

Marulan South Limestone Mine | SSD 7009

Aboriginal Cultural Heritage Management Plan Prepared for Boral Cement Limited | 13th October 2023



Marulan South Limestone Mine

SSD 7009 | ABORIGINAL CULTURAL HERITAGE MANAGEMENT PLAN

Prepared for Boral Cement Limited 22 November 2022

PR163

	Prepared by	Reviewed by
Name	Ryan Desic	Alan Williams
Company	EMM Consulting Pty Limited	EMM Consulting Pty Ltd
Position	Archaeologist – Associate	Archaeologist – Associate Director
Project Role	Project Archaeologist	Technical specialist review
Signature		le D
Date	18 March 2022	18 March 2022

This report and all material contained within it is subject to Australian copyright law, and is the property of Boral Limited. Other than in accordance with the Copyright Act 1968 or the report, no material from the report may, in any form or by any means, be reproduced, distributed, stored in a retrieval system or transmitted, other than with the written consent of Boral Limited or its subsidiaries.

DOCUMENT CONTROL

Revision	Date	Description	Prepared by	Reviewed by
0	20 September 2021	For Boral Cement Limited review	Ryan Desic EMM Consulting Pty Limited	Boral Cement Limited
1	20 December 2021	Draft for RAP review	Ryan Desic EMM Consulting Pty Limited	Boral Cement Limited
2	4 February 2022	Final draft for Heritage NSW Review	Ryan Desic EMM Consulting Pty Limited	Boral Cement Limited
3	18 March 2022	Final	Ryan Desic EMM Consulting Pty Limited	Boral Cement Limited
4	22 November 2022	Post DPE review – minor edits	Pamela Kottaras EMM Consulting Pty Limited	Boral Cement Limited
5	13 October 2023	Document Reviewed No changes	Boral Cement Limited	Boral Cement Limited

Contents

1	INTRO	DUCTION	1
	1.1	Background	1
	1.2	Overview of operations	2
		1.2.1 Site description	2
		1.2.2 Overview of existing mining	2
		1.2.3 Overview of approved project	3
	1.3	Environmental management framework	6
		1.3.1 Environmental Management System	6
		1.3.2 Alignment with other plans	6
	1.4	Purpose and objectives	6
	1.5	Responsibility for implementation	7
	1.6	Document structure	8
	1.7	Authorship	8
2	STAT	UTORY REQUIREMENTS	9
	2.1	Development consent	9
	2.2	Statutory context	11
	2.3	Regulator consultation	12
3	ABOR	IGINAL CONSULTATION	14
	3.1	Key points	14
	3.2	Registered Aboriginal Parties	14
	3.3	Previous consultation for the Project ACHA	15
	3.4	Consultation in developing this plan	15
	3.5	Ongoing consultation required for the Project	16
4	ABOR	GINAL CULTURAL HERITAGE CONTEXT	18
	4.1	Key points	18
	4.2	Summary of Aboriginal heritage	18
5	ABOR	IGINAL HERITAGE MANAGEMENT	22
	5.1	Key points	22
	5.2	Aboriginal heritage protection and storage	23
		5.2.1 Active protection close to development footprint	23
		5.2.2 Passive protection away from Project footprint	23
	5.3	Aboriginal heritage salvage measures	24
		5.3.1 Surface artefact collection	24
		5.3.2 Salvage excavation	24
		5.3.3 No further action (unmitigated impacts)	25
		5.3.4 Sites to be managed under the Peppertree Quarry AHMP	25
	5.4	New finds procedures	25
		5.4.1 Discovery of new Aboriginal objects, sites and/or deposits	25
		5.4.2 Discovery of skeletal/human remains	28
	5.5	Management of salvaged Aboriginal objects	29
		5.5.1 Care Agreement required	30
	5.6	Any proposed activity outside approved disturbance footprint	31

6	COMPL	LIANCE, T	RAINING, REVIEW AND IMPROVEMENT	32
	6.1	Key poi	nts	32
	6.2	Complia	ance and auditing	32
		6.2.1	Measuring performance	32
		6.2.2	Complaints	32
		6.2.3	Incident reporting	32
		6.2.4	Non-compliance reporting	33
	6.3	Aborigii	nal heritage induction requirements	33
		6.3.1	Site inductions	33
		6.3.2	Fostering cultural heritage awareness	34
	6.4	Review	and improvement and data management	34
		6.4.1	Continual improvement	34
		6.4.2	Annual review	34
		6.4.3	ACHMP review and update	35
		6.4.4	Marulan South Limestone Mine Aboriginal Heritage Database	35
7	REFER	RENCES		36

Tables

Table 1.1	Roles and responsibilities for Aboriginal heritage management7
Table 1.2	Structure of the ACHMP
Table 2.1	Management plan requirements9
Table 2.2	Commonwealth and State legislation relevant to the ACHMP11
Table 2.3	Consultation with regulators
Table 3.1	List of RAPs for the Project
Table 3.2	Summary of consultation for the Project ACHA 15
Table 3.3	Aboriginal consultation to be undertaken as part of the Project
Table 3.4	Culturally sensitive dates during which activities requiring Aboriginal heritage
	inputs/participation should be avoided17
Table 5.1	Management summary
Table 5.2	Management summary for Aboriginal sites to be managed under the PTQ
	AHMP
Table 5.3	Management of unexpected cultural materials (except skeletal/human
	remains)
Table 5.4	Procedure for the discovery of potential Aboriginal ancestral remains28
Table 7.1	Site impact assessment and management summary

Figures

Figure 1.1	Regional context	
Figure 1.2	The Project disturbance footprint	5
Figure 4.1	Aboriginal sites main Project site	
Figure 4.2	Aboriginal sites Marulan Creek Dam	
rigaro n.2	, isonginal block maralan brook Barning	

Appendices

APPENDIX A ABORIGINAL SITE INVENTORY	37
APPENDIX B MANAGEMENT PLAN FOR MARULAN CREEK WOMEN'S CULTURAL SIT	E143
APPENDIX C ABORIGINAL CONSULTATION DOCUMENTATION	52
APPENDIX D ARCHAEOLOGICAL EXCAVATION METHODOLOGY	57
APPENDIX E ABORIGINAL SITE DESCRIPTIONS	63
APPENDIX F LEGISLATION AND OBLIGATIONS	66

Abbreviations

Abbreviation	Full term
АСНА	Aboriginal cultural heritage assessment
AHIMS	Aboriginal Heritage Information Management System
AHIP	Aboriginal Heritage Impact Permit
ACHMP	Aboriginal cultural heritage management plan
CoC	Conditions of Consent
EIS	Environmental Impact Statement
EMM	EMM Consulting Pty Limited
DEC/DECCW	A former NSW government body, now Heritage NSW
DPIE	NSW Department of Planning, Industry and Environment
LALC	Local Aboriginal Land Council
LGA	Local government area
RAP	Registered Aboriginal Party (for the Project)
RTS	Response to submissions
SSD	State Significant Development

1 INTRODUCTION

1.1 Background

Boral Cement Limited (Boral) owns and operates the Marulan South Limestone Mine (the mine), an open cut mine located in Marulan South, New South Wales (NSW). Limestone mining north of Bungonia Gorge began around 1830 with major developments emerging in the 1920s to supply limestone for cement manufacturing and steel making.

The limestone mine was opened in 1929 to supply limestone for cement, manufacturing and steel making. By 1953 two main pits (northern mine pit and southern mine pit) were well established and by the early 1970s the facets of the business included limestone for cement, steel making, agriculture, glass making, lime manufacturing, quicklime and hydrated lime.

The mine produces up to 3.38 million tonnes (Mt) of limestone based products per year for the cement, steel, agricultural, construction and commercial markets.

Due to changes in the *NSW Mining Act 1992* (Mining Act) and the NSW *Environmental Planning* & *Assessment Act 1979* (EP&A Act), a State significant development (SSD) consent under the EP&A Act was required to move mining operations beyond the area covered by the mining operations plan (MOP).

Two approvals are required for the mine:

- a consent for the Project (SSD 7009) under Part 4, Division 4.7 of the EP&A Act; and
- controlled action approval under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) for impacts on listed threatened species and communities (sections 18 and 18A of the Act).

An environmental impact statement (EIS) was prepared to accompany the application for SSD 7009 and addresses the requirements of State agencies under the EP&A Act and the Commonwealth Department of Agriculture, Water and the Environment. A response to submissions (RTS) report was subsequently prepared to consider and respond to agency and public submissions and provide clarification of Project components where relevant.

Development consent (the consent) was granted by the Department of Planning, Industry and Environment (DPIE) on 19 August 2021, to continue mining limestone at a rate of up to 4 million tonnes per annum (Mtpa) for a period of up to 30 years (the Project).

To satisfy Condition of Consent (CoC) D5(i), the EIS, RTS, development consent and other publicly available information related to the assessment and determination of SSD 7009 can be accessed on DPIE's Major Projects Planning Portal (https://www.planningportal.nsw.gov.au/major-Projects/project/9691).

The consent requires the preparation and implementation of a number of management plans, strategies, protocols and procedures detailing environmental commitments, controls and performance objectives at the mine throughout its operational life. An Aboriginal Cultural Heritage Management Plan (ACHMP) is required in accordance with CoCs B57–B62 which set out Aboriginal heritage requirements.

This plan incorporates the relevant management measures presented in the EIS, RTS and conditions of consent relating to Aboriginal cultural heritage.

The ACHMP will continue to remain a dynamic document which will be updated as required over the life of mining operations until 31 August 2051.

1.2 Overview of operations

1.2.1 Site description

The Project site is in Marulan South, 10 km south-east of Marulan village and 35 km east of Goulburn. It is in the Goulburn Mulwaree Local Government Area (LGA).

The mine is separated from the Bungonia National Park (NP) and State Conservation Area to the south by Bungonia Creek and is separated from the Shoalhaven River and Morton NP to the east by Barbers Creek.

The Project site and surrounds are characterised by rolling hills of pasture interspersed with forest to the west, contrasting with the heavily wooded, deep gorges that begin abruptly to the east of the mine, forming part of the Great Escarpment and catchment of the Shoalhaven River.

Access is via Marulan South Road, which connects the mine and Boral's Peppertree Quarry with the Hume Highway approximately 9 km to the north-west. Boral's private rail line connects the mine and Peppertree Quarry with the Main Southern Railway approximately 6 km to the north.

The Project site covers historical and proposed future areas of disturbance and comprises two geographically separate areas (Figure 1.2):

- the existing mine including the proposed 30-year mine footprint and associated infrastructure; and
- the proposed Marulan Creek Dam to be on Marulan Creek, within Boral landholdings approximately 2.5 km north of the mine entrance.

The Project site covers an area of 846.4 ha. The existing pre SSD disturbance footprint is 341.5 ha with 256.5 ha of new disturbance associated with the proposed 30-year mine plan.

Most of the Project site is zoned RU1 - Primary Production under the Goulburn Mulwaree Local Environmental Plan (LEP) 2009. Mining and extractive industries are permissible in this zone with consent. The remaining area is zoned E3 - Environmental Management. Mining and extractive industries are prohibited in this zone. However, as agriculture is permitted in the E3 zone with consent, mining is also permitted in this zone under the Mining Sate Environmental Planning Policy with consent.

1.2.2 Overview of existing mining

The mine is sited on a high grade limestone resource. Subject to market demand the mine has typically produced up to 3.38 Mt of limestone and up to 200,000 t of shale per annum.

The mine currently produces a range of limestone products for internal and external customers in the Southern Highlands/Tablelands, the Illawarra and Metropolitan Sydney markets for use primarily in cement and lime manufacture, steel making, agriculture and other commercial uses. Products produced at the mine are despatched by road and rail, with the majority despatched by rail.

Historically limestone mining was focused on the approximately 200-300 m wide Eastern Limestone and was split between a north pit and a south pit. A limestone wall (referred to by the mine as the 'centre ridge') rising almost to the original land surface, divided the two pits. The north and south pits were joined in 2016/2017 by mining the centre ridge to form a single contiguous pit, approximately 2 kilometres (km) in length. However, the north pit/south pit nomenclature remains important as current mining operation locations continue to be reported with respect to one or other of the old pits.

Limestone and shale are extracted using open-cut hard rock drill and blast techniques. Limestone is loaded using front end loaders and hauled either to stockpiles or the processing plant using haul trucks. Oversized material is stockpiled and reduced in size using a hydraulic hammer attached to an excavator. Limestone processing facilities including primary and secondary crushing, screening, conveying and stockpiling plant and equipment are in the northern end of the north pit. Kiln stone grade limestone is also processed on site through the existing lime plant comprising kiln stone stockpiles, rotary lime kiln, hydration plant and associated auxiliary conveying, processing, storage, despatch plant and equipment. Overburden from stripping operations is emplaced in the Western Overburden Emplacement (WOE), west of the open cut pits.

1.2.3 Overview of approved project

Consent was granted for a 30-year mine plan accessing approximately 120 Mt of limestone down to a depth of 335 m. The mine footprint focuses on an expansion of the pit westwards to mine the Middle Limestone and to mine deeper into the Eastern Limestone. As the Middle Limestone lies approximately 70-150 m west of the Eastern Limestone, the 30-year mine plan avoids mining where practical the interburden between these two limestone units thereby creating a smaller second, north-south oriented west pit with a ridge remaining between. The north pit will also be expanded southwards, encompassing part of the south pit, leaving the remainder of the south pit for overburden emplacement and a visual barrier.

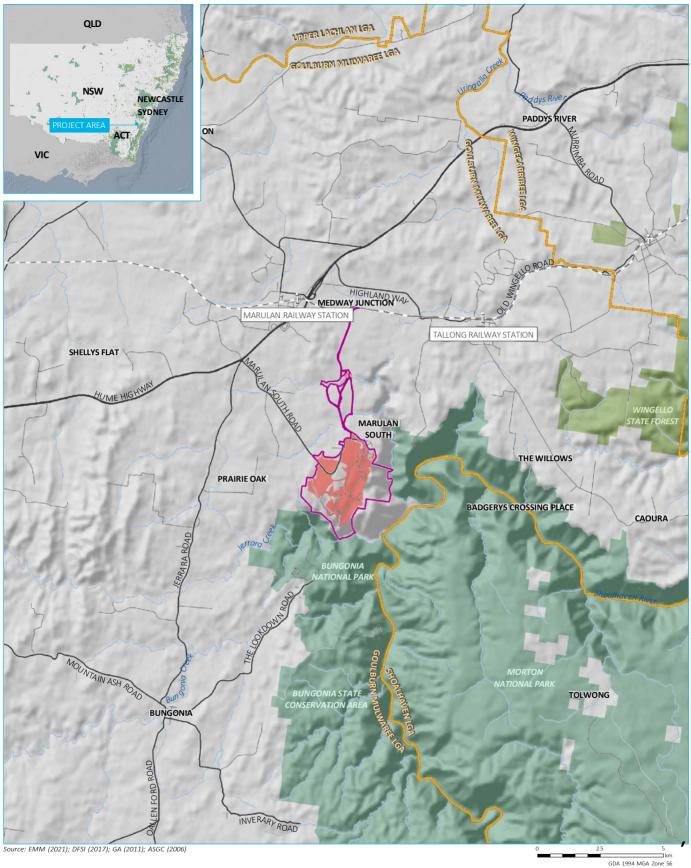
Limestone will be extracted at up to 4 Mtpa for 30 years until 31 August 2051. Clay shale will also continue to be extracted at up to 200,000 tonnes per annum (tpa). The limestone will be processed to create limestone and lime products including limestone aggregates and sand, hydrated lime and quick lime.

Existing infrastructure is being retained along with the following changes:

- relocation of a section of high voltage power line to accommodate a proposed overburden emplacement;
- realignment of a section of Marulan South Road, to accommodate a proposed overburden emplacement;
- relocation of the processing infrastructure and the stockpile and reclaim area at the northern end of the north pit to allow the northward expansion of the pit;
- development of a shared Road Sales Stockpile Area including a weighbridge and wheel wash to service both the mine and Peppertree Quarry; and
- construction of a 118 megalitre (ML) in-stream water supply dam on Marulan Creek.

Boral will transport up to 600,000 tpa of limestone and hard rock products along Marulan South Road to the Hume Highway, as well as 120,000 tpa of limestone products to the agricultural lime manufacturing facility.

The Project provides continued direct employment for 118 people on the mine site and 73 offsite. It will operate 24-hours per day, 7 days per week. Blasting will continue to be restricted to daylight hours on weekdays, excluding public holidays.



KEY

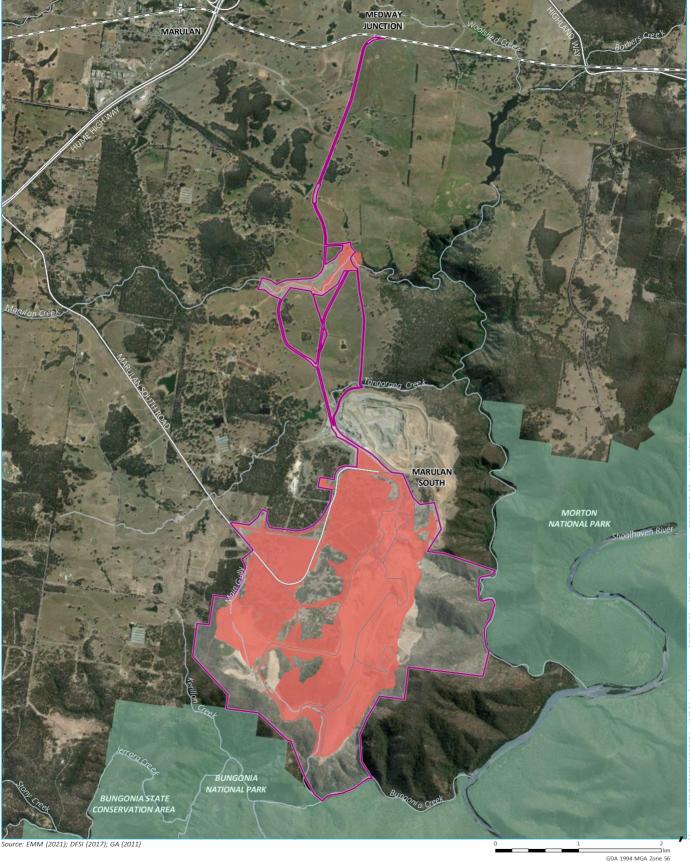


Named waterbody

Marulan South Limestone Mine Historic heritage management plan Figure 1.1

Regional setting





KEY

- 🔲 Project area - Named watercourse Disturbance footprint Named waterbody NPWS reserve 1 Train station – – Rail line Major road - Minor road
- ······ Vehicular track

Project area in the local context

Marulan South Limestone Mine Historic heritage management plan Figure 1.2



1.3 Environmental management framework

The mine operates in accordance with the Boral integrated Health Safety, Environment and Quality Management System (HSEQ MS) which establishes a strategic platform for regulatory compliance and continual improvement in environmental management. This framework is documented in *GRP-HSEQ-1-01 Management System Framework and Operational Control*. The Boral HSEQ MS is aligned with the international standard ISO-14001.

1.3.1 Environmental Management System

CoC D1 requires the preparation of an Environmental Management Strategy (EMS) for the mine. The EMS provides the mine's strategic framework for environmental management under which the ACHMP operates.

1.3.2 Alignment with other plans

The Project shares part of its boundary with the adjacent Peppertree Quarry (Project Approval 06_0074), which is a granodiorite quarry owned and operated by Boral Resources (NSW) Pty Ltd. The shared boundary covers the Peppertree Quarry Modification No. 5 area (Peppertree Quarry MOD 5) which was approved by DPIE in October 2019 and will involve a new overburden area on the Project site and associated infrastructure. The Aboriginal cultural heritage values within this shared boundary will be managed in accordance with the Peppertree Quarry Aboriginal Heritage Management Plan (PTQ AHMP). Chapter 5 of the PTQ AHMP provides detail concerning the management of Aboriginal sites within this area, and Aboriginal community consultation related to the management of these sites is detailed in Chapter 1.4 of the PTQ AHMP.

On 8 November 2021 DPIE approved the staging of the Water Management Plan and this ACHMP. As water management and mine water supply at a mine changes substantially over the life of its 30 year consent, DPIE approved Boral's proposal that the initial Water Management Plan covers the first two stages (stages 1 and 2) of the development. Boral will ensure the Water Management Plan is updated to include the second two stages (stages 3 and 4) of the development and is approved by the Planning Secretary prior to the commencement of Stage 3. DPIE also approved Boral's request that the assessment of the women's cultural heritage site along Marulan Creek as required under condition B60 (e) is not included in this ACHMP as this condition is directly related to potential impact and mitigation associated with alteration of the flow regime of Marulan Creek from the construction of the Marulan Creek Dam. Boral will ensure this ACHMP is updated to address condition B60 (e) and is approved by the Planning Secretary prior to the commencement of the flow regime of construction of the Marulan Creek Dam. Boral will ensure this ACHMP is updated to address condition B60 (e) and is approved by the Planning Secretary prior to the commencement of construction of the Marulan Creek Dam.

1.4 Purpose and objectives

This ACHMP describes how Boral will protect and manage impacts to Aboriginal cultural heritage values within the Project site during the construction and operation of the mine.

Specific objectives of the ACHMP are to address CoCs by providing guidance on:

- processes to maintain ongoing consultation with the Project's registered Aboriginal parties (RAPs) and Heritage NSW (Section 3);
- management procedures for Aboriginal cultural heritage values within, and adjacent to, the Project site during pre-construction and construction phases (Section 5);
- protocols and procedures for new cultural finds, including Aboriginal objects and human remains (Section 5.4); and

 other administrative requirements, including post-Project management of Aboriginal finds and recovered material, ongoing compliance, regular review and update of the ACHMP to ensure its functionality is maintained through the Project (Section 7).

The ACHMP is prepared for a mixed audience of consent authorities, environmental regulators, Aboriginal stakeholders and site personnel; the latter of which are responsible for implementing this plan as part of day-to-day operations.

1.5 Responsibility for implementation

Boral will implement this ACHMP as approved by the Secretary. The individuals responsible for the implementation of the plan are provided in **Table 1.1**. The plan will be stored in Boral's document control system; the latest version will be available electronically at all times. As the document owner, Boral is the contact point for this plan and its requirements and will provide guidance and training to any person that requires additional training regarding this plan.

Table 1.1 Roles and responsibilities for Aboriginal heritage management

Role	Responsibilities
Site Manager	 Ensure that the ACHMP is implemented as approved by the Secretary. Ensure the implementation of this plan is carried out appropriately during construction/operations. Ensure adequate financial and personnel resources are made available for the implementation of this plan. Primary contact with RAPs.
Technical Manager, Environmental Coordinator	 Primary contact with KAPS. Oversee signage and fencing of areas containing artefacts in accordance with this plan. Ensure the Aboriginal heritage management measures required to be undertaken prior to ground disturbance activities are conducted in accordance with the measures outlined in this plan. Ensure signage and fencing of Aboriginal sites is maintained. Ensure inclusion of Aboriginal heritage in work inductions through delivery or input to induction documents. Distribute copies of this plan as required. Engage and coordinate relevant specialist personnel to undertake management measures or additional assessment as specified in this plan. Maintain records of Aboriginal consultation. Ensure relevant reporting, data management and registration is conducted, maintained and updated. Arrange for a review of this plan in accordance with review cycles and conditions specified in this plan.
Project Archaeologist	 Implementing relevant management measures that require archaeologist supervision. Undertaking heritage assessments where required. Assistance in implementing responsibilities of the Environmental Coordinator, where engaged by Boral.
Construction and operations personnel	 Manage the implementation of this plan during extraction and restoration (Site Manager). Reporting unexpected finds, incidents or non-compliance to their shift supervisor.

1.6 Document structure

The structure of the ACHMP is outlined in Table 1.2.

Table 1.2 Structure of the ACHMP

Section	Content
1	Provides an overview of the Project and objectives of the plan.
2	Outlines statutory requirements associated with the development consent, environmental protection license (EPL) and regulator consultation undertaken by the specialist in developing the plan.
3	Provides an overview of Aboriginal consultation completed for the Project, and processes to maintain ongoing consultation with the Project's registered Aboriginal parties (RAPs).
4	Provides an overview of the Aboriginal cultural heritage context of the Project site which has provided the basis for the Aboriginal heritage management measures presented in this ACHMP.
5	Provides management procedures for Aboriginal cultural heritage values within, and adjacent to, the Project site during pre-construction, construction and operational phases. Provides protocols and procedures for new cultural finds, including Aboriginal objects and human remains.
6	Provides requirements, procedures and protocols for compliance, training, review and improvement.
7	References.
Appendix A	Provides a tabulated list of all sites subject to management under this plan.
Appendix B	Provides a specific management plan to address the Marulan Creek Women's Site 1. Note that the preparation of this sub-plan will be staged and prepared closer to when the Marulan Creek Dam component of the Project is planned for construction. This plan will be developed by an intangible cultural heritage specialist.
Appendix C	Provides details of Aboriginal consultation undertaken in preparing the ACHMP.
Appendix D	Provides the archaeological excavation methodology for the relevant Aboriginal sites requiring this management measure.
Appendix E	Provides site definitions and descriptions for a range of Aboriginal site types.
Appendix F	Provides an overview of relevant legislation and reporting requirements under NSW law.

1.7 Authorship

The AHMP was prepared by EMM Associate Archaeologist, Team Leader Ryan Desic (BA Hons Historical and Prehistoric Archaeology) who is a suitably qualified and experienced archaeologist and heritage consultant. Ryan has over 10 years' experience in consulting archaeology and coauthored the Aboriginal cultural heritage assessment (ACHA) for the Marulan South Limestone Mine Continued Operations project to support the EIS. Ryan was endorsed to prepare the AHMP by DPIE on 17 September 2021 in accordance with CoC 60 (a).

2 STATUTORY REQUIREMENTS

2.1 Development consent

This ACHMP has been prepared in accordance with the development consent. Table 2.1 presents the consent conditions relevant to the ACHMP and identifies where each condition has been addressed in this plan.

Table 2.1 Management plan requirements

Condition		Condition requirement	Section reference
No.			
		Protection of Aboriginal heritage	
B57		The Applicant must ensure that the development does not cause any direct or indirect impact on any identified heritage item located outside the approved disturbance area, beyond those predicted in the document/s listed in condition A2(c).	Section 5.2
B58		If suspected human remains are discovered on site, then all work surrounding the area must cease, and the area must be secured. The Applicant must immediately notify NSW Police and Heritage NSW, and work must not recommence in the area until authorised by NSW Police and Heritage NSW.	Section 5.4.2
B59		The Applicant must ensure that all known Aboriginal objects or Aboriginal places on the site and within the offset areas are properly recorded, and those records are kept up to date, in the Aboriginal Heritage Information Management System (AHIMS) Register.	Section 6
		Aboriginal Cultural Heritage Management Plan	
B60		The Applicant must prepare an Aboriginal Cultural Heritage Management Plan for the development. This plan must:	This document
	(a)	be prepared by suitably qualified and experienced person/s whose appointment has been endorsed by the Planning Secretary;	Section 1.7
	(b)	be prepared in consultation with Heritage NSW and Registered Aboriginal Parties;	Section 2.3; Section 3
	(c)	describe the measures to be implemented on the site or within the offset areas to:	
	(c) (i)	comply with the heritage-related operating conditions of this consent;	Whole document
	(c) (ii)	ensure all workers on the site receive suitable Aboriginal cultural heritage training/inductions prior to carrying out any activities which may cause impacts to Aboriginal objects or Aboriginal places, and that suitable records are kept of these inductions;	Section 6.3
	(c) (iii)	protect, monitor and manage identified Aboriginal objects and Aboriginal places (including any proposed archaeological investigation of potential subsurface objects, collection and salvage of objects within the approved disturbance area) in accordance with the commitments made in the document/s listed in condition A2(c);	Section 5
	(c) (iv)	protect Aboriginal objects and Aboriginal places located outside the approved disturbance area from impacts of the development;	Section 5.2
	(c) (v)	manage the discovery of suspected human remains and any new Aboriginal objects or Aboriginal places, including provisions for burials, over the life of the development;	Section 5.4
	(c) (vi)	maintain and manage reasonable access for relevant Aboriginal stakeholders to Aboriginal objects and Aboriginal places (outside of the approved disturbance area); and	Section 3.5

	(c) (vii)	facilitate ongoing consultation and involvement of Registered Aboriginal Parties in the conservation and management of Aboriginal cultural heritage on the site.	Section 3.5
	(d)	include a strategy for the care, control and storage of Aboriginal objects salvaged on the site, both during the life of the development and in the long term; and	Section 5.5; 5.5.1
	(e)	in relation to the women's cultural heritage site along Marulan Creek, include:	
	(e) (i)	an assessment of the potential impacts of the Marulan Creek dam and associated flow regime on the site, prepared by an intangible cultural heritage specialist in consultation with the identified knowledge holders	Appendix B (to be prepared)
	(e) (ii)	assessment of whether mitigation to any negative impacts should occur through periodic cultural flows.	Appendix B (to be prepared)
B61		The Applicant must not commence development under this consent until the Aboriginal Cultural Heritage Management Plan is approved by the Planning Secretary.	
B62		The Applicant must implement the Aboriginal Cultural Heritage Management Plan approved by the Planning Secretary.	
		Management Plan Requirements	
D5	(a)	Summary of relevant background or baseline data;	Section 4
	(b)	Details of:	
	(b)(i)	The relevant statutory requirements (including any relevant approval, licence or lease conditions);	Section 2
	(b)(ii)	Any relevant limits or performance measures and criteria; and	Section 6
	(b)(iii)	The specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures;	Section 6
	(c)	Any relevant commitments or recommendations identified in the document/s listed in condition A2(c);	Section 5
	(d)	A description of the measures to be implemented to comply with the relevant statutory requirements, limits, or performance measures and criteria;	Section 5
	(e)	A program to monitor and report on the:	
	(e)(i)	Impacts and environmental performance of the development; and	Section 6
	(e)(ii)	Effectiveness of the management measures set out pursuant to condition D4(c);	Section 6
	(f)	A contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible;	Section 5.4
	(g)	A program to investigate and implement ways to improve the environmental performance of the development over time;	Section 6
	(h)	A protocol for managing and reporting any:	
	(h)(i)	Complaint; or	Section 6.2.2
	(h)ii)	Failure to comply with other statutory requirements;	Section 6.2.4
	(i)	Public sources of information and data to assist stakeholders in understanding environmental impacts of the development; and	N/A
	(j)	A protocol for periodic review of the plan.	Section 6.4

2.2 Statutory context

Legislation	Description	Relevant to the Project?	Details
Commonwealth			
Environment Protection and Biodiversity Conservation Act 1999	Recognises sites with universal value on the World Heritage List (WHL). Protects Indigenous heritage places with outstanding heritage value to the nation on the National Heritage List (NHL), and significant heritage value on the Commonwealth Heritage List (CHL).	No	There are no Indigenous heritage places within the Project site that are listed on the WHL, NHL, or the CHL.
Native Title Act 1993	Administers rights and interests over lands and waters by Aboriginal people. Provides for negotiation and registration of Indigenous Land Use Agreements (ILUAs). Often used in NSW to identify relevant stakeholders for consultation.	No	No native title claim applications or determinations or Indigenous Land Use Agreements exist over the Project site.
Aboriginal and Torres Strait Islander Heritage Protection Act 1984	Preserves and protects areas and objects of particular significance to Aboriginal people that are under threat from injury or desecration.	No	There are no areas or objects within the Project site subject to a Declaration under the Act.
State			
Environmental Planning and Assessment Act 1979	Requires environmental impacts, including to Aboriginal heritage, to be considered in land use planning. Provides for the development of environmental planning instruments, including State Environmental Planning Policies and Local Environmental Plans.	Yes	The Project was assessed as State Significant Development under Part 4, Division 4.7 of the Act. Development consent was issued under Section 4.36 of the Act.

Table 2.2 Commonwealth and State legislation relevant to the ACHMP

Legislation	Description	Relevant to the Project?	Details
National Parks and Wildlife Act 1974 (NPW Act)	Provides blanket protection for all Aboriginal objects and declared Aboriginal places. Includes processes and mechanisms for development where Aboriginal objects are present, or where Aboriginal Places are proposed for harm.	Yes	The NPW Act generally remains in force for the Project in relation to the discovery, impact notification and care of Aboriginal objects in NSW. However, as the Project is classed as SSD, an Aboriginal heritage impact permit (AHIP) is therefore not required to permit harm to Aboriginal objects associated with the Project. Instead, the SSD consent and an approved ACHMP serve as an approval to impact on and manage impacts to Aboriginal objects.
Aboriginal Land Rights Act 1983	Establishes Local Aboriginal Land Councils (LALCs). Allows transfer of ownership of vacant crown land to a Local Aboriginal Land Council. The Office of the Registrar, <i>Aboriginal Land Rights Act 1983</i> (<i>ORALRA</i>), registers Aboriginal land claims and maintains the Register of Aboriginal Owners. Often used in NSW to identify relevant stakeholders for consultation.	No	The Project site does not appear to have Registered Aboriginal Owners pursuant to Division 3 of the Act.

2.3 Regulator consultation

CoC B60(b) requires this plan be prepared in consultation with Heritage NSW and Registered Aboriginal Parties (RAPs). EMM contacted Heritage NSW on 13 September 2021 to discuss their preferences for consultation and review of the ACHMP. Heritage NSW advised their preference is to review the document after the draft ACHMP has been reviewed by the RAPs so that it incorporates RAP comments. The ACHMP was provided to Heritage NSW on 8 February 2022 for their review. Heritage NSW provided a reviewed version of the ACHMP on 22 February 2022. Their comments were addressed and incorporated into the final version of this ACHMP. All comments were of an editorial nature.

Table 2.3 provides the outcomes of consultation with Heritage NSW. Consultation with RAPs is addressed in Section 3.

Regulator	Representative	Date	Discussion	Outcomes	Section of report
Heritage NSW	HNSW Aboriginal Heritage Officer	13/09/2021	Consultation Approach	Heritage NSW advised of the preference to review the document after the draft ACHMP RAP review period so that it would incorporate the	N/A

Table 2.3 Consultation with regulators

	outcomes of RAP feedback and input.

3 ABORIGINAL CONSULTATION

3.1 Key points

• This Project has an established list of RAPs that require ongoing consultation during the preconstruction, construction and operations phases of the Project. A list of the RAPs and their contact details are presented in Table 3.1.

The RAPs require consultation during the finalisation of, and any updates to, the ACHMP; as part of any cultural inductions; for the implementation of project-specific protection and mitigation measures; and in the event of any unexpected finds being encountered. Timing for notification of each of these activities is provided in Table 3.3.

 Table 3.4 provides a list of dates that are important to the Aboriginal community, and during which works requiring their participation should be delayed/cancelled to avoid any potential conflict.

3.2 Registered Aboriginal Parties

There are 19 Aboriginal parties registered for the Project. The RAPs were identified, registered and consulted as part of the ACHA (EMM 2019). Previous consultation included discussion of the management measures which were outlined in the ACHA and are detailed in this ACHMP.

Organisation	Contact name	Phone	Email
Badu	Karia Bond	0476 381 207	baduchts@gmail.com
Buru Ngunawal Aboriginal Corporation	Walter Bell	0419 425 347	walbell@bigpond.net.au
Corroboree Aboriginal Corporation	Steve Johnson	0406 991 221	corroboreecorp@bigpond.com
Duncan Falk Consultancy	Duncan Falk	040 610 644	duncanfalk@hotmail.com
Gulgunya Ngunawal Heritage Aboriginal Consultancy	Glen Freeman	0451 790 215	GulgunyaNHAC@hotmail.com
Gundungurra Aboriginal Heritage Association Inc	Sharyn Halls	0428 270 594	ghal6522@bigpond.net.au
Gunyuu	Darlene Hoskins- Mackenzie	0413 078 011	dghoskinsmckenzie@gmail.co m
King Brown Tribal Group	Carl Brown	0414 283 216	tina.kingbrown@gmail.com
Koomurri Ngunawal Aboriginal Corporation ¹			
Merrigarn Aboriginal Corporation	Shaun Carroll	0435 040 842	cshaun@y7mail.com
Mr Peter Falk Consultancy	Peter Falk	0401 938 060	kanga26@live.com.au
Murri Bidgee Mullangari Aboriginal Corporation	Darleen Johnson	0490 051 102	murrabidgeemullangari@yaho o.com.au
Ngunawal Heritage Aboriginal Corporation	Dean Delponte	0413 186 133	ngunawalhac@gmail.com
Nundagurri Aboriginal Corporation	Aaron Broad	0402 526 888	Nundagurri@gmail.com
Pejar Local Aboriginal Land Council	Delise Freeman	0417 254 813	pejar1@bigpond.com

Table 3.1 List of RAPs for the Project

¹ This party has advised that they no longer wish to be consulted about the Project.

Organisation	Contact name	Phone	Email
Thunderstone Aboriginal Cultural and Land Management Services	Tyronne Bell	0407 517 844	thunderstoneegm@gmail.com
Walbunja Aboriginal Corporation	Hike Tekowhai	0402 730 612	<u>Walbunja@gmail.com</u>
Wullung	Leeroy Bota	0402 608 052	wullunglb@gmail.com
Yerramurra	Nicholas Glover	0435 898 760	yerramurra@gmail.com

3.3 Previous consultation for the Project ACHA

The following provides a summary of the Aboriginal consultation process completed previously for the ACHA to support the Project EIS. Further detail of this process is provided in the Project ACHA (EMM 2019).

The Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW 2010a) were used for the ACHA. RAPs were invited to provide cultural information about the Project site, were provided with draft assessment and fieldwork methods for review, were kept consulted about Project updates and management via a consultation meeting, letters and emails and were provided with assessment documentation for review and comment. A summary of the main consultation components during the ACHA phase is provided in Table 3.2.

Component	Key features
Main ACHA consultation component February–December 2015	 This phase included: the identification, notification and registration of RAPs (February 2015); presentation of Project information and assessment methodologies including on-site meeting (March–April 2015); gathering cultural information throughout ACHA; archaeological survey (April 2015); archaeological test excavation (June–July 2015); provision of draft ACHA for RAP review including on-site meeting (November–December 2015).
Revision of Project mine plan 2016–2017	RAPs kept informed of Project changes via letter updates during this period.
Provision of final revised ACHA to support Project EIS 2018	Provision of final draft ACHA in October 2018 for review and comment prior to finalisation of report.

Table 3.2	Summary of consultation for the Project ACHA
-----------	--

3.4 Consultation in developing this plan

In accordance with CoC B60(b), EMM consulted RAPs in developing this plan. Aboriginal consultation for this ACHMP was approached in a manner consistent with the requirements set out in the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (DECCW 2010a). Consultation was undertaken with existing RAPs (**Table 3.1**) who have been involved in the consultation process since the preparation of the ACHA (EMM 2019). Documentation of the consultation process and its outcomes is included in Appendix C, which provides the consultation log and emails to RAPs and their responses regarding the ACHMP.

3.5 Ongoing consultation required for the Project

The RAPs will continue to be consulted on matters of Aboriginal heritage management for the Project. Primary communication will be via letter which may be emailed or posted depending on RAP preferred means of communication. Issues raised in conversations, whether by telephone or in person, should be documented in a letter by the person raising the issue within a reasonable time of the conversation.

Table 3.3 Aboriginal consultation to be undertaken as part of the Project provides the required Aboriginal consultation to be implemented prior to, and during development activities. Any Aboriginal consultation undertaken as part of these activities should be documented in Appendix C.

Project stage	Project stage Activity Type and preferred method of communication		Comment or notification period to be provided
Pre- development	Development of ACHMP	Notification letter advising RAPs that ACHMP is being prepared by suitably qualified consultant.	N/A
		Provision of a draft copy ACHMP to RAPs for review and comment. Where possible, conduct face-to-face meeting with RAPs to discuss ACHMP and its contents (noting COVID restrictions).	4 weeks
	Finalisation of ACHMP	Provision of final report via e-mail and/or post prior to its implementation.	1 week
Pre- development and development stages	Updates to the ACHMP	Initial notification via phone/e-mail to advise of proposed update. Provision of updated ACHMP for review and inputs via e-mail and/or post. Where significant changes are proposed, a face-to-face meeting should be offered.	3 weeks
stages Development	Aboriginal site management measures	Boral will give consideration to expressions of interest from suitably skilled, equipped and insured Aboriginal persons to provide Aboriginal cultural heritage management services. Successful applicants would be invited to provide a fieldwork representative to participate in the preliminary demarcation of protection areas, collection of surface artefacts and salvage excavation activities as described in Section 5 under contractual arrangement with Boral. Depending on the scope of specific management tasks, RAP fieldwork representatives may be required to work to a roster in an equal manner consistent with that employed during the ACHA. All fieldwork management tasks will include at least one Project archaeologist and will work in accordance with this plan.	2 weeks
	Cultural awareness inductions	Boral will give consideration to inviting RAPs to assist with the development and implementation of Aboriginal cultural awareness inductions.	Ongoing, with a minimum of one week's notice when required
	Significant cultural unexpected finds	Contact all RAPs via phone and/or e-mail to advise of any significant cultural unexpected finds and proposed management. This may include invitation to undertake on-site observations and/or face-to- face meetings where significant cultural materials, such as human remains are discovered.	Within 2 days of find

Table 3.3 Aboriginal consultation to be undertaken as part of the Project

Project stage Activity Type and preferr		Type and preferred method of communication	Comment or notification period to be provided
	Other Initial notification/discussion via phone and e-mail activities as required as required. Where significant or major changes, suitable face-to-face meetings and/or on-site observation should be provided.		≥2 weeks
Post- development	Ongoing access to Aboriginal sites and objects	Aboriginal community members may visit identified Aboriginal sites, places and deposits. Boral personnel escorts will be required for work health and safety reasons. Permission for entry will be directed by RAPs and may involve invited participants from the broader community.	RAPs must provide ≥1 weeks' notice of intent
	Access to keeping place or stored objects	Access to stored Aboriginal objects will be provided subject to the procedures described for the keeping place detailed in 5.5.	RAPs must provide ≥1 weeks' notice of intent
	General: Project site visitation and access	Note: For any post-development activities, all visitation/access would be during mine operating hours, in line with all safety and security requirements; must comply with the site's operational work health and safety (WHS) requirements; must log their attendance on a register made available by Boral. RAPs may invite other members of the local	RAPs must provide ≥1 weeks' notice of intent
		Aboriginal community for research or educational purposes, and/or nominate other local Aboriginal community members to attend. In these scenarios, detailed personnel information on invited/nominated parties must be provided with the request to access the Project site.	

Table 3.4 is a list of dates that are culturally sensitive, and when works requiring Aboriginal heritage input and/or participation should be avoided where possible.

Table 3.4Culturally sensitive dates during which activities requiring Aboriginal heritageinputs/participation should be avoided

Dates	Activity	Description
26 January	Australia Day	The public holiday and surrounding days are increasingly seen as a time of trauma for Aboriginal people, and any work activities should be re-scheduled to avoid this date.
27 May – 3 June	National Reconciliation Week, includes Sorry Day	A week during which Australians are encouraged to learn about shared histories, cultures and achievements, and to explore how one can contribute to achieving reconciliation in Australia. Aboriginal people are often committed to activities during this week and will often be unavailable.
First Sunday – Second Sunday July	NAIDOC week	A week during which Australians are encouraged to celebrate Aboriginal history, culture and achievements. Aboriginal people are often committed to activities during this week and will often be unavailable.

4 ABORGINAL CULTURAL HERITAGE CONTEXT

4.1 Key points

- The Aboriginal cultural heritage values related to the Project site were identified during the preparation of the ACHA through archaeological investigation and Aboriginal community consultation with RAPs (EMM 2019).
- The ACHA identified Aboriginal objects present as stone artefacts distributed across the Project site as isolated objects and scatters on the ground surface, along with concentrations present in shallowly buried deposits. A total of 75 Aboriginal sites were identified that require protection or mitigation.
- One Aboriginal women's cultural heritage site was identified by a RAP representative and subsequently investigated by an intangible cultural heritage specialist. The site: Marulan Creek Women's Cultural Site 1 is located near the Project Marulan Creek Dam area and will require site-specific management as detailed in Appendix B².

4.2 Summary of Aboriginal heritage

As part of the Project Environmental Impact Statement (EIS), an ACHA was undertaken by EMM (EMM 2019). This included consultation with the Aboriginal community, desktop review of the regional archaeological record, on-site investigations (field survey and test excavations), and an investigation into Women's Cultural Site 1 to identify and assess the cultural heritage within the Project site.

Aboriginal cultural heritage was distributed across the Project site and divided into two sections for ease of reference: the main Project site and Marulan Creek Dam.

The archaeological survey identified 57 surface stone artefact sites, and the test excavation identified subsurface material at 17 of these sites.

An additional 18 sites in the vicinity of the Project site were identified prior to the ACHA and were included in the ACHA and ACHMP scope to be adequately assessed and managed. The 75 archaeological sites are shown across the main Project site (Figure 4.1) and Marulan Creek Dam (Figure 4.2). Also shown on these figures is an archaeological sensitivity model which was developed to predict archaeological potential and guide management measures, such as where to focus further archaeological excavation.

Details for the management of the 75 sites are presented in Section 5 and a summary of management measures are listed in Appendix A. Site details and their management status are kept digitally in the Project Aboriginal Heritage Database as detailed in Section 6.4.4.

The archaeological results show that Aboriginal occupation extended across the entire geographic extent of the Project site but is better evidenced by surface material in the main Project site than through archaeological excavation (possibly due to factors such as poorer eroded soils and also less favourable landforms for occupation). In contrast, the results of the archaeological survey around Marulan Creek are an example where surface artefacts were only revealed by stream bank erosion and nearby subsurface deposits on a broad spur (MSL 046, MSL 057, and MSL 047) were covered in thick grass. The test excavation results indicate that Marulan Creek is likely to have experienced more intensive Aboriginal occupation on prominent landforms, possibly

² Note that the preparation of this sub-plan will be staged and prepared closer to when the Marulan Creek Dam component of the Project is planned for construction. This plan will be developed by an intangible cultural heritage specialist.

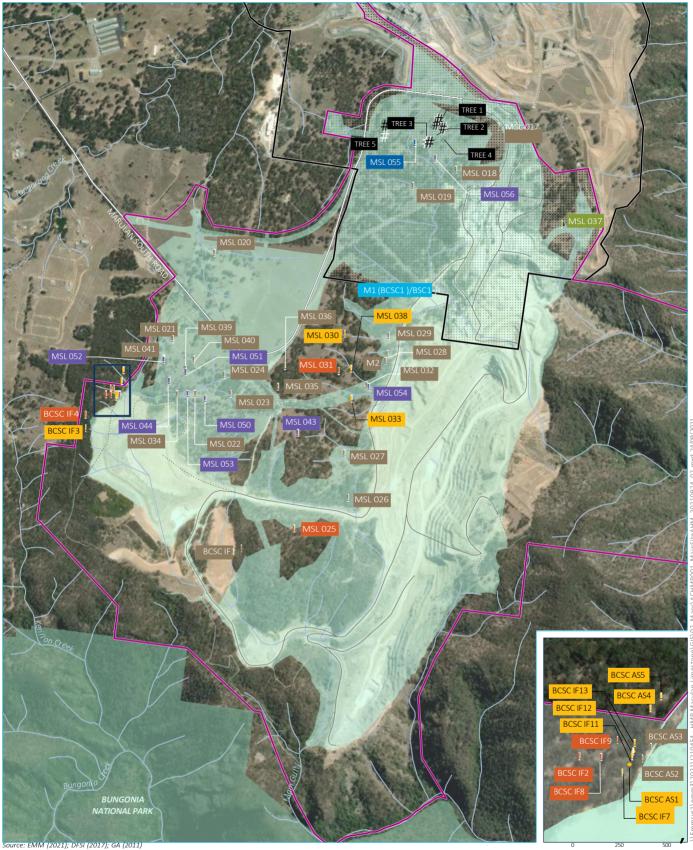
similar to that bordering Tangarang Creek and its tributaries as evidenced by investigations at Peppertree Quarry (refer to EMM 2019 for more detail).

Marulan Creek Women's Cultural Site 1, identified directly east of the Project Marulan Creek Dam area, was assessed to have high cultural significance. The Project was redesigned to prevent all direct construction impacts on this site. Impacts will now derive from indirect sources due to water flow variation after the Marulan Creek Dam is constructed. A site-specific management plan is provided for this site as Appendix B³.

The ACHA determined that the Project will impact 49 out of the 75 assessed Aboriginal archaeological sites. A total of 25 sites will be avoided, and the ACHA identified that one previously recorded site (M1 BCSC1) had already been removed as part of approved mining activities. Management and mitigation measures were developed in response to the proposed impacts. The level of management proposed is directly proportionate to the archaeological significance of each site and the nature of the impact which is detailed in Section 5.

The report recommended that an Aboriginal cultural heritage management plan (ACHMP) be developed following the approval to provide a framework for managing Aboriginal heritage during the pre-construction and construction phases of the Project. This recommendation now forms CoC Part B Condition 60.

³ Note that the preparation of this sub-plan will be staged and prepared closer to when the Marulan Creek Dam component of the Project is planned for construction. This plan will be developed by an intangible cultural heritage specialist.



KEY

- Project area Peppertree Quarry consent boundary
- Shared project and PTQ boundary Disturbance footprint
- # Subject tree

Existing environment

- Major road

- Watercourse/drainage line
- Named waterbody
- NPWS reserve

Management

- Avoidance
- Avoidance and protection •
- Collection •
- N/A •
- None (site removed) • • Salvage excavation
- Unmitigated impacts •

Aboriginal site management: main project site

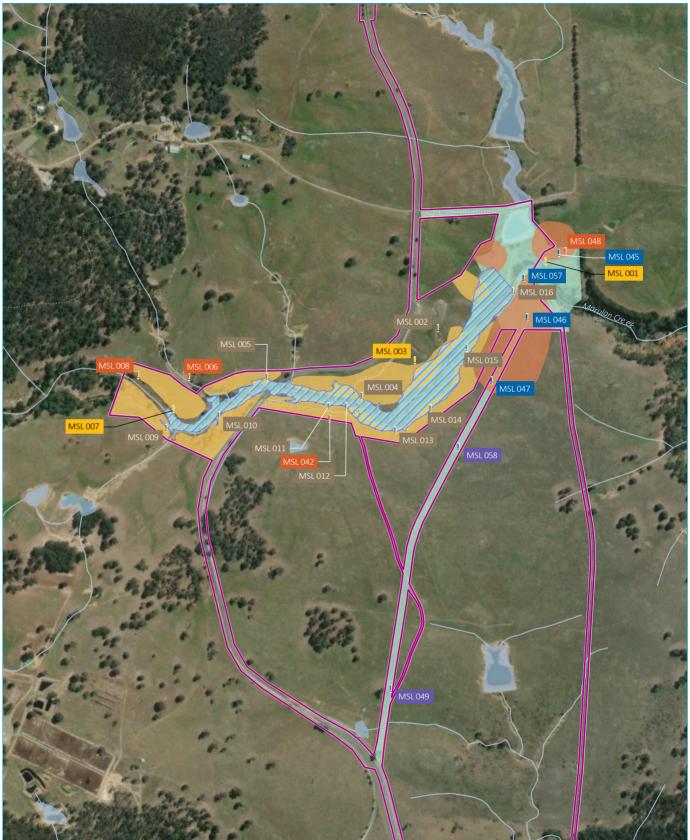
GDA 1994 MGA Zone 56

Aboriginal Cultural Heritage Management Plan Figure 4.1



- Minor road Vehicular track

- - Marulan South Limestone Mine



KEY

- Project area
- Disturbance footprint
- 📨 Marulan Creek dam inundation area
- Existing environment ······ Vehicular track
- Watercourse/drainage line
- Waterbody
- Archaeological sensitivity
- High archaeological sensitivity
- Moderate archaeological sensitivity

- Management
 - Avoidance
 - Avoidance and protection
 - Collection
 - Salvage excavation
 - Unmitigated impacts

GDA 1994 MGA Zone 56

Aboriginal site management: Marulan Creek Dam

Marulan South Limestone Mine Aboriginal cultural heritage management plan Figure 4.2



5 ABORIGINAL HERITAGE MANAGEMENT

5.1 Key points

Aboriginal site management over the life of the Project will primarily take the form of either protective measures for avoided sites, or salvage as mitigation for sites that will be impacted:

- Avoid: Aboriginal sites close to the Project disturbance footprint (within 20 m), scheduled for
 protection from Project impacts will be actively protected. Active protection measures will
 vary depending on site type and other specific requirements. Sites outside 20 m of the
 Project disturbance footprint will be managed through passive avoidance.
- **Salvage**: Certain Aboriginal sites within the Project disturbance footprint will be managed through surface collection and/or salvage excavation mitigation measures. This must occur prior to Project-related ground disturbance occurring near individual sites.
- **Unmitigated impacts**: subsurface sites of low archaeological significance will receive unmitigated Project impacts. These sites do not warrant further archaeological investigation or salvage.
- Marulan Creek Women's Cultural Site 1: will be avoided from direct Project related impacts. A separate plan will be provided as Appendix B which sets out procedures, and protocols on confidential and restricted access arrangements. Note that the development of this sub-plan will be staged and prepared closer to when the Marulan Creek Dam component of the Project is planned for construction. This plan will be developed by an intangible cultural heritage specialist.
- **General**: Several ongoing general post-approval heritage requirements are required during construction and operational phases. These are outlined in detail in this section and include the management of all salvaged Aboriginal objects protocols in the event that unexpected cultural materials are found.

A summary of required management measures is provided in Table 5.1, on Figure 4.1 and Figure 4.2. Management measures for each site are listed in Appendix A.

Management type	Artefact scatter	Isolated find	Subsurface artefact deposit	Total
Passive protection	1	7	2	10
Active protection	8	6		14
Surface collection	25	10		35
Salvage excavation			5	5
Unmitigated impacts			10	10
N/A (site previously removed)	1			1
Total	35	23	17	75

Table 5.1 Management summary

5.2 Aboriginal heritage protection and storage

5.2.1 Active protection close to development footprint

General

The sites scheduled for avoidance within 20 m of the development footprint will be managed through active protection using suitable fencing options (Figure 4.1, Figure 4.2, Appendix A). Fencing may comprise stake and wire fencing or similar materials that form a clear visual and physical barrier between the site and construction areas. Fencing will be erected prior to construction occurring in the vicinity of the sites scheduled for active protection. Fencing will be on the boundaries marked by the Project archaeologist and at least one RAP representative with assistance by a qualified surveyor or fencing contractor. These boundaries will be guided by Aboriginal site GIS data layers contained in the Marulan South Limestone Mine Aboriginal Heritage Database (MSLM AH Database) (Section 6.4.4).

The barriers and fencing will incorporate a 20 m minimum buffer from site features to ensure the site is adequately protected from all construction activities.

The fencing contractor will be guided by boundary markers according to spatial data and/or mapping provided by the Project archaeologist.

A durable sign will be attached to the fencing including words to the effect of:

Environmentally sensitive area Do not disturb Contact the Environmental Coordinator.

At the end of Project construction, Boral will assess the need for ongoing active protection of the sites with respect to the nature of operations in the vicinity of any particular site. If Boral determines that the site does not require active protection during operations, they will consult RAPs in accordance with Section 3.5 of this document and remove the active protection measures, only if there is consensus from RAPs that such a measure is appropriate.

Marulan Creek Women's Site 1

Similar to the general active protection measures, the Marulan Creek Women's Site 1 will be subject to fencing at a distance of 20 metres from the outer edge of the Cultural Site prior to any construction activities in the area. The Project Marulan Creek Dam design allows for a 20 m buffer between the edge of the Cultural Site and the outer extent of the Project disturbance footprint. Further management details are specified in Appendix B⁴.

5.2.2 Passive protection away from Project footprint

Passive management will apply to the Aboriginal sites scheduled for avoidance over 20 m from the development footprint (Figure 4.1, Figure 4.2, Appendix A). While no fencing, signage or active land management measures are proposed for these sites, their locations will be kept on the MSLM AH Database for persons working on or visiting the Project site. Their presence in the landscape will be demarcated by at least one high visibility peg, stake or other marker to alert persons to their location. These locations will be marked by the Project archaeologist and at least one RAP representative.

⁴ Note that the preparation of this sub-plan will be staged and prepared closer to when the Marulan Creek Dam component of the Project is planned for construction. This plan will be developed by an intangible cultural heritage specialist.

5.3 Aboriginal heritage salvage measures

5.3.1 Surface artefact collection

Salvage surface collection of all Aboriginal sites in the development footprint will be completed by the Project archaeologist and RAP representatives (Figure 4.1, Figure 4.2, Appendix A). This will be undertaken prior to any ground disturbance related to the Project in the vicinity of the Aboriginal sites.

The collection method will be as follows:

- 1. Site coordinates and area polygons for each site will be entered into mobile GPS devices to re-locate and confirm the location.
- 2. The general vicinity of each site location will be inspected by the field team. Stone artefacts will be flagged on the ground and a photo taken of the flagged site. Each flagged artefact will be marked as a waypoint in the GPS.
- 3. All artefacts will be collected into snap lock plastic bags or similar, marked with the Project name, site name, collection date and waypoint number.
- 4. All artefacts will be sorted and recorded post-fieldwork with respect to technological type, implement type, raw material, maximum block length and weight.
- 5. The collected artefacts will be incorporated into a salvage report detailing the results of the fieldwork, the artefacts recovered at each site and GIS figures showing the artefact locations.
- 6. The Aboriginal Heritage Information Management System (AHIMS) records will be updated with a site impact recording form for each collected site.

It may not be possible to find all of the previously recorded artefacts designated for collection. This may be due to a number of environmental changes since identified, including changes in ground surface visibility conditions. Regardless of whether stone artefacts are identified at each site during this process, no further collection attempts or mitigation measures will be required after a reasonable attempt at collection has been undertaken. Following this procedure, the management status of these sites will be regarded as completed and Project related development may proceed without further heritage management measures.

As sites MSL 017, MSL 018 and MSL 019 are within the PTQ MOD 5 boundary, they will be subject to collection but in accordance with the PTQ AHMP (Boral & EMM 2021) (refer Section 1.3.2).

5.3.2 Salvage excavation

Five archaeological sites were identified for salvage excavation during the ACHA (EMM 2019). These sites are within two localities: adjacent to Marulan Creek (MSL 046; MSL 047; MSL 057 and MSL 045, Figure 4.2) and on a flat spur at the main Project site (MSL 055 - Figure 4.1). This ACHMP only addresses the sites adjacent to Marulan Creek and excludes MSL 055 because that site is now within the PTQ MOD 5 footprint and subject to the salvage measures detailed in the PTQ AHMP (Boral & EMM 2021) (refer Section 1.3.2).

The sites scheduled for salvage excavation will be investigated in accordance with an archaeological excavation methodology which is provided in Appendix D.

5.3.3 No further action (unmitigated impacts)

No further action (unmitigated impacts) will apply to 10 sites in the Project site: MSL 058; MSL 056; MSL 054; MSL 053; MSL 052; MSL 051; MSL 050; MSL 049; MSL 044 and MSL 043.

This applies to eight sites within the proposed emplacement areas of the main Project site and two sites along the proposed Marulan Creek Dam haul road.

MSL 056 is within the shared PTQ MOD 5 Project boundary which will be managed under the PTQ AHMP (Boral & EMM 2021) (refer Section 1.3.2). No further action applies to these sites because they have been identified as of low scientific significance, and therefore do not warrant further investigation or recovery.

5.3.4 Sites to be managed under the Peppertree Quarry AHMP

As addressed in Alignment with other plans 1.3.2, the PTQ AHMP will be used to manage Aboriginal sites within the shared boundary of the Project site and PTQ MOD 5. Chapter 1.4 of the PTQ AHMP details the management requirements for the sites summarised in Table 5.2.

The table below includes a summary of management measures for the Aboriginal sites within the PTQ MOD 5 footprint.

Site Name	Site type	Management measure
MSL 017	Artefact scatter	Surface collection
MSL 018	Artefact scatter	Surface collection
MSL 019	Isolated find	Surface collection
MSL 055	Subsurface artefact deposit	Salvage excavation
MSL 056	Subsurface artefact deposit	Unmitigated impacts
Tree 1 (Mod 5)	Tree with scar	To be salvaged; archival recording
Tree 2 (Mod 5)	Forked tree	Inspection of fork cavity and salvage contents if required; archival recording
Tree 3 (Mod 5)	Tree with scar	To be salvaged; archival recording
Tree 4 (Mod 5)	Tree with scar	To be salvaged; archival recording
Tree 5 (Mod 5)	Tree with scar	To be salvaged; archival recording

 Table 5.2 Management summary for Aboriginal sites to be managed under the PTQ

 AHMP

5.4 New finds procedures

5.4.1 Discovery of new Aboriginal objects, sites and/or deposits

Table 5.3 sets out the measures in the event that any previously unidentified and/or newly observed cultural material is identified during the pre-construction, construction and/or operational phases of the Project. Table 5.3 provides a description of the types of Aboriginal site that may be encountered during the Project.

The recording of, and any proposed mitigation measures must be completed by a heritage professional(s) with participation of the RAPs representatives. Avoidance of newly identified Aboriginal objects is always the preferred heritage outcome where feasible. Mitigation measures should only be employed when it can be reasonably demonstrated that avoidance is not possible. Heritage NSW must be notified about any plans to move, collect or salvage newly identified sites.

All sites that cannot be avoided must be assessed of their archaeological significance prior to impacts in accordance with best practice heritage guidelines.

Table 5.3 Management of unexpected cultural materials (except skeletal/human remains)

Protocols to follow

- All works within the location of the Aboriginal object/s must stop.
- The person who identified the Aboriginal object/s must immediately notify the person in charge of the activity e.g. Project Manager, Foreman, Environmental Representative.
- All construction that could potentially harm the Aboriginal objects or values must cease (including stopping all construction within at least 15 m). Only construction that is required to make the area safe is permissible.
- The Aboriginal object/s is to be protected with the establishment of a no-go zone.
- Contact the Project heritage consultant (Section 1.5) and RAPs (see Section 3.2) to lead the subsequent management of the find.
- Consideration of avoiding the cultural materials should be undertaken. Where avoidance **can** be achieved, implement the following: -
- if within 20 m of the Project footprint apply active management as set out in Section 5.2.1, or if over 20 m of the Project footprint apply passive management measures as set out in Section 5.2.2. All sites must be suitably recorded in accordance with AHIMS site card standards (Appendix F) by a heritage professional and representatives of the RAPs (listed in Section 3.2). The site/s must be integrated into the cultural inductions (Section 6.3) to ensure all personnel are aware of the location and to avoid inadvertent impacts during the construction.

Where avoidance cannot be achieved: -

Open artefact sites

For sites of low to moderate archaeological significance, surface collection will be employed prior to Project impact. The collection will be undertaken by qualified archaeologists and RAP representatives. The collection method will be as per Section 5.3.1.

For sites of high archaeological significance, or with potential to be of high archaeological significance through the identification of a significant PAD, as determined by the Project archaeologist, test excavation may be employed to a methodology prepared in consultation with Boral and RAPs. Guiding excavation methods are presented in Appendix D.

Any salvage excavation program would require a report on the methods and outcomes of the excavation.

Modified trees

Note that Aboriginal tree scars may require verification by a qualified scar tree expert such as an aborist or Aboriculturalist if the scars are ambiguous to a degree that they cannot be determined by the Project archaeologist. If a tree is assessed by an expert not to be an Aboriginal object, then RAPs and Heritage NSW will be notified and confirm that the tree is not an Aboriginal object to confirm that works may proceed in the area of the tree.

If the find is determined to be an Aboriginal scar tree that cannot be avoided, the following Aboriginal scar tree removal procedure will be followed after adequate consultation with Project RAPs:

- A suitably qualified person in scar tree management (eg archaeologist with scar tree specialisation, Arborculturalist or arborist) will be engaged to determine a suitable removal method in consultation with RAPs. This may involve the requirement to saw the tree above the scar location allowing a suitable buffer from the scar feature. The process of removal will be photographed.
- The removed tree and scar may be treated to preserve the scar to prevent its further deterioration. Any treatment option would be completed in consultation with RAPs, Boral and a suitably qualified curator.
- The tree will be relocated to a nominated Aboriginal keeping place or other location as guided by RAPs (yet to be determined) and appropriately displayed using suitable materials in consultation with Boral and RAPs.
- The outcomes of the tree management activity will be documented in a short letter report including records of the original and new tree location. Note that long term management of any salvaged trees may require a Care Agreement as set out in Section 5.5.1.
- The AHIMS records will be updated with a site impact recording form for the site.

Protocols to follow

Other rarer site types not expected to occur in the Project boundary (eg grinding grooves, engravings, stone arrangements, ceremonial sites)

As other site types have a very limited chance of being identified in the Project boundary, no specific management methodology has been devised.

If other site types not previously identified in the Project boundary are identified, a salvage method must be prepared by the Project archaeologist in consultation with RAPs and Heritage NSW. This may be established through an extraordinary meeting with RAPs or through letter correspondence with a reasonable timeframe for review.

Any salvage activity to such sites may require additional assessment and approvals as dictated by Heritage NSW and would require a report on the methods and results of the exercise.

Post fieldwork

- Once the archaeological on-site activities are complete to the satisfaction of the heritage professional in consultation with the RAPs, construction activities may continue.
- All archaeological activities should involve suitable analysis of cultural materials. Chronological, paleoenvironmental and sedimentological samples should be suitably analysed and documented in a report that is provided to Heritage NSW (see Appendix D).

5.4.2 Discovery of skeletal/human remains

In the event that known or suspected human skeletal remains are encountered during the activity, the procedure presented in Table 5.4 must be applied.

Table 5.4	Procedure for the discovery of potential Aboriginal ancestral remains
-----------	---

Stage	Actions
1.Stop work and secure	All work must STOP in the vicinity of the remains.
site	• The immediate vicinity will be secured to protect the find and the find will be immediately reported to the Environmental Coordinator who will immediately advise the site management.
	• A no-go zone will be established around the immediate area of the site.
	Complete review of activities to enable compliance and continued operations.
2.Notification to authorities and stakeholders	 The site manager should notify NSW Police of the discovery as soon as possible. All subsequent steps will be dictated by the NSW Police.
	 Contact the Project heritage consultant (Section1.5) and RAPs (listed in Section 3.2) to brief them on the evolving situation.
	 If advised by Police, engage suitably qualified archaeologist or forensic anthropologist to assist Police in monitoring of skeletal material.
3.Determination of the find and further notification	 If it is determined that the skeletal material is of ancestral Aboriginal remains, RAPs must be contacted and consultative arrangements will be made to discuss ongoing care of the remains.
	 Contact Heritage NSW (1300 361 967) or the NSW Environment Line (131 555) to notify them of the find.
	 Engage Project archaeologist to assist and/or facilitate management of the Aboriginal ancestral remains with RAPs and Boral.
	Proceed to Step 4.
	 If the skeletal material is not human, resume work. Ensure determination of non-human material is provided by relevant experts (eg Coroner or Police) before resuming work.
	• If the remains are historic but non-Aboriginal human remains, the NSW Heritage Council (or delegate of the Heritage Council) will be consulted to determine requirements in accordance with the NSW <i>Heritage Act 1977</i> and relevant guidelines. Further actions are likely to require adherence with the following NSW Heritage Council guidelines:
	 Conservation Management Documents: Guidelines on Conservation Management Plans and other Management Documents.
	 Skeletal Remains; Guidelines for Management of Human Skeletal Remains.
	 If the remains are non-Aboriginal and non-historic human remains, Boral is to coordinate involvement of police. Works will not proceed until written approval is granted from relevant authorities.

Stage	Actions
4.Initial planning and reporting if it is determined	 Aboriginal ancestral remains certificate to be submitted to the Police/Coroner to address the Coroners Act.
that the remains are Aboriginal ancestral remains.	• In consultation with RAPs, Heritage NSW and archaeologist, establish investigation area and any additional protocols to be adhered to during further investigation. The investigation will aim to establish whether any other burials are within or likely to occur nearby. Suitable methods could include controlled and monitored hand or machine excavation and/or non-invasive techniques such as geophysical techniques.
	• Engage an archaeologist to record the site and undertake significance and impact assessment of the burial site with RAPs and archaeologist. Site recordings must involve drawings and photography. Additional technical studies and samples may be taken with the consent of RAPs such as those for dating and biological information (eg age, sex and health of deceased).
	 Record burial site on AHIMs register, noting any restricted access requirements requested by RAPs.
5.Engagement with Environmental Coordinator	• Explore and demonstrate options have been considered for site avoidance, if RAPs desire for the skeletal material to remain in-situ.
to determine whether disturbance of the burial	 If the Aboriginal ancestral remains cannot be avoided:
site(s) can be avoided.	 Consult with RAPs, Heritage NSW and Project archaeologist to facilitate recovery and reburial protocols and actions. Approval for recovery methods must be obtained by relevant authorities prior to any further movement of the remains:
	 Recovery methods must include:
	 Exhumation in a controlled archaeological method and in consultation with RAPs and placed into a secure, temperate controlled storage location until a final reburial site can be identified.
	 Access to the secure storage location containing any human remains will be managed and facilitated by Boral in consultation with RAPs.
	 RAPs will determine if further studies, media releases or other investigations are appropriate for the finds.
	 Where required, Boral will help facilitate any culturally appropriate reburial or ceremonial methods.
	 Prepare report for Heritage NSW and RAPs on the outcome of relevant investigation, recovery, and reburial outcomes.
	- Update ACHMP.
	 Works will not recommence until written approval is received from relevant authorities.
	If the Aboriginal ancestral remains can be avoided:
	 develop appropriate management and mitigation measures in consultation with RAPs, Heritage NSW and archaeologists;
	 prepare report for DPIE, Heritage NSW and RAPs;
	 update ACHMP; and
	 works will not recommence until written advice is provided from the Project archaeologist that the remains are suitably protected and away from Project impacts.

5.5 Management of salvaged Aboriginal objects

The long-term management of salvaged Aboriginal objects is an aspect of cultural heritage management driven by the desires of local Aboriginal community. Salvaged Aboriginal objects are typically either stored in a long-term facility (known as a 'keeping place') or reburied on Country in an area that will receive long term protection from further development or other impacts. In some instances, a mixture of both options is adopted.

Boral proposes that all recovered Aboriginal objects are managed in a manner generally consistent with the recovered objects for the adjacent Peppertree Quarry (Project Approval

06_0074) as detailed in the PTQ AHMP (Boral & EMM 2021). Through extensive consultation with the Peppertree Quarry Aboriginal Management Committee (AMC), recovered objects from Peppertree Quarry are stored in a secured temporary location within the Peppertree Quarry Project area and will be reburied in the Peppertree Quarry nominated Sensitive Environmental Sites upon the completion of recording and analysis. The final location of salvaged objects are yet to be determined. These objects may be subject to temporary storage at the Peppertree Quarry facility if space is available and RAPs support it. Otherwise, the salvaged materials will be kept temporarily at a secure location at the Marulan South Limestone Mine Project site. An appropriate return to Country reburial location will be decided once the objects have been salvaged. At that stage, the ACHMP will be reviewed and updated in consultation with RAPS to include the decided location prior to reburial occurring.

A sample of collected artefacts, as advised by RAP representatives, may be made available for display in a suitably secure and lockable display case. The display case will include relevant signage for contextual, informational and educational purposes. The location of the display case will be determined in consultation with Boral and RAPs, which may be either in the Project site offices or the Peppertree Quarry site offices.

All stored materials are to be held in locked cabinets with access managed by the keeping place manager or delegate in accordance with instructions by RAPs. The cabinet is to be clearly labelled with the contents and conditions for access.

All associated reports and records bound in a hard copy and digital form will be stored in the same location as the salvaged artefacts.

The reburial activity would be guided by the stone artefact disposition procedures as set out in Section 3.7 of the *Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW* (DECCW 2010b). However, RAPs have requested that buried stone artefacts are not left in plastic recording bags, but packaged within suitable native materials or simply placed directly within the soil. Boral will explore options for the reburial activity to be designed in a manner whereby contextual information is retained for objects that have been removed from plastic bagging and labelling.

Any reburial fieldwork will be undertaken by the RAPS assisted by a qualified archaeologist so that it is recorded appropriately. RAPs who wish to be involved in the activity will also be requested to participate.

If the display area closes or can no longer accommodate the Project Aboriginal objects, consideration of an alternative location will be determined with RAP consultation. Where no facility can be identified, the material should be reburied alongside the rest of the recovered assemblage in a secure manner that allows later retrieval at a location notified to DPIE and Heritage NSW in the designated manner.

Further, if an Aboriginal object from Marulan South is stored at Peppertree Quarry, and the operating relationship between Peppertree Quarry and the Marulan South Limestone Mine ceases, all Aboriginal artefacts relating to the mine will need to be stored securely on the mine site.

5.5.1 Care Agreement required

The NSW *National Parks and Wildlife Act 1974* (NPW Act) provides for the transfer of Aboriginal objects to Aboriginal owners. Aboriginal owners are defined in the Act as persons whose names are entered on the Register of Aboriginal Owners because of the persons' cultural association

with particular land under the NSW *Aboriginal Land Rights Act 1983*⁵. If Aboriginal owners under this definition cannot be identified, a Care Agreement can facilitate the transfer to other persons. In the context of this Project, a Care Agreement will be required for salvaged Aboriginal objects that remain on display. A Care Agreement will not be required for the salvaged objects that are subject to reburial within the Peppertree Quarry Habitat Management Area.

A NPW Act Section 85a 'Care Agreement' will be entered into with Heritage NSW and Boral (either at the Marulan South Limestone Mine or Peppertree Quarry), which will allow for the selection of displayed objects to be managed by Boral. Boral will be the custodian for the purposes of safekeeping, with a person delegated from the environmental management team.

The designated Care Agreement application will be submitted to Heritage NSW prior to, or early in the salvage fieldwork period, with the intention of obtaining a Care Agreement as soon as possible.

5.6 Any proposed activity outside approved disturbance footprint

Any activity that may cause ground disturbance outside of the approved disturbance footprint will not occur without prior Aboriginal heritage assessment and other relevant legislative and internal approvals.

If the proposed activity requires additional environmental assessment and planning approval, such as a modification to the existing development consent, an Aboriginal heritage assessment will be completed in accordance with relevant assessment requirements as specified by Heritage NSW/DPIE. The existing Project RAPs will be consulted for this process.

⁵ There is currently no such defined registered Aboriginal owner for the Project to whom the Aboriginal objects can be transferred.

6 COMPLIANCE, TRAINING, REVIEW AND IMPROVEMENT

6.1 Key points

- This section provides information to ensure the ACHMP is complied with during the Project; training requirements and processes and procedures to manage complaints and nonconformances.
- Criteria and timing for revisiting and updating the ACHMP is provided in this section.

6.2 Compliance and auditing

6.2.1 Measuring performance

Actions undertaken under the plan will be reported as part of required Independent Environmental Audits (CoC D13) to DPIE. Compliance with the plan will be measured by standard environmental auditing procedures undertaken at regular intervals. The audit may include an assessment of compliance with development consent conditions and may include auditing the following measures:

- protection of all scheduled sites;
- salvage of scheduled sites and appropriate management of salvaged materials;
- inductions are taking place and include appropriate material; and
- reporting and managing any newly identified Aboriginal objects in accordance with this plan.

Boral may engage a heritage consultant to assist with reporting compliance as part of an Independent Environmental Audit. Any incidents and non-compliance notifications will follow requirements set out in sections 6.2.3 and 6.2.4 and the EMS (refer Section 1.3).

6.2.2 Complaints

The community complaints protocol as set out in the EMS for the Project will apply to the works associated with this AHMP. Complaints will be recorded in the Boral online HSEQ system and managed through the HSEQ Sequence system.

Any complaints will be considered in improvements of the ACHMP.

6.2.3 Incident reporting

In accordance with CoC D9 Boral will immediately notify DPIE and any other relevant agencies after it becomes aware of an incident resulting in unauthorised Aboriginal heritage impacts. The notification will be in writing through DPIE's Major Projects Website and identify the development (including the development application number and name) and set out the location and nature of the incident.

The development consent defines an 'incident' as:

"An occurrence or set of circumstances that causes or threatens to cause material harm and which may or may not be or cause a non-compliance".

Material harm is defined as:

"harm to the environment that:

involves actual or potential harm to the health or safety of human beings or to the environment that is not trivial, or

results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000 (such loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment)

This definition excludes "harm" that is authorised under either this consent or any other statutory approval"

6.2.4 Non-compliance reporting

The development consent defines a 'non-compliance' as:

"An occurrence, set of circumstances or development that is a breach of this consent".

In accordance with CoC D10 Boral will, within seven days of becoming aware of an Aboriginal heritage non-compliance, notify DPIE of the non-compliance. The notification will be in writing through DPIE's Major Projects Website and identify the development (including the development application number and name), set out the condition of this consent that the development is non-compliant with, why it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance.

The Site Manager (or delegate) is responsible for reporting to DPIE any occurrence or set of circumstances that that has breached any conditions of consent relating to Aboriginal heritage.

Note that a non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.

Investigation into a non-compliance will include:

- a clear description of the non-compliance, and its actual/potential harm to cultural materials;
- all personnel involved in the non-compliance, their organisation and contact details;
- any corrective actions undertaken to address the non-compliance; and
- next steps, including the need for additional heritage activities and/or requirements to contact DPIE/Heritage NSW to advise them of the non-compliance.

Any non-compliance will be considered in improvement of the ACHMP as outlined in Section 6.4.

6.3 Aboriginal heritage induction requirements

6.3.1 Site inductions

All employees, contractors, sub-contractors involved in ground-disturbing activities will undergo an Aboriginal cultural heritage induction conducted either by a representative of the RAP, the lead contractor (once appropriately trained to present the induction), or their subcontractor (once appropriately trained to present the induction). In addition, visitors to the Project and general contractors not involved in ground-disturbing activities will be made aware of their obligation to avoid harm to Aboriginal heritage through an Aboriginal heritage component of the general site induction. Records of these inductions will be kept by Boral/its contractors.

The Aboriginal heritage induction/relevant sub-component of the site induction will be planned in consultation with RAPs. Boral will seek input from RAPs regarding appropriate materials for input and key issues that RAPs would like raised to all inductees. This may involve sending relevant draft material (such as induction booklets or slideshow slides) to RAPs for their review and comment within a reasonable timeframe (minimum one week).

The following points will be conveyed through site induction material:

- Aboriginal sites have been identified across the Project site and beyond;
- Aboriginal sites are of high significance to the Aboriginal community, are important to the wider community and must be treated with respect;
- Aboriginal sites are protected by law and that development consent includes conditions allowing impacts to certain specified Aboriginal sites in accordance with this plan;
- Aboriginal sites have included grinding grooves, scarred trees, quarries, stone artefact sites;
- Aboriginal sites can be hard to recognise, therefore reference must be made to the Aboriginal heritage maps in this ACHMP in order to clearly identify demarcated site boundaries;
- Given sites are difficult to identify, a range of photographs giving examples should be provided to inductees to show the types of material that may be expected; and
- certain sites must be protected or salvaged by the Project archaeologist and RAPs prior to ground disturbance activities; and
- that there are new finds procedures which involve stopping work if suspected new Aboriginal sites or skeletal material is identified on-site.

6.3.2 Fostering cultural heritage awareness

Boral will provide opportunities for RAP representatives to participate in activities related to training and fostering cultural heritage awareness in the Project boundary. This will involve Boral exploring opportunities to involve RAPs in training the lead contractor and/or relevant subcontractors to give cultural heritage inductions, toolbox sessions during construction and operations (as may be relevant) and provide updates on Aboriginal heritage matters for the Project. Boral will also explore opportunities to work with suitable Aboriginal people to develop and implement Cultural Heritage Awareness Training for the life of the Project.

6.4 Review and improvement and data management

6.4.1 Continual improvement

Continual improvement of this ACHMP will be achieved by the ongoing evaluation of environmental management performance against environmental policies, objectives and targets for the purpose of identifying opportunities for improvement. The continual improvement process will be designed to:

- identify areas of opportunity for improvement of environmental management which leads to improved environmental performance;
- determine the root cause or causes of non-conformances and deficiencies;
- develop and implement a plan of corrective and preventative action to address nonconformances and deficiencies;
- verify the effectiveness of the corrective and preventative actions; and
- document any changes in procedures resulting from process improvement.

6.4.2 Annual review

By the end of July each year after the commencement of development, or other timeframe agreed by the Planning Secretary, Boral will prepare a report for submission to the Department reviewing the environmental performance of the development, to the satisfaction of the Planning Secretary.

This report will be prepared and submitted in accordance with CoC D11 of the EMS. Aboriginal heritage will be measured and reported against conditions B57 – B62.

6.4.3 ACHMP review and update

The ACHMP is to be reviewed in accordance with CoC D5 (j). The ACHMP will be revisited and updated in accordance with CoC D7 if necessary, in the following circumstances:

- where modification to the Project occurs that may affect impacts to Aboriginal heritage, ie where approved changes to the Project change or remove previously planned impacts on Aboriginal heritage where mitigation was proposed in the ACHMP but is no longer required; and/or
- where complaints and/or non-conformances have been identified that require changes to ensure suitable management of Aboriginal heritage in future stages of the Project;
- Aboriginal consultation for any updates and/or changes should be undertaken in accordance with Section 3.5.

Each year following the annual review outlined in Section 6.4.2 and every three years after the independent environmental audit detailed in CoC D13, Boral will review this plan and update it if necessary, with findings of the annual review and independent environmental audit, to promote continuous improvement.

In accordance with CoC D8, if changes are required to this plan, it will be resubmitted to the Planning Secretary for approval within six weeks of the review. The most recent version of this plan as approved by the Planning Secretary is to be implemented.

Boral will continue to apply the approved ACHMP until the approval of the revised ACHMP.

6.4.4 Marulan South Limestone Mine Aboriginal Heritage Database

The MSLM AH Database will be created and maintained by Boral. The database will be a 'live' document of the Aboriginal heritage resources within the Project boundary that will be continuously updated to reflect new finds and the management status of all Aboriginal sites within the Project boundary.

The database must include:

- a record of current management status, location and boundaries of Aboriginal sites, site areas and archaeological sensitivity boundaries; and
- a record of Aboriginal heritage survey coverage (represented by GPS survey tracks).

The database will comprise datasets available in both MS Excel format and GIS Format. GIS data will be made available for mapping purposes to assist in the identification and management of Aboriginal heritage sites and areas during the life of the Project. The database will be 'version controlled' to ensure that all relevant parties involved in Aboriginal heritage management are working with the most up to date datasets.

Boral/its contractors will be responsible for ensuring that all relevant employees, RAPs and subcontractors are provided with up to date datasets.

The database will be updated in the following circumstances:

- discovery of a confirmed new Aboriginal site, or human remains;
- changes or incidents to existing Aboriginal sites;
- changes to the management status of Aboriginal sites and areas; and/or
- the completion of Aboriginal heritage activities such as survey, excavation, surface collection, and protective measures.

Note that any newly identified Aboriginal object must be registered on AHIMS.

7 REFERENCES

EMM Consulting Pty Limited (EMM) 2019, Marulan South Limestone Mine Continued Operations Aboriginal cultural heritage assessment, including the results of an archaeological survey and test excavation, prepared for Boral Cement Limited.

Boral Resources (NSW) Pty Ltd (Boral) & EMM 2021, *Peppertree Quarry Aboriginal Heritage Management Plan*, prepared for Boral. Current version in draft.

Department of Environment Climate Change and Water (DECCW) 2010a, *Aboriginal Cultural Heritage Consultation Requirements for Proponents*.

- 2010b, Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW.
- 2010c, Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales.
- 2010d, Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in New South Wales.



Table 7.1	Site impact assessment and management summary
-----------	---

Site Name	AHIMS number	Site type	Overall significance level	Development type	Impact Level	Management
MSL 001	52-4-0518	Artefact scatter	Low	None	No impact	Active protection
MSL 002	52-4-0519	Artefact scatter	Low	Marulan Creek Dam disturbance footprint	Total loss	Surface collection
MSL 003	52-4-0520	Isolated find	Low	None	No impact	Active protection
MSL 004	52-4-0521	Isolated find	Low	Marulan Creek Dam flood area	Total disturbance	Surface collection
MSL 005	52-4-0522	Artefact scatter	Low	Marulan Creek Dam flood area	Total disturbance	Surface collection
MSL 006	52-4-0523	Artefact scatter	Moderate	None	No impact	Passive protection
MSL 007	52-4-0524	Artefact scatter	Low	None	No impact	Active protection
VISL 008	52-4-0525	Isolated find	Low	None	No impact	Passive protection
MSL 009	52-4-0526	Artefact scatter	Low	Marulan Creek Dam flood area	Total disturbance	Surface collection
MSL 010	52-4-052	Isolated find	Low	Marulan Creek Dam flood area	Total disturbance	Surface collection
MSL 011	52-4-052	Artefact scatter	Low	Marulan Creek Dam flood area	Total disturbance	Surface collection
MSL 012	52-4-052	Isolated find	Low	Marulan Creek Dam flood area	Total disturbance	Surface collection
MSL 013	52-4-0527	Artefact scatter	Low	Marulan Creek Dam flood area	Total disturbance	Surface collection
MSL 014	52-4-0528	Isolated find	Low	Marulan Creek Dam flood area	Total disturbance	Surface collection
MSL 015	52-4-0529	Artefact scatter	Low	Marulan Creek Dam flood area	Total disturbance	Surface collection
MSL 016	52-4-0530	Artefact scatter	Moderate	Marulan Creek Dam flood area	Total disturbance	Surface collection
MSL 017	52-4-0531	Artefact scatter	Low	Emplacement	Total loss	Surface collection
VISL 018	52-4-0532	Artefact scatter	Low	Emplacement	Total loss	Surface collection
VISL 019	52-4-0533	Isolated find	Low	Emplacement	Total loss	Surface collection
VISL 020	52-4-0534	Isolated find	Low	Emplacement	Total loss	Surface collection
VISL 021	52-4-0535	Artefact scatter	Low	Emplacement	Total loss	Surface collection
VISL 022	52-4-0536	Artefact scatter	Moderate	Emplacement	Total loss	Surface collection
VISL 023	52-4-0537	Artefact scatter	Low	Emplacement	Total loss	Surface collection
VISL 024	52-4-0538	Isolated find	Low	Emplacement	Total loss	Surface collection

Site Name	AHIMS number	Site type	Overall significance level	Development type	Impact Level	Management
MSL 025	52-4-0539	Isolated find	Low	None	No impact	Passive protection
MSL 026	52-4-0540	Artefact scatter	Low	Emplacement	Total loss	Surface collection
MSL 027	52-4-0541	Artefact scatter	Low	Emplacement	Total loss	Surface collection
MSL 028	52-4-0542	Artefact scatter	Moderate	Emplacement	Total loss	Surface collection
MSL 029	52-4-0543	Artefact scatter	Low	Emplacement	Total loss	Surface collection
MSL 030	52-4-0544	Artefact scatter	Moderate	None	No impact	Active protection
MSL 031	52-4-0545	Isolated find	Low	None	No impact	Avoidance
VISL 032	52-4-0546	Artefact scatter	Low	Emplacement	Total loss	Surface collection
MSL 033	52-4-0547	Artefact scatter	Low	None	No impact	Active protection
VISL 034	52-4-0548	Artefact scatter	Low	Emplacement	Total loss	Surface collection
VISL 035	52-4-0549	Isolated find	Low	Emplacement	Total loss	Surface collection
MSL 036	52-4-0550	Artefact scatter	Low	Emplacement	Total loss	Surface collection
VISL 037	52-4-0551	Not a scar tree	N/A	N/A	N/A	N/A
VISL 038	52-4-0552	Artefact scatter	Low	None	No impact	Active protection
MSL 039	52-4-0553	Artefact scatter	Low	Emplacement	Total loss	Surface collection
VISL 040	52-4-0554	Artefact scatter	Low	Emplacement	Total loss	Surface collection
MSL 041	52-4-0555	Artefact scatter	Low	Emplacement	Total loss	Surface collection
MSL 042	52-4-0556	Subsurface artefact deposit	Moderate	None	No impact	Passive protection
VISL 043	52-4-0557	Subsurface artefact deposit	Low	Emplacement	Total loss	Unmitigated impacts
MSL 044	52-4-0558	Subsurface artefact deposit	Low	Emplacement	Total loss	Unmitigated impacts
VISL 045	52-4-0559	Subsurface artefact deposit	Moderate	None	No impact	Salvage excavation

Table 7.1 Site impact assessment and management summary

Table 7.1Site impact assessment and management summary
--

Site Name	AHIMS number	Site type	Overall significance level	Development type	Impact Level	Management
MSL 046	52-4-0060	Subsurface artefact deposit	High	Marulan Creek Dam disturbance footprint	Total Loss	Salvage excavation
MSL 047	52-4-0575	Subsurface artefact deposit	Moderate	Marulan Creek Dam disturbance footprint	Total Loss	Salvage excavation
MSL 048	52-4-0061	Subsurface artefact deposit	Moderate	None	No impact	Passive protection
MSL 049	52-4-0062	Subsurface artefact deposit	Low	Marulan Creek Dam Haul Road	Total Loss	Unmitigated impacts
MSL 050	52-4-0063	Subsurface artefact deposit	Low	Emplacement	Total loss	Unmitigated impacts
MSL 051	52-4-0576	Subsurface artefact deposit	Low	Emplacement	Total loss	Unmitigated impacts
MSL 052	52-4-0064	Subsurface artefact deposit	Low	Emplacement	Total loss	Unmitigated impacts
MSL 053	52-4-0065	Subsurface artefact deposit	Low	Emplacement	Total loss	Unmitigated impacts
MSL 054	52-4-0066	Subsurface artefact deposit	Low	Emplacement	Total loss	Unmitigated impacts
MSL 055	52-4-0067	Subsurface artefact deposit	Moderate	Emplacement	Total loss	Salvage excavation
MSL 056	52-4-0068	Subsurface artefact deposit	Low	Emplacement	Total loss	Unmitigated impacts
MSL 057	52-4-0069	Subsurface artefact deposit	Moderate	Marulan Creek Dam disturbance footprint	Total loss	Salvage excavation
MSL 058	52-4-0070	Subsurface artefact deposit	Low	Marulan Creek Dam Haul Road	Total loss	Unmitigated impacts
M1 (BCSC1)/BSC1	52-4-0195 and 52-4- 0161	Artefact scatter	Low	Mining (previously removed)	No impact	None (site removed)

Site Name	AHIMS number	Site type	Overall significance level	Development type	Impact Level	Management
M2	52-4-0246	Artefact scatter	low	Emplacement	Total loss	Surface collection
BCSC AS1	52-4-0266	Artefact scatter	Low	None	No impact	Active protection
BCSC AS2	52-4-0267	Artefact scatter	Low	Haul Road	Total loss	Surface collection
BCSC AS3	52-4-0268	Artefact scatter	Low	Haul Road	Total loss	Surface collection
BCSC AS4	52-4-0269	Artefact scatter	Low	None	No impact	Active protection
BCSC AS5	52-4-0574	Artefact scatter	Low	None	No impact	Active protection
BCSC IF1	52-4-0263	Isolated find	Low	Emplacement	Total loss	Surface collection
BCSC IF2	52-4-0270	Isolated find	Low	None	No impact	Avoidance
BCSC IF3	52-4-0271	Isolated find	Low	None	No impact	Active protection
BCSC IF4	52-4-0272	Isolated find	Low	None	No impact	Passive protection
BCSC IF7	52-4-0273	Isolated find	Low	None	No impact	Active protection
BCSC IF8	52-4-0274	Isolated find	Low	None	No impact	Avoidance
BCSC IF9	52-4-0279	Isolated find	Low	None	No impact	Avoidance
BCSC IF11	52-4-0276	Isolated find	Low	None	No impact	Active protection
3CSC IF12	52-4-0277	Isolated find	Low	None	No impact	Active protection
BCSC IF13	52-4-0278	Isolated find	Low	None	No impact	Active protection
BCSC IF14	52-4-0279	Isolated find	Low	Haul Road	Total loss	Surface collection

Table 7.1 Site impact assessment and management summary

APPENDIX B Management Plan for Marulan Creek Women's Cultural Site 1



C1. Consultation Log

C2. Consultation in developing this plan

In accordance with CoC B60(b), EMM consulted RAPs in developing this plan. Aboriginal consultation for this ACHMP was approached in a manner consistent with the requirements set out in the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (DECCW 2010a). Consultation was undertaken with existing RAPs who have been involved in the consultation process since the preparation of the ACHA.

On 25 August 2021, EMM distributed a notice letter to RAPs informing them of Boral's intent to develop an ACHMP after project approval on 13 August 2021. The letter provided information about project approval, a summary of the ACHA completed in 2018, and an overview of the management commitments made during the ACHA that would be developed in the ACHMP.

EMM distributed a draft version of this ACHMP to RAPs on 20 December 2021, allowing for a sixweek review period to account for the Christmas holiday period. Although the notice letter distributed in August 2021 mentioned the potential for an Aboriginal focus group (AFG) meeting to discuss the draft ACHA, this was not pursued because of two factors: COVID-19 health and safety concerns of holding a meeting; and that the RAP feedback gathered in the review period did not raise any issues needing further discussion or resolution. Considering the above, a draft ACHMP meeting was not considered essential because the ACHMP largely mirrored the management commitments presented in the 2018 Project ACHA which were already subject to RAP review and comment.

Two RAPs submitted responses on the draft ACHMP, none of which raised issues needing resolution. A summary of RAP submissions and outcomes relating to the ACHMP are presented in Table C.2. This appendix contains copies of consultation correspondence.

RAP comment (EMM paraphrase from submission)	Response and where issue is addressed in ACHMP if applicable
20 December 2021: Peter Falk Consultancy. Peter provides updated phone number and requests that his son Duncan is provided with fieldwork opportunities for the project.	As detailed in Table 3.3 of the ACHMP, Boral will give consideration to expressions of interest from suitably skilled, equipped and insured Aboriginal persons to provide Aboriginal cultural heritage management services. Boral will contact RAPs in relation to upcoming employment opportunities when management actions are required.
20 December 2021: Murrabidgee Mullangari. Ryan Johnson stated that he had reviewed the ACHMP and endorses the recommendations made.	No response required.

Table C.2Outcomes of consultation with RAPs



Excavation methodology

D1. Overview

The salvage excavation scope has been proposed based on the predicted impacts from the Project, the research questions about the area and the regional archaeological information already present. Excavation aims to provide information that would otherwise have been lost and that may not already have been obtained by previous investigations in the region. The excavation data will also become a resource for comparative analysis in the region particularly those projects nearby at Marulan and Marulan South where excavation has occurred including the Lynwood and Peppertree Quarries. The data presented aims to be easily comparable with other sites by using best practice excavation methods and common techniques such as 1 m² pits.

An archaeological salvage excavation is proposed in two general areas: adjacent to Marulan Creek (sites MSL 045; MSL 046; MSL 047; MSL 057) and the flat spur overlooking ephemeral watercourses within the main Project site (MSL 055). However, the latter site MSL 055 will be managed under the PTQ AHMP (2021) as it is now within the PTQ MOD 5 boundary. As such, this methodology only applies to the sites adjacent to Marulan Creek, but can also be adopted in the case of warranting unexpected finds within the broader Project boundary.

D2. Background and approach

The Project ACHA assessed MSL 046 to be potentially of high archaeological significance as it featured the highest artefact densities from the test excavation program. 174 artefacts were recovered from 3 m² of excavation, but notably 114 artefacts were recovered from a single 1 m² pit in this area. Moreover, evidence of stone tool implements and cores further support a relatively focused area of stone tool manufacture. The sites archaeologically tested nearby (MSL 045, MSL 047 and MSL 057) featured slightly lower artefact frequencies and were assessed to be of moderate archaeological significance, despite the possibility that the whole areas of high predicted high archaeological sensitivity (**Figure 4.2 Aboriginal sites Marulan Creek Dam**Figure 4.2) could be considered a singular site complex. MSL 046 was distinguished from the other tested areas to be allocated greater resources during the salvage excavation program.

The general salvage excavation approach will be to test the area of high archaeological sensitivity as a complex rather than each former test pit location as a discrete site. This will mean that the previous test pit locations are not simply expanded into open areas, but instead will follow a broader two stage approach reflecting initially an investigative phase followed by archaeological salvage where certain thresholds are met.

For context, artefact densities of above 50/m² have been employed as a benchmark for open area expansion and salvage at the adjacent Peppertree Quarry. The similar landscape of the Peppertree Quarry excavations at Tangarang Creek with artefact densities of between 70 and 100 per square metres were evidence of high artefact density with some areas displaying very high artefact density of between 100 and 200 artefacts per square meter (ERM 2012). Furthermore, data from recent broadscale salvage excavations at Peppertree Quarry (2013–2016) has identified some pits with concentrations between 500 and 1000/m² and one 1 m² with a total of 1,722 artefacts (Boral & EMM 2021). Using this data, it can be suggested that regionally low artefact density is under 10 artefacts, moderate artefact density is between 10 and 50 artefacts and high artefact density is above 50 artefacts (or at least the presence of 50 artefacts in a test bit is reason to explore adjacent pits for higher frequencies).

D3. Generic research questions

• What is the spatial and stratigraphic patterns of cultural materials within the investigation area? Can inter and/or intra-site past Aboriginal activities be determined through excavation in these areas?

- What is the age, composition, technological attributes, and significance of cultural materials within this part of the Marulan South area?
- What are the environmental characteristics associated with the distribution of Aboriginal cultural heritage within the area? Can the formative processes of the stratigraphic profile provide information on the nature and/or survivability of the archaeological resources? Are there other key factors in the distribution and extent of the material culture within the area?
- What are the cultural, social and public values associated with the cultural materials in the area? Do the excavations support or require modification of the significance and values previously assigned to Aboriginal sites, places and/or locales within the Project site?
- How should the cultural materials be conserved and managed in future?

D4. Investigative phase

The following methods should be adopted to investigate the cultural materials.

- Excavation
 - A grid of 1 m² test pits would be established at suitable spacing (<20 m) to inform the identified cultural materials using a hand-held Leica RTK CS10/GS08 survey grade Differential GPS device (or equivalent).
 - All test pits would be dug manually using shovels, mattocks, trowels and other hand tools as required. Excavation would be undertaken as 1 m² units. Each square would be given an alpha-numeric label for identification purposes.
 - All excavation would be undertaken in 10 cm spits to culturally sterile depths or where the B2 soil horizon clay is encountered. The test excavation results indicate that the depth of clay varies between ~30–80 cm. Excavations may extend beyond this where the Excavation Director considers potential for cultural material to have fallen into the B2 horizon through shrinking and cracking of the heavy clay subsoil.
 - All sediment would be placed in buckets, labelled according to its assigned test pit number and spit, and recorded and documented. All sediment would then be sieved through a 5 mm wire aperture mesh, and any historic and/or Aboriginal cultural material recovered, labelled and bagged for subsequent analysis and curation. A wet or dry sieving approach may be adopted based on the advice of the Project archaeologist who should take into consideration soil moisture levels at the time of the excavation to determine the most efficient and effective approach.
- Field Documentation
 - All test pits would be documented using photographic records, written descriptions and scaled drawings.
 - Soil profiles would be recorded in accordance with the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (DECCW 2010b), including scaled drawings, photographs, and written descriptions.
 - Soil samples may be collected for description, sedimentological and chronological analysis where such analysis is considered likely to contribute significant information. Optically Stimulated Luminescence (OSL) samples would be taken in areas where Aboriginal objects are found, and generally try to bracket the deposit (to provide a maximum and minimum age). Material for radiocarbon analysis may also be undertaken opportunistically if archaeological features containing charcoal or other dateable material are evident.
 - Reduced levels of the top and bottom of the test pit would be documented using a dumpy level against a known elevation. Other levels may be taken as required.

Excavation procedures and protocols may be modified at the discretion of the Excavation Director, in consultation with the RAPs and Boral as the conditions in the field and nature of the excavations develop. This includes the movement/discontinuance of test pits to avoid existing obstacles, buried services and disturbances.

At the completion of the Phase 1 test pits, consideration of the Phase 2 thresholds (Section D1.5 should be considered as to whether further excavations are required.

D5. Thresholds for further excavation

The initiation of Phase 2 – salvage excavation – would *only* be undertaken in areas where the thresholds outlined below are met. The location of salvage excavations would be determined at the completion of Phase 1 and at those locations where the greatest potential for answering the research questions (Section D1.3) is identified.

The thresholds for expansion would include:

- Stone artefact densities greater than 50/m² and therefore indicative of past occupation based on our broader understanding of the region. However, if densities of 50/m² are not identified, the archaeologist must re-establish the threshold framework to ensure a representative sample of archaeological material is still salvaged from the area. Based on experience in wider NSW contexts, artefact densities of between 20–30 m² are still adequate and warranting further exploration. In the instance of lower than 50/m² densities being encountered, the extent of salvage required would default to the smaller net salvage values of 25 m² or less as indicated in Section D.1.6.
- Where evidence of multiple phases of past activity is identified through changing raw material types and/or distinct technological attributes at different depths within the soil profile.
- Where dense concentrations of cultural materials are discovered at significant depths that may indicate extreme age.
- Where rare or unique stone artefacts and/or other archaeological material is recovered.
- Where unique and/or rare archaeological features (eg hearths, cooking pits, etc) are identified.
- Other conditions that are considered by the Excavation Director to inform the research questions and/or broader aims of the Project.

D6. Salvage excavations

Where suitable thresholds (Section 610) are met, additional archaeological excavations would be undertaken in these identified locations. These excavations are proposed to consist of contiguous open area salvage excavation using higher resolution recovery techniques. The number and size of these open area excavations would be dictated by the size of the identified cultural material, with smaller values of 25 m^2 (5 m x 5 m) and up to 100 m^2 (10 m x 10 m) being common sizes for such work.

The excavation and field documentation methods would follow that employed in the investigative phase.

Excavation procedures and protocols may be modified at the discretion of the Excavation Director, in consultation with the RAPs and Boral as the conditions in the field and nature of the excavations develop. This includes the movement/discontinuance of test pits to avoid existing obstacles, buried services and disturbances.

D7. Post excavation analysis and reporting

The post-excavation analysis (incorporating data from the excavations) would be designed to address the research objectives and aims, along with other relevant questions that may arise based on the results of the excavation. These would include, but not be necessarily limited to:

- Stone artefact analysis, including descriptive and functional recording of the assemblage, as well as interpretation of past activities, post-depositional change and comparison with other nearby data. Artefact conjoining may also be attempted where sufficient cultural materials have been recovered.
- Geochronology, including the processing and analysis of samples to inform the absolute age of the soil profile and/or cultural assemblage recovered. This would include Optically Stimulated Luminescence (OSL) ages, as well as radiocarbon samples, where recovered. While large number of these samples are likely to be collected, given the prohibitive cost of processing, it is probable that a small number of ages would be obtained in a small number of master-sequences to inform the broader archaeological program. The samples would be processed by either University of Gloucestershire and/or University of Wollongong.
- Geochemistry and soil analysis that would be used to further inform and interpret the formation history of the soil profile from which cultural materials are recovered. This would include the use of Itrax X-ray Fluorescence (XRF) core scanning methods at Australia's Nuclear Science and Technology Organisation (ANTSO), as well as particle size analysis to explore changes in the alluvial and colluvial history of the river corridor.
- Palaeo-environmental analysis, including palynology, phytolith analysis and/or charcoal analysis to explore the past vegetation and fire regimes that may have been influenced and/or modified by past human activity. These would utilise the same samples collected for geochemistry and/or sampling and sent to a range of University specialists in these fields to process and interpret the results.
- Reporting that would provide information on the field investigations, compilation and synthesis of the post-excavation analyses, and interpretation of the results to inform the past activity and use of the region.



Site descriptions

A description of terms used to describe different site features known to occur in the vicinity of the Project site is provided in the table below and use definitions provided by Heritage NSW.

Site definitions and recording

Site feature	Definition and recording methods
Aboriginal ceremony and Dreaming	Previously referred to as mythological sites these are spiritual/story places where no physical evidence of previous use of the place may occur; eg, natural unmodified landscape features, ceremonial or spiritual areas, men's/women's sites, dreaming (creation) tracks, marriage places etc.
Artefact site (open stone artefact site)	Objects such as stone tools, and associated flaked material, spears, manuports, grindstones, discarded stone flakes, modified glass or shell demonstrating evidence of use of the area by Aboriginal people.
Burials	A traditional or contemporary (post-contact) burial of an Aboriginal person, which may occur outside designated cemeteries and may not be marked; eg, in caves, marked by stone cairns, in sand areas, along creek banks etc.
Fish trap	A modified area on watercourses where fish were trapped for short-term storage and gathering.
Grinding grooves	Grinding grooves are defined as an area of outcropping bedrock containing evidence of one or more grinding grooves where ground-stone hatchets or other grinding practices (ie seed grinding) were implemented.
Habitation structure	Structures constructed by Aboriginal people for short- or long-term shelter. More temporary structures are commonly preserved away from the NSW coastline, may include historic camps of contemporary significance. Smaller structures may make use of natural materials such as branches, logs and bark sheets or manufactured materials such as corrugated iron to form shelters. Archaeological remains of a former structure such as chimney/fireplace, raised earth building platform, excavated pits, rubble mounds etc.
Modified tree (carved or scarred)	Trees which show the marks of modification as a result of cutting of bark from the trunk for use in the production of shields, canoes, boomerangs, burials shrouds, for medicinal purposes, foot holds etc., or alternately intentional carving of the heartwood of the tree to form a permanent marker to indicate ceremonial use/significance of a nearby area, again these carvings may also act as territorial or burial markers.
Potential archaeological deposit (PAD)	An area where Aboriginal objects may occur below the ground surface. The term 'potential archaeological deposit' was first applied in Sydney regional archaeology in the 1980s, and referred to rockshelters that were large enough and contained enough accumulated deposit to allow archaeologists to predict that subsurface cultural material was likely to be present. Since then the term has come to include open sites where the same prediction can be made. Unless previously identified, it is considered unlikely that a PAD would be classified through an unexpected finds process.
Shell	An accumulation or deposit of shellfish from beach, estuarine, lacustrine or riverine species resulting from Aboriginal gathering or consumption. Usually found in deposits previously referred to as shell middens. Must be found in association with other objects like stone tools, fish bones, charcoal, fireplaces/hearths, and burials. Will vary greatly in size and composition.
Stone quarry	Usually a source of good quality stone which is quarried and used for the production of stone tools. Stone quarries represent where Aboriginal people gathered raw stone materials for stone tools and/or manufactured stone tools from the adjacent source material. Quarry sites are found at rock outcrops where the material was of suitable quality to have been used to manufacture stone tools. Stone quarries were defined by the presence of outcropping stone material with nearby evidence of the same material type used in the stone tool manufacture process. This was most commonly indicated by large stone cores or stone flakes distributed amongst the same naturally outcropping material.



Obligation to protect aboriginal cultural heritage

F1. National Parks and Wildlife Act 1974

The *National Parks and Wildlife Act* 1974 (NPW Act) provides protection for Aboriginal objects and places across NSW:

- An Aboriginal object is defined as: 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, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction, and includes Aboriginal remains.
- An Aboriginal place is: any place declared to be an Aboriginal place under section 84. This is a very specific piece of legislation that provides process and management of Aboriginal sites of cultural, but not necessarily scientific, values. They are commonly, but not always associated with intangible values.
- any place declared to be an Aboriginal place by the Minister for the Environment, under Section 84 of the Act.

F2. Obligation to avoid harm

All employees, contractors, sub-contractors and visitors to the Project have an obligation to avoid harming Aboriginal heritage unless engaged in an Aboriginal heritage management activity described in this plan.

The NPW Act defines "harm" to an object or place as any act or omission that:

- 1. destroys, defaces or damages the object or place, or
- 2. in relation to an object-moves the object from the land on which it had been situated, or
- 3. is specified by the regulations, or
- 4. causes or permits the object or place to be harmed in a manner referred to in paragraph (a), (b) or (c), but does not include any act or omission that:
- 5. desecrates the object or place, or
- 6. is trivial or negligible, or
- 7. is excluded from this definition by the regulations.

F3. Obligation to protect and implement management measures

Site personnel, contractors and subcontractors responsible for land management or construction have an obligation to protect Aboriginal heritage within their area or work responsibility. This extends to both cultural materials identified as part of earlier phases of the Project, and any additional cultural materials identified during construction. Protection means active recognition of known Aboriginal heritage and active measure to avoid and/or suitably mitigate Aboriginal heritage.

This may include fencing, erosion control and modification of work plans to avoid impacts to Aboriginal heritage, as well as facilitating a process where work personnel are aware of the nearby heritage. Site personnel, contractors and subcontractors also have the responsibility to ensure that appropriate management measures have been employed prior to, or in association with, their activities which impact Aboriginal sites.

F4. Statutory reporting requirements

Notifications to Heritage NSW are required in relation to discovery, impact and care of Aboriginal objects under the NPW Act. This will be the responsibility of the Site Manager.

F5. Discovery of Aboriginal objects

Under Section 89A of the NPW Act, it is a requirement that Heritage NSW is notified of the existence of Aboriginal objects as soon as practicable after they are first identified. This is done through the completion of the Heritage NSW Aboriginal Site Card which is submitted to the Registrar of AHIMS for inclusion on the Aboriginal site database. Information regarding AHIMS and site recording forms can be downloaded from Heritage NSW's website:

http://www.environment.nsw.gov.au/licences/DECCAHIMSSiteRecordingForm.htm.

F6. Care agreements

Under s85A of the NPW Act, Aboriginal objects remain the property, and under the protection of, the Crown until formal transfer to a person or persons of a class prescribed by the regulations occurs. A Care Agreement is not currently determined under this plan; however, may be pursued in the future if Aboriginal objects are identified to a level of significance that the RAPs wish to retain such objects.

Care Agreement application forms can be downloaded at:

https://www.environment.nsw.gov.au/topics/aboriginal-cultural-heritage/protect-and-manage/care-agreements.

F7. Reporting impact to Aboriginal sites

An Aboriginal Site Impact Recording Form must be completed following impacts to AHIMS sites that are:

- a result of test excavation carried out in accordance with the Code of Practice for the Archaeological Investigation of Aboriginal Objects in NSW;
- authorised by an Aboriginal Heritage Impact Permit (AHIP) issued by Heritage NSW;
- undertaken for the purpose of complying with Secretary's environmental assessment requirements issued by DPIE for:
 - state significant development (SSD),
 - state significant infrastructure (SSI), or
 - a major Project, or
 - authorised by a SSD/SSI approval under the EP&A Act.

Completed forms must be submitted to the AHIMS Registrar at <u>ahims@environment.nsw.gov.au</u>

Aboriginal Site Impact Recording Forms can be downloaded at: <u>https://www.environment.nsw.gov.au/resources/cultureheritage/aboriginal-site-impact-recording-form-120558.pdf</u>

This page intentionally left blank



Boral Cement Limited

5 Hume Street Marulan South NSW 2579

www.boral.com.au