



MAULES CREEK

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**WHC_PLN_MC_ABORIGINAL ARCHAEOLOGY AND CULTURAL HERITAGE
MANAGEMENT PLAN**

ABORIGINAL ARCHAEOLOGY AND CULTURAL HERITAGE MANAGEMENT PLAN

Edition	Rev.	Comments	Author	Authorised By	Date
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2	2	Revision to Incorporate RAP Comments	UQCHU	Brian Cole	May 2015
2	3	Revision to Incorporate DP&E Comments	UQCHU	Brian Cole	August 2015
2	4	Final	Whincop Archaeology	MCCM	March 2017



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1.0 INTRODUCTION

1.1 Maules Creek Coal Mine Location and Background

The Maules Creek Coal Mine (MCCM) is located on the northwest slopes and plains of New South Wales (NSW), 18 kilometres (km) north-east of Boggabri, and approximately 35 km and 55 km from regional centres of Narrabri and Gunnedah respectively (Figure 1).

The MCCM is a joint venture between Aston Coal 2 Pty Limited (wholly owned subsidiary of Whitehaven Coal Limited [Whitehaven]) (75 percent [%]), ICRA MC Pty Limited (an entity associated with ITOCHU Corporation) (15%) and J-Power Australia Pty Ltd (a wholly owned subsidiary of Electric Power Development Co. Ltd) (10%). Maules Creek Coal Pty Ltd (MCC) is a wholly owned subsidiary of Whitehaven, which manages the MCCM on behalf of Aston Coal 2 Pty Ltd, ICRA MC Pty Ltd and J-Power Australia Pty Ltd.

MCC submitted a Project Application to the NSW Department of Planning (now the NSW Department of Planning and Environment [DP&E]) in August 2010 for the MCCM under Part 3A of the *Environmental Planning and Assessment Act, 1979* (EP&A Act). Project Approval (PA) 10_0138 was granted by the Planning Assessment Commission under delegation of the Minister for Planning and Infrastructure on 23 October 2012.

PA 10_0138 allows for the construction and operation of an open cut coal mine, with the recovery of up to 13 million tonnes per annum (Mtpa) of run-of-mine (ROM) coal for a period of 21 years.

Construction of the MCCM commenced in December 2013. Pre-stripping of the open cut and initial overburden storage area has commenced, and extraction of first coal commenced in the fourth quarter of 2014. The construction phase of the project is now complete and the project is in the operations phase.

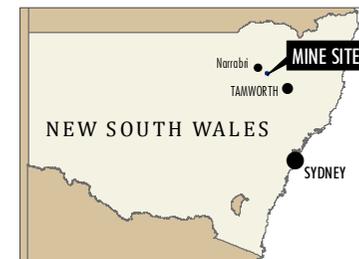
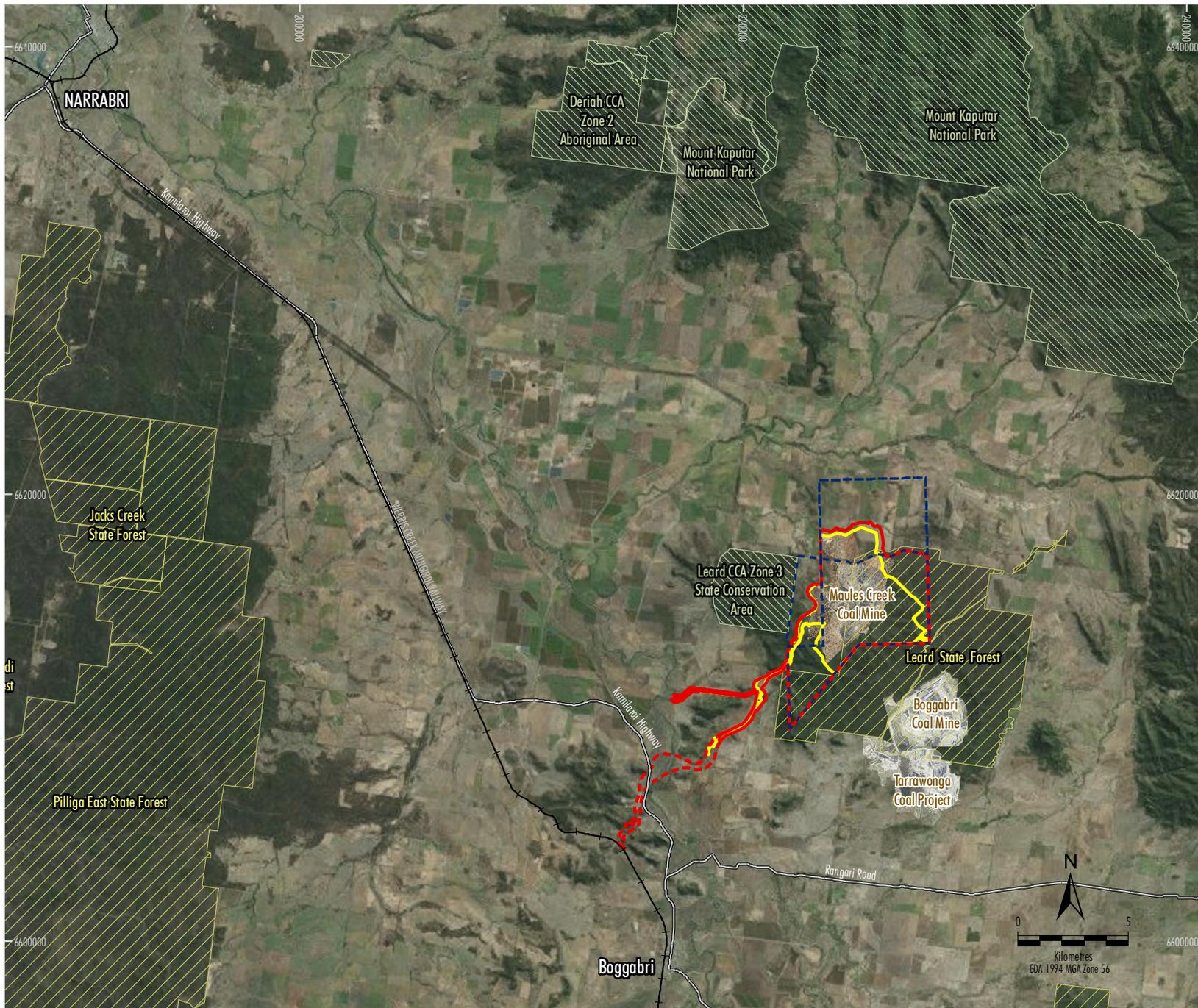
Figure 2 presents the Project Layout and extent of surface disturbance associated with the MCCM.

1.2 Purpose of this Plan

This Aboriginal Archaeology and Cultural Heritage Management Plan (AACHMP) sets out the procedures for management of Aboriginal archaeology and cultural heritage identified within the MCCM Project Boundary (defined in Appendix 2 of PA 10_0138), excluding the portion of the Project Boundary managed by Boggabri Coal Pty Limited (Section 1.4). For completeness, Figures 1 and 2 present the full MCCM Project Boundary, including the portion managed by Boggabri Coal Pty Limited. All other figures in this AACHMP present the portion of the MCCM Project Boundary to which this AACHMP applies (i.e. excluding the portion managed by Boggabri Coal Pty Limited). A reference to the "Project Boundary" elsewhere in this AACHMP refers to the portion of the MCCM Project Boundary to which this AACHMP applies.

The AACHMP has been specifically prepared to document how Aboriginal heritage will be managed in a manner that satisfies the relevant requirements of Condition 58 of Schedule 3 of PA 10_0138. It should be noted that Condition 58 concerns both Aboriginal heritage and non-Aboriginal heritage (i.e. historic heritage), and that it describes both aspects as being contained in a 'Heritage Management Plan'. MCC has elected to separate the two heritage components; with this AACHMP dealing with Aboriginal heritage (i.e. Condition 58a to 58d); and a separate Historic Heritage Management Plan dealing with historic heritage (i.e. the requirements of Condition 58e).

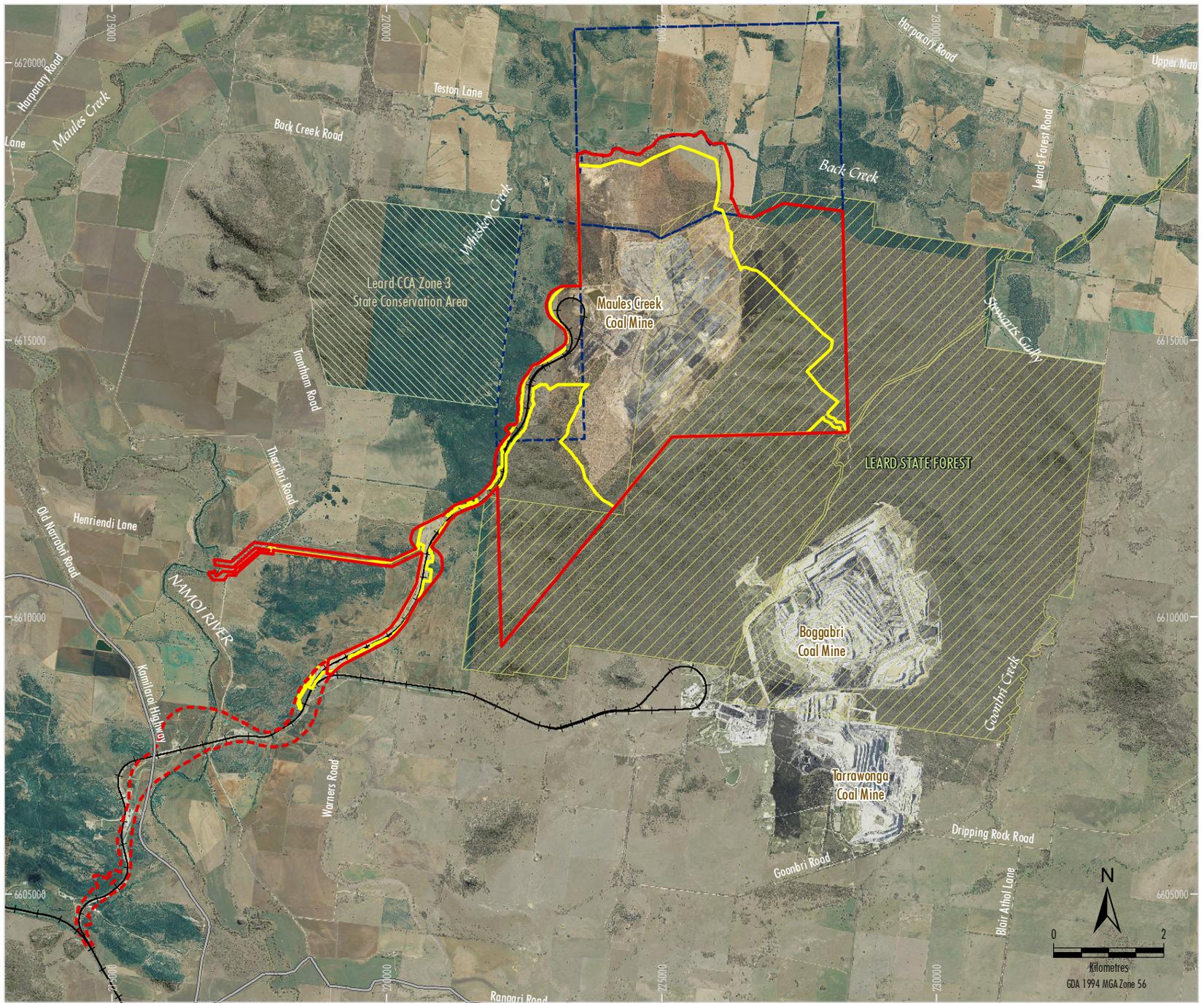
Table 1 outlines the requirements of Condition 58 of Schedule 3 of PA 10_0138 and provides cross references to where each is addressed in this AACHMP.



- LEGEND**
- NPWS Estate
 - State Forest
 - Railway
 - Mining Tenement Boundary
 - Project Boundary
 - Maules Creek Project Surface Development Extent

Source: Whitehaven Coal Limited (2016); NSW LPI (2015);
 NSW Dept of Industry (2016); OEH NSW (2016)
 Orthophoto: (Mar 2016; Sept 2015; Esri Basemap 2014)

Figure 1



- LEGEND**
-  NPWS Estate
 -  State Forest
 -  Railway
 -  Mining Tenement Boundary
 -  Project Boundary
 -  Maules Creek Project Surface Development Extent

Source: OEH NSW (2016); Whitehaven Coal Limited (2016);
 NSW LP&I (2015); NSW Dept of Industry (2016)
 Orthophoto Mosaic: Whitehaven Coal Limited
 (Mar 2016 - July 2011)



ABORIGINAL HERITAGE CONSERVATION STRATEGY
Project Layout

Figure 2



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Table 1 Condition 58 of Schedule 3 of PA 10_0138 Requirements

Condition No.	Requirement	Relevant AACHMP Section
58	<i>The Proponent shall prepare and implement a Heritage Management Plan for the project to the satisfaction of the Director-General. This plan must:</i>	
(a)	<i>Be prepared by suitably qualified and experienced person/s whose appointment has been endorsed by the Director-General;</i>	1.2
(b)	<i>Be prepared in consultation with the OEH, Namoi CMA and the local Aboriginal stakeholders (in relation to the management of Aboriginal heritage values);</i>	1.5
(c)	<i>Be submitted to the Director-General for approval prior to any development that may impact heritage items, unless the Director-General agrees otherwise;</i>	1.5
(d)	<i>Include the following for the management of Aboriginal heritage</i>	-
	<ul style="list-style-type: none"> • <i>a detailed plan for the implementation of the approved Aboriginal Heritage Conservation Strategy;</i> 	1.2
	<ul style="list-style-type: none"> • <i>a detailed archaeological salvage program for Aboriginal sites/objects within the approved disturbance area, including methodology and procedures/protocols for: <ul style="list-style-type: none"> – <i>sub-surface testing;</i> – <i>staged salvage, based on anticipated mine planning;</i> – <i>if relevant, historic heritage salvage at the Lawler's Waterhole site;</i> – <i>pre-disturbance monitoring;</i> – <i>site assessment and reporting;</i> – <i>research objectives to inform knowledge of Aboriginal occupation;</i> – <i>protection, storage and management of salvaged Aboriginal objects;</i> – <i>addressing relevant statutory requirements under the National Parks and Wildlife Act 1974; and</i> – <i>long term protection of salvaged Aboriginal objects;</i> </i> 	6
	<ul style="list-style-type: none"> • <i>a description of the measures that would be implemented for: <ul style="list-style-type: none"> – <i>Protecting, monitoring and managing Aboriginal sites on the site which are outside of the approved disturbance area;</i> – <i>Maintaining and managing reasonable access for Aboriginal stakeholders to heritage items on the site and within the Biodiversity Offset Strategy areas;</i> – <i>Managing the discovery of any human remains or previously unidentified Aboriginal objects on site, including (in the case of human remains) stop work provisions and notification protocols;</i> – <i>Ongoing consultation of the local Aboriginal stakeholders in the conservation and management of Aboriginal cultural heritage both on-site and within any Aboriginal heritage conservation areas;</i> – <i>Ensuring any workers on site receive suitable heritage inductions prior to carrying out any activities which may disturb Aboriginal sites, and that suitable records are kept of these inductions;</i> </i> 	6
	<ul style="list-style-type: none"> • <i>A strategy for the storage and management of any heritage items salvaged on site, both during the project and long term;</i> 	6.10



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Condition No.	Requirement	Relevant AACHMP Section
(e)	<p><i>Include the following for the management of historic heritage:</i></p> <ul style="list-style-type: none"> <i>A detailed plan of management measures for maintaining or enhancing the heritage values of heritage items on project-related land which are outside of the approved disturbance area;</i> 	#
	<ul style="list-style-type: none"> <i>A description of the measures that would be implemented for:</i> <ul style="list-style-type: none"> <i>Managing the discovery of human remains or previously unidentified heritage items on site; and</i> <i>Ensuring workers on site receive suitable heritage inductions prior to carrying out any development on site, and that suitable records are kept of these inductions.</i> 	6.13 and 6.15
Note:	<p><i>The Department acknowledges that the initial Heritage Management Plan may not include a detailed plan for the implementation of the Aboriginal Heritage Conservation Strategy. If this occurs, the Proponent will be required to update the plan as soon as practicable following the Director-General's approval of the Aboriginal Heritage Conservation Strategy.</i></p>	

OEH - NSW Office of Environment and Heritage.

Historic heritage (i.e. non-Aboriginal) aspects are not covered in this AACHMP. Refer to the separate MCCM Historic Heritage Management Plan for details.

This AACHMP was initially prepared by Dr Andrew Sneddon and Dr Matthew Whincop of the University of Queensland Culture & Heritage Unit (UQCHU), whose appointment was approved by DP&E (letter dated 22 August 2013) as a "suitably qualified and experienced person/s" in accordance with Condition 58(a) of Schedule 3 of PA 10_0138.

The revision of this AACHMP has been prepared by Dr Matthew Whincop of Whincop Archaeology Pty Ltd, whose appointment has been approved by DP&E (letter dated 22 August 2016) as a "suitably qualified and experience person" in accordance with Condition 58(a) of Schedule 3 of PA 10_0138.

Other conditions contained in Schedule 3 of PA 10_0138 that are relevant to the management of Aboriginal heritage are as follows:

Operating Conditions

23. *During mining operations on site, the Proponent shall:*

(a) *Implement best management practices to:*

- minimise blasting impacts on heritage items in the vicinity of the site.*

Biodiversity Management Plan

52. *The Proponent shall prepare and implement a Biodiversity Management Plan for the project to the satisfaction of the Director-General. This plan must:*

(e) *include a detailed description of the measures that would be implemented including the procedures to be implemented for:*

- maximising the salvage of resources within the approved disturbance area - including vegetative, top and sub-soils and cultural heritage resources - for beneficial reuse in the enhancement of the biodiversity areas or rehabilitation area; and*
- managing any potential conflicts between the proposed restoration works in the biodiversity areas and any Aboriginal heritage values (both cultural and archaeological).*



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Aboriginal Heritage Conservation Strategy

57. The Proponent shall prepare and implement an Aboriginal Heritage Conservation Strategy for the project and the Biodiversity Offset Strategy areas to the satisfaction of the Director-General. This Strategy must enhance and conserve the Aboriginal cultural heritage values (both cultural and archaeological) and provide for their long-term protection and management. The Strategy must:
- Be prepared by suitably qualified and experienced person/s whose appointment has been endorsed by the Director-General;
 - Be prepared in consultation with OEH, the local Aboriginal community and other mines within the Leard Forest Mining Precinct, and submitted to the Director-General for approval within 18 months from the date of project approval;
 - Identify the Aboriginal cultural heritage values of the Biodiversity Offset Strategy areas;
 - Identify areas of high Aboriginal cultural heritage significance within both the site and the Leard Forest Mining Precinct;
 - Identify a range of options for enhancing and conserving Aboriginal cultural heritage values, with specific consideration of the potential for the long-term protection and management of significant sites within either the site, the Biodiversity Offset Strategy areas or other lands within the Leard Forest Mining Precinct identified as having high cultural heritage significance to the Aboriginal community; and
 - Consider cumulative impacts and potential for developing joint initiatives with other mines within the Leard Forest Mining Precinct for enhancing and conserving Aboriginal cultural heritage values.

The Aboriginal Heritage Conservation Strategy was submitted to the DP&E in September 2014 and has been the subject of subsequent communications and discussions between OEH and DP&E. As a result, its findings have not yet been integrated into this AACHMP. However, as per the explanatory note for Condition 58 of Schedule 3 of PA 10_0138, MCC will update this AACHMP as soon as practicable following the DP&E Secretary's approval of the Aboriginal Heritage Conservation Strategy.

Appendix 5 of PA 10_0138 provides a consolidated Statement of Commitments (SoC), which summarises the key management and mitigation measures for the MCCM as documented in the Maules Creek Coal Project Environmental Assessment (EA) prepared by Hansen Bailey Pty Ltd in July 2011 (Hansen Bailey, 2011a), the Response to Submissions (Hansen Bailey, 2011b) and the Response to Subsidiary Submissions (Hansen Bailey, 2012). The undertakings made in the SoC that pertain to Aboriginal heritage are listed in Table 2. Cross references to where each is addressed in this AACHMP are also included.

Table 2 Relevant Statement of Commitments contained in Appendix 5 of PA 10_0138

SoC Reference Number	Commitment	Relevant AACHMP Section
18	<i>The salvage and protection of all known Aboriginal objects within the Project Boundary will be managed in accordance with an Aboriginal Archaeology and Cultural Heritage Management Plan to be developed in consultation with the local Aboriginal community and OEH.</i>	This document
19	<i>Maules Creek Coal will consult with Boggabri Coal Mine and contribute to the establishment and ongoing funding of a keeping place for the purpose of housing salvaged Aboriginal artefacts from the local area.</i>	6.10
20	<i>Maules Creek Coal will provide the opportunity for one representative of the Aboriginal community to be a member of the Maules Creek Coal CCC.</i>	6.21

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SoC Reference Number	Commitment	Relevant AACHMP Section
21	<i>Maules Creek Coal will offer training in relation to site recording, artefact recording and basic analysis.</i>	6.22

1.3 Historical Development of the AACHMP

This AACHMP represents the second edition of the document. The initial AACHMP (i.e. Edition 1, Revision 3) was prepared over a nine month period commencing in the second half of 2012 in consultation with DP&E, OEH, Namoi Catchment Management Authority (CMA) (now the North West Local Land Services [NWLLS]) and the local Aboriginal community. The initial AACHMP (i.e. Edition 1, Revision 3) was approved by DP&E on 17 April 2013.

MCC has conducted Aboriginal heritage salvage activities for the MCCM construction areas and initial operational areas in accordance with the initial AACHMP (i.e. Edition 1, Revision 3). Salvage has taken place where known Aboriginal artefacts have occurred within the approved disturbance areas in the MCCM Project Boundary. The salvage activities have been conducted in stages, with the first stage involving the construction areas, and the second stage involving the initial operations areas. Since that time during the annual clearing campaigns, salvage activities have been conducted.

Condition 5(a) of Schedule 5 of PA 10_0138 requires MCC, within three months of the submission of the Annual Review, to review, and if necessary revise, the strategies, plans and programs required under PA 10_0138 to the satisfaction of the Director-General (now the Secretary) of the DP&E. In addition to this requirement, in a letter to Whitehaven dated 7 April 2014, the DP&E requested that it review the AACHMP in consultation with all Registered Aboriginal Parties (RAPs) as soon as practicable. Condition 4 of Schedule 2 of PA 10_0138 requires MCC to comply with reasonable requirements arising from the DP&E's assessment of management plans submitted under PA 10_0138, or the implementation of such plans. The DP&E also noted some other matters raised by the Department in a previous letter to Whitehaven dated 8 October 2013. These included the communications protocol and the need to consider gender issues in the salvage program. Further, Section 6.20 makes provision for the review and revision of the AACHMP in consultation with RAPs, and for the submission of a revised AACHMP to the DP&E for approval by the Secretary.

This AACHMP (Edition 2, version 4) has been prepared as a result of the above. Upon its approval, it will supersede any previous AACHMP that has been approved for the MCCM.

Further revisions to the AACHMP will be made from time to time, as required for effective administration of Aboriginal heritage management measures for the mine, and such revisions will be submitted to DP&E for approval by the Secretary (refer to Section 6.20 for further details on when the AACHMP may be revised).

MCC will continue to conduct Aboriginal heritage salvage activities at the MCCM in a staged manner, and in accordance with this AACHMP.



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1.4 Aboriginal Heritage Sites

An Aboriginal Archaeological and Cultural Heritage Impact Assessment was conducted by AECOM Australia Pty Ltd (2010) as part of the Maules Creek Coal Project EA (Hansen Bailey, 2011 a). AECOM's study also took into consideration previous investigations, including work by Dallas (1986). The resulting study identified 75 Aboriginal archaeological and cultural heritage sites within, and in the vicinity of the MCCM Project Boundary.

This AACHMP is based on these two earlier studies, and on more recent archaeological investigations undertaken at the MCCM by the UQCHU, and focuses only on sites within the MCCM Project Boundary (Figure 2). As a result, this document presents the status of 75 Aboriginal archaeological and cultural heritage sites, salvaged or not, within the MCCM Project Boundary (Tables 3 and 4). The total of 75 sites includes 39 Aboriginal archaeological and cultural heritage sites identified during archaeological salvage and/or pre-clearance works at the MCCM, as well the amalgamation of several smaller (previously listed as separate) sites. Some of AECOM's original sites have also been re-assessed by detailed scientific analyses (Global Soil Systems 2013; 2014a; 2014b), which has led to some locations or features being updated as non-cultural on the AHIMS site database and register¹.

Aboriginal archaeological sites covered by this AACHMP (including those salvaged) are shown in Table 3 and shown in Figures 3a to 3c. Artefact scatters and isolated artefacts occur across the MCCM Project Boundary within a variety of landforms, predominately in association with creeks and slopes. One larger artefact scatter (Teston South Site Complex), located within the lower slopes of the steep sided gully landform unit, incorporated several artefacts associated with grinding traditions, including one portable grinding groove.

¹ Note that the sites subject to re-assessment include the following: 16-4-0016 (Leard SF ST1), 20-4-0407 (Leard SF ST2), 20-4-0451 (Namoi River TSR ST4), 20-4-0452 (Namoi River TSR ST5), 20-4-0453 (Namoi River TSR ST6), 20-4-0454 (Namoi River TSR ST7), 20-4-0455 (Namoi River TSR ST8), 20-4-0463 (Watsons ST1), 20-4-0464 (Younger ST1), 16-4-0027 (Teston ST1) and 16-4-0028 (Teston ST2).



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Table 3 Aboriginal Archaeological Sites (including those Salvaged) within MCCM Project Boundary

Site Name	AHIMS #	Site Type	Recorded	Site Amalgamation
Back Creek AS1	20-4-0395	Artefact Scatter	AECOM	None
Back Creek AS2	20-4-0396	Artefact Scatter	AECOM	None
Back Creek AS3	20-4-0397	Artefact Scatter	AECOM	None
Back Creek AS4	20-4-0398	Artefact Scatter	AECOM	None
Back Creek AS5	20-4-0399	Artefact Scatter	AECOM	None
Back Creek AS6	20-4-0400	Artefact Scatter	AECOM	None
Back Creek IA1	20-4-0401	Isolated Artefact	AECOM	None
Back Creek IA2	20-4-0402	Isolated Artefact	AECOM	None
Leard SF 3; BBS; Red Chief LALC	20-4-0078	Artefact Scatter	Pre EIS	None
Leard SF AS1	20-4-0403	Artefact Scatter	AECOM	None
Leard SF AS2	20-4-0404	Artefact Scatter	AECOM	None
Leard SF AS3	20-4-0500	Artefact Scatter	AECOM	None
Leard SF AS4*	20-4-0405	Artefact Scatter	AECOM	None
Leard SF AS5	20-4-0525	Artefact Scatter	UQ	None
Leard SF IA2	20-4-0406	Isolated Artefact	AECOM	None
Leard SF IA3	20-4-0513	Isolated Artefact	UQCHU	None
Leard SF IA4	20-4-0514	Isolated Artefact	UQCHU	None
Leard SF IA8	20-4-0715	Isolated Artefact	UQCHU	None
Leard SF4; BSB; Red Chief LALC	20-4-0077	Artefact Scatter	Pre EIS	None
MC15	20-4-0028	Artefact Scatter	Pre EIS	20-4-0029 (Willow Tree Range; Manilla); Manilla MC21
Teston AS1	20-4-0456	Artefact Scatter	AECOM	None
Teston AS2	20-4-0457	Artefact Scatter	AECOM	None
Teston AS3	20-4-0408	Artefact Scatter	AECOM	None
Teston AS7	16-4-0017	Artefact Scatter	AECOM	None
Teston AS8	20-4-0483	Artefact Scatter	UQCHU	None
Teston AS9	20-4-0484	Artefact Scatter	UQCHU	None
Teston AS10	20-4-0485	Artefact Scatter	UQCHU	None
Teston AS11	20-4-0486	Artefact Scatter	UQCHU	None
Teston AS12	20-4-0487	Artefact Scatter	UQCHU	None
Teston AS13	20-4-0488	Artefact Scatter	UQCHU	20-4-0015 (Willow Tree Range); 16-4-0021 (Teston IA4); 16-4-0022 (Teston IA5); 20-4-0411 (Teston AS6)
Teston AS14	20-4-0489	Artefact Scatter	UQCHU	None
Teston AS15	20-4-0490	Artefact Scatter	UQCHU	None
Teston AS16	20-4-0501	Artefact Scatter	UQCHU	None



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Site Name	AHIMS #	Site Type	Recorded	Site Amalgamation
Teston AS17	20-4-0521	Artefact Scatter	UQCHU	None
Teston AS18	20-4-0522	Artefact Scatter	UQCHU	None
Teston AS19	20-4-0523	Artefact Scatter	UQCHU	None
Teston AS20	20-4-0718	Artefact Scatter	UQCHU	None
Teston GG3	20-4-0712	Grinding Grooves	UQCHU	None
Teston GG4	20-4-0707	Grinding Grooves	UQCHU	None
Teston IA1	16-4-0018	Artefact Scatter	AECOM	None
Teston IA2	16-4-0019	Isolated Artefact	AECOM	None
Teston IA3	16-4-0020	Isolated Artefact	AECOM	None
Teston IA6	16-4-0023	Isolated Artefact	AECOM	None
Teston IA7	16-4-0024	Isolated Artefact	AECOM	None
Teston IA9	16-4-0026	Isolated Artefact	AECOM	None
Teston IA10	20-4-0491	Isolated Artefact	UQCHU	None
Teston IA11	20-4-0492	Isolated Artefact	UQCHU	None
Teston IA12	20-4-0493	Isolated Artefact	UQCHU	None
Teston IA13	20-4-0494	Isolated Artefact	UQCHU	None
Teston IA14	20-4-0495	Isolated Artefact	UQCHU	None
Teston IA15	20-4-0524	Isolated Artefact	UQCHU	None
Teston IA16	20-4-0515	Isolated Artefact	UQCHU	None
Teston IA17	20-4-0516	Isolated Artefact	UQCHU	None
Teston IA18	20-4-0517	Isolated Artefact	UQCHU	None
Teston IA19	20-4-0518	Isolated Artefact	UQCHU	None
Teston IA20	20-4-0520	Isolated Artefact	UQCHU	None
Teston IA21	20-4-0519	Isolated Artefact	UQCHU	None
Teston IA22	20-4-0717	Isolated Artefact	UQCHU	None
Teston IA23	20-4-0720	Isolated Artefact	UQCHU	None
Teston IA24	20-4-0721	Isolated Artefact	UQCHU	None
Teston IA25	20-4-0719	Isolated Artefact	UQCHU	None
Teston South AS1	20-4-0475	Artefact Scatter	UQCHU	None
Teston South AS2	20-4-0496	Artefact Scatter	UQCHU	None
Teston South IA2	20-4-0498	Isolated Artefact	UQCHU	None
Teston South Site Complex	20-4-0026	Artefact Scatter	AECOM	20-4-0027; 20-4-0412 (Teson [sic] GG2); 20-4-0413 (Teston Grindstone 1)
Velyama AS8	20-4-0499	Artefact Scatter	UQCHU	None
Velyama; Manila (MC11)	20-4-0024	Artefact Scatter	Pre EIS	None
Willow Tree Range (MC4)	20-4-0019	Artefact Scatter	Pre EIS	None
Willow Tree Range (MC5)	20-4-0016	Artefact Scatter	Pre EIS	None
Willow Tree Range; Teston (MC2)	20-4-0033	Artefact Scatter	Pre EIS	None



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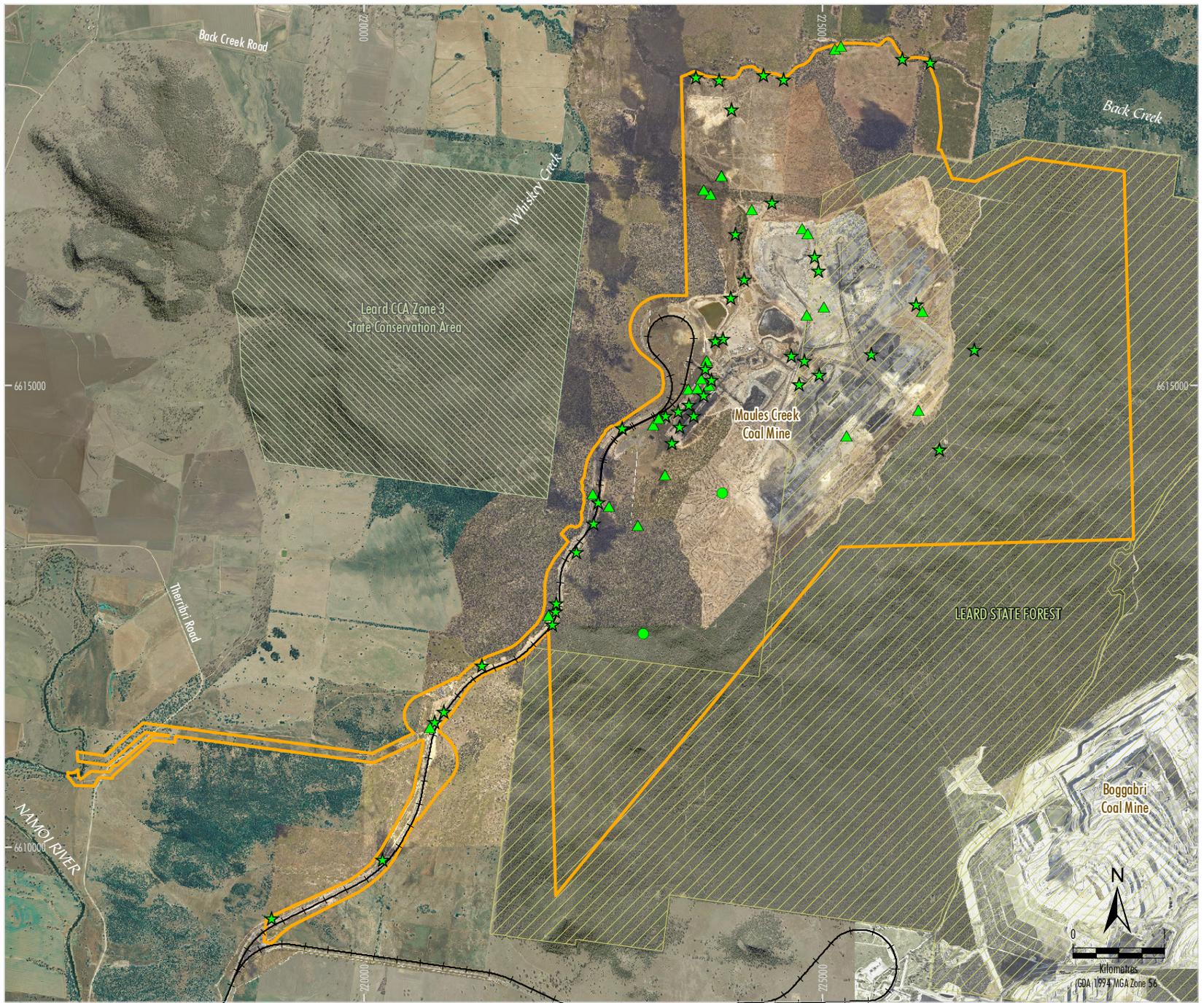
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Site Name	AHIMS #	Site Type	Recorded	Site Amalgamation
Willow Tree Range; Teston (MC3)	20-4-0034	Artefact Scatter	Pre EIS	None
Willow Tree Range; Teston; Therribri (MC8)	20-4-0021	Artefact Scatter	Pre EIS	None
Willow Tree Range; Teston; Therribri (MC9)	20-4-0022	Isolated Artefact	Pre EIS	None
Willow Tree Range; Teston; Therribri (MC7)	20-4-0020	Artefact Scatter	Pre EIS	None
Willowtree Range; Teston; Therribri (MC10)	20-4-0023	Artefact Scatter	Pre EIS	None

Note: Aboriginal archaeological sites located on Whitehaven-owned land outside the MCCM Project boundary are not included in the above table. These sites are managed outside the scope of the AACHMP (which is limited to the MCCM Project boundary only).

Note: An additional AHIMS record is located within the MCCM Project Boundary (i.e. AHIMS 20-4-0554). This site is currently undergoing an archaeological re-assessment and hence is not considered further in this version of the AACHMP. In the event that the site is confirmed to be valid, the AACHMP would be updated to incorporate appropriate management during the next AACHMP revision.



- LEGEND**
- NPWS Estate
 - State Forest
 - Railway
 - AACHMP Project Boundary
 - Aboriginal Archaeological Site Type**
 - Airefact Scatter
 - Grinding Groove
 - Isolated Artefact

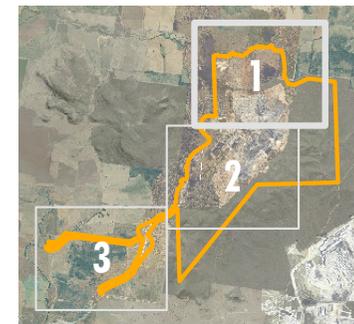
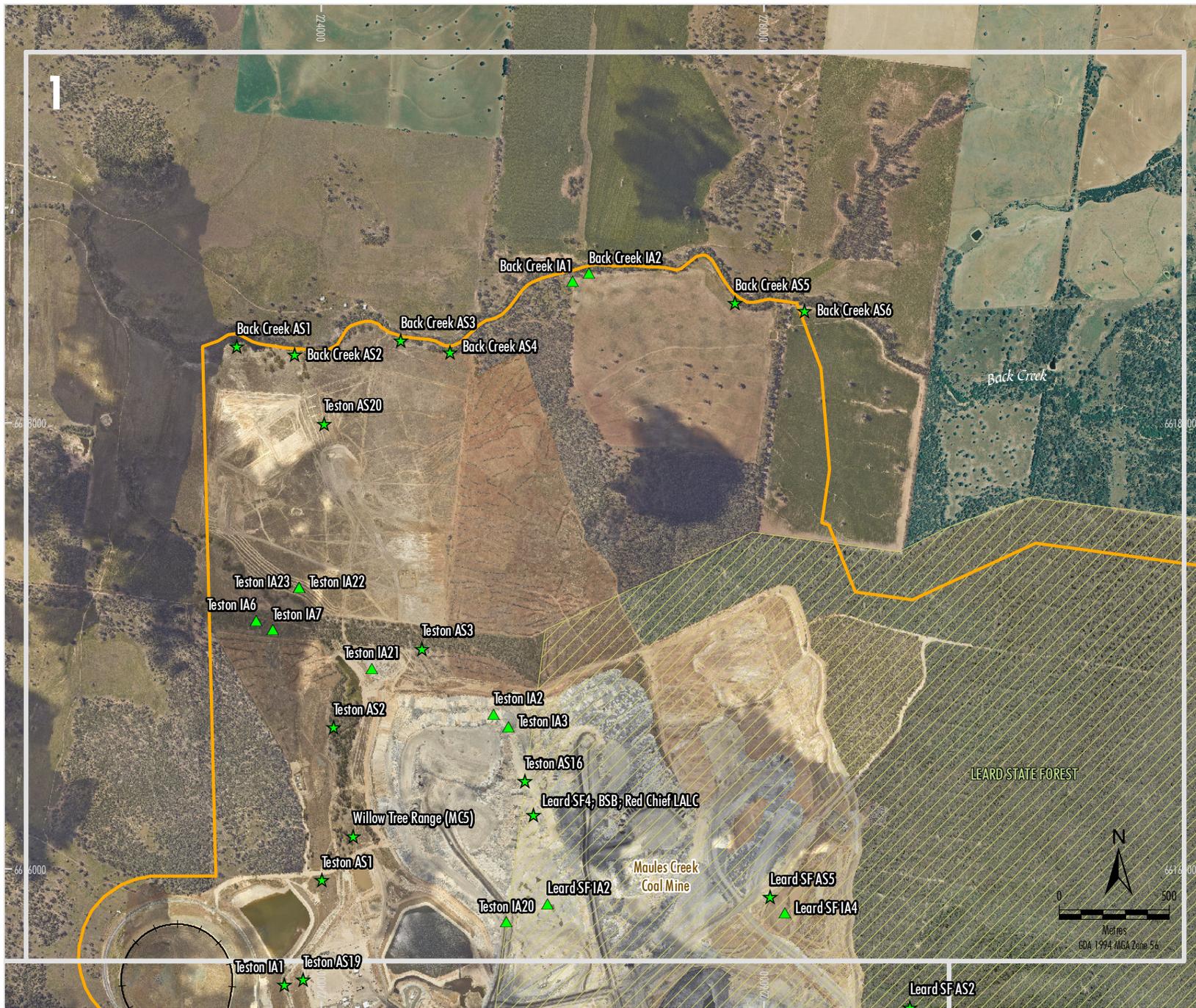
Source: OEH NSW (2016); Whitehaven Coal Limited (2016);
 NSW LP&I (2015); Whincop Archaeology (2016)
 Orthophoto Mosaic: Whitehaven Coal Limited
 (Mar 2016 - July 2011)

WHITEHAVEN COAL

AACH MANAGEMENT PLAN
Aboriginal Archaeological Sites
within the AACHMP Project Boundary
(Overview)



Figure 3



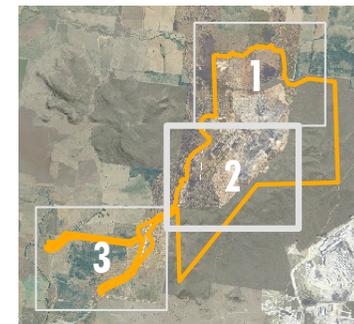
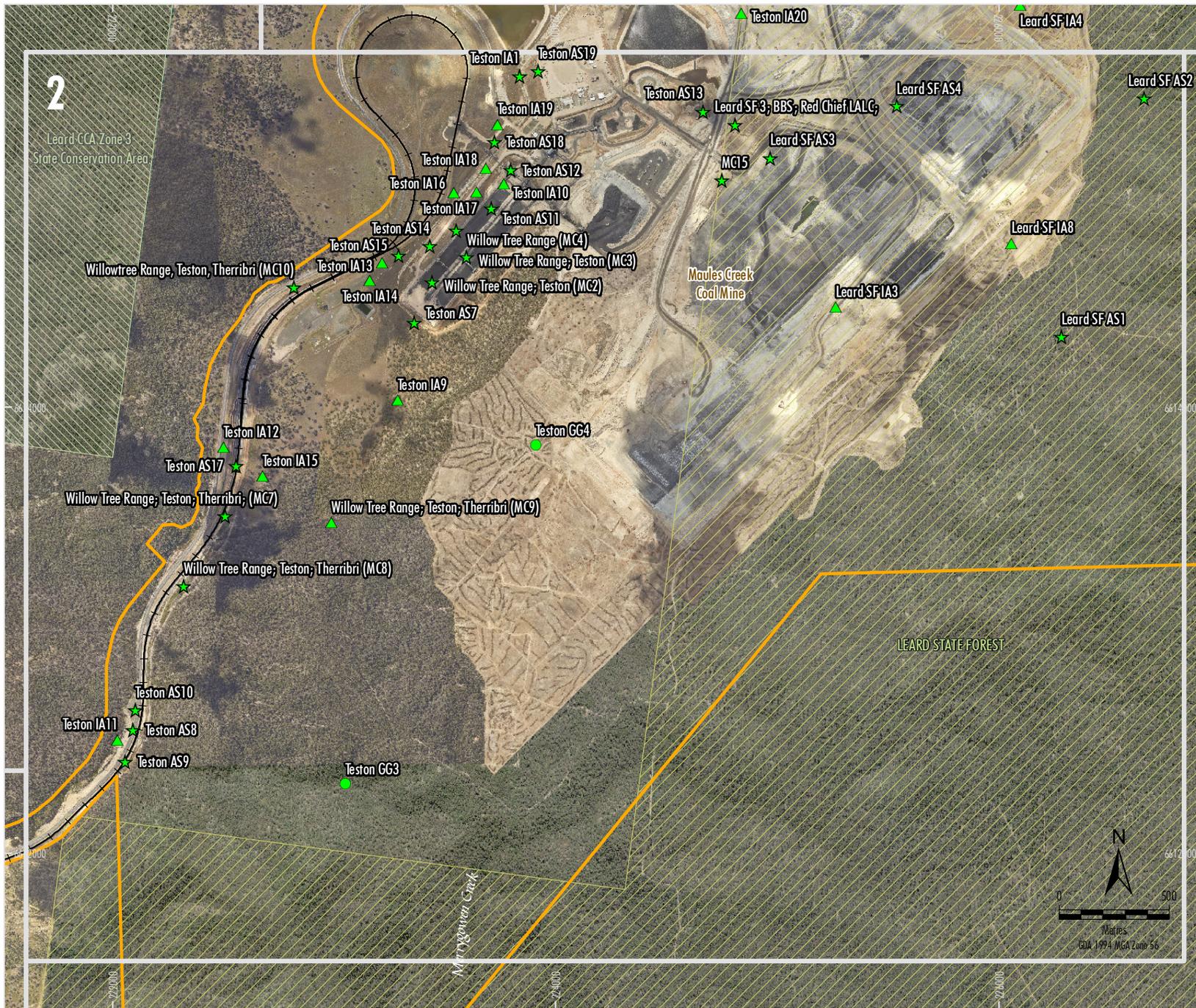
KEY

- LEGEND**
- NPWS Estate
 - State Forest
 - Railway
 - AACHMP Project Boundary
 - Aboriginal Archaeological Site Type**
 - Arefact Scatter
 - Grinding Groove
 - Isolated Artefact

Source: OEH NSW (2016); Whitehaven Coal Limited (2016); NSW LP&I (2015); Whincop Archaeology (2016)
 Orthophoto Mosaic: Whitehaven Coal Limited (Mar 2016 - July 2011)

WHITEHAVEN COAL
AACH MANAGEMENT PLAN
Aboriginal Archaeological Sites
within the AACHMP Project Boundary
 (Sheet 1 of 3)

Figure 3a



KEY

- LEGEND**
- NPWS Estate
 - State Forest
 - Railway
 - AACHMP Project Boundary
 - Aboriginal Archaeological Site Type**
 - Arefact Scatter
 - Grinding Groove
 - Isolated Artefact

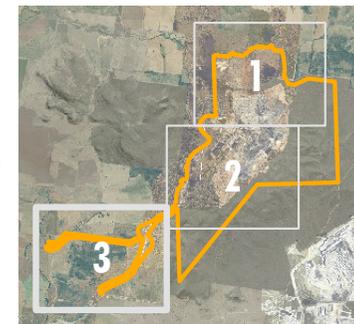
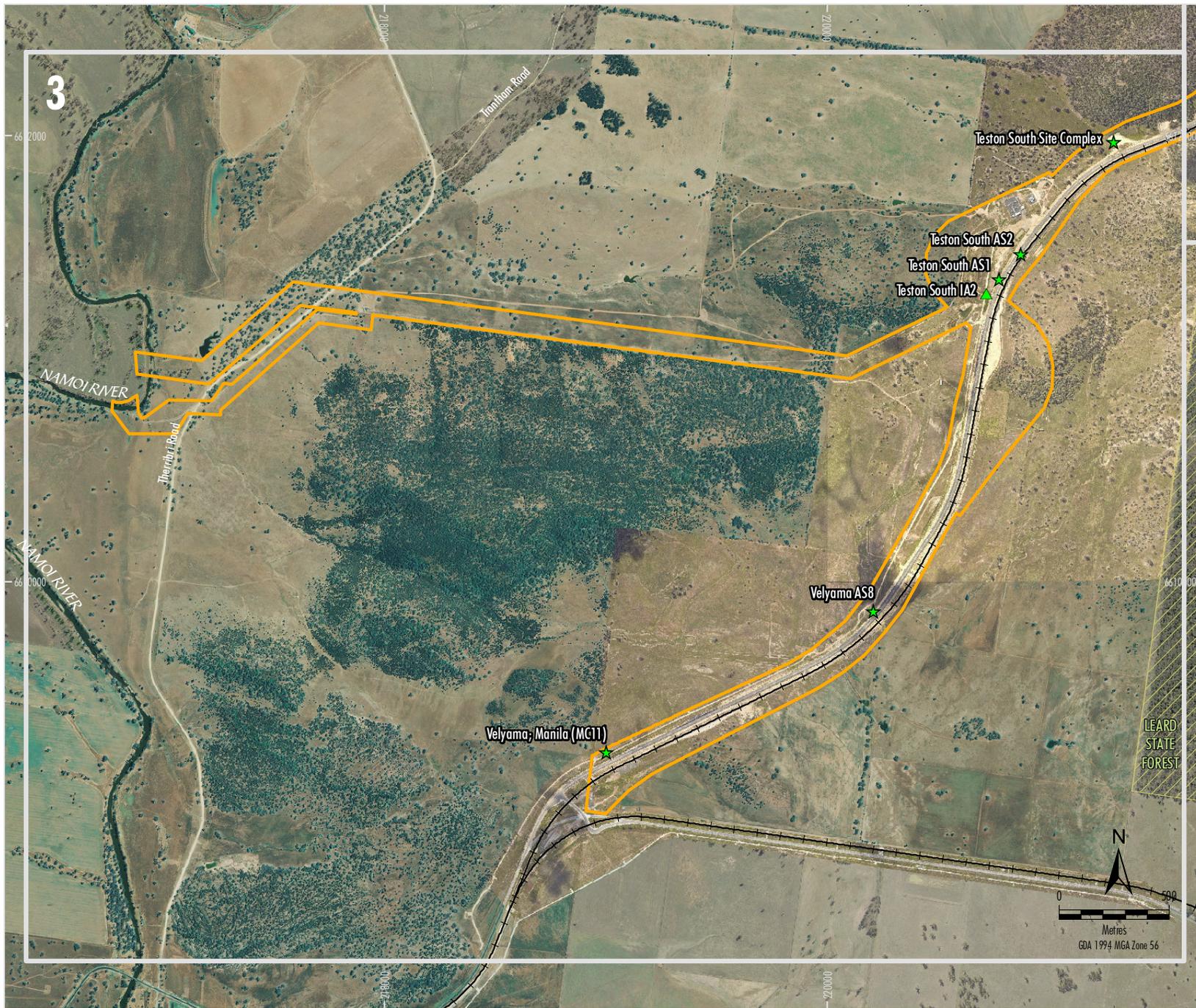
Source: OEH NSW (2016); Whitehaven Coal Limited (2016); NSW LP&I (2015); Whincop Archaeology (2016)
 Orthophoto Mosaic: Whitehaven Coal Limited (Mar 2016 - July 2011)



AACH MANAGEMENT PLAN

**Aboriginal Archaeological Sites
 within the AACHMP Project Boundary
 (Sheet 2 of 3)**

Figure 3b

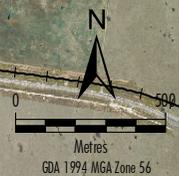


KEY

- LEGEND**
- NPWS Estate
 - State Forest
 - Railway
 - AACHMP Project Boundary
- Aboriginal Archaeological Site Type**
- Arefact Scatter
 - Grinding Groove
 - Isolated Artefact

Source: OEH NSW (2016); Whitehaven Coal Limited (2016); NSW LP&I (2015); Whincop Archaeology (2016)
 Orthophoto Mosaic: Whitehaven Coal Limited (Mar 2016 - July 2011)

LEARD STATE FOREST



WHITEHAVEN COAL
AACH MANAGEMENT PLAN
Aboriginal Archaeological Sites
within the AACHMP Project Boundary
(Sheet 3 of 3)

Figure 3c



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Table 4 Summary of Aboriginal Archaeological Sites (including those already Salvaged) within MCCM Project Boundary

Site Type	Site Type Count	Percentage Represented in Total Sites*
Artefact Scatter	44	59%
Isolated Artefact	29	39%
Grinding Grooves Site	2	3%
Total	75	100%

* Due to rounding, total may not sum to 100%.

A number of Aboriginal archaeological sites are located within the portion of the MCCM Project Boundary managed by Boggabri Coal Pty Limited (Section 1.2), and are therefore not managed under this AACHMP. These sites are not considered further in this AACHMP.

1.5 Consultation for this AACHMP

In accordance with Condition 58(b) of Schedule 3 of PA 10_0138, a draft of the revised AACHMP was provided to OEH, NWLLS (previously Namoi CMA) and the RAPs for review and comment. Comments received within the specified time period have been considered prior to finalisation of this revised AACHMP and lodgement with the Secretary of the DP&E for approval. There were no comments received from RAP's during the consultation period in 2016. Additionally, NWLLS provided recommendations which are included in Table 6.



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WHC_PLN_MC_ ABORIGINAL ARCHAEOLOGY AND CULTURAL HERITAGE MANAGEMENT PLAN

2.0 LEGISLATIVE & PLANNING CONTEXT

2.1 Environmental Planning & Assessment Act, 1979

The EP&A Act requires that consideration be given to environmental impacts as part of the land use planning process. In NSW, environmental impacts are interpreted as including cultural heritage impact. In October 2011, the *NSW Environmental Planning and Assessment Amendment (Part 3A Repeal) Act 2011* repealed the Part 3A provisions, putting in place transitional arrangements for all Part 3A projects started under the previous legislative regime. The MCCM is classified as a 'transitional Part 3A project' under transitional Part 3A arrangements under the EP&A Act.

Development to which Part 3A continues to apply, including the MCCM, is exempt from the requirement to obtain various permits and licences (e.g. Aboriginal Heritage Impact Permits) under Section 75U of the EP&A Act. Heritage assessments carried out under Part 3A should address the steps outlined in the *Draft Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation* (NSW Department of Environment & Conservation, 2005) to ensure compliancy with the Act.

Aboriginal heritage is managed under the conditions of PA 10_0138. This AACHMP has statutory force in this regard because it is prepared in accordance with a condition of the Part 3A Project Approval (i.e. Condition 58 of Schedule 3 of PA 10_0138).

2.2 National Parks and Wildlife Act, 1974

A development with Project Approval under Part 3A does not require an Aboriginal Heritage Impact Permit for impacts to Aboriginal sites or salvage of Aboriginal sites (under Section 75U(1)(d) of the EP&A Act, which continues to apply in respect of the MCCM despite its repeal).

The NSW *National Parks and Wildlife Act 1974* (NP&W Act), administered by the OEH, is the primary legislation for the protection of Aboriginal cultural heritage in NSW. The NP&W Act gives the Director-General of OEH responsibility for the proper care, preservation and protection of 'Aboriginal objects' and 'Aboriginal places', defined under the NP&W Act as follows:

- An Aboriginal object is any deposit, object or material evidence (that is not a handicraft made for sale) relating to Aboriginal habitation of NSW, before or during the occupation of that area by persons of non-Aboriginal extraction (and includes Aboriginal remains).
- An Aboriginal place is a place declared so by the Minister administering the NP&W Act because the place is or was of special significance to Aboriginal culture. It may or may not contain Aboriginal objects.

Part 6 of the NP&W Act provides specific protection for Aboriginal objects and places by making it an offence to harm them. Section 89A of the NP&W Act requires notification of the location of sites of Aboriginal objects within a reasonable time, with penalties for non-notification, including daily penalties. Section 89A of the NP&W Act is binding in all instances including Part 3A projects.



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3.0 ABORIGINAL SITES AND ABORIGINAL HERITAGE VALUES

3.1 Aboriginal Sites

Aboriginal archaeological and cultural heritage sites covered by this AACHMP are listed in Table 5. Listed sites include those identified within the MCCM Project Boundary, the majority of which have since been salvaged. Table 5 is based on the list compiled for the Aboriginal Archaeology and Cultural Heritage Impact Assessment (AACHIA) prepared for the EA (AECOM, 2010), with refinements based on further studies conducted by the UQCHU, as described in Section 1.4. Further site details are listed in Appendix A. For ease of reference, site names used herein are consistent with the AACHIA (AECOM, 2010).

3.2 Aboriginal Archaeological Heritage Values

The Aboriginal cultural heritage values of the MCCM are commonly associated with the archaeological evidence within the MCCM Project Boundary and its cultural significance for RAPs. All identified Aboriginal archaeological sites within the MCCM Project Boundary and adjoining properties owned by MCC have been identified by RAPs as being, in their opinion, culturally significant. These archaeological sites have the potential to provide a link between past and present and RAPs have identified the need for them to be cared for appropriately.

Aboriginal archaeological heritage values identified within the MCCM Project Boundary include:

- Pre-contact Aboriginal activity associated with the presence of stone artefacts on and sometimes within the topsoil in close association with creeks and some nearby slopes.
- A pre-contact landscape reflecting a level of Aboriginal activity associated with a gully connecting the Namoi River north of Boggabri with the upper reaches of Maules and Back Creeks distinct from low intensity activity in the upper reaches of intermittent creeks where creek margins are more inclined.
- Occasional evidence of Aboriginal grinding practices.

These values are interpreted herein in the light of a systematic lithics analysis of more than 5,000 artefacts undertaken in 2014 and which concluded (Clarkson, 2014):

- The MCCM artefact assemblages do not stand out as having exceptional regional richness.
- The MCCM artefact assemblage incorporates a relatively high artefact breakage rate (around 70%) in comparison with other known assemblages from eastern Australia (characteristically 40%) indicating that the surface assemblage has been the subject to considerable disturbance.
- Excavated assemblages have typically yielded little valuable scientific data. The excavated assemblages are commonly characterised by small, broken and unidentifiable artefact fragments.

In summary, the Aboriginal sites within the MCCM Project Boundary exhibit low to moderate scientific significance on a local level, and do not exhibit any scientific significance on a regional or national level. This remains the case following analysis and recent identification of Teston GG4 and consultation undertaken in relation to the level of scientific significance. This is attributable to high levels of artefact attrition, low levels of average 'richness' and no evidence of intact sub-surface stratigraphy suitable for reconstructing cultural change.

3.3 Aboriginal Cultural Heritage Values (Non-Archaeological)

MCC facilitated a number of consultation workshops and field trips with a representative group of RAPs (including Traditional Owners) from mid-2013 to mid-2016 in order to identify the broader cultural heritage (non-archaeological) values present at the site.



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Table 5 Significance of Aboriginal Archaeological Sites within the MCCM Project Boundary

Site Name	AHIMS #	Site Type	Scientific Significance	Cultural Significance	Impacted
Back Creek AS1	20-4-0395	Artefact Scatter	Moderate	High	No
Back Creek AS2	20-4-0396	Artefact Scatter	Moderate	High	No
Back Creek AS3	20-4-0397	Artefact Scatter	High	High	No
Back Creek AS4	20-4-0398	Artefact Scatter	Low	High	No
Back Creek AS5	20-4-0399	Artefact Scatter	Low	High	No
Back Creek AS6	20-4-0400	Artefact Scatter	High	High	No
Back Creek IA1	20-4-0401	Isolated Artefact	Low	High	No
Back Creek IA2	20-4-0402	Isolated Artefact	Low	High	No
Leard SF 3; BBS; Red Chief LALC	20-4-0078	Artefact Scatter	Low	High	Yes
Leard SF AS1	20-4-0403	Artefact Scatter	Low	High	Proposed
Leard SF AS2	20-4-0404	Artefact Scatter	Low	High	Proposed
Leard SF AS3	20-4-0500	Artefact Scatter	Low	High	Yes
Leard SF AS4	20-4-0405	Artefact Scatter	Low	High	Yes
Leard SF AS5	20-4-0525	Artefact Scatter	Low	High	Yes
Leard SF IA2	20-4-0406	Isolated Artefact	Low	High	Yes
Leard SF IA3	20-4-0513	Isolated Artefact	Low	High	Yes
Leard SF IA4	20-4-0514	Isolated Artefact	Low	High	Yes
Leard SF4; BSB; Red Chief LALC	20-4-0077	Artefact Scatter	Low	High	Yes
Leard SF IA8	20-4-0715	Isolated Artefact	Low	High	Yes
MC15	20-4-0028	Artefact Scatter	Moderate	High	Yes
Teston AS1	20-4-0456	Artefact Scatter	Low	High	Yes
Teston AS2	20-4-0457	Artefact Scatter	Low	High	Yes
Teston AS3	20-4-0408	Artefact Scatter	Low	High	Partial
Teston AS7	16-4-0017	Artefact Scatter	Low	High	Partial
Teston AS8	20-4-0483	Artefact Scatter	Low	High	Yes
Teston AS9	20-4-0484	Artefact Scatter	Low	High	Yes
Teston AS10	20-4-0485	Artefact Scatter	Low	High	Yes
Teston AS11	20-4-0486	Artefact Scatter	Low	High	Yes
Teston AS12	20-4-0487	Artefact Scatter	Low	High	Yes
Teston AS13	20-4-0488	Artefact Scatter	Low	High	Yes
Teston AS14	20-4-0489	Artefact Scatter	Low	High	Yes
Teston AS15	20-4-0490	Artefact Scatter	Low	High	Yes
Teston AS16	20-4-0501	Artefact Scatter	Low	High	Yes
Teston AS17	20-4-0521	Artefact Scatter	Low	High	Yes
Teston AS18	20-4-0522	Artefact Scatter	Low	High	Yes
Teston AS19	20-4-0523	Artefact Scatter	Low	High	Yes
Teston AS20	20-4-0718	Artefact Scatter	Low	High	Yes



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Site Name	AHIMS #	Site Type	Scientific Significance	Cultural Significance	Impacted
Teston GG3	20-4-0712	Grinding Grooves	Moderate	High	No
Teston GG4	20-4-0707	Grinding Grooves	Low	High	Proposed
Teston IA1	16-4-0018	Artefact Scatter	Low	High	Yes
Teston IA2	16-4-0019	Isolated Artefact	Low	High	Yes
Teston IA3	16-4-0020	Isolated Artefact	Low	High	Yes
Teston IA6	16-4-0023	Isolated Artefact	Low	High	No
Teston IA7	16-4-0024	Isolated Artefact	Low	High	No
Teston IA9	16-4-0026	Isolated Artefact	Low	High	No
Teston IA10	20-4-0491	Isolated Artefact	Low	High	Yes
Teston IA11	20-4-0492	Isolated Artefact	Low	High	Yes
Teston IA12	20-4-0493	Isolated Artefact	Low	High	Yes
Teston IA13	20-4-0494	Isolated Artefact	Low	High	Yes
Teston IA14	20-4-0495	Isolated Artefact	Low	High	Yes
Teston IA15	20-4-0524	Isolated Artefact	Low	High	No
Teston IA16	20-4-0515	Isolated Artefact	Low	High	Yes
Teston IA17	20-4-0516	Isolated Artefact	Low	High	Yes
Teston IA18	20-4-0517	Isolated Artefact	Low	High	Yes
Teston IA19	20-4-0518	Isolated Artefact	Low	High	Yes
Teston IA20	20-4-0520	Isolated Artefact	Low	High	Yes
Teston IA21	20-4-0519	Isolated Artefact	Low	High	Yes
Teston IA22	20-4-0717	Isolated Artefact	Low	High	Yes
Teston IA23	20-4-0720	Isolated Artefact	Low	High	Yes
Teston IA24	20-4-0721	Isolated Artefact	Low	High	Yes
Teston IA25	20-4-0719	Isolated Artefact	Low	High	Yes
Teston South AS1	20-4-0475	Artefact Scatter	Low	High	Yes
Teston South AS2	20-4-0496	Artefact Scatter	Low	High	Yes
Teston South IA2	20-4-0498	Isolated Artefact	Low	High	Yes
Teston South Site Complex	20-4-0026	Artefact Scatter	High	High	Partial
Velyama AS8	20-4-0499	Artefact Scatter	Moderate	High	Partial
Velyama; Manila (MC11)	20-4-0024	Artefact Scatter	Low	High	Partial
Willow Tree Range (MC4)	20-4-0019	Artefact Scatter	Moderate	High	Yes
Willow Tree Range (MC5)	20-4-0016	Artefact Scatter	Moderate	High	Yes
Willow Tree Range; Teston (MC2)	20-4-0033	Artefact Scatter	Low	High	Yes
Willow Tree Range; Teston (MC3)	20-4-0034	Artefact Scatter	Low	High	Yes
Willow Tree Range; Teston; Therribri (MC8)	20-4-0021	Artefact Scatter	Moderate	High	Partial
Willow Tree Range; Teston; Therribri (MC9)	20-4-0022	Isolated Artefact	Low	High	No



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Site Name	AHIMS #	Site Type	Scientific Significance	Cultural Significance	Impacted
Willow Tree Range; Teston; Therribri (MC7)	20-4-0020	Artefact Scatter	Moderate	High	Partial
Willowtree Range; Teston; Therribri (MC10)	20-4-0023	Artefact Scatter	Moderate	High	Yes

Note: The status of the above sites including any site amalgamation is described in Table 3.

During fieldwork and in group meetings, the RAPs placed emphasis on the physical evidence of their ancestors within the MCCM Project Boundary, especially on artefact scatters and (should any be clearly identified) scarred trees or other cultural objects and features. Therefore, the management of archaeological sites within the MCCM Project Boundary will commonly overlap with the management of cultural heritage places, more broadly defined.

Representatives of the RAPs stated during consultation that they value archaeological sites for more than their scientific worth because such sites reflect both the physical and spiritual presence of ancestors on Country. Nevertheless, there was general agreement that the appropriate management response to such places should be to follow standard archaeological methodologies:

- Record the location of the place.
- Record the physical layout and composition of the place (e.g. nature and extent of artefact scatters, shape and any other cultural object/item encountered).
- Some controlled excavation where preliminary investigation indicates an archaeological site of high scientific significance that would be disturbed (see Section 6.6.4).
- Salvage the physical evidence (e.g. stone artefacts, scarred trees) where mine operations would impact them and place them in an appropriate keeping place.

As a result, the management recommendations contained within this AACHMP for archaeological sites will commonly also satisfy the requirements of broader cultural heritage management.

It is therefore noteworthy that the extent of surface development has been extensively surveyed and salvaged and will have limited additional disturbance post-construction. As the mining footprint advances over the life of the mine the disturbance footprint and associated salvage will advance progressively.

During consultation and field work with representatives of the RAPs (including Traditional Owners) some other cultural values were identified broadly associated with the MCCM Project Boundary. The attending RAPs (including Traditional Owners) emphasised that the wider region should be interpreted as a 'cultural landscape' both shaped by and reflecting Aboriginal people and activities. The following observations, summarising views expressed by the attending RAPs (including Traditional Owners), guide the recommendations contained within this management plan.

3.3.1 Inter-connected Places

Traditionally, Gomeroi people are considered to have traversed the region to the north of Boggabri for trade, hunting and foraging, along established routes defined by the topography (e.g. certain creek lines and ridgelines). Further, their movement through the landscape would have been reflected in traditional stories and places (e.g. 'songlines' and 'Dreaming places'). This traditional knowledge has been impacted by the actions of white settlers and government policy since first contact, but some traditional stories can still potentially connect the Maules Creek environs with features of the wider landscape (e.g. 'Gins Leap', Mt Kaputar and Dripping Rock).



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3.3.2 'Nature' and 'Culture'

Some Aboriginal people do not make a clear distinction between the natural world and 'culture', because the two things are closely intertwined e.g. through the existence of totemic species, the use of bush tucker and bush medicine, and through cultural obligations for the management of country. Therefore, in managing the biodiversity of the environs of the mine, opportunities will be taken to consult with RAPs as appropriate, and to facilitate access to certain species of flora and fauna where possible for cultural purposes (e.g. for bush tucker, bush medicine and ceremony).

MCC is committed to facilitating reasonable access to the MCCM consistent with personnel workplace health and safety requirements. RAPs wishing to access the MCCM for cultural purposes should contact MCC in writing. The facilitation of access to site for cultural purposes is further addressed in Section 6.19.

3.3.3 Access

Some Gomeri people are presently experiencing a renewed interest in their history and traditions, and it is desirable that they be afforded opportunities to access Country containing major cultural sites, objects, items etc. to continue to embed their beliefs in physical places, to continue to practice traditional activities, and to educate their younger generations. Access will be consistent with Workplace Health and Safety (WHS) statutes and regulations. The facilitation of access to site for cultural purposes is addressed in Section 6.19.

3.3.4 Recommendations

The recommendations in Table 6 arise out of previous feedback received from RAPs (including Traditional Owners) in relation to the broader cultural heritage values of the MCCM area. Consultation with NWLLS and OEHL was also undertaken and recommendations included where relevant within Table 6.

The RAP feedback reflects the following:

- The archaeological presence at the MCCM should continue to be managed in accordance with the AACHMP because of its physical links with Aboriginal ancestors.
- The MCCM forms part of a cultural landscape in which the component parts are related and can be interpreted together.
- Access to Country from time to time is desirable to allow cultural traditions to be maintained.
- Being on Country is part of an ongoing educational experience for Gomeri people, and helps younger people to reconnect with any significant cultural features or objects.
- Aspects of biodiversity at the MCCM are important to the cultural beliefs and practices of parts of the Gomeri community.

There were no additional recommendations received from RAP's following consultation on this revised AACHMP during 2016.



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Table 6 Summary of Recommendations within AACHMP

Objective	Recommended Actions
Facilitate access to the MCCM area for cultural activities	See Section 6.19 regarding Aboriginal community access procedures.
Encourage educational opportunities, especially for the younger generations	See Section 6.6.1 in relation to RAP participation in fieldwork; See Section 6.10 in relation to the 'keeping place' which presents educational opportunities; See Section 6.19 regarding Aboriginal community access; See Section 6.22 in relation to community 'heritage training'.
Provide on-Country work opportunities at MCCM	See Section 6.6.1 in relation to RAP participation in fieldwork; See Section 6.19 regarding Aboriginal community access. In addition, it is noted that MCCM is committed to the employment of Aboriginal people on-site, which in turn provides personal and professional development and the opportunity to spend time 'on Country'.
Assist Aboriginal people meet their cultural responsibilities in relation to caring for country	See Section 4.4 in relation to ongoing consultation with RAPs; See Section 6.13 regarding heritage inductions and cultural heritage training; See Section 6.2-6.3 in relation to recording and fencing of heritage places; See Section 6.4 in relation to ongoing monitoring of heritage places; See Section 6.6.1 in relation to RAP participation in fieldwork; See Section 6.21 regarding RAP involvement in the MCCCCC.
Safeguard physical elements of cultural heritage	See Section 6.3 in relation to fencing certain sites; See Section 6.4 in relation to the monitoring of sites and their ongoing condition; See Section 6.6.1 in relation to archaeological salvage; See Section 6.10 in relation to the establishment of a 'keeping place'; See Section 6.12 in relation to incident reporting and management; See Section 6.14 in relation to procedures for newly identified Aboriginal heritage sites.
NWLLS recommendations following revision of AACHMP: <ul style="list-style-type: none"> • Ensure the correct aboriginal person and/or representatives are consulted. • Feedback received from the community who seeks further information on the method of discharge water management and further acknowledgement regarding reduced opportunity to engage in cultural practices where sites are salvaged. 	<p>Consultation occurs with the registered RAP's. Notifications are provided in accordance with this plan under Section 4.4 and enables currency of contact details to be updated and provided to MCCM.</p> <p>Water management details are publicly available within the Water Management Plan on the Whitehaven Coal website.</p> <p>Consultation with respect to opportunities are addressed during regular meetings with RAP's. Please refer to Section 4.4</p>



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4.0 REGISTERED ABORIGINAL PARTIES

4.1 Identification of Registered Aboriginal Parties

RAPs were identified as part of the consultation process for the *Maules Creek Coal Project Aboriginal Archaeology and Cultural Heritage Impact Assessment* (AECOM, 2010). Subsequent to this assessment, additional RAPs have registered their interest with MCC in being consulted as part of the ongoing management of Aboriginal cultural heritage at the MCCM. Appendix B provides a consolidated list of RAPs from these processes.

4.2 Registered Aboriginal Parties

To date, 183 RAPs have registered an interest. A full list of RAPs is presented in Appendix B. A reference in this AACHMP to RAPs refers to the parties listed in Appendix B.

4.3 Native Title

A native title claim was registered by the "Gomeri People" on the 20 January 2012 (NC11/6) and includes a small area of the MCCM that involves the portion of Crown Road and Leard State Forest that lies directly to the north of the existing surface mining rights within CL375. Any consultation with regard to the native title claim is outside the scope of this AACHMP.

4.4 Ongoing Consultation with Registered Aboriginal Parties

MCC is committed to maintaining ongoing consultation with RAPs throughout the life of the MCCM; however, it is the responsibility of RAPs to ensure that up-to-date contact details (full name, postal address, telephone number, and where possible, email address) are provided to MCC. At regular intervals, generally on a 6-12 month basis, MCC will mail out forms to RAPs to provide them with the opportunity to provide up to date contact details as soon as practical. These details will be updated on the register of RAPs which will be maintained by MCC over the life of the MCCM. RAPs are also encouraged to contact MCCM to update their details as needed rather than awaiting forms to be provided.

Ongoing consultation with RAPs will occur via meetings throughout the life of the MCCM. Meetings will be open to all RAPs and will provide a forum for RAPs to raise any issues they may have regarding the MCCM and for MCC to provide updates. The communication protocol is attached as Appendix C to ensure that all parties have a clear understanding of their roles and responsibilities in relation to this AACHMP.

Meetings with RAPs will be convened by MCC every six months. Issues that may be discussed in the meetings include (but are not limited to):

- mine progress;
- update on Keeping Place;
- fieldwork timing and arrangements;
- fieldwork policies and protocols;
- implementation of Aboriginal Cultural Awareness Training;
- AACHMP review;
- key results of any fieldwork (including the outcomes of salvage activities and post-salvage analysis and any additional training opportunities);
- update on the Aboriginal Heritage Conservation Strategy; and



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- RAP input on, and facilitating access to, certain species of flora and fauna for cultural purposes.

RAPs will be notified of upcoming meetings with a minimum of 14 days' notice.

Aboriginal community members other than RAPs may attend individual meetings, if agreed by MCC prior to the meeting.

Additional meetings with RAPs (i.e. in addition to the six monthly scheduled meetings) may be held on an as required/requested basis if agreed by MCC, and may be called to address issues that cannot be dealt with by means of established protocols.

Meeting notes of all RAP meetings (i.e. the six monthly meetings and any additional meetings) will be made available to all RAPs at subsequent meetings.



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5.0 IMPACTS TO IDENTIFIED ABORIGINAL ARCHAEOLOGICAL AND HERITAGE SITES

5.1 Summary of Impacting Development

At the time of revising this AACHMP, there are 24 Aboriginal archaeological sites remaining within the MCCM Project Boundary; this total includes the remains of seven sites which have been subject to partial salvage². Of these 24 Aboriginal archaeological sites, the entire extent of 14 (seven artefact scatters, six isolated artefacts and one grinding groove site) will be protected in-situ throughout the operational phase of the MCCM. The partial extent of another seven sites will also be protected in situ. Impacts to two artefact scatters located in the Leard State Forest (Leard SF AS1 and Leard SF AS2) and one grinding groove site (Teston GG4) are associated with the open cut mine and/or overburden emplacements.

Table 7 details the 21 protected in-situ Aboriginal archaeological sites (14 fully protected and seven partially protected), as well as the remaining three impacted sites according to location and/or extent of impact. Impacts to Aboriginal archaeological sites and heritage are further discussed below while measures to mitigate impacts and manage Aboriginal archaeological sites and heritage are discussed in Section 6.0. Aboriginal archaeological sites in relation to the proposed development are shown in Figure 4.

5.1.1 The Open Cut Mine and Overburden Emplacements

The open cut mine is located in the north-eastern portion of the MCCM Project Boundary and is mostly confined to the Leard State Forest. Three Aboriginal archaeological sites will be impacted by the future development of the open cut mine and associated placement of overburden; two artefact scatters and one grinding groove site. As indicated in Table 7, these three sites have been assessed as being of low scientific significance. In 2014, Leard SF AS1 was reassessed through a targeted subsurface investigation; the soil profile, level of disturbance, and general absence of subsurface artefacts has led archaeologists from the UQCHU to conclude that Leard SF AS1 maintains little spatial integrity and no subsurface in-situ component and because of this, is considered to be of low scientific significance. Similarly, grinding groove site 'Teston GG4' was analysed in 2016 by archaeologists from the UQCHU and classified as having low scientific significance.

The MCCM will avoid impacting all identified sites along Back Creek through the creation of a buffer intended to protect the ecological and cultural heritage values of this watercourse. Protected sites along Back Creek include: Back Creek AS1, AS2, AS3, AS4, AS5 and AS6 (artefact scatters), and Back Creek IA1 & IA2 (isolated artefacts) (see Table 7).

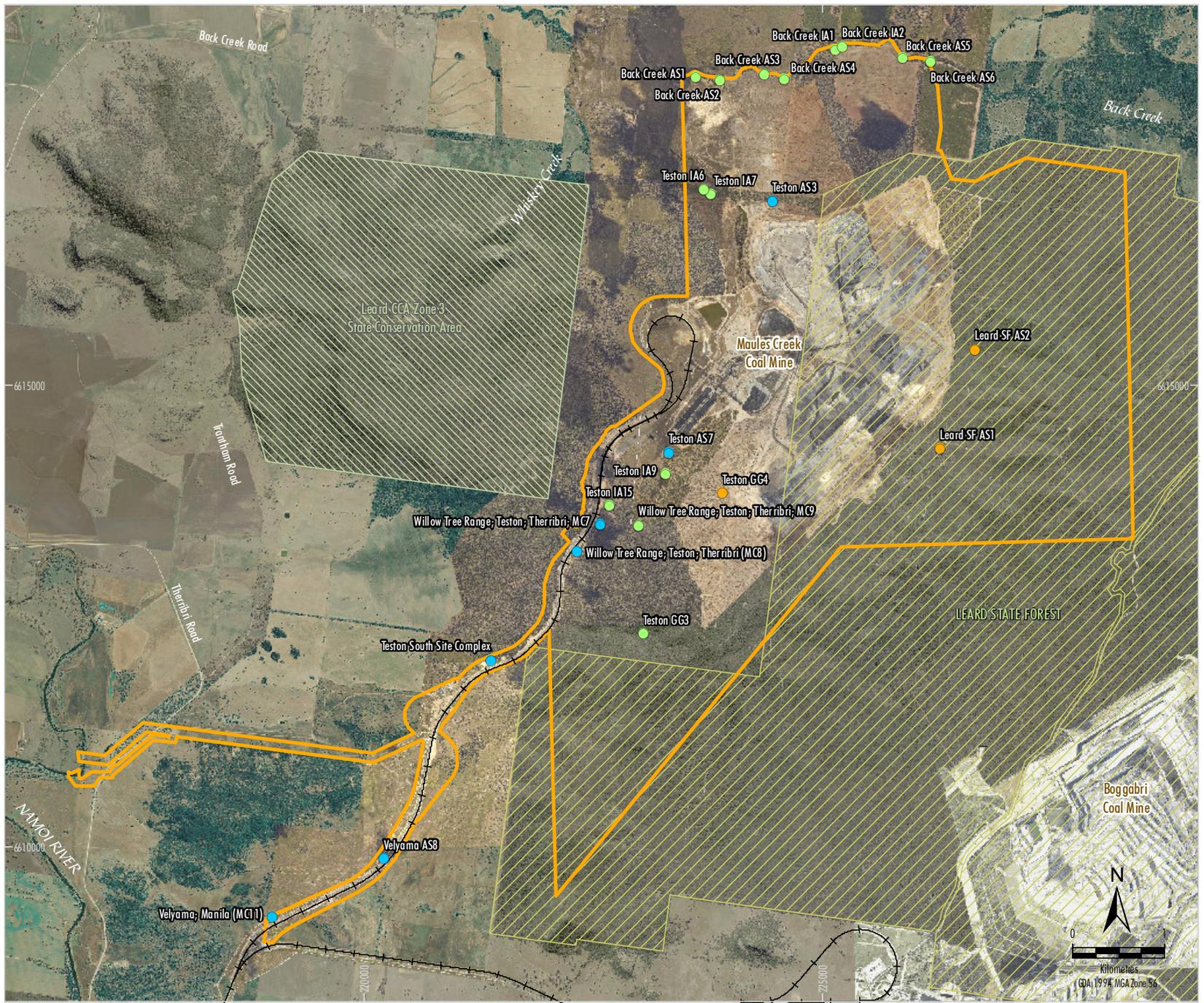
5.1.2 Rail Spur

Aboriginal archaeological sites located within the southern component of the rail line, which connects to the Werris Creek/Mungindi Railway Line, will be managed under the approved CHMP for the Boggabri Coal Project (Boggabri Coal Pty Ltd, 2012) (or latest approved version).

5.1.3 Water Pipeline

The original approved alignment of the Namoi water pipeline was altered as part of a formal Modification application to PA 10_0138.

² A list of all known Aboriginal archaeological sites within the MCCM Project Boundary, including those sites already subject to archaeological salvage and therefore no longer extant, is presented in Appendix A.



LEGEND

- NPWS Estate
- State Forest
- Railway
- AACHMP Project Boundary Management
- No Impact: Fencing
- Partial Impact: Fencing and Partial Salvage
- Direct Impact: Impact and/or Salvage

Source: OEH NSW (2016); Whitehaven Coal Limited (2016); NSW LP&I (2015); Whinop Archaeology (2016)
 Orthophoto Mosaic: Whitehaven Coal Limited (Mar 2016 - July 2011)

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Management of Remaining Aboriginal Archaeological Sites



Figure 4



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Table 7 Summary of Impacts to Known Aboriginal Archaeological Sites

Impact	Site Name	AHIMS #	Site Type	Scientific Significance
Full Impact - Open Cut Pit and Overburden Area	Leard SF AS1	20-4-0403	Artefact Scatter	Low
	Leard SF AS2	20-4-0404	Artefact Scatter	Low
	Teston GG4	20-4-0707	Grinding Grooves	Low
Not Impacted	Back Creek AS1	20-4-0395	Artefact Scatter	Moderate
	Back Creek AS2	20-4-0396	Artefact Scatter	Moderate
	Back Creek AS3	20-4-0397	Artefact Scatter	High
	Back Creek AS4	20-4-0398	Artefact Scatter	Low
	Back Creek AS5	20-4-0399	Artefact Scatter	Low
	Back Creek AS6	20-4-0400	Artefact Scatter	High
	Back Creek IA1	20-4-0401	Isolated Artefact	Low
	Back Creek IA2	20-4-0402	Isolated Artefact	Low
	Teston GG3	20-4-0712	Grinding Grooves	Moderate
	Teston IA6	16-4-0023	Isolated Artefact	Low
	Teston IA7	16-4-0024	Isolated Artefact	Low
	Teston IA9	16-4-0026	Isolated Artefact	Low
	Teston IA15	20-4-0524	Isolated Artefact	Low
	Willow Tree Range; Teston; Therribri (MC9)	20-4-0022	Isolated Artefact	Low
Partial Impact – Rail Spur	Velyama AS8	20-4-0499	Artefact Scatter	Moderate
	Willow Tree Range; Teston; Therribri (MC8)	20-4-0021	Artefact Scatter	Moderate
	Willow Tree Range; Teston; Therribri; (MC7)	20-4-0020	Artefact Scatter	Moderate
	Teston South Site Complex	20-4-0026 20-4-0027 20-4-0412 20-4-0413	Artefact Scatter	High
	Velyama; Manila (MC11)	20-4-0024	Artefact Scatter	Low
Partial Impact – MCCM Infrastructure	Teston AS7	16-4-0017	Artefact Scatter	Low
Partial Impact – Overburden Area	Teston AS3	20-4-0408	Artefact Scatter	Low



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6.0 MANAGEMENT AND SALVAGE

6.1 Project Approval Commitments

Management measures in relation to the Statement of Commitments (SoC) for the MCCM as provided within Appendix 5 of PA 10_0138 are reproduced in this section. Tables 8 and 9 summarise the main management sections of the AACHMP and are included for convenience as a quick reference table of contents for land management purposes and the management of Aboriginal cultural heritage.

Table 8 Summary of Project Approval 10_0138 Commitments and AACHMP Linkage

SoC Reference Number	Commitment	Relevant AACHMP Section
18	Development of AACHMP in consultation with the local Aboriginal registrants and OEH	6.6
19	'Keeping Place' for salvaged Aboriginal objects	6.10
20	RAP representative on the MCCCCC	6.21
21	Training opportunities for RAPs	6.22

Other management measures in relation to land management and the management of Aboriginal archaeological and cultural heritage are shown in Table 11.

Table 9 Other Management Measures and AACHMP Linkage

Management Measure	Relevant AACHMP Section
Aboriginal Site Database	6.2
Monitoring	6.4
Management of Quinine Bush (<i>Alstonia constricta</i>)	6.9
Breach Investigation & Dispute Resolution	6.12
Aboriginal Heritage Induction & Cultural Awareness Training	6.13
Discovery of Aboriginal Archaeological Objects	6.14
Discovery of Human Remains	6.15
Ground Impacts from Weed and Feral Animal Management	6.16
Exemptions for Emergency Vegetation Management	6.17
Reporting under the AACHMP	6.18
Aboriginal Heritage Conservation Strategy	1.2
Aboriginal Community Access	6.19
Aboriginal Heritage Management Plan Review	6.20
Community Consultative Committee	6.21
Cultural Heritage Training for Community	6.22
Implementation	7



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6.2 Aboriginal Site Database

A comprehensive Aboriginal Site Database for the MCCM Project Boundary (including associated infrastructure) and its immediate environs has been established. The Aboriginal Site Database contains the name, type, extent (where applicable), MGA coordinates and status of all Aboriginal archaeological and cultural heritage sites within the MCCM Project Boundary.

This information will be saved in a GIS format and will be made available to all relevant MCCM staff and contractors when developing maps/drawings/figures to ensure that any disturbance works consider the location of known Aboriginal archaeological and cultural heritage sites for the MCCM. Maps showing boundaries of these identified sites will be included with specific works documents as part of MCCM mine plans.

MCC will update the Aboriginal Site Database after becoming aware of the identification of any previously unrecorded Aboriginal heritage evidence at the MCCM (other than additional evidence at an already known location). Updates to the Aboriginal Site Database will be undertaken as required.

The MCC Environmental Superintendent (or relevant equivalent) will be responsible for the maintenance of and updates to the Aboriginal Site Database.

6.3 Fencing of Aboriginal Archaeological Sites

All relevant identified Aboriginal archaeological and cultural heritage sites within the MCCM Project Boundary have been fenced, and appropriately signed to avoid accidental damage. The fencing of any newly identified Aboriginal archaeological and cultural heritage sites will adhere to the Procedure on the Discovery of Aboriginal Archaeological Objects (Section 6.14).

Metal signs attached to fencing will include the following words as a minimum:

ENVIRONMENTALLY SENSITIVE AREA

NO UNAUTHORISED ENTRY

OPERATIONS MANAGER

Fencing will comprise (at a minimum) star pickets and high visibility construction fencing (or similar suitable materials).

MCCM will seek to minimise the risk of damage to scarred trees (if identified in future works). Although fencing of the trees is generally the preferred method of physical protection, this AACHMP recognises that the use of fences in some environments (especially a publicly accessible location) may actually encourage damage through vandalism. For this reason, this AACHMP proposes that scarred trees (if identified in future works) in publicly accessible locations will not be fenced. Rather, the following management process will be observed:

- A sign is to be erected in the vicinity of each scarred tree (although not directly adjacent to it) that states that the area is environmentally sensitive and that damage to its flora is prohibited.
- A program of monitoring of the condition of the trees is to be instituted, with site visits at reasonable intervals (on a minimum annual basis) having regard to the nature of the risk.

Fencing of archaeological sites within the MCCM Project Boundary is already in place and outlined in Appendix A. Mitigation measures described in Sections 6.4 - 6.18 will be followed for these archaeological sites.



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Any additional sites identified prior to disturbance will either be salvaged or fenced (for later salvage) depending on their location in relation to scheduled works. Fencing will be undertaken when surface disturbance activities are within 50 m of the relevant Aboriginal archaeological site.

Should a tree of possible Aboriginal origin be identified within the MCCM Project boundary that requires further assessment, temporary fencing may be required to ensure that the site is not damaged until an assessment can be undertaken.

Fencing of new sites (if required) will encompass the boundary of the site as determined by an appropriately qualified archaeologist³ in consultation with attending RAPs.

Existing access tracks within archaeological site boundaries are to be maintained. Traffic and/or upgrading of roads will be managed or limited within these areas to reduce additional impacts to sites.

Fencing will be inspected annually to ensure the integrity of the fencing is not compromised and that no adverse impacts have occurred to the fenced sites. If adverse impacts are suspected to have occurred to the fenced sites, then the sites would be re-assessed by a qualified archaeologist and RAPs. The MCCM Environment Superintendent (or delegate) will be responsible for organising fencing inspections. In addition to formal annual inspections, fences will be opportunistically inspected by MCC staff and RAPs during day-to-day activities across the MCCM.

Fences will be removed following completion of salvage at particular sites or at the end of the MCCM.

6.4 Monitoring/Inspection

6.4.1 Annual Monitoring Program

Annual inspection of all fenced archaeological and cultural heritage sites within the MCCM Project Boundary will be undertaken as part of the MCCM compliance auditing program and in accordance with Section 6.3. Inspections will involve at a minimum, recording of the following:

- condition assessment of the Aboriginal archaeological site;
- condition assessment of fencing; and
- evidence of nearby disturbance that has the potential to impact the fenced site.

A compliance audit of previously salvaged Aboriginal objects will be undertaken as part of the annual review conducted for the Keeping Place (see Section 6.10). The compliance audit will involve an audit of all previously salvaged Aboriginal objects to confirm that the objects are stored appropriately and to determine the status of any post-salvage analysis required for individual objects.

A report is to be prepared on completion of the annual monitoring program and the findings of this report will also be presented within the Annual Review for the MCCM.

³ All references to a 'qualified archaeologist' in this AACHMP are taken to be references made in accordance with the OEH policy *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (DECCW, 2010b). That is, to an appropriately skilled and experienced person with a minimum of a bachelor's degree with honours in archaeology or relevant experience in the field of Aboriginal cultural heritage management, and the equivalent of two years full-time experience in Aboriginal archaeological investigation (including involvement in a project of similar scope) and a demonstrated ability to conduct a project of the scope required through inclusion as an attributed author on a report of similar scope.



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6.4.2 Additional Monitoring/Inspection of Cultural Heritage Sensitive Areas

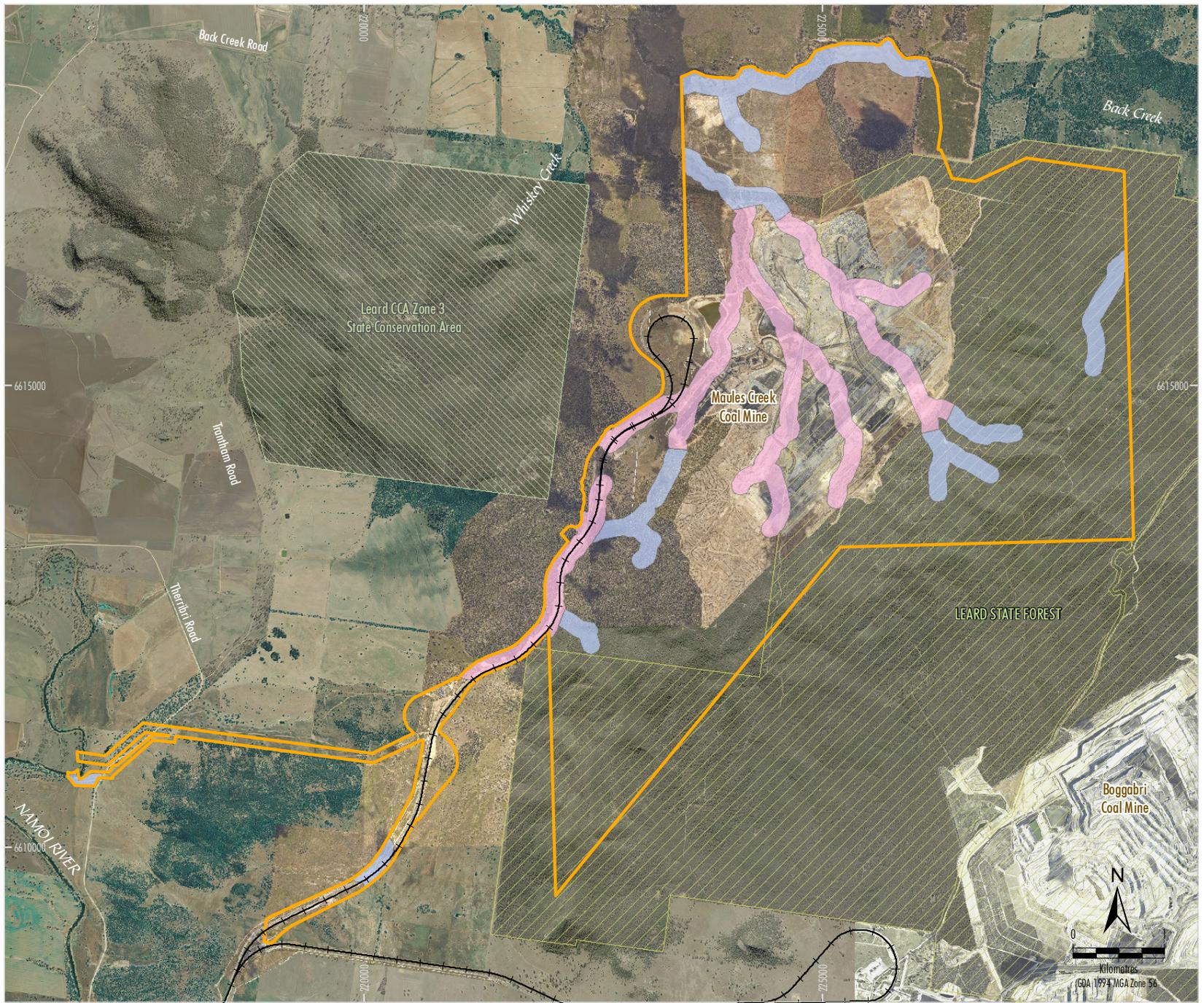
Cultural heritage sensitive areas were determined on the basis of existing archaeological data for north-western NSW, which demonstrate a close relationship between artefact presence and distance to water (NSW National Parks and Wildlife Service, 2002). Combining both previous research and the findings of the Aboriginal Archaeology and Cultural Heritage Impact Assessment (AECOM, 2010), landform analysis was conducted for the MCCM and the wider Leard State Forest area. On the basis of this study, cultural heritage sensitive areas for the MCCM have been defined as those areas within the MCCM Project Boundary and within 50 metres (m) of registered recorded sites and/or land within 200 m of named creeks and 100 m either side of other mapped drainage lines (Figure 5). Creeks & drainage lines within the surrounding area have been identified using both LMPA 2011 spatial data, and also on the basis of an analysis of digital elevation models collected as part of the Shuttle Radar Topography Mission (also known as SRTM).

Monitoring/inspection of cultural heritage sensitive areas, as shown on Figure 5, will be undertaken prior to or during topsoil clearance in these areas as advised by the attending qualified archaeologist. Monitoring/inspection of cultural heritage sensitive areas will be undertaken with RAPs/RAP representatives in accordance with the protocol described in Section 6.6.1.

The monitoring/inspection of cultural heritage sensitive areas would generally follow the following methodology:

1. Sensitive zones to be monitored will be identified and marked on plan before any site work commences.
2. Vegetation will be cleared with minimal ground disturbance and pushed into stockpiles. RAPs (or their representatives) will not be required on site until machine scrapes commence. The current ground surface has been inspected during survey and salvage works, hence there is no need for surface inspection prior to the first scrape. The felling of all trees will not be subject to archaeological monitoring, due to the low potential for the identification of archaeological material. Tree root system inspections is not an effective monitoring measure and cannot be considered a substitute for controlled archaeological subsurface investigations.
3. Where practical, stockpiles of vegetation should be clear of areas to be monitored.
4. Scrapes in sensitive areas will be undertaken with RAPs and archaeologists present - two RAPs per machine. The first monitoring inspection will be undertaken following the initial scrape.
5. Where possible, scrapes will proceed in pits of generally 100 mm depth (dependent upon machine being used), with a minimum of two spits for each scrape. If no cultural material is recorded after two spits the scrape will be closed. If cultural material is recorded further spits can be removed until the nature of the site can be accurately characterised. Only when a new Aboriginal archaeological site is assessed as being of moderate or high scientific significance will further works cease at the location and the Procedure on the Discovery of Aboriginal Archaeological Objects (Section 6.14) be implemented. If Aboriginal archaeological objects of low scientific significance are identified, these objects will be appropriately collected and monitoring scrapes will continue.
6. Scrapes should be undertaken in a system of parallel lines no more than 50 m apart.

The findings of the monitoring/inspection of cultural heritage sensitive areas will be presented within the Annual Review for the MCCM, and will be discussed with RAPs during the six monthly meetings (Section 4.4).



- LEGEND**
- NPWS Estate
 - State Forest
 - Railway
 - AACHMP Project Boundary
 - Cultural Sensitive Areas
 - Monitoring to be Completed
 - Monitoring Complete

Source: OEH NSW (2016); Whitehaven Coal Limited (2016); NSW LP&I (2015); Whincop Archaeology (2016)
 Orthophoto Mosaic: Whitehaven Coal Limited (Mar 2016 - July 2011)



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Cultural Heritage Sensitive Areas



Figure 5



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6.4.3 Monitoring of Potential Blasting Impacts

Condition 23(a), Schedule 3 of PA 10_0138 requires MCC to minimise blasting impacts on heritage items in the vicinity of the site. Blasting and associated vibration is only considered to hold potential to impact on Aboriginal heritage with an inherent structural element, such as grinding grooves and rock shelters. Stone artefact sites (e.g. isolated artefacts, artefact scatters) and trees are generally not at risk from blasting activities.

Any grinding groove site and any rock shelters that are identified during future operations which are located within 500 metres of proposed blasting will be subject to blast monitoring (Section 6.7.2). The acceptable level of blasting-related vibration will be determined by an appropriately qualified expert (e.g. geotechnical engineer) in liaison with the approved archaeologist.

The Teston GG3 (grinding groove) site is located more than 500 m from open cut operations at the MCCM, and as such, is unlikely to experience potential impacts from blasting. Notwithstanding, a visual inspection of the site will be undertaken during the annual monitoring program (Section 6.4.1) to confirm that the site has not been impacted by blasting activities. In the event that impacts associated with blasting activities are observed at Teston GG3 or Teston GG4, the procedures outlined in Section 6.7 will be implemented.

6.5 Biodiversity Management - Preclearance

All contractors engaged to conduct preclearance activities for biodiversity management will, prior to the commencement of their works, be briefed on the identification of Aboriginal cultural heritage sites, and especially culturally modified trees. Any suspected cultural heritage sites identified by preclearance contractors will be assessed by a qualified archaeologist following the Procedure on the Discovery of Aboriginal Archaeological Objects (Section 6.14).

6.6 Archaeological Salvage Program

An archaeological salvage program will be undertaken within the disturbance footprint as the mine advances. This program is designed to meet Project Approval Conditions 57 & 58 for the MCCM. In order to accommodate potential research direction changes brought about by Condition 57 – Aboriginal Heritage Conservation Strategy, a modular open research program has been developed on the broad principles of previous regional studies (e.g. the Brigalow Belt South Aboriginal Cultural Heritage Study - NSW National Parks and Wildlife Service, 2002). The ongoing salvage of existing and any potential new sites will be determined according to an assessment of each Aboriginal archaeological site's scientific significance; a site's significance is closely connected to its potential to yield data on human occupation of the wider area.

Previous salvage programs incorporated the following components:

1. Shovel test pits and open area archaeological excavations have been conducted at open artefact scatters 20-4-0026 and 20-4-0027, both of which were initially assessed as being of high scientific and cultural significance on the basis of observed surface evidence (subsequently excavation, however, revealed a lower scientific value due to the high level of artefact attrition and absence of spatial integrity at these sites)⁴.
2. Surface collection of open artefact sites (i.e. artefact scatters and isolated artefacts) scheduled for impact.

Staging of archaeological salvage activities is detailed in Table 10.

⁴ Note that shovel test pits have also been undertaken at 14 other sites. These sites are described in Section 6.6.4.1.



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Table 10 Staging of Archaeological Salvage Program

Stage	Task	Timing	Relevant AACHMP Section	Status
Stage 1	Surface collection of Impacted Aboriginal Sites in areas of immediate priority: Rail Loop & Spur, Mine Access Road and Mine Infrastructure Area	Prior to construction	6.6.2	Complete
Stage 1	Subsurface salvage program – 20-4-0026 and 20-4-0027	Prior to construction	N/A	Complete
Stage 2	Surface collection of Impacted Aboriginal Sites in Open Cut Mine & Northern OEA and remaining areas within MCCM Disturbance Boundary	Prior to surface disturbance works	6.6.2	Majority complete

6.6.1 RAP Participation in Fieldwork

All RAPs will be offered the opportunity to apply for participation in the archaeological salvage program and other relevant fieldwork described in this AACHMP. Engagement of RAPs for participation in fieldwork will be based on the roster system described below.

1. A standard field investigation team will consist of one qualified archaeologist and up to four RAPs or RAP representatives. Departure from this standard may occur in certain circumstances, for example during monitoring/inspection of cultural heritage sensitive areas which would involve two RAPs/RAP representatives (Section 6.4.2).
2. In some circumstances a field program may require the parallel involvement of more than one field investigation team (e.g. in order to complete salvage activities prior to commencement of surface disturbance activities).
3. RAP involvement in paid fieldwork will be undertaken on a roster system to provide equitable involvement of all eligible RAPs (and/or their representatives).
4. MCC will maintain the fieldwork roster and update it on a progressive basis.
5. Inclusion of individuals on the roster will be by written application from RAPs. Only a RAP can apply to have an individual included on the roster.
6. If a RAP is an individual they may only be represented by themselves.
7. If a RAP is a group/organisation/company it may be represented by any member of that RAP group/organisation/company as long as the individual's details are provided to MCC at the time of making written application and the individual can comply with MCC's WHS and insurance requirements.
8. The order of involvement in fieldwork will be based on the order that RAPs or RAP representatives satisfy MCC's insurance and WHS requirements.



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9. Each RAP or RAP representative will be generally allocated up to five field days (depending on the scope of work) before the roster moves to the next individuals on the roster. The five field days do not necessarily need to be consecutive and will depend on the fieldwork program/schedule. For example, an individual may be invited to participate in five consecutive days or several campaigns of one, two or three days, depending on the fieldwork program/schedule. Engagement for participation in field work will be based on the merits of each written application received. Applications for involvement in field work will be evaluated and successful applications will be selected based on their ability to demonstrate connection to country, experience in the field and representativeness/ability to communicate findings to a large number of Aboriginal stakeholders. In some circumstances, exceptional applications may be offered more than the standard five day allocation.
- At least five days' notice will be provided to individuals prior to field work as a standard. In some circumstances, MCC may not be able to give 5 days' notice on all occasions and this will be discussed with the individuals next on the roster, as required.
10. As part of the field work notification, individuals will be given a brief description of the works required, including which sites/areas are to be salvaged/inspected/monitored. MCC respects that gender issues may be relevant to some sites/areas although it will be the responsibility of the invited individual to determine if they do not wish to attend based on gender restrictions. If an individual does not wish to attend based on gender restriction they will remain first in line on the roster and will be invited to participate in the next field campaign.
11. All participants of the field investigation team are required to comply with the following MCCM WHS and insurance requirements (proof of which is required to be provided to MCC prior to being allocated to a roster and undertaking any works onsite):
- Valid public liability insurance.
 - Valid workers' compensation insurance (or equivalent to the satisfaction of MCC).
 - Hard hat.
 - Safety glasses.
 - Long sleeved shirt and pants.
 - Safety boots.
 - High visibility vest or shirt.
 - Gloves.
 - All MCC staff and contractors (including archaeologists and RAPs) may be subject to random drug and alcohol tests. Any person that returns a non-negative test will only be permitted to undertake further work at MCCM strictly at the discretion of MCCM Management.
 - All MCC staff and contractors (including archaeologists and RAPs) must be able bodied and fit to undertake the work required. In some circumstances, MCC reserves the right to require written advice from a medical practitioner to support an application for inclusion on the field work roster.
12. RAPs or RAP representatives will only be included on the field roster once they can demonstrate compliance with MCCM's WHS and insurance requirements.
13. Scheduled fieldwork will not be delayed due to RAPs or RAP representatives' inability to comply with MCCM's WHS and insurance requirements. Subject to suitable notification requirements being met by MCC as described in point 9 above, the fieldwork salvage (and/or other heritage management works required by this AACHMP) may commence to avoid unnecessary delays to mining operations at the MCCM.



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14. All MCC staff and contractors (including archaeologists and RAPs) will be required to adhere to relevant MCCM behaviour protocols.

The MCCM WHS and insurance requirements are subject to periodical review and update by MCC outside the requirement for this AACHMP to be revised. All contractors, including participating archaeologists and RAPs, will be notified of any relevant changes to fieldwork requirements.

6.6.2 Surface Collection

The objective of the surface collection component of the salvage program is to systematically record and recover a sample of visible surface artefacts within open artefact sites. Should a previously recorded site not be able to be relocated after a reasonable search effort (to be determined by the qualified archaeologist in consultation with the attending RAPs) then the site may be considered to have been salvaged, and steps will be taken to have the classification/status of relevant sites updated within the AHIMS database accordingly.

The majority of artefact scatters within the MCCM Project Boundary that are scheduled to be impacted by MCCM activities have been salvaged through surface collection and excavation. Two Aboriginal archaeological sites, Leard SF AS1 and Leard SF AS2, which are both located within the proposed open cut mine area, will be subject to surface collection prior to impact. One grinding groove site (Teston GG4) will also be affected by the approved overburden emplacement, and the artefacts associated with the site will be appropriately salvaged (as per protocols within Section 6.7). Table 11 lists the sites identified for surface collection within the MCCM Project Boundary.

Table 11 Sites identified for Surface Collection within the MCCM Project Boundary

Impact Area	AHIMS #	Site Name
Open Cut Pit and/or Overburden Emplacement	20-4-0403	Leard SF AS1
	20-4-0404	Leard SF AS2
	20-4-0707	Teston GG4

6.6.2.1 Surface Collection: Research Questions

The potential significance of a site guides the surface collection methodology described in Section 6.6.2.2. The potential significance is in turn determined through asking a series of research questions, examples of which are presented below:

1. What, if any, spatial patterning is apparent in the distribution of major artefact classes across the MCCM Project Boundary?
2. What, if any, patterning is apparent in the distribution of raw material types across the MCCM Project Boundary?
3. Does artefact distribution vary significantly in relation to landform?
4. Does artefact distribution vary significantly in relation to slope?
5. Does artefact distribution vary significantly in relation to distance to water?
6. Does artefact distribution vary significantly in relation to stream order?
7. Does artefact distribution vary significantly in relation to geology?
8. Does artefact distribution vary significantly in relation to aspect?



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6.6.2.2 Methodology

Surface collection will be undertaken by a combined field team of qualified archaeologists and RAP representatives and will involve:

1. the flagging of all visible artefacts within each site;
2. the recording of individual artefact locations using a GPS;
3. site photography; and
4. bagging of identified artefacts.

Written notification of sites cleared for ground disturbance works will be provided by the attending qualified archaeologist to MCC on a progressive basis as sites are salvaged (Appendix D). Generally this will be completed at the end of the salvage campaign within a 2-4 week period. Aboriginal Site Impact Recording Forms (ASIRF) are also completed and submitted to the OEH and MCC for all partially and completely impacted and/or salvaged sites within approximately a 6 month period.

All surface collected artefacts will be assigned a Unique Reference Number (URN) for accessioning and data analysis purposes. Analysis of surface artefacts will be conducted off site on a progressive basis.

As part of the surface collection program, previously recorded sites that could not be relocated during the survey undertaken for the EA will be revisited. A sample of Aboriginal objects identified within these sites, sufficient to answer substantive research questions, will be salvaged according to the methodology outlined above.

6.6.3 Archaeological Test and Open Area Excavations

Archaeological excavation has been undertaken at two Aboriginal archaeological sites within the MCCM Project Boundary (AHIMS 20-4-0026 and AHIMS 20-4-0027), and was proposed because of the potential these sites held for providing scientific data on past Aboriginal occupation of the local area.

The primary objectives of these excavations were as follows:

1. to establish the extent and nature of subsurface archaeological materials at these sites; and
2. to recover stone artefact assemblages of a size sufficient for a meaningful analysis of the relationship between assemblage composition and past Aboriginal behaviour at and between these sites.

The potential for future excavation of newly identified sites in the MCCM Project Boundary is contingent on the identification of sites of high scientific significance. In order for an Aboriginal archaeological site to be considered of high scientific significance, it would need to display evidence of good spatial integrity, in situ stratigraphic deposits, and low level disturbance. Alternatively, a site type unique to the wider area would also be considered high scientific significance.

6.6.3.1 Excavation: Research Questions

The following research questions have been used to guide the excavation and post-excavation analysis components of archaeological salvage works at 20-4-0026, and 20-4-0027:

1. What, if any, spatial patterning is evident in the distribution of recovered artefactual material from these sites?
2. How long have Aboriginal people utilised these sites?
3. Do these sites represent 'persistent places' in the sense of sustained/repeated occupation?
4. What activity or combination of activities occurred at these sites?



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5. What lithic raw materials were used on these sites and where did they come from?
6. What knapping techniques/strategies were used at these sites?
7. What types of tools were produced on these sites?
8. What function(s) did these tools serve?
9. Do the chipped stone assemblages recovered from these sites differ from other excavated sites in the region? If so, how?

6.6.4 Archaeological Excavation - Methodology

Excavations at sites of potential high significance will be undertaken in two phases:

1. initial testing using one or more linear transects of hand excavated, regularly-spaced shovel test pits; and
2. open area hand excavation of key areas identified through initial testing.

If the initial program of shovel test pits determines that the site can no longer be considered to be of high scientific significance, then Phase 2 (open area excavation) will not be undertaken. For instance, if shovel test pitting revealed evidence of poor spatial integrity at the site, there would remain little value in a more detailed scientific investigation of the site through open area excavation.

6.6.4.1 Test Excavation

A program of shovel test pitting has been undertaken at 14 archaeological sites (see Table 12 Table). This stage of excavation was conducted in order to identify each site's extent and assist in focussing subsequent salvage excavation efforts on recovery of concentrated sub-surface deposits. The majority of sites subjected to test excavation (shovel test pits) revealed a heavily disturbed, shallow soil profile not warranting more detailed subsurface investigation. Open area excavation was limited to the two artefact scatters with considerable artefact densities, though these too later revealed a limited level of spatial integrity within the soil profile.

Table 12 Sites Subject to Shovel Test Pitting

AHIMS #	Site Name	# STPs	Resulting Comment
20-4-0403	Leard SF AS1	12	Poor spatial integrity and limited subsurface artefacts Open area excavation not recommended
20-4-0078	Leard SF 3; BBS; Red Chief LALC	7	Poor spatial integrity and limited subsurface artefacts Open area excavation not recommended
20-4-0028	MC15	51	Poor spatial integrity and limited subsurface artefacts Open area excavation not recommended
20-4-0077	Leard SF4; BSB; Red Chief LALC	3	Thin soil profile and no subsurface artefacts Open area excavation not recommended
20-4-0500	Leard SF AS3	8	Poor spatial integrity and limited subsurface artefacts Open area excavation not recommended
20-4-0021	Willow Tree Range; Teston; Therribri (MC8)	6	Poor spatial integrity and limited subsurface artefacts Open area excavation not recommended



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AHIMS #	Site Name	# STPs	Resulting Comment
20-4-0488	Teston AS13	11	Poor spatial integrity and limited subsurface artefacts Open area excavation not recommended
20-4-0020	Willow Tree Range; Teston; Therribri (MC7)	11	Poor spatial integrity and no subsurface artefacts Open area excavation not recommended
20-4-0023	Willowtree Range; Teston; Therribri (MC10)	8	Poor spatial integrity and no subsurface artefacts Open area excavation not recommended
20-4-0456	Teston AS1	2	Poor spatial integrity and limited subsurface artefacts Open area excavation not recommended
20-4-0487	Teston AS12	3	Poor spatial integrity and limited subsurface artefacts Open area excavation not recommended
20-4-0024	Velyama; Manila (MC11)	3	Poor spatial integrity and limited subsurface artefacts Open area excavation not recommended
20-4-0499	Velyama AS8	19	Poor spatial integrity and limited subsurface artefacts Open area excavation not recommended
20-4-0026 20-4-0027	Teston South Site Complex	159	Shallow soils with localised subsurface artefact concentrations 51 m ² open area excavation undertaken

Test excavations (where required) will be undertaken as follows:

- A systematic grid of points spaced no more than 20 m apart will be overlaid over the site boundary (as determined from surface expression of artefacts). Areas of grossly modified terrain (i.e. Dams) will be excluded from the sampling universe.
- Shovel test pits 50 cm by 50 cm (0.25 m²) test pits dug by hand (shovel probe) at each gridded point.
- For the initial test excavation, all excavated material is to be sieved through 5 mm aperture screens. Nested 5 mm and 3 mm sieves are to be used for the full salvage excavation as per Section 10.1.5 of the Aboriginal heritage impact assessment (AECOM, 2010).

6.6.4.2 Open Area Excavation Methodology (where required)

The proposed excavation methodology is as follows:

- All excavation will be carried out manually using trowels, shovels and mattocks (where appropriate).
- Open area excavation will proceed in 1 m² units.
- All excavation units (i.e., test pits and open area squares) will be assigned an alpha-numeric identifier.
- Excavation within open areas will proceed in arbitrary 10 cm spits or stratigraphic layers (whichever is thinnest).
- Excavation will cease at sterile units or bedrock in all instances.



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- Photographic and scale-drawn records of exposed soil profiles in open area excavations will be made.
- If specific archaeological features (e.g. hearths) are identified, the entire feature will be excavated and recorded prior to the continuation of excavation. Features will be photographed and scale plans drawn.
- Where encountered, charcoal deemed suitable for radiocarbon dating will be collected using 'best practice' guidelines (e.g., Burke and Smith, 2004: 154).
- If deemed appropriate on geomorphological grounds, sediment samples for OSL dating will be collected using 'best practice' guidelines (e.g., Burke and Smith, 2004: 152).
- All excavated soils will be wet or dry-sieved (dependent on composition) through nested 5 mm and 3 mm sieve.
- Artefacts recovered from sieving will be retained in plastic zip-lock bags and labelled with appropriate provenance data.
- A standard site recording form will be used for each 1 m² excavation unit and will include (as a minimum): site name, date, recorder, square identifier, number of spits, number of buckets and weight of each bucket.
- Upon completion of excavations, the location of all excavation units will be picked up by survey and incorporated into the topographic survey plan for the site.
- All excavation units will be backfilled upon conclusion of excavations at the site. No excavation will be left open unless approved by MCC.

6.6.5 Archaeological Salvage Signoff

Operations will be allowed to commence subject to qualified archaeologist clearance sign off (Appendix D).

6.6.6 Post-Salvage Analysis

Post-salvage analyses for surface collected and excavated sites (including sites collected during monitoring/inspection of the cultural heritage sensitive areas) will at minimum, include:

- The analysis and cataloguing of a sample of recovered Aboriginal objects (e.g. stone artefacts, hearth stones) by a suitably qualified person or persons. Excavated and surface collected stone artefacts will be considered by a qualified archaeologist for detailed technological analysis by a lithic specialist and a sample of collected material analysed.
- The submission, where deemed appropriate by a qualified archaeologist, of a selection of stone artefacts for functional use-wear/residue analysis. No more than 10 artefacts will be submitted for analysis.

Post-excavation analyses will not delay mining (or associated) activities within the boundaries of any salvaged sites.

Training in the undertaking of archaeological excavation and salvage (including archaeological site recording and basic lithic identification and analysis) has been provided throughout the salvage excavation program undertaken to date at the MCCM. Opportunities for additional training will be considered as the salvage and post-salvage analysis program is implemented over the life of the MCCM.



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6.6.7 Archaeological Salvage Program Reporting

A summary of the results of the archaeological salvage program undertaken (including the results of any post-excavation analyses) is to be completed and included in the Annual Review. A copy of the Annual Review (or relevant sections of the Annual Review) will be provided to any RAPs when requested. A detailed report of the results of the archaeological salvage program undertaken (including the results of any post-excavation analyses) is to be completed within one year of completion of the analyses and made available to the RAPs on request.

Consistent with the requirements of the Project Approval (10_0138) a comprehensive review of monitoring results will be included in the Annual Review.

6.7 Management of Grinding Grooves

The management of grinding grooves at the MCCM (including both the known grinding groove sites and any additional grinding groove sites not yet identified [should they occur]) will be guided by the protocols outlined in the following sections.

6.7.1 Located within Areas of Direct Disturbance

In instances where a grinding groove site is located within an area of known surface disturbance activities, and avoidance of the site is not practicable:

- A complete site recording as per the OEH site card and detailed archival recording (consistent with relevant NSW guidelines) is to be undertaken.
- Consultation with RAP's is detailed in section 6.20. Communication will occur with RAP's providing notification of any moderate to higher scientifically significant grinding groove sites. Notification will be provided in writing once adequate detail is available.
- Where the site is of low or low-moderate scientific significance, impacts will be permitted to occur. At a minimum, detailed archival recording of grinding groove sites will be undertaken by a suitably qualified and experienced archaeologist and will include:
 - detailed mapping of the individual grinding grooves and the site as a whole, including reference to any associated landscape features (e.g. drainage line, rise, rocky outcrops);
 - the compilation of a thorough photographic archive of the site and its immediate context; and
 - detailed drawing of individual grinding grooves incorporating measurements of each grooves length, width, depth, and orientation.
- Where the site is of moderate or higher scientific significance, MCC will consider additional potential management measures for the site. This may include consideration of, for example, burial (if located within the extent of an emplacement or stockpile), use-wear and residue analysis and/or further research, or salvage. The ultimate decision or additional management will be dependent on the particulars of the situation (e.g. nature of the site and disturbance required). Any management options would be considered in consultation with a qualified engineer (or relevant expert) and RAPs (i.e. via written correspondence and/or a meeting as per the procedures outlined in Section 4.4).
- Following treatment of the site, an Aboriginal Site Impact Recording Form would be completed and lodged with OEH.



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6.7.2 Located Outside Areas of Direct Disturbance

All grinding groove sites that are located outside of areas of direct disturbance would be fenced as per the protocol outlined in Section 6.3 and subject to the following monitoring process:

- An initial visual inspection of the site to allow site recording as per the OEH site card and sufficient recording to act as a baseline record for subsequent monitoring. The baseline recording will include a thorough photographic archive for future comparison.
- visual inspection of the site will be undertaken during the annual monitoring program (Section 6.4.1).
- Where a grinding groove site is located within 500 m of blasting activities, MCC would engage a suitably qualified expert (e.g. geotechnical engineer) to determine an appropriate blast vibration limit for the site⁵. This would occur on a progressive basis, and at least prior to blasting within 500 m of the site. Should the blast program be determined to have the potential to exceed the blast vibration limits, the process outlined in Section 6.7.1 would be implemented, with management measures selected to reflect the likelihood of damage and the significance of the site.

6.8 Scarred Tree Removal

Although no known scarred trees will be impacted by the MCCM works, an example methodology has been developed based on industry best practice scarred tree removal and relocation procedure, and will be employed to remove and store any scarred trees directly impacted by the MCCM, if any are identified in the future. The identification of trees as 'scarred trees' may include the involvement of an arborist or forestry specialist with relevant experience. The determination of the origin of the tree's scarring will also involve an archaeologist or anthropologist with relevant experience. If considered to be of likely cultural origin, the archaeologist or anthropologist will offer advice on the tree's removal, in consultation with the attending RAPs or appropriate Indigenous knowledge holders. The removal of the tree will follow a four step procedure:

1. pre-removal preparation;
2. removal/relocation;
3. storage; and
4. management/preservation.

Should a possible scarred tree be identified and then later determined to not be of Aboriginal origin by an archaeologist, anthropologist, arborist or forestry specialist in consultation with the RAPs, a technical report would be prepared. This report would be provided to the OEH and made available to the RAPs. A copy would also be forwarded to the AHIMS registrar so that the status of the tree can be appropriately recorded (as necessary).

The example methodology for removal of any scarred trees, should any be identified in future, is outlined in Appendix F. All processes described in Appendix F would be subject to modification based on the arborist's recommendations.

⁵ MCC may use existing advice from a suitably qualified expert for this purpose. Additional advice does not necessarily need to be obtained for each individual site.



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6.9 Management of Quinine Bush (*Alstonia constricta*)

Quinine Bush or Bitterbark (*Alstonia constricta*) is a native shrub/small tree of the family *Apocynaceae*. It is commonly found in the north and central western slopes, north western plains, northern tables and north coast of NSW. The species was recorded in the MCCM Project Boundary within the Teston property.

It occurs in low frequencies as an associated tall shrub species within White Box – Wilga – Belah Woodland on the heavier alluvial soils to the west of Leard State Forest.

The species could potentially occur in other occurrences of White Box – Wilga – Belah Woodland within the MCCM Project Boundary and adjoining offset properties. It could also occur in the ironbark communities on the offset properties in low densities.

Alstonia constricta is usually 4 – 6 m high, and can occur as scattered individuals or in groves. The species is capable of producing adventitious shoots or 'suckers' from the root system and can often form thickets. It is capable of growing into a large tree to 15 m high with girth to 0.5 m diameter. The bark is grey or light brown, fissured, thick and corky. It has dark or light green leaves that can be covered in short, fine hairs. The flowers are star-shaped with 5 petals and are 10 – 15 mm diameter.

It typically flowers anywhere from August – December. The fruits are narrow, green, pencil shaped pods that turn brown and split in half when dry, often curling at the ends.

The milky sap, bark and roots are known to contain several alkaloids which are used for medicinal purposes. The sap of the plant is known to be a deadly poison with the latex used to cure infectious sores and skin rashes. The taste of the bark resembles quinine, a compound used in the treatment of malaria, however it has instead been shown to contain reserpine which is useful in the treatment of high blood pressure. Local knowledge supplied by RAPs identified that the leaves can also be boiled and the fluid drunk to cure stomach aches.

There is the potential for impact of this species throughout the lifetime operation of the mine. In order to manage and mitigate these impacts for this species, the following ethnobotanical management procedures are to be implemented:

1. Mapping of the extant Quinine Bushes are to be undertaken to determine their location within the MCCM mining footprint. Each tree is to be recorded using GPS and this information included as part of vegetation and cultural mapping for the MCCM.
2. A programme of plant and seed collection will be undertaken where appropriate. A program of seed propagation is to be undertaken to replace those plants impacted through mining activities.

The above described program has commenced, and will continue. Propagation of the seed species is ongoing.

6.10 Aboriginal Keeping Place

Consultation with RAPs to identify a culturally appropriate keeping place for all salvaged material from the MCCM has commenced. Once the consultation process is completed, a care agreement as required under the *NSW National Park and Wildlife Act 1974* is to be completed that sets out the obligations of the caretaker for the long term safe keeping of transferred Aboriginal objects.

(<http://www.environment.nsw.gov.au/licences/CareAgreements.htm>).



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Until the keeping place and care agreement are settled, all Aboriginal heritage material⁶ recovered from collections and salvage excavations will be stored in an Interim Keeping Place at the Whitehaven Offices in Gunnedah, NSW that meets the requirements of a secure storage area.

The Interim Keeping Place (and final Keeping Place) will also serve as a storage facility for plant specimens and cultural knowledge acquired as part of the Quinine Bush management program (Section 6.9).

Consultation regarding the keeping place is ongoing and will be discussed with all RAPs at the six-monthly meeting (Section 4.4).

6.11 Delays

No Party will be liable for any delay or failure to perform on time its obligations under this AACHMP if such delay is due to circumstances beyond the control of that Party.

6.12 Independent Review & AACHMP Breach Investigation

Where a person has good reason to believe that MCC is in breach of this AACHMP, then firstly they must document fully the basis of their claim and submit it to MCC for consideration.

Upon receiving a documented claim that MCC is in breach of the AACHMP, the following procedure is to be followed:

1. The MCC Environment Superintendent is to investigate the breach with respect to the AACHMP. This may include discussions with the complainant including via telephone or face-to-face meetings as suitable.
2. The MCC Environment Superintendent reserves the right to engage a heritage technical advisor to review the alleged breach.

Where an activity has been determined by MCC to depart from the AACHMP requirements, the following will occur:

1. Subject to the outcomes of the above, the MCC Environment Superintendent will (in consultation with RAPs) seek to update the AACHMP as/if required.
2. Notification of the breach is to be provided by email to Secretary of DP&E, the OEHL, and all RAPs as soon as practicable.
3. A report detailing the breach will be prepared by MCC and forwarded by email to the Secretary of DP&E and RAPs within twenty-eight days, or as otherwise directed by the Secretary of the DP&E following notification.
4. If the breach is considered to be an incident under the Project Approval, then MCC will prepare a report of the incident and provide a copy to the Secretary of the DP&E, the OEHL and all RAPs within seven days.
5. Within reason, further actions may be required dependent on the nature of any breach and comment received from DP&E, the OEHL, and RAPs.

⁶ Although none are currently known, if identified, any larger objects (scarred trees etc.) will be maintained in upgraded farm sheds suitable for storage and will meet the requirements of an interim Keeping Place in terms of security and protection from the elements and pests.



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If a person has good reason to believe that MCC is not implementing the heritage conditions in Schedule 3 of the Project Approval Conditions satisfactorily, then he/she may ask the Secretary in writing for an independent review of the matter (Schedule 4, Item 7). The person is required to fully document the claim and indicate how a condition is not being implemented according to the Project Approval.

If the Secretary is satisfied that an independent review is warranted, then within 2 months of the Secretary's decision, the Proponent shall:

- a) Commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Secretary, to:
 - consult with the person and/or relevant agencies;
 - investigate the person's complaints/claims;
 - review the environmental performance of the Proponent;
 - determine whether the Proponent's performance is satisfactory or not; and if necessary
 - recommend measures to improve the Proponent's performance.
- b) Give the Secretary and complainant a copy of the independent review.

All incidences of potential breaches are to be documented thoroughly with a register maintained by the Environment Superintendent at MCC.

Complaints handling is described in further detail in Section 6.23.

6.13 Aboriginal Heritage Induction & Cultural Awareness Training

As part of all MCCM inductions, an Aboriginal cultural heritage component is included. This outlines current protocols and responsibilities with respect to the management of Aboriginal cultural heritage for the MCCM. It also provides an overview of the site types present and procedures for reporting the identification of Aboriginal archaeological sites.

An Aboriginal cultural awareness training package has been developed for use throughout the operational life of the MCCM.

Aboriginal cultural awareness training is mandatory for all staff whose roles may reasonably bring them into contact with Aboriginal sites and/or involve consultation with local Aboriginal community members. Training is also offered on a voluntary basis to all other mine staff and contractors.

6.14 Procedure on the Discovery of Aboriginal Archaeological Objects

In the event that previously unidentified Aboriginal objects⁷ are discovered throughout the life of the MCCM, the following procedure (in consideration of the *Guide to Investigating, assessing and reporting on Aboriginal cultural heritage in NSW* [OEH, 2011]) is to be adopted:

1. All works must cease immediately in the area to prevent any further impacts to the object(s).
2. Notify the MCC Environment Superintendent immediately. The Environment, Heritage Community Manager will assess whether works can continue in the area with safeguards in place.

⁷ Other than new evidence identified during heritage mitigation works in a location where evidence has previously been recorded (for example, new stone artefacts identified during surface collection or excavation of a known site).



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3. A qualified archaeologist will (in consultation with attending RAPs, when the object is determined to be of Aboriginal origin⁸) determine the nature, extent and scientific significance of the object(s).
4. The qualified archaeologist will determine the extent of the newly identified site and the site may be temporarily fenced off with an appropriate buffer to avoid further disturbance. Work will be able to resume in the vicinity of the newly identified site once the site has been demarcated and where there is no risk of further disturbance to the site, or once the appropriate management is undertaken.
5. If the site is determined to be of Aboriginal origin⁶ by the qualified archaeologist, proposed management actions will be discussed with attending RAPs. Following these discussions, management actions will be implemented (including salvage and/or other measures) in accordance with the procedures outlined in this AACHMP for the type of site.
6. If the site is determined to be of Aboriginal origin⁶ but is located in an area already subject to archaeological salvage signoff, the qualified archaeologist will propose the management actions for the newly identified site in accordance with the procedures outlined in this AACHMP. If relevant to the type of site and its location, MCC may utilise a salvage team that is already onsite to complete the salvage works depending on the priority of the work area in relation to the construction and operational program.
7. In the event of a newly identified site type (i.e. a site type not already considered in this AACHMP), the qualified archaeologist will propose management actions (suitable to the nature and scientific significance of the site) for discussion with attending RAPs. Following these discussions, management actions will be implemented and documented accordingly. Correspondence will be provided to all RAPs (including those not attending in the field) to advise of the new site type and to document the undertaken and/or proposed management measures.
8. All salvaged material will be given a URN for accessioning and data analysis purposes (Section 6.6.7). All salvaged artefacts will then be deposited in the Keeping Place.
9. An AHIMS site card will be completed and submitted to OEH in compliance with s.89A of the NPW Act 1974. A copy will also be provided to those RAPs who have indicated in writing that they would like a copy.
10. The MCCM Aboriginal Site Database is to be updated with the relevant information.
11. Revision of the AACHMP would occur in accordance with the protocols outlined in Section 6.20. This revision would incorporate any newly identified sites and their management, but it is not required to occur prior to the implementation of the agreed management approach.

6.15 Procedure on the Discovery of Human Remains

In the event that human remains (skeletal material) are discovered, the following procedure is to be followed:

1. When suspected human remains are exposed, all work is to cease immediately in the near vicinity of the find location.
2. Notify the MCC Environment Superintendent immediately.
3. The MCC Environment Superintendent is to notify the Police immediately.
4. The MCC Environment Superintendent is to contact OEH's Environment line on 131 555 to identify that possible skeletal remains have been discovered and that the police have been notified. OEH will provide details on the current processes involved in best dealing with archaeological skeletal remains (both Aboriginal & historic).

⁸ As defined under the NSW *National Parks and Wildlife Act, 1974*.



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5. Under the instructions of the Police, an area of 50 m radius is to be cordoned off by temporary fencing around the exposed suspected human remains site - work can continue outside of this area as long as there is no risk of interference to the human remains or the assessment of human remains.
6. If the remains are determined to be Aboriginal remains, then under the advice of OEHL, consult with the RAPs.
7. Do not recommence work at the location until all legal requirements and the reasonable requirements of OEHL and the RAPs have been adequately addressed.

6.16 Ground Impacts from Weed and Feral Animal Management

Measures to control weeds and feral animals within the MCCM Project Boundary will avoid ground impacts to all Aboriginal heritage sites. If impacts are required within cultural heritage sensitive areas, the monitoring/inspections described in Section 6.4.2 will be undertaken as part of the weed or feral animal control works.

6.17 Exemptions for Emergency Vegetation Management

Should an emergency situation arise that requires vegetation clearance (e.g. fire-fighting, hazardous materials spill) in the vicinity of protected Aboriginal heritage sites, vegetation clearance will be undertaken with minimum possible disturbance to the topsoil. Activities relating to maintenance, construction or operational activities do not comprise emergency situations.

6.18 Reporting under the AACHMP

All Aboriginal heritage management and mitigation works carried out under the AACHMP for the MCCM will be documented to a standard comparable to that required by the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (DECCW, 2010). Summaries of technical archaeological salvage reports will also be prepared. Printed and/or digital copies of all archaeological salvage reports (plain English and technical) are to be made available to RAPs upon request and copies will be provided to the OEHL when available.

6.19 Aboriginal Community Access

Aboriginal community members may, throughout the life of the MCCM, wish to access sites and/or areas within the MCCM Project Boundary and/or the Biodiversity Offset Strategy areas for cultural purposes (e.g., education, ceremony). MCC is committed to facilitating reasonable access consistent with personnel workplace health and safety. Aboriginal community members wishing to access the MCCM Project Boundary should contact the MCC Environment Superintendent in writing at PO Box 56, Boggabri NSW 2382. Access, in all instances, will be subject to relevant operational and safety considerations and cannot be guaranteed. There will be no unauthorised access to the Site. Access to some sites and areas will be restricted during periods of mining.

6.20 Aboriginal Archaeological and Cultural Heritage Management Plan Review

A review of the AACHMP may be conducted within three months of:

- submission of the Annual Review (Schedule 5, Conditions 4 and 5 of PA 10_0138);
- the filing of an incident report (Schedule 5, Condition 8 of PA 10_0138);
- the undertaking of an Independent Environmental Audit (Schedule 5, Condition 10 of PA 10_0138); or
- any modification to PA 10_0138.



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or at any time when, in the view of MCC, it is necessary or convenient to review the AACHMP for the effective administration of Aboriginal cultural heritage matters connected with MCCM.

If the AACHMP is to be revised as a result of a review (and where the changes proposed are material in nature), copies of the document are to be sent to the RAPs for comment for a 28 day review period prior to finalisation.

Subject to agreement by DP&E, MCC may submit a revised AACHMP for approval without undertaking consultation, in instances where the changes proposed to the AACHMP are not material in nature.

Following review and revision of the AACHMP, the resulting revised AACHMP will be submitted to the DP&E for approval by the Secretary.

6.21 Community Consultative Committee

The MCCCC has been established and includes one member from the Aboriginal RAP groups. The nominated RAP will be responsible for raising concerns identified by the RAPs for general discussions at these meetings.

Minutes of these meetings will also be made available on the MCC website.

6.22 Cultural Heritage Training for Community

In addressing Commitment 20 from the EA SoC, MCC has run training packages to interested RAPs in archaeological site recording and basic lithic identification and analysis.

In addition to the above workshops, training in the undertaking of archaeological excavation and salvage has been provided throughout the salvage excavation program (Section 6.6.7).

As per Section 6.6.7, opportunities for additional training will be considered over the life of the MCCM.

6.23 Complaints Handling

Any complaint received relating to any heritage issues will be managed in accordance with the Maules Creek Coal Complaint Handling and Response processes as outlined in the MCC Environmental Management Strategy.

As a minimum, records of the complaint will include:

- date and time the complaint was logged;
- complainant contact information;
- complaint details;
- action taken, proposed to be undertake regarding the complaint, or if no action was taken, the reason why; and
- any follow-up contact with the complainant.

6.24 Incident Reporting

MCC will notify, at the earliest opportunity, the Secretary and the OEH of any incident that has caused, or threatens to cause, material harm to the environment.

For any other incident associated with the MCCM, MCC shall notify the Secretary and the OEH as soon as practicable after MCC becomes aware of the incident. Within 7 days of the date of becoming aware of the incident, MCC shall provide the Secretary and the OEH with a detailed report on the incident, and such further reports as may be requested.



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7.0 IMPLEMENTATION

Certain management areas described above have specific tasks, responsibilities and timeframes. The responsibility and timing of the tasks are detailed in Table 13. These timings are indicative only and may change subject to the receipt of the post approval documentation being prepared.

Table 13 Task Implementation

Task	Relevant AACHMP Section	Responsibility	Timing
Implementation of this AACHMP	All	MCCM General Manager & Environment Superintendent	The General Manager of the MCCM will assign reasonable resources at the MCCM to meet the objectives and timeframes specified within this management plan.
Monitoring of Cultural Heritage Sensitive Areas	6.4	MCCM Environment Superintendent	During surface disturbance works.
Final Surface Collection of Impacted Aboriginal Sites	6.6.2	MCCM Environment Superintendent	Prior to proposed impacts.
Subsurface Salvage Program – MCCM	6.6	MCCM Environment Superintendent	Prior to proposed impacts.
Scarred Tree Removal	6.7	MCCM Environment Superintendent	Prior to proposed impacts.
Keeping Place & Development of Keeping Place Management Team	6.10	MCCM Environment Superintendent & Aboriginal Community Relations Officer	Ongoing consultation with RAPs.
Management of Quinine Bush	6.9	MCCM Environment Superintendent	Following proposed impacts.
Aboriginal Cultural Heritage Awareness Induction	6.13	Induction Company/MCCM Environment Superintendent	Induction and Training package has been completed.
New Site Recording & Reporting	6.14	MCCM Environment Superintendent	Working in consultation with qualified archaeologists. Notification of new sites to OEH as soon as practical on completion of fieldwork.
Human Remains Notification	6.15	All personnel	Notification immediately on discovery.
Cultural Heritage Training for Community	6.22	MCCM Environment Superintendent	Completed

In addition to the specific responsibilities for heritage management outlined in Table 13, general roles and responsibilities for the implementation of the AACHMP are presented in Table 14.



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Table 14 Roles and Responsibilities

Role	Responsibilities
General Manager – Maules Creek	<p>Provide required resources and support to implement these procedures.</p> <p>Undertake training in relevant management plans and procedures as required.</p> <p>Specific Heritage responsibilities outlined in Table 13.</p>
Environment Superintendent	<p>Authorise the AACHMP and future amendments.</p> <p>Ensure induction and training relevant to the AACHMP is implemented.</p> <p>Act as the interface for heritage matters between government authorities, private industry, contractors, community groups and the wider community.</p> <p>Ensuring that the Interim Keeping Place is secure and provides protection from the elements and pests.</p> <p>Notify the relevant regulatory agencies of any incidents or non-compliances.</p> <p>Specific heritage responsibilities outlined in Table 13.</p>
Environment Officer	<p>Inform the relevant managers of unexpected or serious heritage impact issues.</p> <p>Assess the implementation of this AACHMP.</p> <p>Ensure training relevant to the AACHMP is implemented.</p> <p>Maintain a high level of understanding of the AACHMP.</p> <p>Ensure the AACHMP is implemented in daily operations of the site.</p> <p>Review this AACHMP if any significant changes to mine plans or operations occur.</p> <p>Support the Environment Superintendent to act as the interface for heritage matters between government authorities, private industry, contractors, community groups and the wider community (where appropriate).</p> <p>Support the Environment Superintendent to gather the required information and ensure reportable incidents are reported to relevant authorities.</p> <p>Maintain an environmental monitoring program to gauge the effects of the mining operations on air quality.</p> <p>Conduct required monitoring to the standard and frequency outlined in this AACHMP, and as per requirements of the Project Approval.</p> <p>Prepare as part of the annual environmental report (Annual Review), a report detailing the results of key performance indicators developed for each monitoring location identified in this AACHMP.</p> <p>Respond to any unplanned events that may potentially result in, or cause, negative heritage impacts</p> <p>Ensure inspections are undertaken in accordance with the AACHMP.</p> <p>Check that persons conducting the inspection are appropriately trained, understand their obligations and the specific requirements of this AACHMP.</p> <p>Review and assess monitoring results and inspection checklists.</p> <p>Promptly notify the Environment Superintendent of any identified environmental issue.</p> <p>Carry out all required notifications. Specific Heritage Management responsibilities outlined in Table 13.</p>



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Role	Responsibilities
Manager Mining/Manager CHPP	<p>Maintain accountability for the overall environmental performance, including the procedures and outcomes of this AACHMP.</p> <p>Respond to any unplanned events that may potentially result in negative environmental impacts.</p> <p>Ensure reportable incidents are investigated and reported to the Environmental Department. Ensure inspections are undertaken in accordance with the AACHMP.</p> <p>Check that persons conducting the inspection are appropriately trained and understand their obligations and the specific requirements of this AACHMP.</p> <p>Specific Heritage Management responsibilities outlined in Table 13.</p>
All personnel	<p>Adhere to the requirements of this AACHMP.</p> <p>Report any events that may potentially result in negative impacts to heritage immediately to their Supervisor.</p> <p>Identification and notification of previously unidentified Aboriginal archaeological objects.</p>



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8.0 SAFETY

Access to the MCCM will be via approved Site or Visitors induction only. There will be no unauthorised access to the site during the construction or mining operations phases.

All persons attending the MCCM must abide by all site safety policies and procedures whilst on site.

All work activities conducted at the MCCM must be assessed and documented to identify potential hazards and any controls implemented. A Risk Assessment (RA) and Safe Work Procedure (SWP) will be developed for the tasks to be conducted. The RA and SWP will be reviewed and approved by MCC prior to the tasks being conducted.



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9.0 BIBLIOGRAPHY

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Appendix A Aboriginal Archaeological Sites Identified within the MCCM Project Boundary

Management Mitigation Measure	Impact Area	AHIMS #	Site Name	Site Type	Easting GDA94 Zone 56	Northing GDA94 Zone 56	Area m ²	Scientific Significance	Salvaged?
No impact - Fenced for life of the mine with annual monitoring of site condition	No impact	20-4-0395	Back Creek AS1	AS	223621	6618342	528	Moderate	N/A
	No impact	20-4-0396	Back Creek AS2	AS	223882	6618305	210	Moderate	N/A
	No impact	20-4-0397	Back Creek AS3	AS	224360	6618368	3032	High	N/A
	No impact	20-4-0398	Back Creek AS4	AS	224584	6618315	81	Low	N/A
	No impact	20-4-0399	Back Creek AS5	AS	225871	6618537	63	Low	N/A
	No impact	20-4-0400	Back Creek AS6	AS	226184	6618503	5951	High	N/A
	No impact	20-4-0401	Back Creek IA1	IA	225135	6618633	1	Low	N/A
	No impact	20-4-0402	Back Creek IA2	IA	225211	6618669	1	Low	N/A
	No impact	20-4-0022	Willow Tree Range; Teston; Therribri (MC9)	IA	222989	6613482	9	Low	N/A
	No impact	16-4-0026	Teston IA9	IA	223288	6614031	1	Low	N/A
	No impact	16-4-0024	Teston IA7	IA	223783	6617070	77	Low	N/A
	No impact	20-4-0524	Teston IA15	IA	222679	6613687	312	Low	N/A
	No impact	20-4-0524	Teston GG3	GG	223050	6612309	20	Moderate	N/A
	No impact	16-4-0023	Teston IA6	IA	223710	6617113	77	Low	N/A
Full impact - surface collection of artefacts	OCP	20-4-0404	Leard SF AS2	AS	226658	6615384	132	Low	No
	OCP	20-4-0405	Leard SF AS4	AS	225541	6615348	4023	Low	Yes
	OCP	20-4-0525	Leard SF AS5	AS	226030	6615875	400	Low	Yes
	OCP	20-4-0715	Leard SF IA8	IA	226057	6614731	312	Low	Yes
	OCP	20-4-0718	Teston AS20	AS	224016	6617996	20	Low	Yes
	OCP	20-4-0717	Teston IA22	IA	223902	6617261	312	Low	Yes
	OCP	20-4-0720	Teston IA23	IA	223902	6617261	312	Low	Yes



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	OCP	20-4-0721	Teston IA24	IA	223631	223631	312	Low	Yes
	OCP	20-4-0719	Teston IA25	IA	223789	223789	312	Low	Yes
	OCP	20-4-0513	Leard SF IA3	IA	225266	6614448	312	Low	Yes
	OCP	20-4-0514	Leard SF IA4	IA	226096	6615801	312	Low	Yes
Full impact - surface collection of artefacts and test excavation	OCP	20-4-0500	Leard SF AS3	AS	224970	6615118	1354	Low	Yes
	OCP	20-4-0403	Leard SF AS1 ¹	AS	226284	6614316	59824	Low	No
	OCP	20-4-0028	MC15	AS	224752	6615016	104862	Moderate	Yes
Full impact - surface collection of artefacts	Rail	20-4-0523	Teston AS19	AS	223922	6615505	844	Low	Yes
	Rail	20-4-0483	Teston AS8	AS	222094	6612555	890	Low	Yes
	Rail	20-4-0484	Teston AS9	AS	222058	6612414	4384	Low	Yes
	Rail	20-4-0491	Teston IA10	IA	223767	6615000	312	Low	Yes
	Rail	20-4-0492	Teston IA11	IA	222021	6612507	312	Low	Yes
	Rail	20-4-0493	Teston IA12	IA	222500	6613818	312	Low	Yes
	Rail	20-4-0495	Teston IA14	IA	223162	6614567	312	Low	Yes
	Rail	20-4-0515	Teston IA16	IA	223541	6614959	312	Low	Yes
	Rail	20-4-0516	Teston IA17	IA	223642	6614961	312	Low	Yes
	Rail	20-4-0517	Teston IA18	IA	223686	6615066	312	Low	Yes
	Rail	20-4-0518	Teston IA19	IA	223740	6615265	312	Low	Yes
	Rail	20-4-0485	Teston AS10	AS	222102	6612642	12352	Moderate	Yes
	Rail	20-4-0486	Teston AS11	AS	223710	6614892	1078	Low	Yes
	Rail	20-4-0489	Teston AS14	AS	223433	6614721	867	Low	Yes
	Rail	20-4-0490	Teston AS15	AS	223291	6614678	3229	Low	Yes
	Rail	20-4-0521	Teston AS17	AS	222557	6613737	1169	Low	Yes
	Rail	20-4-0522	Teston AS18	AS	223723	6615187	651	Low	Yes
	Rail	20-4-0475	Teston South AS1	AS	220776	6611357	1132	Low	Yes
Rail	20-4-0496	Teston South AS2	AS	220875	6611469	821	Low	Yes	



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	Rail	20-4-0498	Teston South IA2	IA	220720	6611291	312	Low	Yes
	Rail	20-4-0494	Teston IA13	IA	223218	6614643	312	Low	Yes
Full impact - surface collection of artefacts and test excavation	Rail	20-4-0487	Teston AS12	AS	223798	6615062	24805	Low	Yes
	Rail	20-4-0023	Willowtree Range, Teston, Therribri (MC10)	AS	222819	6614537	207400	Moderate	Yes
Partial impact - surface collection of artefacts and test excavation with fencing of remnant	Rail	20-4-0499	Velyama AS8	AS	220209	6609870	130710	Moderate	Partial
	Rail	20-4-0024	Velyama; Manila (MC11)	AS	219001	6609239	11032	Low	Partial
	Rail	20-4-0021	Willow Tree Range; Teston; Therribri (MC8)	AS	222320	6613198	12137	Moderate	Partial
	Rail	20-4-0020	Willow Tree Range; Teston; Therribri; (MC7)	AS	222508	6613511	51996	Moderate	Partial
Partial impact - surface collection, test excavation and open area salvage excavation with fencing of remnant	Rail	20-4-0026	Teston South Site Complex	AS	221292	6611969	202385	High	Partial
Full impact - surface collection of artefacts	MCCM	16-4-0018	Teston IA1	AS	223836	6615484	954	Low	Yes
	MCCM	20-4-0019	Willow Tree Range (MC4)	AS	223550	6614793	8280	Moderate	Yes
	MCCM	20-4-0033	Willow Tree Range; Teston (MC2)	AS	223443	6614561	4278	Low	Yes
	MCCM	20-4-0034	Willow Tree Range; Teston (MC3)	AS	223598	6614673	4027	Low	Yes
Full impact - surface collection of artefacts and test excavation	MCCM	20-4-0078	Leard SF 3; BBS; Red Chief LALC;	AS	224811	6615266	3705	Low	Yes
	MCCM	20-4-0456	Teston AS1	AS	224005	6615953	7958	Low	Yes
	MCCM	20-4-0457	Teston AS2	AS	224058	6616636	3215	Low	Yes
Partial impact - surface collection of artefacts and test excavation with fencing of remnant	MCCM	16-4-0017	Teston AS7	AS	223363	6614378	17082	Low	Partial
Full impact - surface collection of artefacts	OA	20-4-0501	Teston AS16	AS	224922	6616395	8542	Moderate	Yes
	OA	20-4-0406	Leard SF IA2	IA	225023	6615846	77	Low	Yes
	OA	16-4-0019	Teston IA2	IA	224781	6616695	77	Low	Yes
	OA	16-4-0020	Teston IA3	IA	224846	6616638	77	Low	Yes



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	OA	20-4-0520	Teston IA20	IA	224838	6615762	312	Low	Yes
	OA	20-4-0519	Teston IA21	IA	224232	6616899	312	Low	Yes
	OA	20-4-0016	Willow Tree Range (MC5)	AS	224147	6616149	18678	Moderate	Yes
Full impact - surface collection of artefacts and test excavation	OA	20-4-0488	Teston AS13	AS	224665	6615325	58244	Moderate	Yes
	OA	20-4-0077	Leard SF4; BSB; Red Chief LALC	AS	224961	6616244	1242	Low	Yes
Partial impact - surface collection of artefacts with fencing of remnant	OA	20-4-0408	Teston AS3	AS	224455	6616988	3334	Low	Partial
Full impact – subject to detailed archival recording	OA	20-4-0707	Teston GG4	GG	223910	6613828	20	Low	No

Impact Area (MCCM = MCCM Disturbance Boundary, which includes associated infrastructure; OCP = Open Cut Pit; Rail = Rail Spur, which includes the mine access road, rail loop and spur; OA = Overburden Area – Northern Overburden Emplacement Area).

Site Type (IA = Isolated Artefact; AS = Artefact Scatter; GG = Grinding Groove).

¹ Site has been subject to test excavations.



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**WHC_PLN_MC_ ABORIGINAL ARCHAEOLOGY AND CULTURAL HERITAGE
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Appendix B Registered Aboriginal Parties



MAULES CREEK

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WHC_PLN_MC_ABORIGINAL ARCHAEOLOGY AND CULTURAL HERITAGE MANAGEMENT PLAN

Ref	Group	Primary Contact
1	Cacatua Cultural Consultants (CCC)	George Sampson
2	Min Min Aboriginal Corporation (MMAC)	Gwen Griffen
3	Red Chief Local Aboriginal Land Council (RCLALC)	Chief Executive Officer
4	Gunida Gunyah Aboriginal Corporation (GGAC)	Jane Bender
5	Bigundi Biame Traditional People (BBTP)	Wayne Griffiths
6	Ellilewis	Patrica Jean Hands
7	Aboriginal Native Title Consultants (ANTC)	John Matthews
8	Giwiirr Consultants (GC)	Rodney Matthews
9	Hunter Valley Culture Consultants (HVCC)	Christine Archbold
10	Mingga Consultants (MC)	Clifford Matthews (Mick)
11	Upper Hunter Heritage and Culture Consultants (UHHCC)	Darrell Matthews
12	Bullen Consultants (BBC)	Lloyd Matthews
13	Narrabri Local Aboriginal Land Council (NLALC)	Edward Trindall
14	Gomeri Narrabri Aboriginal Corporation (GNAC)	Craig Trindall - Narrabri National Park Cultural officer
15	Wee Waa LALC (WWLALC)	Robyn Keeffe
16	Aboriginal Natural Resource Officer (ANRO)	Jason Wilson
17	Carrawonga Consultants (CC)	Justin Matthews
18	Mooki River Consultants (MRC)	Wayne Matthews
19	Wiawa Aboriginal Corporation (WAC)	Brian Warren
20	Gomeri Cultural Consultants (GCC)	David Horton
21	Traditional Local Site Trackers (TLST)	Troy Silver
22	-	Cindy Foley
23	Wunga-Li Traditional Owners (WLTO)	Veronica Talbot
24	AT Gomilaroi Cultural Consultancy	Aaron Talbot
25	ACA ROOFING (ACA)	Sonny Fitzroy
26	Gomeri - Namoi	Stephen Talbot
27	White Cockatoo	Michael Long
28	-	Brian Draper
29	-	Wendy Talbott
30	-	Leonard Talbott
31	Gomeri People Native Title Claim (NC11/6) Registered Native Title Applicant	Ross Mackay Strategic Project Director - NTSCORP
32	-	Ronald Long
33	-	Loretta (Long) Uren
34	-	Ian Long
35	-	Yvonne Rodgers
36	-	Natasha Rodgers
37	-	Robert Miller
38	-	Natasha Talbott
39	-	Tyan Silver



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Ref	Group	Primary Contact
40	-	Sky-Lee Silver
41	Kawul Cultural Services	Vicky Slater
42	Aboriginal T/O Surveys	Gloria Foley
43	-	Dean Foley
44	-	James Foley
45	-	Leonard Draper
46	-	Leanne Foley
47	-	Reg Talbott
48	-	Gloria Maltby
49	-	Lesbra Shumack
50	-	Rita Long
51	-	Kerry Fernando
52	Gomeroi Murri Ganuurr Yuuray Wadi Palinka	Greg Griffiths
53	-	Marjorie Talbott
54	-	Gary Griffiths
55	-	Samuel Cameron
56	HECMO Consultants	Mitchum Neave
57	-	Hazel Collins
58	-	Kathy King
59	-	Linda Whitten
60	-	Jason Whitten
61	-	Anthony Bennett
62	-	Allan Talbott
63	-	Scott Talbott
64	Deslee Talbott Consulting	Deslee Matthews
65	-	Toni Comber
66	Wunda Cultural Consultants	Travis Matthews
67	Bawurra	Kevin Sampson
68	-	Clifford Johnson
69	Muswellbrook Cultural Consultants	Brian Horton
70	-	Veronica Long
71	Curindi Consultants	Rona Slater
72	Huckda Dreamin Heritage Group	Richard Slater
73	T&G Culture Consultants	Tony Griffiths
74	-	Shannon Draper
75	AGA Services	Adam Sampson
76	L.J. Culture Management	Les Field
77	-	Amanda Heard
78	-	Cyril Sampson
79	ENT Cultural and Heritage	Esther Tyre
80	Woonaruah Cultural Heritage	Gordon Griffiths
81	Waabi Gabinya Cultural Consultancy	Elizabeth Howard



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<u>Ref</u>	<u>Group</u>	<u>Primary Contact</u>
82	Cheryl Moodie Consultants	Cheryl Moodie
83	-	Rodger Noel Matthews
84	-	Joan Suey
85	-	Shirley Talbott
86	-	Derrek Talbott
87	Breeza Plains Culture Heritage Consultant	Terry Matthews
88	-	Neville Sampson
89	-	Melissa Hooper
90	-	Aleena Eather
91	-	Paul Moodie
92	-	Norm Long
93	Myland Cultural and Heritage Group	Wayne Schillings
94	Galamaay	Karen Matthews
95	DRM	Helen Faulkner
96	-	Robyn Wizgier
97	-	David Maltby
98	-	Antwinette Squires
99	-	Melissa Corkery
100	Smith Dhagaans Cultural Group	Tim Smith
101	-	Adam Budden
102	I&E Aboriginal Culture and Heritage	Ivy Jaeger
103	Marie- Ellen Griffiths Cultural Management	Marie Ellen Griffiths
104	Wurrumay Consultant	Kerrie Slater
105	Gomeroi indigenous mining company	Ray Welsh
106	Gomeroi indigenous mining company	Marvonja Welsh
107	-	Patricia Hampton
108	Jumbumma Traffic Management Group Pty Ltd	Norman Archibald
109	Yinarr Cultural Services	Kathie Kinchela
110	-	Dorothy Tighe
111	Tribes United Aboriginal Corporation	Richard Green
112	-	Pam Silver
113	-	Clinton Lamb
114	-	Douglas McGrady
115	-	Wesley Binge
116	-	Kye McKenzie
117	-	Josie Conlan
118	-	Lillian Gillon
119	-	Joshua Silver
120	-	Kevin Leo Sharpley
121	-	Josh Silver
122	-	Corey Lamb
123	-	Nathan Sellers



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<u>Ref</u>	<u>Group</u>	<u>Primary Contact</u>
124	-	Gavin Close
125	-	Ruby Copeland
126	-	Emily Roberts
127	-	Gordon Copeland
128	-	Ruth Sampson
129	-	Robert King
130	-	Alison Sampson
131	-	Angus Binge
132	-	Hollie Dorrington
133	-	Leslie John Woodbridge
134	-	Leslie Bracken
135	-	Daniel Smith
136	-	Aaron Walton
137	-	Fiona Draper
138	-	Chantae Griffiths
139	-	Grant Trindall
140	-	Callum Trindall
141	-	Peter Swan
142	-	Paul McGrady
143	-	Leo Walker
144	-	Ian Jerrard
145	-	Jimmy Thomas
146	-	Gary Suey
147	-	Delma Jones
148	-	Melissa Conlan
149	-	David MaGuire
150	-	Terrance Jones
151	-	Carla Suey
152	-	Joshua Suey
153	-	Jason Suey
154	-	Joe Conlan
155	-	Louise Conlan
156	-	Thorn Conlan
157	-	Rebecca Beyzade
158	-	Jane Conlan
159	-	Heath Conlan
160	-	Anthony James Conlan
161	-	Sarah Jones
162	-	Wayne McDonald
163	-	Ronald Suey
164	-	Linda Suey
165	-	John Suey



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<u>Ref</u>	<u>Group</u>	<u>Primary Contact</u>
166	-	Wayne Conlan
167	-	Elizabeth Humble
168	-	Sam Connolly
169	-	Sandy Aldridge
170	-	Vickie Wortley
171	-	Lorna Lamb
172	-	June Field
173	-	David Dorrington
174	-	Dalton Dorrington
175	-	Benny Murray
176	-	Betty Condran
177	-	Elaine Binge
178	-	James Thomas Jnr
179	-	Jeanette Crozier
180	-	Wendy Slade
181	-	Michael Trindall
182	-	Shaun Dixon
183	-	Carol Walsh



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**WHC_PLN_MC_ ABORIGINAL ARCHAEOLOGY AND CULTURAL HERITAGE
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Appendix C Communication Protocol

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WHC_FRM_MC_RAP CONTACT DETAILS			

WHITEHAVEN COAL

MAULES CREEK - COMMUNICATION PROTOCOL (RAPs)

Approval	Name	Position	Signed	Date
Document Originator:	Kelly Browning	Work Health & Safety Officer		
Document Owner:	Scott Mitchell	Environment Superintendent		
Authorised by:	Peter Wilkinson	General Manager – Maules Creek Coal		

	WHITEHAVEN GROUP	Document Owner:	OH&S Manager
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WHC_PRO_MC_COMMUNICATION PROTOCOL (RAPs)			

PURPOSE

To provide effective communication protocols for ongoing consultation between Whitehaven Coal and Registered Aboriginal Parties (RAPs) for the Maules Creek Coal Project to ensure all parties work in the spirit of cooperation, mutual understanding and respect.

SCOPE

This Protocol applies to Maules Creek Coal and RAPs for the Project and is designed to provide processes for communication between Maules Creek Coal (MCC) and the RAPs for the Project.

Information and communication may include items relating to:

- i. Consultation of management plans and strategies;
- ii. Review of Aboriginal Archaeology and Cultural Heritage Management Plan (AACHMP) and AHCS;
- iii. Training and education needs and opportunities;
- iv. Keeping Place Management Team;
- v. Open meeting;
- vi. Fieldwork timing and arrangements;
- vii. Fieldwork policies and protocols/procedures;
- viii. General Queries; and
- ix. Other communications that may arise from time to time.

REQUIREMENTS

MAULES CREEK COAL AND THEIR SERVICE PROVIDERS

During consultation and communications Maules Creek Coal and their service providers should:

- display a meaningful appreciation, understanding and respect for the belief system, spiritual connection and sense of belonging that Aboriginal people have to their land, people and environment, which includes plants, animals, waterways, sacred sites and other places of cultural significance and importance.
- respect the traditional rights, obligations and responsibilities of Aboriginal people who hold cultural knowledge particularly as these relate to the cultural business of men and women.
- encourage active participation of culturally experienced and appropriate Aboriginal people who hold cultural knowledge in the consultation and communication process.

"If it's not safe, don't do it."

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WHC_PRO_MC_COMMUNICATION PROTOCOL (RAPs)		

REGISTERED ABORIGINAL PARTIES

During consultation and communication RAPs should display a mutual respect and a spirit of cooperation, act in a respectful proactive manner and refrain from an act or conduct that may cause unwarranted offence towards others.

RAPs with appropriate cultural heritage knowledge to inform decision making who seek to register their interest as an Aboriginal party are those people who:

- continue to maintain a deep respect for their ancestral belief system, traditional lore and custom;
- recognise their responsibilities and obligations to protect and conserve their culture and heritage and care for their traditional lands or Country; and
- have the trust of their community, knowledge and understanding of their culture, and permission to speak about it.

It is up to Aboriginal people to determine who is accepted by their community as being authorised to speak for Country and its associated cultural heritage. Where there is a dispute about who speaks for Country, it is appropriate for Aboriginal people to resolve this dispute in a timely manner to enable effective consultation to proceed.

RAPs who have registered an interest may indicate to MCC they have appointed a representative to act on their behalf. Where this occurs, the RAP must provide written confirmation and contact details of those individuals to act on their behalf.

METHOD OF CONTACT AND COMMUNICATION

Communication is the effective transfer of information from one person to another. The communicator has a responsibility to ensure the message is understood by the other party.

There are various methods of contacting and communicating a message to the intended recipient these can include:

- Letter via post.
- Fax.
- Phone (land line and/or mobile).
- Email.
- In person.
- Presentations.
- Meetings.

"If it's not safe, don't do it."

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WHC_PRO_MC_COMMUNICATION PROTOCOL (RAPs)			

CONTACT DETAILS FOR ALL PARTIES

Each party will be responsible for supplying their contact details and preferred method of contact to MCC.

Each party will also be responsible for updating their contact details as soon as possible after these details change.

MCC will maintain an up to date register of all contact details provided to them. Contact details will be captured using WHC_FRM_MC_RAP Contact Details. This form will also be utilised to capture any change of contact details.

From time to time MCCM will write to all RAPs and based on feedback update the register of RAPs.

As a minimum the contact details will include:

- Name of contact person.
- Mailing address.
- One contact phone number.
- Name of person whose contact phone number is supplied.

TIMEFRAMES FOR RESPONDING TO QUERIES

All parties will use best endeavours to respond as soon as reasonably practicable to any query received. Depending on the nature and extent of the query a response may be able to be given at the time of the query being made. A response may not able to be provided at the time of the query for a number of reasons including:

- The individual does not have the decision making authority to respond.
- The response may impact a wider group and should be communicated in wider forum.
- The individual does not have the information available to them to respond.
- The response may be more complex and warrants further discussion prior to responding.

In any case a response within 14 days should be expected unless otherwise agreed.

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TIMING OF MEETINGS

During the early stages of the Project commencing open RAP meetings will be convened every six months. An agenda for these meetings may include:

- progress of the Project;
- review of any Aboriginal Heritage issues;
- address any concerns that may have arisen;
- review of AACHMP and or AHCS;
- field work program; and
- results of field work programs.

These meetings may be extended out to an agreed time frame as the Project progresses should the need arise.

Additional meetings may be called to address issues that cannot be dealt with by the agreed protocols.

LOCATION OF MEETINGS

The location of meetings will be held in close proximity to the Project that provides the opportunity for all RAPs to attend on mutually acceptable "Neutral" ground.

Due to availability of venues the exact location may change from time to time.

MAULES CREEK CONTACT LIST

General Manager Operations - Maules Creek – Peter Wilkinson
pwilkinson@whitehavencoal.com.au

Environment Superintendent - Maules Creek- Scott Mitchell - smitchell@whitehavencoal.com.au

External Relations Superintendent – Darren Swain – dswain@whitehavencoal.com.au

Executive General Manager – Operations – Jamie Frankcombe –
jfrankcombe@whitehavencoal.com.au

Group Environmental Manager – Jill Johnson – jjohnson@whitehavencoal.com.au

[Maules Creek Aboriginal Heritage email - maulesaboriginalheritage@whitehavencoal.com.au](mailto:maulesaboriginalheritage@whitehavencoal.com.au)

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WHC_PRO_MC_COMMUNICATION PROTOCOL (RAPs)			

DEFINITIONS

<u>Term</u>	<u>Definition</u>
RAPs	<ul style="list-style-type: none"> ▪ Registered Aboriginal Parties
AACHMP	<ul style="list-style-type: none"> ▪ Aboriginal Archaeology and Cultural Heritage Management Plan
MCC	<ul style="list-style-type: none"> ▪ Maules Creek Coal
Project	<ul style="list-style-type: none"> ▪ Maules Creek Coal Project operating under Project Approval PA 10_0138
AHCS	<ul style="list-style-type: none"> ▪ Aboriginal Heritage Conservation Strategy



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Appendix D Archaeological Sites Salvage Record Form

ARCHAEOLOGICAL SITES SALVAGE RECORD FORM

Date:

Archaeological Clearance Type (please tick)

Aboriginal Archaeological Site

Location of Clearance Works (attach map of Works Area with co-ordinates of change points)

Site Name		Site ID	
GPS Co-ords (Easting GDA94)		GPS Co-ords (Northing GDA94)	
Site Type		Salvage Method	

Description of Archaeological Salvage Works

Comments/Recommendations

Signed:.....

Supervising Archaeologist



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WHC_PLN_MC_ ABORIGINAL ARCHAEOLOGY AND CULTURAL HERITAGE MANAGEMENT PLAN

Appendix E Glossary of Terms and Abbreviations



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Glossary of Terms

Aboriginal Object	Any deposit, object or material evidence (not being a handicraft made for sale) relating to the Aboriginal habitation of the area that comprises New South Wales (NSW), being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction, including Aboriginal remains (NSW <i>National Parks and Wildlife Act, 1974</i> section 5[1]).
Aboriginal Archaeological Site	Location of evidence of Aboriginal occupation (typically, Aboriginal objects, but also places of traditional or historical cultural value for which no Aboriginal objects exist).
Heritage item	An item defined under the NSW <i>Heritage Act, 1977</i> and/or an Aboriginal Object or Aboriginal Place as defined under the NSW <i>National Parks and Wildlife Act, 1974</i> .
PAD	Potential Archaeological Deposit, archaeological evidence (typically stone artefacts buried within the upper soil unit of rock shelters or in open contexts) predicted to occur in a specific place through application of a predictive model of site location.
Registered Aboriginal Party	Members of a local Aboriginal land council, registered holders of Native Title, Aboriginal groups or other Aboriginal people who may have an interest in the Maules Creek Coal Mine.

Abbreviations

AACHIA	Aboriginal Archaeology and Cultural Heritage Impact Assessment
AACHMP	Aboriginal Archaeology and Cultural Heritage Management Plan
AHCS	Aboriginal Heritage Conservation Strategy
AHIMS	The OEH Aboriginal Heritage Information Management System
AMS	Accelerated Mass Spectrometry
AS	Artefact Scatter
CCCC	Maules Creek Coal Community Consultative Committee
CMA	?
DP&E	NSW Department of Planning and Environment
EA	Environmental Assessment
EIS	Environment Impact Statement
IA	Isolated Artefact
MCC	Maules Creek Coal Pty Ltd
MCCM	Maules Creek Coal Mine
NP&W	National Parks and Wildlife



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OEH	NSW Office of Environment and Heritage
PAD	Potential Archaeological Deposit
RAP	Registered Aboriginal Party
SoC	Statement of Commitments
UQCHU	The University of Queensland Culture & Heritage Unit
URN	Unique Record Number
WHS	Workplace Health and Safety



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**WHC_PLN_MC_ ABORIGINAL ARCHAEOLOGY AND CULTURAL HERITAGE
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Appendix F Scarred Tree Removal Protocol



MAULES CREEK

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The removal of a scarred tree, if identified in the future, will follow the below four step procedure:

1. Pre-removal preparation;
2. Removal/relocation;
3. Storage; and
4. Management/preservation

Pre-removal Preparation

A qualified arborist will be engaged to plan, conduct and direct the tree removal works. The arborist is responsible for assessing the most appropriate method of removing each tree based on specific factors such as species, condition and location.

A qualified archaeologist will be engaged to attend the removal in order to address potential archaeological issues such as exposure of artefacts during topsoil disturbances.

A pre-removal planning meeting will be held onsite that includes MCC representatives, the arborist, two RAPs and the qualified archaeologist. This allows all parties to discuss the works program and any logistical issues. The pre-removal planning meeting may be held on the day of the tree removal or before.

The following equipment may be required:

- Backhoe.
- Large front-end loader.
- Excavator.
- 25 tonne all-terrain crane.
- 50 tonne crane.
- Tipper (for hay bales for bedding).
- Elevated work platform.
- 20 tonne soft slings.
- Water truck.
- Wool bags or similar for bedding.
- Concrete blocks for plinths.
- Chain saws.
- Carpet or similar for wrapping scar and bole of tree.
- Hazard cones, bunting signage etc.

Removal/Relocation

The following steps provide a guide for the tree removal. This process will be subject to modification based on the arborist's recommendations.

1. Prepare access and safe work area, including a barricaded exclusion zone.
2. Wrap carpet or similar around scar for protection.
3. Erect an elevated platform in order to remove overhanging branches and limbs (if required).
4. Attach lift swing.



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5. Use backhoe to trench around the tree in order to expose the base of the bole (trunk) above the roots.
6. Once the trench has been excavated and the base of the bole cut, the crane can begin removing the tree from the trench.
7. Load the tree on the truck for transportation and relocate the tree to a keeping place or storage area.
8. Tree can then be cleaned and cared for including application of pest control.

Storage

This section describes the process for storage of the trees. This process will be subject to modification based on the arborist's recommendations.

Trees will be placed on non-timber based sleepers such as high strength concrete block or plinths. The storage facility must be of sufficient size to adequately store and maintain the number and sizes of all removed trees. The facility must be suitable for enabling cleaning and maintenance of the trees. A tag, identifying the tree, including AHIMS ID will be placed on the tree.

In addition, a barrier layer of acrylic resin at the base or other suitable area of the tree and an indelible pigment based pen will be used to apply the registration number of the scarred tree.

Preservation - Cleaning

This section describes the process for preservation (including cleaning) of the trees. This process will be subject to modification based on the arborist's recommendations.

Many trees suffer from termite activity and rotting which subsequently hollows the tree's trunk. Therefore, all termite detritus will be attempted to be cleared from the inside of the trunk and the outer surface as far as practical without damaging the scar for which the tree has been salvaged for. Termite detritus will be removed using brushes and probes and then vacuumed. Insects recovered during this process will be identified to determine an appropriate eradication procedure. Insect traps such as glue pads will be placed throughout the storage container or shed as required.

Preservation – Seasoning

This section describes the process for preservation (including seasoning) of the trees. This process will be subject to modification based on the arborist's recommendations.

Should the scarred tree that is to be removed be a living or 'green' tree it must be stored indoors until the moisture content is below 20%. Trees with moisture content less than 20% are unlikely to support decay fungi degradation and should also be relatively physically stable. In dry conditions, the trees will age and season readily.

Once seasoned, high temperatures should not affect the trees, however 'green' humidity may obstruct the drying process. Humidity indicators and moisture detection strips may be used as a guide to ventilation requirements. Such requirement may be as simple as opening the container or shed doors on a dry day. The scarred trees will be monitored regularly (monthly) during the initial stages of their storage.