comprehensive studies have been completed of past and present horse-studs in this major breeding region.)

Under the Hale Durham period, the principal activities on the estate included the breeding of both draught-horses and racing horses in two phases from the 1840s to the 1870s. The surviving carriage-house/stables structure dates to this period and was intended to serve the general need of draught-horses and carts for farm use. While these timber-slab structures are generally good representative examples of their type and period, they are not particularly rare. No stables or other structures associated with race horse breeding survive from the Hale- Durham period, though sites such as the former Barn (shown in the 1892 survey plan) west of the Homestead Complex may have some archaeological potential.

The surviving structures directly related to horse breeding activities - including stallion boxes, stalls and circular mounting yard (to the north of the Homestead Complex) - date from the third stud, established by Allen and McDonald between 1905 and 1907. These structures are particularly evocative of Wambo's horse-breeding history, and the circular

mounting yard is of considerable rarity, with no similar yard comparable to this, from any period, having been identified in the Hunter region. Other examples of similar stallion boxes, however, include Dunmore which has preserved a distinctive separate stallion box within its stables.

4.2.5 Association with Cattle and Sheep

While Wambo was associated with the breeding of quality cattle under the Hale-Durham family from the 1830s until the 1870s, little above-ground physical evidence (other than paddock fencing lines) survives from these years of this activity.

The small, timber vernacular-style Butcher's Hut (west of the main homestead) is, however, almost certainly from the Hale-Durham period (ie pre 1905) and is a rare surviving example of a once ubiquitous rural outbuilding. The timber slab construction filled with rammed earth/clay for insulation in both walls and roof and mesh-screened vents in the external walls are unusual features in what is a relatively intact structure. Certainly no comparative examples, in the Hunter region at least, are currently known, though again there is a lack of recording information on such structures generally.

4.3 Conclusions

4.3.1 Rarity

The place is a rare surviving example of regional homestead complex begun in the 1830s that is still able to demonstrate the development of land tenure, pastoral and agricultural activity in the Hunter Region - an important early region of settlement - from the colonial period to the present.

The place is a rare example in the Hunter Region of ex-convict ownership of a significant regional landholding and the means by which the owner/developer (Hale) prospered and established links with free settlers, joining the more notable Squatter society of the early colony.

The place is a notably large and important group of nineteenth and early twentieth century homestead buildings, with a rare core group of five buildings dating to the 1830s-50s which retain important early components and fabric.

The main residence is a rare example within the Hunter Region of a substantial house constructed in the middle of the 1840s Depression, as well as an unusual example of an idiosyncratic vernacular adaptation of more elegantly resolved Victorian-Georgian architectural models.

A number of the outbuildings and associated structures are notable and rare, particular examples including the Butcher's Hut and circular Mounting Yard.

4.3.2 Representativeness

Wambo is a good representative example of early-nineteenth- to mid-twentieth-century regional homestead complex, and provides important evidence of the early settlement, subdivision, agrarian and pastoral use of the Hunter Valley through its location, layout and surviving structures/site components.

The place is a good representative example of the changing fortunes of different rural site uses and resources in NSW over the last 200 years, from simple pastoral and agrarian pursuits to more intensive animal breeding (horses and cattle) through to the subsequent, and current, resources/mining developments.

The layering of the place through accretions and alterations to the layout, components and structures and fabric, is representative of the pattern of development of working-farm complexes, as well as vividly demonstrating key themes and periods in its development and use/ownership.

5.0 Analysis of Significance

5.1 New South Wales Heritage Assessment Guidelines

5.1.1 Introduction

The following assessment and statement of cultural significance for the Wambo Homestead Complex has been prepared in accordance with the NSW Heritage Manual Guidelines (NSW Heritage Office and Department of Urban Affairs and Planning). These guidelines incorporate the five types of cultural heritage values identified in the Burra Charter into a specifically structured framework that is generally prescribed as the required format by heritage authorities in New South Wales.

Note: The term 'item' is used the NSW Heritage Manual in the same way that 'place' is used in the Burra Charter for the identified heritage item/place/site. In this CMP, the terms are generally used interchangeably.

5.1.2 State and Local Historical Themes

The NSW Heritage Manual identifies a specific set of 'Historical Themes relevant to New South Wales' within which the heritage values of the place can be examined. Relevant state themes for the Wambo Homestead Complex are identified in **Table 8**, together with Local sub-themes.

Table 8: Historical Themes*

Historical Theme	NSW Theme	Local Theme	Notes
Peopling Australia	Aboriginal cultures and interactions with other cultures	Wannaruah / Kamilaroi people.	European contact, workplace, remembering Aboriginal cultural identities and practices, past and present. History of interactions and race relations.
Peopling Australia	Convicts	Wambo estate, major land holding	Associations with James Hale - emancipated convict who became a wealthy pastoralist and land owner. Establishing the homestead buildings. Part of Hale's NSW land holdings.
Economic Development	Pastoralism & Agriculture. Feeding the colony	Upper Hunter pastoral growth & innovation.	Breeding quality cattle and horses. Grazing; lucerne feed crops; wheat and maize. Later McDonald's dairy herd.
Phases of life; changing ownership and enterprise	Person(s)	Associations with identifiable individuals of significance	James Hale and William Durham, their families. Associations with Windsor and land ownership in the Hunter. Allen and Frank McDonald. Their buildings and alterations.
The sport of horse racing	Sport	Horse stud innovation and success	Durham's Wambo horse breeding 1860's, early 1870's. McDonald's Wambo horse breeding 1905-1919.
Developing Economies	Mining. Underground, later open cut	Coal Mining in the Hunter Valley	Coal seams found 1863. 1971 sale to Wambo Mining Corporation. From 1985 to the present various mining companies have owned the remaining, consolidated estate.

*adapted from the 'Heritage Council of New South Wales Historical themes' published 4 October 2001.

5.1.3 State Heritage Register and Local Listings

The Wambo Estate, outbuildings and curtilage was listed on the State's Heritage Register, under the Heritage Act as item 00200 in April 1999. Prior to that, Wambo Homestead had been subject to a Permanent Conservation Order since September 1982.

The Singleton Development Control Plan 2014 supports the Singleton Local Environmental Plan 2013 (LEP). Schedule 5 of the LEP 'Environmental heritage' lists Wambo Homestead and Outbuildings, Warkworth off the Golden Highway being Lot 82 DP 548749 as Item 144 as being of State Significance.

The current Statement of Significance in the SHR listing has been reviewed in the process of preparing this CMP Review in the context of the revised historical analysis and examination of existing site elements and fabric. In a few areas, the assessment of significance in this report differs from and/or slightly amends the SHR listing conclusions/claims.

The Heritage Council of New South Wales has previously rejected an application to have the Wambo Homestead Complex removed from the State Heritage Register. This clearly reconfirms the previous assessments of its State significance.

5.2 Heritage Assessment of Wambo Homestead Complex

This section assesses the heritage significance of the Wambo Homestead Complex in accordance with the criteria set out in the NSW Heritage Office Guidelines. The assessment includes consideration of the original and subsequent layering of fabric, uses, associations and meanings of the place as well as its relationship to its immediate and wider settings.

5.2.1 Criteria for Assessment of Significance

The NSW heritage assessment criteria encompass the four values in the Australian ICOMOS Burra Charter, which are commonly accepted as generic values by all Australian heritage agencies and professional consultants. With a common approach, applying common criteria to assessment, the comparison of items of heritage significance can be a more objective process. The four values (categories) are:

- Historical significance,
- Aesthetic significance,
- Scientific significance, and
- Social significance.

Definitions from the Heritage Act include, " 'Local heritage significance'- in relation to a place, building, work, relic, moveable object or precinct, means significance to an area in relation to the historical, scientific, cultural, social, archaeological, architectural, natural or aesthetic value of an item." The term 'item' is used by the NSW Heritage Manual in the same way that 'place' is used by the Burra Charter.

The four values are examined as seven (7) criteria:

- a) Historical: An item is important in the course, or pattern of NSW's or a local area's cultural or natural history.
- b) Social: An item has strong or special association with the life or works of a person, or group of people of importance in NSW's or a local area's cultural or natural history.
- c) Creative or Technical: An item is important in demonstrating aesthetic characteristics and / or a high degree of creative or technical achievement in NSW or for a local area.
- d) Cultural: An item has strong or special association with a particular community or cultural group in NSW or a local area for social, cultural or spiritual reasons.
- e) Archaeological / research: An item has potential to yield information that will contribute to an understanding of NSW's or the local area's cultural or natural history.
- f) Rarity: An item possesses uncommon, rare or endangered aspects of NSW's or a local area's cultural or natural history.
- g) Representative: An item is important in demonstrating the principal characteristics of a class of NSW's or a local area's cultural or natural environments or places.

5.2.2 Heritage Assessment

Table 9 summarises the Heritage Assessment outcomes from the 2004 SHR Assessment, alongside the 2012 CMP assessment and 2017 CMP review notes.

Table 9: Heritage Assessment Summary (2004, 2012 & 2018)

Criteria	SHR Assessment 2004	2012 CMP Review Assessment (GML)	2017 CMP Review Notes (EJE Heritage)
<p>Historical Criteria (a) Historical Significance</p>	<p>Wambo Homestead shows the development of pastoral activities in the Hunter Valley after Commissioner J.T Bigge's reports to the British Government on the state of the colony and its administration. Wambo Homestead specifically shows the pattern of selection by residents of Windsor via John Howe's newly established Bulga Road.</p> <p>It provides evidence of the rise to wealth of James Hale, a former convict and important resident of Windsor who by the mid-1840s had established himself as a successful entrepreneur and one of the 100 largest landholders in the colony. Wambo Homestead is a rare example which demonstrates the economic development of the Hunter Valley Region from an agricultural base through sheep, cattle and horse breeding to dairying and presently coal mining. The process involved in gaining the best economic opportunities from the property can be clearly seen.</p>	<p>The place is a rare surviving example of a regional homestead complex begun in the 1830s that is still able to demonstrate the development of land tenure, pastoral and agricultural activity in the Hunter Region - an important early region of settlement - from the colonial period to the present. It provides evidence of the early settlement, subdivision, agrarian and pastoral use of the Hunter Valley through its location, layout and surviving structures/site components.</p> <p>The place is a rare example of ex-convict ownership of a significant regional landholding and the means by which the owner/developer (Hale) prospered and established links with free settlers, joining the notable pastoralist society of the early colony.</p> <p>The place demonstrates the changing fortunes of different rural site uses and resources characteristic of the state's history over the last 200 years, from simple pastoral and agrarian pursuits to more intensive animal breeding (horses and cattle) through to the subsequent and current, resources/mining developments. The significant layering of the site through accretions and alterations to the layout, components, structures and fabric demonstrates key themes and periods in its development and use/ownership.</p> <p>The place has the potential to contain archaeological evidence associated with its evolution and occupation. This evidence has the potential to contribute information about the physical character of the place, the occupants and their activities, that would be relevant to key historical themes.</p>	<p>Second 'wave' of land ownership.</p> <p>'The significant layering of the site through accretions and alterations to the layout, components, structures and fabric demonstrates key themes and periods in its development and use/ownership'. CMP2012 Setting is still significant. Sheep were passing through. Hale and Durham also farmed on other land holdings.</p>

Criteria	SHR Assessment 2004	2012 CMP Review Assessment (GML)	2017 CMP Review Notes (EJE Heritage)
Social Criteria Associative Significance (b)	<p>As the creation of the convicted thief, James Hale, Wambo Estate demonstrates the enormous opportunities open to the pioneers of New South Wales. Within two decades a farm boy serving a seven year prison term had become wealthy and influential in two districts, the Hawkesbury and the Hunter Valley, and one of the colony's largest landholders. In the Durham period, the property continued to yield affluence to its owners, allowing the children of convicts to control the circumstances of their lives and to live with some style.</p>	<p>The place is closely associated with the life of James Hale and his family and their notable contribution to the settlement and agricultural/pastoral development of the Hunter Valley.</p> <p>The place is closely associated with horse breeding, initially under Hale but more importantly under his successors, stepson William Durham (1850s-1870s) and the McDonald brothers (1905-1919). It retains important evidence of these uses, particularly in the circular Mounting Yard, stable buildings including horse boxes and fenced yards.</p> <p>The place is associated with extensive pastoral use (primarily cattle grazing with occasional sheep) throughout most of its life. Pastoralism was particularly important in the late nineteenth century under William Durham and Benjamin Richards, and in the early twentieth century under the McDonalds.</p> <p>The place has the potential to contain archaeological evidence that may contribute information related to key individuals who occupied and operated the property, as well as the activities and developments they fostered.</p>	<p>Hale's relationship with William Cox, in the Hawkesbury area. 'Hale joined the pastoralist society of the early colony'. CMP2012 It was further developed by William Durham.</p>

Criteria	SHR Assessment 2004	2012 CMP Review Assessment (GML)	2017 CMP Review Notes (EJE Heritage)
<p>Creative Technical</p> <p>Criteria Aesthetic</p>	<p>or</p> <p>(c)</p> <p>Wambo Homestead remains substantially intact and largely unaltered. The buildings follow the architectural vocabulary of vernacular Georgian England and demonstrate the progressive architectural development of a typical early Australian homestead group.</p> <p>The New House (c.1847) is state significant for its capacity to demonstrate refined design and architectural ambition at an early stage of colonial settlement through its conception as an architecturally ambitious Regency style villa that was designed to impress as a tasteful, spare, symmetrical grand homestead residence placed to present to the valley floor and ranges to the south.</p>	<p>The place is a notably large and important group of nineteenth- and early-twentieth-century homestead buildings, with a rare core group of five buildings dating to the 1830s-50s which retain important early components and fabric. It provides important evidence of the evolutionary patterns of early to mid-nineteenth century rural homestead complexes in NSW, particularly in the rich farming/pastoral lands in the main river valleys.</p> <p>The main residence is an important surviving example of early Victorian-Georgian country homestead retaining important original features and fabric with various subsequent alterations and additions. The architectural idiosyncrasies of the residence's design and detailing also contribute to its aesthetic uniqueness.</p> <p>The outbuildings and associated vernacular structures are notable and rare, particularly examples such as the Butcher's Hut and circular Mounting Yard.</p> <p>The place contains important layers of evidence (in its buildings, landscape features and archaeological remains) of its various owners, changes in functional needs and wider socioeconomic changes over the past 180 years. With the key periods of historical development and change continuing up to the First World War, the site is particularly important for the extent, variety and integrity of surviving components (including fencing, outbuildings and landscape features) from a range of periods.</p> <p>The Homestead Complex and its immediate setting within the SHR boundaries still retains notable aesthetic and local landmark qualities in local views from the south (within the WCPL site). Similarly, there are a number of views from the Homestead Complex (particularly from the grounds and verandah on the south of the New House) that retain picturesque rural views across undeveloped areas of the site towards the distant hills. The aesthetic values of the Wambo views, however, have been notably impacted by the site's mining activities and associated infrastructure, particularly to the north of the complex.</p>	<p>The Homestead group is substantially intact.</p> <p>Individual buildings within that group are not substantially 'intact'. The single-story main house, obviously conceived as an architecturally ambitious Regency style villa, was built at the height of the Depression of the 1840s when resources were otherwise scarce possibly confirmed if it is in fact the only homestead in the region to have been built around 1844.</p> <p>The significance of the Stud Master's Cottage has been enhanced by recent works.</p>

Criteria	SHR Assessment 2004	2012 CMP Review Assessment (GML)	2017 CMP Review Notes (EJE Heritage)
Cultural Criteria (d) Associative Significance	<p>Wambo Homestead demonstrates the opportunities available to energetic people who were transported to NSW in the early decades of the 19th century. Wambo Homestead is significant in terms of its distance from Hales place of residence, Windsor, and because of its position in the broadening agricultural enterprises of pioneer settlers. The group of buildings expresses the way farms were operated, with an emphasis on manual labour, and the use of the horse for work and transport.</p> <p>As the residence of William and Sophia Durham the homestead has associative social significance in the Hunter Valley. This is evident in the substantial development of the Homestead in the early years and the descriptions of lifestyle afforded by visiting commentators of the period. Further, the development of the Horse Stud infrastructure by the Allen and McDonald partnership provides physical evidence of the social and sporting aspirations of elite residents of Sydney at the turn of the 20th century.</p>	<p>The place is valued by the Hunter Region community for its significant buildings/structures, landscape features and historical associations, as attested in a range of locally produced and/or archived documentary records of the site's history and character.</p> <p>On the basis of interviews/oral evidence gathered in the 1990s-2006, there is evidence that 'the complex of homestead buildings remained a social focus for the residents of the surrounding district up until the sale of the property by descendants of the McDonald family in the 1990s' (CMP 2006, p190).</p>	<p>William Durham was also a Magistrate in Singleton, early in his life.</p> <p>On the basis of interviews / oral evidence gathered in the 1990s-2006, there is evidence that 'the complex of homestead buildings remained a social focus for the descendants of the McDonald family in the 1980s'. CMP2006.</p>

Criteria	SHR Assessment 2004	2012 CMP Review Assessment (GML)	2017 CMP Review Notes (EJE Heritage)
<p>Research Potential</p> <p>Criteria (e) Archaeological / Research Significance</p>	<p>As an archaeological resource the buildings and surrounding grounds provided an opportunity to contribute to the knowledge regarding the expansion of the colony of New South Wales, its agricultural diversification and everyday life on homestead properties from the 1820s till the 1890s.</p>	<p>The place has the potential to contain archaeological evidence that may contribute information about various aspects and phases of the site, including early settlement in the Hunter Valley, the development and evolution of the Wambo Estate, the agrarian and animal- breeding operations, the physical character of the property and its elements, as well as the people who lived and worked there.</p> <p>The potential archaeological resource of the place is likely to contain evidence of former structures and other built elements, infrastructure associated with the farming pursuits and animal-breeding operations, landscape features, occupation deposits, rubbish dumps and artefacts.</p> <p>The place has the potential to contain archaeological evidence with high research value that may contribute information that could not be obtained through other sources (such as documentary records) or from other sites. As the physical characteristics of the place are not well documented in the historical record, especially during the early period of settlement and development during the nineteenth century, the archaeological evidence may be able to provide insight into aspects of the site's form and layout that are otherwise unrecorded.</p>	<p>Archaeological evidence has the potential to supplement historical detail, particularly for the initial settlement.</p> <p>Minor but interesting items found when excavating a swale at the Stud Master's Cottage.</p>

Criteria	SHR Assessment 2004	2012 CMP Review Assessment (GML)	2017 CMP Review Notes (EJE Heritage)
<p>Rarity</p> <p>Criteria (f) Significance as uncommon, rare or endangered</p>	<p>As a group of buildings, Wambo Homestead is rare in New South Wales in that many outbuildings still remain substantially intact allowing easy understanding of the development of a homestead complex.</p> <p>It is rare as a large and important estate established by an emancipated convict in the Hunter Valley, where most such estates were established by free settlers.</p> <p>The core group of 1830s and 1840s buildings demonstrates rare evidence of extensive early finishes in the building fabric and the retention of all the original joinery in the four masonry buildings of the group.</p>	<p>The place is a rare surviving example of regional homestead complex begun in the 1830s that is still able to demonstrate the development of land tenure, pastoral and agricultural activity in the Hunter Region - an important early region of settlement - from the colonial period to the present.</p> <p>The place is a rare example in the Hunter Region of ex-convict ownership of a significant regional landholding and the means by which the owner/developer (Hale) prospered and established links with free settlers, joining the notable pastoralist society of the early colony.</p> <p>The place is a notably large and important group of nineteenth - and early-twentieth-century homestead buildings, with a rare core group of five buildings dating to the 1830s-50s which retain important early components and fabric.</p> <p>The New House (main residence) is an unusual and rare example within the Hunter Region of a substantial house constructed in the middle of the 1840s Depression as well as an unusual example of an idiosyncratic vernacular adaptation of more elegantly resolved Victorian-Georgian architectural models.</p> <p>A number of the outbuildings and associated structures are notable and rare, particular examples including the Butcher's Hut and circular Mounting Yard.</p> <p>The place has potential to contain intact archaeological remains associated with this early rural settlement. The survival of intact archaeological evidence of this nature from this period is increasingly rare.</p>	<p>Not all buildings are substantially intact.</p> <p>The style of the New House demonstrates an idiosyncratic attempt to create a substantial, elegant house.</p> <p>The outbuildings and fences from the early C20 developments have recently benefitted from straightening, 'rewiring' and re-fixing.</p>

Criteria	SHR Assessment 2004	2012 CMP Review Assessment (GML)	2017 CMP Review Notes (EJE Heritage)
<p>Representative-ness</p> <p>Criteria (g) Demonstrates the principal characteristics of a class of cultural or natural environments or places</p>	<p>Nothing stated in State Heritage Register listing</p>	<p>As an example of an early-nineteenth to mid-twentieth-century regional homestead complex, the place provides important evidence of the early settlement, subdivision, agrarian and pastoral use of the Hunter Valley through its location, layout and surviving structures/site components.</p> <p>The place is a good representative example of the changing fortunes of different rural site uses and resources in NSW over the last 200 years, from simple pastoral and agrarian pursuits to more intensive animal breeding (horses and cattle) through to the subsequent, and current, resources/mining developments.</p> <p>The layering of the site through accretions and alterations to the layout, components and structures and fabric is representative of the pattern of development of working-farm complexes, as well as demonstrating key themes and periods in its development and use/ownership.</p> <p>The place has the potential to contain archaeological evidence that is representative of early- nineteenth to mid-twentieth-century rural development and occupation, including the physical characteristics of the site, as well as artefacts related to the site's occupation and operation.</p>	<p>Nothing further noted in 2017 review</p>

5.2.3 Integrity/Intactness

As an example of an early-nineteenth to mid-twentieth-century regional homestead complex, the place has a relatively high level of integrity, being able to provide important evidence of its early layout, architectural character and functions. Of particular importance are:

- The extent to which original early-nineteenth-century components, fabric and detailing have been retained in the oldest buildings, notably the Kitchen Wing (ground floor) and New House;
- The extent to which the site has retained so much physical evidence of its early outbuildings and related structures (including fences and yards); and
- The extent to which sequential periods of development, which are part of the significant history of the place, are made legible through the layering of building components and fabric. This is most notably found in the Kitchen Wing, but is also a feature of the New House and Stud Master’s Cottage.

At the same time, the condition of the fabric of the surviving structures is, in many areas, sufficiently poor and/or deteriorated as to affect the potential long-term integrity of a number of key components.

The place/item has potential to contain archaeological evidence associated with the evolution and operation of the site. In some areas of the site this evidence has not been subject to major disturbance and is likely to have survived relatively intact.

5.3 Significance of Components

5.3.1 Gradings of Significance

Different components of a place may make a different relative contribution to its heritage value. Loss of integrity or poor condition may also diminish significance. Specifying the relative contribution of an item or its components to overall significance provides a useful framework for decision making about the conservation of and/or changes to the place.

Table 10 sets out the terms used to describe the degrees (or grades) of significance for different components of the place as well as WCPL’s status, how the grades apply to the WHC and the relevant components and attributes of the WHC.

Table 10: Grades of Significance of Components and Attributes of the WHC*

Grade	Justification	Status	Application to the WHC	Components and Attributes
Exceptional	Rare or outstanding item of local or State significance. High degree of intactness. Item can be interpreted relatively easily.	Fulfils criteria for local or State listing	Overall collection of buildings/structures/components which make up the homestead complex. Components of homestead complex which are rare either because of their type/function, age, character and/or integrity.	Physical and visual relationships between components of the Complex and their immediate setting. Main examples are the Butcher’s Hut and Mounting Yard because of rarity. New House also because of date of construction, idiosyncratic architectural character and survival of original components and fabric.

Grade	Justification	Status	Application to the WHC	Components and Attributes
High (H)	High degree of original fabric. Demonstrates a key element of the item's significance. Alterations do not detract from significance.	Fulfils criteria for Local or State listing.	All surviving nineteenth-century structures, components, fabric and/or other site features. Early twentieth-century structures and site components relating to horse stud and stabling functions, particularly the 1905 Stock Yards complex. Areas of high archaeological significance relating to former nineteenth- to early-twentieth-century structures and major site components.	This group includes above- and below-ground (ie archaeological) remains of: <ul style="list-style-type: none"> Built structures such as the Carriage House and Stables and Stud Master's Cottage - as well as the former Barn west of Stable Yards; Major landscape features (eg the early driveway/approach road and pathways within the Home Compound), Surviving early architectural components and fabric internally as well as externally (including early guttering, joinery, fencing, etc) both removed and in situ.
Moderate (M)	Altered or modified elements. Elements with little heritage value but which contribute to the overall significance of the item.	Fulfils criteria for local or State listing.	Surviving layout, components, fabric and detailing from subsequent alterations and additions which contribute to the site's layered evidence of twentieth- century changes in ownership, use and architectural period/style.	This includes above- and below-ground (ie archaeological) remains of: <ul style="list-style-type: none"> Built structures - such as the various additions and alterations to the former Kitchen Wing and Stud Master's Cottage - and their surviving early architectural components and fabric (eg ceilings and floors, etc), removed and in situ; Major landscape features (eg early changes to fencing and roads and/paths as part of homestead use of site) and major plantings within the Home Compound; Traditional bush-man' construction and repairs using bush timbers, fencing wire, reused building components.
Little (L)	Alterations detract from significance. Difficult to interpret.	Does not fulfil criteria for listing.	Added or altered spaces, elements and fabric which detract from heritage significance and which may obscure more significant attributes.	Components and fabric introduced after c1960, including hydraulic and electrical services, changes to fireplaces, modern linings and/or openings in earlier walls, etc.
Intrusive (I)	Damaging to the item's heritage significance.	Does not fulfil criteria for listing.	Unattractive external accretions and exposed services which detract from an appreciation of the building's aesthetic and architectural qualities. Later materials and fabric which detract from heritage values and/or compromise integrity of rooms and spaces. Later internal fixtures, fittings and unsightly services related to more recent hospital uses.	Early-twentieth-century cement renders on external and internal surfaces of masonry walls (New House, Stud Master's Cottage, Kitchen Wing and Servant's Block).

*Adapted from *Assessing Heritage Significance* (NSW Heritage Office, 2001).

5.4 Statement of Significance

The Wambo Homestead Complex is of State significance as a rare surviving example of a regional homestead complex begun in the 1830s and continuing to development up to the First World War. It is notable for the extent, range and integrity of its surviving components, including the many-layered New House (main residence) and variety of associated outbuildings and other structures.

The place has particularly close associations with the life of James Hale and his notable contribution to the settlement and agricultural/pastoral development of the Hunter Valley, including his links with other significant early settler families. In this regard, the place is a rare example of ex- convict ownership of a significant regional landholding and provides evidence of the means by which he prospered and established links with free settlers, joining the notable pastoralist society of the early colony.

The main residence is an important surviving example of an early Victorian-Georgian country homestead, retaining important original features. The architectural idiosyncrasies of the residence's design and detailing, and its dating to the years of the 1840s Depression, also contribute to its uniqueness. Among the unusually substantial and varied collection of outbuildings and associated structures are notable and rare individual examples, these include the Butcher's Hut and the circular Mounting (Stock) Yard.

The place retains important evidence of, and associations with, horse breeding/stud facilities up to the First World War, with particular examples including the circular Mounting Yard and associated barns, horse boxes and stock yards.

The place provides evidence of the early settlement, subdivision, agrarian and pastoral use of the Hunter Valley through its location, layout and surviving structures/site components. The layers of its surviving fabric in buildings, landscape features and archaeological remains provide evidence of its various owners and changes in use and functional needs.

The place has notable aesthetic and local landmark qualities in selected local views towards the main homestead complex, where this is not encroached on by adjacent mining activities.

6.0 Opportunities and Constraints

Opportunities and constraints relating to the conservation and management of the WHC are mainly associated with the following:

- Requirements imposed by external factors and agencies, including controls and restrictions of statutory authorities i.e. development approval
- The constraints on (and opportunities for) use and development of the place arising from the assessment of cultural significance;
- The physical condition and degree of integrity of the fabric of the place and its setting; and
- The requirements of the site owners, users, and manager, as well as available resources and appropriate uses.

The conservation policies in this CMP (**Section 7.3**) have taken into account these opportunities and constraints.

6.1 Statutory Requirements

As an item listed on the SHR, approval is required from the Heritage Council for any of the activities listed under Section 57 of the Heritage Act (other than those activities covered by the Standard Exemptions provisions). In regard to the management of the Wambo Homestead Complex, this means that any works to the buildings or development within the curtilage of the listed area (unless exempted under the Heritage Act) will require the approval of the Heritage Council under section 60 (s60) of the Heritage Act.

Where development (other than mining-related activities) with the potential to impact on significant features is proposed within the SHR area, it would be classified as integrated development under section 91 of the EP&A Act. An application for integrated development (and IDA) would require the consent of both Singleton Council (which lists it as an item of State significance in Singleton Local Environmental Plan (LEP) 1996) and the Heritage Council of NSW (regarding both General Terms of Approval (GTA) for the IDA and any specific s60 requirements).

In addition to SHR listing requirements, WCPL must also comply with a number of development consent conditions relating to the WHC. These conditions are summarised in **Table 2 (Section 1.5.1)**.

6.2 Heritage Significance

Appropriate measures to conserve, manage and interpret the cultural significance of the Wambo Homestead Complex are key requirements for any conservation policies regarding its future care and management. The major aspects of significance, as summarised in the Statement of Significance (**Section 5.4**), should inform decision making about the future of the place and its key components.

The heritage significance of the place also needs to be presented (ie interpreted or 'made accessible') to the communities for whom it has meaning. At its simplest, this requires some form of visual and/or physical access or other interaction with the significant attributes and features of the place, whether from the public domain or, more effectively, from within the place itself. As the key components of the place are not currently viewable from the public

domain, and access is limited for safety reasons (other than via occasional, controlled viewings arranged by WCPL), effective interaction with the community is, at this stage, significantly constrained. This situation will also continue as part of the planned mining of the WCPL leases for the next 10-20 years.

In this situation, alternative opportunities to interpret the significance of the place are particularly important and should be actively incorporated into planning for its future. With appropriate interpretation strategies and actions that contribute to better understanding and appreciation of the history and significance of the place, independently and remotely, the impacts of limited physical access can be considerably mitigated. A range of these alternatives has been considered in the *'Wambo Homestead Complex – Heritage Strategy'* report prepared for WCPL by GML in September 2010.

Fundamentally, protection of significance includes protection of the remaining built fabric. Roofs and building envelop must keep out rainwater, vermin and wind. Protection and retention of other structures including outbuildings and fences allows visitors to understand and interpret the historical uses of the place. The ability to interpret this from the evidence of the existing fabric is important to the significance of the Homestead Complex.

6.3 Ongoing Budget Commitments

WCPL has an annual budget for the management of the WHC. Regular programmed cyclic maintenance of the site and buildings includes fire protection measures, targeted termite management, arboreal and mowing maintenance, clearing roof gutters and valleys, adjusting and refixing temporary rainwater and propping initiatives, maintaining fences and gates, vermin barriers, regularly sweeping out all buildings and keeping records. The regular programmed cyclic maintenance program is shown in

In addition to annual cyclic work there is a need to plan and undertake specific, prioritised projects. **Section 7.4** provides the program for actions in the CMP period.

WCPL will continue to maintain the Homestead Complex consistent with the minimum maintenance standards of the NSW Heritage Act until a feasible management option is identified in consultation with the relevant stakeholders (including the relevant statutory authorities).

6.4 Other Constraints

The site is relatively remote and is surrounded by a large and complex coal mining operation. The Wambo Homestead Complex is vacant, unused and unseen. The original methods used to construct the buildings and structures rarely used good practice. Subsequent repairs were rarely undertaken in a skilful manner. This combined with ground water and salt issues, rising damp, failed or missing roofs, falling damp, erosion of masonry and the extent of cracking damage to walls and finishes, all generate many constraints.

6.4.1 Mining Operations

The heritage listed site is located at the bottom edge and to the south of a major coal mining operation (refer **Figure 3**). This presents the following constraints:

- Limited public access (industrial safety);
- Blasting impacts (overpressure and ground vibration);
- Heavy vehicle movements;

- Long-wall mining subsidence; and
- The changing topographical context, setting, outlook and approach.

6.4.2 Fragility of Existing Fabric

A number of issues relating to physical condition and degree of intactness/integrity were identified during the site analysis (**Section 3.4.2**):

- The construction of original building footings was not sophisticated.
- The high water table, rising damp and salt deterioration of stone, brick and joints has caused erosion of the lower courses of load bearing masonry, with a substantial loss of material, wall thickness and structural integrity.
- Differential movement and mining operations over time have left many walls cracked.
- Termite damage and roof water have caused damage.
- Many of the more 'bush carpentry' structures are lightly framed and lack original bracing.

Overall, the buildings and structures are in a fragile condition. This will require slow and careful work, presenting further project constraints relating to 'time and money' considerations.

6.4.3 Approval Processes

Constraints arising from the heritage significance of the Wambo Homestead Complex and its curtilage include approval requirements. For a place listed on the State Heritage Register, approval must be obtained from the Heritage Council of NSW before carrying out works, particularly major works. This is to ensure that any changes or additions or new work on the site do not detract from the heritage significance of the place. This is outlined in section 60 of the Act. The s.60 application would be lodged after receiving approval from Singleton Shire Council for the Integrated Development IF that is also required (depending on the nature of the work).

A process of 'Standard Exemptions for Works that would otherwise require Heritage Council approval' exists for works of a minor nature that will have minimal impact on significance. There are 17 Standard Exemptions, however site-specific exemptions for a particular heritage item can be approved by the Minister on the recommendation of the Heritage Council.

A s.60 Application for approval requires substantial preparation and involves a lengthy assessment and approval process.

Section 139 of the Act stipulates that in some circumstances, disturbing or excavating land within the curtilage of the heritage item must be carried out in accordance with an excavation permit. This applies to land that is known or where there is reasonable cause to suspect, that a relic could be discovered, exposed, moved, damaged or destroyed by the work.

Note the Heritage Division's standard application forms for s.139(4) Excavation Exception and s.146 Notification of a Relic. Also note the National Parks and Wildlife Act 1974 (NPW Act) also administered by the Office of Environment and Heritage. This Act includes

provisions for the protection of some aspects of Aboriginal cultural heritage. The 'Due Diligence Code of Practice' must be consulted prior to disturbance or excavation of land at the Wambo Homestead Complex and its curtilage.

This CMP re confirms the archaeological potential of the Wambo Homestead Complex and its curtilage and its contribution to overall historic and cultural significance

6.5 Other Opportunities

Given the constraints, the existing physical conditions (buildings and structures), the location of homestead site within the context of open-cut and underground coal mining activities, the limited public access and the distance from a population centre or a major highway (visitation), the opportunities available to the Wambo Homestead Complex are likely to be very site specific.

A number of opportunities present themselves, but it is understood that only a few will be annually funded and resourced within the operational budget. Generally, initiatives taken, in addition to the obligations arising from heritage significance, can be focused on 'Wambo-after-mining'. That is, protecting the place and its significance. This will include conservation and interpretation. Both enhance the wider community appreciation for and understanding of the historical and cultural significance of the place.

6.5.1 Works Exempted from s.60 Approvals

Other than regular maintenance, some project works exist that require a Notification process as 'works exempted from s.60 Approval' by the Standard Exemptions. These present an opportunity to further protect surviving fabric and slow deterioration, in every annual cycle.

6.5.2 Research potential

Over the last two decades a number of studies, reports, surveys and plans have been prepared for the Wambo Homestead. This work represents an existing resource that could be made available to interested individuals and the wider research community. The opportunity exists to consolidate the current documentation (history, land surveys, photographic records, site measures, reports, studies and assessments, etc), edit and package this information then make it available on a website "Wambo Estate, Warkworth – its history and development". Interested members of the public could also be directed to that website from a Wambo Coal website. Content would include 'Wambo Homestead-an artist's impression' by Vivian Dwyer 2007, aural history recordings, drone fly-over video and B&W archive photographs.

This initiative would partially compensate the limitations on public access (safety), improve community liaison effectiveness and attract other research contributions (eg, other documents and photographs held in other collections). These in turn might inform interpretation initiatives.

6.5.3 Supplementary Records

New digital technologies and opportunities now exist to accurately record the surviving existing fabric, internally and externally. Digital 3D scanning and drone digital photography can provide accurate on-line models and data. This opportunity has the potential to provide 'virtual site visits' for researchers, historians and members of the public. Regular updating of the 3D scans and drone flyovers allowed for in the budget presents opportunity for interested researchers and historians to follow the progress of the conservation works.

6.5.4 Public access and a Quarterly News Letter

Quarterly or half yearly pre-programmed community group visits / guided tours would offer an opportunity to the Mine to share the story of the place with specific groups including but not limited to mine employees and their families; neighbours; university under graduate and post graduate history and conservation students and researchers; TAFE construction industry trade schools; and community groups in the Singleton area, the broader Hunter region and in response to niche interest groups. These would be planned in advance for specific dates and this would be shared with each group by the end of the academic year, for the following year. This could also be promoted in a brief, regular, on-going quarterly 'news' letter (hardcopy and on line digital versions.)

6.5.5 Skills training master classes

In addition to the web based heritage resource provided by the consolidation of existing information and supplementary recording (**Section 6.5.2**), there exists an opportunity to use the site for 'trade training' for preservation, conservation and reconstruction skills, in conjunction with projects on site. This opportunity would require strict compliance with WCPL's site safety and people management procedures.

6.5.6 Reinstatement of the homestead setting

Condition 69, Schedule 4 of DA305-7-2003 states that:

Following the cessation of the use of the coal haulage road which traverses the Wambo Homestead Complex property [curtilage], the land is to be returned to its former condition (pre 1999) and the half-palisade fence on the southern alignment as required by the approval of the Heritage Council for the construction of the road, on 12th February 1999.

An opportunity exists now for planning and then undertaking the eventual removal of the mine services road and services. This could identify when and how this process could be achieved.

6.5.7 New uses in a rural setting

With a committed application of the Policies of this plan, the opportunity exists to leave the curtilage of this heritage item, its immediate setting, homestead trees, the group of masonry and timber framed buildings, agricultural structures and fences to future generations, after mining activities have ceased. If carefully managed the place could still have the potential to convey the story of early settlement, the relationships between buildings, historical homestead activities, remote lifestyle, pastoral processes and innovation.

The success of preservation, conservation, reconstruction and interpretation efforts now could allow an appropriate adaptive reuse to occupy the homestead complex in the future. Occupation and use of the place would then improve its potential to exist for many decades after mining.

6.6 Issues arising from Current Physical Conditions

The 2017 site inspection identified a number of conditions that require urgent attention. These conditions are summarised in **Table 11**.

Table 11: Conditions requiring urgent attention

Description	Likely Impact
Self-seeded invasive plants and trees in close proximity to the structures.	The trunk and root dimensions, also with impact on subsoil moisture will continue to destroy the adjacent built structure, accelerating as the plant grows.
General termite control requires additional specific baits for each timber structure.	Given the nature of 'timber buried in earth' construction techniques, a normal level of protection is inadequate. Also, the collapsed timber structures are now unattended and mowed around (timber lying on the ground).
Valley gutters and eaves gutters are full of leaves.	This will cause water to back-up and also retains moisture and accelerates corrosion.
Roofs are missing.	This will accelerate the deterioration of roof framing, internal walls, internal floors, brickwork.
A lack of bracing.	Additional support required for some structures to prevent the wind blowing some structures over.
No access	Access is required to allow inspections, maintenance and project work to proceed. Facilitate safe access.
Rotation at the top of walls is increasing as framework fails and no longer provides restraint.	This will increase the rate of failure in external walls and at the return corners in those walls.
The base courses of some stone and some brickwork walls have rising damp, salt damage problems. The loss is evident with neat piles of coloured dust at the base of those walls. Walls are thin. There are holes through some walls.	The masonry (both sandstone and brickwork) and the joints in masonry walls are failing due to salt-attack. The loss of masonry integrity reduces the load carrying potential of the base of the wall. The loss of bed and perpend joint material causes collapse. Floor and roof framing often rely on support from the walls. Window and door openings are impacted by the deterioration of the walls. Investigation required. Further measures to divert ground water are required. Replacement stone and brickwork is required. Repair is required.
Fuel load and fire risk.	Mowing has reduced risk. Further management of trees, shrubs, scrub, garden beds is required to remove avoidable fuel and risk.
Theft	Petty theft has produced a cumulative loss, eg. Door hardware from main door at the front (south) verandah of the New House.
Consideration in parts.	The consideration for individual buildings overlooks the contribution to the significance of the place that the interrelationships between buildings (and their historical uses) make to the Homestead Complex.

7.0 Management of Heritage Values

7.1 Management Actions in Response to DA Consent Conditions

WCPL has implemented a number of management actions in response to the consent requirements for DA-305-7-2003. These actions are summarised in **Table 12**.

Table 12: Management Actions Undertaken in Response to Consent Conditions

Condition	Management Action	Completion Date																								
57: Section 60 Approval	Submission of applications for s60 approval for works on land within the State Heritage Register listing boundary for the Wambo Homestead Complex [WHC] where required, including the following:	As per table provided																								
	<table border="1"> <thead> <tr> <th>Application No.</th> <th>For</th> <th>Date application submitted</th> <th>Date of approval</th> </tr> </thead> <tbody> <tr> <td>2011/S60/13</td> <td>Proposed maintenance works on the WHC in accordance with the WHC Voluntary Action Plan (VAP) and Supplementary GML Report.</td> <td>17 Feb 2011</td> <td>25 March 2011</td> </tr> <tr> <td>2012/S60/30</td> <td>Extension of Longwall mining into the WHC Curtilage in accordance with the Mine Management Plan (GML 2012) and Subsidence Data Review and Impact Assessment for LWs 7 and 8 (Ditton Geotechnical Services, 2012)</td> <td>16 April 2012</td> <td>12 Sept 2012</td> </tr> <tr> <td>2012/S60/30</td> <td>Repair and reinstatement of roof and verandah on the former Studmaster's cottage building.</td> <td>28 Nov 2012</td> <td>18 Jan 2013</td> </tr> <tr> <td>2013/S60/30</td> <td>Extension of Underground Coal Mining (Longwalls 9 and 10) at Wambo and in the vicinity of the WHC</td> <td>18 April 2013</td> <td>5 June 2013</td> </tr> <tr> <td>2013/S65A/16</td> <td>Modification to Condition 2 of S60 approval (2013/S60/30)</td> <td>25 June 2013</td> <td>16 July 2013</td> </tr> </tbody> </table>		Application No.	For	Date application submitted	Date of approval	2011/S60/13	Proposed maintenance works on the WHC in accordance with the WHC Voluntary Action Plan (VAP) and Supplementary GML Report.	17 Feb 2011	25 March 2011	2012/S60/30	Extension of Longwall mining into the WHC Curtilage in accordance with the Mine Management Plan (GML 2012) and Subsidence Data Review and Impact Assessment for LWs 7 and 8 (Ditton Geotechnical Services, 2012)	16 April 2012	12 Sept 2012	2012/S60/30	Repair and reinstatement of roof and verandah on the former Studmaster's cottage building.	28 Nov 2012	18 Jan 2013	2013/S60/30	Extension of Underground Coal Mining (Longwalls 9 and 10) at Wambo and in the vicinity of the WHC	18 April 2013	5 June 2013	2013/S65A/16	Modification to Condition 2 of S60 approval (2013/S60/30)	25 June 2013	16 July 2013
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58-62: Conservation Measures	Preparation of Conservation Management Plan (CMP) by EJE Heritage in April 2006.	April 2006																								
	Preparation of an annual photographic record of the Wambo Homestead Complex structures in accordance with Heritage Council guidelines and submitted to the NSW Heritage Council archives. This documentation has been prepared by EJE Heritage and GML Heritage.	Reports prepared annually																								
	Preparation of an illustrated history of the site, Wambo Homestead by local artist Vivian Dwyer (in 2007) which includes pictorial reconstructions/interpretations of the site and its past uses as well as oral historical accounts.	2007																								
	Preparation of the Wambo Homestead Oral History Stages 1 and 2 Report, completed by GML Heritage (GML, 2015). This report was provided to various stakeholders including Singleton Shire Council and OEH.	May 2015																								
	Provision of opportunities for community members to inspect the Wambo Homestead Complex as part of special occasions. Escorted visits to the WHC by members of the public have included: <ul style="list-style-type: none"> Family visits with employees able to show family and/or friends over 	2011 and 2012																								

Condition	Management Action	Completion Date
	<p>the site in July and October 2011 and April 2012;</p> <ul style="list-style-type: none"> A site inspection by Singleton Council's Mayor and General Manager in October 2010. 	
	Provision of updated reports to Wambo Community Consultation Committee (CCC). An invitation to inspect Wambo has also been made at each CCC meeting since early 2011.	Ongoing and as required
	Implementation of regular inspections and maintenance of site with WCPL staff carrying out maintenance of the landscaped setting of the Homestead Complex, installing a fire-fighting water service to the area, keeping grass mown and removing invasive trees/weeds where these endanger the stability of significant structures.	Ongoing and as required
	Implementation of works to improve site drainage and security.	As per VAP
63-68: Blasting	Development and implementation of a Blast Management Plan in accordance with Condition 20, Schedule 4 of DA305-7-2003.	Current version finalised Dec 2017 (Rev 8) – implementation ongoing
63: Blasting	<p>Implementation of blast monitoring of the Homestead Complex in accordance with conditions of consent including the following:</p> <ul style="list-style-type: none"> Establishment of a blast monitoring station inside the WHC, adjacent to the Stud Master's Cottage. 	Monitor established 2004. Monitoring of each blast - ongoing.
64: Blasting	<ul style="list-style-type: none"> Engagement of a qualified engineer to examine blast monitoring records for the WHC. Bill Jordan (from Bill Jordan and Associates) has been reviewing blast monitoring results for the WHC since 2010. In 2016 Bill Jordan was formerly approved by DP&E (via email) to examine blast monitoring records. 	Engineer endorsed by OEH on 30 Nov 2005 and DP&E on 19 Oct 2016
65: Blasting	<ul style="list-style-type: none"> Monitoring of blasts to ensure they do not exceed AS2187. 	Ongoing
	<ul style="list-style-type: none"> Blast monitoring results are provided to WCPL on a monthly basis. 	Ongoing (monthly reporting)
	<ul style="list-style-type: none"> Engagement of an engineer (Bill Jordan) to undertake a Blast Vibration Vulnerability Study for the WHC, to determine susceptible blast wave frequencies that may also pose a risk to the structural integrity of the WHC. 	April 2012
66: Blasting	<ul style="list-style-type: none"> Review of blast monitoring results from shots within 2km of WHC by an engineer (Bill Jordan) with advice returned to WCPL regarding his assessment of potential impacts on the WHC. 	Ongoing (6 monthly reports)
67: Blasting	<ul style="list-style-type: none"> Annual inspections of structural integrity of the WHC by an engineer. Additional inspection of the WHC in April 2011 following two shots that exceeded the blast criteria. No actions were identified as required following these inspections. 	Ongoing (6 monthly reports)
68: Blasting	<ul style="list-style-type: none"> Annual assessment of the WHC by an engineer. 	

7.2 Further Management Actions

WCPL have engaged EJE to provide additional services to help plan for and direct the long-term management of the site, in a manner consistent with the policy recommendations of the 2018 Revised CMP (this document) and DA-305-7-2003 consent conditions.

7.2.1 Maintenance and Stabilisation Works

WCPL has undertaken an extensive program of works to stabilise and maintain the buildings in the Wambo Homestead Complex (WHC). The works to key components of the Complex including the New House, Kitchen Wing, Carriage House and Stables building, have been

directed towards maintaining and protecting significant components and fabric in situ and stabilising structures as needed to facilitate their long- term conservation.

From January to October 2011, maintenance and stabilisation works were undertaken to implement works agreed to with the relevant heritage authorities as part of a 'Voluntary Action Plan (VAP)' in accordance with the documents prepared by GML, including *Wambo Homestead Complex VAP: Initial Conservation and Maintenance Works, Draft Report, prepared for Wambo Coal Pty Ltd (17 February 2011)* and *Wambo Homestead Complex VAP Supplementary GML Report (25 February 2011)*.

The VAP included the following works (as standard exemptions):

- Studmaster's Cottage - inspect and maintain weather proof coverings.
- Butcher's Hut - trim adjacent tree to the south, to reduce potential for impact on the hut.
- Main Homestead building - clean and test functionality of roof gutters; store any dislodged fabric in a weather proof area.
- Kitchen wing / servant wing - install safety fencing to prevent entry (safety).
- Carriage house - trim adjacent trees / branches to increase weather proofing of structure.

Additional works undertaken with advice and where required, s.60 approval, included:

- Studmaster's Cottage - retrieve and store dislodge fabric of significance for later reuse.
- Butcher's Hut - identify required remedial works; re-attach timber slabs at the western wall; increase the weather proofing of the structure; store and protect unattached fabric.
- Main Homestead building - trim trees and branches to reduce impacts on weather proofing the building; trim the hedges to the south of the Main Homestead building; improve roofing and roof guttering to shed water, improve the guttering system and install temporary downpipes; assess stability of pylons on southern and northern verandahs and any requirement for additional propping.

An illustrated summary report on the works completed, including 'before' and 'after' photographs, *Wambo Homestead Complex VAP Report on Completion of Conservation and Maintenance Works (November 2011)*, was subsequently prepared and submitted to the relevant heritage authorities.

This was followed by a second stage of conservation and maintenance works early in 2012 to 'continue with the works started to prevent further deterioration of the buildings while [the current] revised Conservation Management Plan (CMP) was being prepared and submitted' (Quoted from email correspondence to WCPL from NSW Department of Planning, 8 July 2011.) As with the initial VAP program, the aim of the Stage 2 works was to secure and protect significant components and fabric from ongoing deterioration, as much as possible, retaining in situ where feasible and/or dismantling for secure storage where required.

During the course of the works, appropriate measures were taken to adequately protect significant built elements from potential damage, using methods that did not adversely affect existing fabric and were readily removable. The VAP Report 2011 provides a number of examples where works were needed to reinstate, remove and replace and/or prop components to prevent collapse/failure. Other removable/non-invasive methods to protect

exposed fabric from water damage were also used, including sand-bad diversionary walls and fibreglass sheet 'spouts'.

As with the initial VAP program the aim of the Stage 2 conservation works was to secure and protect significant components and fabric from ongoing deterioration, as much as possible. That is, the intention of the works is to conserve and retain in situ. Priority was given to essential stabilisation and protection works, as well as investigation of particular problem areas where deterioration rates have increased.

Both the VAP and Stage 2 Conservation works programme were directed and monitored by Jyoti Somerville, Associate, GML with specialist structural engineering input from Paul Connett, Hyder Consulting Pty Ltd. Site works other than landscape maintenance were carried out by Gary Waller, G & C Waller Builders Pty Ltd, who has extensive expertise and experience working on significant heritage sites.

Key works carried out include:

- Works to prevent water entry and upgrade roof and ground water drainage, including, for example, run-off into the Kitchen Wing cellar;
- Opening up and inspecting particular areas to identify/implement required maintenance and repair works, with specialist engineering input where required;
- Implementing measures to make secure, support and/or stabilise significant components/fabric by strutting and/or bracing (including roofs, walls, ceilings and other structural components); and
- Securing fabric from ongoing deterioration by appropriate protection methods (including temporary coverings and/or partial dismantling and storage).

An illustrated summary of the completed works, including 'before' and 'after' photographs, *Wambo Homestead Complex Report on Completion of Conservation and Maintenance Works Part 2 (June 2012)*, was subsequently prepared and submitted to the relevant heritage authorities.

7.2.2 Photographic Recording

During the opening up, repair and maintenance works, information on site conditions, detailing and/or layering of components/fabric was photographically recorded, where possible, to contribute to future research and provide input into future decision making and management of the place.

7.2.3 Heritage Strategy Report

In 2010, a detailed report was prepared for WCPL to help assist with long term planning for the future of the site. This report, the *Wambo Homestead Complex Heritage Strategy* (completed September 2010), included:

- A comparative analysis/assessment of the place/item in the context of comparative sites in the hunter valley, particularly surviving nineteenth-century homestead groups;
- Professional review of the history of the place/item to identify the key themes, events and people relevant to assessment of its heritage significance, including the significance of surviving components and attributes and relationship to comparative sites;
- Provision of specialist engineering and architectural advice on the feasibility of relocating the structures that make up the Wambo Homestead Complex. Also, initial

input/advice on heritage criteria relevant to any new site/location for the reconstructed elements; and

- Preparation of initial interpretation strategy recommendations for incorporating and presenting the heritage values of the place as part of any future management and/or development, proposals (**Section 7.2.4**).

7.2.4 Interpretation Strategy

In 2010 GML developed an Initial Interpretation Strategy for the WHC as part of the WHC Heritage Strategy (GML, 2010). The Initial Interpretation Strategy represents the first stage in planning for interpretation of the WHC and explored linkages such as regional tourism, virtual visits, online exhibitions, salvage, recycling and new visions for rehabilitated landscapes. The focus of the Initial Interpretation Strategy was communicating the historic themes, meanings, memories and associations of the WHC. These themes, in conjunction with the interpretative concepts identified to communicate them, will facilitate the future interpretation of the WHC and allow for greater appreciation of and access to the heritage values by the wider public.

The Initial Interpretation Strategy identified a number of potential interpretation opportunities. They are varied in their approach but are essentially focussed on sustaining and communicating the significance of the WHC through media that will be accessible to the widest possible audience. Interpretation opportunities for the WHC broadly fall into four categories:

- *Relocation and reconstruction* of selected timber or masonry buildings to a secondary location which would allow for continuing public interaction with the architecture;
- *Virtual experiences* of the WHC will allow the general public detailed access to the fabric and history of the site through web-based media;
- *Recycling of the heritage fabric* of the WHC in secondary locations, either in the reconstruction of other heritage homesteads or in public art will allow the fabric of the site to continue in a functional use; and
- *A Hunter Heritage Fund* which will sustain the memory and significance of the WHC through an appropriate grants scheme.

The development of any interpretation strategy is a staged process. The first stage has identified a number of possibilities for interpretation. The next stage will involve the development of interpretation devices into a comprehensive strategy. The timeline has been incorporated into the action plan in **Table 16**. Extensive community consultation will be an essential element of this process. This will identify community priorities for the preservation of the site and will also reveal the associations, meanings and memories that will enliven and enrich the history of the WHC into the future.

The Singleton community and its tourism industry operators are important stakeholders in these considerations. Any future promotion of the WHC based interpretation will need to be undertaken in conjunction with the community and existing tourism infrastructure and systems.

7.2.5 Comparative Homestead Assessment

In 2011, further historical investigations were carried out on the comparative historical significance of the Wambo Homestead Complex in its Hunter Valley setting, with research by Professor Ian Jack of the University of Sydney. This provided the basis for a revised Comparative Homesteads Study which, in turn, has informed the comparative heritage assessment in the CMP Review.

7.2.6 Oral History

In 2015 GML completed the oral history for the Wambo Homestead Complex. The following recommendations were made regarding the use of the research material collected during the oral history study:

- Forward copies of the Oral History Report to the Singleton Public Library and/or Singleton Historical Society, the NSW Heritage Council, DP&E and the State Library of NSW;
- Share the findings and material collected as part of the oral history project with the local community through one or more public presentations;
- Consider funding the publication of an illustrated comprehensive history of Wambo;
- Review and update the history and significance of assessment sections in the CMP during the 2017 CMP review; and
- Forward a copy of the revised history and assessment of significance (including a revised Statement of Significance) to the DP&E Heritage Division, for inclusion in a revised version of the SHR inventory form.

WCPL has provided copies of the Oral History Report to Singleton Public Library, NSW Heritage Council and DP&E.

WCPL has developed a number of conservation policies that address further physical research, documentation and recording of the WHC and further historical research and oral history. These policies and their respective strategies and implementation schedules are detailed in **Table 13**.

WCPL has considered the findings of the Oral History study as part of the 2017/2018 review of the CMP. A copy of the revised CMP will be forwarded to OEH.

7.2.7 Conservation Management Plan Review

In 2017/2018, the 2012 CMP was reviewed and updated by WCPL in conjunction with EJE Heritage. This version of the CMP has been updated to reflect current site conditions, management and statutory constraints and meet the relevant statutory requirements detailed in **Section 1.5**.

7.3 Conservation Policies/Management Strategy

7.3.1 Introduction

Previous versions of the CMP for the Wambo Homestead Complex and its curtilage have presented and expanded upon options for a management strategy:

- Protect, preserve, conserve and interpret in situ [partially undertaken].
- Relocate and make accessible, interpret [rejected].
- Record, document, manage as a ruin, interpret [rejected].
- Protect, preserve, conserve, reconstruct enabling reuse and appreciation after mining [adopted with the work to the Studmaster's Cottage].

A number of factors are taken into consideration when defining the direction a strategy should take, drafting Management Policies and preparing Guidelines. These include:

- The State Heritage Register Listing – this gives rise to obligations under the Heritage Act which generally focuses on protecting and conserving existing fabric in-situ;
- Requirements for minimum maintenance to prevent ‘demolition-by-neglect’ - the Burra Charter provides an over-arching approach to this;
- Existing conditions on site (within the curtilage and outside it);
- Available resources;
- Community values relating to its significance;
- Constraints and opportunities; and
- Owners’ intentions.

The CMP 2012 (section 7.2.2) discussed the benefit of further investigation on site and the need to interpret and present the story / significance of the place. It also noted, *‘the potential to use remote forms of site interpretation should be investigated as part of future management planning for the site, including electronic-media-based methods (eg via a website) as well as written publications, visual displays, and / or presentations to interested groups’.*

The 2017 inspection undertaken by EJE Heritage reconfirmed the conclusions of the 2012 CMP (section 7.1.2 Key Constraints) regarding Policy Aims being limited by the complexity of current and future constraints, including:

- Limited public access;
- No targeted current or future adaptive reuse (direction for conservation, towards a purpose?);
- A very large component of ‘reconstruction’ would be required to make the buildings useable;

‘the extent of the required new material and structural support measures (particularly in the masonry walled buildings) would notably and detrimentally reduce, if not entirely remove, significant original / early fabric and layering [of history, changes and periods of development]. This outcome may be questionable as a sustainable heritage conservation investment.’; and

- Research is required to determine if the water table has changed and what is the likely impact on the salt-damp deterioration of existing and reconstructed stone and brickwork, if that was to be undertaken. Extensive ‘treatment’ of the masonry structures may be required.

The CMP 2012 (section 6.6.1) also noted *‘despite the condition and loss of integrity of a number of components however, there is still a substantial amount of significant early fabric – whether original or dating to an early period of development – requiring appropriate conservation, management and interpretation’.*

7.3.2 Development and Implementation of Conservation Policies

A number of Conservation Policies and an implementation schedule have been developed for the WHC (**Table 13**). These policies are informed by the whole of the CMP and should be read and applied in that context.

Given the absence of an appropriate, stakeholder agreed new use for the place now or 'after-mining' the policies and guidelines provided by this CMP focus on protecting and conserving the place so that 'after-mining' the Wambo Homestead Complex and its curtilage can be visited, used, appreciated and its historical and cultural significance in the settlement and development of NSW and the Hunter Region recognised and understood.

Table 13: Conservation Policies and Implementation Schedule

Policy No	Policy Description	Strategies and Guidelines	Implementation Schedule
Conservation Policy 1: Adoption of this CMP.	This Conservation Management Plan is to be endorsed and adopted by the current and future Owners and Managers of the place. Review and update this Plan within 5years of its adoption, or earlier in response to any major change of circumstances.	Proposed works within the curtilage considered against the CMP during the planning stage, prior to commencement. Scope and/or methodology to be adjusted before proceeding if not consistent with the CMP.	Monthly following inspection
		Endorsement of this CMP review required from DP&E.	Ideally within six months of completion
Conservation Policy 2: Protect and enhance the Setting and Landscape	Protect and enhance the heritage significance of the setting for the homestead complex including the landscape elements, views into and where possible views out of the homestead and its curtilage.	Prepare an audit of existing exotic and native species for the Homestead and Yards. Determine the health status of the trees and shrubs. Remove dead or diseased plants and under growth. Lop and prune as required to return the setting to 'homestead' conditions. Retain the perimeter wind break but return the olive hedge north of the New House back to a height permitting views from the verandah to the paddocks.	Landscape Management Strategy including landscape maintenance plan by October 2020
		Survey, describe and record the homestead and yard trees and shrubs that contribute to heritage significance through the setting.	
		Establish a hard and soft landscape maintenance plan in addition to the current mowing maintenance.	
		Formulate and implement an ongoing landscape management strategy.	
		Remove self-seeded inappropriately located trees that threaten the stability of homestead structures	Ideally within one year, pending approval from OEH
		Plan now for the removal of the mine's road and services that use that corridor, then the reinstatement of the homestead fences and layout so that the road can be removed at the earliest possible date.	To be considered in Mine Closure Plan, scheduled for update following determination of the United JV
		Prepare and instigate a strategy to enhance the views into and out of the homestead and its curtilage. The context of an open cut coal mine has significantly altered the original setting however specific view corridors remain. These should be identified and enhanced.	Landscape Management Strategy by October 2020
		Heritage fabric is not damaged or removed.	Noted

Policy No	Policy Description	Strategies and Guidelines	Implementation Schedule
Conservation Policy 3: Protect and Retain Existing Fabric	Regularly inspect, monitor and record the current condition of existing built fabric, including buildings, fences and other structures relating to the homestead and yards. Provide interim stabilisation and protection as required. In addition to programmed cyclic maintenance, plan and undertake prioritised conservation and reconstruction works.	Short, informative 'heritage significance' induction for anyone visiting or working within the Homestead / Yards and curtilage to be signed off as understood	Review Induction to include sign off by June 2019
		Keep a record of attendees and details of the work that was undertaken.	
		Provide interim structural and stabilisation measures to support, protect and manage the buildings and structures on the site	Included in Table 14 and Table 15
		Identify those works that could be undertaken as a standard exemption from the requirements a s.60 application and approval. Confirm with the OE&H, Heritage that exemption is suited to the proposed works then submit a Notification for Works.	Added to Table 15 (in annual cycle)
		Suitably qualified and experienced consultants, contractors and tradespeople to plan, detail and to carry out the works	Engaged monthly for inspections, then as required for additional work
		If substantially intact, archaeological deposits or 'relics' are discovered immediately cease work in the affected area and seek advice from the OE&H, Heritage.	
		Brief assessment of archaeological potential and the proposed work method where excavation or other ground disturbance is required, submitted to the OH&E for approval prior to commencement.	As required
		Commence a program of stone and brickwork replacement, repointing in order to maintain or achieve structural capacity.	As detailed in Table 15 , within one year
		Prevent water from entering the buildings.	As detailed in Table 14 and Table 15
		Mitigation and Conservation works are to be identified, documented, monitored, be inspected and verified by qualified and experienced heritage consultant. After completion of the works a brief report is to be prepared by the Owners' consultant and provided to the OE&H, Heritage.	Annual inspections will continue to be completed by qualified heritage consultants and will document conservation works completed in that year. A summary will be included in the Annual Review which will be provided to OEH.
Any detached components are to be recorded, protected and stored close to their correct location.	Noted		

Policy No	Policy Description	Strategies and Guidelines	Implementation Schedule
Conservation Policy 4: Undertake further physical research, documentation and recording	Undertake further investigation to determine what confirmation and correlation exists between historical evidence, physical evidence and archaeological evidence. This is to inform a better understanding of the place and to inform interpretation strategies.	<p>Consolidate all survey information, including levels, buildings, structures, hard and soft landscape elements, drains, fences, gates, termite baits, fire services, aerial services, water and power services to one drawing and database which is searchable or sortable by layer or category etc.</p> <p>Incorporate existing archaeological information and future potential over the site plan.</p> <p>Regularly update the consolidated site plan with any new findings or new detail.</p> <p>Review and reassess the archaeological potential and mapping for the site, including the 'shed' to the north east of the mounting yards and the tennis court identified in previous CMPs (a comprehensive archaeological assessment and management plan)</p> <p>Obtain 3D scans of all internal spaces to record existing buildings and their condition. Prepare a digital 3D model of the buildings.</p> <p>Obtain 3D scan records of significance facades and courtyard space. Prepare a digital 3D models</p> <p>Maintain the existing cycle of photographic recording. Include the shed at the north-west corner</p>	<p>October 2020</p> <p>Annual photographic monitoring will continue and include the shed in the north west corner</p>
Conservation Policy 5: Undertake further historical research and oral history	Engage and partner with the Community, secondary and tertiary educational institutions. Invite further, more detailed investigation and analysis of the place's history and development, including mining. Collate existing oral history recordings to one resource. Identify further opportunities and commission additional recorded interviews. All to better inform the interpretation and presentation of the place's story and significance.	<p>Use findings of the oral history to inform the Interpretation Strategy and potential adaptive reuse options</p> <p>Liaise with the University of Newcastle, School of Humanities and Social Science (History); University of Sydney Department of History (est.1891) and the School of Humanities & Communication Arts (History) University of Western Sydney regarding opportunities for undergraduate and postgraduate research students.</p> <p>Liaise with primary and secondary schools of the Upper Hunter Valley with regards to their engagement with Wambo Homestead history projects</p>	<p>As required. Interpretation Strategy to be developed by October 2020</p> <p>Correspondence sent to the listed Universities 23 May 2019 to gauge level of interest in completing further work on the WHC..</p> <p>An offer for students to visit the WHC in 2019 will be made to the local primary school during a meeting in the coming weeks. Correspondence has been sent to engage schools in the broader region.</p>

Policy No	Policy Description	Strategies and Guidelines	Implementation Schedule
Conservation Policy 6: Provide effective Interpretation and presentation	Provide access, facilitate sharing and engagement. Given the limited public access provide off-site interpretation.	Make offers for an open day or small group visits each year	Annually
		Establish collaborations (conservation students, historians, OEH, Singleton Council)	Ongoing
		Establish Virtual access: Wambo Homestead website (shared documents, history, etc , open study resource, VR Tour)	Online platform to be developed by October 2020
		Site induction to include some information on the heritage of the property	Currently included, information to be revised by June 2019
		Consolidate the current documentation (history, land surveys, photographic records, site measures, reports, studies and assessments, etc), edit and package this information then make it available on an online platform "Wambo Estate, Warkworth – its history and development". Content would include 'Wambo Homestead-an artist's impression' by Vivian Dwyer 2007, aural history recordings, drone fly-over video and B&W archive photographs.	Online platform to be developed by October 2020, add 3D scans once complete and suitable information from site audits / surveys as they are completed.
		Set up a Wambo Homestead online platform. Invite contributions to a shared resource. This initiative, with the dedicated website would partially compensate the limitations on public access and improve community liaison effectiveness. It has the potential to attract other research contributions (eg, other documents and photographs held in other collections).	
		Develop a comprehensive Interpretation Strategy in consultation with stakeholders including, but not limited to, the Heritage Office, WCPL's neighbours, WCPL Community Consultative Committee, Singleton Council and Singleton Tourism Advisory Group)	Within 5 years to correspond with next CMP review and final use for WHC
		Provide on-site interpretation (at the main road, front gate, at the homestead).	
		Implement the Interpretation Strategy in stages, per year until completed	Regularly
		Prepare cost / benefit analysis, including heritage issues related costs and benefits, in consultation with the relevant authorities to identify end-goals and a direction to be adopted in Master Planning for the remnants of Wambo Estate (staged over 30 years).	Mine Closure Plan will be revised following determination of the United JV Project (2019) and will include the WHC and consultation with regulators.
Prepare a Preliminary Master Strategy to tie in to mine closure plan	Preliminary Master Strategy for the WHC will then be developed, consistent with Mine Closure Plan		

7.4 Preventative and Cyclic Maintenance

In 2015 EJE Heritage developed a Heritage Asset Maintenance Plan for the WHC which included a monthly preventative and cyclic maintenance program. This program is summarised in **Table 14** below.

Table 14: Monthly Preventative and Cyclic Maintenance Program

Action	Scope
Debris and rubbish removal	<ul style="list-style-type: none"> • Clear away blown in rubbish from mine site or roads. • Inspect gutters including valley gutters • Remove debris or rubbish which has penetrated to the inside of the buildings. If possible close gaps where ingress occurs
Remove invasive weeds and keep grass slashed around heritage items	<ul style="list-style-type: none"> • Remove any noxious weeds. Remove any self-seeded vegetation less than 1m high which bears a potential threat to the heritage structures or could encourage vermin. Seek advice for larger vegetation such as trees.
Inspect for general deterioration	<ul style="list-style-type: none"> • Record any deterioration to roofs, ceilings, walls, floors, windows, doors and joinery. If damage is minor and readily repairable, undertake repairs.
Inspect for subsidence or blasting damage	<ul style="list-style-type: none"> • Record any damage. If damage is minor and readily repairable, undertake repairs.
Inspect temporary props and measures	<ul style="list-style-type: none"> • Inspect all temporary propping or other measures such as supplementary sheeting and confirm that they are still performing their intended function: e.g. structural propping, or stormwater diversion. Maintain, adjust or re-fix any temporary devices which are failing.
Inspect windows and doors	<ul style="list-style-type: none"> • Close and secure windows and doors to prevent entry by weather, vermin or other wildlife such as birds or kangaroos.

Table 15 details the longer term (one to five year) preventative and cyclic maintenance program.

Table 15: Longer Term Preventative and Cyclic Maintenance Program

Annual Maintenance Works	Medium Term Maintenance Works: 2-3 years	Long Term Maintenance Works: 5 years
General – All Areas		
Review recorded results of monthly maintenance program for the year and adjust frequency or budgets to suit.		
Undertake pest and termite inspection. (2017 Inspection noted 'termite control requires additional specific baits for each timber structure. Normal level of protection is inadequate')		
Repair Locks and replace missing keys		
Inspect the status of all stored building componentry e.g. New House Timber columns, shutters and zinc awnings. Move to secure and weather tight locations if not already so protected.		
Install temporary measures, e.g. props or drainage as necessary to arrest deterioration.	Begin plans and investigations / make applications to undertake permanent repairs to fabric assisted by temporary measures	Remove temporary measures through completion of permanent repairs with appropriate approvals.
	Begin planning and investigation of future use / of Wambo Homestead Complex and greater site area for the cessation of mining.	Confirm future use of Wambo Homestead Complex and greater site area for the cessation of mining.
	Remove spoil heaps from locations around the Stock Yards and Studmasters Cottage Precincts and spread where land is depressed.	
		Review CMP and make policies which will implement the confirmed future use and prepare the site for the cessation of mining.
Investigate if additional support is required for some structures to prevent the wind blowing over ¹ .		
Review fire risk - trees, shrubs, scrub and garden beds trimmed or slashed to reduce avoidable fuel and risk ¹		
Identify any works that could be undertaken as a standard exemption from the requirements of a Section 60 application and approval. Confirm with OEH, Heritage that exemption is suited to the proposed works then submit a Notification for Works ¹		

Annual Maintenance Works	Medium Term Maintenance Works: 2-3 years	Long Term Maintenance Works: 5 years
Roof Coverings		
Inspect connections to vents and roof penetrations – repair as needed.		
Inspect condition of ridges, hips, valleys, cappings and flashings – repair as needed		
Inspect fixings to roof sheeting or cladding – re-fix as needed. n.b. failing battens may be a cause for loose fixings		
Inspect condition of roof cladding and structure.	Begin preparations and investigate required pathways for major roof repairs if necessary	Undertake major roof repairs if necessary to ensure the long-term protection of heritage items.
Roof Drainage		
Inspect connections to downpipes – reattach if loose and fix securely.	Inspect gutters and downpipes for leaks or corrosion. If damage is minor and readily repairable, undertake repairs.	Inspect gutters and downpipes for ladder or other mechanical damage. If damage is minor and readily repairable, undertake repairs.
	Inspect downpipe connections into water tanks and in-ground stormwater system (if existing). Restore connections and remove blockages as necessary.	Begin preparations and investigate required pathways for major roof drainage repairs if necessary
	Inspect water tanks and bases for integrity.	Begin preparations and investigate required pathways for installation of water tanks if needed.
Eaves and Verandah Roof Space		
Inspect for bird's nests, bees, wasps or hornets nests and remove		
Remove cobwebs		
Inspect for water stains which might indicate an overflowing gutter or roof leaks.	Inspect paintwork and condition of exposed rafter ends. Inspect especially for damage which might indicate roof leakage.	
Walls, Floors and Ceilings.		
Inspect all areas for general dirt and grime, graffiti / vandalism, bird excretion and plant growth from joints in fabric.	Inspect paintwork and condition of timber parts.	
Advise any signs of termite or fungal attack to the pest inspector prior to inspection.	Inspect for deteriorating or permanently moist areas which might identify leaks or lead to termite or fungal attack.	
	Investigate options to improve termite protection of timber Butcher's Hut, Carriage House and Horse Boxes.	Incorporate additional termite protection measures to Butcher's Hut, Carriage House and Horse Boxes with required approvals.

Annual Maintenance Works	Medium Term Maintenance Works: 2-3 years	Long Term Maintenance Works: 5 years
Cut back new growth of climbing plants, trees and shrubs against the walls of the heritage items ²	Inspect for cracking in foundations, walls and junctions which might be caused by growth of nuisance planting.	
	Monitor existing cracks for further movement or deterioration. Compare photos between inspections to confirm movement	
	Inspect underfloor areas to ensure ventilation if is available is maintained.	
Monitor walls for salt / damp attack. Compare photos between inspections and seek advice if rate of deterioration is seen to increase.	Investigate options for arresting salt / damp attack, including diverting groundwater ¹	Seek approvals to undertake work commensurate with future use of Wambo Homestead Complex.
	Inspect condition of brickwork where identified cement mortar repairs have been made. Where brickwork is deteriorating, desalinize bricks and repoint with lime mortar.	
	Inspect condition of ceilings and re-fix as necessary. Ensure there are no objects in roof space or ceiling void space which are affecting the support of the ceilings	
	Inspect ceilings for water damage which might indicate roof leaks or failing flashings.	
Joinery		
Inspect glazing for cracks or breakage. Replace glazing like-for like where broken windows have permitted weather or vermin into the buildings. N.B mine subsidence may lead to cracked window glazing.	Inspect the condition of door and window catches, hardware, hinges, runners, counterweights etc and make repairs as necessary. N.b installation of a door stop may be advisable to prevent damage to adjacent walls	
Inspect doors and windows for correct operation. N.b. subsidence and other structural movement may lead to doors and windows binding or jamming.	Inspect the window and door surrounds for water staining which may indicate failing flashings	
	Inspect Fixtures and Fittings for condition and also for the soundness of their connections to walls or floors. If damage is minor and readily repairable, undertake repairs.	

Annual Maintenance Works	Medium Term Maintenance Works: 2-3 years	Long Term Maintenance Works: 5 years
Paintwork		
		Inspect all cladding including wall slabs, floorboards and linings. Identify any areas which are deteriorating due to lack of paint protection.
		Inspect for areas which are exposed to splashing water. E.g. gutter overflows.
		Inspect all doors and windows for deterioration and weathering (typically occurring in their lower parts)
		Inspect for cracking or blistered paint which will indicate a higher grade of paint is required for recoating with adequate protection.
		Seek guidance from a heritage consultant for paint colouring and undertake painting to buildings which require such protection. N.b do not paint parts of structures that were never intended to be painted.
Services		
	Inspect for loose or damaged switches or wall outlets and repair or secure. Noted – there is no electricity service	
	Inspect for exposed wiring or damaged insulation and repair or secure as necessary.	

¹Adopted from 2017 Annual Inspection (**Table 6** and **Table 11**)

² WCPL have sought advice from OEHL regarding the management/removal of a peppercorn tree abutting the Butcher's Hut. OEHL has recommended that WCPL submit a Section 57 Exemption Notification for this work (refer Appendix A for correspondence). Removal of the tree will occur following OEHL approval. A replacement tree will be planted nearby, out of range of the footings of the butcher's hut and kitchen wing.

7.4.1 Implementation Schedule for Actions Arising from the 2017 WHC Inspection

The 2017 WHC site inspection (**Section 6.6**) identified a number of issues to be addressed. **Table 16** provides implementation details which have been included in **Table 14** and **Table 15**.

Table 16: Timetable for Additional Management Actions Arising from 2017 Inspection

Actions Arising from 2017 Inspection	Implementation Schedule
General termite control requires additional specific baits for each timber structure. Given the nature of 'timber buried in earth' construction techniques, a normal level of protection is inadequate	Requirement for additional baits added to longer term preventative and cyclic maintenance program (Table 15)
Valley gutters and eaves gutters are full of leaves	Included in monthly preventative and cyclic maintenance program (Table 14)
Roofs are missing, accelerating the deterioration of roof framing, internal walls floors and brickwork	Roofs are included in longer term preventative and cyclic maintenance program (Table 15)
Additional support required for some structures to prevent the wind blowing some structures over.	Added to longer term preventative and cyclic maintenance program (Table 15)
The base courses of some stone and some brickwork walls have rising damp, salt damage problems. Further measures to divert ground water are required. Replacement stone and brickwork is required. Repair is required.	Investigation to divert groundwater added to longer term preventative and cyclic maintenance program (Table 15). Replacement of stone and brickwork forms part of long term maintenance cycle.
Reduce fuel load and fire risk by continuing with mowing and undertaking additional management of trees, shrubs, scrub, garden beds to reduce avoidable fuel and risk.	Included in monthly preventative and cyclic maintenance program (Table 14)

8.0 Review and Reporting

8.1 Review

This CMP will be reviewed every 5 years. If required the CMP will be updated to reflect current site conditions, management concerns and statutory requirements.

8.2 Reporting

Results of blast monitoring in the vicinity of the WHC will be reported in the Annual Review, along with the details of any non-compliances with the blast criteria detailed in DA 305-7-2003. Subsidence impacts (which are not predicted) and progress with maintenance works and management actions in will also be reported in the Annual Review.

9.0 Responsibilities

Table 17 below summarises responsibilities documented in the CMP. Responsibilities may be delegated as required.

Table 17: CMP Responsibilities

No	Task	Responsibility	Timing
1	Coordinate maintenance and monitoring of the WHC in accordance with this CMP	E&C Manager	Ongoing
2	Review and update CMP in accordance with Section 8.1	E&C Manager	Every 5 years
3	Report blast monitoring results for the WHC and progress against maintenance works and management actions	E&C Manager	Annually
4	Stakeholder engagement – Interpretation Strategy / use	E&C Manager	Ongoing
5	Implement preventative and cyclic maintenance	E&C Manager	Monthly
6	Implement Conservation Policies, Strategies and Guidelines in accordance with the Implementation Schedule (Table 13)	E&C Manager	Ongoing

APPENDIX A REGULATORY CORRESPONDENCE



Peter Jaeger
Environment and Community Manager
Wambo Coal Pty Ltd
PMB 1
SINGLETON NSW 2330

Via Email: PJaeger@peabodyenergy.com

Dear Mr Jaeger

**Wambo Coal Mine (DA 305-7-2003)
Approval of Wambo Homestead Complex Conservation Management Plan**

I refer to your email of 29 May 2019, submitting the revised Wambo Homestead Complex Conservation Management Plan (CMP), required under conditions 58 and 59 of Schedule 4 of the Wambo Coal Mine project approval (DA 305-7-2003).

The Department has reviewed the plan and is satisfied that it meets the relevant requirements of the conditions. Consequently, I wish to advise that the Secretary approves the Wambo Homestead Complex CMP (Revision 6, dated May 2019).

Please ensure a finalised copy of this document is made available on your company website at your earliest convenience.

Should you have any enquiries in relation to this matter, please contact Nathan Heath on the details above.

Yours sincerely,

Howard Reed

Director

Resource Assessments

as nominee of the Secretary

31.5.19

Dobbins, Nicole

From: Nathan Heath <Nathan.Heath@planning.nsw.gov.au>
Sent: Tuesday, May 21, 2019 4:25 PM
To: Dobbins, Nicole
Cc: Jaeger, Peter F
Subject: RE: Wambo Coal - Wambo Homestead Complex_Conservation Management Plan

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Good afternoon Nicole,

Thank you for submitting the revised Wambo Homestead Complex Conservation Management Plan (CCMP) for approval.

I have gone through WCPL's response to the Department's review comments and it appears as though most of the comments are now complete and closed out.

I do note, however, that Table 13 (Conservation Policies and Implementation Schedule), Conservation Policy 5, states that WCPL will liaise with a number of universities regarding opportunities for undergraduate and postgraduate students, and primary and secondary schools regarding their engagement with Wambo Homestead History projects. The timing trigger for correspondence to be drafted regarding this matter is June 2019. Noting that June 2019 is a couple of weeks away, please provide the Department an update on the progress and status of Conservation Policy 5, and update the CCMP as relevant.

If you have any questions please feel free to contact me on the details provided below.

Thank you,
Kind regards

Nathan Heath
Environmental Assessment Officer
Resource Assessments
320 Pitt Street | GPO Box 39 City | Sydney NSW 2001
T 02 8289 6617 E: nathan.heath@planning.nsw.gov.au



**Planning &
Environment**



From: Dobbins, Nicole <NDobbins@peabodyenergy.com>
Sent: Wednesday, 15 May 2019 2:29 PM
To: Megan Dawson <Megan.Dawson@planning.nsw.gov.au>
Cc: Melanie Hollis <Melanie.Hollis@planning.nsw.gov.au>; Jaeger, Peter F <PJaeger@peabodyenergy.com>; Nathan Heath <Nathan.Heath@planning.nsw.gov.au>
Subject: RE: Wambo Coal - Wambo Homestead Complex_Conservation Management Plan

Hi Megan,

Summary of DP&E Correspondence (dated 18 December 2018) and WCPL Response

Reference	DPE Comment (dated 18 Dec 2018, received 15 Jan 2019)	Action Required	WCPL Response (14 March 2019)
DA Schedule 4 Condition 60	Table 5 notes the 'Wambo Homestead Oral History Stage 1 and 2 Report' (2015) prepared by GML. Table 12 also identifies the 'Preparation of the Wambo Homestead Oral History Stages 1 and 2 Report, completed by GML Heritage (GML, 2015). This report was provided to various stakeholders including Singleton Shire Council and OEH'. The Department notes that the subject report was prepared to satisfy the requirements of Schedule 4, Condition 60.	Please append a copy of the 'Wambo Homestead Oral History Stages 1 and 2 Report' to the updated CMP for reference. Alternatively, update the CMP to include a summary of key outcomes from the subject report.	The 'Wambo Homestead Oral History Stages 1 and 2 Report' is too large to append to the CMP. A new section has been added to the CMP which includes a summary of the recommendations from the Oral History report and actions WCPL has taken to address these recommendations (refer CMP Section 7.2.6).
		Please demonstrate the suitability of the consultant that has prepared the subject report, i.e. is the consultant (GML) suitably qualified and experienced.	GML Heritage is one of Australia's leading heritage consultancies. GML has over 28 years of experience and more than 50 experienced professionals, including archaeologists, architects, historians and built heritage experts. GML has experience in preparing oral history reports and in the preparation of significance assessments for local history collections. GML also prepared the 2012 CMP for the WHC so they are familiar with the site and its history.
DA Schedule 4 Condition 64	Table 12, reference row 64: Blasting has been updated to note that Mr Bill Jordan (from Bill Jordan and Associates) is the qualified engineer examining blast monitoring records for the WHC. The applicant has indicated that Mr Bill Jordan was endorsed by DPE	Please confirm that the Director of the NSW Heritage Office has approved the appointment of the structural engineer (Mr Bill Jordan), as required under Schedule 4, Condition 64.	A letter from OEH (dated 31 Nov 2005) approving the appointment of Mr Bill Jordan has been included in Appendix A of the CMP.

Reference	DPE Comment (dated 18 Dec 2018, received 15 Jan 2019)	Action Required	WCPL Response (14 March 2019)
	<p>on 19 October 2016 as the qualified engineer for the WHC blast monitoring station. It is noted that Mr Bill Jordan has been providing advice to the applicant since 2010. It is not clear however if the Director of the NSW Heritage Office has approved the appointment of Mr Bill Jordan, as required under Schedule 4, Condition 64 of the development consent.</p> <p>The suitability of Mr Bill Jordan as a qualified and experienced structural engineer is also not clear.</p>	<p>Please demonstrate the suitability of Mr Bill Jordan as a qualified and experienced structural engineer.</p>	<p>Bill Jordan is a Chartered Civil and Structural Engineer specialising in the conservation of historical structures. Bill has more than 40 years of experience in this field. Bill's vast experience in this field includes the development of vibration monitoring programs and software tools for analysing mining blast vibrations and setting safe ground vibration limits. Bill has written and presented numerous papers for engineering conferences, including papers specifically relating to mine blasting and its impacts on buildings and structures. Bill has been providing advice to WCPL on the WHC since his appointment in 2005.</p>
<p>DA Schedule 4 Condition 65</p>	<p>The applicant has indicated that Mr Bill Jordan was endorsed by DPE on 19 October 2016 as the qualified engineer for the WHC blast monitoring station. It is noted that Mr Bill Jordan has been providing advice to the applicant since 2010.</p>	<p>Please refer to comments provided under Schedule 4, Condition 64 above.</p>	<p>See response provided for Condition 64.</p>
<p>DA Schedule 4 Condition 66</p>	<p>Table 12, reference row 66: Blasting has been updated to note 'review of blast monitoring results from shots within 2km of WHC by an engineer (Bill Jordan) with advice returned to WCPL regarding his assessment of potential impacts on the WHC'. The timing for this requirement is noted as 'Ongoing (6 monthly reports)'.</p>	<p>Please update Table 12, reference row 66: Blasting, column 'Completion Date' to also include 'reporting to the applicant on monitoring results each month for blasting within 2km of the Wambo Homestead Complex'.</p>	<p>Monitoring of blasts within 2km of the WHC is undertaken in accordance with Condition 65 of DA305-7-2003. Table 12 has been updated to include provision of blast monitoring results to WCPL on a monthly basis (reference row 65).</p>

Reference	DPE Comment (dated 18 Dec 2018, received 15 Jan 2019)	Action Required	WCPL Response (14 March 2019)
		<p>Please clarify as to whether copies of the subject reports have been forwarded to the NSW Heritage Office (OEH)?</p>	<p><u>Blast Results</u> Copies of blast monitoring results for the period Nov 2005 – Oct 2006 and Aug 2007 – Dec 2007 have been provided to OEH. WCPL has been unable to locate evidence to confirm that copies of blast reports for the following periods were sent to OEH:</p> <ul style="list-style-type: none"> • Nov 2006 – July 2007 • Jan 2008 - present. <p>These results will be sent to OEH.</p> <p><u>Structural Assessment Reports</u> Copies of the 2005, 2007, 2011, 2015 and 2016 Structural Assessment Reports have been provided to OEH. WCPL has been unable to locate evidence to confirm that copies of the 2006, 2008, 2009, 2010, 2012, 2013, 2014, 2017 and 2018 Structural Assessment Reports were sent to OEH. These reports will be sent to OEH.</p>
DA Schedule 4 Condition 67	It is noted that additional inspections of the WHC were undertaken in April 2011 following two shots that exceeded the blasting criteria. It is not clear however if any additional exceedances of the blasting criteria have occurred since April 2011.	<p>Please clarify as to whether any additional exceedances of the blasting criteria have occurred since April 2011. If so, please include the nature of the exceedance(s) and whether any actions were identified.</p>	<p>No additional exceedances of the blasting criteria have occurred since April 2011. It is noted that any blasting exceedances will be reported in the site's Annual Reviews.</p>
		Please also refer to comments provided under Schedule 4, Condition 64 above.	See response provided for Condition 64.
		Please also refer to comments provided under Schedule 4, Condition 64 above.	See response provided for Condition 64

Reference	DPE Comment (dated 18 Dec 2018, received 15 Jan 2019)	Action Required	WCPL Response (14 March 2019)
DA Schedule 4 Condition 68	It is noted that Mr Bill Jordan was engaged by the applicant to undertake annual inspections and assessments of the structural integrity of the WHC.	Please refer to comments provided under Schedule 4, Condition 64 above.	See response provided for Condition 64
DA Schedule 4 Condition 69	Table 13 (Conservation Policies and Implementation Schedule), reference row, Conservation Policy 2, commits to plan for 'removal of the mine's road and services that use that corridor, then the reinstatement of the homestead fences and layout so that the road can be removed at the earliest possible date'. The proponent has indicated that the requirements of Condition 69 would be considered in the Mine Closure Plan.	Table 13 – Please update the timing for consideration of this requirement to 2019, if that is the case (as noted in Appendix A).	Table 13 has been updated to include the timing for consideration of this requirement i.e. 2019.

Reference	DPE Comment (dated 18 Dec 2018, received 15 Jan 2019)	Action Required	WCPL Response (14 March 2019)
DA Schedule 4 Condition 70	<p>Table 13 notes that 'moveable heritage is to be documented in an inventory and safely, protected and stored'. The Proponent has indicated that no moveable heritage items have been documented at the site.</p> <p>The CMP must however include a commitment to liaise with the Power House Museum and Museums and Galleries Foundation regarding the significance of movable heritage as relevant.</p>	Please update Table 13, reference row, Conservation Policy 2, to include a commitment to liaise with the Power House Museum and Museums and Galleries Foundation regarding the significance of moveable heritage, as relevant.	<p>The 2003 Non-Aboriginal Heritage Impact Statement (Appendix C of the Wambo Development Project EIS) (Resource Strategies, 2003) did not identify any moveable heritage items within the WHC therefore there is no requirement for WCPL to liaise with the Power House Museum and Museums and Galleries Foundation in regard to moveable heritage items for the WHC. A note has been added below Table 2 of the CMP (DA305-7-2003 Requirements for the CMP) to this effect. Moveable heritage has been removed from Table 13 of the CMP (Ver 5) as there are no moveable heritage items to manage at the WHC.</p> <p>It is noted that there are a number of moveable heritage items at other sites within the Wambo approved mine boundary, however these are outside the WHC and are therefore not relevant to the WHC CMP.</p> <p>WCPL contacted Museums & Galleries NSW (formerly the Museums and Galleries Foundation) via telephone on 13 March 2019 and were advised that Museums & Galleries NSW do not provide advice on moveable heritage. WCPL will liaise with the Power House Museum in relation to moveable heritage items, in accordance with Schedule 4, Condition 70 of DA305-7-2003.</p>

Reference	DPE Comment (dated 18 Dec 2018, received 15 Jan 2019)	Action Required	WCPL Response (14 March 2019)
CMP Implementation Strategy	<p>It is not clear as to whether all dates/timelines provided under Table 13 are current and up to date.</p> <p>OEH (email dated 21 November) noted that ‘in the event the applicant requires approval under the Heritage Act 1977 for the removal of the tree then you (the applicant) should fill out the attached exemption notification form and submit it to the heritagemailbox@environment.nsw.gov.au’ for consideration prior to commencing works.</p> <p>The applicant has indicated in Table 15 of the CMP that initial advice from OEH suggests the removal of the peppercorn tree may be exempt from a section 60 application, however further consultation is required to confirm this position.</p> <p>Table 14 (Monthly Preventative and Cyclic Maintenance Program) includes actions such as ‘Debris and rubbish removal’ and ‘inspect windows and doors’ to prevent water from entering the building. Table 15 also includes annual and medium-term maintenance measures to prevent water from entering the building, for example, maintenance on roof coverings, roof drainage, eaves and verandah roof space, and joinery.</p>	Please clarify that all dates/ timelines provided under Table 13 are current and up to date.	<p>The Implementation Schedule date for the Mine Closure Plan referenced in Conservation Policy 6 has been updated from “likely late 2018” to “2019”. All other dates provided in Table 13 are current and up-to-date.</p> <p>Note: The Conservation Policy 1 strategy to seek endorsement of the CMP by OEH has also been removed from Table 13, as endorsement is not required by OEH under DA305-7-2003.</p>

Reference	DPE Comment (dated 18 Dec 2018, received 15 Jan 2019)	Action Required	WCPL Response (14 March 2019)
CMP Section 7.3.3.	<p>OEH (email dated 21 November) noted that <i>'in the event the applicant requires approval under the Heritage Act 1977 for the removal of the tree then you (the applicant) should fill out the attached exemption notification form and submit it to the heritagemailbox@environment.nsw.gov.au'</i> for consideration prior to commencing works. The applicant has indicated in Table 15 of the CMP that initial advice from OEH suggests the removal of the peppercorn tree may be exempt from a section 60 application, however further consultation is required to confirm this position.</p>	<p>Please provide the Department an update on the applicant's final position regarding the management of the subject peppercorn tree.</p>	<p>EJE Heritage architect Stephen Batey discussed the removal of the peppercorn tree with OEH (via telephone) on 13 March 2019. Stephen summarised the outcome of that discussion in an email to WCPL on the same day – a copy of this email has been included in Appendix A.</p> <p>OEH has recommended that WCPL submit a Section 57 Exemption Notification for the removal of the subject tree. The agreed approach is to cut the tree to a stump and poison it to prevent regrowing. A replacement peppercorn tree will then be planted nearby, out of range of the footings of the butcher's hut and kitchen wing (refer to diagram in attached email). Removal of the peppercorn tree is included as part of Conservation Policy 2 (refer Table 13 strategies). WCPL is currently preparing a Section 57 Exemption Notification for this work. Removal of the tree will be completed as soon as approval from OEH is granted.</p>
		<p>Please update Appendix A to include any additional email correspondence with OEH on the matter.</p>	<p>Appendix A has been updated to include additional email correspondence with OEH and DP&E.</p>
Action Plan – item 3	<p>Please refer to previous DPE comments above regarding consultation with OEH on the removal of the tree abutting the butchers hut.</p>	<p>Please provide the Department an update on the applicant's final position regarding the management of the subject peppercorn tree.</p>	<p>See above response.</p>
		<p>Please update Appendix A to include any additional email correspondence with OEH on the matter.</p>	

Reference	DPE Comment (dated 18 Dec 2018, received 15 Jan 2019)	Action Required	WCPL Response (14 March 2019)
General comments	Please refer to previous DPE comments above regarding consultation with OEH on the removal of the tree abutting the butchers hut.	Please update Appendix A to include any additional email correspondence with OEH.	See above response.

Summary of DP&E Correspondence (dated 12 November 2018) and WCPL Response

Reference	DPE Comment	Action Required	WCPL Response
DA Schedule 4 Condition 57	<ul style="list-style-type: none"> Both Section 6.1 Statutory Requirements and Section 7.1 Management Actions in Response to DA Consent Conditions acknowledge the requirement for an application under Section 60 of the Heritage Act to be approved by the Heritage Council. However there are no further details if approval has been granted. 	Please provide evidence that this requirement has been adequately addressed.	<p>There was no disturbance of the WHC by WCPL's mining activities prior to June 2010. The only activities to be undertaken included maintenance of the structures to reduce potential deterioration from water damage.</p> <p>A number of S60 applications were submitted to the Heritage Council during 2011-2013. S60 approvals were granted for all of these applications. Table 12 has been updated to include details of the S60 applications and approvals.</p>
DA Schedule 4 Condition 59	<ul style="list-style-type: none"> Endorsement of the CMP required from the Heritage Council, Office of Environment and Heritage, Heritage Division. Table 13, Conservation Policy 5: Undertake further historical research and oral history, several strategies to liaise with stakeholders indicates that such correspondences are to be drafted by June 2019. Identify when correspondences will be undertaken. 	Follow up with OEH required.	<p>Schedule 4, Condition 58 requires that the CMP be prepared ..."in accordance with Heritage office guidelines for the <u>consideration</u> of the Heritage Council of NSW". WCPL provided a copy of the CMP to OEH on 11 October 2018 and sought feedback from the Heritage Council on the document.</p> <p>In an email to WCPL , dated 29 Nov 2018, OEH advised that they do not provide comments or feedback on CMPs unless it is part of an "endorsement process", for which there is a \$2,200 fee, with an extra \$2,200 if a site visit is required (refer attached OEH email, dated 29/11/18). WCPL notes that it is not required to obtain an <u>endorsement</u> of the CMP from OEH under Schedule 4, Condition 58 of the Development Consent and therefore it is unlikely that OEH will provide any comment on the document"</p> <p>WCPL will commence consultation with stakeholders regarding opportunities for research during the first half of 2019 i.e. correspondence will be drafted by June 2019.</p>

Reference	DPE Comment	Action Required	WCPL Response
DA Schedule 4 Condition 60	<ul style="list-style-type: none"> No details provided to address this requirement. 	Please provide evidence that this requirement has been adequately addressed.	In 2015 GML Heritage completed the Wambo Homestead Oral History Stages 1 and 2 Report on behalf of WCPL. This report was developed to satisfy the requirements of Condition 60. Table 5 (Previous Studies and Reports for the WHC) and Table 12 (Management Actions Undertaken in Response to Consent Conditions) have been updated to include details of this report.
DA Schedule 4 Condition 63	<ul style="list-style-type: none"> Table 12 – Management Actions Undertaken in Response to Consent Conditions (Table 12) does not indicate the timeframe in which management actions have been and/or to be undertaken. Table 12 indicates that Condition 63 has been addressed by the: ‘establishment of a blast monitoring station inside the WHC, adjacent to the Stud Master’s Cottage’. However, it is unclear whether this has been undertaken and when. 	Please amend table and provide timeframe for undertaking of management actions.	Table 12 (Management Actions Undertaken in Response to Consent Conditions) has been updated with a “Completion Date” column and further details have been provided of what/when actions were undertaken.
DA Schedule 4 Condition 64	<ul style="list-style-type: none"> Table 12 indicates that Condition 64 has been addressed by the ‘engagement of a qualified engineer to examine blast monitoring records for the WHC’. Unsure when and if this has occurred. 	Please provide details of the engineer that has been engaged to address this requirement.	Table 12 (Management Actions Undertaken in Response to Consent Conditions) has been updated with a “Completion Date” column and further details have been provided of what/when actions were undertaken. Bill Jordan from Bill Jordan and Associates has been engaged by WCPL to examine blast monitoring records for the WHC. Bill has been reviewing blast monitoring records and providing advice to WCPL since 2010. Bill was endorsed by DPE on 19 Oct 2016.
DA Schedule 4 Condition 65	<ul style="list-style-type: none"> Table 12 outlines that Condition 65 has been addressed by the ‘monitoring of blasts to ensure they do not exceed AS2187 and engagement of an engineer to undertake a study to determine susceptible blast wave frequencies that may also pose a risk to the structural integrity of the WHC’. 	Please provide details of the engineer that has been engaged to address this requirement.	As per Condition 64. Bill Jordan was also engaged by WCPL to undertake a Blast Vulnerability Study for the WHC in April 2012.

Reference	DPE Comment	Action Required	WCPL Response
DA Schedule 4 Condition 66	<ul style="list-style-type: none"> Table 12 outlines that Condition 66 has been addressed by the 'review of blast monitoring results from shots within 2km of WHC by an engineer with advice returned to WCPL regarding his assessment of potential impacts on the WHC'. 	Please provide details of the engineer that has been engaged to address this requirement.	As per Condition 64.
DA Schedule 4 Condition 67	<ul style="list-style-type: none"> Table 12 outlines that Condition 67 has been addressed as follows: "annual inspections of structural integrity of the WHC by an engineer. Additional inspection of the WHC in April 2011 following two shots that exceed the blast criteria. No actions were identified as required following these inspections". Unsure when this has occurred. 	Please provide details of the engineer that has been engaged to address this requirement.	As per Condition 64. Bill Jordan was also engaged by WCPL to undertake annual inspections and assessments of the structural integrity of the WHC.
DA Schedule 4 Condition 68	<ul style="list-style-type: none"> Table 12 outlines that Condition 68 has been addressed specifically: 'annual assessment of the WHC by an engineer'. 	Please provide details of the engineer that has been engaged to address this requirement.	As per Condition 64. Bill Jordan was also engaged by WCPL to undertake annual inspections and assessments of the structural integrity of the WHC.
DA Schedule 4 Condition 69	<ul style="list-style-type: none"> This requirement is not covered in Table 13 – Conservation Policies and Implementation Schedule. 	Update and amend Table 13.	Table 13 (Conservation Policies and Implementation Strategy) includes a policy and implementation schedule for the removal of the mine's haul road and reinstatement of the homestead fence (refer Policy 2: Protect and enhance the setting and landscape). Table 13 indicates that this aspect will be considered as part of the site's Mine Closure Plan, scheduled for update following the determination of the United JV i.e in 2019.
DA Schedule 4 Condition 70	<ul style="list-style-type: none"> This requirement is not covered in Table 13 – Conservation Policies and Implementation Schedule. 	Update and amend Table 13.	Table 13 (Conservation Policies and Implementation Strategy) includes a policy and implementation schedule for the documentation and storage of moveable heritage (refer Policy 3: Protect and retain existing fabric). No moveable heritage items have been documented at the site therefore there is no further action required.

Reference	DPE Comment	Action Required	WCPL Response
CMP Implementation Strategy	<ul style="list-style-type: none"> The CMP has been revised to include a timetable for implementation of the management strategies in Table 13 of the WHC CMP. Table 13, The strategy: ‘remove self-seeded inappropriately located trees that threaten the stability of homestead structures’ – the implementation strategy outlines that this is to be undertaken ideally within one year, pending approval from OEH. Clarify if OEH provided a response to this approach. Table 13, The strategy: ‘prevent water from entering the buildings’ – the implementation strategy suggests that this is to be undertaken as part of the ‘long term maintenance works’, as outlined in Table 15. However, there are no provisions for this to be undertaken annually or medium term (2-3 years), please clarify and amend table, if required. 	Amend and update, where relevant.	<p>WCPL has received a response from OEH (email dated 21 November 2018 – refer Appendix A) regarding WCPL’s proposed strategy to remove the peppercorn tree adjacent the Butcher’s Hut (see attached).</p> <p>The response included the following advice regarding approvals “In the event that you require approval under the Heritage Act 1977 for the removal of the tree then you should fill out the attached exemption notification form and submit to heritagemailbox@environment.nsw.gov.au ”</p> <p>Table 15 (Longer Term Preventative and Cyclic Maintenance Program has been updated to include a footnote specifically addressing the management/removal of the peppercorn tree abutting the Butcher’s Hut (refer footnote no. 2). If it is deemed by OEH that a s60 application is required to be submitted, then WCPL will submit the application and seek approval for the works from OEH prior to commencing works.</p> <p>Table 14 of the CMP (Monthly Preventative and Cyclic Maintenance Program) includes the following actions to prevent water from entering the buildings:</p> <ul style="list-style-type: none"> Debris and rubbish removal - Inspect gutters including valley gutters Inspect windows and doors - Close and secure windows and doors to prevent entry by weather <p>Table 15 of the CMP (Longer Term Preventative and Cyclic Maintenance Program) includes annual and medium term maintenance works to prevent water from entering the buildings:</p> <ul style="list-style-type: none"> Roof Coverings – inspect and repair as needed Roof Drainage – inspect and repair as needed Eaves and Verandah Roof Space – inspections Joinery – inspect and repair as needed
CMP Table 15	<ul style="list-style-type: none"> Table 15 of the WHC CMP includes a commitment to investigate contributors of salt-damp. 	Amend and update, where relevant.	Noted – no update required.

Reference	DPE Comment	Action Required	WCPL Response
CMP Table 14 and 15	<ul style="list-style-type: none"> Preventative and Cyclic Maintenance Programs are included in Table 14 and Table 15 of the WHC CMP. Approval has been sought from OEH regarding the management of the tree abutting the butcher's hut (refer to Appendix A). However, no response has been provided from OEH. Has OEH advised that an approval is required? 	Amend and update, where relevant.	See above response.
Action Plan – item 3	<ul style="list-style-type: none"> Refer to email in Appendix A. Provide an update of the consultation with OEH seeking appropriate approval for undertaking management strategies on the tree abutting the Butcher's Hut. 	Follow up required.	See above response.
General comments	<ul style="list-style-type: none"> An update of the consultation with OEH is required, including any OEH approval is to be provided. 	Provide update of consultation with OEH.	See above response.

Summary of DP&E Correspondence (received 29 August 2018) and WCPL Response -

Comment	WCPL Response / Consideration of Comment
Reference is made to the heritage inspection conducted by the Department of Planning and Environment on 4 June 2018 and the additional information submitted to the Department by Wambo Coal Pty Ltd on 22 June 2018. ...	
Schedule 4 Condition 59 requires "The conservation policies and an interpretation strategy contained in the conservation management plan are to be implemented in accordance with a timetable to be contained in the conservation management plan".	Refer to Table 13.
The Department notes that the timetable and interpretation strategies are not contained in the 2012 CMP.	The CMP has been revised to include a timetable for implementation of management strategies in Table 13.
Section 7.3.3 of the CMP requires "further investigation of site conditions to identify and assess potential contributors to salt-damp problems should be carried out with the assistance of appropriate professional advice."	Table 15 : Longer Term Preventative and Cyclic Maintenance Program includes a commitment to investigate contributors of salt-damp
Section 7.3.3 of the CMP also states that "existing site components/structures /features should continue to be maintained in situ, including works to: remove plant, pest, rubbish or other infestations with the potential to damage structures or fabric. The Department noted during the inspection a tree abutting the butcher's hut.	Preventative and Cyclic Maintenance Programs are included in Table 14 and Table 15 . Approval has been sought from OEH regarding the removal of the tree abutting the butcher's hut (refer to email in Appendix A). OEH has advised an approval will be required
The Department requests under Schedule 3, Condition 4 that Wambo Submit an action plan by 11 October 2018. The action plan shall require:	
(1) Evidence of the review of the CMP and the inclusion of the timetable of conservation policies and interpretation strategies	This document represents Version 3 of the CMP which will be submitted for consultation and approval. A timetable for implementation of conservation policies and interpretation strategies is included in the 2018 revision in Table 13.
(2) Evidence of the investigation of possible contributors to salt-damp including the timing of such investigations	Table 15 : Longer Term Preventative and Cyclic Maintenance Program includes a commitment to investigate contributors of salt-damp
(3) Evidence of Consultation with the Office of Environment and Heritage regarding the removal of the tree abutting the butcher's hut	Refer to email in Appendix A . Consultation will continue with OEH seeking appropriate approval for the removal of the tree abutting the Butcher's Hut

From: Stephen Batey <SBatey@eje.com.au>
Sent: Wednesday, 13 March 2019 4:03 PM
To: Cheryl Henriques
Cc: Jaeger, Peter F; Dobbins, Nicole; Barney Collins
Subject: RE: Removal of pepper tree at Wambo Homestead.
Attachments: IMG_2483 NEW TREE.jpg

Hi Cheryl and Peter,
I've just had a long chat with Gary Hinder from the Heritage Office. He still recommends submitting a section 57 under Standard Exemption no. 7 - Minor Activities with little or no adverse impact upon heritage significance. He says he anticipates no problems approving it under that exemption.

We will have to cut the tree to a stump and poison it to prevent it regrowing. That will arrest the damage to the Butcher's Hut. We also need to show on a diagram where we will plant a replacement peppercorn tree nearby, but out of range of the footings to the butcher's hut and kitchen wing. I've attached a marked up photo which may be enough though a plan extract might also be helpful. We'll need to ensure the survival of the new tree also - it may require some protective measures for a while.

Kind Regards,
Stephen Batey
Registered Architect 9941 (NSWARB)
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EJE architecture

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EJE acknowledges the Traditional Custodians of country throughout Australia and recognises their continuing connection to land, waters and community. We pay our respects to them and their cultures, and to others past, present and emerging.



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From: May Patterson <May.Patterson@planning.nsw.gov.au>
Sent: Tuesday, 15 January 2019 11:39 AM
To: Jaeger, Peter F <PJaeger@peabodyenergy.com>
Subject: RE: Wambo Coal_Wambo Homestead Complex Conservation Management Plan

Good morning Peter,

Thank you for providing the amended CMP in December 2018. DPE have reviewed the CMP and raised some minor issues to be addressed. Notwithstanding the email correspondence received from OEH (Adrian Hohenzollern) on the 18 December 2018, the CMP requires updating in some sections.

Please see attached comments for your consideration.

Kind regards,

May Patterson

Team Leader
Resource Assessments
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From: Adrian Hohenzollern <Adrian.Hohenzollern@environment.nsw.gov.au>
Sent: Tuesday, 18 December 2018 11:12 AM
To: May Patterson <May.Patterson@planning.nsw.gov.au>; Jaeger, Peter F <PJaeger@peabodyenergy.com>
Cc: Jacqueline Dalton <Jacqueline.Dalton@environment.nsw.gov.au>
Subject: RE: Wambo Coal_Wambo Homestead Complex Conservation Management Plan

Dear May, Peter,

Thanks for referring the CMP to the Heritage Council, which I understand has been prepared in accordance with Condition 58 of DA 305-7-2003.

Since 2005, the Heritage Council only reviews CMPs that have been submitted for endorsement (along with the relevant fee), see below:

<https://www.environment.nsw.gov.au/resources/heritagebranch/heritage/cmpstrategyapril2005.pdf>

I can advise that as this condition does not require endorsement of the CMP, the Heritage Division will not be taking any further action at this stage. If the owner or applicant seeks endorsement of the CMP in the future, the Heritage Division would commence a review at that time.

The Heritage Division will keep a copy of the CMP on file for future reference.

If you need any further information or clarification, please don't hesitate to get in touch.

Kind regards
Adrian

Adrian Hohenzollern
Senior Team Leader

Customer Strategies, Heritage Division
Office of Environment and Heritage
Locked Bag 5020 PARRAMATTA NSW 2124
Level 6, [10 Valentine Ave, PARRAMATTA NSW 2150](#)
T: 02 9860 1505 E: adrian.hohenzollern@environment.nsw.gov.au
W www.environment.nsw.gov.au | www.environment.nsw.gov.au/cultureandheritage.htm

From: May Patterson
Sent: Friday, 14 December 2018 9:57 AM
To: Jacqueline Dalton <Jacqueline.Dalton@environment.nsw.gov.au>
Subject: RE: Wambo Coal_Wambo Homestead Complex Conservation Management Plan

Good morning Jacky,

As per our conversation, please find attached a copy of DA 305-7-2003 for your information.

The requirement of the Conservation Management Plan is as per the condition outlined under Schedule 4, Condition 58:

*“Within 12 months of the commencement of this consent, the Applicant shall prepare a conservation management plan for the Wambo Homestead Complex in accordance with Heritage Office guidelines for the **consideration of the Heritage Council of NSW**”.*

Kind regards,

May Patterson

Team Leader
Resource Assessments
320 Pitt Street | GPO BOX | Sydney NSW 2001
T 02 8275 1190
E: may.patterson@planning.nsw.gov.au



Planning &
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From: Jaeger, Peter F <PJaeger@peabodyenergy.com>
Sent: Wednesday, 12 December 2018 2:28 PM
To: May Patterson <May.Patterson@planning.nsw.gov.au>
Cc: Leah Cook <Leah.Cook@planning.nsw.gov.au>; Michael Frankcombe <Michael.Frankcombe@planning.nsw.gov.au>
Subject: RE: Wambo Coal_Wambo Homestead Complex Conservation Management Plan

Hi May,

Please find attached revised CMP which addresses the comments received from DPE on 13 November 2018.

In relation to obtaining review from OEH, Schedule 4, Condition 58 requires that the CMP be considered by the Heritage Council of NSW. WCPL provided a copy of the CMP to OEH on 11 October 2018 and sought feedback from the Heritage Council on the document. OEH advised that they do not provide comments or feedback on CMPs unless it is part of an "endorsement process", for which there is a \$2,200 fee, with an extra \$2,200 if a site visit is required (refer attached OEH email, dated 29/11/18). WCPL notes that it is not required to obtain an endorsement of the CMP from OEH under Schedule 4, Condition 58 of the Development Consent and therefore it is unlikely that OEH will provide any comment on the document.

Regards,

Peter Jaeger

Manager: Environment & Community

Wambo Coal

PMB 1 | Singleton, NSW 2303

Office Phone: +61 2 6570 2206 | Mob: +61 417 527 585

pjaeger@peabodyenergy.com

From: May Patterson <May.Patterson@planning.nsw.gov.au>
Sent: Tuesday, 4 December 2018 11:13 AM
To: Jaeger, Peter F <PJaeger@peabodyenergy.com>
Subject: RE: Wambo Coal_Wambo Homestead Complex Conservation Management Plan

Good morning Peter,

As per Schedule 4, Condition 58 the condition requires that the CMP be considered by the Heritage Council of NSW. If you can liaise with OEH directly and once their review/ feedback has been provided, please pass these on to DPE for our consideration.

Kind regards,

May Patterson

Team Leader

Resource Assessments

320 Pitt Street | GPO BOX | Sydney NSW 2001

T 02 8275 1190

E: may.patterson@planning.nsw.gov.au



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From: Jaeger, Peter F <PJaeger@peabodyenergy.com>
Sent: Tuesday, 4 December 2018 8:28 AM
To: May Patterson <May.Patterson@planning.nsw.gov.au>
Cc: Leah Cook <Leah.Cook@planning.nsw.gov.au>; Michael Frankcombe <Michael.Frankcombe@planning.nsw.gov.au>
Subject: RE: Wambo Coal_Wambo Homestead Complex Conservation Management Plan

Hi May,

Thanks for the comments on the Wambo Homestead Conservation Management Plan (CMP).

In response to submission of the CMP to OEH (Heritage) Wambo received the attached correspondence.

Schedule 4 Condition 58 of the DA states "Within 12 months of the commencement of this consent, the Applicant shall prepare a conservation management plan for the Wambo Homestead Complex in accordance with Heritage office guidelines for the consideration of the Heritage Council of NSW."

DPE noted in comments on the CMP (dated 12 November 2018) that endorsement of the CMP is required from the Heritage Council, Office of Environment and Heritage, Heritage Division.

Is it the expectation of the DPE that Wambo obtain endorsement from OEH and such pay the fee for review and comment? If so, Wambo will provide the updated CMP to OEH which incorporates the DPE comments. Concurrently, Wambo will provide the updated comments to DPE also.

Regards,

Peter Jaeger

Manager: Environment & Community

Wambo Coal

PMB 1 | Singleton, NSW 2303

Office Phone: +61 2 6570 2206 | Mob: +61 417 527 585

pjaeger@peabodyenergy.com

Peabody

From: Jacqueline Dalton <Jacqueline.Dalton@environment.nsw.gov.au>
Sent: Thursday, 29 November 2018 10:38 AM
To: Jaeger, Peter F <PJaeger@peabodyenergy.com>
Subject: RE: Wambo Coal_Wambo Homestead Complex Conservation Management Plan submitted to the Heritage

Our reference: DOC18/770961

Dear Peter,

As we discussed, generally when CMPs are sent to the Heritage Council it is for endorsement and there is a fee for this process, \$2,200 for the endorsement with an extra \$2,200 if a site visit is required. The Heritage Council does not provide comments or feedback unless it is part of the endorsement process.

Please advise me how you would like to proceed. If you wish to proceed with the endorsement, the payment of the \$2,200 is required before it can progress to an assessor. I can assist you with this process.

If you have any queries please don't hesitate to contact me on (02) 9873 8500.

Regards,
Jacky Dalton



Jacky Dalton
Assistant Heritage
Assessment Officer
Customer Strategies
Heritage Division

Level 6, 10 Valentine Ave, Parramatta
Locked Bag 5020, Parramatta 2124
T 02 8837 6375
www.heritage.nsw.gov.au

From: May Patterson <May.Patterson@planning.nsw.gov.au>
Sent: Tuesday, 13 November 2018 9:36 AM
To: Jaeger, Peter F <PJaeger@peabodyenergy.com>
Cc: Leah Cook <Leah.Cook@planning.nsw.gov.au>; Michael Frankcombe <Michael.Frankcombe@planning.nsw.gov.au>
Subject: RE: Wambo Coal_Wambo Homestead Complex Conservation Management Plan

Good morning Peter,

Please find attached the Department's review of the Wambo Homestead Complex Conservation Management Plan.

If you can please re-submit the document by 12 December 2018, that will be much appreciated.

Kind regards,

May Patterson
Team Leader
Resource Assessments
320 Pitt Street | GPO BOX | Sydney NSW 2001
T 02 8275 1190
E: may.patterson@planning.nsw.gov.au





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From: Jaeger, Peter F <PJaeger@peabodyenergy.com>
Sent: Thursday, 11 October 2018 4:40 PM
To: Leah Cook <Leah.Cook@planning.nsw.gov.au>; Michael Frankcombe <Michael.Frankcombe@planning.nsw.gov.au>
Cc: DPE PSVC Compliance Mailbox <compliance@planning.nsw.gov.au>; OEH HD Heritage Mailbox <HERITAGEMailbox@environment.nsw.gov.au>
Subject: Wambo Coal_Wambo Homestead Complex Conservation Management Plan

Good afternoon Michael and Leah,

Please find attached correspondence and copy of the Wambo Homestead Complex Conservation Management (CMP) Plan for review and comment, which are provided to satisfy the Department's Request for an Action Plan.

The CMP has also been provided Office of Environment and Heritage (OEH) (Heritage) for comment.

If you require anything further please let me know.

Regards

Peter Jaeger

Manager: Environment & Community

Wambo Coal

Jaeger, Peter F

From: Gary Hinder <Gary.Hinder@environment.nsw.gov.au>
Sent: Wednesday, 21 November 2018 3:08 PM
To: Jaeger, Peter F
Subject: Removal of pepper tree at Wambo Homestead.
Attachments: S57 form.pdf

Hi Peter,

Thanks for discussing the removal of the peppercorn tree at Wambo Homestead.

Peppercorn trees are often associated with old homesteads and it would be safe to assume the tree in question has some heritage significance in terms of its landscape qualities. If the tree was to be removed due to the impacts it is causing to the butchers hut, it should be replanted in a nearby location that won't cause further issues to the Butchers hut or other significant structures. The new sapling should be appropriately cared for to ensure its survival. This would be considered acceptable in terms of its heritage impact.

Further to this, I suggest avoiding any ground disturbance if possible by cutting the tree to a stump above ground. By avoiding ground disturbance, any impacts to archaeology (if present) can be easily avoided which means a faster and more streamlined assessment process.

Please consider this advice in general as I am not sure whether these works fit within the scope of any approval or consent that you may have. In the event that you require approval under the Heritage Act 1977 for the removal of the tree then you should fill out the attached exemption notification form and submit it to heritagemailbox@environment.nsw.gov.au

Accompanying the form should be information that explains the proposal in full, including any diagrams, photos or maps that would assist in understanding the work.

Please contact me on the details provided below if you have any further questions regarding this matter.

Kind regards

Gary Hinder

Heritage Assessment Officer Customer Strategies Heritage Division www.heritage.nsw.gov.au



**Office of
Environment
& Heritage**

Level 6, 10 Valentine Ave, Parramatta
Locked Bag 5020, Parramatta 2124
T 02 9873 8547

Dobbins, Nicole

From: Jaeger, Peter F
Sent: Thursday, 11 October 2018 9:20 AM
To: Dobbins, Nicole
Subject: FW: Wambo Coal - Consultation Required

Peter Jaeger

Manager: Environment & Community

Wambo Coal

PMB 1 | Singleton, NSW 2303

Office Phone: +61 2 6570 2206 | Mob: +61 417 527 585

pjaeger@peabodyenergy.com



From: Katrina Stankowski <Katrina.Stankowski@environment.nsw.gov.au>
Sent: Tuesday, 9 October 2018 10:37 AM
To: Jaeger, Peter F <PJaeger@peabodyenergy.com>
Subject: FW: Wambo Coal - Consultation Required

Hi Peter

Siobhan has passed your enquiry on to me. Please feel free to give me a call to discuss this matter.

Regards,



Office of
Environment
& Heritage

Katrina Stankowski
STL/Regional Heritage
Assessments North
Heritage Division

10 Valentine Street, Parramatta, 2150
Locked Bag 5020, Parramatta, 2124
T 02 9873 8569

Please note that I leave work at 2:30pm every Monday and Thursday. Email or phone messages sent after 2:30pm will be responded to at the first available opportunity the following work day.

From: Siobhan Lavelle
Sent: Tuesday, 9 October 2018 8:51 AM
To: Katrina Stankowski <Katrina.Stankowski@environment.nsw.gov.au>
Subject: FW: Wambo Coal - Consultation Required

From: Jaeger, Peter F <PJaeger@peabodyenergy.com>
Sent: Monday, 8 October 2018 4:58 PM
To: Siobhan Lavelle <Siobhan.Lavelle@environment.nsw.gov.au>
Subject: RE: Wambo Coal - Consultation Required

Hi Siobhan,

I have been trying to touch base with a representative of the heritage office and got your details off some previous correspondence regarding the homestead. Below is an email that was sent Friday 5 October 2018 to the general mailbox.

I hope you can assist.

Thanks,

To OEH,

Wambo Coal Pty Ltd (Wambo) is currently revising the 2012 Conservation Management Plan (CMP) for the Wambo Homestead Complex. This revision is being undertaken in consultation with heritage consultants, EJE Architecture. The revised CMP is to be submitted to the NSW Department of Planning and Environment (DPE) by Thursday 11 October 2018.

Following a site inspection by DPE, it was requested in a letter 29 August 2018 that Wambo consult with the Office of Environment and Heritage (OEH) regarding the removal of a Pepper Corn Tree which sits adjacent to the Butcher's Hut at the Wambo Homestead Complex (see photo below). The current CMP (2012) refers to the landscaping, including the "Pepper Corn Trees close to outbuildings and along fences", as being important contributors to the historic and aesthetic values of the place - which is why the tree is still insitu. The major landscape features are graded in the CMP 2012 as being of Moderate Significance. However the Butcher's Hut is graded as being of Exceptional Significance.

EJE Architecture is providing advice on possible strategies for removal of the tree abutting the Butcher's Hut. The strategy recommended at this time is trimming back and poisoning the tree to spread out the impact and allow the Butcher's Hut structure to settle into the revised situation. It would be appreciated if a representative from OEH (Heritage) could provide a position / advice on the removal of the tree and any approvals required for work to be done to remove and/or manage the tree abutting the Butcher's Hut.

Please note that I have tried to make contact with OEH (Heritage) this week through the main phone contact (02 9873 8500) and have left multiple messages to discuss this issue however I have not been successful in obtaining a response. If you could contact me by Wednesday 10 October 2018 it would be greatly appreciated.

Regards,

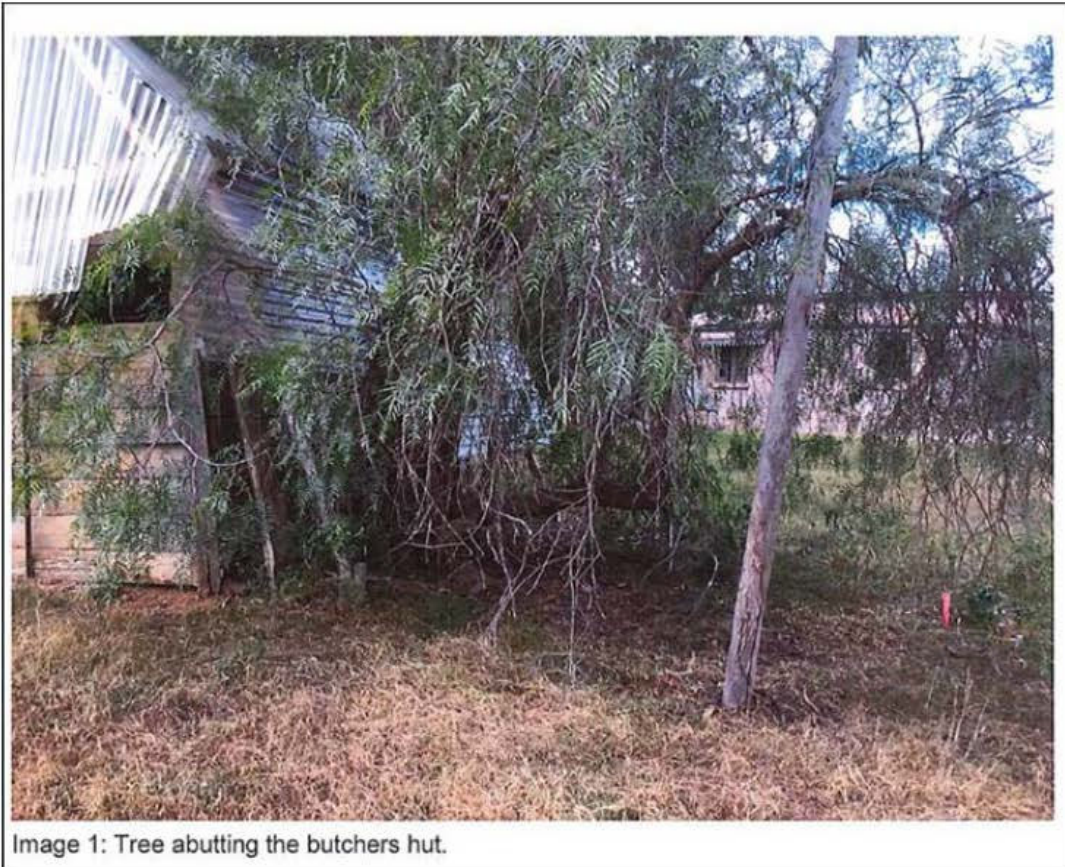


Image 1: Tree abutting the butchers hut.

Peter Jaeger

Manager: Environment & Community

Wambo Coal

PMB 1 | Singleton, NSW 2303

Office Phone: +61 2 6570 2206 | Mob: +61 417 527 585

pjaeger@peabodyenergy.com



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Peter Jaeger
Senior Environmental Advisor
Wambo Coal Pty Ltd
PMB 1
Singleton NSW 2303

Contact: Michael Frankcombe
Phone: 6575 3413
Email: michael.frankcombe@planning.nsw.gov.au
Our ref: MP 305-7-2003

**Wambo MP 305-7-203
Request for Action Plan**

Dear Peter,

Reference is made to the heritage inspection conducted by the Department of Planning and Environment on the 4 June 2018 and the additional information submitted to the Department by Wambo Coal Pty Ltd (Wambo) on 22 June 2018. The Department has reviewed the response to a request for information relating to the heritage Conditions of Consent, Heritage Conservation Management Plan Reviews 2012 (CMP) and Wambo Coal Heritage Management Plan 2017 (HMP).

Schedule 4 Condition 59 requires "The conservation policies and an interpretation strategy contained in the conservation management plan are to be implemented in accordance with a timetable to be contained in the conservation management plan". The Department notes that the timetable and interpretation strategies are not contained in the 2012 CMP. The Department also notes that in Wambo's response it was stated that the project is "Currently reviewing CMP to include interpretation strategy".

Section 7.3.3 of the CMP requires "further investigation of existing site conditions to identify and assess potential contributors to salt-damp problems in the main buildings should be carried out with the assistance of appropriate professional advice". The Department notes that Wambo was not able to provide evidence of such investigations.

Section 7.3.3 of the CMP also states that "existing site components/structures/features should continue to be retained and maintained in situ, including works to: remove plant, pest, rubbish or other infestations with the potential to damage structures or fabric". The Department noted during the inspection a tree abutting the butcher's hut (see Attachment 1, image 1).

The Department requests, under Schedule 3, Condition 4, that Wambo submit and implement an action plan by **11 October 2018**. The action plan shall require (1) evidence of the review of the CMP and the inclusion of the timetable of conservation policies and interpretation strategies;(2) evidence of the investigation of possible contributors to salt-damp including the timing of such investigations (3) evidence of consultation with the Office of Environment and Heritage regarding the removal of the tree abutting the butches hut.

The Department notes that the identified concrete waste has been removed from site since the site inspection

Should you have any queries on this matter, please contact Michael Frankcombe on 6575 3413 or compliance@planning.nsw.gov.au.

Yours sincerely



29/8/18

Leah Cook
Team Leader - Compliance
As Nominee of the Secretary

Attachment 1 - Image



Image 1: Tree abutting the butchers hut.



The General Manager
Wambo Coal Pty Limited
PMB 1
SINGLETON NSW 2330

Contact: Julia Pope
Phone: (02) 6575 3403
Fax: (02) 6575 3415
Email: Julia.Pope@planning.nsw.gov.au
Our ref: 10/21804
Your ref:

16 May 2011

Attention: Troy Favell

Dear Troy

Application for extension of Wambo Homestead Conservation Management Plan

We refer to your letter dated 11 May 2011 requesting an extension of the Wambo Homestead's Cultural Heritage Management Plan. It should be noted that under Condition 58, Schedule 4 of DA 305-7-2003 it is referred to as the "Conservation Management Plan" (CMP).

The Department agrees to the requested extension of the current CMP to Monday 15 August 2011. Please ensure that a revised CMP is submitted to the Heritage Office and the Singleton office, prior to that date.

Should you need to discuss the matter further, please contact Julia Pope on telephone number 6575 3403 or by email to julia.pope@planning.nsw.gov.au.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Julia Pope'.

Julia Pope
Senior Compliance Officer

Singleton Office Suite 14, Level 1, 1 Civic Avenue, PO Box 3145, Singleton NSW 2330
Telephone: (02) 6575 3404 Facsimile: (02) 6575 3415 Website planning.nsw.gov.au



WAMBO COAL



9 November 2006

Mr Gary Pringle
NSW Heritage Office
Locked Bag 5020
Parramatta NSW 2124

Dear Mr Pringle

Wambo Homestead Conservation Management Plan

Wambo Coal Mine was granted development consent, DA 305-7-2003, of the extension of open cut and underground mining activities by the Minister assisting the Minister for Infrastructure and Planning (Planning Administration) on the 4th February 2004. Activities under the consent were commenced on the 14th November 2005.

Condition 58 of Schedule 4 of the consent states:

Within 12 months of the commencement of this consent, the Applicant shall prepare a conservation management plan for the Wambo Homestead Complex in accordance with Heritage Office guidelines for the consideration of the Heritage Council of NSW.

Wambo Coal Mine has prepared a Conservation Management Plan in accordance with the Heritage Office guidelines for your review.

If you have any questions or require any additional information please do not hesitate to contact me on 6570 2206.

Yours sincerely

Sarah Withell
Environment and Community Manager

Enc: Wambo Coal Environmental Management System, Wambo Homestead Conservation Management Plan

Wambo Coal Pty Ltd

Registered Office:
Level 27, AMP Place, 10 Eagle Street
Brisbane Qld 4000

Postal Address:
PMB 1
Singleton NSW 2330

N:\Environmental Management System\Management Plans\EMP002 Conservation Management Plan\Correspondance\061109 NSW Heritage Office Let.doc

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DX 8225 PARRAMATTA

Telephone: 61 2 9673 8500
Facsimile: 61 2 9673 8599
heritageoffice@heritage.nsw.gov.au
www.heritage.nsw.gov.au

Contact: Gary Pringle
Telephone: 02 9673 8564
gary.pringle@heritage.nsw.gov.au
File: S90/07120/003
Our Ref: HRL37402
Your Ref: NA

Julie Thomas
Environmental Officer
Wambo Coal Pty Ltd
PMB 1
SINGLETON 2330

Dear Ms Thomas

WAMBO HOMESTEAD COMPLEX – APPOINTMENT OF STRUCTURAL ENGINEER

Thank you for your letter of 3 November 2005 nominating Bill Jordan of Bill Jordan and Associates as the structural engineer to perform the blast monitoring in relation to consent DA-305-7-2003 for open cut and underground operations at the Wambo Coal Mine.

I advise that the Director of the Heritage Office approves the appointment of Mr Jordan in accordance with condition 64 of the development consent.

For any further contact in relation to this matter, please phone Gary Pringle on 98738564.

Yours sincerely

Reece McDougall 30/11/05

Reece McDougall
REECE McDOUGALL
Director

cc. Department of Planning

APPENDIX B
THE BURRA CHARTER - THE AUSTRALIA ICOMOS
CHARTER FOR PLACES OF CULTURAL SIGNIFICANCE
(1999)

The Burra Charter

(The Australia ICOMOS Charter for Places of Cultural Significance)

Preamble

Considering the International Charter for the Conservation and Restoration of Monuments and Sites (Venice 1964), and the Resolutions of the 5th General Assembly of the International Council on Monuments and Sites (ICOMOS) (Moscow 1978), the Burra Charter was adopted by Australia ICOMOS (the Australian National Committee of ICOMOS) on 19 August 1979 at Burra, South Australia. Revisions were adopted on 23 February 1981, 23 April 1988 and 26 November 1999.

The Burra Charter provides guidance for the conservation and management of places of cultural significance (cultural heritage places), and is based on the knowledge and experience of Australia ICOMOS members.

Conservation is an integral part of the management of places of cultural significance and is an ongoing responsibility.

Who is the Charter for?

The Charter sets a standard of practice for those who provide advice, make decisions about, or undertake works to places of cultural significance, including owners, managers and custodians.

Using the Charter

The Charter should be read as a whole. Many articles are interdependent. Articles in the Conservation Principles section are often further developed in the Conservation Processes and Conservation Practice sections. Headings have been included for ease of reading but do not form part of the Charter.

The Charter is self-contained, but aspects of its use and application are further explained in the following Australia ICOMOS documents:

- Guidelines to the Burra Charter: Cultural Significance;
- Guidelines to the Burra Charter: Conservation Policy;
- Guidelines to the Burra Charter: Procedures for Undertaking Studies and Reports;
- Code on the Ethics of Coexistence in Conserving Significant Places.

What places does the Charter apply to?

The Charter can be applied to all types of places of cultural significance including natural, indigenous and historic places with cultural values.

The standards of other organisations may also be relevant. These include the Australian Natural Heritage Charter and the Draft Guidelines for the Protection, Management and Use of Aboriginal and Torres Strait Islander Cultural Heritage Places.

Why conserve?

Places of cultural significance enrich people's lives, often providing a deep and inspirational sense of connection to community and landscape, to the past and to lived experiences. They are historical records, that are important as tangible expressions of Australian identity and experience. Places of cultural significance reflect the diversity of our communities, telling us about who we are and the past that has formed us and the Australian landscape. They are irreplaceable and precious.

These places of cultural significance must be conserved for present and future generations.

The Burra Charter advocates a cautious approach to change: do as much as necessary to care for the place and to make it useable, but otherwise change it as little as possible so that its cultural significance is retained.

Articles

Article 1. Definitions

For the purposes of this Charter:

1.1 Place means site, area, land, landscape, building or other work, group of buildings or other works, and may include components, contents, spaces and views.

Explanatory Notes

The concept of place should be broadly interpreted. The elements described in Article 1.1 may include memorials, trees, gardens, parks, places of historical events, urban areas, towns, industrial places, archaeological sites and spiritual and religious places.

1.2 Cultural significance means aesthetic, historic, scientific, social or spiritual value for past, present or future generations.

Cultural significance is embodied in the place itself, its fabric, setting, use, associations, meanings, records, related places and related objects.

Places may have a range of values for different individuals or groups.

1.3 Fabric means all the physical material of the place including components, fixtures, contents, and objects.

1.4 Conservation means all the processes of looking after a place so as to retain its cultural significance.

1.5 Maintenance means the continuous protective care of the fabric and setting of a place, and is to be distinguished from repair. Repair involves restoration or reconstruction.

1.6 Preservation means maintaining the fabric of a place in its existing state and retarding deterioration.

1.7 Restoration means returning the existing fabric of a place to a known earlier state by removing accretions or by reassembling existing components without the introduction of new material.

1.8 Reconstruction means returning a place to a known earlier state and is distinguished from restoration by the introduction of new material into the fabric.

1.9 Adaptation means modifying a place to suit the existing use or a proposed use.

1.10 Use means the functions of a place, as well as the activities and practices that may occur at the place.

1.11 Compatible use means a use which respects the cultural significance of a place. Such a use involves no, or minimal, impact on cultural significance.

1.12 Setting means the area around a place, which may include the visual catchment.

1.13 Related place means a place that contributes to the cultural significance of another place.

1.14 Related object means an object that contributes to the cultural significance of a place but is not at the place.

1.15 Associations mean the special connections that exist between people and a place.

1.16 Meanings denote what a place signifies, indicates, evokes or expresses.

1.17 Interpretation means all the ways of presenting the cultural significance of a place.

The term cultural significance is synonymous with heritage significance and cultural heritage value.

Cultural significance may change as a result of the continuing history of the place.

Understanding of cultural significance may change as a result of new information.

Fabric includes building interiors and sub-surface remains, as well as excavated material.

Fabric may define spaces and these may be important elements of the significance of the place.

The distinctions referred to, for example in relation to roof gutters, are:

- maintenance — regular inspection and cleaning of gutters;
- repair involving restoration — returning of dislodged gutters;
- repair involving reconstruction — replacing decayed gutters.

It is recognised that all places and their components change over time at varying rates.

New material may include recycled material salvaged from other places. This should not be to the detriment of any place of cultural significance.

Associations may include social or spiritual values and cultural responsibilities for a place.

Meanings generally relate to intangible aspects such as symbolic qualities and memories.

Interpretation may be a combination of the treatment of the fabric (e.g. maintenance, restoration, reconstruction); the use of and activities at the place; and the use of introduced explanatory material.

Conservation Principles

Article 2. Conservation and management

- 2.1 Places of cultural significance should be conserved.
- 2.2 The aim of conservation is to retain the cultural significance of a place.
- 2.3 Conservation is an integral part of good management of places of cultural significance.
- 2.4 Places of cultural significance should be safeguarded and not put at risk or left in a vulnerable state.

Article 3. Cautious approach

3.1 Conservation is based on a respect for the existing fabric, use, associations and meanings. It requires a cautious approach of changing as much as necessary but as little as possible.

The traces of additions, alterations and earlier treatments to the fabric of a place are evidence of its history and uses which may be part of its significance. Conservation action should assist and not impede their understanding.

3.2 Changes to a place should not distort the physical or other evidence it provides, nor be based on conjecture.

Article 4. Knowledge, skills and techniques

4.1 Conservation should make use of all the knowledge, skills and disciplines which can contribute to the study and care of the place.

4.2 Traditional techniques and materials are preferred for the conservation of significant fabric. In some circumstances modern techniques and materials which offer substantial conservation benefits may be appropriate.

The use of modern materials and techniques must be supported by firm scientific evidence or by a body of experience.

Article 5. Values

5.1 Conservation of a place should identify and take into consideration all aspects of cultural and natural significance without unwarranted emphasis on any one value at the expense of others.

Conservation of places with natural significance is explained in the Australian Natural Heritage Charter. This Charter defines natural significance to mean the importance of ecosystems, biological diversity and geodiversity for their existence value, or for present or future generations in terms of their scientific, social, aesthetic and life-support value.

5.2 Relative degrees of cultural significance may lead to different conservation actions at a place.

A cautious approach is needed, as understanding of cultural significance may change. This article should not be used to justify actions which do not retain cultural significance.

Article 6. Burra Charter Process

6.1 The cultural significance of a place and other issues affecting its future are best understood by a sequence of collecting and analysing information before making decisions. Understanding cultural significance comes first, then development of policy and finally management of the place in accordance with the policy.

The Burra Charter process, or sequence of investigations, decisions and actions, is illustrated in the accompanying flowchart.

6.2 The policy for managing a place must be based on an understanding of its cultural significance.

6.3 Policy development should also include consideration of other factors affecting the future of a place such as the owner's needs, resources, external constraints and its physical condition.

Article 7. Use

7.1 Where the use of a place is of cultural significance it should be retained.

7.2 A place should have a compatible use.

The policy should identify a use or combination of uses or constraints on uses that retain the cultural significance of the place. New use of a place should involve minimal change, to significant fabric and use; should respect associations and meanings; and where appropriate should provide for continuation of practices which contribute to the cultural significance of the place.

Article 8. Setting

Conservation requires the retention of an appropriate visual setting and other relationships that contribute to the cultural significance of the place.

Aspects of the visual setting may include use, siting, bulk, form, scale, character, colour, texture and materials.

New construction, demolition, intrusions or other changes which would adversely affect the setting or relationships are not appropriate.

Other relationships, such as historical connections, may contribute to interpretation, appreciation, enjoyment or experience of the place.

Article 9. Location

9.1 The physical location of a place is part of its cultural significance. A building, work or other component of a place should remain in its historical location. Relocation is generally unacceptable unless this is the sole practical means of ensuring its survival.

9.2 Some buildings, works or other components of places were designed to be readily removable or already have a history of relocation. Provided such buildings, works or other components do not have significant links with their present location, removal may be appropriate.

9.3 If any building, work or other component is moved, it should be moved to an appropriate location and given an appropriate use. Such action should not be to the detriment of any place of cultural significance.

Article 10. Contents

Contents, fixtures and objects which contribute to the cultural significance of a place should be retained at that place. Their removal is unacceptable unless it is: the sole means of ensuring their security and preservation; on a temporary basis for treatment or exhibition; for cultural reasons; for health and safety; or to protect the place. Such contents, fixtures and objects should be returned where circumstances permit and it is culturally appropriate.

Article 11. Related places and objects

The contribution which related places and related objects make to the cultural significance of the place should be retained.

Article 12. Participation

Conservation, interpretation and management of a place should provide for the participation of people for whom the place has special associations and meanings, or who have social, spiritual or other cultural responsibilities for the place.

Article 13. Co-existence of cultural values

Co-existence of cultural values should be recognised, respected and encouraged, especially in cases where they conflict.

For some places, conflicting cultural values may affect policy development and management decisions. In this article, the term cultural values refers to those beliefs which are important to a cultural group, including but not limited to political, religious, spiritual and moral beliefs. This is broader than values associated with cultural significance.

Conservation Processes

Article 14. Conservation processes

Conservation may, according to circumstance, include the processes of: retention or reintroduction of a use; retention of associations and meanings; maintenance, preservation, restoration, reconstruction, adaptation and interpretation; and will commonly include a combination of more than one of these.

There may be circumstances where no action is required to achieve conservation.

Article 15. Change

15.1 Change may be necessary to retain cultural significance, but is undesirable where it reduces cultural significance. The amount of change to a place should be guided by the cultural significance of the place and its appropriate interpretation.

When change is being considered, a range of options should be explored to seek the option which minimises the reduction of cultural significance.

15.2 Changes which reduce cultural significance should be reversible, and be reversed when circumstances permit.

Reversible changes should be considered temporary. Non-reversible change should only be used as a last resort and should not prevent future conservation action.

15.3 Demolition of significant fabric of a place is generally not acceptable. However, in some cases minor demolition may be appropriate as part of conservation. Removed significant fabric should be reinstated when circumstances permit.

15.4 The contributions of all aspects of cultural significance of a place should be respected. If a place includes fabric, uses, associations or meanings of different periods, or different aspects of cultural significance, emphasising or interpreting one period or aspect at the expense of another can only be justified when what is left out, removed or diminished is of slight cultural significance and that which is emphasised or interpreted is of much greater cultural significance.

Article 16. Maintenance

Maintenance is fundamental to conservation and should be undertaken where fabric is of cultural significance and its maintenance is necessary to retain that cultural significance.

Article 17. Preservation

Preservation is appropriate where the existing fabric or its condition constitutes evidence of cultural significance, or where insufficient evidence is available to allow other conservation processes to be carried out.

Preservation protects fabric without obscuring the evidence of its construction and use. The process should always be applied:

- where the evidence of the fabric is of such significance that it should not be altered;
- where insufficient investigation has been carried out to permit policy decisions to be taken in accord with Articles 26 to 28.

New work (e.g. stabilisation) may be carried out in association with preservation when its purpose is the physical protection of the fabric and when it is consistent with Article 22.

Article 18. Restoration and reconstruction

Restoration and reconstruction should reveal culturally significant aspects of the place.

Article 19. Restoration

Restoration is appropriate only if there is sufficient evidence of an earlier state of the fabric.

Article 20. Reconstruction

20.1 Reconstruction is appropriate only where a place is incomplete through damage or alteration, and only where there is sufficient evidence to reproduce an earlier state of the fabric. In rare cases, reconstruction may also be appropriate as part of a use or practice that retains the cultural significance of the place.

20.2 Reconstruction should be identifiable on close inspection or through additional interpretation.

Article 21. Adaptation

21.1 Adaptation is acceptable only where the adaptation has minimal impact on the cultural significance of the place.

Adaptation may involve the introduction of new services, or a new use, or changes to safeguard the place.

21.2 Adaptation should involve minimal change to significant fabric, achieved only after considering alternatives.

Article 22. New work

22.1 New work such as additions to the place may be acceptable where it does not distort or obscure the cultural significance of the place, or detract from its interpretation and appreciation.

New work may be sympathetic if its siting, bulk, form, scale, character, colour, texture and material are similar to the existing fabric, but imitation should be avoided.

22.2 New work should be readily identifiable as such.

Article 23. Conserving use

Continuing, modifying or reinstating a significant use may be appropriate and preferred forms of conservation.

These may require changes to significant fabric but they should be minimised. In some cases, continuing a significant use or practice may involve substantial new work.

Article 24. Retaining associations and meanings

24.1 Significant associations between people and a place should be respected, retained and not obscured. Opportunities for the interpretation, commemoration and celebration of these associations should be investigated and implemented.

For many places associations will be linked to use.

24.2 Significant meanings, including spiritual values, of a place should be respected. Opportunities for the continuation or revival of these meanings should be investigated and implemented.

Article 25. Interpretation

The cultural significance of many places is not readily apparent, and should be explained by interpretation. Interpretation should enhance understanding and enjoyment, and be culturally appropriate.

Conservation Practice

Article 26. Applying the Burra Charter process

26.1 Work on a place should be preceded by studies to understand the place which should include analysis of physical, documentary, oral and other evidence, drawing on appropriate knowledge, skills and disciplines.

The results of studies should be up to date, regularly reviewed and revised as necessary.

26.2 Written statements of cultural significance and policy for the place should be prepared, justified and accompanied by supporting evidence. The statements of significance and policy should be incorporated into a management plan for the place.

Statements of significance and policy should be kept up to date by regular review and revision as necessary. The management plan may deal with other matters related to the management of the place.

26.3 Groups and individuals with associations with a place as well as those involved in its management should be provided with opportunities to contribute to and participate in understanding the cultural significance of the place. Where appropriate they should also have opportunities to participate in its conservation and management.

Article 27. Managing change

27.1 The impact of proposed changes on the cultural significance of a place should be analysed with reference to the statement of significance and the policy for managing the place. It may be necessary to modify proposed changes following analysis to better retain cultural significance.

27.2 Existing fabric, use, associations and meanings should be adequately recorded before any changes are made to the place.

Article 28. Disturbance of fabric

28.1 Disturbance of significant fabric for study, or to obtain evidence, should be minimised. Study of a place by any disturbance of the fabric, including archaeological excavation, should only be undertaken to provide data essential for decisions on the conservation of the place, or to obtain important evidence about to be lost or made inaccessible.

28.2 Investigation of a place which requires disturbance of the fabric, apart from that necessary to make decisions, may be appropriate provided that it is consistent with the policy for the place. Such investigation should be based on important research questions which have potential to substantially add to knowledge, which cannot be answered in other ways and which minimises disturbance of significant fabric.

Article 29. Responsibility for decisions

The organisations and individuals responsible for management decisions should be named and specific responsibility taken for each such decision.

Article 30. Direction, supervision and implementation

Competent direction and supervision should be maintained at all stages, and any changes should be implemented by people with appropriate knowledge and skills.

Article 31. Documenting evidence and decisions

A log of new evidence and additional decisions should be kept.

Article 32. Records

32.1 The records associated with the conservation of a place should be placed in a permanent archive and made publicly available, subject to requirements of security and privacy, and where this is culturally appropriate.

32.2 Records about the history of a place should be protected and made publicly available, subject to requirements of security and privacy, and where this is culturally appropriate.

Article 33. Removed fabric

Significant fabric which has been removed from a place including contents, fixtures and objects, should be catalogued, and protected in accordance with its cultural significance.

Where possible and culturally appropriate, removed significant fabric including contents, fixtures and objects, should be kept at the place.

Article 34. Resources

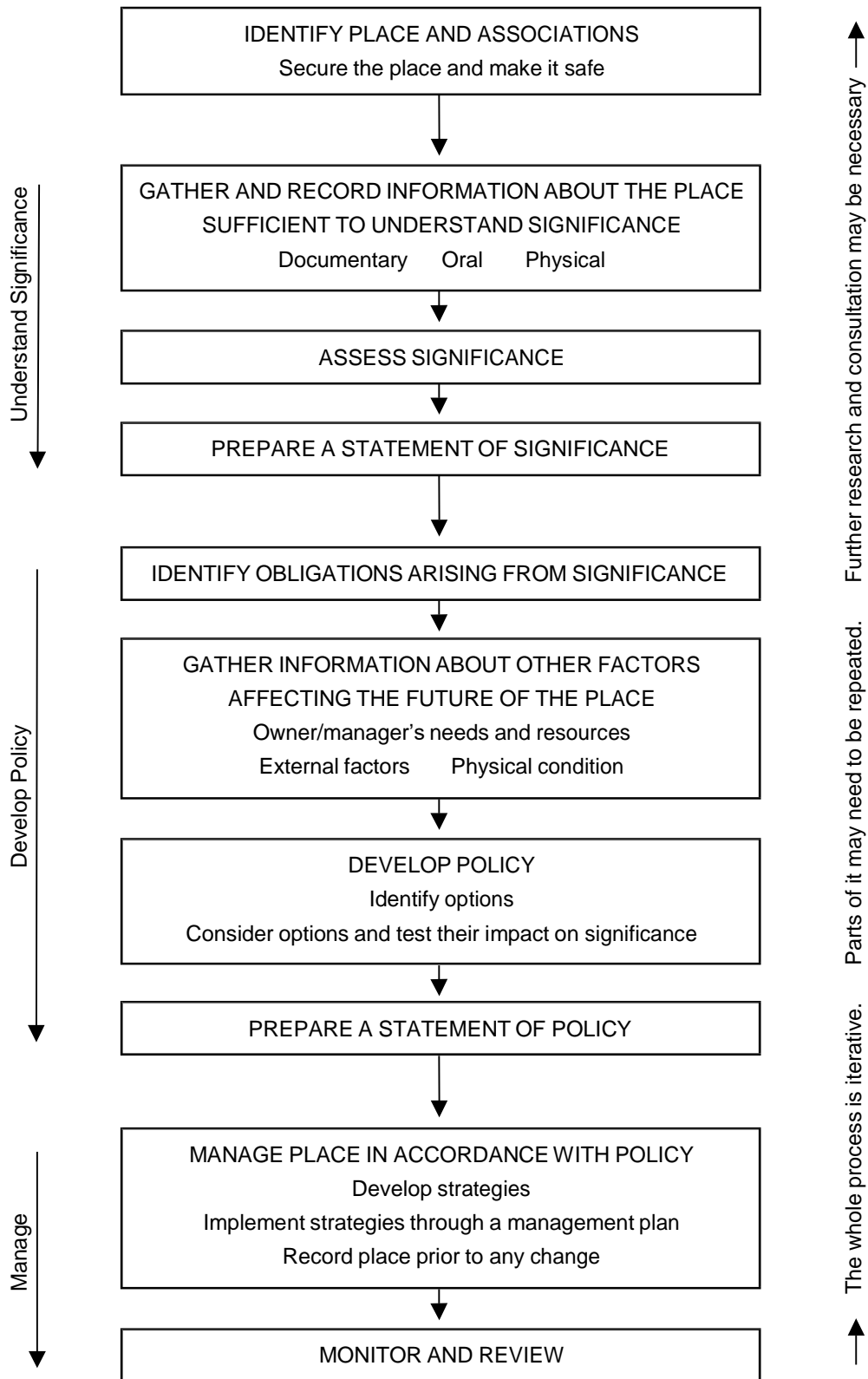
Adequate resources should be provided for conservation.

The best conservation often involves the least work and can be inexpensive.

Words in italics are defined in Article 1.

The Burra Charter Process

Sequence of investigations, decisions and actions



APPENDIX C CHRONOLOGICAL HISTORY SUMMARY

Chronology under James Hale (1816 to 1857)

Early years of James Hale (1816 to 1828)

- 1816 Arrival in New South Wales of James Hale, transported for theft.
- 1820s Hale assigned to William Cox in Windsor.
- 1828 Hale married Mary, widow of William Durham, Windsor butcher and grazier, with three young children. Hale was now emancipated, operating the White Hart inn in Windsor, cultivating 100 acres (40 hectares) and running horses, cattle and sheep on some 2,000 acres (800 hectares) near Windsor. At this time he first displayed an interest in acquiring land in the Hunter Valley.

First grants at Wambo (1824 to 1839)

- 1824 Grant of 2,000 acres (800 hectares), including future site of Wambo homestead, promised to Matthew Hindson (see below Figure).
- Grant of 746 acres (300 hectares), including future South Wambo, promised to David Mazière (see below Figure).
- 1832 Purchase of Hindson's 2,000 acres by Hale. This becomes defined as portion 1 (later portion 131), Lemington parish, county of Hunter.
- 1833 Actual grant of Hale's 2,000 acres made out in name of Hindson. By July 1833 Hale had built huts for workers and planted wheat on southeast edge of the 2,000 acres, encroaching on Maziere's 746 acres, which was surveyed at this time on Hale's behalf.
- 1835 - 1838 Hale is granted six portions, south of the 2,000 acres, totalling an additional 2,413 acres (965 hectares). Hale also acquired right to Maziere's 746 acres.
- 1837 Hale granted four further portions on the east side of Wollombi Brook, totalling 1,020 acres (400 hectares).
- 1839 Hale acquired another seven portions in the Wambo area, totalling 1,660 acres (660 hectares). This brought his total Wambo estate to 7,839 acres (3,155 hectares).

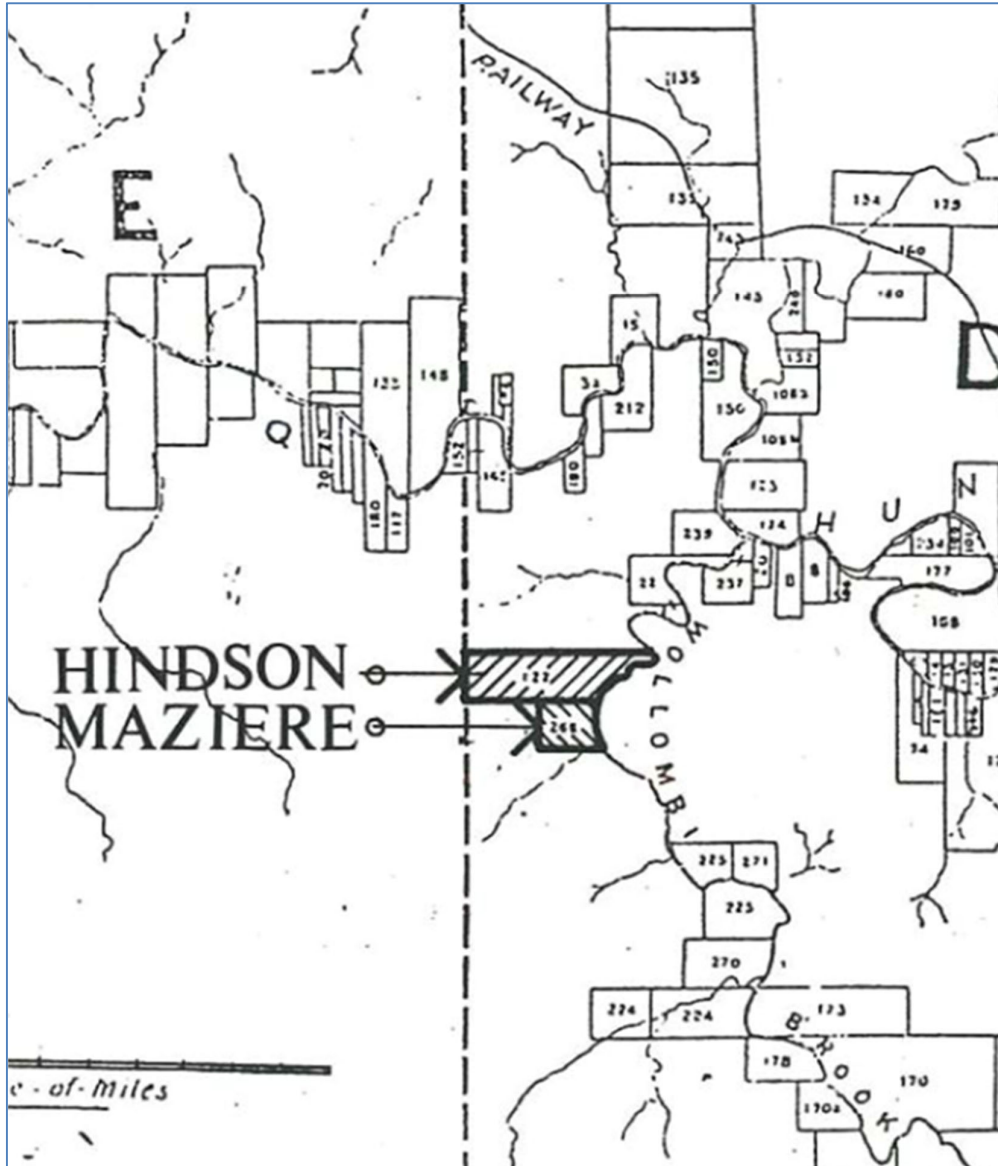


Figure: The Hindson and Maziere Lots on Wollombi Brook (Map by C.Green showing the progress of settlement in the Hunter-River-District 1821 to 1825 (future railways shown) JF Campbell August 21 1975.)

Hale's pastoral properties in the north of New South Wales (1830s to 1850s)

- 1830s Hale acquired some 180,000 acres (72,000 hectares) of pastoral properties southeast of Coonabarabran, with the head station at Bomera, where in 1841 Hale had 21 workmen. These were primarily sheep stations. Bomera and Boobala could sustain 11,000 head of sheep in 1866.
- 1840s Hale expanded further to the north buying Bannockburn station north of Inverell in 1845 and Big River station on the Gwydir near Bingara. These two stations totalled over 100,000 acres (40,000 hectares).
- On most of these 280,000 acres (112,000 hectares) Hale ran large flocks of sheep in the 1840s and 1850s, except at Bannockburn, where there were only cattle in 1850. In 1845 Hale brought more than 1,500 ewes from the Liverpool Plains station to the Wambo paddocks and advertised them for sale there.

Crops at Wambo (1832 to 1857)

- 1833 The first known exploitation of Wambo was the planting of wheat in 1832 or 1833 on the southern paddock of the original 2,000 acres, close to Wollombi Brook and North Wambo Creek. Hale was noted as a successful wheat farmer in 1844 and his earliest cultivation paddock remained under crops for the rest of the nineteenth century.
- 1850s In his later years, Hale also grew maize on the 300 acres which he had acquired in 1837 on the east side of Wollombi Creek.

Stock at Wambo (1833 to 1857)

- Throughout his ownership of Wambo, Hale was primarily concerned with good-quality cattle and horses.
- Hale owned a famous horse-stud on the Hawkesbury at Clifton in the late 1840s and 1850s and one of the stallions at Wambo was bred at Clifton. Another cart-horse stallion was advertised as standing at Wambo in 1845, but the activity under Hale was less vigorous than under his successor, William Durham.
- Hale also kept prize-winning pigs for domestic consumption at Wambo.
- Sheep were in the paddocks at Wambo in the 1840s and probably the 1850s, only as transient visitors from the stations on the Liverpool Plains and New England, awaiting sale.

Buildings at Wambo (1832 to 1857)

- 1832 - 1833 By July 1833 Hale had erected huts for workmen on the extreme south of the 2,000 acres, between the wheat paddock and Wollombi Brook. It is not known whether these continued to be occupied when the first homestead group was built further to the north in the mid-1830s or when they disappeared. They are not shown on the detailed plan of Wambo prepared in 1892.
- Mid 1830s At an unknown date in the mid-1830s, the first homestead was built on the present residential site. This is almost certainly the lower storey by Hale and there must also have been accommodation for a manager and perhaps for workmen, as well as various functional out-buildings.
- 1844 The present homestead was built at right angles to the first homestead (now known as the Kitchen Wing) in 1844.

- 1847 Antonio Roderigo came from Bathurst as Hale's resident overseer at Wambo and remained there after Hale's death. It is not known which house he occupied. A possibility is the house known as the Stud Master's Cottage, where the fabric is consistent with construction in the 1830s or 1840s.
- 1840s or 1850s Two-storey brick extension to the Kitchen Wing now known as the Servants' Wing is likely to have been constructed some time after the present homestead was constructed in 1844, but no documentary evidence for its dating has been found.
- 1840s and 1850s Out-buildings connected with cattle-raising, milking-cows, the horse-stud and the raising of wheat and maize are likely to have been built by Hale in the vicinity of the homestead in this period. The 1892 plan, the earliest to survive, shows a stockyard, a barn and milking-yard close to the house, but no date can be confidently attributed to these or to the two sheds on the northern edge of the wheat paddock to the south.

Chronology under William Durham (1823 to 1891)

Durham's early career (1823 to 1857)

- 1823 - 1847 William Durham, born in 1823, was the only son of a prosperous Windsor butcher. William's father died in 1827 and his widow married James Hale in 1828. Thereafter William and his three sisters were full members of the Hale family. All the Durham children married suitably. In 1847 William married Sophia Hill, a member of an upwardly mobile Sydney family.
- 1850 - 1857 William moved to Wambo to manage his stepfather's estate. He and his growing family occupied the 1844 homestead, although James Hale still came to Wambo from time to time.

Durham as an independent pastoralist (1857 to 1891)

- 1857 Under the will of James Hale, William Durham, a man of 34, inherited a life-interest in Wambo estate in 1857. He did not own the property, but on his death his two eldest surviving sons would own the estate in common. William received outright ownership of one quarter of all Hale's horses, wherever they were, so he immediately had blood-stock of his own at Wambo. He also acquired Bannockburn, Hale's main New England station, from his sister, but sold this in 1865.
- 1858 William Durham became a magistrate at Singleton.
- 1860s Durham was judge at many horse races in the Singleton area and was prominent in the Hunter River Agricultural and Horticultural Association.
- 1865 Durham sold Bannockburn station for £6070.
- 1870s Suffering from gross obesity, Durham gradually withdrew from his social commitments.
- 1875 Durham entered into a legal agreement with his two sons that they should run the property, while he continued to occupy the homestead and run three horses, with an annuity of £600.
- 1876 William Durham invested in 28 town allotments in Singleton in 1876.
- 1880-1891 With his health much impaired, Durham's financial position deteriorated and he died in 1891 a relatively poor man, with few assets. His annuity died with him and his widow returned to Sydney, where she lived in Macleay Street until her death in 1900.

The second major horse-stud (1857 to early 1870s)

- 1859 William Durham sold over 60 Wambo horses at Sydney, probably inherited from James Hale.
- 1860 'Young Prince' was standing at Wambo and a paddock was reserved for visiting mares.
- By 1865 Durham's horse stud was 'celebrated.'
- 1870-1872 Durham successfully ran his own racehorses from Wambo at Sydney races, including one which he had named 'Wambo'.

Breeding and exhibiting of Durham cattle (early 1860s to mid-1870s)

- Early 1860s Maintenance of high-quality Durham herd separate for some 500 head of ordinary cattle. Between 640 and 3,000 head of cattle at his own Bannockburn in New England and at least 200 fattening at Byron Plains, which he leased.
- 1865 Durham sold Bannockburn and its stock for £6070 (\$600,000 in modern terms).
- Late 1860s Prize bulls won significant prizes at shows, including the Intercontinental exhibition in Sydney in 1869.
- 1891 When Durham died, there was still a designated calf paddock, south of the cultivation paddocks. There was also a milking yard close to the homestead.

Sheep (1867 to 1868)

- 1867 70 fat lambs from Wambo were sold at Rutherford.
- 1868 40 fat lambs were sold at Sydney and wool shorn from Wambo sheep was exported. There is no mention of sheep at Wambo except in these two years.

Lucerne in the cultivation paddock (late 1860s to 1891)

- 1865 First mention of growing lucerne at Wambo. This continued for the use of the estate and for sale throughout Durham's time. The only cultivation paddocks shown on the 1892 plan are where Hale had grown his wheat in the 1830s, so it is almost certain that this is where Durham grew his lucerne.

Possible exploitation of coal (1863)

- 1863 Two coal seams were found near the homestead when a well was being sunk in August 1863 and there was interest in developing a mine. If a mine was developed, the coal remained for private consumption only.

Buildings at Wambo (1857 to 1891)

- William Durham continued to live in the 1844 homestead until he died in 1891. His wife, and for some 20 years his two sons and two daughters and occasionally a governess, also lived in the homestead.
- In the late 1860s and early 1870s the Chinese cook, his Australian wife and their children lived in some squalor either in the Kitchen Wing or in the 'Servants' Wing'.
- The overseer, who continued to be Antonio Rodriguez until 1863, possibly lived in what is now called the 'Stud Master's Cottage'.
- Close to the house by 1892 there was a dam, a cottage close to the 'Stud master's Cottage', a milking yard and a stockyard, but there is no evidence for the date of their construction. By

- 1892 any facilities for the horse-stud of the 1860s had been removed or were too dilapidated to be recorded on the plan.
- To the south, on the northern edge of the lucerne paddock, there were two sheds close to a well in 1892.

Subdivision (1891 to 1905)

Joint ownership by Durham brothers (1891 to 1894)

- 1892 Title was formally awarded under James Hale's will to William James Hill Durham and Charles Henry McQuade Durham, the two sons of William Durham, holding in common. A detailed estate map was prepared for projected sale of the estate. This is the only surviving historic map showing the location of buildings and the use of paddocks at Wambo.
- 1893 The Durham brothers converted the tenures to Torrens title, after applying in August 1892. They sub-divided the land into 28 parcels and in October 1893 12 allotments were sold.
- 1894 The remaining 14 allotments were offered for sale and the Durham brothers ceased to own Wambo. Title to the six allotments taken up at the initial sale in 1893, which included the homestead area, was transferred in March 1894 to Charles Durham's father-in-law, Benjamin Richards.

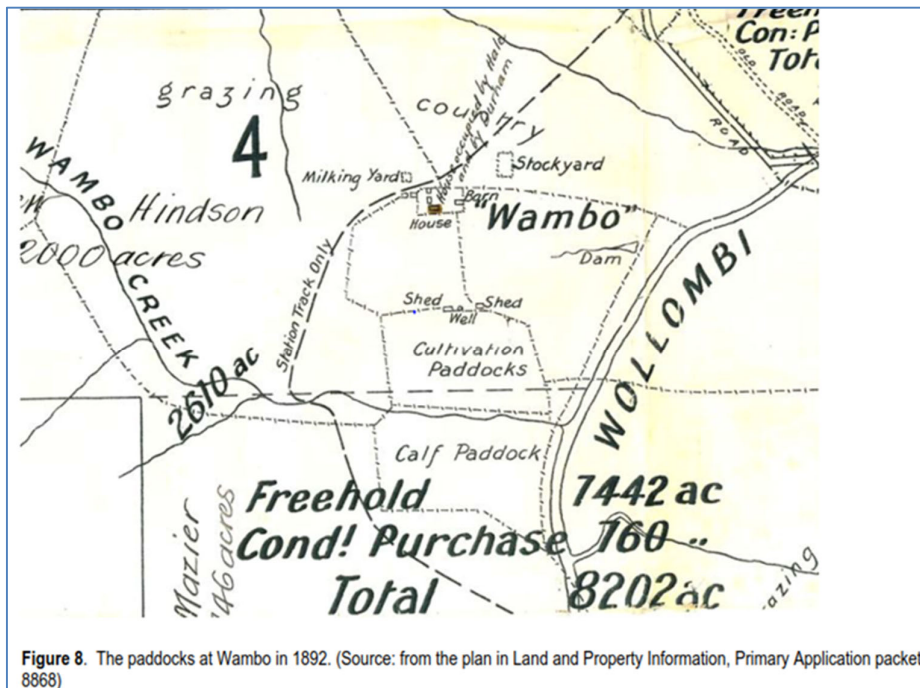


Figure: House and Cultivation Paddock (Map prepared prior to sale 1892, Source: CMP2012 History Figure 8, annexure p12)

Part of a meat empire (1894 to 1898)

- 1894 Benjamin Richards, whose daughter was Mrs Charles Durham, bought the heartland of Wambo in 1894. Richards was the owner of the nationally important meatworks at Riverstone in the Hawkesbury and Wambo became a part of his system of transferring stock from the eastern states to the meatworks.
- 1898 Richards, however, died 4 years later, in 1898, and Wambo did not develop any important part in his empire. It is unlikely that Richards spent much time at Wambo. It has been suggested that the surviving butcher's shop [hut] was built in his time and this is an attractive possibility, but Richards used Milbrodale on Wollombi Brook to the south as his principal Hunter entrepot in the 1890s and it is likely that Wambo merely provided holding paddocks for stock.

Interlude under Badgery, Ridge and Jones (1898 to 1905)

- 1898 On the death of Richards, Wambo was sold to Prosper Ridge and Frederick Badgery, two well-known pastoralists with extensive interests elsewhere. Badgery had married an orphaned niece of Mrs Sophia Durham who had been brought up at Wambo. Both Ridge and Badgery came of old Richmond families and their grandfathers had known the first William Durham and James Hale well. There is no evidence, however, that Ridge and Badgery did any development at Wambo.
- After Ridge died in 1904, William Badgery and Frank Jones acquired his interest in Wambo, but in the following year the consortium sold the property.

The McDonald Era (1905 to 1983)

Ownership and occupancy

- 1905 -1908 Reginald Allen and Frank McDonald were joint owners and occupiers of Wambo.
- 1908-1915 Allen and Frank McDonald remained joint owners of the heartland of Wambo, but McDonald occupied Wambo homestead block, with his son William as stud master, while Allen occupied South Wambo.
- 1915 -1944 William McDonald was owner and occupier of Wambo.
- 1919 Frank McDonald died at Leura during the influenza pandemic.
- 1944 -1954 Absentee owners were children of William McDonald, John Linden McDonald and Mrs Joan Blasick, together with the family solicitor, Colin Dunlop of Singleton. The homestead was occupied by overseers or managers. McDonald was initially in Scone, and Joan Blasick was in America with her husband.
- 1954 -1966 John Linden McDonald became sole owner, but lived in Double Bay and Wambo homestead continued to be occupied by staff until Joan Blasick returned from America in 1966 or just before.
- 1966 -1971 John McDonald and his sister, Joan Blasick became owners in common. The Blasick family occupied Wambo homestead.
- 1971 McDonald and Blasick sold the whole Wambo estate of over 3,000 acres to Wambo Mining Corporation. Later that year the mining company sub-divided the estate and sold a new allotment of 68.09 hectares around the homestead to Joan Blasick.
- 1971-1983 Joan Blasick was sole owner of the new, small homestead block. She also occupied the house during this period.

- 1983 -1985 Joan Blasick sold her part of Wambo to a veterinary surgeon, John Birks, who attempted to live there. He found this uncongenial and successfully sued the Wambo Mining Corporation for damage to the house and for noise pollution, but sold the entire property to the coal company in 1985.
- 1985 - present Successive coal-mining companies have owned the reconsolidated Wambo estate.

Third horse-stud under Reginald Allen and Frank McDonald (1905 to 1919)

- 1905 The wealthy Sydney lawyer, Reginald Allen and Frank McDonald purchased Wambo and at once proceeded to create a significant horse-stud. By October, 'Bonnie Chiel', a stallion of impressive pedigree, which had won major races, was standing at stud, at Wambo.
- 1905-1907 To accommodate the stud, 30 loose-boxes, 18 stalls and yards were constructed.
- 1906 A Newmarket stallion, 'Mousqueton' was purchased along with a third stallion. Excellent photographs of Wambo estate and horses by the Allen family in December.
- 1908 Allen and McDonald loosened their partnership and sub-divided part of the estate, as the Durhams had hoped to do 15 years before. McDonald retained the heartland around the homestead, while Reginald Allen retained South Wambo, although the land remained in joint ownership until 1915. The stud of 87 horses, including seven stallions, was sold, but the partners bought some of them and continued to breed horses there. As a result Wambo stud continued under McDonald alone with 'Riding Master' as its principal stallion, while a new Allen stud was created at South Wambo. Frank's son, William McDonald, became stud-master at Wambo and developed the stud for another 10 years or so.
- 1914 Frank McDonald bought a stallion, 'Kerman, in Britain at William's request. It reached Australia before war broke out. There were now four racing stallions at Wambo.
- 1915 McDonald transferred title to Wambo, and therefore to the stud, to his son, William Francis, who lived there until his death in 1944.
- 1916 William McDonald sold 30 horses, bred at the Wambo stud. There were no more advertisements for stallions standing at Wambo.
- 1919 The last advertised sale of bloodstock from Wambo.

The dairy herd of Jersey cows and bulls (1905 to c1940)

- 1905 -1908 the dairy herd owned jointly by Allen and McDonald consisted of 100 cows and seven bulls, along with 145 heifers and 108 calves, was sold in 1908 and largely repurchased by Frank McDonald, so it is likely that the 1908 herd was also Jersey.
- 1915 William McDonald advertised for a dairyman to tend 100 cows.
- 1925 While running 345 cattle, McDonald advertised for a dairying family to look after 80 cows.
- 1931 The total herd was now 290.
- 1936 A Wambo bull was added to the national Honour Board for Jersey bulls.

Sheep (1922)

- 1922 William McDonald was praised for the quality of the wool from his cross-bred sheep on October 1922. As in 1867 1868, this seems to have a short-lived enterprise. There is no evidence that a shearing-shed was ever built at Wambo.

Lucerne (1905 to 1930s)

- By 1908 the new owners Allen and McDonald already had 200 acres (80 hectares) under lucerne by 1908. This was almost certainly grown in the original cultivation paddocks in use from the 1830s just above North Wambo Creek, used for wheat by Hale and for lucerne by Durham.
- 1910 William McDonald was anxious to plant more lucerne.
- 1915 William McDonald became a member of the local Pastures Protection Board after being a stern critic.
- 1939 William McDonald was praised for his improvements to Wambo pastures.

Buildings (1905 to 1928)

- 1905-1907 At the 1908 sale, the auctioneer drew the attention of potential purchasers to the newly built features of the horse stud to the north of the homestead. He described the innovations of Allen and McDonald as: '30 Loose Box, 18 Stalls, and Yards attached. All new and very heavily timbered, and will last for years. Water is laid on, and Haysheds and every other convenience are very handy.'
- 1922 Despite the evidence of wool-production in 1922, there is no evidence for the construction of a shearing-shed at Wambo at any time.
- 1928 Electricity installed along with the party line phone.

Coal Mining

1969 to 1982

- 1969 Formation of Wambo Mining Corporation, which bought land formerly part of Wambo and extracted some coal in a small open-cut called Charlie's Hole.
- 1972 A shaft for access to one of the underground seams was sunk 100m north of Wambo homestead. This processed over 5,000 tonnes of coal daily.
- 1974 Open-cut mining began as a small-scale operation to supplement the underground production from the Wambo seam. Joan Blasick sold her part of Wambo to a veterinary surgeon, John Birks, who attempted to live there but found the site uncongenial.
- 1982 Wambo Homestead Complex was made subject to a Permanent Conservation Order (PCO) under the Heritage Act. In 1999 this was replaced by listing on the SHR following amendments to the Heritage Act in 1998.

1982 to the present

- From 1982 to present Successive mining companies have owned the reconsolidated Wambo estate, though the name Wambo has been retained by subsequent owners.
- 1985 After successfully suing the Wambo Mining Corporation for damage to the house and for noise pollution, John Birks finally sold the entire property to the coal company.
- 1982 - 1991 Property was owned by a combination of companies including Panaroya, Hartogen, Total Australia, GIO and CdF Minerals.

- 1991 - 2001 Property transferred to Sumito Coal Mining Ltd (now Sumiseki) in 1991 who managed the site until it was purchased by Excel Coal in 2001. Underground mining progressively expanded to include six mines - Wambo, Ridge Entry, Homestead, Wollemi and the latest in 2005, North Wambo.
- Initially, some pastoral uses of the property continued under the successive mining owners and the Homestead Complex buildings were used for storage and other functions, but these uses had all but disappeared by the end of the 1990s.
- 2005 United Collieries Pty Ltd (which owns underground mining rights) was granted Environmental Planning and Assessment Act 1979 (EP&A Act) and Heritage Act 1977 (Heritage Council) approval for expanded underground mining operations in the vicinity of Wambo homestead and within 'the listed curtilage' (that is the SHR boundary).
- October 2006 Site operations taken over by WCPL (comprising 75% Peabody Energy and 25% Sumiseki). Future mining - including underground mining under the Wambo Homestead Complex and open-cut outside the boundary – is currently approved until 2020 (open cut) and 2039 (underground).

Chronology of Key Historic Themes

The table below shows the chronology of key historic themes for the Wambo Homestead Complex.

Table: Major Historical Uses of the WHC (GML, 2012)

Decade	Wheat	Lucerne	Horse Stud	Durham Cattle	Jersey Cattle	Sheep	Coal
1820s							
1830s	X			X			
1840s	X		X	X		X	
1850s			X	X			
1860s			X	X		X	X
1870s		X	X	X			
1880s		X					
1890s		X					
1900s		X	X		X		
1910s		X	X		X		
1920s		X			X	X	
1930s		X			X		
1940s							
1950s							
1960s							X
1970s							X
1980s							X
1990s							X
2000s							X
2010s							X

Diagrammatic Layouts

The diagrammatic layouts shown in the figures below document changes to the Wambo Homestead Complex based on available documentary evidence, starting with the earliest plan of the site in 1892. Insufficient information is available to reconstruct earlier layouts of the study area.

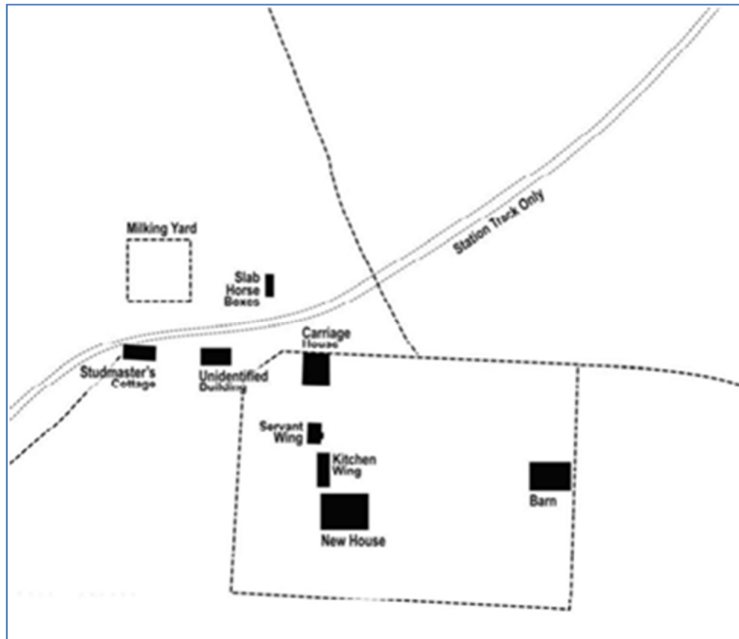


Figure: 1892 Layout of Study Area (Based on RH Matthews Primary Application 8868, LPMA) by GML

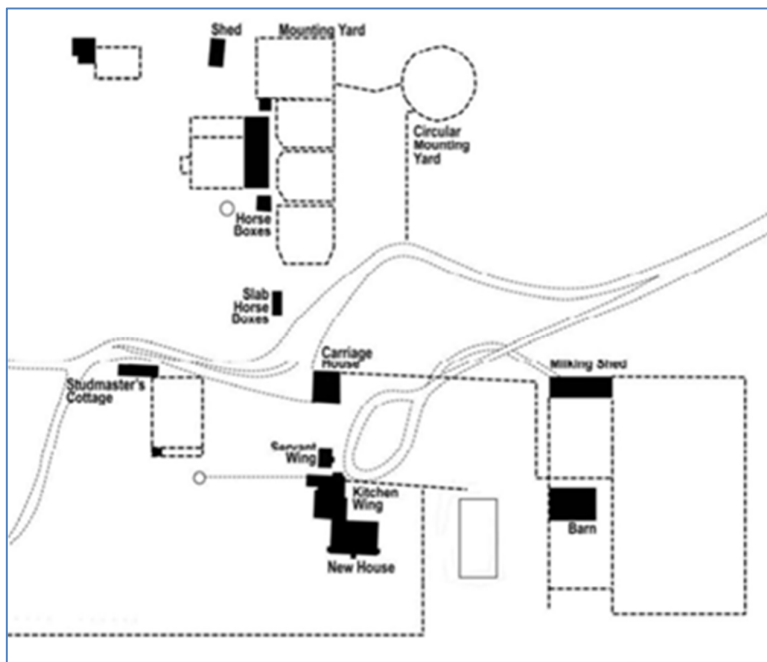


Figure: 1942 Layout of Study Area (based on 1942 Aerial Survey) by GML

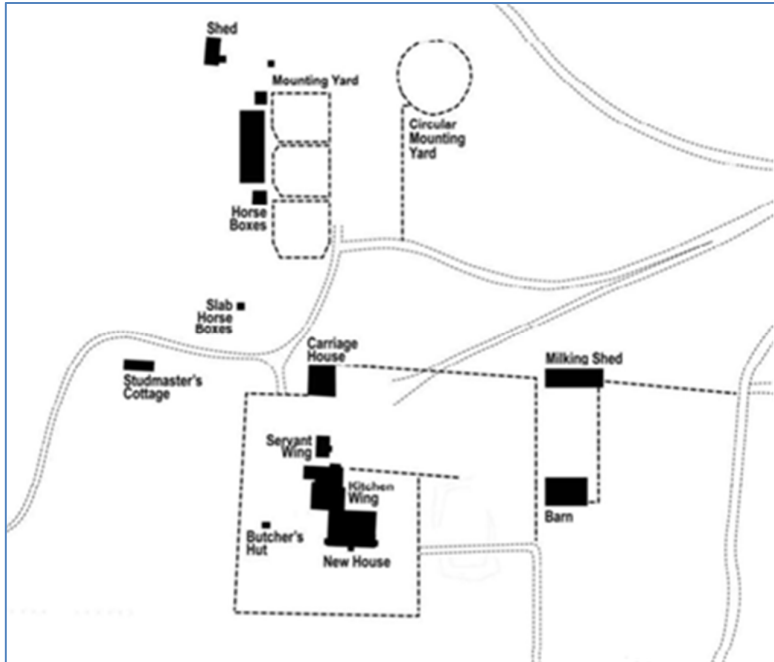


Figure: 1951 Layout of Study Area (Based on 1951 Aerial Survey) by GML

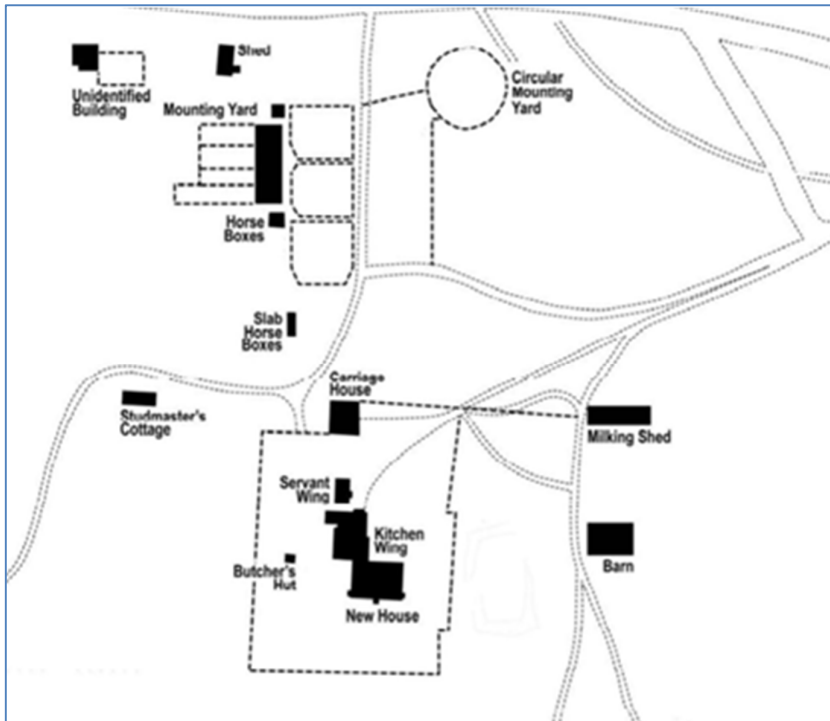


Figure: 1974 Layout of Study Area (Based on 1974 Aerial Survey) by GML

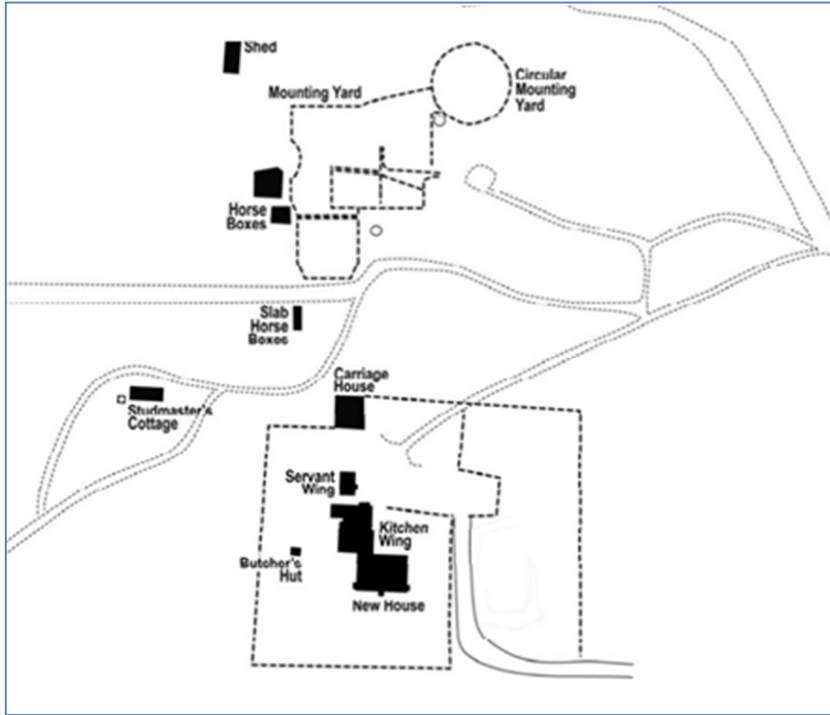


Figure: 1991 Layout of Study Area (Based on 1991 Aerial Survey) by GML

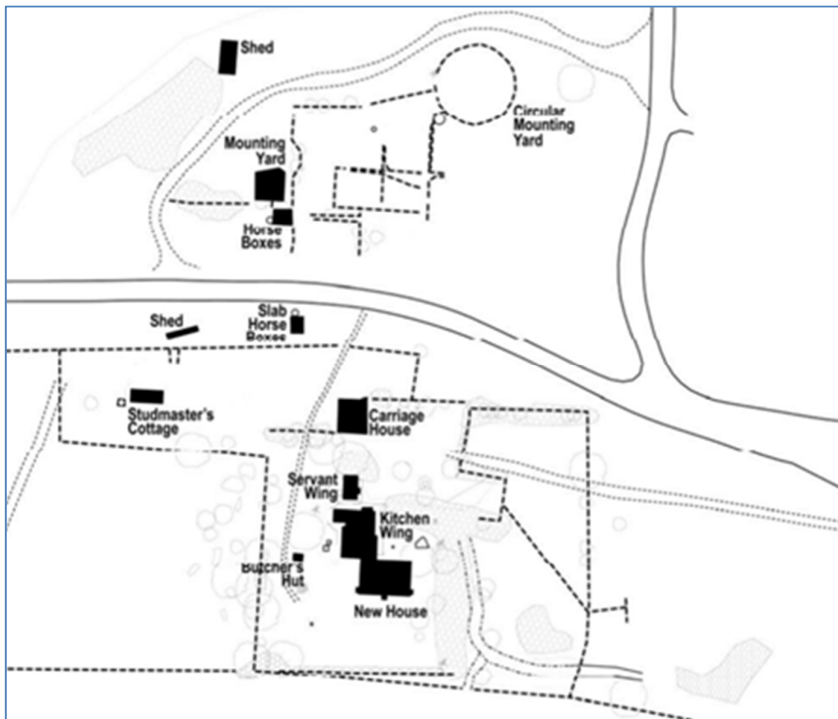


Figure: 2012 Layout of Study Area (Based on 2012 Site Survey). Note: The 'shed' (shipping container), north of the Studmaster's Cottage has been removed. This diagram also applies to 2017. The driveway to the west of the Butcher's Hut is less obvious now.

APPENDIX D BUILDING CONDITION AND INTEGRITY REPORTS

2012 CONDITION AND INTEGRITY REPORT (GML)

New House (Main Homestead)



South



West



North



NE corner



Columns removed



Junction with kitchen



Propped Arch



Propped ceiling

Figure: External and Internal views

Source GML 2012

The building provides extensive evidence of its development over time and the successive details of different areas and phases of growth. The construction history can be read through the building and include works such as the removal of masonry partition walls from the lesser and verandah rooms, the introduction of new door openings, the adaptation of the verandah rooms as a kitchen and bathrooms, the introduction of modern joinery into the master bedroom and installation of pressed metal ceilings over the boarded verandah ceilings. The current condition of the building's fabric is variable throughout the structure, ranging from badly deteriorated (to the point of collapse) through to relatively sound and/or readily repairable. The contributors to this deterioration have included water penetration and poor drainage, salt damp attack in masonry, termite activity and inappropriate repairs (such as early cement renders), all of which appear to have been occurring for much of the twentieth century history of the site, including the period of previous agricultural related uses.

Over the last 18 months WCPL have instigated a program of maintenance, repair and stabilisation works directed towards removing agents of deterioration and retaining and protecting existing structures and fabric in situ as much as possible. These works have included the following:

- Checking over and re-securing roofing and flashings to make buildings watertight, particularly at connections between structures and around chimneys and other penetrations.
- Collecting and disposing of roof water drainage via existing gutters and downpipes and/or new fittings (including acrylic 'water shutes') to ensure water is deposited well away from building walls. As part of the process, all sections of early ogee-profile gutter have been retained in situ as historic evidence of the original detail.
- Providing new structural props to the front (south) verandah to replace deteriorated timber posts, which have been carefully dismantled and stored in the Homestead. Also providing new structural propping along the west end of the sandstone verandah base wall to halt further movement/settlement of the footings.
- Propping up areas of deteriorated masonry near the base of damp-affected walls to prevent structural collapse and retain existing fabric in situ as much as possible.

- Installing new timber props to support internal lath and plaster ceilings and archways where cracking and/or collapse of fabric was noted.
- Retrieving and securely storing removed features and fabric (e.g. deteriorated timber columns and bases, zinc awnings, etc) within the main building.

The Kitchen Wing (former House)



East



West



Stairs to basement and first floor



Salt damp attacked stonework



Interior



Former stoves



Upper level



Basement after propping

Figure: External and Internal views

Source GML 2012

As with the New House (Homestead) the Kitchen Wing building provides extensive evidence of its development over time, though like its construction history, this is quite complex and confusing. As with the Homestead, the successive details of different areas and phases of growth are evident throughout the building and include features such as the change from stone to brick between the ground and first floor levels, progressive changes to the surrounding verandahs (including the intriguing 'butting-up' to the New House verandah on the south elevation), the removal and installation of walls at ground and first floor level (at different periods) and the interesting range of internal finishes and fabric in the main habitable rooms.

As with the New House, the current condition of the building's fabric is variable throughout the structure, ranging from badly deteriorated (to the point of collapse) through to relatively sound and/or readily repairable. The contributors to this deterioration have included water penetration and poor drainage, salt damp attack in masonry, termite activity and inappropriate repairs (such as early cement renders), all of which appear to have been occurring for much of the twentieth-century history of the site, including the period of previous agricultural related uses.

Of the building as a whole, the first floor level appears to be in the best condition, with roof and gutters, chimneys and first floor windows appearing largely sound when examined from ground level. The brickwork of the first floor addition also appears (from remote inspection) to be relatively sound and free from cracks. Internally, throughout the building, extensive repair and replacement of floors has taken place in the past.

Recent maintenance, repair and stabilisation works on the former Kitchen Wing directed protecting existing structures and fabric in situ as much as possible have included the following:

- Making the building's roofs watertight, particularly at connections between structures and around chimneys and other penetrations.
- Collecting and disposing of roof water drainage via existing gutters and downpipes and/or new fittings (including acrylic 'water chutes') to ensure water is deposited well away from building walls. This has included the particularly complex southeast junction with the New House.
- Propping of the east verandah framing to replace/support deteriorated components (to make secure) and provide appropriate falls for roof drainage.
- Installing a number of vertical and lateral props in the basement Cellar to support both the ground floor framing and provide lateral support to the east wall of the Area (access corridor).
- Clearing out modern debris and linings (including modern carpets and fake-timber veneer dado linings) throughout the building, including later laundry/service areas, to improve ventilation and allow existing fabric/features to be viewed.
- Propping up areas of deteriorated masonry near the base of damp-affected walls to prevent structural collapse and retain existing fabric in situ as much as possible. This is most notable on the west walls facing the northwest courtyard.

The Servant's Wing



East



West



Propped roof



Propped lower floor

Figure: External and Internal views

Source GML 2012

The Servant's Wing has spent many years in a dilapidated condition, with structural problems preventing access for inspection, maintenance and repair. Neither of the east or west verandahs remain and on the west elevation, a self-sown *Grevillia robusta* (Silky Oak) has grown up within the footprint of the former verandah. The progressive collapse of the main roof of the building into the attic rooms has also left the internal areas and fabric exposed to the weather and the north gable wall unsupported. There is no longer any access stair between ground floor and attic.

The external brickwork to walls and chimney (on the east elevation) is badly affected by salt-damp which appears to have been occurring for many decades. Cement render applied to the lower levels of the walls externally and internally appears to be of early to mid-twentieth century vintage and has aggravated the earlier salt-damp erosion of the masonry. The loss of the building's soft lime/mud mortar is pronounced in many areas leading to localised areas of collapsing brickwork. In addition, walls have cracked and moved outwards as tie elements have deteriorated and ground conditions have altered. Brickwork under a number of the west-facing windows had collapsed, allowing the related collapse of the timber joinery window frames.

While the building has lost components and fabric through long-term deterioration, sufficient details of construction and original elements such as window joinery remain to allow interpretation of much of the construction history of the building.

Recent maintenance, repair and stabilisation works on the Servants' Wing building have resulted in a notable improvement in both the stability of the structure and ability to read its form and detailing. As elsewhere, the works have focused on measures to make surviving structural elements secure and retain existing components and fabric in situ as much as possible. Key works have included the following:

- Removal of damaging plant growth on or within the building footprint.
- Propping and tying together where required the major structural elements including walls, floors and roof structure internally and externally to reinstate building form and improve structural integrity. This includes supports to brickwork internally and externally where salt-damp has eroded structural fabric.
- Replacing flashings at the wall/chimney junction to prevent water entry.

The Butcher's Hut



West



East



Window detail



Eaves detail

Figure: External and Internal views

Source GML 2012

The Butcher's Hut remains a notably complete structure with little evidence of major changes to its fabric, other than repairs and minor alterations to fittings. That is, it has a relatively high degree of integrity.

With recent maintenance, repair and stabilisation works the physical condition of the structure has also been considerably improved. As part of works to stabilise and improve the weatherproofing of the building, measures to protect and restore significant detailing and fabric have also been implemented, these helping to ensure the structure is retained in as good a condition as possible. As elsewhere, the work program has focused on measures to secure structural elements and retain existing components and fabric in situ. Key works have included the following:

- Restoration of fallen/loose timber slabs from the external walls (particularly on the north and west elevations) to their original locations and reinstatement of the 'mud' mortar/insulation within the wall cavity.
- Provision of external timber propping to stabilise the structure and lessen the strain on junctions and opening up of fabric to weathering due to rotational movement. This previous movement appears to have been due to a number of factors including the lack of diagonal bracing in the structure itself, invasive tree and vegetation growth, settlement under the footings and failure of some fixings.
- Provision of supplementary framing and propping to the roof to reinstate the alignment and support role of the original structure. Refixing of surviving corrugated iron sheeting, supplemented with new clear acrylic sheeting to make structure watertight.
- Installation of clear acrylic sheeting over openings particularly the end gables supported on new timber framing to provide waterproofing and ventilation while allowing inspection/reading of the internal structure.

Carriage House and Stables



North



South



NE corner



Shingles visible below later roof sheeting



Stables



Granary Loft



Western lean-to



Stone flagging in south end

Figure: External and Internal views

Source GML 2012

Though not in particularly good condition, the Carriage House and Stables building still retains considerable material relating to its original design, construction, and subsequent use which contribute to its high degree of integrity. The building's surviving fabric also provides important evidence of various phases of adaptation thus serving an important role in the historical interpretation of the site.

The building's original structural system is, in many ways, a contributor to its present condition as, having no bracing (apart from collar ties in the attic roof), it has had to rely upon the completeness of framing and rigid fixing for stability. Past termite activity, structural movement and invasive plantings have seen movement and deterioration of the structure allowing weather into the building. Recent works have stabilised the structure and made it weatherproof, retaining existing components and fabric in situ where possible. Key works have included the following:

- Removal of invasive tree and vine plantings from within and immediately adjacent to the building to expose key structural features and allow them to be stabilised, repaired in situ and/or dismantled for storage on site.
- Clearing out of the internal areas, particularly the carriage bays used for feed storage, to expose the original stone flagging and previously hidden components, including post holes, timber base-plates and framing fixing detailing. This process has also improved ventilation to help fabric dry out as well as allowing access for inspection and repairs.
- Collection, sorting and reinstatement or storage of loose, readily retrievable building components, including posts, cladding, doors and framing sections.
- Installation of new timber propping and bracing as part of securing, straightening and stabilising the structure, located to support existing floor, wall, ceiling and roof framing as necessary.
- Installation of clear corrugated sheeting over openings, particularly west wall of attic and gable ends, to prevent water entry while allowing ventilation and visibility for monitoring and interpretation.

Stud Master's Cottage (N.b. condition report prior to 2013-4 re-roofing programme)



North



South



Condition of walls



Verandahs

Figure: External and Internal views

Source GML 2012

The building generally is in poor condition and with the loss of significant early components and fabric, particularly the roof and verandahs, it has low integrity. At the same time, the building retains sufficient evidence of early fabric and detailing to provide a useful historical account of its original character and subsequent development history, particularly examined in the context with other structures in the study area. With, for example, the recent collection, sorting and storage of building components from the original roof and verandahs, a useful picture of both its original construction methods and subsequent alterations can be put together, though the extent of remaining fabric is less than complete.

Ongoing deterioration of the building fabric, however, continues due to a number of factors:

- With the removal of the roof and verandahs, both the potential exposure of the building to the weather (at least before the tarpaulin was installed) and the loss of the main structural element tying the building together have left it vulnerable.
- The high water table under the floor framing, which may well have been characteristic of the site conditions for many years, contributes to ongoing problems with footings, timber framing and masonry walls.
- The application of cement rich renders over the base of the brick walls, both internally and externally, has exacerbated both the rate and extent of salt-damp erosion, extending up above the impervious barrier.

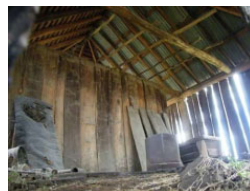
Slab Horse Boxes (The Stallions' Box)



West



East



Interior



Interior

Figure: External and Internal views

Source GML 2012

This building has a high degree of integrity and appears to be essentially complete. No evidence of major changes to its fabric was noted and generally it appears to be in quite good condition. It is, in fact, in the best overall condition of all the structures within the Wambo Homestead Complex.

From inspection there appears to be no obvious evidence of termite activity in the slabs or structural frame. There may, however, have been termite attack in the roof shingles. Having no diagonal bracing, it relies upon its complete frame, and various phases of nailing and fixing/bolting, for its structural integrity. Deterioration might be expected in the post bases and wall slabs where they are buried in the earth and hence damp.

The adjacent rainwater tank is corroded and might be expected to be fragile as its base has collapsed. The later concrete slab has cracked and broken up.

Mounting Yard, Horse Boxes and Stock Yards



Main Horse Box



Main Horse Box



Main Horse Box



Remains of other Horse Box



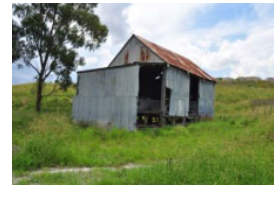
Horse Box detail



Mounting Yard detail



Shed Structure



Shed structure

Figure: External and Internal views

Source GML 2012

The surviving Horse Box buildings generally have a low degree of integrity due to both the loss of fabric and confusion of the remaining evidence, particularly the now largely collapsed structure. The condition of these buildings is also poor with extensive loss and/or deterioration of components and fabric. Because of their method of construction, with large, lightly framed and unbraced structural elements spanning considerable distances, the components that do remain, particularly the roof, are vulnerable to movement and possible collapse.

Similarly, the loss and/or deterioration of original fabric from the circular Mounting Yard and Stock Yard enclosures has notably lowered their degree of integrity. The physical condition of the Mounting Yard enclosure is also generally poor with both fabric, particularly the timber slabs, and structural stability in a vulnerable state. Earth works adjacent to the northern edge of the Yard in recent years have also affected the structure, though the substation in this location, as shown in the 2006 CMP (p.155) has, since been removed.

A number of the other features previously recorded in this area - including, for example, the log feed trough shown in Figure 5.35 of the 2006 CMP (p172) - have also either deteriorated or collapsed and been covered over by planting growth.

Despite their overall condition and loss of fabric, however, this group of structures remains an important resource for understanding the development history of the Wambo Homestead Complex, particularly in the early twentieth century, with important evidence of both functional and architectural practices. Because of its rarity, this is particularly important in the case of the circular Mounting Yard.

2017 CONDITION AND INTEGRITY REPORT (EJE HERITAGE)

New House (Main Homestead)

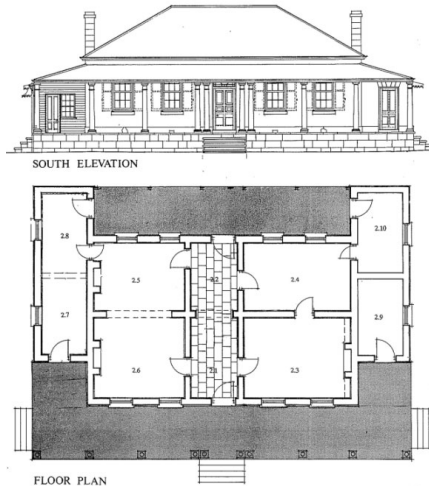


Figure: Floor Plan and Elevation

Source: Collins (1994). North up the page

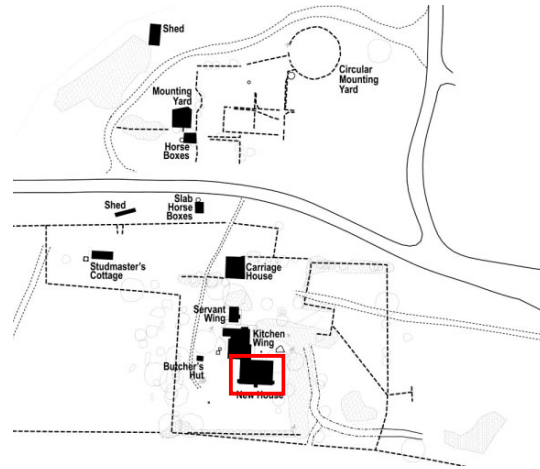


Figure: Location Plan

Source: Collins (1994). North up the page

The upper level roof is in better condition than the lower verandah roofs. Some hip cappings and all fascia, gutters and downpipes need attention. The junction between the north verandah roof and the south roof of the Kitchen Wing requires clearing and the temporary pvc downpipe needs reconnecting at roof level. The eaves soffit requires re-fixing and in some places replacing. Lengths of the roof fascia are rotten. The lower verandah roof has sagged at hip ridges and along the line of the edge beam in places. The gutter is still operational throughout most of its length excepting on the east side where it is rusted through in places and on the northern side where it has partially collapsed. Many gutter brackets display corrosion which is starting to affect the gutter itself.

Temporary chutes for directing rainwater away from the building are in varied condition. The southwest corner chute is still intact whereas the southeast chute has lost its acrylic sheeting and is no longer performing its intended function. The other eastern chute appears to be intact.

From within, the roofs appear to be working however the inspection was undertaken during a long period of nearly no rain. The flashings at the chimneys appear to be relatively recent, with some damage to render on the chimneys due to flashing replacement over time.

The south elevation is threatened by the collapse of the stone verandah at the south west corner. This has caused the verandah beam to drop at both ends. The fines material under the stone flagging seems to have washed away. This could be due to a combination of storms from the south west and the lack of storm water downpipes from the roof. The temporary timber props and rainwater dispersion screens have slowed this deterioration. Four of the timber columns are missing. Some of the material belonging to the columns, capitals and bases are lying on the verandah. The stone steps are subsiding and rotating, some more so than others. There is erosion of stone, cracking and failed render obvious at the south east corner verandah. Door hardware has been removed from the main Entry Door.

The west elevation now has one of the four window shutters still fixed. There is a metal shade missing (stored in the corner room). The gutter has dropped; there are no downpipes from the roof. The rendered wall is in a fair condition however significant cracks are obvious under windows, from the corners, another vertically at the mid length of the wall and above one window. The corner room cladding is intact though the dropping verandah flagging has opened a gap under the wall cladding allowing weather and potential vermin into the room.

To the east the sandstone base courses are more weathered and damaged than the west. The bull-nosed edge profile to the verandah has eroded under the projection. The course above the verandah level runs around the whole building. Cement rich render repairs to that course have been attempted in the past. These repairs have failed in most instances. The east windows are without shutters and the openings are closed over with plywood. There are no shade hoods anymore. There are cracks in the wall below the sills. The north east corner of the wall is now timber propped in both directions.

Timber props have been installed below the verandah beam of the north elevation. The doorways at both ends of the north verandah both have cracks above the door head at both corners. The verandah stone flagging is in reasonable conditions but one is very undermined.

The north wall, at the east end has a wide open vertical crack close to the corner and a large hole through the wall close to what was the floor level. A foil membrane has been taped over the crack and corrugated clear roof sheeting has been taped over the hole.

Inside sections of plaster cornice mouldings have dropped away and old and new 'shear-tear' diagonal cracks in the wall up to ceiling corners are seen in most plastered walls. Cracks in the hallway arch are open and obvious. Ceiling finishes are cracked. Much older cracks to chimney breast have been roughly patched and painted over and appear to be stable. Fire place surrounds, inserts and mantel pieces have all been removed from the front (south) room fireplaces.

There are now large timber sections used as props in most rooms, to support ceilings or archways. In the verandah room at the north-west corner large areas of ceiling has collapsed. The former verandah bathroom at the north east corner is a scene of destruction. Red brick dust has coated most surfaces after vertical control joints were sawn into the wall. The floor and framing are gone. The internal plaster is nearly all gone. There is remnant evidence of more recent linings now removed. Plumbing has been cut and fixtures removed.

This partial demolition and the removal of skirtings in other rooms has revealed evidence of original construction materials and techniques. This confirms the lack of knowledge and skill used for the original construction of the New House.



Figure: External and Internal views

Source : EJE 2017



Figure: New House Roofs
Source: Peabody Energy 2017



Figure: s-w corner
Source: EJE 2017



Figure: s-e corner
Source: EJE 2017



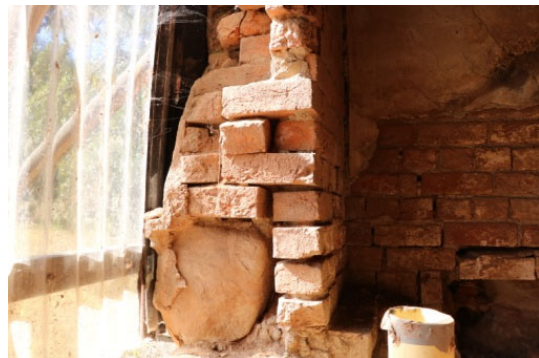
South door, east verandah



East wall, north corner (props and closures)



Windows east wall



Sandstone String course detail (north wall)

Figure: Detail views
Source: EJE 2017

The Kitchen Wing (former House)

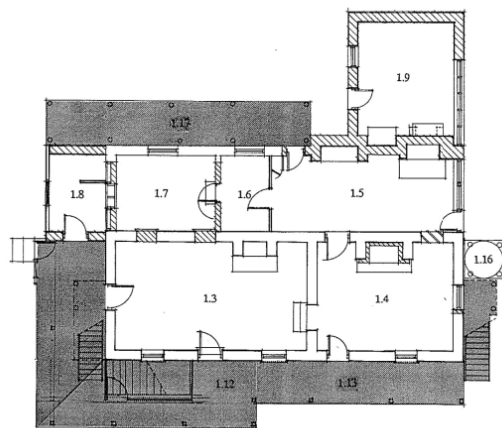
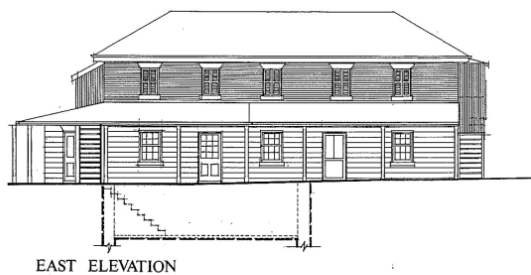


Figure: Floor Plan and Elevation

Source: Collins (1994) north to the right

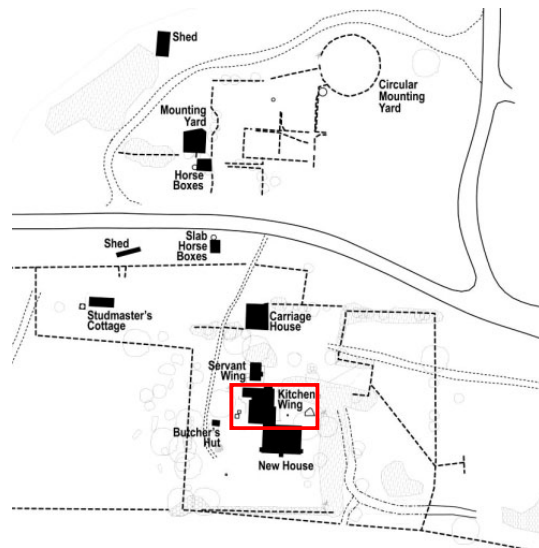


Figure: Location Plan

Source: Collins (1994) north up the page

Exterior:

The roof appears to provide protection to the building, however the site was very dry at the time of inspection having received nearly no rain for months. Most of the chimneys survive. The junction between the low roofs of the kitchen wing and the New House north verandah appears to offer insufficient drainage capacity, further exacerbated by the accumulation of leaf litter in that roof valley. The edge of some east facing roofs show the remains of timber shingles under metal roofing. Parts of the west skillion roof have temporary clear corrugated sheeting over metal roofing.

Gutters are generally non-existent, fascia boards are weathered and loose (again, clear corrugated sheeting has been screwed over section of fascia); eaves linings are becoming detached and dropping away from framing, or missing. In places the external brickwork is open beneath the eaves (west elevation window head). This also applies to the Laundry addition. Remnants of guttering are at the north end of the main roof, held in position at the north-east corner. Most of the east edge of the roof is without a gutter. The eastern verandah roof changes in its reach, along its length. The materials are likely to date from the turn of the C19 and early C20, resulting in a mix, poor junctions, overlaps and a change in pitch. The flashings at the brick wall at the top of those roofs vary in age and length. The gutter at the northern end of that skillion roof is the older gutter remnant on the building. For the main roof above, the south-east corner has a length of gutter in two directions and one contemporary downpipe and spreader. The external steps at both ends of the building are roofed. The structure of the west skillion roof is bush carpentry using timber rounds.

At points where roof collected water is dumped to the ground, timber frames with clear corrugated roof sheeting have been installed to disburse that water further away from the building, to slow deterioration. The same sheeting has been tucked under and over roof sheeting to limit water damage. Where the verandah beams and post have rotted and failed, timber posts and lintels have been installed to 'true-up' the structure, support the remnants of beams and the roof. A bay of the south verandah soffit is lined with T&G boards.



Figure: Kitchen Wing Roofs
Source: Peabody Energy 2017



Allen Family Visit to Wambo 1906

Figure: New House and Kitchen Wing
Source: Collins (1994)

The external brick wall of the upper storey was laid in English bond with red brick and lime rich mortar. Generally the walls appear to be in a fair condition. Some deterioration is obvious to the left and right of the window sills of the east elevation, where catches for the louvred timber shutters were once located. The shutters now remain closed. The window head is of stone, with a 45° upward splay at the ends. The window heads appear to have been repointed and painted. On the east side one half of the header course height is visible above the stone head. At the west the stone window head is taller.

The stone above the windows of the ground floor walls is in two courses. Brick work commences from the top of that stone work. Rising damp and salt damage has led to serious deterioration of sandstone. This is localised, usually affecting three or four courses above the base, except where attempted repairs in cement rich plaster has forced the moisture and damage higher up the wall. In a number of places the extent of damage is reaching an extent where structural integrity is not reliable. There are openings in the walls at these levels, with stonework arching over the openings. Timber props are now in place to support masonry over openings created by erosion.

A galvanised wire mesh has been placed over some of these holes to deter entry by wildlife. The stone walls appear to have been painted (creams, red and grey layers are obvious).

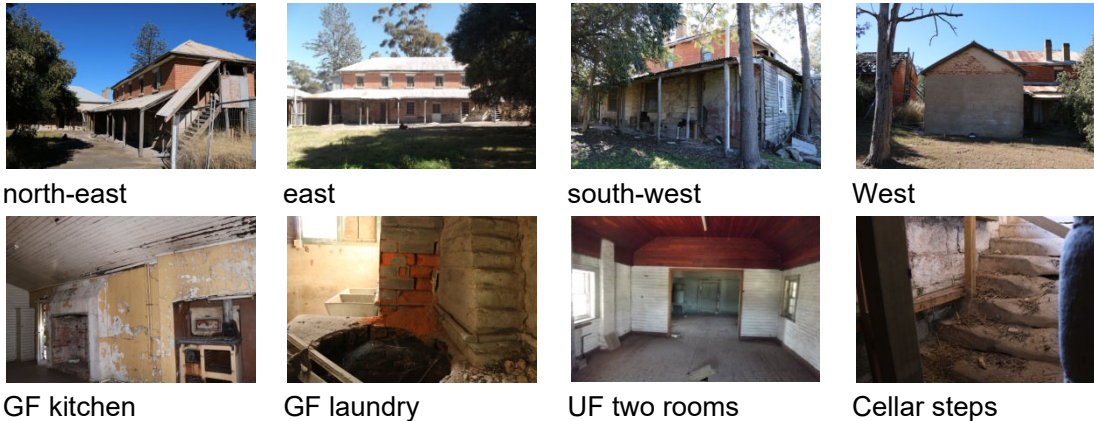


Figure: Exterior and Interior views

Source EJE 2017

To the north-west corner the C20 laundry addition appears to be in a solid brick wall construction, cement rendered both sides with a large proportioned, tooled ashlar coursing shown externally to eaves level and smooth internally. Metal arch bars appear to have corroded and produced cracks above openings. When this room was built it was simply butted up to existing. The interior walls feature chimney brickwork in what was once an external wall.

The sill height stone work of the single storey north wall is severely degraded and has been repeatedly patched with cement rich plaster. It was probably first plastered over existing stone, to match in with the new laundry. The 1994 survey identifies these additions to probably date from 1906.

Steps to the cellar:

The ground level opening to the cellar stair is framed on two sides with a large rectangular timber and one side in concrete (a later replacement), all seated on a red brickwork wall. The other side is the full height sandstone wall down to the cellar level. The metal balustrade around that opening appears to be influenced by the art deco style and could date from the mid 1920s. It appears to pre-date the raised concrete pavement that has been placed flush with that timber surround. That pavement slab is likely to have been poured over stone flagging, to deflect water away from the cellar. It has created an unusual stepped arrangement from the north verandah of the New House, down then up onto the new pavement.

The stone stairs to the cellar are both eroded from use wear and rising damp. The top two treads are-all-but smooth to 45°, the third tread is 50 % eroded. The adjacent wall is severely decayed, as are the first three courses of the corner of the house, in the same location. There are new timber blocking, struts and propping installed between the walls of the stair and around the first window and the doorway, at the lower level into the cellar.

Interior:

The cellar floor is laid in large rectangular stone flagging. The walls are constructed in large rectangular blocks of sandstone laid in stretcher bound. The 1994 survey identifies the cellar walls as having been 'white washed'. There are also signs of paint finishes. The two windows incorporate vertical iron bars. The stone for the walls and openings on the east side have lost cross sectional area, have become rounded and soft. The floor at the walls is covered in white sand.

Diminished nib walls support fireplace loads from above. The floor joists over appear to have once been painted. Parts of the cellar is propped and strutted off a system of new sole plates and wedges. This has also trued the floor level above to some extent.

At ground floor level, the two original 'large' rooms are separated by an internal stone wall and three low steps up to the north. That internal wall is severely deteriorated to five courses above floor level, with stone eroded away from perpendents allowing light to filter through the thick wall. Both rooms include a fireplace. The 6" T&G floor boards are in reasonable condition. There is a tall profiled timber skirting. The south room has two bricked-up windows in its west wall, using the same brick and bond as the upper level addition. This room features a pressed metal decorative ceiling complete with cornices and a concealed fan in a ceiling rose. It also has a decorative fire surround below a simple mantel piece. The north room has exposed ceiling joists with obvious termite damage in four of them. The threshold level of the external door has been lifted to suit the adjustment to the external pavement levels. The walls to these rooms show the tooling and coursing of the stone under a painted finish. The east wall is thin or open in some places, to three or four courses above the floor. This corresponds to the remnants of a blue painted dado in part of the room that might have been concealed linings at some stage.

The north-west room appears to be the kitchen from the early decades of the C19, featuring two large fireplaces. The raking ceiling of T&G boards is moisture damaged in the area for the length of the later laundry to the west. This room shows cracked cement rich render and failed gloss painted finishes. A doorway to the north-east larger room has been blocked up and never finished. The dividing partition to the south is lined in horizontal boards. The external door is a basic ledged boarded door and operational.

The three rooms to the south-west are severely cracked and deteriorated. The internal masonry is cracked and has moved. The west wall is collapsing from the ground up for all three rooms, with masonry missing and large holes to the exterior. These have recently been propped with new timber sections. These three rooms show a variety of mixed materials, tooling and finishes.

Upstairs the floor area is divided into two large rooms, now with a wide opening in the timber framed partition wall between them. The wide floor boards and tall timber skirting are in reasonable condition. The southern room, with the fireplace is painted brickwork to three courses above the window head, and then stained cypress pine lining boards for five boards before meeting the roof framing. The boarded ceiling is horizontal below higher level collar tie framing. In the north room, the walls and ceiling are painted. The ceiling at the four corners of the building is framed into a bulkhead across each corner and lined with the same boarding. There is obvious termite damage at the window reveals. The inside of the chimney show stains from water flow down the inside.

The Servant's Wing

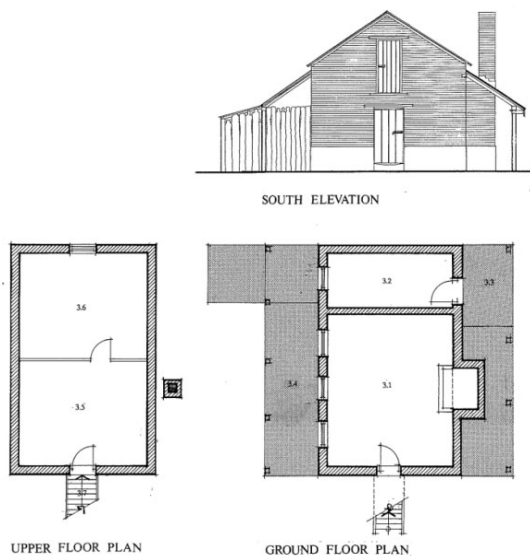


Figure: Floor plans and Elevation

Source: Collins (1994). North up the page

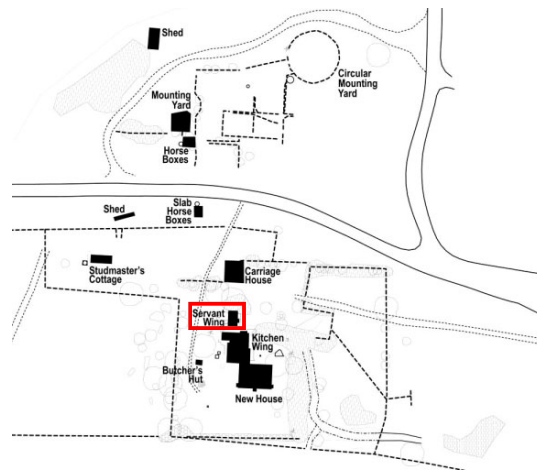


Figure: Location Plan

Source: Collins (1994). North up the page

The east and west verandah / skillion structures are missing. The roof framing has been straightened and strengthened since 2012 but it does not shelter the building. The interior, particularly the lower north room displays extensive water damage. The absence of a roof over a prolonged period has accelerated its deterioration.

The Servants' Wing also has a long history of rising damp problems, as evidenced by the attempts to 'repair' the spalling, powdering brickwork with cement render, inside and out. Large areas of brickwork have lost its bed and perpend joints. The soft bricks and soft lime rich mortar have failed or eroded away to a state of collapse in some areas of the building. This is particularly true of the north and west walls, the brickwork of the internal dividing wall, the exterior of the fireplace and at the building's corners, above the line of render. The west wall has collapsed under the window sills bringing down the brickwork above. This wall is held up by new needles of timber through the wall and 45 degree props against posts up the wall, at regular centres. Around the building the top four courses of the external skin are generally missing. Bricks are balancing in place along the walls. The external corner of the chimney has collapsed.

The southern gable has been badly re-bricked in stretcher bond and cement mortar, below the ridge down to the attic floor level. The apex of that wall has rotated, above the head of the attic door, perhaps due to imposed loads from the roof framing.

At the foot of the north wall openings have collapsed in the lowest courses of brickwork and stepping vertical cracks have developed above the largest opening. Brickwork collapse at the internal dividing wall has created large openings.

Plywood sheeting has been fixed over the upper floor (seen from below). Well constructed timber props and framing have been erected at the upper level and through most walls. The building is highly dependent on this framing, installed just prior to the preparation of the 2012 CMP.

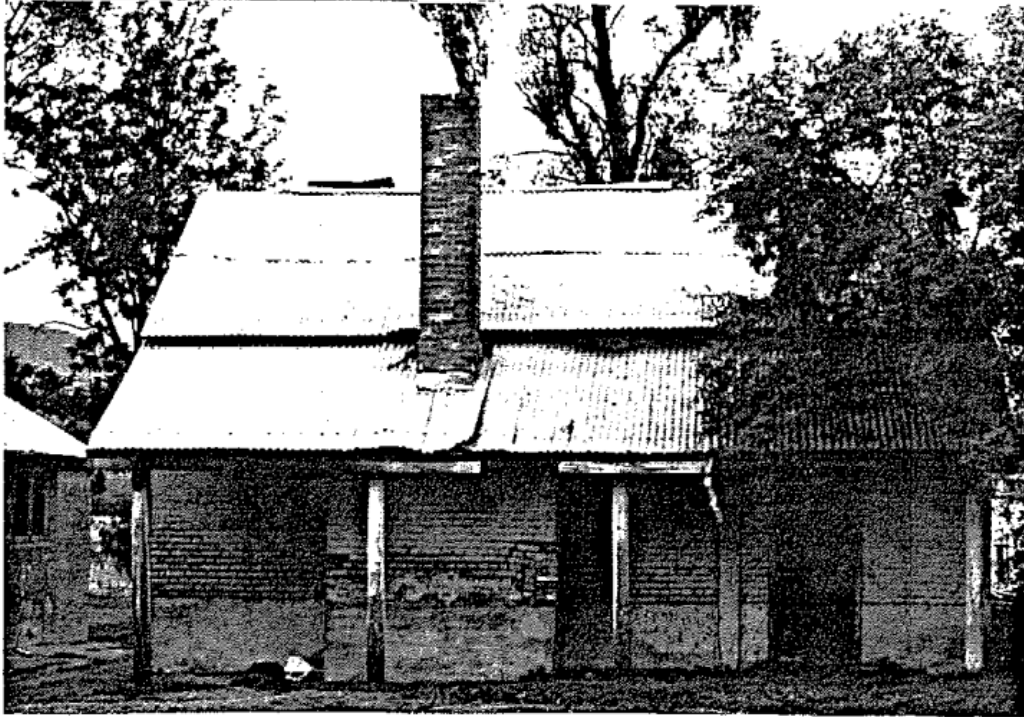


Figure: Side Verandah and Condition 1993

CMP 2006 page 79



Figure: Advanced erosion of joints and loss of roofs 2017

The building is collapsing:



Figure: Servants' Wing Roof remnants.
Source: Peabody Energy 2017



Figure: Collapsed brickwork and timber propping, north west corner.
Source: EJE 2017



Figure: the north-west corner 2012
Source: GML 2012



Figure: the north-west corner 2017
Source: EJE 2017



N-W corner



S-E corner



S-W corner



East (north end)



shingles & metal



Under upper floor



Loose bricks



Holes & propping

Figure: External and Internal views

Source: EJE 2017

The Butcher's Hut

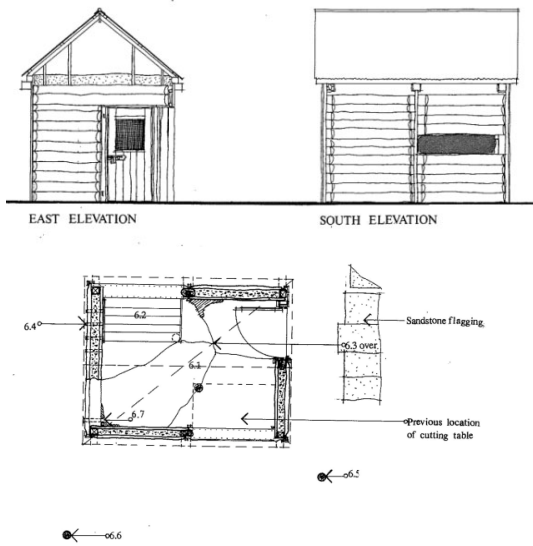


Figure: Plan and Elevations

Source: Collins (1994) north up the page

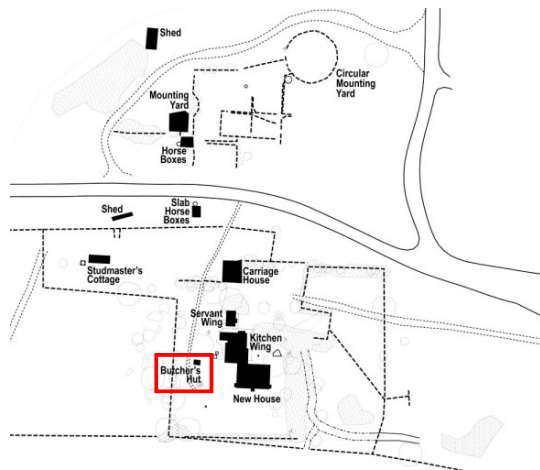


Figure: Location Plan

Source: Collins (1994) north up the page

The Butcher's Hut remains a notably complete structure with little evidence of major changes to its fabric, other than repairs and minor alterations to fittings. That is, it has a relatively high degree of integrity. It displays a high degree of original fabric and its purpose and use is clearly understood.

The south wall and south-east corner has lost the low timber slabs that make the external face of the wall, causing a loss of earth fill insulation. An advanced, self seeded peppercorn tree is growing immediately against the south wall, close to the west corner. The expanding root base of this tree is applying pressure to the building. The building is leaning to the north.

With maintenance, repair and stabilisation works the physical condition of the structure has been considerably improved. As part of works to stabilise and improve the weatherproofing of the building, measures to protect and restore significant detailing and fabric were implemented. These included measures to secure structural elements and retain existing components and fabric in situ. These works require maintenance. The clear roof sheeting over the structure is providing protection, but requires re fixing in places.

The north wall prop framing and the bracing requires further adjustment after the risk from the peppercorn tree is removed. This will require a slow, careful process.

Timber wall slabs have dropped off and are stored within the building. These require restoration, with the reinstatement of the hard 'mud' mortar insulation within the wall cavity. Other slabs are falling away from the framing.

The connections between structural elements require work in places, after the adjustment of propping and bracing.

Additional termite protection is required for this building given the combination of timber, soil and shade that it offers.



North



west



S-E corner



East (door)



Beams & fine mesh



Bench & floor



Two walls & earth fill



Corner detail

Figure: External and Internal Views

Source: EJE 2017

Carriage House and Stables

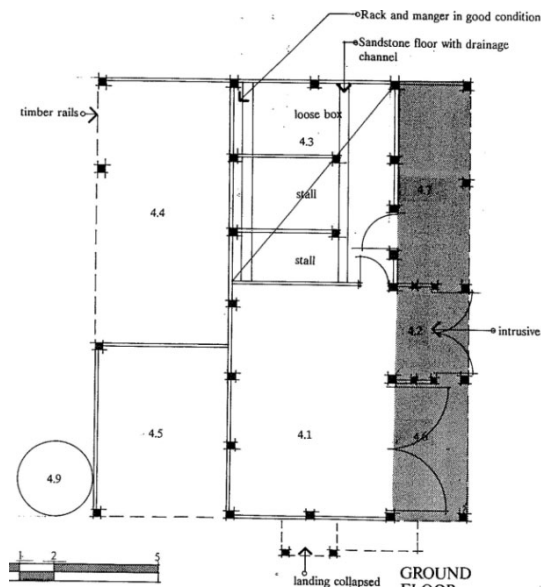


Figure: Plan

Source: Collins (1994) north up the page

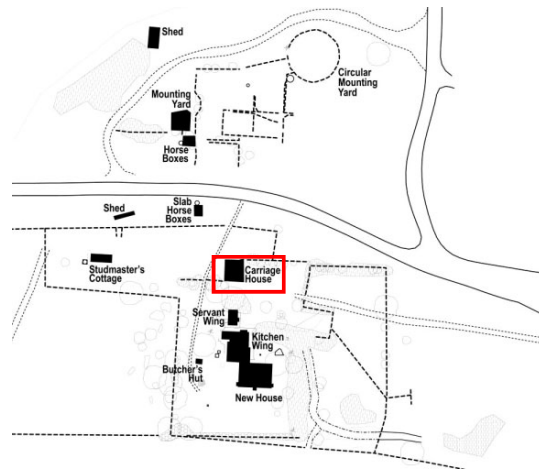


Figure: Location Plan

Source: Collins (1994) north up the page

The building displays interesting materials, construction and detail. It stills retains considerable material relating to its original purpose and construction providing important evidence of various phases of use and adaption. It possesses integrity important to the interpretation of the homestead complex.

The building lacks bracing and appears to have a general lean towards the east. Visually, this is exaggerated by the large columns under the east edge of the main roof extension and the loose vertical slabs of the north wall falling or leaning to the east.

Prior to the CMP 2012, stabilisation works were undertaken. This included inserting additional structure, building propping frames under floor structure, installing triangular plywood braces at the ridge to provide some bracing of the structure, closing over holes in the external walls with clear profiled sheeting and using the same sheeting to flash the western skillion roof to the upper level wall. Since then it appears that eastern doors have been removed and stored flat within the building, weatherboards have fallen off, vertical timber slabs have fallen over and stone flagging disturbed. Material associated with the building has been stacked inside.

The roof appears to be providing protection. The large gaps in the weatherboard wall cladding have been covered with clear profiled sheeting. Many of the timber slabs are loose but have not fallen away yet. The tank stand has collapsed. The north east corner fence between the gate post and the building has collapsed. The remaining shingle roof is expansive in area and protected by the corrugated metal roofing. The stalls area is in very good condition.

The metal hardware, including bolts and hinges belong to various eras and provide evidence and interest in relation to construction methods and former uses.

Additional termite protection is required. The disturbance under stone flagging requires investigation and action. Nearby ground level scrub (a fire hazard) should be cut back.



Figure 3.3.5.3: External and Internal views

Source: EJE 2017



.5. The Homestead from the North 1906

Figure: Looking South from the stockyards 1906

Source: CMP 2006 page 16



Figure: Looking South from the stockyards 2017

Source: EJE 2017

Stud Master's Cottage

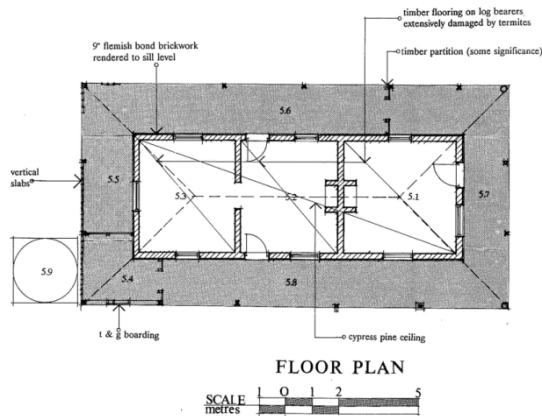


Figure: Floor Plan

Source: Collins (1994) north up the page

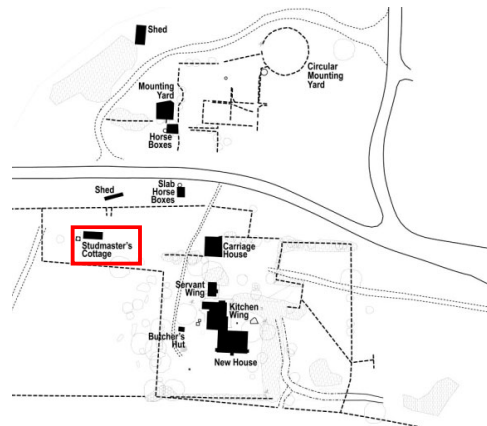


Figure: Location Plan

Source: Collins (1994) north up the page

A report 'Wambo Stud Master's Cottage Roof & Verandah Reconstruction – Report on Completion' prepared by Godden Mackay Logan January 2014 for Wambo Coal / Peabody Energy Pty Ltd describes the 2013 reconstruction works, summarised here:

- Top courses of wall brickwork reconstructed, laid with lime mortar.
- Brick chimney reconstructed.
- Main roof framing restored / reconstructed, on original plate.
- Verandah posts reinstated (after archaeological investigations), some new, some repaired.
- Verandah beam reinstated, some new sections, new steel bracing plates were installed.
- New bush pole verandah rafters were installed to replace deteriorated timbers.
- Vertical timber slabs reinstated at west end screen.
- New heavy duty galvanised corrugated steel roof sheeting was installed to the roof and verandah roofs, with lead flashing to the chimney and ogee gutters.
- A swale was created at the north east corner. That excavation was archaeologically monitored.
- A brick path at the northern door was uncovered and retained.
- A new tank stand was constructed to support a new galvanised steel water tank.
- New free standing tie-down framing (temporary and removable) installed inside.
- Archaeologists examined veranda post holes confirming original cross sections and construction methods, investigated beneath the water tank and in the area of the new swale. Artefacts found broadly dated to the second half of the nineteenth century (179 artefacts providing 123 items). a fence line post hole revealed an 1880s Symington's 'Essence of Coffee' bottle. The report lists all items.
- Re used bricks were desalinated prior to re-bricking.

The building exhibits severely eroded bricks in the courses immediately above the cement rendered dado and immediately below window sills. In places the mortar joints and the face of the brick (or accumulated coatings) is in place after the deep erosion (salt and rising damp) has occurred. Bricks have dropped from below window sills. The cement dado is breaking away in places. Red brick dust is accumulating inside the cottage.

The Stud Master's Cottage demonstrates construction and lifestyle associated with the beginnings of the Wambo Homestead complex.



N-E corner

N-W corner

S-W corner

S-E corner



roof framing



Brickwork repairs



Ceiling



threshold

Figure: External and Internal views

Source EJE 2017

Slab Horse Boxes (The Stallions' Box)

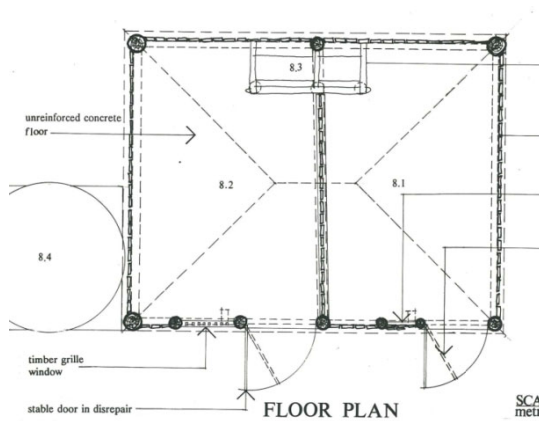


Figure: Floor Plan

Source: Collins (1994) north up the page

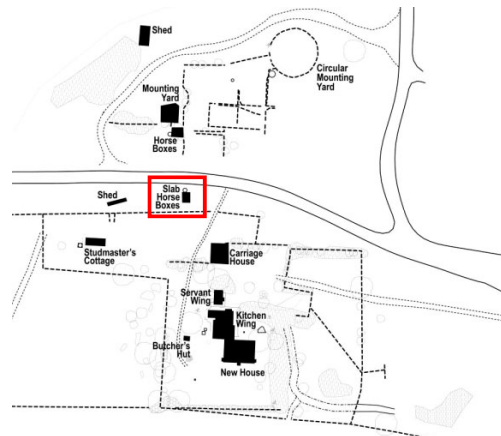


Figure: Location Plan

Source: Collins (1994) north up the page

A new bush round tie beam connection has been installed, halved over and bolted through to a steel plate, reinstating a tie beam across the building. The bottom edge of the lapped roof sheeting has rusted away allowing rain into the building. Materials that appear to belong to the building have been stacked inside the building.

The building lacks bracing.

Given the type of construction used it requires additional termite protection.

The building is in comparatively good condition and still displays a great deal about bush carpentry construction and its original uses. It has a high degree of integrity and appears to be essentially complete.



north



N-E corner



west



south



West window



Battens and shingles



Manger



Tie beam

Figure: External and Internal views

Source EJE 2017

Mounting Yard, Horse Boxes and Stock Yards

The Main Horse Box building is very lightly framed, with large spans and lacking adequate bracing, yet a significant portion of it remains standing. It displays construction methods unlike the earlier homestead buildings. It still provides some evidence of former uses. However, this is not clear due to a loss of fabric, later changes and the extent of collapse. The smaller 'Loose Horse Box' is nearly completely on the ground. Collectively they have lost a significant degree of integrity.

Conversely, the recent stabilisation works in the yards, straightening, restoring components that had detached and providing supplementary bracing has improved the integrity of the Circular Mounting Yard, the holding areas, chutes, the race and loading ramp.

Despite the overall conditions in this precinct and the loss of fabric of buildings and of facilities in the yards, this group of structures remain important in the interpretation of development history in the later phases of the Wambo Homestead Complex, in this case, the third horse stud enterprise by the McDonald ownership. The rarity of the large circular yard makes it particularly important.



Main shed north



Main shed N-E corner



North small shed



East small shed



Inside large shed



Yards & peppercorn



Yards & races



Large shed



Round Yard



Round yard



Wire repairs



Yards

Figure: Views of Yards and Horse Boxes

Source EJE 2017

The Barn is in surprisingly good condition given the rudimentary techniques and materials used in its construction. It requires some levelling, propping and bracing. A bearer has dropped at the doorway in the side wall, causing the wall plate to deflect.



Barn S-E corner



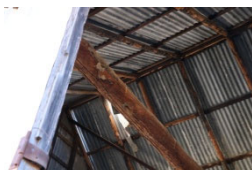
Barn S-W corner



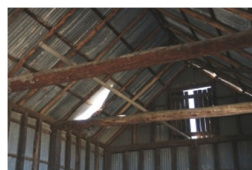
Barn N-E corner



Floor framing



Interior



Interior



Subfloor



context

Figure: Views of the Barn



Figure 3.3.8.7: Barn Roof - Redcliffe
Crown roofing, imported until 1921.
Source: EJE 2017

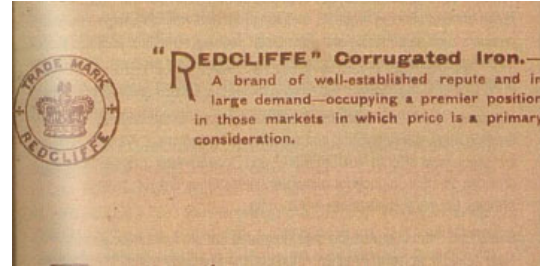


Figure 3.3.8.8: acquired as a Lysaght Trade
Mark
Source: Lysaght Handbook, edition no. 33