# Appendix P

Aboriginal Cultural Heritage and Historic Heritage Assessment Addendum – Mine access road and pipeline options







View north of site location of Evans Plains Creek Tributary IF-01 (AHIMS 44-5-0175).

## ADDENDUM ABORIGINAL CULTURAL HERITAGE & HISTORIC HERITAGE ASSESSMENT REPORT

# MCPHILLAMYS GOLD PROJECT MINE ACCESS ROAD AND PIPELINE OPTIONS

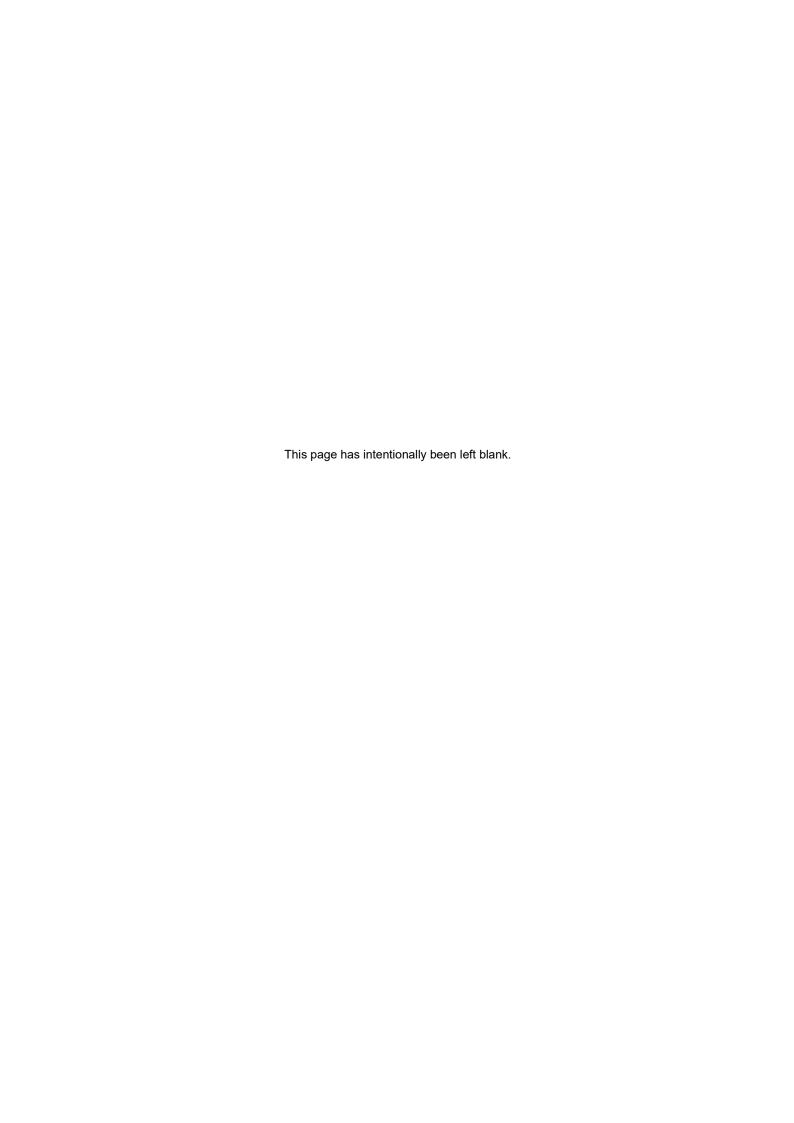
BLAYNEY AND BATHURST LGAS
AUGUST 2020

Report prepared by
OzArk Environment & Heritage
for EMM Consulting on behalf of
LFB Resources NL (Regis)

## OzArk Environment & Heritage

145 Wingewarra St (PO Box 2069) Dubbo NSW 2830

Phone: (02) 6882 0118 Fax: (02) 6882 0630 enquiry@ozarkehm.com.au www.ozarkehm.com.au







### ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT COVER SHEET

Report Title	Addendum Aboriginal Cultural Heritage & Historic Heritage Assessment Report: McPhillamys Gold Project, Mine Access Road and Pipeline options.
Author(s) Name	Dr Alyce Cameron
Author(s)' Organisation Name (if applicable)	OzArk Environmental & Heritage Management Pty Ltd
Author(s) contact details	145 Wingewarra St DUBBO NSW 2830 Email: alyce@ozarkehm.com.au Phone: 02 6882 0118
Address of Subject Area	Address: Kings Plains, Evans Plains Title Reference: Various Local Government Area: Blayney and Bathurst LGAs
Report prepared for	Company Name: EMM Consulting  Contact Person: Janet Krick Address: Level 3, 175 Scott Street, Newcastle, NSW 2300  Email: jkrick@emmconsulting.com.au Phone: 02 4907 4800
Date of Report	31 August 2020
Use of Report/ Confidentiality	This report is not confidential  This report may be used by OEH in a number of ways including: placing it in a database generally making hard and electronic copies available to the public and communicating the report to the public.
Copyright owner of the report	© OzArk Environment & Heritage 2020 and © LFB Resources NL (Regis) 2020
Indemnity	If the person/entity who claims to be the copyright owner of the report is not entitled to claim copyright in the report, he/she/it indemnifies all persons using the report in accordance with the National Parks & Wildlife Act 1974, against any claim, action, damage or loss in respect of breach of copyright

#### I hereby confirm:

- That this report does not contain confidential information
- That copyright is held jointly by OzArk Environment & Heritage and LFB Resources NL (Regis) 2020
- That the copyright owners indemnify all persons using the report in accordance with the National Parks & Wildlife Act 1974, against any claim, action, damage or loss in respect of breach of copyright.

Alameron.

	OzArk Environment & Heritage
This page has intentionally been left blank.	
p. g ,,	

#### **DOCUMENT CONTROLS**

Proponent	LFB Resources NL (Regis)			
Client	EMM Consulting			
Document Description	Addendum Aboriginal Cultural Heritage & Historic Heritage Assessment Report: McPhillamys Gold Project, Mine Access Road and Pipeline options.			
File Location	OzArk Job No.			
	2612			
Document Status: V3.3 FINAL		Date: 31 August 2020		
Draft V1.1 Author to Editor OzArk 1st	Internal (Series	V1.0 AC author 25/7/20		
V1 = OzArk internal edits)		V1.1 BC edit 27/7/20		
		V1.2 AC edit 27/7/20		
Draft V2.0 Report Draft for release to	client	V2.0 AC to client 27/7/20		
(Series V2 = OzArk and Client edits	s)	V2.1 AC client edits 3/8/20		
FINAL V3once latest version of draft approved by		V3.0 AC finalise 3/8/20		
client		V3.1 AC edit figures 4/8/20		
		V3.2 AC edit & finalise for Stage 4 25/8/20		
		V3.3 AC minor client edit 31/8/20		
Prepared For		Prepared By		
Janet Krick		Dr Alyce Cameron		
Senior Environmental Planner		Senior Archaeologist		
EMM Consulting		OzArk Environment & Heritage		
		145 Wingewarra Street (PO Box 2069)		
		Dubbo NSW 2830		
		P: 02 6882 0118		
		F: 02 6882 6030		
		alyce@ozarkehm.com.au		
	COD	VDICUT		

#### **COPYRIGHT**

© OzArk Environment & Heritage 2020 and © LFB Resources NL 2020

All intellectual property and copyright reserved.

Apart from any fair dealing for private study, research, criticism or review, as permitted under the Copyright Act, 1968, no part of this report may be reproduced, transmitted, stored in a retrieval system or adapted in any form or by any means (electronic, mechanical, photocopying, recording or otherwise) without written permission.

Enquiries should be addressed to OzArk Environment & Heritage.

#### Acknowledgement

OzArk acknowledge Traditional Owners of the area on which this assessment took place and pay respect to their beliefs, cultural heritage and continuing connection with the land. We also acknowledge and pay respect to the post-contact experiences of Aboriginal people with attachment to the area and to the elders, past and present, as the next generation of role models and vessels for memories, traditions, culture and hopes of local Aboriginal people.

#### **ABBREVIATIONS AND GLOSSARY**

ACHAR Aboriginal Cultural Heritage Assessment Report. As set out in the Code of

Practice for Archaeological Investigation of Aboriginal Objects in New South

Wales, all developments where harm to Aboriginal objects is likely must be

assessed in an ACHAR.

ACHCRs Aboriginal Cultural Heritage Consultation Requirements for Proponents.

Guidelines for conducting Aboriginal community consultation for

developments where harm to Aboriginal objects is likely.

AHIMS Aboriginal Heritage Information Management System. Administered by

Department of Premier and Cabinet, AHIMS is the central register of all

Aboriginal sites within NSW.

Code of Practice Code of Practice for Archaeological Investigation of Aboriginal Objects in New

South Wales under Part 6 NPW Act. Issued by DECCW in 2010, the Code of

Practice is a set of guidelines that allows limited test excavation without the

need to apply for an AHIP.

DPIE NSW Department of Planning, Industry and Environment

EARs Environmental Assessment Requirements issued by the NSW Department of

Planning, Industry and Environment.

EIS Environmental Impact Statement. A required document for major projects

documenting all potential impacts to the environment, including heritage, that

may arise due to the development.

Heritage Act 1977. Provides for the protection and conservation of historical

places and objects of cultural heritage significance and the registration of such

places and objects.

Heritage Council The Heritage Council makes decisions about the care and protection of

heritage places and items that have been identified as being significant to the

people of NSW.

Heritage NSW Government department tasked with ensuring compliance with the NPW and

Heritage Acts. Heritage NSW is advised by the Aboriginal Cultural Heritage

Advisory Committee (ACHAC) and is part of the Department of Premier and Cabinet. Heritage NSW is preceded by the Biodiversity and Conservation

Division (BCD) and the Office of Environment and Heritage (OEH).

NPW Act National Parks and Wildlife Act 1974. Primary legislation governing Aboriginal

cultural heritage within NSW.

PAD	Potential archaeological deposit. Indicates that a particular location has
	potential to contain subsurface archaeological deposits, although no
	Aboriginal objects are visible.
RAP	Registered Aboriginal Party. An individual or group who have indicated through the ACHCR process that they wish to be consulted regarding the project.
SEARs	Secretary's Environmental Assessment Requirements issued by the NSW Department of Planning and Environment.
SHR	State Heritage Register. A heritage list of places in NSW that are protected by

NSW legislation, generally covered by the Heritage Act.

#### **EXECUTIVE SUMMARY**

LFB Resources NL, a 100% owned subsidiary of Regis Resources Limited (Regis) is seeking state significant development (SSD) consent under Division 4.7 of Part 4 of the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act) to develop and operate a greenfield open cut gold mine, associated mine infrastructure and a water supply pipeline in Central West NSW.

OzArk Environment and Heritage (OzArk) has been engaged by EMM Consultants (the client), on behalf of Regis (the proponent) to complete an *Aboriginal Cultural Heritage Assessment Report* (ACHAR) and *Historic Heritage Assessment* (HHA) for the McPhillamys Gold Project Amendment Report. The study areas for this addendum ACHAR which will form part of the Amendment Report include a mine access road within the mine development project area (outside of the area assessed in Appendix P of the EIS), and two revised pipeline route options to replace a section of the previous route between Bathurst and the mine development. This report serves as an addendum to the existing McPhillamys Gold Project heritage assessments (Landskape 2019 and OzArk 2019) (Appendix P and Appendix Z of the McPhillamys Gold Project EIS). A separate Addendum to the mine development heritage assessment (Appendix P of the EIS) is being prepared to assess changes to the disturbance footprint within the mining lease (ML application area).

The assessment of the addendum study areas was undertaken by OzArk archaeological Dr Alyce Cameron on Tuesday 23 June to Thursday 25 June 2020. A representative from a Registered Aboriginal Party (RAP) attended the survey of the mine access road on Tuesday 23 June 2020. No RAP representatives attended the pipeline options on Wednesday 24 June or Thursday 25 June 2020 due to difficulties in accessing the pipeline options and following social distancing restrictions associated with Covid-19.

During the pedestrian survey, one Aboriginal site (AHIMS #44-5-0175) and two historic sites (HS-01 and HS-02) were recorded.

#### Aboriginal Cultural Heritage

Recommendations concerning Aboriginal cultural values within the study area are as follows:

- This report should be read in conjunction with Landskape 2019 and OzArk 2019
   (Appendix P and Appendix Z of the McPhillamys Gold Project EIS and Appendix O of
   the Amendment Report (Addendum Aboriginal and Historic Heritage Assessment for the
   mine development (Landskape 2020)). Recommendations in these reports remain
   applicable.
- 2. Should development consent for the project be granted, archaeological management strategies to manage and mitigate the impact of the proposed works are set out in

- **Section 9.2**. All sites within the impact footprint for the pipeline development should be salvaged by a surface collection of all visible artefacts (see OzArk 2019; Section 9.2.2.1).
- 3. The salvage works will include the mapping, analysis and collection of all surface artefacts at the affected sites. Results will be included in a report to preserve the data in a useable form and the relevant AHIMS site cards will be updated accordingly.
- 4. All land-disturbing activities must be confined to within the assessed study area. Should the parameters of the proposed work extend beyond this, then further archaeological assessment may be required.
- 5. Following development consent of the project, an Aboriginal Heritage Impact Permit (AHIP) will not be required for impacts to cultural heritage, so long as the impact accords with the terms and conditions of the consent. Instead, impacts on Aboriginal heritage would be managed through an *Aboriginal Cultural Heritage Management Plan* (ACHMP) which is to be agreed to by the proponent, RAPs and the Department of Planning, Industry and Environment (DPIE). The archaeological management recommendations within this report would normally be incorporated into the ACHMP that is usually formulated following development consent. The ACHMP will also include an unanticipated finds protocol, unanticipated skeletal remains protocol and long-term management of any artefacts.

#### Historic Heritage

Recommendations concerning the historic values within the addendum study area are as follows.

- 6. This report should be read in conjunction with Landskape 2019 and OzArk 2019 (Appendix P and Appendix Z of the McPhillamys Gold Project EIS and Appendix O of the Amendment Report). Recommendations in these reports remain applicable.
- 7. To avoid inadvertent impacts, the curtilages of Bathampton Homestead and Binalong should be marked as 'no-go zones' on the construction management plans and all contractors made aware of the two locations (see **Figure 12-5**).
- 8. Should development consent for the project be granted, archaeological management strategies to manage and mitigate the impact of the pipeline development component the project and construction of the mine access road within the mine development project area are set out in **Section 13.2**.
- 9. To avoid the potential for harm to historic objects on unassessed adjacent landforms, all ground surface disturbing activities must be confined to the assessed study area.
- 10. Following development consent of the project, impacts on historical heritage would be managed through a *Historic Heritage Management Plan* (HHMP) which is to be agreed

to by the proponent, local councils and DPIE. The archaeological management recommendations within this report would normally be incorporated into the HHMP that is usually formulated following development consent. The HHMP will also include an unanticipated finds protocol.

## **CONTENTS**

A	BBREV	IATIO	ONS AND GLOSSARY	IV
Ε	XECUTI	VE S	SUMMARY	VI
1	Inti	RODI	JCTION	1
	1.1	Ba	ckground	1
	1.2	Pro	ject amendment overview	2
	1.3	Pu	pose of this report	3
	1.4	Ter	minology	3
	1.5	Re	port framework	4
2	LAN	IDSC	APE CONTEXT	8
	2.1	Top	pography	8
	2.2	Ge	ology and soils	. 10
	2.3	Ну	drology	. 10
	2.4	Ve	getation	. 12
	2.5	Clir	mate	. 12
	2.6	Lar	nd–use history and existing levels of disturbance	. 12
	2.7	Со	nclusion	. 14
Α	BORIGI	NAL	CULTURAL HERITAGE ASSESSMENT	. 16
3	Ass	SESS	MENT INTRODUCTION	. 18
	3.1	Da	te of archaeological assessment	. 18
	3.2	Oz	Ark involvement	. 18
	3.2.	.1	Field assessment	. 18
	3.2.	2	Reporting	. 18
	3.3	Re	evant legislation	. 18
	3.3.	.1	State legislation	. 18
	3.3.	2	Commonwealth legislation	. 20
	3.3.	.3	Applicability to the proposal	. 20
	3.4	Pu	pose and objectives	. 20
	3.4.	.1	Aboriginal archaeological assessment objectives	. 20
	3.5	Re	port compliance with the Code of Practice	. 21

	3.	6	Ass	essment approach	22
4		Авс	RIGI	NAL COMMUNITY CONSULTATION	24
	4.	1	Abo	riginal community consultation	24
		4.1.	1	ACHCRs Stages 2 & 3	24
		4.1.	2	ACHCRs Stage 4	24
	4.	2	Abo	riginal community involvement in the assessment	25
		4.2.	1	Comments arising from the assessment	25
5		Авс	RIGI	NAL ARCHAEOLOGY BACKGROUND	26
	5.	1	Ethr	no-historic sources of regional Aboriginal culture	26
	5.	2	Reg	ional archaeological context	26
	5.	3	Loc	al archaeological context	26
		5.3.	1	Desktop database searches conducted	26
		5.3.	2	Local archaeological studies	34
	5.	4	Pred	dictive model for site location	35
		5.4.	1	Settlement strategies	35
		5.4.	2	Past land use	36
		5.4.	3	Previously recorded sites	36
		5.4.	4	Landform modelling	36
		5.4.	5	Previous studies	37
		5.4.	6	Conclusion	37
6		RES	ULTS	OF ABORIGINAL ARCHAEOLOGICAL ASSESSMENT	40
	6.	1	San	npling strategy and field methods	40
	6.	2	Proj	ect constraints	40
	6.	3	Effe	ctive survey coverage	41
		6.3.	1	Mine access road	41
		6.3.	2	Pipeline options	42
	6.	4	Abo	riginal sites recorded	45
		Eva	ns P	lains Creek Tributary IF-01 (#44-5-0175)	45
	6.	5	Rav	/ materials recorded	46
7		Disc	cuss	ION	49

	7.1	Dis	cussion of survey results	49
	7.1.	.1	Summary of survey results	49
	7.1	.2	Discussion	49
8	Sig	NIFIC	ANCE AND IMPACT ASSESSMENT	51
	8.1	Ass	essment of significance	51
	8.1.	.1	Introduction	51
	8.2	Ass	essed significance of the recorded sites	52
	8.3	Avc	oiding and minimising harm	53
	8.3	.1	Conserving significant Aboriginal cultural heritage	53
	8.3	.2	Opportunities to conserve Aboriginal cultural heritage values	54
	8.3	.3	Ecologically sustainable development principles	54
	8.4	Like	ely impacts to Aboriginal heritage from the proposal	55
9	MA	NAGE	EMENT OF ABORIGINAL CULTURAL HERITAGE SITES	57
	9.1	Ger	neral management principles	57
	9.2	Maı	nagement and mitigation of recorded Aboriginal sites	57
	9.2	.1	Opportunities to conserve Aboriginal cultural heritage values	57
	9.2	.2	Management of potentially impacted Aboriginal sites	58
Н	ISTORI	с НЕ	RITAGE ASSESSMENT	59
1(	0 H	listo	RIC HERITAGE ASSESSMENT: INTRODUCTION	61
	10.1	Brie	ef description of the proposal	61
	10.2	Rel	evant legislation	61
	10.2	2.1	State legislation	61
	10.2	2.2	Commonwealth legislation	61
	10.2	2.3	Applicability to the proposal	61
	10.3	Hist	toric heritage assessment objectives	62
	10.4	Dat	e of historic heritage assessment	62
	10.5	OzA	Ark involvement	62
1	1 H	listo	RIC HERITAGE ASSESSMENT: BACKGROUND	63
	11.1	Hist	torical background	63
	11.2	Loc	al context	63

11.	2.1 Desktop database searches conducted	63
11.3	Survey methodology	65
11.4	Project constraints	65
12 R	RESULTS OF HISTORIC HERITAGE ASSESSMENT	66
12.1	Historic heritage sites	66
His	toric Survey Blaze Tree (HS-01)	66
His	toric Chimney and associated sheds (HS-02)	69
12.2	Assessment of historic heritage significance	71
12.	2.1 Assessment of significance—general principles	71
12.	2.2 Assessment of significance of historic items	72
His	toric Survey Blaze Tree (HS-01)	72
His	toric Chimney and associated sheds (HS-02)	73
12.3	Discussion	73
12.4	Likely impacts to historic heritage from the proposal	73
13 N	MANAGEMENT AND MITIGATION: HISTORIC HERITAGE	77
13.1	General principles for the management of historic sites	77
13.2	Management and mitigation of recorded historic sites	77
14 R	RECOMMENDATIONS	78
14.1	Aboriginal cultural heritage	78
14.2	Historic heritage	79
REFERE	NCES	80
APPEND	IX 1: CONSULTATION LOG AND ACHCR DOCUMENTATION	82
APPEND	IX 2: AHIMS EXTENSIVE SEARCHES	94

## **F**IGURES

Figure 1-1: Regional setting – project application area	. 5
Figure 1-2: Amended mine development layout.	. 6
Figure 1-3: Amended pipeline development layout	. 7
Figure 2-1: Topography of the mine access road.	. 9
Figure 2-2: Topography of the two pipeline options.	. 9
Figure 2-3: Watercourses in relation to the mine access road	11
Figure 2-4: Watercourses in relation to the pipeline options.	12
Figure 2-5: Land use of the study areas.	14
Figure 2-6: Land-use and levels of disturbance of the study area	14
Figure 5-1: Location of previously recorded AHIMS sites in relation to the addendum study area	ıs.
	28
Figure 5-2: Detail of previously recorded AHIMS sites in relation to the mine access road 2	29
Figure 5-3: Detail of previously recorded AHIMS sites in relation to the pipeline options	30
Figure 5-4: Location of previously recorded AHIMS sites in relation to the remainder of the	ne
pipeline – western half	32
Figure 5-5: Location of previously recorded AHIMS sites in relation to the remainder of the	ne
pipeline – eastern half	33
Figure 6-1: Aerial showing the areas of pedestrian survey	14
Figure 6-2: Evans Plains Creek Tributary IF-01. View of site and selection of recorded artefact	ls.
	15
Figure 6-3: Site map of Evans Plains Creek Tributary IF-01	16
Figure 6-4: Aerial showing the location of Evans Plains Creek Tributary IF-01 & pieces of ochr	e.
	48
Figure 11-1: Location of LEP listed items in relation to addendum study areas	34
Figure 12-1: Historic Survey Blaze Tree (HS-01). View of site and scar6	37
Figure 12-2: Location of Historic Survey Blaze Tree (HS-01) and Historic chimney (HS-02) 6	38
Figure 12-3: Historic Chimney (HS-02). View of site and chimney	70
Figure 12-4: Terrace adjacent to Historic Chimney and associated sheds (HS-02) showir	ng
existing track (blue) and old tracks and cuttings (red)	71
Figure 12-5: Historic listings and sites in relation to impact footprint of pipeline options	75
Figure 12-6: Historic listings and sites in relation to impact footprint of mine access road 7	76

## **TABLES**

Table 2-1: Summary of key terrain features within the addendum study areas	10
Table 3-1: Report compliance with the Code of Practice.	21
Table 3-2: Technical assessment (heritage) related SEARs	22
Table 3-3: Agency project specific assessment recommendations	23
Table 5-1: Aboriginal cultural heritage: desktop-database search results	26
Table 5-2: Site types and frequencies of AHIMS sites near the mine access road and adden	ıdum
pipeline options.	27
Table 5-3: Site types and frequencies of AHIMS sites near the remainder of the pip	eline
alignment	31
Table 6-1: Effective survey coverage within the mine access road	41
Table 6-2: Effective survey coverage and incidences of site recording at the mine access r	∙oad.
	42
Table 6-3: Effective survey coverage within the pipeline options.	42
Table 6-4: Effective survey coverage and incidences of site recording at the pipeline options	s. 43
Table 6-5: Aboriginal cultural heritage sites recorded during the survey	45
Table 6-6: Location and details of red ochre.	47
Table 8-1: Aboriginal cultural heritage: significance assessment	53
Table 8-2: Application of ESD principles to the proposal.	55
Table 8-3: Aboriginal cultural heritage: impact assessment pipeline option	56
Table 8-4: Aboriginal cultural heritage: impact assessment (reproduced OzArk 2019: 80)	56
Table 11-1: Historic heritage: desktop-database search results.	63
Table 11-2: Historic LEP listings within 1 km of mine access road or pipeline options	63
Table 12-1: Historic Survey Blaze Tree (HS-01).Scar attributes	66
Table 12-2: Historic heritage: assessment of significance	72
Table 12-3: Assessment of heritage significance – Historic Survey Blaze Tree (HS-01)	72
Table 12-4: Assessment of heritage significance – Historic Chimney and associated sheds	(HS-
02)	73
Table 12-5: Historic heritage: impact assessment	74

#### 1 Introduction

#### 1.1 BACKGROUND

LFB Resources NL is seeking state significant development (SSD) consent under Division 4.7 of Part 4 of the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act) to develop and operate a greenfield open cut gold mine, associated mine infrastructure and a water supply pipeline in Central West NSW. The project application area is illustrated at a regional scale on **Figure 1-1**. LFB Resources NL is a 100% owned subsidiary of Regis Resources Limited (herein referred to as Regis).

As shown on **Figure 1-1**, the McPhillamys Gold Project (the project) is comprised of two key components; the mine site where the ore will be extracted and processed with the resultant gold produced for distribution to the market (the mine development), and an associated water pipeline which will enable the supply of water from approximately 90 kilometres (km) away near Lithgow to the mine site (the pipeline development). The mine development is around 8 km northeast of Blayney, within the Blayney and Cabonne Local Government Areas (LGAs), and the pipeline development is within the Blayney, Bathurst and Lithgow LGAs.

Up to 8.5 Million tonnes per annum (Mtpa) of ore will be extracted from the McPhillamys gold deposit over a total project life of 15 years. The mine development will include a conventional carbon-in-leach processing facility, waste rock emplacement, an engineered tailings storage facility (TSF) and associated mine infrastructure including workshops, administration buildings, roads, water management infrastructure, laydown and hardstand areas, and soil stockpiles.

In accordance with the requirements of the EP&A Act, the NSW *Environmental Planning & Assessment Regulation 2000* (EP&A Regulation) and the Secretary's *Environmental Assessment Requirements* (SEARs) for the project, an Environmental Impact Statement (EIS) was prepared to assess the potential environmental, economic and social impacts of the project. The development application and accompanying EIS was submitted to the NSW Department of Planning, Industry and Environment (DPIE) and subsequently publicly exhibited for six weeks, from 12 September 2019 to 24 October 2019. During this exhibition period Regis received submissions from government agencies, the community, businesses and other organisations regarding varying aspects of the project.

In response to issues raised in submissions received, as well as a result of further detailed mine planning and design, Regis has made a number of refinements to the project. Accordingly, an Amendment Report has been prepared by EMM Consulting Pty Ltd (EMM 2020a) to outline the changes to the project that have been made since the public exhibition of the EIS and to assess the potential impacts of the amended project, compared to those that were presented in the EIS. This report forms part of the Amendment Report and presents an assessment of the heritage

impacts of the amended project impacts relevant to the pipeline development and mine access road components of the project.

#### 1.2 PROJECT AMENDMENT OVERVIEW

A summary of the key amendments to the project since the exhibition of the EIS are summarised below and described in detail in Chapter 2 of the Amendment Report (EMM 2020a):

- **Site access** a new location for the site access intersection off the Mid Western Highway is proposed, approximately 1 km east of the original location assessed in the EIS, in response to feedback from Transport for NSW (TfNSW, former Roads and Maritime Services) and the community. A new alignment is subsequently proposed for the site access road to the mine administration and infrastructure area.
- Mine and waste rock emplacement schedule revision of the mine schedule and the subsequent construction sequence of the waste rock emplacement has been undertaken, in particular consideration of predicted noise levels in Kings Plains. This achieved a reduction in predicted noise levels at nearby residences while extending the construction timeframe for the southern amenity bund.
- **Pit amenity bund** the size of the pit amenity bund has been reduced as a result of optimisation of the open cut pit design and the improved location of exit ramps for haul trucks.
- Tailings Storage Facility (TSF) amendments to the design include changes to the embankment design and construction timing, the TSF footprint, and the TSF post closure landform.
- Water management system the secondary water management facility (WMF) has been removed from the water management system, resulting in an avoidance of impacts to a potential item of historic heritage significance (MGP 23 Hallwood Farm Complex (Hallwood)).
- **Mine administration and infrastructure area** the layout of this area has been revised and optimised.
- **Mine development project area** a very small change has been made to the mine development project area along the eastern boundary (an additional 1 ha, or 0.04% change), to accommodate the required clean water management system. The change takes the project area from 2,513 hectares (ha) to 2,514 ha.

Some amendments to the pipeline development have also been made, as follows:

- **Pipeline route** The pipeline route has been amended for a section of the corridor west of Bathurst, primarily in consideration of land access. Two options for the amended pipeline route have been included and assessed in the amended project; the northern option and the southern option. As shown in **Figure 1.3**, the pipeline alignment changes approximately 3 km west of pumping station facility No. 4. The new alignment continues for around 3 km, where it then splits into two options before re-joining the original route. The northern option is approximately 11 km long from where the two options split and the southern option is approximately 6 km long, before re-joining the original alignment. The amended section of the pipeline route is therefore around 14 km long if the northern option is adopted, and approximately 9 km if the southern option is constructed.
- **Pipeline corridor/disturbance footprint** the pipeline corridor has been differentiated from the pipeline disturbance footprint, with small changes made to both the pipeline

corridor and the disturbance footprint in consideration of biodiversity impacts. While the alignment of pipeline sections outside the realigned northern and southern options has not changed, there have been minor variations in the width of the corridor to provide flexibility in the detailed design and subsequent construction phases of the project. See also the definition of pipeline corridor in Section 1.5.

• **Pumping station facilities** – pumping station facility No.3 has been relocated from the vicinity of Energy Australia's Mount Piper Power Station (MPPS), to approximately 4.3 km to the west and adjacent to Pipers Flat Road.

No amendments have been made to other key aspects of the project as presented in the EIS for which approval is sought, such as the proposed mining method, operating hours, annual ore extraction of up to 8.5 Mtpa, annual ore processing rate up to 7 Mtpa, employee numbers, and rehabilitation methods and outcomes.

The amended mine development project layout, compared to that assessed in the EIS, is shown in **Figure 1-2**, while the revised section of the pipeline development route is shown in **Figure 1-3**.

#### 1.3 PURPOSE OF THIS REPORT

This report has been prepared to assess the potential impacts of the amended project on Aboriginal cultural heritage and historic heritage, namely amendments to the pipeline development and the amended site access of the mine development. The assessment considers and outlines the differences in impacts compared to the original project as presented in the EIS. In this way, it serves as an update to the McPhillamys Gold Project Heritage Assessments (Landskape 2019 and OzArk 2019) (Appendix P and Appendix Z of the McPhillamys Gold Project EIS).

This report presents the findings of the additional archaeological investigations carried out for the revised mine access road and pipeline route options. It also considers:

- the change of the location of pumping station facility No.3 and,
- amendments to the pipeline disturbance footprint and,
- pipeline corridor which are defined separately in the amended project, are also considered.

However, as the new location of pumping station facility No.3 is within the original pipeline alignment, further assessment at this location was not undertaken as it is in a low potential location for Aboriginal or historical archaeological deposits as assessed in OzArk 2019. Similarly, minor changes to the pipeline corridor and disturbance footprint, while considered in this assessment were not surveyed further in the field as these changes are within the original study area assessed by OzArk 2019.

#### 1.4 TERMINOLOGY

The following terms were used throughout the EIS to describe the McPhillamys Gold Project, and remain relevant for this assessment:

- the project the project in its entirety; encompassing the mine development and the
  pipeline development. In this report, the term 'the project' refers to the amended project
  for which approval is now sought. Where the original project design as presented in the
  EIS is being discussed, this will be clarified
- project application area the area in its entirety to which the development application (SSD 9505) relates; comprising the mine development project area and the pipeline corridor as illustrated in Figure 1-1. In this report, the term 'the project application area' refers to the amended area that relates to the development for which approval is now sought. Where the original project application area, as presented in the EIS, is being discussed, this will be clarified
- mine project area refers to the mine development project area as illustrated in Figure 1-1
- pipeline corridor an approximate 20 m wide, 90 km long pipeline alignment to which the development application (SSD 9505) relates; from Centennial's Angus Place Colliery (Angus Place) and Springvale Coal Services Operations (SCSO); and Energy Australia's MPPS near Lithgow to the mine development project area, as illustrated in Figure 1-1. Direct disturbance is not proposed across the entire 20 m corridor for construction of the pipeline; the anticipated disturbance footprint is generally 6 10 m wide and has been delineated based on the nature of the vegetation or existing disturbance the pipeline travels through.
- **mine development** construction and operation of the mine and associated mine infrastructure within the mine project area
- **pipeline development** construction and operation of the pipeline and associated infrastructure to transfer water to the mine development within the pipeline corridor.

#### 1.5 REPORT FRAMEWORK

The ACHAR is presented in **Sections 3** to **9** of this report while the historic heritage assessment is presented in **Sections 10** to **13** of this report. The project background and environmental context of the study area presented in **Sections 1** and **2** are also applicable to both the Aboriginal and historic heritage assessments. Recommendations regarding Aboriginal cultural heritage and historic heritage are provided in **Section 14**.

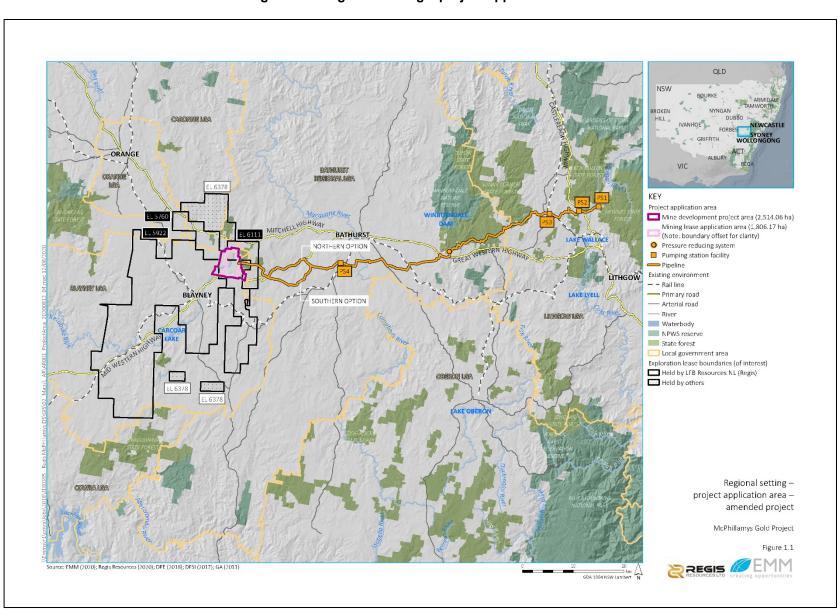


Figure 1-1: Regional setting – project application area.

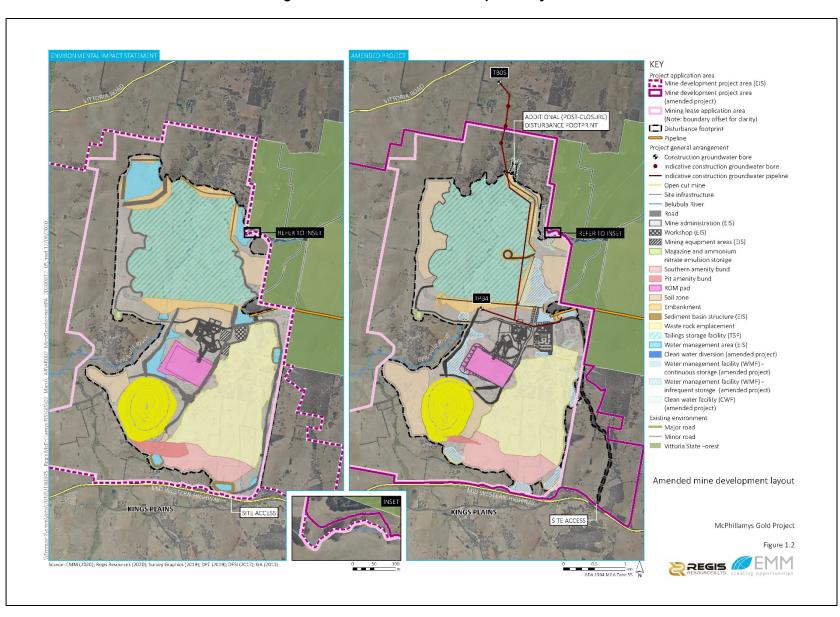


Figure 1-2: Amended mine development layout.

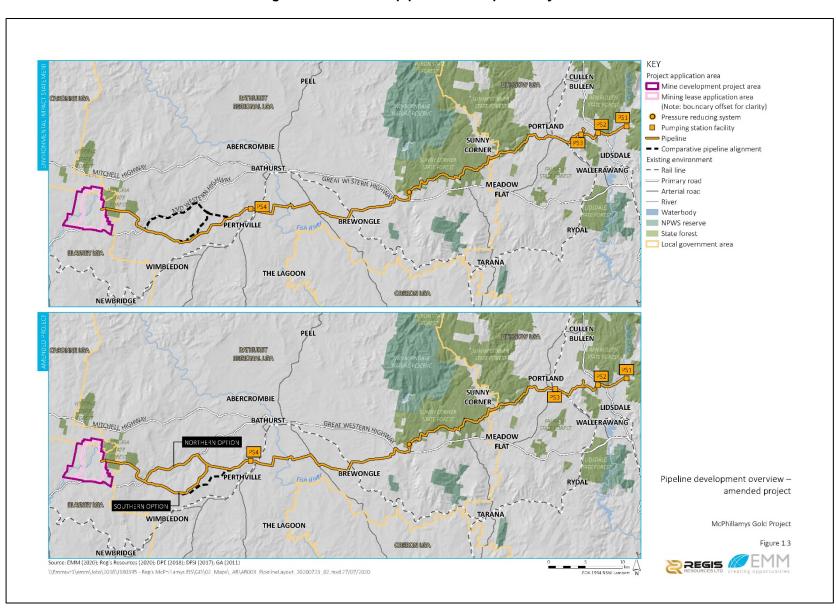


Figure 1-3: Amended pipeline development layout.

#### 2 LANDSCAPE CONTEXT

An understanding of the environmental contexts of a study area is requisite in any archaeological investigation (DECCW 2010). It is a particularly important consideration in the development and implementation of survey strategies for the detection of archaeological sites. In addition, natural geomorphic processes of erosion and/or deposition, as well as humanly activated landscape processes, influence the degree to which these material culture remains are retained in the landscape as archaeological sites; and the degree to which they are preserved, revealed and/or conserved in present environmental settings.

This section of the report only relates to the addendum study areas requiring additional heritage assessment: the mine access road and the two pipeline alignment options. The remainder of the pipeline alignment is covered in OzArk 2019 and mine development project area in Landskape 2019.

#### 2.1 TOPOGRAPHY

The mine access road is situated within two different landscape units: the Mullion Slopes; and the Rockley Plains. The Mullion Slopes are characterised by steep hills and ridges with a general elevation of 500–830 metres (m). The Rockly Plains are characterised by low rolling hills (Mitchell 2002). The mine access road primarily consists of gently rolling hills with gentle to moderate slopes, though there is one elevated flat area near where existing stockyards are located. where proposed wash bays are currently proposed. **Figure 2-1** provides representative photographs of the predominate landforms of the mine access road.

The northern and southern pipeline options are both situated wholly within the Bathurst Granites landscape unit (Mitchell 2002). The Bathurst Granites are characterised by undulating to steep hills with rock outcrops being common. Both pipeline options consist mostly of moderate slopes, though there are several creek or drainage line crossings. **Figure 2-2** provides representative photographs of the predominate landforms across the northern and the southern pipeline option.

Table 2-1 quantifies the extent of each landform within each of the study areas.

Figure 2-1: Topography of the mine access road.



Figure 2-2: Topography of the two pipeline options.



Table 2-1: Summary of key terrain features within the addendum study areas.

Location	Total study area	Gentle/moderate slope	Moderate/steep slope	Flat creek plains	Elevated flats
Mine access road	10 hectares (ha)	9 ha	Not applicable, none present.	Not applicable, none present.	1 ha
Alternative pipeline alignment	62 ha	21 ha	32 ha	7 ha	2 ha

#### 2.2 GEOLOGY AND SOILS

The soil within the mine access road study area tended to be colluvial soil, with a brown silty topsoil present over a light to mid brown clay subsoil and ranges from being moderately to very highly erodible (SSM 2019).

There is a variety of soil types throughout the two pipeline options. On the rounded and steep hills with scarps the soils are hard neutral and acidic red soils with some hard neutral and acidic yellow mottled soils. Sometimes there are also siliceous sands and leached sands on or adjacent to the steeper portions of the areas. The rolling and hilly country have hard neutral red soils, sometimes in association with hard neutral yellow mottled soils. The river terraces and flood plains tend to be dark porous loamy soils with terrace remnants (ASRIS 2003).

#### 2.3 HYDROLOGY

The closest named watercourse to the mine access road is McLeans Creek, located approximately 500 m east of Pounds Lane. There are several minor drainage lines surrounding the access road (**Figure 2-3**).

The two pipeline options cross several named watercourses. The northern option intersects with Evans Plains Creek, Dicks Creek and McLeans Creek. The southern option intersects with a tributary of Evans Plains Creek. The eastern half of the northern option intersects with Spring Creek and two of its tributaries. **Figure 2-4** shows the location of the watercourses in relation to the pipeline options.



Figure 2-3: Watercourses in relation to the mine access road.

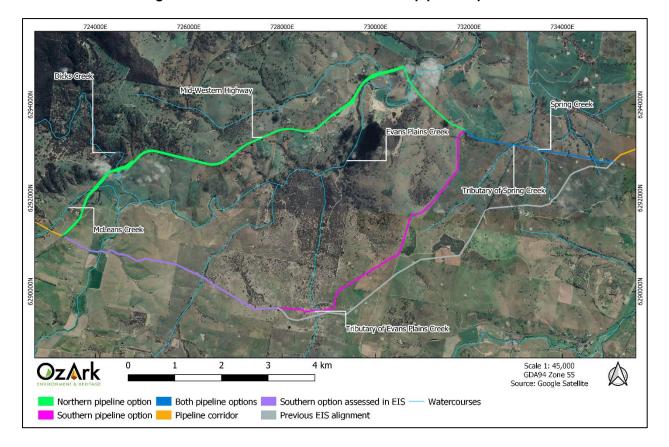


Figure 2-4: Watercourses in relation to the pipeline options.

#### 2.4 VEGETATION

The study areas have a variety of vegetation types present. The mine access road is mostly cleared, with only scattered remnant trees or tree lines which have been deliberately planted to act as wind breaks. Of the vegetation along the two pipeline options, most is remnant stands of isolated trees as the majority of the two options have been previously cleared for agricultural cropping, as well as sheep and cattle grazing.

#### 2.5 CLIMATE

The study areas are characterised by temperate summer months (mean maximum temperature in January for the area is around 28°C) and cool winter months (mean minimum temperature in July is around 0.4°C). Average monthly rainfall tends to be highest in December and January (average of around 79 millimetres [mm]) and lowest in April and May (average around 41 mm).

#### 2.6 LAND-USE HISTORY AND EXISTING LEVELS OF DISTURBANCE

Disturbance, historical or natural, potentially alters the archaeological record. It can do this in a variety of ways, directly or indirectly. For example, land clearing directly moves a particular site type: usually scarred trees or stone arrangements. Indirectly, land clearing accelerates soil erosion, potentially resulting in previously buried occupation and activity sites being exposed and altered or damaged.

The study area has moderate to high levels of disturbance mostly consisting of impacts related to the various types of land use (**Figure 2-5**). Disturbances across the study area are summarised below:

- Agriculture and pastoralism. Farming and grazing are fundamental to the local economy and dominate land-use throughout the area. The study area traverses through many paddocks which are or have been used for farming and grazing which has had the following impacts:
  - Vegetation removal. The study area has been subject to significant levels of vegetation removal. Culturally modified trees may have been removed during the land clearance phase across the area, thereby distorting the archaeological landscape by removing this site type
  - Cultivation. Sections of the study area has been subjected to cultivation. Repeated cultivation since the commencement of European settlement will have altered soil profiles and potentially disturbed subsurface archaeological deposits
  - Grazing. Large section of the study area has and is being used for low-intensity livestock grazing. The presence of hoofed livestock is likely to have resulted in trampling and compaction of the ground surface which accelerates soil loss
  - Farm infrastructure and remediation works. The study area has a moderate level of disturbance generated by the construction of dams, contour banks, agricultural buildings, and fencing. Earthworks associated with contour banking and dams can reveal lithic artefacts which may have been other concealed by low ground surface visibility (GSV).
- Transport. Several unsealed roads and tracks intersect the study area:
  - Unsealed tracks. This disturbance tends to provide exposures, thus enabling the identification of otherwise obscured artefacts
  - Sealed roads. The high disturbance to the ground surface within the road corridor due to earthworks during construction generally obscures and destroys any archaeological material which may have been present.
- Erosion. Erosion includes sometimes severe gully erosion and widespread sheet wash
  erosion, primarily adjacent to waterways. Varying scales of erosion on the archaeological
  landscape as the capacity to completely remove archaeological sites. However, in the
  process of erosion, many archaeological sites can become freshly exposed.

**Figure 2-6** shows examples of the varying types of land-use and levels of disturbance along the addendum pipeline corridor and the mine access road.

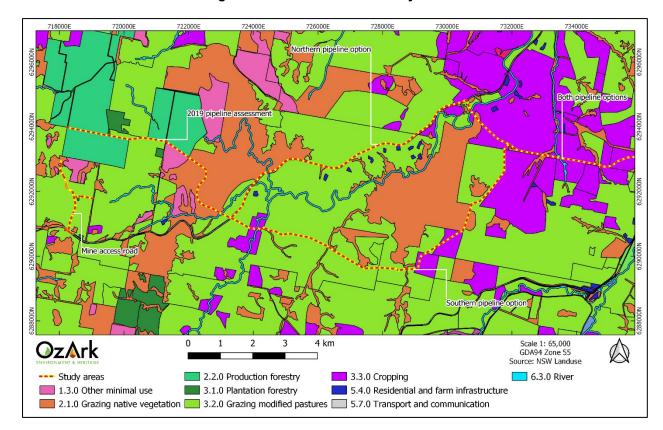
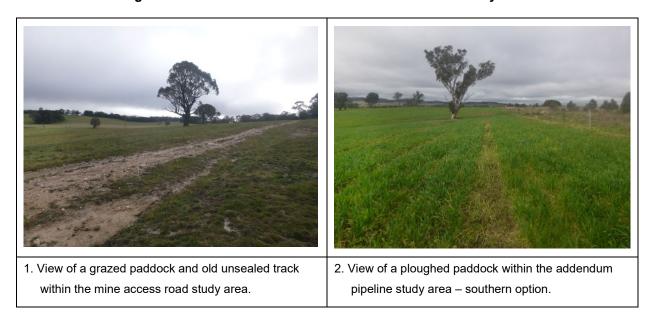


Figure 2-5: Land use of the study areas.

Figure 2-6: Land-use and levels of disturbance of the study area.



#### 2.7 CONCLUSION

Across the addendum study area, the pipeline passes through a wide range of landforms which have undergone differing types of past and current land use applications and disturbances. It is likely these prior disturbances would have impacted any potential archaeological deposits (PADs). Erosion of the topsoil, partly due to vast land clearing, agricultural and gazing practices, especially around creek banks, suggests objects are likely to be revealed by erosional processes.

The mine access road has less variation of landforms present, consisting primarily of gentle to moderate gradient slopes with a small area of high elevated flats present.

The topographic features which would be conductive to retention of archaeological deposits within the study area are terraces overlooking sources of permanent or semi-permanent water, and to a lesser degree, the elevated flats.

	OzArk Environment & Heritage
ABORIGINAL CULTURAL HERITAGE ASSESSMENT	



This page has intentionally been left blank.

#### 3 ASSESSMENT INTRODUCTION

#### 3.1 DATE OF ARCHAEOLOGICAL ASSESSMENT

The fieldwork component of this assessment was undertaken by OzArk on Tuesday 23 June to Thursday 25 June 2020.

#### 3.2 OZARK INVOLVEMENT

#### 3.2.1 Field assessment

The fieldwork component of the heritage assessment was undertaken by:

 Fieldwork Director: Dr Alyce Cameron (OzArk Senior Archaeologist, BA [Hons] and PhD [Archaeology & palaeoanthropology] Australian National University).

## 3.2.2 Reporting

The reporting component of the heritage assessment was undertaken by:

• Report Author: Dr Alyce Cameron

• Reviewer: Ben Churcher (OzArk Principal Archaeologist; BA [Hons], Dip Ed).

#### 3.3 RELEVANT LEGISLATION

Cultural heritage is managed by several state and national Acts. Baseline principles for the conservation of heritage places and relics can be found in the *Burra Charter* (Burra Charter 2013). The *Burra Charter* has become the standard of best practice in the conservation of heritage places in Australia, and heritage organisations and local government authorities have incorporated the inherent principles and logic into guidelines and other conservation planning documents. The *Burra Charter* generally advocates a cautious approach to changing places of heritage significance. This conservative notion embodies the basic premise behind legislation designed to protect our heritage, which operates primarily at a state level.

Several Acts of parliament provide for the protection of heritage at various levels of government.

#### 3.3.1 State legislation

#### Environmental Planning and Assessment Act 1979 (EP&A Act)

This Act established requirements relating to land use and planning. The framework governing environmental and heritage assessment in NSW is contained within the following parts of the EP&A Act:

- Part 4: Local government development assessments, including heritage. May include schedules of heritage items
  - Division 4.7: Approvals process for SSD

- Part 5: Environmental impact assessment on any heritage items which may be impacted by activities undertaken by a state government authority or a local government acting as a self-determining authority
  - Division 5.2: Approvals process for state significant infrastructure.

In accordance with section 4.41 of the EP&A Act an Aboriginal heritage impact permit (under section 90 of the *National Parks and Wildlife Act 1974*) is not required for an SSD that has received development consent.

## National Parks and Wildlife Act 1974 (NPW Act)

Amended during 2010, the NPW Act provides for the protection of Aboriginal objects (sites, objects, and cultural material) and Aboriginal places. Under the Act (Part 6), an Aboriginal object is defined as: any deposit, object or material evidence (not being a handicraft for sale) relating to indigenous and non-European habitation of the area that comprises NSW, being habitation both prior to and concurrent with the occupation of that area by persons of European extraction, and includes Aboriginal remains.

An Aboriginal place is defined under the NPW Act as an area which has been declared by the Minister administering the Act as a place of special significance for Aboriginal culture. It may or may not contain physical Aboriginal objects.

As of 1 October 2010, it is an offence under Section 86 of the NPW Act to 'harm or desecrate an object the person knows is an Aboriginal object'. It is also a strict liability offence to 'harm an Aboriginal object' or to 'harm or desecrate an Aboriginal place', whether knowingly or unknowingly. Section 87 of the Act provides a series of defences against the offences listed in Section 86, such as:

- The harm was authorised by and conducted in accordance with the requirements of an Aboriginal Heritage Impact Permit (AHIP) under Section 90 of the Act
- The defendant exercised 'due diligence' to determine whether the action would harm an Aboriginal object; or
- The harm to the Aboriginal object occurred during the undertaking of a 'low impact activity' (as defined in the regulations).

Under Section 89A of the Act, it is a requirement to notify the Secretary of the Department of Premier and Cabinet of the location of an Aboriginal object. Identified Aboriginal items and sites are registered on Aboriginal Heritage Information Management System (AHIMS) that is administered by Heritage NSW.

## 3.3.2 Commonwealth legislation

#### **Environment Protection and Biodiversity Conservation Act 1999** (EPBC Act)

The EPBC Act, administered by the Commonwealth Department of Agriculture, Water and the Environment, provides a framework to protect nationally significant flora, fauna, ecological communities, and heritage places. The EPBC Act establishes both a National Heritage List and Commonwealth Heritage List of protected places. These lists may include Aboriginal cultural sites or sites in which Aboriginal people have interests. The assessment and permitting processes of the EPBC Act are triggered when a proposed activity or development could potentially have an impact on one of the matters of national environment significance listed by the Act. Ministerial approval is required under the EPBC Act for proposals involving significant impacts to National/Commonwealth heritage places.

#### Other

The Aboriginal and Torres Strait Islander Heritage Protection Act 1984 is aimed at the protection from injury and desecration of areas and objects that are of significance to Aboriginal Australians. This legislation has usually been invoked in emergency and conflicted situations.

The *Protection of Movable Cultural Heritage Act 1986* includes legislation that prevents objects of cultural heritage significance, such as those that are sacred to Aboriginal peoples' heritage, from being exported out of Australia.

# 3.3.3 Applicability to the proposal

The current project will be assessed as an SSD under Division 4.7 of the EP&A Act.

In accordance with section 4.41 of the EP&A Act, an Aboriginal heritage impact permit (under section 90 of the NPW Act) is not required for an SSD that has received development consent.

It is noted there are no Commonwealth or National Aboriginal heritage listed places within the study area, and as such, the heritage provisions of the EPBC Act and other commonwealth Acts do not apply.

## 3.4 PURPOSE AND OBJECTIVES

The purpose of the current study is to identify and assess heritage constraints relevant to the proposed works.

## 3.4.1 Aboriginal archaeological assessment objectives

The current assessment will apply the Code of Practice in the completion of an Aboriginal archaeological assessment to meet the following objectives:

<u>Objective One</u>: Undertake background research on the study area to formulate a predicative model for site location within the study area

**Objective Two:** Identify and record objects or sites of Aboriginal heritage significance within

the study area, as well as any landforms likely to contain further

archaeological deposits

Objective Three: Assess the likely impacts of the proposed work to Aboriginal cultural

heritage and provide management recommendations.

## 3.5 REPORT COMPLIANCE WITH THE CODE OF PRACTICE

The Code of Practice establishes requirements that should be followed by all archaeological investigations where harm to Aboriginal objects may be possible. **Table 3-1** tabulates the compliance of this report with the requirements established by the Code of Practice.

Table 3-1: Report compliance with the Code of Practice.

Code of Practice Requirement	Context of the Requirement	Concordance in this report	
Requirement 1	Review previous archaeological work	See subheadings below	
Requirement 1a	Previous archaeological work	Section 5.3	
Requirement 1b	AHIMS searches	Section 5.3.1	
Requirement 2	Review the landscape context	Section 2	
Requirement 3	Summarise and discuss the local and regional character of Aboriginal land use and its material traces	Section 5.4	
Requirement 4	Predict the nature and distribution of evidence	See subheadings below	
Requirement 4a	Predictive model	Section 5.4	
Requirement 4b	Predictive model results	Section 5.4.6	
Requirement 5	Archaeological survey	See subheadings below	
Requirement 5a	Survey sampling strategy	Section 6.1	
Requirement 5b	Survey requirements	This Requirement was fulfilled during the undertaking of the survey	
Requirement 5c	Survey units	Section 6.1	
Requirement 6	Site definition	Section 5.4.6	
Requirement 7	Site recording	See subheadings below	
Requirement 7a	Information to be recorded	Not applicable to this report as no new sites were recorded.	
Requirement 7b	Scales for photography	All artefact photographs employed a centimetre scale bar.	
Requirement 8	Location information and geographic reporting	See subheadings below	
Requirement 8a	Geospatial information	All artefact locations were logged using a non-differential handheld GPS.	
Requirement 8b	Datum and grid coordinates	All coordinates are provided in GDA94 Zone 55.	
Requirement 9	Record survey coverage data	Section 6.3	
Requirement 10	Analyse survey coverage	Section 6.3	
Requirement 11	Archaeological Report content and format	This report adheres to this Requirement.	
Requirement 12	Records	OzArk undertakes to maintain all survey records for at least five years.	
Requirement 13	Notifying OEH and reporting	See subheadings below	

Code of Practice Requirement	Context of the Requirement	Concordance in this report
Requirement 13a	Notification of breaches	Not applicable
Requirement 13b	Provision of information	Not applicable
Requirement 14	Test excavation which is not excluded from the definition of harm	Not applicable
Requirement 15	Pre-conditions to carrying out test excavation	See subheadings below
Requirement 15a	Consultation	Consultation has included the ACHCRs, see <b>Section 4</b> .
Requirement 15b	Test excavation sampling strategy	Not applicable
Requirement 15c	Notification	Not applicable
Requirement 16	Test excavation that can be carried out in accordance with this Code	See subheadings below
Requirement 16a	Test excavations	Not applicable
Requirement 16b	Objects recovered during test excavations	Not applicable
Requirement 17	When to stop test excavations	Not applicable

## 3.6 ASSESSMENT APPROACH

This Aboriginal cultural assessment has been prepared following the appropriate guidelines, policies, and industry requirements, and following consultation with stakeholders including community members and relevant government agencies.

Guidelines and policies referenced are as follows:

- Code of Practice for the Investigation of Aboriginal Objects in New South Wales (Code of Practice; DECCW 2010).
- Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW (OEH 2011).
- Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 (DECCW 2010b)

This assessment has been prepared in accordance with DPIE's (then the Department of Planning and Environment) Secretary's Environmental Assessment Requirements (SEARs) for the project, issued on 24 July 2018 and revised on 19 December 2018. The SEARs identify matters which must be addressed in the EIS and essentially form its terms of reference. **Table 3-2** lists individual requirements relevant to this Aboriginal cultural heritage and historic heritage assessment and where they are addressed in this report.

Table 3-2: Technical assessment (heritage) related SEARs.

Requirement	Section addressed
Aboriginal cultural heritage and archaeological assessment	Section 2 to Section 9
Historical heritage and archaeological assessment	Section 10 to Section 13
Consultation with Aboriginal stakeholders having regard to the Aboriginal Cultural Heritage Consultation Requirements for Proponents	Section 4

Requirement	Section addressed
Assessment of the impact on Environmental heritage in accordance with the NSW Heritage Manual, including heritage conservation areas and State and local heritage items within and near the site, and detailed mitigation measures to offset potential impacts on Heritage values.	Section 12 to 13

To inform the preparation of the SEARs, DPIE invited other government agencies to recommend matters to be address in the EIS. These matters were considered by the Secretary for DPIE when preparing the SEARs. Copies of the government agencies' advice to DPIE were attached to the SEARs.

Heritage Council of New South Wales and Heritage NSW (then the Office of Environment and Heritage) raised matters relevant to the Aboriginal cultural heritage and historical heritage assessment. The matters raised concerning Aboriginal cultural heritage are listed in **Table 3-3** and have been considered in preparing this assessment, as indicated in the table. Specific assessment recommendations for historic heritage are covered in **Section 9**.

Table 3-3: Agency project specific assessment recommendations.

Requirement	Section addressed
Aboriginal cultural heritage	
The EIS must identify and describe the Aboriginal cultural heritage values that exist across the whole area that will be affected by the McPhillamys Gold Project and document these in the EIS. The identification of cultural heritage values should be guided by the <i>Guide to investigation, assessing and reporting on Aboriginal Cultural Heritage in NSW</i> and consultation with OEH regional officers.	Section 2 to Section 9
Where Aboriginal cultural heritage values are identified, consultation with Aboriginal people must be undertaken and documented in accordance with the <i>Aboriginal cultural heritage consultation requirements for proponents 2010.</i> The significance of cultural heritage values for Aboriginal people who have a cultural association with the land must be documented in the EIS.	Section 4
Impacts on Aboriginal cultural heritage values are to be assessed and documented in the EIS. The EIS must demonstrate attempts to avoid impact upon cultural heritage values and identify any conservation outcomes. Where impacts are unavoidable, the EIS must outline measures proposed to mitigate impacts. Any objects recorded as part of the assessment must be documented and notified to OEH.	Section 2 to Section 9

## 4 ABORIGINAL COMMUNITY CONSULTATION

## 4.1 ABORIGINAL COMMUNITY CONSULTATION

The Aboriginal cultural heritage assessment of the proposal has followed the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (ACHCRs) (DECCW 2010b). For the details regarding the ACHCRs for the overall project, please see OzArk (2019), Landskape (2019) and Landskape (2020). The details presented in this section only relate to the addendum study areas.

A log and copies of correspondence with Aboriginal community stakeholders is presented in **Appendix 1**.

#### 4.1.1 ACHCRs Stages 2 & 3

The aim of Stages 2 and 3 is provide information about the proposal to the RAPs and to acquire information regarding Aboriginal cultural values associated with the proposal either through consultation and/or field work. Often these two stages are run together, and the detailed project information is provided in the assessment methodology that is issued to all RAPs for their consideration.

An addendum survey methodology was sent on 29 April 2020 to all RAPs who had registered for either the mine heritage assessment or the pipeline heritage assessment. Feedback for the addendum survey methodology closed on 13 May 2020.

Feedback was received by Wellington Valley Wiradjuri Aboriginal Corporation (WVWAC) on 8 May 2020 stating:

WVWAC do not have any concerns regards to the proposed survey areas, as long as all surface pedestrian surveys are conducted preferably with RAP's (Registered Aboriginal Party) present especially within 200m of creeks and natural drainage.

## 4.1.2 ACHCRs Stage 4

Stage 4 involves the production of a draft addendum ACHAR that is issued to all RAPs for their consideration. The addendum ACHAR will document the results of the addendum assessment, outline opportunities for the conservation of Aboriginal cultural values, and suggest recommendations for the management of Aboriginal objects should impacts to these objects be unavoidable.

Stage 4 consultation is currently being undertaken. Copies of the ACHAR were distributed to RAPs on 26 August 2020 for Stage 4 review. This period closes on 23 September 2020. The addendum ACHAR will then be updated based on comments and review from RAPs once Stage 4 has been completed.

## 4.2 ABORIGINAL COMMUNITY INVOLVEMENT IN THE ASSESSMENT

Due to social distancing restrictions for Covid-19, including a maximum of two individuals per vehicle, a representative of a RAP was only able to attend the field survey for the mine access road. The social distancing restrictions for Covid-19 in conjunction with land holders' requests regarding vehicle numbers and movements along the two pipeline options resulted in no RAPs being present during the survey of the pipeline options.

Ian Sutherland from Orange Local Aboriginal Land Council (LALC) participated in the survey of the mine access road on Tuesday 23 June 2020.

# 4.2.1 Comments arising from the assessment

The survey located two pieces of ochre in the mine access road study area. Following discussion as to whether these fragments constituted 'sites', Ian understood why the two pieces of ochre would not be registered as sites. However, he expressed the view that he would like the pieces of raw ochre moved prior to construction of the road (see **Section 6.5**).

# 5 ABORIGINAL ARCHAEOLOGY BACKGROUND

# 5.1 ETHNO-HISTORIC SOURCES OF REGIONAL ABORIGINAL CULTURE

Please see OzArk (2019) and Landskape (2019) for relevant information.

# 5.2 REGIONAL ARCHAEOLOGICAL CONTEXT

Please see OzArk (2019) and Landskape (2019) for relevant information.

# 5.3 LOCAL ARCHAEOLOGICAL CONTEXT

# 5.3.1 Desktop database searches conducted

A desktop search was conducted on the following databases to identify any potential previously recorded heritage within the addendum study areas (the mine access road and pipeline options). In addition, an updated AHIMS search has been conducted along the entire pipeline alignment. The results of these searches are summarised in **Table 5-1** and presented in detail in **Appendix 2**.

Table 5-1: Aboriginal cultural heritage: desktop-database search results.

Name of Database Searched	Date of Search	Type of Search	Comment					
Mine access road and addendum pipeline alignment options								
Commonwealth Heritage Listings	15 June 2020	Blayney and Bathurst LGAs	No places listed on either the National or Commonwealth heritage lists are located within the study area					
National Native Title Claims Search	15 June 2020	NSW	No Native Title Claims cover the study area.					
AHIMS	7 x 7 km centred on the mine access road and the two addendum pipeline options		97 sites within the search area. None within the study areas.					
Local Environment Plan (LEP)	15 June 2020	Bathurst LEP of 2014 Blayney LEP of 2012	None of the Aboriginal places noted occur near the study area.					
	Remainder of	the pipeline						
Commonwealth Heritage Listings	24 July 2020	Blayney, Bathurst, and Lithgow LGAs	No places listed on either the National or Commonwealth heritage lists are located within the study area					
National Native Title Claims Search	24 July 2020	NSW	The Warrabinga-Wiradjuri #7 (Tribunal No NC2017/001 and NC2018/002) have a claim over part of the pipeline alignment.					
AHIMS	24 July 2020	1.5 km centred on remainder of pipeline alignment	27 additional sites than reported in OzArk 2019.					
LEP	24 July 2020	Bathurst LEP of 2014 Blayney LEP of 2012 Lithgow LEP of 2014	None of the Aboriginal places noted occur near the study area.					

As per **Table 5-1**, it is noted that part of the pipeline alignment includes land currently subject to Native Title Claim (NC2018/002, NSD857/2017, Warrabinga-Wiradjuri #7).

## Mine access road and addendum pipeline options

A search of the AHIMS database conducted on 17 June 2020 for the mine access road and addendum pipeline alignments returned 97 records for Aboriginal heritage sites within the designated search area (GDA Zone 55 Eastings: 711542–737644, Northings: 6284663–6299270). **Figure 5-1** shows the location of the AHIMS sites that have been recorded near the study area while **Table 5-2** summarises the number and frequency of site type.

**Figure 5-2** and **Figure 5-3** show a detailed view of AHIMS sites in relation to the mine access road and the pipeline options.

Table 5-2: Site types and frequencies of AHIMS sites near the mine access road and addendum pipeline options.

Site Type	Number	% Frequency
Artefact scatters & isolated finds	66	68.0
Modified tree	10	10.3
Stone arrangement	6	6.2
Artefact scatter & PAD	4	4.1
Aboriginal ceremony & dreaming	2	2.1
Aboriginal ceremony & dreaming / ceremonial ring (stone or earth) / stone arrangement	2	2.1
Burial/s	2	2.1
Restricted	2	2.1
Aboriginal ceremony & dreaming / resource and gathering	1	1.0
Grinding groove & artefact scatter	1	1.0
PAD	1	1.0
Total	97	100

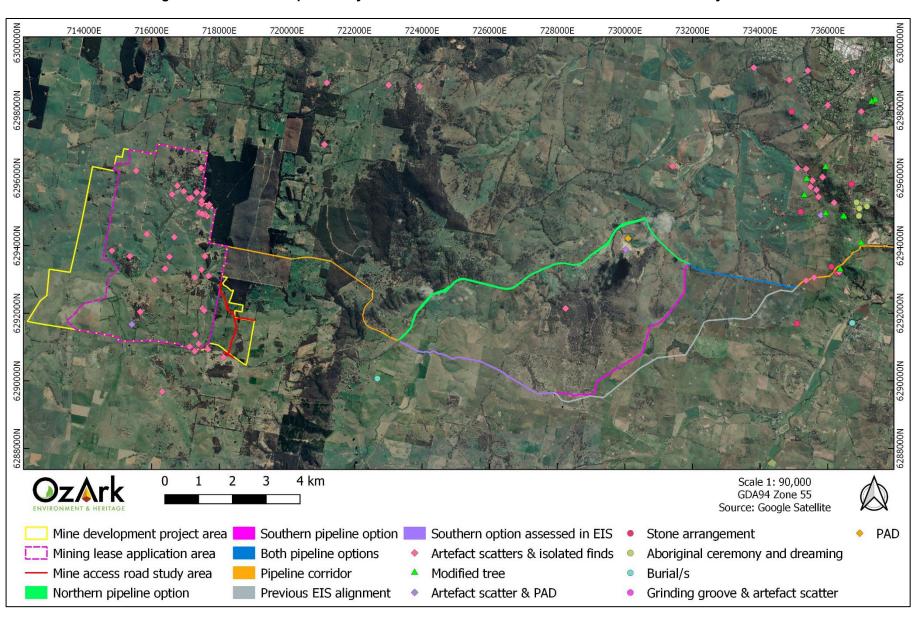


Figure 5-1: Location of previously recorded AHIMS sites in relation to the addendum study areas.

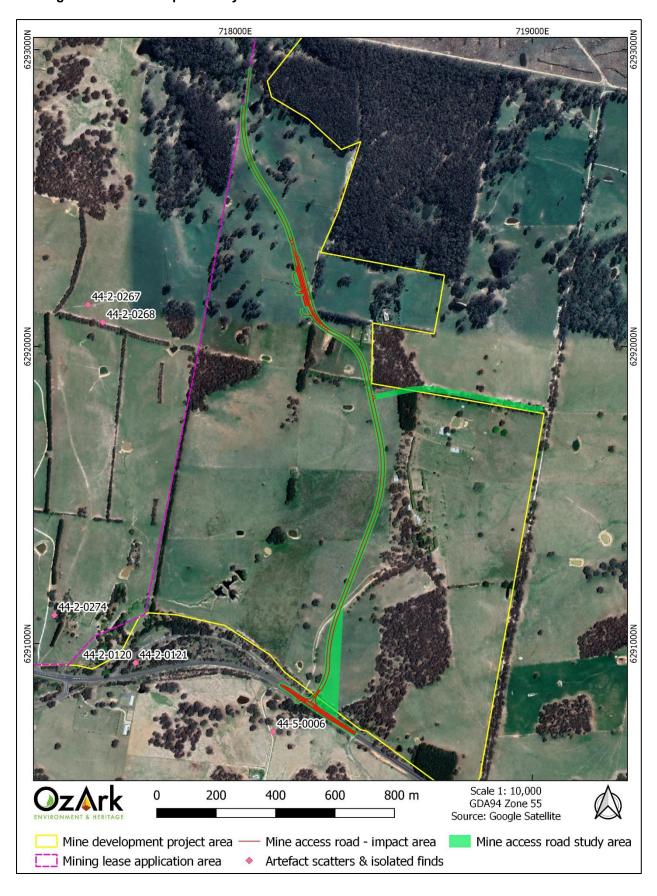


Figure 5-2: Detail of previously recorded AHIMS sites in relation to the mine access road.

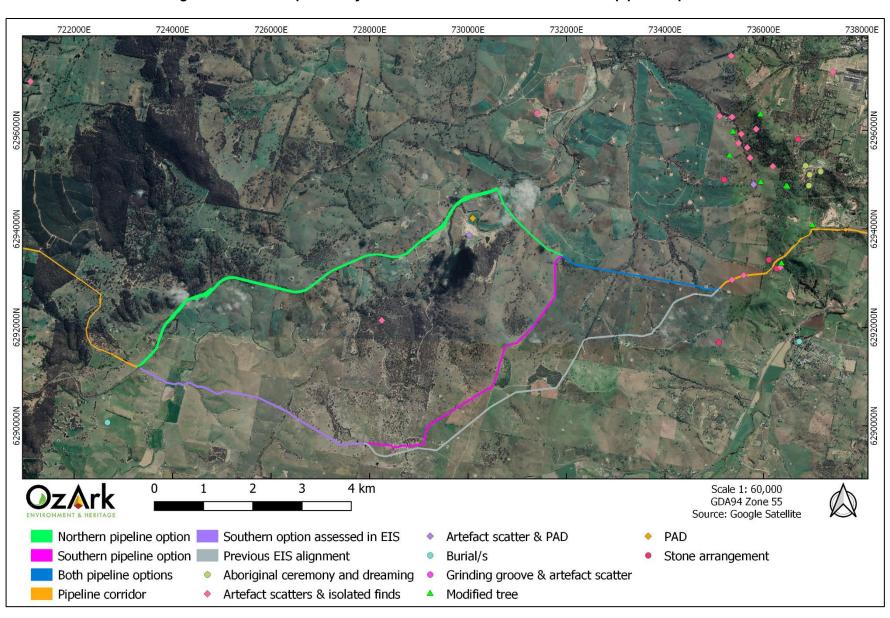


Figure 5-3: Detail of previously recorded AHIMS sites in relation to the pipeline options.

# Remainder of the pipeline alignment

A search of the AHIMS database conducted on 24 July 2020 for the remainder of the pipeline alignment route returned an additional 27 Aboriginal sites within the designated 1.5 km search area around the pipeline corridor. The 27 additional Aboriginal sites include the sites recorded during the assessment and detailed in OzArk 2019.

The purpose of this AHIMS search was to update the findings in OzArk (2019) and ensure any additional sites recorded in the past two years are considered in the impact assessment.

**Figure 5-5** shows the location of the AHIMS sites that have been recorded near the study area while **Table 5-3** summarises the number and frequency of site type.

Table 5-3: Site types and frequencies of AHIMS sites near the remainder of the pipeline alignment.

Site Type	Number	% Frequency
Artefact scatter	53	48
Isolated artefact	26	23
Aboriginal ceremony & dreaming site	6	5
Stone arrangement	4	4
Modified tree	5	5
Restricted site	2	2
Isolated artefact & PAD	2	2
Grinding grooves	1	1
Burial	1	1
Artefact scatter, art & grinding grooves	1	1
Artefact scatter & PAD	2	2
Artefact scatter & grinding grooves	1	1
Artefact scatter & Aboriginal ceremony and dreaming site	1	1
Quarry	1	1
Artefact scatter & modified tree	2	2
Shelter with deposit	3	3
Total	111	100

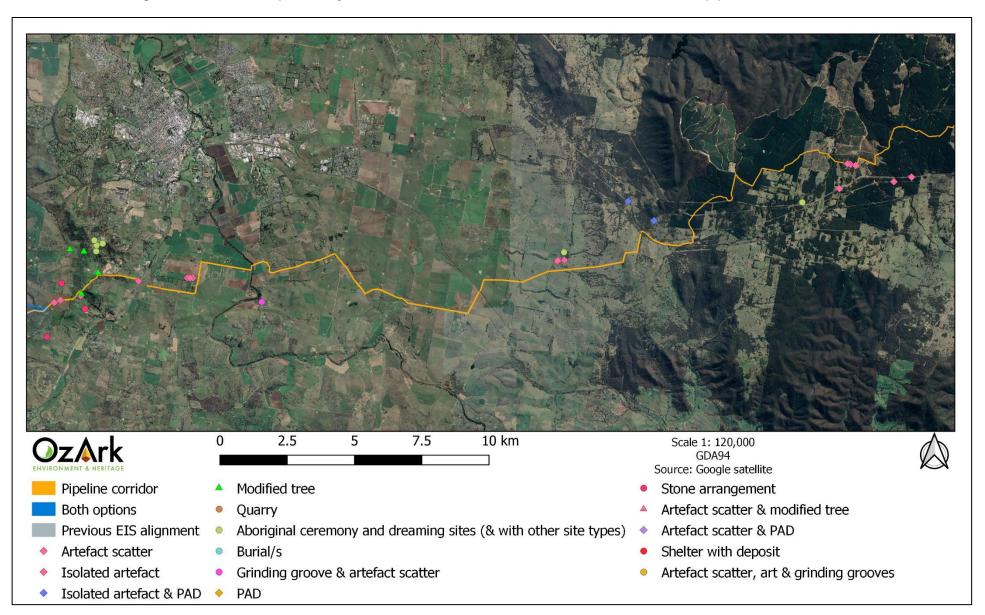


Figure 5-4: Location of previously recorded AHIMS sites in relation to the remainder of the pipeline – western half.

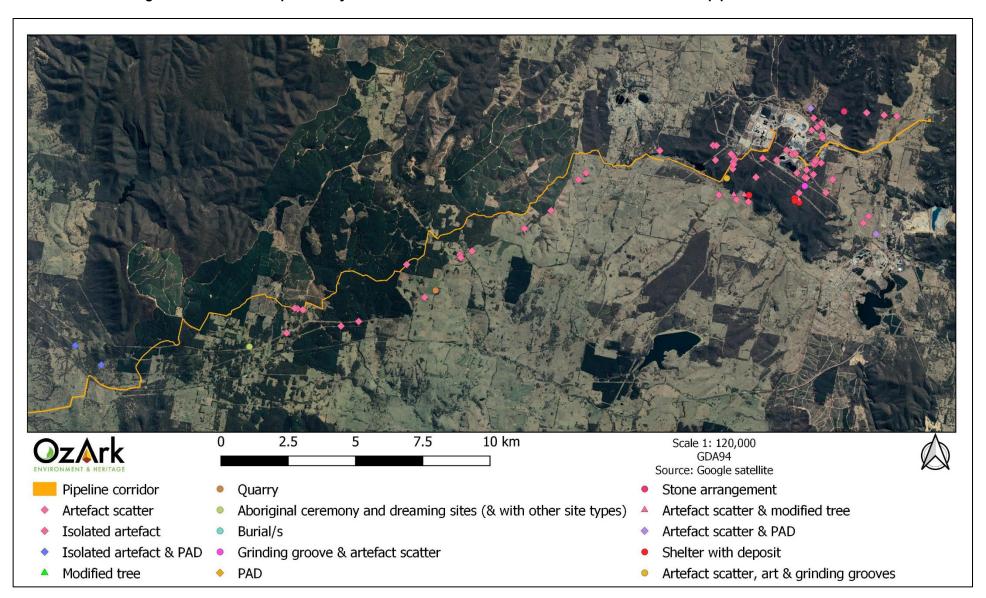


Figure 5-5: Location of previously recorded AHIMS sites in relation to the remainder of the pipeline – eastern half.

# 5.3.2 Local archaeological studies

There have been a number of development driven assessments conducted in the Blayney and Bathurst areas. Only those assessments which are close or related to the addendum study areas of the mine access road and the two pipeline options have been summarised. For further information regarding local archaeological studies in relation to the entire McPhillamys Gold Project see Landskape (2019) and OzArk (2019).

#### 5.3.2.1 Mine access road

Kelton (2000) undertook a heritage assessment of the proposed Mid-Western Highway realignment near Kings Plains. The area assessed by Kelton is directly south of the mine access road study area. During Kelton's assessment, two Aboriginal sites were recorded (KS-OS-1 [#44-2-0121] and #44-2-0120] and KP-OS-2 [#44-2-0122]). Both sites are artefact scatters. One existing PAD was also noted, and two new PADs identified. Austral Archaeology (2004) completed test excavation at the sites Kelton (2000) recorded. The test excavation at these sites resulted in a small number of artefacts being recorded which are characteristic of the region.

Landskape (2019) conducted the Aboriginal cultural heritage assessment for the mine development component of the McPhillamys Gold Project, located near Blayney. During this assessment nineteen stone artefact scatters and eighteen isolated finds of stone artefacts were recorded in addition to one previously recorded stone artefact scatter (AHIMS #44-2-0122). This assessment concluded that the Aboriginal cultural heritage sites that would be impacted by the mine development are not of high scientific or cultural significance.

## 5.3.2.2 Northern and Southern pipeline options

Navin Officer (2018) completed a heritage assessment for the Swans Ponds Quarry Extension located approximately 700 m south of the northern pipeline option. During the assessment two sites were recorded: #44-2-0296 (artefact scatter and PAD) and #44-2-0295 (PAD). The artefact scatter and PAD (#44-2-0296) was recorded midslope on the south side of Evans Plains Creek. It consisted of at least 12 artefacts made from materials such as quartz, tuff, and volcanic material, though quartz was the most prevalent material type. The PAD (#44-2-0295) was recorded on a terrace adjacent to the south bank of the Evans Plains Creek.

Pickering (1980) surveyed a proposed electricity easement between Bathurst, Raglan and Mount Panorama. Seven sites were recorded including several isolated finds, a lithic scatter, and a possible scarred tree. The artefacts recorded were made from a range of materials: quartzite, quartz, fine grained silcrete and fine-grained basalt. In addition, Pickering attempted to locate five previously identified stone arrangements but found all of them had been destroyed via agricultural activities, or by campers.

OzArk (2019) conducted the Aboriginal cultural heritage assessment for the pipeline development component of the McPhillamys Gold Project. During this assessment, seven Aboriginal sites were recorded consisting of six isolated finds and one low-density artefact scatter. One previously recorded site, #45-1-2723, was also located. The assessment concluded that the Aboriginal sites likely to be impacted by the pipeline development are not of high archaeological / scientific significance.

Although there is a limited number of archaeological studies that have been conducted in the vicinity of the addendum study areas, the results indicate that, despite the negative impacts of agricultural practices in these areas, Aboriginal sites are still likely to be located on landforms next to a permanent water source.

## 5.4 PREDICTIVE MODEL FOR SITE LOCATION

Across Australia, numerous archaeological studies in widely varying environmental zones and contexts have demonstrated a high correlation between the permanence of a water source and the permanence and/or complexity of Aboriginal occupation. Site location is also affected by the availability of and/or accessibility to a range of other natural resources including plant and animal foods; stone and ochre resources and rock shelters; as well as by their general proximity to other sites/places of cultural/mythological significance. Consequently, sites tend to be found along permanent and ephemeral water sources, along access or trade routes or in areas that have good flora/fauna resources and appropriate shelter.

In formulating a predictive model for Aboriginal archaeological site location within any landscape it is also necessary to consider post-depositional influences on Aboriginal material culture. In all but the best preservation conditions very little of the organic material culture remains of ancestral Aboriginal communities survives to the present. Generally, it is the more durable materials such as stone artefacts, stone hearths, shell, and some bones that remain preserved in the current landscape. Even these, however, may not be found in their original depositional context since these may be subject to either (a) the effects of wind and water erosion/transport—both over short- and long-time scales—or (b) the historical impacts associated with the introduction of European farming practices including grazing and cropping, land degradation, and farm related infrastructure. Scarred trees, due to their nature, may survive for up to several hundred years but rarely beyond.

## 5.4.1 Settlement strategies

The archaeological studies undertaken within the vicinity of the study area and the wider region provide information to obtain a sound understanding of the nature and distribution of archaeological sites within the area. Although there is some conjecture about the relationship

between stream order, site numbers and densities, the general pattern is that most sites representing occupation, such as artefact scatters, are present close to permanent water sources.

There are cultural and ritual sites (such as initiation and birthing sites, and bora rings) which do not necessarily correlate to environmental data and a predictive model. These types of sites are determined more due to cultural choice than environmental situation.

#### 5.4.2 Past land use

Crucial for the preservation of archaeological deposits is the history of past land use in an area. The study area has had several different types of land use ranging from mining, agricultural, grazing and transport corridors. Previous archaeological studies conducted at the eastern portion of the study area, predominately due to either mining or energy purposes, have highlighted the disturbed context of these areas and the difficulties in locating previously recorded Aboriginal sites.

The results of past archaeological investigations near the study area indicate that the most common site type will be artefact scatters or isolated artefacts generally located on flat terraces or gentle slopes near higher order watercourses. Aboriginal ceremony and dreaming sites have also been recorded in locations around the pipeline study area, most prominently at Mount Bathurst. Stone arrangements have also been recorded around Bald Hill (to the south of Mount Panorama) and scarred trees have also been recorded in proximity to these Aboriginal ceremony and dreaming sites and stone arrangements.

Based on the previously recorded sites in vicinity to the study area, the most likely site type to be located inside the study area are artefact scatters and isolated artefacts.

## 5.4.3 Previously recorded sites

The results of past archaeological investigations near the study areas, including the remainder of the pipeline development (see OzArk 2019), indicates that the most common site type will be artefact scatters or isolated finds. There is also potential for modified trees where mature native vegetation exists.

## 5.4.4 Landform modelling

A consideration of the landforms within the study area enables a prediction regarding the type and distribution of sites to be made. As the study areas are linear and narrow, they traverse a range of central tablelands landforms from steep hills to flat landforms: all of which are dissected by a variety of waterways.

The highest order waterway intersected by the addendum study areas is the Evans Plains Creek (**Figure 2-4**). Though there is a variety of topographic features within the mine access road and the pipeline option study areas, there are limited locations that would have encouraged past

Aboriginal occupation. These locations are limited to elevated terraces adjacent to water, which is also a landform type recognised in the area as having archaeological sensitivity.

#### 5.4.5 Previous studies

Previous archaeological studies indicate that artefact scatters and isolated finds will possibly be recorded within the study area, especially on well drained landforms adjacent to permanent water sources. The main types of raw materials for artefacts recorded during archaeological assessments are quartz, chert, silcrete, volcanic material and tuff.

#### 5.4.6 Conclusion

Based on knowledge of the environmental contexts of the study area and a desktop review of the known local and regional archaeological record, the following predictions are made concerning the probability of those site types being recorded within the study area:

- <u>Isolated finds</u> may be indicative of random loss or deliberate discard of: a single artefact; the remnant of a now dispersed and disturbed artefact scatter; or an otherwise obscured or sub-surface artefact scatter. They may occur anywhere within the landscape but are more likely to occur in topographies where open artefact scatters typically occur.
  - As isolated finds can occur anywhere, particularly within disturbed contexts, it is
    predicted that this site type could be recorded within the study area.
- Open artefact scatters are defined as two or more artefacts, not located within a rock shelter, and located no more than 50 m away from any other constituent artefact. This site type may occur almost anywhere that Aboriginal people have travelled and may be associated with hunting and gathering activities, short- or long-term camps, and the manufacture and maintenance of stone tools. Artefact scatters typically consist of surface scatters or sub-surface distributions of flaked stone discarded during the manufacture of tools but may also include other artefactual rock types such as hearth and anvil stones. Less commonly, artefact scatters may include archaeological stratigraphic features such as hearths and artefact concentrations which relate to activity areas. Artefact density can vary considerably between and across individual sites. Small ground exposures revealing low density scatters may be indicative of a background scatter rather than a spatially or temporally distinct artefact assemblage. These sites are classed as 'open', that is, occurring on the land surface unprotected by rock overhangs, and are sometimes referred to as 'open camp sites'.

Artefact scatters are most likely to occur on level or low gradient contexts, along the crests of ridgelines and spurs, and elevated areas fringing watercourses or wetlands. Larger sites may be expected in association with permanent water sources.

Topographies which afford effective through-access across, and relative to, the surrounding landscape, such as the open basal valley slopes and the valleys of creeks, will tend to contain more and larger sites, mostly camp sites evidenced by open artefact scatters.

 As the study area traverses a wide range of landforms, this site type has potential to occur. Artefact scatters are most likely to be located within landforms of a gentle gradient associated with permanent / semi-permanent waterways as these are likely to have been attractive camping areas. Smaller sites containing low density and low complexity assemblages are predicted near less permanent watercourses. Moderate to steeply sloping landforms are unlikely to have been utilised with lower gradient ridges and spurs being more attractive for camping. The lack of water in these elevated landforms would suggest, however, that camping would have been short-term and that sites would be smaller and contain low complexity assemblages. The high degree of impact from past agricultural practices along the creek flats or gentle slopes, i.e. cultivation, will probably mean that surface scatters and archaeological deposits are likely to have become displaced. It would be expected that most sites located would date to the late Holocene (i.e. less than 4,000 years old), the age attributed to the A-Horizon artefact bearing deposits. Although Pleistocene sites contained within B-Horizon sediments may also occur but must be considered a rare eventuality.

- Aboriginal scarred trees contain evidence of the removal of bark (and sometimes wood) in the past by Aboriginal people, in the form of a scar. Bark was removed from trees for a wide range of reasons. It was a raw material used in the manufacture of various tools, vessels, and commodities such as string, water containers, roofing for shelters, shields, and canoes. Bark was also removed because of gathering food, such as collecting wood boring grubs or creating footholds to climb a tree for possum hunting. Due to the multiplicity of uses and the continuous process of occlusion (or healing) following removal, it is difficult to accurately determine the intended purpose for any example of bark removal. Scarred trees may occur anywhere old growth trees survive. The identification of scars as Aboriginal cultural heritage items can be problematical because some forms of natural trauma and European bark extraction create similar scars. Many remaining scarred trees probably date to the historic period when bark was removed by Aboriginal people for both their own purposes and for roofing on early European houses. Consequently, the distinction between European and Aboriginal scarred trees may not be clear.
  - Due to the near-total clearance of trees from within the study area, this site type is predicted to be very rare. It is also noted that this site type is very rare at a regional level.
- Quarry sites and stone procurement sites typically consist of exposures of stone
  material where evidence for human collection, extraction and/or preliminary processing
  has survived. Typically, these involve the extraction of siliceous or fine grained igneous
  and meta-sedimentary rock types for the manufacture of artefacts. The presence of
  quarry/extraction sites is dependent on the availability of suitable rock formations.
  - This site type could be recorded within the study area should suitable rock outcroppings be available.
- <u>Burials</u> are generally found in soft sediments such as aeolian sand, alluvial silts, and rock shelter deposits. In valley floor and plains contexts, burials may occur in locally elevated topographies rather than poorly drained sedimentary contexts. Burials are also known to have occurred on rocky hilltops in some limited areas. Burials are generally only visible where there has been some disturbance of sub-surface sediments or where some erosional process has exposed them.

 Although it is possible that this site type could be found within the study area, it is considered a rare site type especially given the disturbance that has occurred within the study area.

#### 6 RESULTS OF ABORIGINAL ARCHAEOLOGICAL ASSESSMENT

## 6.1 SAMPLING STRATEGY AND FIELD METHODS

Standard archaeological field survey and recording methods were employed in this study (Burke & Smith 2004). The Aboriginal cultural heritage assessment of the study area followed the Code of Practice. The field inspection followed standard archaeological field survey and recording methods (Burke & Smith 2004) as well as the *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in New South Wales* (OEH 2011).

The methodology is based on the understanding that:

- Some portions have been moderately disturbed, such as those along modified road corridors, transmission line easements etc.
- Some portions have undergone low levels of disturbance, possibly only from land clearing.

Survey effort was apportioned according to the likelihood of Aboriginal sites being present and with regards to disturbance. It should be noted that the aim of any archaeological survey is not to locate every artefact in a landscape but to undertake investigations so that the archaeological potential and archaeological characteristics of all landforms within the study area are known.

When recording a site, the following details were noted:

- GPS location/s of site features (i.e. stone artefact locations, etc.)
- Site type
- Site extent
- Landform and context of site
- Details for each artefact (size, type, raw material, etc.)
- Whether site had potential for PAD
- Notes on discussion from RAPs regarding possible mitigation measures and their views concerning the site

These details were used to register the site on AHIMS and compile the information in **Section 6.4**.

## 6.2 PROJECT CONSTRAINTS

There were no significant constraints in completing the archaeological assessment of the study area. Ground surface visibility (GSV) posed the greatest constraint during field inspection (**Section 6.3**), however, not to the extent that the efficacy of the survey was unduly diminished.

## 6.3 EFFECTIVE SURVEY COVERAGE

Two of the key factors influencing the effectiveness of archaeological survey are GSV and ground surface exposure (GSE). These factors are quantified to ensure that the survey data provides adequate evidence for the evaluation of the archaeological materials across the landscape. For the purposes of the current assessment, these terms are used in accordance with the definitions provided in the Code of Practice.

#### GSV is defined as:

... the amount of bare ground (or visibility) on the exposures which might reveal artefacts or other archaeological materials. It is important to note that visibility, on its own, is not a reliable indicator of the detectability of buried archaeological material. Things like vegetation, plant or leaf litter, loose sand, stone ground or introduced materials will affect the visibility. Put another way, visibility refers to 'what conceals' (DECCW 2010: 39).

#### GSE is defined as:

... different to visibility because it estimates the area with a likelihood of revealing buried artefacts or deposits rather than just being an observation of the amount of bare ground. It is the percentage of land for which erosion and exposure was sufficient to reveal archaeological evidence on the surface of the ground. Put another way, exposure refers to 'what reveals' (DECCW 2010: 37).

#### 6.3.1 Mine access road

**Table 6-1** calculates the effective survey coverage within the mine access road. In general, **Table 6-1** presents an approximation of the amount of ground surface able to be seen at any location within particular landform units. For example, at any one location within the elevated flat landforms of the mine access road approximately 15% of the ground surface could be seen. Exposures in this landform were generally confined to erosion scalds or existing vehicle and animal tracks. The amount of visible ground decreased across the slopes as these were generally grassed more heavily than the elevated flats. Visibility within these landforms was hampered by grass cover.

**Effective Coverage** Effective Coverage % (= Effective Coverage Area (sq m) (= Survey Survey **Survey Unit** Visibility **Exposure** Unit Area x Visibility Area / Survey Unit Landform Unit Area (sq m) % x Exposure %) Area x 100) Gentle to moderate 71830 40 30 8620 12 1 slope Elevated 2 10510 50 30 1576 15 flats

Table 6-1: Effective survey coverage within the mine access road.

Survey Unit	Landform	Survey Unit Area (sq m)	Visibility %	Exposure %	Effective Coverage Area (sq m) (= Survey Unit Area x Visibility % x Exposure %)	Effective Coverage % (= Effective Coverage Area / Survey Unit Area x 100)
3	Gentle to moderate slope	18146	40	30	2178	12

**Table 6-2** demonstrates that the survey efficacy of both the elevated flats and gentle to moderate slopes was relatively consistent at 15 per cent and 12 per cent, respectively.

Table 6-2: Effective survey coverage and incidences of site recording at the mine access road.

Landform	Landform area (sq m)	Area Effectively Surveyed (sq m) (= Effective Coverage Area)	% of Landform Effectively Surveyed (= Area Effectively Surveyed / Landform x 100)	Number of Sites	Number of Artefacts or Features
Elevated flats	10510	1576	15	0	0
Gentle to moderate slope	89976	10797	12	0	0

# 6.3.2 Pipeline options

**Table 6-3** calculates the effective survey coverage of the two pipeline options. Overall, creek flats and elevated flats were the landforms with the highest amount of ground surface able to be seen. Exposures on the elevated flats consisted of small erosion scalds, vehicle tracks and animal trails. The exposures within the creek flat landforms also consisted of erosion scalds, though on a larger scale than those within the elevated flats, and included areas affected by water wash. Vehicle tracks and animal trails were also present in the creek flats. The amount of visible ground decreased across the gentle to moderate and moderate to steep slopes. Visibility was hampered across all landforms by grass cover, crops and where trees were present, leaf litter and branches.

Table 6-3: Effective survey coverage within the pipeline options.

Survey Unit	Landform	Survey Unit Area (sq m)	Visibility %	Exposure %	Effective Coverage Area (sq m) (= Survey Unit Area x Visibility % x Exposure %)	Effective Coverage % (= Effective Coverage Area / Survey Unit Area x 100)
1	Moderate - steep slopes	15895	30	50	2384	15
2	Elevated flats	2477	40	50	495	20
3	Moderate - steep slopes	12106	30	50	1816	15
4	Creek flats	4596	50	60	1379	30
5	Moderate - steep slopes	7405	20	30	444	6
6	Elevated flats	6530	50	70	2285	35
7	Moderate - steep slopes	9590	40	50	1918	20
8	Creek flats	702	70	60	295	42
9	Moderate - steep slopes	14780	40	50	2956	20

Survey Unit	Landform	Survey Unit Area (sq m)	Visibility %	Exposure %	Effective Coverage Area (sq m) (= Survey Unit Area x Visibility % x Exposure %)	Effective Coverage % (= Effective Coverage Area / Survey Unit Area x 100)
10	Gentle - moderate slopes	76355	40	50	15271	20
11	Elevated flats	15096	20	10	302	2
12	Moderate - steep slopes	28343	30	40	3401	12
13	Creek flats	14421	40	60	3461	24
14	Gentle - moderate slopes	20293	20	30	1218	6
15	Creek flats	10626	40	60	2550	24
16	Highway corridor - gentle/moderate slopes	80974	20	50	8097	10
17	Highway corridor - creek flats	34839	20	50	3484	10
18	Highway corridor - moderate/steep slopes	262823	20	50	26282	10

**Table 6-4** demonstrates that although the survey efficacy within moderate to steep slope landforms was the lowest at 11 per cent, this did hamper the recording of a site. These results conform with the results of the overall survey for the pipeline development (see OzArk 2019: 55–56). As with the 2019 assessment (OzArk 2019), the most archaeologically sensitive areas (i.e. along the banks of waterways in the 'creek flat landform') are the least represented along the two addendum pipeline options. Furthermore, the locations of the pipeline alignment across the 'creek flat landforms' were all effected by gully erosion, trampling, earthworks or sheet wash that raised the survey efficacy of this survey unit.

Table 6-4: Effective survey coverage and incidences of site recording at the pipeline options.

Landform	Landform area (sq m)	Area Effectively Surveyed (sq m) (= Effective Coverage Area)	% of Landform Effectively Surveyed (= Area Effectively Surveyed / Landform x 100)	Number of Sites	Number of Artefacts or Features
Gentle to moderate slopes	177621	24586	14	0	0
Moderate to steep slopes	350943	39202	11	1	1
Elevated flats	24103	3083	13	0	0
Creek flats	65184	11169	17	0	0

**Figure 6-1** shows the pedestrian survey effort for the addendum study areas of the mine access road and the pipeline options.

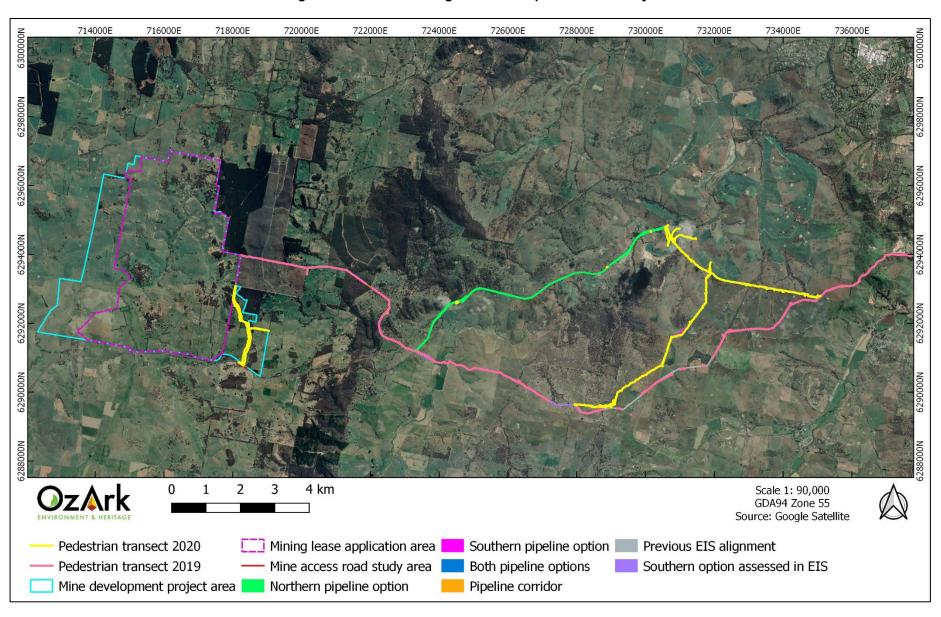


Figure 6-1: Aerial showing the areas of pedestrian survey.

#### 6.4 ABORIGINAL SITES RECORDED

**Table 6-5** summarises the Aboriginal cultural heritage site recorded during the survey of the study area. Further details on each site follows.

Table 6-5: Aboriginal cultural heritage sites recorded during the survey.

Site Name & Number	Feature(s)	Survey Unit	Landform
Evans Plains Creek Tributary IF-01 #44-5-0175	Isolated find	8	Gentle to moderate slope

## **Evans Plains Creek Tributary IF-01 (#44-5-0175)**

**Site Type**: Isolated find

**GPS Coordinates**: 728678 E / 6289590 N (GDA94 Zone 55)

<u>Location of Site</u>: The site is located on private property approximately 3.9 km south of the Mid-Western Highway, 2.1 km north of Wimbledon Road and 1.9 km northwest of the homestead 'Green Creek'. The site is approximately 90 m west of a tributary of the Evans Plains Creek (**Figure 6-4**).

<u>Description of Site</u>: The site consists of a single quartz flake (**Figure 6-2**). The flake measures 30 mm in length, 30 mm in width and 7 mm in thickness. It has a simple platform and hinge termination. The flake is located on the top of a contour bank west of a modified terrace next to the tributary. The contour bank is in a lower slope descending west to east towards the tributary. A historical site (HS-01) is located approximately 35 m north (**Figure 6-3**). Soils at the site are mid-brown loamy silt and the vegetation consists of grazed grasses. Due to the disturbances in the area, it is unlikely there are *in situ* subsurface deposits present.

Figure 6-2: Evans Plains Creek Tributary IF-01. View of site and selection of recorded artefacts.

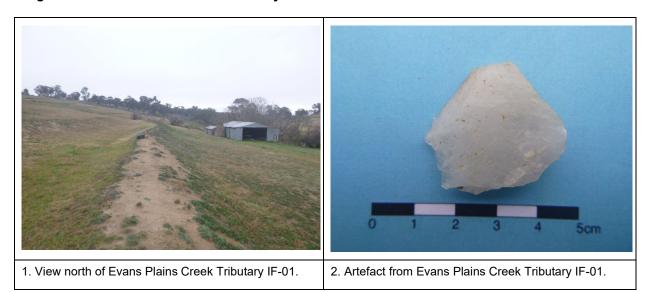




Figure 6-3: Site map of Evans Plains Creek Tributary IF-01.

## 6.5 RAW MATERIALS RECORDED

In addition to the Aboriginal site recorded during the survey, two pieces of red ochre were recorded during the survey of the mine access road. **Table 6-6** outlines the location and details of the pieces of red ochre, while **Figure 6-4** shows the location of the red ochre. Neither piece of ochre had evidence of having been utilised. Both pieces were also in secondary contexts and no Aboriginal items or sites were recorded in conjunction with them. As such, these pieces of red

ochre have been recorded at the request of the RAP representative but will not be registered as sites on AHIMS.

Table 6-6: Location and details of red ochre.

Name	GPS coordinates (GDA94 Zone 55)	Details	Photographs
Piece of red ochre #1	718341 E 6291098 N	One small piece of hard red ochre. Located on the southeast edge of an old track which led to a former mine. In a secondary context and area is affected by water wash and soil erosion.	
Piece of red ochre #2	718445 E 6291939 N	One chunk of hard red ochre broken into two pieces. Located west of crown land on a slope descending towards the southwest. In a secondary context and area is affected by water wash.	

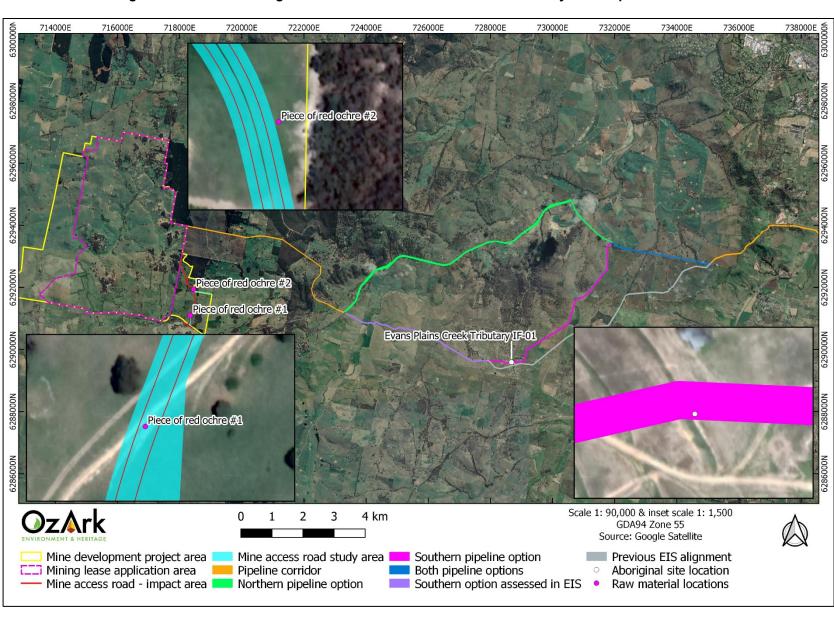


Figure 6-4: Aerial showing the location of Evans Plains Creek Tributary IF-01 & pieces of ochre.

## 7 DISCUSSION

## 7.1 DISCUSSION OF SURVEY RESULTS

# 7.1.1 Summary of survey results

The survey of the addendum study areas resulted in one Aboriginal site being recorded (Evans Plains Creek Tributary IF-01 #44-5-0175) and two pieces of raw ochre identified. The following summarises the results of the survey:

- The isolated artefact was a quartz flake located in a disturbed context and at the base of a moderate to steep slope overlooking a minor tributary of Evans Plains Creek
- The two pieces of red ochre are raw materials located in secondary contexts.

#### 7.1.2 Discussion

The results of the survey conform to the predictive model outlined in **Section 5.4**.

The regional studies, predictive model, and the results of the previous pipeline survey for McPhillamys Gold Project (OzArk 2019) suggested that artefact scatters and isolated finds would be the most common site type recorded and this is supported by the survey results. Both addendum study areas, the mine access road, and the pipeline options, have been cleared of vegetation, and any remaining stands of mature native vegetation did not have any culturally scarred trees present. The absence of stone quarries and grinding grooves is attributable to the absence of suitable rock outcropping within the addendum study areas.

The one site recorded, an isolated artefact, was identified to be in a disturbed context and did not have any associated PAD. The single quartz flake is within 100 m of a small tributary, though on a slope with a moderate to steep gradient. The low density of artefacts and sites recorded inside the addendum study areas is reflective of the study areas having high levels of prior disturbance due to land use. Regional studies show that most sites will include quartz and chert and that most artefacts recorded are unmodified flakes or proximal fragments of flakes.

The main landforms within the addendum study areas which are likely to be associated with Aboriginal sites are moderate to steep gradient slopes (see **Section 6.3**). This was the only landform during the addendum survey in which an Aboriginal site was recorded. The results of the addendum survey differ to the results of the pipeline development survey (OzArk 2019) where Aboriginal sites tended to be located on gentle and moderate slopes or creek flats. The difference is mostly due to gentle and moderate slopes or creek flats being less represented across the addendum survey area than in the overall pipeline development survey.

There have been moderate levels of previous disturbance to most of the addendum study areas. In portions of the study area which are not sealed roads or unsealed tracks there is evidence that the study area has been subject a variety of land use disturbances. This includes the widespread

clearance of native vegetation, extensive ploughing practices, long-term grazing, and ground disturbance due to soil erosion.

The site recorded during the survey is representative of sites recorded in the region. In terms of site size, artefact density, raw materials and artefact types these complement the archaeological context highlighted in **Section 5.2** and **Section 5.3**. In the past, sites such as isolated finds and artefact scatters would not have been rare and on a state-wide scale, low density artefact scatters and isolated finds would remain the most common site type recorded. Although the site recorded during this assessment is in no way remarkable, its presence alone, in albeit a much-modified landscape, remains a memory of the past in a landscape that is fast changing (or has changed). The results of the survey conclude that the general site integrity is low. As noted, the study area has been subject to wide range of past and current land uses.

#### 8 SIGNIFICANCE AND IMPACT ASSESSMENT

## 8.1 ASSESSMENT OF SIGNIFICANCE

#### 8.1.1 Introduction

The appropriate management of cultural heritage items is usually determined based on their assessed significance, as well as the likely impacts of any proposed developments. Cultural, scientific, aesthetic, and historical significance are identified as baseline elements of significance assessment, and it is through the combination of these elements that the overall cultural heritage values of a site, place or area are resolved.

## Social or Cultural Value

This area of assessment concerns the importance of a site or features to the relevant cultural group: in this case the Aboriginal community. Aspects of social value include assessment of sites, items, and landscapes that are traditionally significant or that have contemporary importance to the Aboriginal community. This importance involves both traditional links with specific areas, as well as an overall concern by Aboriginal people for their sites generally and the continued protection of these. This type of value may not be in accord with interpretations made by the archaeologist: a site may have low archaeological value but high social value, or vice versa.

#### Archaeological/Scientific Value

Assessing a site in this context involves placing it into a broader regional framework, as well as assessing the site's individual merits in view of current archaeological discourse. This type of value relates to the ability of a site to answer current research questions and is also based on a site's condition (integrity), content and representativeness.

The overriding aim of cultural heritage management is to preserve a representative sample of the archaeological resource. This will ensure that future research within the discipline can be based on a valid sample of the past. Establishing whether a site can contribute to current research also involves defining 'research potential'. Questions regularly asked when determining significance are: can this site contribute information that no other site can? Is this site representative of other sites in the region?

#### Aesthetic Value

This refers to the sensory, scenic, architectural, and creative aspects of the place. It is often closely linked with the social values. It may consider form, scale, colour, texture and material of the fabric or landscape, and the smell and sounds associated with the place and its use (Burra Charter 2013).

# Historic Value

Historic value refers to the associations of a place with a historically important person, event, phase, or activity in an Aboriginal community. Historic places do not always have physical evidence of their historical importance (such as structures, planted vegetation or landscape modifications). They may have 'shared' historic values with other (non-Aboriginal) communities.

Places of post-contact Aboriginal history have generally been poorly recognised in investigations of Aboriginal heritage. Consequently, the Aboriginal involvement and contribution to important regional historical themes is often missing from accepted historical narratives. This means it is often necessary to collect oral histories along with archival or documentary research to gain enough understanding of historic values.

## 8.2 Assessed significance of the recorded sites

**Table 8-1** presents a summary of the significance assessment of the Aboriginal cultural heritage site recorded during this addendum assessment. Further details of each of the assessment criteria are provided below.

#### Social or Cultural Value

The assessment of cultural or social value concerns the importance of a site or features to the relevant cultural group, in this case the Aboriginal community. Aspects of social value include assessment of sites, items, and landscapes that are traditionally significant or that have contemporary importance to the Aboriginal community. This importance involves both traditional links with specific areas, as well as an overall concern by Aboriginal people for their sites generally and the continued protection of these. This type of value may not be in accord with interpretations made by the archaeologist: a site may have low archaeological value but high social value, or vice versa.

All sites have been afforded high cultural values based on OzArk's experience of working with the Aboriginal community in the area. This is because artefacts, even isolated artefacts, are seen by the community as a marker of ancient occupation across the region, as well as being a tangible link to their ancestors. If further information is provided regarding the social or cultural value by RAPs during the Stage 4 consultation, this information will be incorporated here.

#### Archaeological/Scientific Value

The scientific significance of AHIMS #44-5-0175 (Evans Plains Creek Tributary IF-01) is assessed as low. This site is described as having low scientific / archaeological significance based on the following values:

- The site represents a single artefact in a secondary context
- The artefact is not a formal tool type

The site is not associated with archaeological deposits.

The determination of low scientific values is also because the site has little or no research potential and a very limited ability to inform researchers about the nature and extent of Aboriginal occupation in the area. The site is high representative of other sites in the region.

#### Aesthetic Value

AHIMS #44-5-0175 (Evans Plains Creek Tributary IF-01) has been assessed as having low aesthetic value. The site has been recorded as such since the integrity of the sensory landscape has been altered in historic and modern times. Additionally, the artefact itself is not remarkable.

#### Historic Value

The Aboriginal site (Evans Plains Creek Tributary IF-01 #44-5-0175) recorded does not have an apparent direct relationship to known historical Aboriginal sites (such as missions or massacre sites). It is possible that the area saw some of the earliest contact between Aboriginals and non-Aboriginal settlers, however, the Aboriginal site does not display evidence that it constitutes a 'contact' or 'post-contact' Aboriginal site (i.e. flaked glass, etc.). To that end, the site is assessed as having no historic value. Please note that this determination is only based on archaeological and known historic evidence. The RAPs consider all Aboriginal sites to be historic and add to the collective anthropological information and story of their people whether its pre- or post-colonial contact.

Table 8-1: Aboriginal cultural heritage: significance assessment.

Site Name	Social or Cultural Value	Archaeological / Scientific Value	Aesthetic Value	Historic Value
Evans Plains Creek Tributary IF-01	High	Low	Low	Low

# 8.3 AVOIDING AND MINIMISING HARM

# 8.3.1 Conserving significant Aboriginal cultural heritage

An object of the NPW Act is the 'conservation of objects places and features... of cultural value within the landscape, including... places, objects and features of significance to Aboriginal people' (s.2A(1(b)(i)).

As heritage professionals, OzArk, strives for good conservation outcomes. In particular, OzArk is primarily concerned with the conservation and protection of Aboriginal cultural heritage that is of significance to Aboriginal people.

Two primary objectives when managing harm to an Aboriginal object are:

 Impacts to significant Aboriginal objects and places should always be avoided wherever possible  Where impacts to Aboriginal objects and places cannot be avoided, proposals should be amended so as to reduce the extent and severity of impacts to significant Aboriginal objects and places through the use of reasonable and feasible measures.

# 8.3.2 Opportunities to conserve Aboriginal cultural heritage values

# 8.3.3 Ecologically sustainable development principles

Ecologically sustainable development principles (ESD) (defined in s.6 of the *Protection of the Environment Administration Act 1991*) requires the integration of economic and environmental considerations (including cultural heritage) in the decision-making process. In regard to Aboriginal cultural heritage, ESD can be achieved by applying the principle of intergenerational equity and the precautionary principle.

## 8.3.3.1 Intergenerational equity

Intergenerational equity is the principle whereby the present generation should ensure the health, diversity, and productivity of the environment for the benefit of future generations.

In terms of Aboriginal heritage, intergenerational equity can be considered in terms of the cumulative impacts to Aboriginal objects and places in a region. If few Aboriginal objects and places remain in a region (for example, because of impacts under previous permits), fewer opportunities remain for future generations of Aboriginal people to enjoy the cultural benefits of those Aboriginal objects and places.

Information about the integrity, rarity or representativeness of the Aboriginal objects and places proposed to be impacted, and how they illustrate the occupation and use of land by Aboriginal people across the region, will be relevant to the consideration of intergenerational equity and the understanding of the cumulative impacts of the proposal.

Where there is uncertainty, the precautionary principle should also be followed.

#### 8.3.3.2 The precautionary principle

The precautionary principle states that if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing cost-effective measures to prevent environmental degradation.

In relation to Aboriginal cultural values, the precautionary principle should be guided by:

- The proposal involves a risk of serious or irreversible damage to Aboriginal objects or places or to the value of those objects or places
- There is uncertainty about the Aboriginal cultural heritage values or scientific or archaeological values, including in relation to the integrity, rarity or representativeness of the Aboriginal objects or places proposed to be impacted.

#### 8.3.3.3 Principle of Integration

The Plan of Implementation of the World Summit on Sustainable Development held in Johannesburg, 2002, noted the need to "promote the integration of the three components of sustainable development- economic development, social development and environmental protection- as interdependent and mutually reinforcing pillars".

The principle of integration ensures mutual respect and reciprocity between economic and environmental considerations:

- Environmental considerations are to be integrated into economic and other development plans, programs, and projects and
- Development needs are to be taken into account in applying environmental objectives.

#### 8.3.3.4 Applicability to the proposal

**Table 8-2** examines the application of ESD principles to the proposal. It is important to also consider the original heritage assessments in relation to the ESD principles and the proposal. While the results of the mine site (Landskape 2019), pipeline development (OzArk 2019) are also applicable, this report will only consider the results of the addendum Aboriginal heritage assessment. There is therefore one Aboriginal site with the potential to be impacted in the addendum study area.

Response **ESD** principle Avoiding and minimising harm One Aboriginal site will be potentially impacted if the southern route is selected and it is not possible to reroute the pipeline in the southern route to avoid the isolated find. The integration principle The integration principle has been followed by the project as a robust understanding of environmental impacts will assist in determining the merits of the project. The precautionary principle The precautionary principle has been followed in that all landforms likely to contain Aboriginal objects were inspected. In addition, landforms not assessed as likely to contain Aboriginal objects were also assessed to ensure that a broad range of landforms were surveyed. The intergenerational equity principle The cumulative impacts on Aboriginal sites that may result from the project is considered to be low and would be mitigated by the ongoing program of archaeological recording and salvage recommended by 2019 assessments (Landskape 2019 and OzArk 2019).

Table 8-2: Application of ESD principles to the proposal.

#### 8.4 LIKELY IMPACTS TO ABORIGINAL HERITAGE FROM THE PROPOSAL

**Table 8-3** presents a summary of potential impacts to Aboriginal cultural heritage associated with the addendum proposal depending on whether the northern or southern pipeline option is chosen for the development.

If the southern pipeline option is chosen, then AHIMS #44-5-0175 (Evans Plains Creek Tributary IF-01) is located inside the disturbance footprint and will be impacted (**Table 8-3**). However, if the northern pipeline option is chosen, then AHIMS #44-5-0175 (Evans Plains Creek Tributary IF-01)

will not be impacted. See **Figure 6-4** for the location of the Aboriginal site in relation to the southern pipeline impact footprint.

A re-assessment of impacts by the entire pipeline corridor was also undertaken following the changes to the remainder of the pipeline corridor width in sections. There are no changes to the impacts as outlined in the original pipeline assessment (OzArk 2019: 80). This impact assessment is reproduced in **Table 8-4**. For further details regarding the sites and 2019 pipeline assessment see OzArk 2019.

Table 8-3: Aboriginal cultural heritage: impact assessment pipeline option.

Site Name & Number	Type of Harm (Direct/Indirect / None)	Degree of Harm (Total/Partial / None)	Consequence of Harm (Total/Partial/No Loss of Value)
Southern pipeline option			
Evans Plains Creek Tributary IF-1 44-5-0175	Direct	Total	Total
Northern pipeline option			
Evans Plains Creek Tributary IF-1 44-5-0175	None	None	No loss of value

Table 8-4: Aboriginal cultural heritage: impact assessment (reproduced OzArk 2019: 80).

Site Name & Number	Type of Harm (Direct/Indirect / None)	Degree of Harm (Total/Partial / None)	Consequence of Harm (Total/Partial/No Loss of Value)
Bathurst Bike Park IF-1 44-3-0221	None	None	No loss of value
Sunny Corner IF-1 44-3-0222	Direct	Total	Total
Sunny Corner IF-2 44-3-0223	Direct	Total	Total
Sunny Corner IF-3 44-3-0224	Direct	Total	Total
Sunny Corner OS-1 44-3-0225	Direct	Total	Total
Bald Hill IF-1 44-3-0229	Direct	Total	Total
Bald Hill IF-2 44-3-0228	Direct	Total	Total
CS SU4-A2 45-1-2723	None: with management	None	No loss of value
IV-IF-2 45-1-2548	Direct	Total	Total
IV-OS-5 45-1-2551	None: with management	None	No loss of value

# 9 Management of Aboriginal Cultural Heritage Sites

#### 9.1 GENERAL MANAGEMENT PRINCIPLES

Appropriate management of cultural heritage items is primarily determined based on their assessed significance as well as the likely impacts of the proposed development. **Section 8.2** and **Section 8.4** describe, respectively, the significance / potential of the recorded sites and the likely impacts of the development. The following management options are general principles, in terms of best practice and desired outcomes, rather than mitigation measures against individual site disturbance.

- Avoid impact by altering the development proposal or in this case by avoiding impact to a
  recorded Aboriginal site. If this can be done, then a suitable curtilage around the site must
  be provided to ensure its protection both during the short-term construction phase of
  development and in the long-term use of the area. If plans are altered, care must be taken
  to ensure that impacts do not occur to areas not previously assessed.
- If impact is unavoidable then appropriate management of the site/object will be determined through policies set out in an Aboriginal Cultural Heritage Management Plan (ACHMP). The ACHMP should include measures for site conservation, as well as detailing methods for the management of sites to be impacted. The management will depend on many factors including the assessed significance of the sites (Section 8.2). In certain instances, a site may have low archaeological, aesthetic, and historic values but moderate or high cultural value. In these cases, management is aimed to mitigate the loss of the cultural heritage values, rather than the loss of the scientific values. Sites of low scientific significance, such as an isolated find, could, from an archaeological perspective, be removed/destroyed with no further archaeological management being required. However, given the site's cultural value, further management in respect to these sites will be recommended here. For example, due to a site's cultural values, the local Aboriginal community may wish to collect or relocate artefacts, whether temporarily or permanently, and such management will form part of the ACHMP. The ACHMP will be developed in consultation between the proponent, RAPs and DPIE.

#### 9.2 MANAGEMENT AND MITIGATION OF RECORDED ABORIGINAL SITES

#### 9.2.1 Opportunities to conserve Aboriginal cultural heritage values

This addendum assessment has recorded one additional Aboriginal site within the study area. Due to the location of the site within the southern pipeline option corridor, it is possible if this pipeline option is chosen then the site will be impacted. However, if the northern pipeline option is chosen for the proposal, then the Aboriginal site will be avoided.

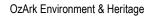
#### 9.2.2 Management of potentially impacted Aboriginal sites

If the Aboriginal site, #44-5-0175 (Evans Plains Creek Tributary IF-01), will be impacted by the proposal, then it recommended that the site be salvaged through the recording and collection of the artefact. This recommendation is made due to:

- The cultural value of these sites and their importance to the Aboriginal community
- The nature of the impacted sites (all are isolated finds or low-density artefact scatters)
- Being in landforms with high previous disturbance from a range of factors including erosion and land use practices
- The low archaeological values assigned to the sites preclude more intensive archaeological investigations
- Sites such as these have a limited ability to further inform the community about the history and culture of the area. While any potential research questions are limited, some information can nevertheless be gained.

For specific information on the management of potentially impacted Aboriginal sites identified in OzArk 2019, please see OzArk 2019: 83 (Section 9.2.2.1).

	OzArk Environment & Heritage
HISTORIC HERITAGE ASSESSMENT	



This page has intentionally been left blank.

#### 10 HISTORIC HERITAGE ASSESSMENT: INTRODUCTION

#### 10.1 Brief description of the proposal

Please refer to **Sections 1** and **2** for a description of the proposal and the environmental context of the study area.

#### 10.2 RELEVANT LEGISLATION

## 10.2.1 State legislation

#### Environmental Planning and Assessment Act 1979 (EP&A Act)

Please refer to **Section 3.3.1** for a description of the EP&A Act.

#### Heritage Act 1977 (Heritage Act)

The *Heritage Act 1977* (Heritage Act) is applicable to the current assessment. This Act established the Heritage Council of NSW. The Heritage Council's role is to advise the government on the protection of heritage assets, make listing recommendations to the Minister in relation to the State Heritage Register (SHR), and assess/approve/decline proposals involving modification to heritage items or places listed on the SHR. Most proposals involving modification are assessed under Section 60 of the Heritage Act.

Automatic protection is afforded to 'relics', defined as 'any deposit or material evidence relating to the settlement of the area that comprised New South Wales, not being Aboriginal settlement, and which holds state or local significance' (note: formerly the Act protected any 'relic' that was more than 50 years old. Now the age determination has been dropped from the Act and relics are protected according to their heritage significance assessment rather than purely on their age). Excavation of land on which it is known or where there is reasonable cause to suspect that 'relics' will be exposed, moved, destroyed, discovered or damaged is prohibited unless ordered under an excavation permit.

#### 10.2.2 Commonwealth legislation

#### Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)

Please refer to **Section 3.3.2** for a description of the EPBC Act.

#### 10.2.3 Applicability to the proposal

The current project will be assessed as an SSD under Division 4.7 of the EP&A Act.

Any items of local or state historical heritage significance within the study area are afforded legislative protection under the Heritage Act.

It is noted there are no Commonwealth or National heritage listed places within the study area, and as such, the heritage provisions of the EPBC Act do not apply.

#### 10.3 HISTORIC HERITAGE ASSESSMENT OBJECTIVES

The current assessment will apply the Heritage Council's *Historical Archaeology Code of Practice* (Heritage Council 2006) in the completion of a historical heritage assessment, including field investigations, to meet the following objectives:

**Objective One:** To identify whether historical heritage items or areas are, or are likely to

be, present within the addendum study areas

Objective Two: To assess the significance of any recorded historical heritage items or

areas

Objective Three: Determine whether the proposal is likely to cause harm to recorded

historical heritage items or areas

Objective Four: Provide management recommendations and options for mitigating

impacts.

#### 10.4 DATE OF HISTORIC HERITAGE ASSESSMENT

The historic heritage assessment took place at the same time as the Aboriginal heritage assessment. Please refer to **Section 3.1** for the dates of the fieldwork.

#### 10.5 OZARK INVOLVEMENT

The fieldwork and reporting of the historic heritage assessment are the same personnel involved with the Aboriginal heritage assessment. Please see **Section 3.2** for details.

Blayney LEP: one heritage listing within 1 km of the mine access road.

#### 11 HISTORIC HERITAGE ASSESSMENT: BACKGROUND

## 11.1 HISTORICAL BACKGROUND

Please see Landscape (2019: 26–32) and OzArk (2019: 90–94) for a brief historical background of the areas surrounding the project.

#### 11.2 LOCAL CONTEXT

#### 11.2.1 Desktop database searches conducted

A desktop search was conducted on the following databases to identify any potential previously recorded heritage within the study area. The results of this search are summarised in **Table 11-1**.

Name of Database Searched	Date of Search	Type of Search	Comment
National and Commonwealth Heritage Listings	16 June 2020	Blayney & Bathurst LGAs	No National or Commonwealth heritage listings within 5 km of mine access road or pipeline options.
State Heritage Listings	16 June 2020	Blayney & Bathurst LGAs	No state heritage listings within 5 km of mine access road or pipeline options
LEP	16 June 2020	Blayney & Bathurst LGAs	Bathurst LEP: two heritage listings within 1 km of the pipeline options.

Table 11-1: Historic heritage: desktop-database search results.

A search of the Heritage Council of NSW administered heritage databases and the Blayney and Bathurst LEPs returned three records for historical heritage sites within 1 km of either the mine access road or the two pipeline options (**Table 11-2** and **Figure 11-1**). Two of the items listed in **Table 11-2**, I205 Woolshed and I6 Bathampton Homestead were included in the original assessment (OzArk 2019).

Table 11-2: Historic LEP listings within 1 km of mine access road or pipeline options.

LEP	Item number, name and location	Brief description	Distance from addendum study area
Blayney LEP 2012	I205 – Woolshed 22 Pounds Lane Lot 42 DP750413	None available	880 m northwest of the mine access road
Bathurst LEP 2014	I6 - Bathampton Homestead, stables and brick barn 2021 Mid-Western Highway Part Lot 300, DP 1144793	Brick homestead and stables. Presumably designed by Edward Gell, leading architect of period. High level of original integrity. Association with Gilmour and Rutherford families. Large brick barn (convict built) is one of oldest buildings in district still standing.	134 m northwest of the northern pipeline option.
Bathurst LEP 2014	I129 - Binalong (former university building) 1216 Mid-Western Highway Lot 1, DP 856795	Built c.1948 as teachers' accommodation. Readapted as office space and hospital at Sturt University. Relocated in 1990s to become a country house at current location. Well-presented and re-adapted. Timber framed government constructed building.	40 m east of northern pipeline option. On opposite side of Mid-Western Highway to the northern pipeline option.

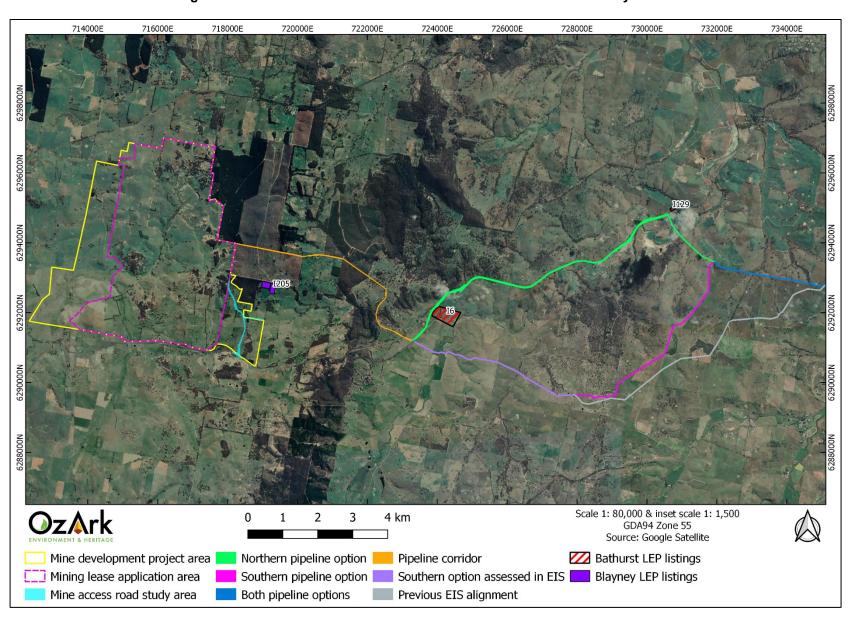


Figure 11-1: Location of LEP listed items in relation to addendum study areas.

## 11.3 SURVEY METHODOLOGY

Standard archaeological field survey and recording methods were employed in this study (Burke & Smith 2004). The historical heritage assessment of the study area was completed concurrently with the Aboriginal cultural heritage assessment. See **Section 6.1** for further details.

## 11.4 PROJECT CONSTRAINTS

There were no significant constraints in completing the archaeological assessment of the study area. GSV posed the greatest constraint during field inspection (see **Section 6.3**), however, not to the extent that the efficacy of the survey was unduly diminished.

#### 12 RESULTS OF HISTORIC HERITAGE ASSESSMENT

#### 12.1 HISTORIC HERITAGE SITES

Two historic heritage sites were recorded during the survey of the mine access road and the two pipeline options.

## **Historic Survey Blaze Tree (HS-01)**

Site Type: Historic Survey Blaze Tree

**GPS Coordinates**: 718466 E / 6291886 N (GDA94 Zone 55)

<u>Location of Site</u>: The site is located approximately 9.6 km northeast of Blayney township. The site is located in a parcel of crown land (Lot 153 DP750413) adjacent to the proposed mine access road at the western end of Fleetwood Lane (**Figure 12-2**).

<u>Description of Site</u>: The site consists of a single survey blaze tree with one survey scar on the trunk facing southwest. The details of the survey scar are summarized in **Table 12-1**. The scar itself has been damaged after the scarring event with a large split down the east side of the tree which has resulted in part of the scar separating from the trunk (**Figure 12-1**). Carved into the survey scar is an arrow pointing roughly northeast and the numbers '153' and '47'. The tree is still alive. Surrounding vegetation comprised native regrowth. Disturbances include erosion. Soils consisted of brown loam.

Table 12-1: Historic Survey Blaze Tree (HS-01).Scar attributes.

Scar attributes	Details
Shape	Originally scar would have been an oval shape
Direction scar faces	Southwest
Size (cm)	Length: 60 cm Width: 40 cm Depth: 5-10 cm Regrowth: 5-10 cm
Height of scar from ground surface (cm)	Originally the base of the scar would have been approximately 40 cm from the ground surface. Now the scar extends to base of trunk.
Approximate circumference of tree (m)	3 m
Approximate height of tree (m)	Approximately 30–35 m
Tree condition (i.e. alive, dead, damaged, etc.)	Tree is in still alive.
Additional information	The original face of the scar has steel axe marks along the bottom. Face of scar is weathered. Part of scar (east side and bottom) has come away from trunk, likely to due to branch tear. Original dimensions of scar able to be seen.

Figure 12-1: Historic Survey Blaze Tree (HS-01). View of site and scar.





1. View north of Historic Survey Blaze Tree HS-01.

2. Detail of scar on Historic Survey Blaze Tree HS-01.

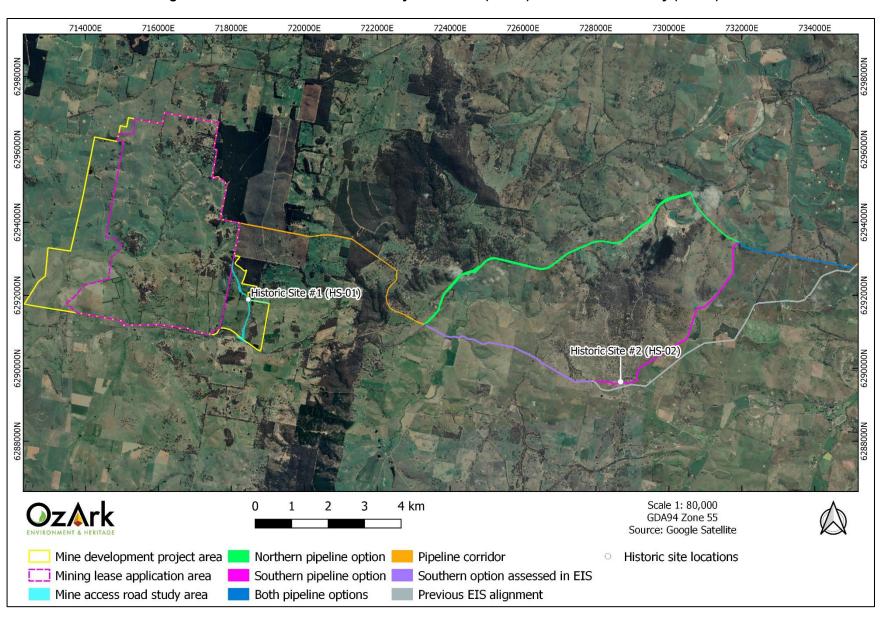


Figure 12-2: Location of Historic Survey Blaze Tree (HS-01) and Historic chimney (HS-02).

## Historic Chimney and associated sheds (HS-02)

**Site Type**: Dry stone chimney

**GPS Coordinates**: 718466 E / 6291886 N (GDA94 Zone 55)

<u>Location of Site</u>: The site is located approximately 14.8 km southwest of Bathurst and 4 km south of the Mid-Western Highway (**Figure 12-2**). The site is 85 m west of a tributary of the Evans Plains Creek.

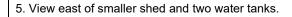
<u>Description of Site</u>: The site consists of a stone and brick chimney, a large shed, a smaller shed adjacent to the chimney, two water tanks and some brick rubble partially buried on the western side of the complex (**Figure 12-3**). The features of interest are the stone and brick chimney and the partially buried rubble.

The style of the chimney is random rubble and bonded together by mortar or concrete (Connah 1988). The top of the chimney is finished with bricks (**Figure 12-3**). The chimney itself is in good condition, and the adjacent sheds appear to be sturdy and not in imminent danger of collapse. Both sheds have timber framework and corrugated iron walls and roofs. The size of the large shed is approximately 11 m by 14 m, the smaller shed is approximately 7.5 m by 4 m and the chimney is approximately 1.5 m by 60 centimetres (cm).

There are also old fences directly to the east of the larger shed. These were possibly used as holding yards previously. The terrace where the HS-02 complex is located has also undergone significant ground disturbance, as it shows where previously tracks have been cut into ground surface (**Figure 12-4**). The terrace is unlikely to contain *in situ* archaeological deposits.









View south along edge of smaller shed and chimney. Note semi-buried bricks at base of gentle slope.

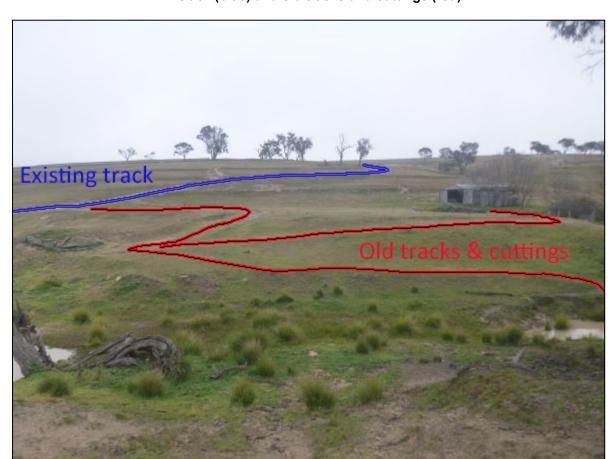


Figure 12-4: Terrace adjacent to Historic Chimney and associated sheds (HS-02) showing existing track (blue) and old tracks and cuttings (red).

#### 12.2 ASSESSMENT OF HISTORIC HERITAGE SIGNIFICANCE

#### 12.2.1 Assessment of significance—general principles

The current assessment will evaluate the heritage significance of the historic heritage sites identified within the study area in accordance with the NSW Heritage Office's publication Assessing Heritage Significance (Heritage Office 2001). A historic heritage site must satisfy at minimum one of the following criteria to be assessed as having heritage significance:

- **Criterion (a):** An item is important in the course, or pattern, of NSW's cultural or natural history (or the cultural or natural history of the local area)
- **Criterion (b):** An item has a strong or special association with the life or works of a person, or group of persons, of importance in NSW's cultural or natural history (or the cultural or natural history of the local area)
- **Criterion (c):** An item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in NSW (or the local area)
- **Criterion (d):** An item has strong or special association with a particular community or cultural group in NSW (or the local area) for social, cultural or spiritual reasons

- **Criterion (e):** An item has potential to yield information that will contribute to an understanding of NSW's cultural or natural history (or the cultural or natural history of the local area)
- **Criterion (f):** An item possesses uncommon, rare or endangered aspects of NSW's cultural or natural history (or the cultural or natural history of the local area)
- **Criterion (g):** An item is important in demonstrating the principal characteristics of a class of NSW's cultural or natural places; or cultural or natural environments (or a class of the local area's cultural or natural places; or cultural or natural environments).

Significance assessments are carried out on the basis that decisions about the future of heritage items must be informed by an understanding of these items' heritage values. The *Australia ICOMOS Burra Charter* (Burra Charter 2013) recognises four categories of heritage value: historic, aesthetic, scientific, and social significance

Items are categorised as having local or state level, or no significance. The level of significance is assessed in accordance with the geographical extent of the item's value. An item of state significance is one that is important to the people of NSW whilst an item of local significance is one that is principally important to the people of a specific LGA.

#### 12.2.2 Assessment of significance of historic items

**Table 12-2** details the assessed significance of recorded historic heritage items in accordance with the NSW Heritage Office guidelines and the *Burra Charter*. Both historic sites recorded during the survey do not have local or state significance.

Table 12-2: Historic heritage: assessment of significance.

Site Name	Level of Significance
Historic Survey Blaze Tree (HS-01)	Nil
Historic Chimney and associated sheds (HS-02)	Nil

## **Historic Survey Blaze Tree (HS-01)**

**Table 12-3** assesses the Historic Survey Blaze Tree (HS-01) against the assessment criteria established in the Heritage Office publication, *Assessing Heritage Significance* (Heritage Office 2001).

Table 12-3: Assessment of heritage significance – Historic Survey Blaze Tree (HS-01).

Criteria	Comments	Significance
а	The site does not show evidence of a significant human activity.	Nil
b	There are no known associations of the sites with a significant event, person or group of persons.	Nil
С	The site is typical of survey marker trees from the late 19 <sup>th</sup> Century to the mid-20 <sup>th</sup> Century.	Nil

Criteria	Comments	Significance
d	There are no known associations of the site with an identifiable group or a community's sense of place.	Nil
е	The site has little potential for further scientific and/or archaeological information. It does not have the qualities of an important benchmark or reference site or type.	Nil
f	The site is not a rare site type for the Blayney region or NSW.	Nil
g	The site does not represent well the characteristics of the site type.	Nil

## Historic Chimney and associated sheds (HS-02)

**Table 12-4** assesses the Historic Chimney and associated sheds (HS-02) against the assessment criteria established in the Heritage Office publication, *Assessing Heritage Significance* (Heritage Office 2001).

Table 12-4: Assessment of heritage significance – Historic Chimney and associated sheds (HS-02).

Criteria	Comments	Significance
а	The site does not show evidence of a significant human activity.	Nil
b	There are no known associations of the sites with a significant event, person or group of persons	Nil
С	The site is typical of chimneys and farm sheds from the late $19^{\text{th}}$ Century to the mid- $20^{\text{th}}$ Century.	Nil
d	There are no known associations of the site with an identifiable group or a community's sense of place.	Nil
е	The site has little potential for further scientific and/or archaeological information. It does not have the qualities of an important benchmark or reference site or type.	Nil
f	The site is not a rare site type for the Blayney region or NSW.	Nil
g	The site does not represent well the characteristics of the site type.	Nil

## 12.3 DISCUSSION

Historic Survey Blaze Tree (HS-01) was a survey marker. However, as outlined in **Table 12-3** the historical feature does not meet the criteria for local, state or national significance. Landskape (2019: 86) recorded one survey blaze tree (MGP-H7) during the assessment of the McPhillamys Mine site. The Historic Survey Blaze Tree (HS-01) is recorded approximately 2.7 km east of MGP-H7. HS-01 is a different style of survey blaze tree, having been used to indicate the southwest boundary of the crown land, instead of MGP-H7's purpose of delineating the boundary of a mining lease.

The Historic chimney and associated sheds (HS-02) are common for the regional area. The chimney may have been associated with an earlier hut or workshop which has been covered over by the existing sheds.

#### 12.4 LIKELY IMPACTS TO HISTORIC HERITAGE FROM THE PROPOSAL

**Table 12-5** details the anticipated impacts to historic heritage from the proposal. The Historic Survey Blaze Tree (HS-01) is in a parcel of crown land adjacent to where the proposed mine

access road is situated. It is outside the corridor of the proposed road and will not be impacted. The Historic chimney and associated sheds (HS-02) is approximately 17 m north of the pipeline corridor and will not be impacted by the proposal.

None of the historic LEP listings (see **Section 11.2.1** and **Table 11-2**) will be impacted by the proposal. **Figure 12-5** and **Figure 12-6** show the location of the historic LEP listings and recorded historic sites in relation to the impact footprint for the mine access road and pipeline options.

Table 12-5: Historic heritage: impact assessment.

Survey Area	Site Name	Will this site be impacted?
Mine access road Survey area 1	Historic Survey Blaze Tree (HS-01)	No
Southern pipeline option Survey area 8	Historic Chimney and associated sheds (HS-02)	No

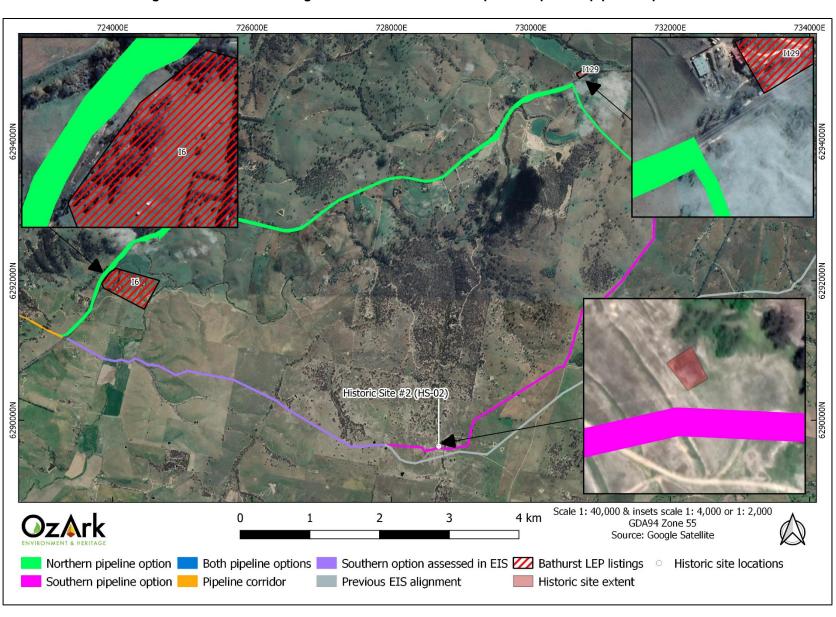


Figure 12-5: Historic listings and sites in relation to impact footprint of pipeline options.

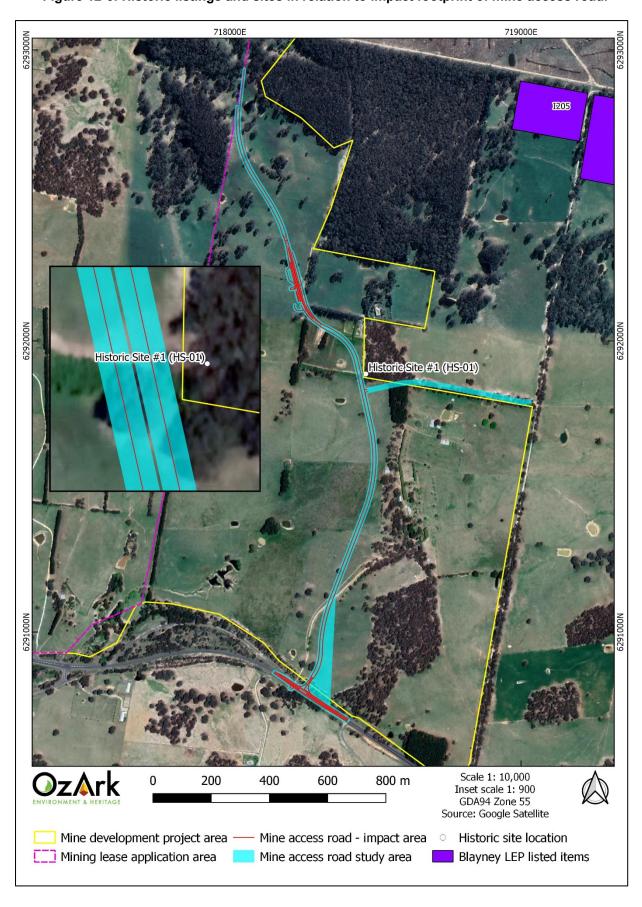


Figure 12-6: Historic listings and sites in relation to impact footprint of mine access road.

#### 13 Management and Mitigation: Historic Heritage

#### 13.1 GENERAL PRINCIPLES FOR THE MANAGEMENT OF HISTORIC SITES

Appropriate management of heritage items is primarily determined based on their assessed significance as well as the likely impacts of the proposed development.

In terms of best practice and desired outcomes, avoiding impact to any historical item is a preferred outcome, however, where a historical site has been assessed as having no heritage value, impacts to these items does not require any legislated mitigation.

#### 13.2 MANAGEMENT AND MITIGATION OF RECORDED HISTORIC SITES

Two historic sites, a survey blaze tree (HS-01) and a chimney and associated shed complex (HS-02) were recorded in proximity to the mine access road or the southern pipeline option. Neither site is inside the impact footprint and for either the mine access road or the southern pipeline option (**Figure 12-5** and **Figure 12-6**).

Following development consent of the project, impacts on historical heritage would be managed through a *Historic Heritage Management Plan* (HHMP) which is to be agreed to by the proponent, local councils and DPIE. The archaeological management recommendations within this report would normally be incorporated into the HHMP that is usually formulated following development consent. The HHMP will also include an unanticipated finds protocol.

As Bathampton Homestead and Binalong are adjacent or close to the northern pipeline option, care should be taken to remain outside the curtilages for these local heritage listings if this pipeline option is chosen. To avoid inadvertent impacts, the curtilages of Bathampton Homestead and Binalong should be marked as 'no-go zones' on the construction management plans and all contractors made aware of the two locations (see **Figure 12-5**).

## 14 RECOMMENDATIONS

## 14.1 ABORIGINAL CULTURAL HERITAGE

Under Section 89A of the NPW Act it is mandatory that all newly-recorded Aboriginal sites be registered with OEH AHIMS. As a professional in the field of cultural heritage management it is the responsibility of OzArk to ensure this process is undertaken.

To this end it is noted that one Aboriginal site was recorded during the assessment.

The following recommendations are made based on these impacts and with regard to:

- Legal requirements under the terms of the NPW Act whereby it is illegal to damage, deface or destroy an Aboriginal place or object without the prior written consent of OEH, or its equivalent
- The findings of the current investigations undertaken within the study area
- The interests of the Aboriginal community.

Recommendations concerning Aboriginal cultural values within the study area are as follows:

- This report should be read in conjunction with Landskape 2019 and OzArk 2019
   (Appendix P and Appendix Z of the McPhillamys Gold Project EIS). Recommendations in these reports remain applicable. It should also be read in conjunction with Landskape 2020 (Appendix O of the McPhillamys Gold Project Amendment Report).
- 2. Should development consent for the addendum project be granted, archaeological management strategies to manage and mitigate the impact of the proposed works are set out in **Section 9.2**. All sites within the impact footprint for the pipeline development should be salvaged by a surface collection of all visible artefacts (see OzArk 2019, Section 9.2.2.1).
- 3. The salvage works will include the mapping, analysis and collection of all surface artefacts at the affected sites. Results will be included in a report to preserve the data in a useable form and the relevant AHIMS site cards will be updated accordingly.
- 4. All land-disturbing activities must be confined to within the assessed study area. Should the parameters of the proposed work extend beyond this, then further archaeological assessment may be required.
- 5. Following development consent of the project, an Aboriginal Heritage Impact Permit (AHIP) will not be required for impacts to cultural heritage, so long as the impact accords with the terms and conditions of the consent. Instead, impacts on Aboriginal heritage would be managed through an ACHMP which is to be agreed to by the proponent, RAPs and the DPIE. The archaeological management recommendations within this report

would normally be incorporated into the ACHMP that is usually formulated following development consent. The ACHMP will also include an unanticipated finds protocol, unanticipated skeletal remains protocol and long-term management of any artefacts.

#### 14.2 HISTORIC HERITAGE

The following recommendations are made based on the impacts associated with the proposal and with regard to:

- Legal requirements under the terms of the Heritage Act
- Guidelines presented in the Burra Charter
- The findings of the current assessment
- The interests of the local community.

Recommendations concerning the historic values within study area are as follows.

- 6. This report should be read in conjunction with Landskape 2019 and OzArk 2019 (Appendix P and Appendix Z of the McPhillamys Gold Project EIS). Recommendations in these reports remain applicable. It should also be read in conjunction with Landskape 2020 (Appendix O of the McPhillamys Gold Project Amendment Report)
- To avoid inadvertent impacts, the curtilages of Bathampton Homestead and Binalong should be marked as 'no-go zones' on the construction management plans and all contractors made aware of the two locations (see Figure 12-5).
- 8. Should development consent for the project be granted, archaeological management strategies to manage and mitigate the impact of the pipeline development component of the project are set out in **Section 13.2**.
- 9. To avoid the potential for harm to historic objects on unassessed adjacent landforms, all ground surface disturbing activities must be confined to the assessed study area.
- 10. Following development consent of the project, impacts on historical heritage would be managed through a *Historic Heritage Management Plan* (HHMP) which is to be agreed to by the proponent, local councils and DPIE. The archaeological management recommendations within this report would normally be incorporated into the HHMP that is usually formulated following development consent. The HHMP will also include an unanticipated finds protocol.

# **R**EFERENCES

ASRIS 2003	Australian Soil Resources Information System (ASIRS). 2013. CSIRO National Soil Archive.
Burke & Smith 2004	Burke, H. and Smith, C. 2004. <i>The Archaeologist's Field Handbook</i> , Blackwell, Oxford.
Burra Charter 2013	International Council on Monuments and Sites 2013. <i>The Burra Charter:</i> The Australia ICOMOS Charter for Places of Cultural Significance.
Connah 1988	Connah, G. 1988. <i>The Archaeology of Australia's History</i> . Cambridge University Press.
DECCW 2010	Department of Environment, Climate Change and Water, Sydney (now OEH). Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales.
DECCW 2010b	Department of Environment, Climate Change and Water, Sydney (now OEH). Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010.
EMM 2019	EMM. 2019. Pipeline Water Assessment: McPhillamys Gold Project. Report to LFB Resources NL.
EMM 2020	EMM. 2020. <i>McPhillamys Gold Project Addendum Report</i> . Report to LFB Resources NL.
Heritage Council 2006	Heritage Office of the Department of Planning (now OEH). Historical Archaeology Code of Practice.
Heritage Office 2001	Assessing Heritage Significance.
Kelton 2000	Kelton J. 2002. An archaeological study and heritage assessment of the proposed Mid-Western Highway realignment, near Kings Plains, between Bathurst and Blayney. Report to PPK Environmental and Infrastructure Pty Ltd.
Landskape 2019	Landskape. 2019. Appendix P: McPhillamys Gold Project Aboriginal and Historical Cultural Heritage Assessment. Report to Regis Resources Ltd.
Mitchell 2002	Mitchell P. 2002. Description for NSW (Mitchell) Landscapes Version 2.  Department of Environment and Climate Change NSW.
Navin Officer 2018	Navin Officer Heritage Consultants. 2018. Swan Ponds Quarry Extension: Heritage assessment. Report to R.W. Corkery.

OEH 2011	Office of Environment and Heritage 2011. Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW.
OzArk 2019	OzArk Environment and Heritage. 2019. Aboriginal Cultural Heritage and Historic Heritage Assessment Report: McPhillamys Gold Project Pipeline Development. Report to Regis Resources Ltd.
Pickering 1980	Pickering MP. 1980. An Archaeological survey of the proposed electricity commission transmission line between Bathurst-Ragland-Mount Panorama. Report to New South Wales National Parks & Wildlife Services.
SSM 2019	Sustainable Soils Management Pty Ltd. 2019. <i>Appendix H: McPhillamys Gold Project: Land Capability and Soil Assessment</i> . Report to Regis Resources Ltd.

# **APPENDIX 1: CONSULTATION LOG AND ACHCR DOCUMENTATION**

# Consultation Log: Addendum McPhillamys ACHAR

Addendu	ım Consultation commenced		
29.4.20	Bathurst Local Aboriginal Land Council	Rebecca Hardman (RH) sent Addendum Survey Methodology. Feedback ends 13.5.20	Email
29.4.20	Dhuuluu-Yala Aboriginal Corporation	RH sent Addendum Survey Methodology. Feedback ends 13.5.20	Email
29.4.20	Gundungurra Aboriginal Heritage Association Inc	RH sent Addendum Survey Methodology. Feedback ends 13.5.20	Email
29.4.20	Gundungurra Tribal Council Aboriginal Corporation	RH sent Addendum Survey Methodology. Feedback ends 13.5.20	Email
29.4.20	Murra Bidgee Mullangari Aboriginal Corporation	RH sent Addendum Survey Methodology. Feedback ends 13.5.20	Email
29.4.20	Wiradyuri Traditional Owners Central West Aboriginal Corporation	RH sent Addendum Survey Methodology. Feedback ends 13.5.20	Email
29.4.20	Neville and Region Landcare	RH sent Addendum Survey Methodology. Feedback ends 13.5.20	Email
29.4.20	Wellington Valley Wiradjuri Aboriginal Corporation	RH sent Addendum Survey Methodology. Feedback ends 13.5.20	Email
29.4.20	Gunjeewong Cultural Heritage Aboriginal Corporation	RH sent Addendum Survey Methodology. Feedback ends 13.5.20	Email
29.4.20	Muragadi Heritage Indigenous Corporation	RH sent Addendum Survey Methodology. Feedback ends 13.5.20	Email
29.4.20	Warrabinga	RH sent Addendum Survey Methodology. Feedback ends 13.5.20	Email
29.4.20	Orange Local Aboriginal Land Council	RH sent Addendum Survey Methodology. Feedback ends 13.5.20	Email
29.4.20	Muragadi Heritage Indigenous Corporation	RH received email:  Just wondering when the survey is being done.	Email
29.4.20	Muragadi Heritage Indigenous Corporation	RH responded: At this stage survey dates and what groups will be involved has not yet been determined.	Email
29.4.20	Muragadi Heritage Indigenous Corporation	RH received email: Okay please keep me updated, I have noticed that the Covid 19 restrictions are being reduced and so long as everyone follows the Covid19 safety procedure i.e. constructions workers, coles employees, Woolworths employees, service station employees are still working, then RAPS should be involved in the projects surveying	Email
29.4.20	Murra Bidgee Mullangari Aboriginal Corporation	RH received phone call from Darleen, she wants proponents contact details	Phone
8.5.20	Wellington Valley Wiradjuri Aboriginal Corporation	RH received feedback:  WVWAC do not have any concerns regards to the proposed survey areas, as long as all surface pedestrian surveys are conducted preferably with RAP's present especially within 200m of creeks and natural drainage.  Please advise as information becomes available	Email
11.5.20	Wellington Valley Wiradjuri Aboriginal Corporation	RH thanked Brad	Email
12.6.20	Orange Local Aboriginal Land Council	RH sent invite to fieldwork. RSVP 17.6.20	email
12.6.20	Orange Local Aboriginal Land Council	RH received response: Thank you for the invitation. OLALC will be available, could you please liaise with Lisa Paton as she will be the one who organises staff to attend.	email

			1
		Just for future reference. The email is no longer in use, could you remove from your system? You may wish to replace with:	
17.6.20	Orange Local Aboriginal Land Council	Alyce Cameron (AC) sent email with Regis paperwork for site officer who will be doing fieldwork on Monday 22 June 2020 to complete. Also notified that the meeting place has been changed to Regis Blayney office (57 Adelaide Street).	Email
17.6.20	Orange Local Aboriginal Land Council	AC received email from Lisa Paton confirming that site officer is available for fieldwork on Monday 22 June 2020.	Email
17.6.20	Orange Local Aboriginal Land Council	AC forwarded Chris Roach's email to Lisa Paton so as to send completed Regis forms back to.	Email
17.6.20	Orange Local Aboriginal Land Council	Lisa Paton replied saying was getting everything organised.	Email
19.6.20	Orange Local Aboriginal Land Council	Lisa Paton replied to AC saying; Ian has already completed the Regis induction please see attached Site Induction card and drivers licence attached, I have got the forms you sent through filled in again although Regis should already have them. Do you want me to send the forms I have through?	Email
22.6.20	Orange Local Aboriginal Land Council	Lisa rang OzArk office to confirm whether fieldwork was going ahead due to bad weather conditions.	Phone
22.6.20	Orange Local Aboriginal Land Council	AC rang Lisa back. No, fieldwork cancelled for the day, but will take place on Tuesday 23 June instead.	Phone
23.6.20	Orange Local Aboriginal Land Council	Ian Sutherland, site officer for Orange LALC, attended the mine access road survey.	In person
		Stage 4 to be added once completed	

## Addendum Stage 2/3 example letter



OzArk Environment & Heritage

Dubbo

T: 02 6882 0118

Queanbeyan enquiry@ozarkehm.com.au

Newcastle www.ozarkehm.com.au

ABN 59 104 582 354

145 Wingewarra St PO Box 2069 DUBBO NSW 2830

29 April 2020

Members
Orange Local Aboriginal Land Council
PO Box 10
Orange NSW 2800
CEO@olalc.com.au
james.riley@olalc.com.au

# ADDENDUM SURVEY METHODOLOGY MCPHILLAMYS GOLD PROJECT PIPELINE

Dear Members

OzArk Environment & Heritage (OzArk) will be undertaking Aboriginal and historic heritage assessment for the addendum survey area for the McPhillamys Gold Project Pipeline and an access road into and around the Mine Project area.

In 2019, OzArk completed Aboriginal and historical archaeological reports for the McPhillamys Gold Project Pipeline and Landskape completed the heritage assessments of Mine Project Area. Both reports formed part of an *Environmental Impact Statement* (EIS) which went on public exhibition 12 September 2019 and completed exhibition on 24 October 2019.

LFB Resources NL, a wholly owned subsidiary of Regis Resources Limited (the proponent, Regis) has now amended the alignment for a section of the pipeline and has three options for the realignment. Pumping station facility No.3 which was proposed to be placed adjacent to the Energy Australia Mt Piper Power Station is also proposed to be moved along the current pipeline alignment towards Pipers Flat Road.

Regis also propose to move the proposed mine access from the Mid-Western Highway further to the east. The revised alignment of the proposed new access will transect land within the mine development project area to the east of the mining lease application area. This portion of the project area was not assessed during the EIS.

In order to address these updates, Aboriginal and historic heritage addendum reports will be required to inform the Amendment Report being prepared by EMM Consulting.

If you have comment on the following methodology, please contact the OzArk Office on (02) 6882 0118 or rebecca@ozarkehm.com.au by **Wednesday 13<sup>th</sup> May 2020**.

Kind regards,

Rebecca Hardman Consultation Officer

rebecca@ozarkehm.com.au

#### 1 METHODS

The Aboriginal cultural heritage addendum assessment will be undertaken in accordance with the *Code of Practice for the Investigation of Aboriginal Objects in New South Wales* (Code of Practice; DECCW 2010) and the *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW* (OEH 2011).

The field assessment will include survey of the three pipeline realignment options (see **Figure 2-1**) and the revised site access within the Mine Project area (to the mining lease application boundary) (see **Figure 2-3**). The survey methodology will focus on landforms with increased archaeological sensitivity that have not been previously disturbed, as well as mature, remnant vegetation.

#### 1.1 PIPELINE ALIGNMENT OPTIONS

There are three potential pipeline realignment options. The feasibility of each option is currently being considered by Regis. The addendum survey and report will include Option Two and either Option One **or** Option Three.

The three pipeline realignment options are detailed below:

- Option One is 9.4 km long and crosses Spring Creek and two minor tributaries or drainage lines.
   Based on aerial imagery, the alignment is predominately through pastoral paddocks used for stock grazing. Many of the paddocks have had contour banks constructed within them.
- Option Two is 19.3 km long, with 6.6 km of the alignment within the road corridor of Hen and Chicken Lane, and the remaining, 12.7 km in the road corridor of the Mid-Western Highway.
- Option Three is 14.3 km long, with 9 km of the alignment within the road corridor of the Mid-West Highway, and 5.3 km through pastoral paddocks used for stock and grazing. The alignment will cross Spring Creek and Evans Plains Creek. Many of the paddocks have had contour banks constructed within them.

The methodology for the addendum pipeline alignments will follow the same methods used for the original survey (and detailed in OzArk 2019: Aboriginal Cultural Heritage Assessment Report: McPhillamys Gold Project Pipeline).

The entirety of Option One will be surveyed (9.4 km) as this alignment option does not follow existing roads and crosses Spring Creek and two minor tributaries or drainage lines.

Given that Option Two is within existing road corridors, and based on OzArk's knowledge of the area, the assessment in some portions will only require documentation to demonstrate levels of disturbance, clearance etc., while other portions may require pedestrian survey, i.e. near waterways or where there is mature vegetation.

The section of Option Three through paddocks will be surveyed completely (5.3 km) as this section of the alignment option does not follow existing roads and crosses Spring Creek, Evans Plains Creek and two minor tributaries or drainage lines. The remainder of Option Three is the same alignment as Option Two.

The addendum relating to the pipeline alignment and proposed pump station at Pipers Creek Flat is shown in **Figure 2-2**. This area was surveyed with adequate coverage during the original survey and is not required to have further survey undertaken at this location.

Addendum Survey Methodology: McPhillamys Gold Project Pipeline

#### 1.2 Access Road to Mine Project area

The field assessment will include survey of the proposed access road from the Mid-Western Highway to the mining lease application boundary. **Figure 2-3** shows the proposed access roads.

• The main access road is approximately 4.7 km from the Mine Site to the Mid-Western Highway. There is an additional 500 m to connect this main access road to Fleetwood Lane.

The entirety of the new proposed access road will be surveyed (5 km). The access road from the Mid-Western Highway to the mining lease application area is through pastoral paddocks which appear to have been used for grazing. OzArk is aware that a number of Aboriginal sites were recorded during the Mine Development heritage assessment (see Landskape 2019: *McPhillamys Gold Project: Aboriginal and Historical Cultural Heritage Assessment*), and any areas of the access road which are on the same or similar landforms to these sites will be extensively surveyed within the proposed road corridor.

#### 1.3 COVID-19 RESTRICTIONS

Due to the ongoing COVID-19 pandemic, state government legislation regarding social distancing, and landowner requirements / restrictions around vehicle movements for certain areas, the logistics surrounding the survey are still being discussed.

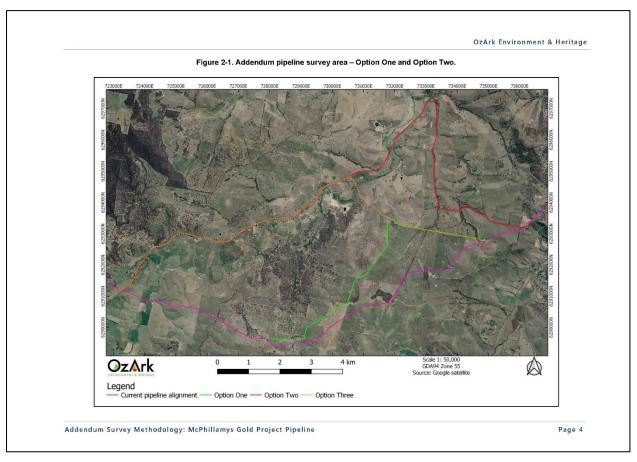
If any Aboriginal sites are recorded during the addendum survey that are likely to be harmed, then a site visit can be undertaken including RAPs at a later date once social distancing rules have been relaxed or removed.

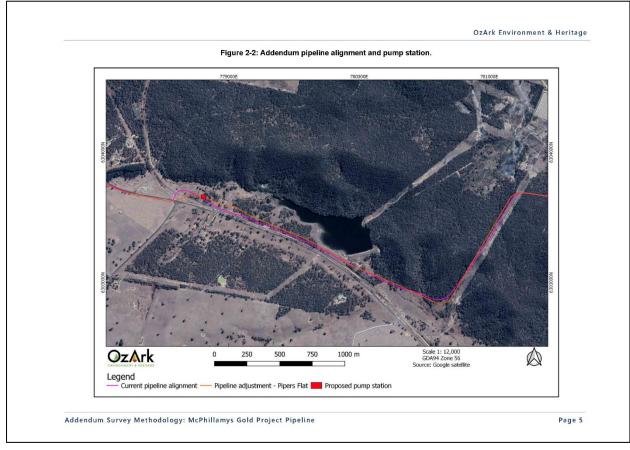
As RAPs were involved in the main survey of the pipeline route, the landscape of the addendum survey area is known and understood by the RAPs. OzArk invites any information on the cultural landscape through which the addendum survey area passes in case anything needs to be considered during the survey.

#### 2 RESULTS

A draft Aboriginal and historic heritage addendum report will be prepared. As an Aboriginal and historic heritage report has already been prepared for the proposal, this will form the basis of the addendum report. The addendum report will be circulated to RAPs upon finalisation.

Addendum Survey Methodology: McPhillamys Gold Project Pipeline





Scale 1: 10,000 GDA94 Zone 55 Source: Google Hybrid 750 1000 m Oz∧rk Legend - Main access road outside mining lease 🔸 Mine Project - Historical sites Mine Project - Aboriginal sites

Figure 2-3: Addendum access road to and within Mine Project area.

Addendum Survey Methodology: McPhillamys Gold Project Pipeline

## Invitation to fieldwork for mine access road



OzArk Environment & Heritage

T: 02 6882 0118

Newcastle

Dubbo

Queanbeyan enquiry@ozarkehm.com.au www.ozarkehm.com.au

ABN 59 104 582 354

145 Wingewarra St PO Box 2069 DUBBO NSW 2830

12 June 2020

Members

Orange Local Aboriginal Land Council

c/- Annette Steele

PO Box 10

**ORANGE NSW 2800** 

olalc@bigpond.com

ceo@olalc.com.au

lisa.paton@olalc.com.au

#### ABORIGINAL CULTURAL HERITAGE ASSESSMENT FOR THE PROPOSED MCPHILLAMYS GOLD PROJECT - ROAD CORRIDOR.

Dear Members,

Thank you for your ongoing interest in the above-mentioned project. EMM Consulting have engaged OzArk to undertake the archaeological assessment and would like to invite you to provide one (1) Regis <u>Inducted</u> site officer to participate in the one (1) full day field work, scheduled for Monday 22<sup>nd</sup> June 2020.

FIELD WORK DATE: Monday 22nd June 2020

TIME TO MEET: 9:30 am

LOCATION TO MEET: On Site

Pull over area near where the mine road will turn off north from the Mid-Western

Highway, Orange NSW. (Figure 1)

**DURATION:** One (1) full day

The fee offered is \$ inc of GST for the full day of participation in the fieldwork FEE OFFER:

> for the experienced Site Officer. This fee is all inclusive of travel, travel time, fuel, accommodation, meal expenses and participation in the field work. Breaks are not

paid.

OZARK FIELD DIRECTOR: Alyce Cameron

0430 586 040

INVOICES: Invoices are to be addressed to:

OzArk Environment & Heritage

C/- Rebecca Hardman

PO Box 2069 Dubbo, NSW 2830 rebecca@ozarkehm.com.au

PLEASE NOTE: THE ABOVE FIELDWORK MAY BE CANCELLED AT SHORT NOTICE DUE TO CIRCUMSTANCES OUTSIDE OUR CONTROL. SHOULD THIS HAPPEN WE WILL CONTACT YOU AS SOON AS POSSIBLE AND ATTEMPT TO RESCHEDULE FOR A LATER DATE.

COVID-19 REQUIREMENT: YOUR SITE OFFICER WILL BE REQUIRED TO FILL IN AND SIGN THE ATTACHED FORM PRIOR TO ENTERING THE WORK SITE. PLEASE ENSURE THAT YOUR SITE OFFICER WILL BE ABLE TO ANSWER 'NO' TO THE QUESTIONS ON THIS FORM.

You must ensure that you or your representative has enough water and snacks / lunch for the duration of the fieldwork.

Personal Protective Equipment (PPE) – your site officer will need:

- Long pants and long sleeve shirt
- High visibility safety shirt / vest
- Enclosed, sturdy footwear
- Water / Sunscreen / Hat.

You or your representative must be physically fit and will need to identify if you have any medical conditions / allergies that should be known to other people participating in the fieldwork in the event of an emergency. The OzArk field director will send home anyone who they determine to be 'unfit for work' or who may pose a WH&S risk to themselves or others.

Please note, if you are a sending a representative who has any underlying medical conditions or severe allergies, it is important that they have on their person appropriate treatment such as asthma inhalers or EpiPens and notify us accordingly.

As previously noted, due to NSW WH&S legislation we need to have on record current Workers Compensation insurances before going into the field. Unfortunately, we will **NOT** be able to allow participation in the fieldwork without seeing your **current Workers Compensation Certificate of Currency**. We currently have on file a copy of your workers compensation. Please note that if you are unable to send a representative from your organisation, we will proceed with the fieldwork with the OzArk archaeologist only.

Please advise our office by **Wednesday 17<sup>th</sup> June 2020**, if you are available as well as the name and contact number of the site officer who will participate in the fieldwork. After this date, if we have not heard from you, we will either proceed with the survey with the OzArk archaeologist only or offer this position to other relevant groups.

If you have any feedback or relevant cultural heritage knowledge that you would like to offer, please discuss with the archaeologist during the fieldwork or contact our office.

Should you have any queries in relation to the enclosed information please do not hesitate to contact our office.

Kind regards,

Rebecca Hardman

Consultation Officer

Mcphillamys Gold Project - Road Corridor





Mcphillamys Gold Project - Road Corridor

All workers will be required to fill in and sign this form on the morning of the fieldwork. OzArk will
bring copies of the form on the day. The form is reproduced here so that it is understood what will
be required, on acceptance of this fieldwork, please confirm you will be able to complete this
form and answer 'no".



OzArk Environment & Heritage

ABN 59 104 582 354

Dubbo Queanbeyan Newcastle T: 02 6882 0118 enquiry@ozarkehm.com.au www.ozarkehm.com.au

145 Wingewarra St PO Box 2069 DUBBO NSW 2830

#### **COVID-19 RELATED ILLNESS REPORTING FORM**

#### Instructions

- To be completed by all members of an OzArk work crew, including subcontractors and/or community volunteers. All members of the fieldwork team are referred here to as 'workers'.
- If a worker answers Yes to any question below, please send this form to sheridan@ozarkehm.com.au

Date			
Time			
Worke	er name		
Worke	er mobile number		
Site /	Location		
Name	of OzArk Field Director		
Ques	tion	Yes	No
1.	Have you travelled overseas in the last 14 days?		
2.	Have you had contact with a confirmed or suspected case of Covid-19 (Coronavirus)		
3.	Are you experiencing flu like symptoms? i.e. fever, sore throat, cough, fatigue, difficulty breathing?		
4.	Do you currently have a fever > 37.3 degrees?		

If my health condition changes at any point during work from the above, I will ensure that I inform the OzArk Fieldwork Director immediately.

Worker Signature	
Date	

If you have answered <u>Yes to 1 and 2</u>, do not enter the workplace, self-isolation is required for 14 days from the date of your last contact or arrival back to Australia.

If you have answered Yes to 3 and 4, do not enter the workplace, contact your GP by phone to arrange a medical assessment.

If you answered No to all of the above, you are able to enter the workplace.

Mcphillamys Gold Project - Road Corridor

# Addendum Stage 4 example letter

To be added once completed

# **APPENDIX 2: AHIMS EXTENSIVE SEARCHES**

SiteID	SteName	<u>Datum</u> .	Zone	Easting	Northing	Context	Site Status	SiteFeatures	S	SiteTypes	Reports
4-2-0118	EP-IF-1;Willow Vale;	AGD	55	731290	6296170	Open site	Valid	Artefact:-		Isolated Find	
	Contact	Recorders	Centr	al West Ard		l Heritage Servic		I	Permits		
14-3-0151	Boundary Road Reserve #1 Modified Tree	AGD		737189	6298066	Open site	Valid	Modified Tre (Carved or So 1	carred):		
	Contact	Recorders		even Woodl	10000			_	<u>Permits</u>		
14-3-0152	Boundary Road Reserve #2 Scar Tree	AGD		737296	6298124	Open site	Valid	Modified Tre (Carved or So			
	Contact	Recorders		even Woodl					Permits		
14-2-0265	MGP-A29	GDA	55	715857	6294342	Open site	Valid	Artefact:-			
	Contact	Recorders				nts Pty Ltd,Miss.l	Lucy Blackam		Permits		
4-2-0266	MGP-A23	GDA	55	717289	6291385	Open site	Valid	Artefact : -			
	Contact	Recorders	Navin	Officer Her	ritage Consulta	nts Pty Ltd,Miss.l	Lucy Blackam	1	ermits		
4-2-0276	MGP-A11	GDA	55	717552	6294926	Open site	Valid	Artefact : -			
	Contact	Recorders	Navin	Officer Her	ritage Consulta	nts Pty Ltd.Miss.l	Lucy Blackam	I	Permits		
4-2-0277	MGP-A12	GDA	55	717673	6295167	Open site	Valid	Artefact:-			
	Contact	Recorders	Navin	Officer Her	ritage Consulta	nts Pty Ltd,Miss.l	Lucy Blackam	1	Permits		
4-2-0278	MGP-A13	GDA	55	717705	6295213	Open site	Valid	Artefact:-			
	Contact	Recorders	Navir	Officer Her	ritage Consulta	nts Pty Ltd,Miss.l	Lucy Blackam	I	Permits		
4-2-0279	MGP-A18	GDA		716760	6295774	Open site	Valid	Artefact : -			
	Contact	Recorders	Navin	Officer Her	ritage Consulta	nts Pty Ltd,Miss.l	Lucy Blackam	I	Permits		
4-2-0280	MGP-A17	GDA		717106	6295392	Open site	Valid	Artefact : -			
	Contact	Recorders	Navin	Officer Her	ritage Consulta	nts Pty Ltd.Miss.l	Lucy Blackam	F	Permits		
4-2-0281	MGP-A14	GDA		717481	6295232	Open site	Valid	Artefact : -			
	Contact	Recorders	Matrix	Officer Her	ritare Consulta	nts Pty Ltd.Miss.l	Lucar Rladyam	T	Permits		
4-3-0246	MPW-background scatter	GDA		735494	6295740	Open site	Valid	Artefact : -	CI III CI		
	Contact	Recorders	Total	. W T		000000000000000000000000000000000000000	sers.Miss.Coral Hardw	T	Permits		
4-3-0241	MPW-IF3	GDA .		735670	6295651	Open site	Valid	Artefact:-	CITIE		
	Contact	Recorders				15 to 100 to	sers,Miss.Coral Hardw		Permits		
14-3-0242		GDA GDA		n neritage i 735728	6295444	nt - individual us Open site	valid	Artefact:-	ermits		
T-J-ULTL	Contact	Recorders				•			Permits		
4-3-0243	MPW-AS3	GDA GDA		r neritage i 735109	6296288	open site	sers,Miss.Coral Hardw Valid	Artefact:-	ermits		
1 3 0213	Contact	Recorders					sers.Miss.Coral Hardw		Permits		
	nerated by AHIMS Web Service on 17/06/2020 for Alyc O meters. Additional Info: Background data. Number of	ce Cameron for the followin	ngarea	at Datum :	GDA, Zone : 55					70 with a	

Extensive search - Si	te iist report							Chent Se	ervice ID : 51321:
SiteName			Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
MPW-AS4	GDA	55	735800	6294900	Open site	Valid	Artefact:-, Potentia Archaeological Deposit (PAD):-	1	
Contact	Recorders								
KP-05-02	AGD	55	717010	6290830	Open site	Valid		850 05	98954
Contact	Recorders					Marie Control of the			
KP-051	AGD	55	716200	6289500	Open site	Destroyed	Artefact : -	Open Camp Site	98954
Contact	Recorders								
KP-0501	AGD	55	717550	6290750	Open site	Valid	Artefact : -	Open Camp Site	
Contact	Recorders								
KP-OS-1	AGD	55	717550	6290750	Open site	Valid	Artefact : -	Open Camp Site	98954
Contact									-V-3-074
Rocks Creek	AGD	55	723812	6298529	Open site	Valid	Artefact:-	Open Camp Site	353,1298
Contact	Recorders								
Evans Plains Creek Dicks Creek	AGD	55	728134	6291957	Open site	Valid	Artefact : -	Open Camp Site	353,1298
Contact	Recorders								
Bathampton Fitzgeralds Valley	AGD	55	722564	6289885	Open site	Valid	Burial : -	Burial/s	353,1298
Contact	Recorders						100000-000		
Camerons P addock; Blayney;	AGD	55	718013	6290518	Open site	Valid	Artefact:-	Open Camp Site	
Contact									
Oakey Creek	AGD	55	721071	6298635	Open site	Valid	Artefact:-	Open Camp Site	1298
Contact	Recorders						-	-	
Rocks Creek	AGD	55	722898	6298565	Open site	Valid	Artefact:-	Open Camp Site	1298
Contact									
Bald Hills - Stone Arrangement	1070,000				Open site		-		353,606,1298
									252 (264 200
Prount Aspiey - Stone Arrangement	GDA	55	734935	0297964	open site	valid	stone Arrangement	: stone Arrangement	353,606,1298
Contact	Recorders	ASRS	YS.Extent H	eritage Ptv Ltd	- Pyrmont - Individ	lual users.Mr.Camer	on Neal Permit	s	
Panorama Hills Site No.4	GDA			6294867	Open site	Valid	Modified Tree	Scarred Tree	606,1298
Contact	Recorders	Mich	ael Pickerin	g, Extent Herita	ge Pty Ltd - Pyrmor	nt - Individual users	Extent Herit <b>Permit</b>	<u>s</u>	
	AGD		737300	6297000	Open site	Valid	Artefact:-	Open Camp Site	606
Evans Plains; Bathurst;			YS				Permit		
	SteName  MPW-AS4  Contact  KP-05-02  Contact  KP-05-1  Contact  KP-05-1  Contact  KP-05-1  Contact  KP-03-1  Contact  RP-03-1  Contact  Rocks Greek  Contact  Bathampton Pitzgeralds Valley  Contact  Caractons Paddock:Blayney:  Contact  Caractons Paddock:Blayney:  Contact  Caractons Paddock:Blayney:  Contact  Contact	SiteName	SiteName	SteName	SiteName	SteName	SteName		SteName

SOVERNMENT	& Heritage Extensive search - S	Site list report								Client Se	ervice ID : 51321
SiteID 44-3-0065	<u>SteName</u> Panorama Hills Stone	Datum 2 GDA		Easting 35200	Northing 6295000	Context Open site	<u>Site Status</u> Valid	SteFeatu Stone Arra	res ingement :	SteTypes Stone Arrangement	Reports 606,1298
	Contact	Recorders	ASRSY	S,Extent H	eritage Pty Ltd	- Pyrmont - Indivi	dual users,Mr.Camer	on Neal	<u>Permits</u>		
44-2-0004	Vittoria Oakey Creek	AGD	55 7	21000	6296808	Open site	Valid	Artefact:		Open Camp Site	353,1298
	Contact	Recorders	ASRSY						<u>Permits</u>		
44-2-0259	MGP-A35	GDA	55 7	16527	6293672	Open site	Valid	Artefact:			
	Contact	Recorders				nts Pty Ltd,Miss.L			Permits		
44-2-0260	MGP-A30	GDA		16087	6292981	Open site	Valid	Artefact:-			
44-2-0261	Contact	Recorders			-	nts Pty Ltd,Miss.L		Artefact : -	Permits		
44-2-0261	MGP-A31	GDA		17279	6293060	Open site	Valid	Artelact : -			
44-2-0262	Contact MGP-A32	Recorders GDA		Omcer ner 716398	1tage Consulta: 6293319	nts Pty Ltd,Miss.L. Open site	valid	Artefact:	<u>Permits</u>		
112-0202	Contact	Recorders				nts Pty Ltd.Miss.L		ra teract.	Permits		
44-2-0263	MGP-A33	GDA		17477	6293296	Open site	Valid	Artefact:			
	Contact	Recorders				nts Pty Ltd.Miss.L			Permits		
44-2-0264		GDA		17683	6293109	Open site	Valid	Artefact:			
	Contact	Recorders	Navin	Officer Her	itage Consulta	nts Pty Ltd,Miss.L	cv Blackam		Permits		
44-3-0155	Perthville Burial	GDA		36725	6291714	Open site	Valid	Burial : -			102990
	Contact Bathurst LALC	Recorders	Peter l	eckham,M	s.Allira Chatfie	ld			<u>Permits</u>		
44-2-0267	MGP-A24	GDA	55 7	17504	6292141	Open site	Valid	Artefact:-			
	Contact	Recorders	Navin	Officer Her	itage Consulta	nts Pty Ltd,Miss.L	icy Blackam		Permits		
44-2-0268	MGP-A25	GDA	55 7	17554	6292082	Open site	Valid	Artefact:			
	Contact	Recorders				nts Pty Ltd,Miss.L			<u>Permits</u>		
44-2-0269	MGP-A26	GDA		15351	6293688	Open site	Valid	Artefact:-			
	Contact	Recorders			-	nts Pty Ltd,Miss.L	•		Permits		
44-2-0270	MGP-A27	GDA		14823	6293853	Open site	Valid	Artefact : -			
44-2-0271	Contact MGP-A28	Recorders GDA		Officer Her 17575	itage Consulta: 6293689	nts Pty Ltd,Miss.Li	icy Blackam Valid	Artefact:	<u>Permits</u>		
44-2-02/1						Open site		Arteract:-			
44-2-0272	Contact MGP-A20	Recorders GDA		Omcer ner 717329	1tage Consulta: 6295589	nts Pty Ltd,Miss.Li Open site	Valid	Artefact:	Permits		
11 1 01/1	Contact	Recorders				nts Pty Ltd.Miss.Li		THE SOURCE .	Permits		
44-2-0273	MGP-A21	GDA GDA		16671	6294253	Open site	Valid	Artefact:-			
	Contact	Recorders				nts Pty Ltd.Miss.L	ory Blackam		Permits		
44-2-0274	MGP-A22	GDA		17391	6291096	Open site	Valid	Artefact:-			
	Contact	Recorders	Navin	Officer Her	itage Consulta	nts Pty Ltd,Miss.Li	icy Blackam		Permits		
0						•					

44-2-0300 Mcl Co 44-3-0228 Bale Co 44-3-0229 Bale Co	e <mark>Name</mark> Phillamys Gold Project Artefact 36 <b>mhact</b> dd Hill IF-2	GDA		Easting	Northing	Combond	m_max_ accessor				
Co 44-3-0228 Bale Co 44-3-0229 Bale Co	ontact		55 7			Context	Site Status	SiteFeature	25	SiteTypes	Reports
44-3-0228 Balo <u>Co</u> 44-3-0229 Balo <u>Co</u>				717463	6296297	Open site	Valid	Artefact:-			
Co 44-3-0229 Balo Co	ld Hill IF-2	Recorders				- Natural & Cultural I			Permits		
14-3-0229 Bali <u>Co</u>		GDA	55 7	735600	6293057	Open site	Valid	Artefact:-			104281
Co	mtact	Recorders				age Management,Do			Permits		
	ld Hill IF-1	GDA	55 7	735361	6292969	Open site	Valid	Artefact:-			104281
	ontact	Recorders				age Management,Do			Permits		
4-2-0302 McI	Phillamys Gold Project Artefact 37	GDA	55 7	715544	6296219	Open site	Valid	Artefact:-			
	ontact	Recorders	Doctor	Matt Cupp	er,LandSkape	- Natural & Cultural I		ent	<u>Permits</u>		
	striction applied. Please contact					Open site	Valid				
	ms@environment.nsw.gov.au. ontact	Recorders	Extent	Horitago D	trz I tel . Drzemow	nt - Individual users,	Mr Iada Dann Mr C	annorm No	Dormite		
		GDA .		735940	6296320	Open site	Valid	Modified Tr			
		<b>32.1</b>	55 /	, 55, 10	0270020	open sae	Vanu	(Carved or			
Co	mtact	Recorders	Extent	Heritage P	ty Ltd - Pyrmo	nt - Individual users,	Mr Alistair Hobbs		Permits		
14-3-0235 MP1	W-IF1	GDA	55 7	736191	6295269	Open site	Valid	Artefact:-			
Co	ontact .	Recorders	Extent	t Heritage P	ty Ltd - Pyrmo	nt - Individual users,	Mr Alistair Hobbs		Permits		
14-3-0236 MP	W-AS2	GDA	55 7	735362	6296271	Open site	Valid	Artefact:-			
Co	entact	Recorders	Extent	Heritage P	ty Ltd - Pyrmo	nt - Individual users,	Mr Alistair Hobbs		Permits		
14-3-0237 MP1	W-ST1	GDA	55 7	735945	6294943	Open site	Valid	Modified Tr (Carved or :			
Co	ontact	Recorders	Extent	Heritage P	tv Ltd - Pvrmo	nt - Individual users,	Mr.Alistair Hobbs		Permits		
l-4-2-0295 Swa	an Ponds Quarry 2	GDA		730097	6294214	Open site	Valid	Potential Archaeologi Deposit (PA			
Co	<u>mtact</u>	Recorders	Navin	Officer Her	itage Consultar	nts Pty Ltd,Mrs.Nicol	a Hayes		Permits		
14-2-0296 Swa	an Ponds Quarry 1	GDA		730025	6293879	Open site	Valid	Artefact : -, Archaeologi Deposit (PA	cal		
	entact	Recorders				nts Pty Ltd,Mrs.Nicol			Permits		
14-3-0238 MP1	W-GS1	GDA		735345	6297513	Open site	Valid	Artefact:-			
	entact	Recorders				nt - Individual users,			Permits		
14-3-0239 MP1	W-AS1	GDA	55 7	735549	6295928	Open site	Valid	Artefact:-			
	<u>mtact</u>	Recorders				nt - Individual users,			Permits		
l-4-3-0214 Mt l	Panorama Scarre d'Tree 1	GDA	55 7	736485	6294854	Open site	Valid	Modified Tr (Carved or :			



#### Office of Environment & Heritage AHIMS Web Services (AWS) Extensive search - Site list report Extensive search - Site list report

Your Ref/PO Number : McPhillamys addendum Client Service ID: 513211

SiteID	SiteName	Datum .	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
	Contact	Recorders	Extent	Heritage l	Pty Ltd - Pyrmo	nt - Individual u	sers, Extent Heritage	Pty Ltd - Pyrm: Permits		
44-3-0226	Scar tree near creek line	GDA	55 :	735312	6295486	Closed site	Valid	Modified Tree (Carved or Scarred):		
	Contact	Recorders	Mr.Iad	e Flynn.W	iradvuri Tradit	ional Owners Cer	ntral West (WTOCWA	(C) Permits		
44-3-0227	Double scar modified tree	GDA		735380	6295967	Open site	Valid	Modified Tree (Carved or Scarred):		
	Contact	Recorders	Extent	Heritage l	Pty Ltd - Pyrmo	nt - Individual u	sers,Mr.Jade Flynn,Mi	Cameron Ne Permits		
44-3-0240	MPW-IF2	GDA	55 :	735852	6296027	Open site	Valid	Artefact:-		
	Contact	Recorders	Extent	Heritage I	Ptv Ltd - Pvrmo	nt - Individual u	sers,Mr.Cameron Nea	l Permits		
44-3-0092	SP-3;	AGD		736630	6298960	Open site	Valid	Artefact : -	Open Camp Site	
	Contact	Recorders	Mr.Do	ug William	ıs			Permits		
44-3-0093		AGD		735890	6297970	Open site	Valid	Artefact : -	Isolated Find	
	Contact	Recorders	Mr. Do	ug William	ıs			Permits		
44-3-0102	GGH4:	AGD		735300	6298990	Open site	Valid	Artefact : -	Open Camp Site	2795
	Contact	Recorders	Mr.Ma	tthew Barl	her	•		Permits		
44-3-0103		AGD		734750	6298720	Open site	Valid	Artefact : -	Open Camp Site	2795
	Contact	Recorders	Mr Ma	tthew Barl	her	•		Permits		
44-3-0104	The second secon	AGD		733700	6299080	Open site	Valid	Artefact : -	Open Camp Site	2795
	Contact	Recorders	Mr Ma	tthew Bari	her	16		Permits	820 12	
44-3-0011		AGD		734979	6291511	Open site	Valid	Stone Arrangement :	Stone Arrangement	353,1298
						• • • • • • • • • • • • • • • • • • • •		-		
	Contact	Recorders	ASRSY	.2				<u>Permits</u>		
44-3-0012	Mt Panorama Stone Arrangement 1	GDA	55	736111	6293372	Open site	Valid	Stone Arrangement :	Stone Arrangement	353,606,1298
	W		. ana							
44 2 0042	Contact Mt Panorama Stone Arrangement 2	Recorders GDA		5,Extent H 736704	eritage Pty Ltd 6295820	- Pyrmont - Indr Open site	vidual users,Mr.Came Valid	eron Neal <u>Permits</u> Stone Arrangement :	Stone Arrangement	353,606,1298
44-3-0013	Pit ranorama stone Arrangement 2	GDA .	55 .	30/04	0273020	Open site	vanu	stone Arrangement :	stone Arrangement	333,000,1270
	Contact	Recorders	ASRSY	S,Extent H	eritage Pty Ltd	- Pyrmont - Indi	vidual users,Mr.Came	ron Neal <b>Permits</b>		
44-5-0105	KP-IF-1	AGD	55 :	717160	6290690	Open site	Valid	Artefact : -		
	Contact	Recorders	Centra	l West Arc	ha eological an	d Heritage Servic	es Ptv Ltd	Permits		
44-3-0150	Boundary Rd Reserve	AGD	55 1	736881	6297782	Open site	Valid	Artefact: 1		
	Contact	Recorders	Mr.Ste	ve Woodh	all			Permits		
44-3-0181	Wahluu mens site 1	GDA		736938	6295100	Open site	Valid	Aboriginal Ceremony		
								and Dreaming:-		
	Contact	Recorders	Mr.Jad	e Flynn,W	iradyuri Tradit	ional Owners Cer	ntral West (WTOCWA	(C) Permits		

Report generated by AHIMS Web Service on 17/06/2020 for Alyce Cameron for the following area at Datum: 6DA, Zone: 55, Eastings: 711542 · 737644, Northings: 6284663 · 6299270 with a Buffer of 0 meters. Additional Info: Background data. Number of Aboriginal sites and Aboriginal objects found is 97
This information is not guaranteed to be free from error omission. Office of Environment and Heritage (NSW) and its employees disclaim liability for any act done or omission made on the information and consequences of such

Page 5 of 7



#### AHIMS Web Services (AWS) Extensive search - Site list report Extensive search - Site list report

Your Ref/PO Number : McPhillamys addendum Client Service ID: 513211

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeature	es	SteTypes	Reports
44-3-0182	Restriction applied. Please contact ahims@environment.nsw.gov.au.					Open site	Valid				
	Contact	Recorders	Exter	nt Heritage I	ty Ltd - Pyrmo	nt - Individual us	sers,Mr.Jade Flynn,Mr	Cameron Ne	<u>Permits</u>		
44-2-0275	MGP-A19	GDA	55	717333	6295568	Open site	Valid	Artefact : -			
	Contact	Recorders	Navi	n Officer He	itage Consulta	nts Pty Ltd,Miss.I	Lucy Blackam		Permits		
44-2-0282	MGP-A15	GDA	55	717479	6295327	Open site	Valid	Artefact:-			
	Contact	Recorders	Navi	n Officer Her	itage Consulta	nts Pty Ltd.Miss.I	Lucy Blackam		Permits		
44-2-0283	MGP-A16	GDA	55	717525	6295541	Open site	Valid	Artefact:-			
	Contact	Recorders	Navi	n Officer He	itage Consulta	nts Pty Ltd,Miss.I	Lucy Blackam		Permits		
44-2-0284		GDA		715415	6291672	Open site	Valid	Artefact : -,			
								Archaeolog	ical		
								Deposit (PA	.D):-		
	Contact	Recorders				nts Pty Ltd,Miss.I			Permits		
44-2-0285	MGP-A4	GDA	55	716606	6295516	Open site	Valid	Artefact : -			
	Contact	Recorders	Navi	n Officer He	itage Consulta	nts Pty Ltd,Miss.I	Lucy Blackam		Permits		
44-2-0286	MGP-A5	GDA	55	717646	6294875	Open site	Valid	Artefact : -			
	Contact	Recorders	Navi	n Officer He	itage Consulta	nts Pty Ltd,Miss.I	Lucy Blackam		<u>Permits</u>		
44-2-0287	MGP-A6	GDA	55	717576	6294932	Open site	Valid	Artefact:-			
	Contact	Recorders	Navi	n Officer He	itage Consulta	nts Pty Ltd,Miss.I	Lucy Blackam		Permits		
44-2-0288	MGP-A7	GDA	55	717176	6295410	Open site	Valid	Artefact:-			
	Contact	Recorders	Navi	n Officer He	itage Consulta	nts Pty Ltd,Miss.I	Lucy Blackam		Permits		
44-2-0289	MGP-A8	GDA		716949	6295604	Open site	Valid	Artefact : -			
	Contact	Recorders	Navi	o Officer He	itage Consulta	nts Pty Ltd,Miss.I	Lucy Blackam		Permits		
44-2-0290		GDA		717408		Open site	Valid	Artefact:-			
	Contact	Recorders	Navi	o Officer He	itage Consulta	nts Pty Ltd,Miss.I	Lucy Blackam		Permits		
44-2-0291		GDA		713547		Open site	Valid	Artefact : -,			
								Archaeologi			
								Deposit (PA	D):-		
	Contact	Recorders	Navi	n Officer He	itage Consulta	nts Pty Ltd,Miss.I	Lucy Blackam		Permits		
44-2-0292	MGP-A2	GDA	55	715664	6292045	Open site	Valid	Artefact:-			
	Contact	Recorders	Navi	n Officer He	itage Consulta	nts Pty Ltd,Miss.I	Lucy Blackam		<u>Permits</u>		
44-3-0193	Grinding stone upper Wahluu	GDA	55	736342	6293221	Open site	Valid	Grinding Gr Artefact : -	00Ve:-,		
	Contact	Recorders					sers,Mr.Jade Flynn,Mr	.Cameron Ne	<u>Permits</u>		
44-3-0194	Hammer stone artefact Wahluu	GDA	55	736342	6293221	Open site	Valid	Artefact:-			
	Contact	Recorders	Mel	do Elema Mi	radunyi Traditi	anal Oumare Car	ntral West (WTOCWA	C)	Permits		

Report generated by AHIMS Web Service on 17/06/2020 for Alyce Cameron for the following area at Datum: GDA, Zone: 55, Eastings: 711542 - 737644, Northings: 6284663 - 6299270 with a Entfer of 0 meters. Additional Info: Eackground data. Number of Abortiginal Stressand Abortiginal objects found is 97
This information is not guaranteed to be free from error omission. Office of Environment and Heritage (ISW) and its employees disclaim liability for any act done or omission made on the information and consequences of such acts or omission.

Page 6 of 7

NSW GOVERNMENT	Livioinnene	Web Services (AWS) search - Site list report								er : McPhillamys addendun Client Service ID : 51321:
SiteID 44-3-0195	SteName Scar tree marker Wahluu	<b>Datum</b> GDA	<b>Zone</b> 55	Easting 736367	Northing 6293294	<u>Context</u> Open site	<u>Site Status</u> Valid	SteFeatures Modified Tree (Carved or Scarred):	SiteTypes	Reports
	Contact	Recorder	e Fyt	ent Heritage I	Pts: Itd. Psermo	mt - Individual use	re Mr Iada Flunn Mr	Cameron Ne <b>Permits</b>		
44-3-0196	Women's Dreaming Site Wahluu	GDA GDA		736924	6294879	Open site	Valid	Aboriginal Ceremony and Dreaming:-		
	Contact	Recorder						Cameron Ne Permits		
44-2-0293	MGP-A10	GDA	55	717496	6294939	Open site	Valid	Artefact : -		
	Contact	Recorder				nts Pty Ltd,Miss.L		<u>Permits</u>		
44-3-0192	Scar tree Wahluu 2	GDA	55	736992	6294073	Open site	Valid	Modified Tree (Carved or Scarred):		
	Contact	Recorder	s Mr.	ade Flynn,W	iradyuri Tradit	ional Owners Cent	ral West (WTOCWA	) Permits		
44-3-0184	Wahluu bora stones site	GDA .	55	737162	6295163	Open site	Valid	Aboriginal Ceremony and Dreaming:-, Ceremonial Ring (Stone or Earth):-, Stone Arrangement:		
	Contact	Recorder	s Mr.	ade Flynn,W	iradyuri Tradit	ional Owners Cent	ral West (WTOCWA	2) Permits		
44-3-0185	Wahluu bora stones site 2	GDA	55	736854	6295282	Open site	Valid	Aboriginal Ceremony and Dreaming:-, Ceremonial Ring (Stone or Earth):-, Stone Arrangement:		
	Contact	Recorder					ral West (WTOCWA			
44-3-0186	Wahluu ceremonial and initiation comple	explants GDA	55	736854	6295282	Open site	Valid	Aboriginal Resource and Gathering:-, Aboriginal Ceremony and Dreaming:-		103608
	Contact	Recorder	s Mr.	ade Flynn,Wi	iradyuri Tradit	ional Owners Cent	ral West (WTOCWA0	C) Permits		
Renort ger	nerated by AHIMS Web Service on 17/0	6/2020 for Alyce Cameron for the follo	vingare	a at Datum :	GDA, Zone : 5	5, Eastings : 7115	42 · 737644, Northi	ngs: 6284663 · 6299	270 with a	

NSW GOVERNMENT	Office of Environment & Heritage	AHIMS Web Services (A Extensive search - Site list rep									Your Ref/PO Number : f	McPhillamys Update
SiteID	SiteName	1	Datum	Zone	Easting	Northing	Context	Site Status	SteFeatures		SiteTypes	Reports
44-2-0086	Pipers Flat	I .	AGD	55	778300	6303800	Open site	Valid	Artefact : -		Open Camp Site	387
	Contact		Recorders	ASRS	YS				Pe	rmits		
44-3-0041	Bald Hills - Stone Arrar	gement	GDA	55	736272	6293192	Open site	Valid	Stone Arranger	nent :	Stone Arrangement	353,606,1298
	Contact	I	Recorders	ASRS	YS.Extent H	eritage Ptv Ltd	- Pyrmont - Indi	zidual users,Mr.Came	ron Neal Pe	rmits		
44-3-0058	Orton Park Bathurst	- I	AGD		740400	6293700	Open site	Valid	Artefact: 6		Open Camp Site	606,1298
	Contact	I	Recorders	Mich	ael Pickerins	,			Per	rmits		
44-3-0059	Orton Park; Bathurst.		AGD		740300	6293700	Open site	Valid	Artefact:1		Open Camp Site	606
	Contact	T	Recorders	Mich	ael Pickerins	,			Po	rmits		
44-3-0068	Williwa Creek 4;	-	AGD		775560	6302970	Open site	Valid	Artefact : -		Open Camp Site	232
	Contact	ī	Recorders	ASRS	YS				Per	rmits		
44-3-0069	Williwa Creek 3;		AGD		775280	6302720	Open site	Valid	Artefact : -		Open Camp Site	232
	Contact	ī	Recorders	ASRS	YS				Per	rmits		
44-3-0070	Williwa Creek 2:		AGD		774260	6301570	Open site	Valid	Artefact:-		Open Camp Site	232
	Contact	ī	Recorders	ASRS	YS				Pe	rmits	•	
44-3-0071	Scotts Creek 5		AGD		771322	6300063	Open site	Valid	Artefact:-	шш	Open Camp Site	232.1298
	Contact	· ·	Recorders	ASRS	ve		•		Por	rmits		
44-3-0072	Scotts Creek 4		AGD		770880	6299930	Open site	Valid	Artefact:-	ши	Open Camp Site	232.1298
	Contact		Recorders		is,Roderick		.,			rmits		
44-3-0073	Scotts Creek 3:	-	AGD		770900	6299820	Open site	Valid	Artefact : -		Open Camp Site	232
	Contact		Recorders	L Cub						rmits	-1	
44-3-0074	Scotts Creek 2;		AGD		769968	6298786	Open site	Valid	Stone Quarry:	1	Quarry	232
	Contact	I	Recorders	L Cub	ois					rmits		
44-3-0075	Scotts Creek 1		GDA	55	769677	6298530	Open site	Valid	Artefact : -		Open Camp Site	232,1298
	Contact	I	Recorders	ASRS	YS,OzArk Er	vironmental ar	nd Heritage Man	agement,Miss.Stepha	nie Rusden Per	rmits		
44-3-0076	Diamond Creek 1	£	AGD	55	767110	6297450	Open site	Valid	Artefact : -		Open Camp Site	232,1298
	Contact	I	Recorders	ASRS	YS				Per	rmits		
44-3-0077	Kirkconnell Creek 1	I	AGD	55	764430	6297020	Open site	Valid	Artefact:-		Open Camp Site	232,1298
	Contact	<u> 1</u>	Recorders	ASRS	YS				<u>Pe</u>	rmits		
44-3-0078	Frying Pan Creek 1		AGD	55	763050	6296510	Open site	Valid	Artefact : -, Aboriginal Cere and Dreaming :			232,1298,1021 46
	Contact		Recorders	ASRS	YS					mits		
44-3-0060	Orton Park; Bathurst;	I	AGD	55	740200	6293700	Open site	Valid	Artefact : 1		Open Camp Site	606
	Contact	I	Recorders	Mich	ael Pickering	Į.			Per	rmits		

Page 1 of 4

NSW	& Heritage Extensive search	ı - Site list report							Client S	ervice ID : 52272
SiteID 14-3-0061	SteName Panorama Hills Site No.4	<u>Datum</u> GDA	<b>Zone</b> 55	Fasting 736464	Northing 6294867	Context Open site	<u>Site Status</u> Valid	SteFeatures Modified Tree (Carved or Scarred):	SteTypes Scarred Tree	Reports 606,1298
	Contact	Recorders	Mich	nael Pickerin	g.Extent Herita	ge Pty Ltd - Pyrı	mont - Individual user	s,Extent Herit Permits		
14-3-0067	Williwa Creek 1;	AGD	55	773270	6300900	Open site	Valid	Artefact:-	Open Camp Site	83,232
	Contact	Recorders						<u>Permits</u>		
4-3-0011	Mt Apsley	AGD	55	734979	6291511	Open site	Valid	Stone Arrangement :	Stone Arrangement	353,1298
	Contact	Recorders						<u>Permits</u>		
14-3-0012	Mt Panorama Stone Arrangement 1	GDA	55	736111	6293372	Open site	Valid	Stone Arrangement :	Stone Arrangement	353,606,1298
	Contact	Recorders	ASR	SYS,Extent H	eritage Pty Ltd	- Pyrmont - Ind	ivi dual users,Mr.Cam	eron Neal <u>Permits</u>		
4-3-0170	W20 A7	GDA		756692	6296736	Open site	Valid	Artefact : 1, Potential Archa eological Deposit (PAD) : 1		104298
	Contact	Recorders						Heritage Man Permits	3764	
4-3-0171	W20 A8	GDA .	55	757657	6296015	Open site	Valid	Artefact : 1, Potential Archaeological Deposit (PAD) : 1		
	Contact	Recorders			ritage Consulta			<u>Permits</u>	3764	
4-3-0163	W20 A6	GDA	55	766565	6297463	Open site	Valid	Artefact : 1		
	Contact	Recorders			ritage Consulta			Permits	3764	
4-3-0181	Wahluu mens site 1	GDA		736938	6295100	Open site	Valid	Aboriginal Ceremony and Dreaming :-		
4-3-0182	Contact Restriction applied. Please contact	Recorders	Mr.j	ade Flynn,Wi	iradyuri Tradit	onal Owners Ge Open site	ntral West (WTOCW. Valid	4C) <u>Permits</u>		
4-3-0102	ahims@environment.nsw.gov.au.			N2 00 1	program a	•				
4-3-0193	Contact Grin ding stone upper Wahluu	Recorders GDA		nt Heritage F 736342	Pty Ltd - Pyrmo 6293221		isers,Mr.Jade Flynn,M Valid	r.Cameron Ne Permits Grinding Groove :		
4-3-0193	Grin ding stone upper wantuu	GDA	55	/30342	6293221	Open site	vand	Artefact : -		
	Contact	Recorders	Exte	nt Heritage I	Pty Ltd - Pyrmo	nt - Individual u	isers,Mr.Jade Flynn,M	r.Cameron Ne Permits		
4-3-0194	Hammer stone artefact Wahluu	GDA	55	736342	6293221	Open site	Valid	Artefact : -		
	Contact	Recorders			iradyuri Tradit	ional Owners Ce	ntral West (WTOCW.	(C) <u>Permits</u>		
4-3-0195	Scar tree marker Wahluu	GDA	55	736367	6293294	Open site	Valid	Modified Tree (Carved or Scarred): -		
	Contact	Recorders	Exte	nt Heritage I	Pty Ltd - Pyrmo	nt - Individual u	isers,Mr.Jade Flynn,M	r.Cameron Ne <u>Permits</u>		
H-3-0196	Women's Dreaming Site Wahluu	GDA.	55	736924	6294879	Open site	Valid	Aboriginal Ceremony and Dreaming:-		
Info: Back	nerated by AHIMS Web Service on 24/07/2020 for sground. Number of Aboriginal sites and Aborigina ation is not guaranted to be free from error omission. Office	d objects found is 49								

SiteID	SteName	Datum	Zone	Easting	Northing		Site Status	SiteFeatures	SiteTypes	Reports
1.4. 2.01.02	Contact Scar tree Wahhuu 2	Recorders GDA		nt Heritage 736992	Pty Ltd - Pyrme 6294073	nt - Individual u Open site	isers,Mr.Jade Flynn,Mr. Valid	Cameron Ne <u>Pe</u> Modified Tree	rmits	
FF-5-0172	oca u ee wanuu z	don	33	730772	0274073	Open site	vanu	(Carved or Scar	red):	
	Contact	Recorders			Viradyuri Tradit	ional Owners Ce	ntral West (WTOCWAC		rmits	
4-3-0184	Wahluu bora stones site	GDA	55	737162	6295163	Open site	Valid	Aboriginal Cere		
								and Dreaming : Ceremonial Rin		
								(Stone or Earth		
								Stone Arranger	nent :	
	Contact	Recorders	Mr.I	ade Flynn.W	Viradvuri Tradit	ional Owners Ce	ntral West (WTOCWA0	) Per	rmits	
1-3-0185	Wahluu bora stones site 2	GDA		736854	6295282	Open site	Valid	Aboriginal Cere		
								and Dreaming		
								Ceremonial Rin (Stone or Earth		
								Stone Arranger		
	Contact	Recorders	36.7	. d. 15 14	(P 3) M 3/4		ntral West (WTOCWAC	- D	rmits	
<b>⊢</b> 3-0186	Wahluu ceremonial and initiation complex plants	GDA GDA		736854	6295282	Open site	Valid	Aboriginal Res		103608
1 3 0100								and Gathering :		
								Aboriginal Cere		
	Contact	Recorders	MrI	ade Elsmn W	Viradsoni Tradit	ional Owners Ce	ntral West (WTOCWA0	and Dreaming:	- rmits	
4-3-0228	Bald Hill IF-2	GDA		735600	6293057	Open site	Valid	Artefact:-		104281
	Contact	Recorders	OzA	rk Environn	nental and Herit	age Managemen	t,Doctor Alyce Camero	n Per	rmits	
4-3-0229	Bald Hill IF-1	GDA	55	735361	6292969	Open site	Valid	Artefact : -		104281
	Contact	Recorders					t,Doctor Alyce Camero		rmits	
1-3-0221	Bathurst Bike Park IF-1	GDA	55	738495	6293770	Open site	Valid	Artefact : -		104281
	Contact	Recorders					t,Doctor.Alyce Camero	-	rmits	
F3-0222	Sunny Corner IF-1	GDA		769007	6299750	Open site	Valid	Artefact:-		104281
1-3-0223	Contact Sunny Corner IF-2	Recorders GDA		rk Environn 764957	nental and Herit 6298103	age Managemen Open site	t,Doctor.Alyce Camero: Valid	n <u>Per</u> Artefact:-	rmits	104281
F3-0223	Contact	Recorders				. 85	t.Doctor Alvce Camero		rmits	104201
4-3-0224	Sunny Corner IF-3	GDA		764843	6298127	Open site	Valid	Artefact:-	unues	104281
	Contact	Recorders	OzA	rk Environn	nental and Herit		t,Doctor Alyce Camero	ı Pe	rmits	
4-3-0225	Sunny Corner OS-1	GDA		765147	6298067	Open site	Valid	Artefact:-		104281
	Contact	Recorders	OzA	rk Environn	nental and Heri	age Managemen	t,Doctor.Alyce Camero	n <u>Pe</u> r	rmits	

NSW GOVERNMENT	Office of Environment & Heritage AHIMS Web Ser Extensive search - S								iber : McPhillamys Update ent Service ID : 522726
SiteID 44-3-0230	SteName Restriction applied. Please contact ahims@environment.nsw.gov.au.	Datum Z	one Easti	ng Northing	Context Open site	Site Status Valid	SiteFeatures	SiteTypes	Reports
	Contact	Recorders	Extent Herit	age Pty Ltd - Pyrm	ont - Individual u	isers,Mr.Jade Flynn,M	r.Cameron Ne Permit	<u>s</u>	
44-3-0231	Salt Water Creek IF-2	GDA	55 75432	1 6294548	Open site	Valid	Artefact : -		104280
	Contact	Recorders	OzArk Envir	onmental and Heri	itage Managemen	t,Doctor.Alyce Camer	on <u>Permit</u>	s	
44-3-0232	Salt Water Creek IF-1	GDA	55 75405	5 6294493	Open site	Valid	Artefact : -		104280
	Contact	Recorders	OzArk Envir	onmental and Heri	itage Managemen	t,Doctor.Alyce Camer	on <b>Permit</b>	s	
44-3-0233	Salt Water Creek OS-1	GDA	55 75407	3 6294530	Open site	Valid	Artefact:-		104280
	Contact	Recorders	OzArk Envir	onmental and Heri	tage Managemen	t,Doctor Alyce Camer	on <b>Permit</b>	s	
44-3-0237	MPW-ST1	GDA	55 73594	5 6294943	Open site	Valid	Modified Tree (Carved or Scarred)	:	
	Contact	Recorders	Extent Herit	age Pty Ltd - Pyrm	ont - Individual u	sers,Mr.Alistair Hobb	s <u>Permit</u>	S	
44-3-0214	Mt Panorama Scarre d Tree 1	GDA	55 73648	5 6294854	Open site	Valid	Modified Tree (Carved or Scarred)	:	
	Contact	Recorders	Extent Herit	age Pty Ltd - Pyrm	ont - Individual u	sers,Extent Heritage	Pty Ltd - Pyrm: Permit	s	
44-3-0216	Stone fire pit Penrise	GDA	55 75430	7 6294842	Closed site	Valid	Aboriginal Ceremor and Dreaming:-, Grinding Groove:-	у	
	Contact	Recorders	Mr.Jade Flyn	n,Wiradyuri Tradi	tional Owners Ce	ntral West (WTOCW)	(C) <u>Permit</u>	<u>s</u>	
44-3-0217	Grin ding grooves penrose	GDA	55 74307	9 6292992	Closed site	Valid	Grinding Groove : -		
	Contact	Recorders	Mr.Jade Flyn	n,Wiradyuri Tradi	tional Owners Ce	ntral West (WTOCW)	4C) <u>Permit</u>	s	
44-3-0244	MPW-AS4	GDA	55 73580	0 6294900	Open site	Valid	Artefact : -, Potentia Archa eological Deposit (PAD): -	1	

Report generated by AHIMS Web Service on 24/07/2020 for Alyce Cameron for the following area at Search using shape file Zone 55 AHIMS search.SHP with a buffer of 0 meters. Additional Info: Background. Number of Aboriginal sites and Aboriginal objects found is 49
This information is not guaranteed to be free from error omission. Office of Environment and Heritage (RSW) and its employees disclaim liability for any act done or omission made on the information and consequences of such actor omission.

Page 4 of 4

NSW GOVERNMENT	Littli Offitieric	Services (AWS) th - Site list report								Number : McPhillamys Service ID : 522728
SiteID	SteName	Datum	Zone East	ing Northing	Context	Site Status	SiteFeatur	es	SiteTypes	Reports
45-1-2547	IV-OS-1	AGD	56 2220	4 6304060	Open site	Valid	Artefact:-		Open Camp Site	
	Contact	Recorders	Mrs.Robym	e Mills				Permits		
45-1-2548	IV-IF-2	AGD	56 2228	0 6303590	Open site	Valid	Artefact:-		Isolated Find	
	Contact	Recorders	Mrs.Robym	e Mills				Permits		
45-1-2549	IV-OS-3	AGD	56 2227	0 6303230	Open site	Valid	Artefact:-		Open Camp Site	
	Contact	Recorders	Mrs.Robym	e Mills				Permits		
45-1-2551	IV-OS-5	AGD	56 2227	0 6303490	Open site	Valid	Artefact : -		Open Camp Site	
	Contact	Recorders	Mrs.Robym	e Mills				<u>Permits</u>		
45-1-2552	IV-OS-4	AGD	56 2228	.0 6303400	Open site	Valid	Artefact:-		Open Camp Site	
	Contact	Recorders	Mrs.Robym	e Mills				Permits		
45-1-2553	IV-OS-6	AGD	56 2236	0 6302970	Open site	Valid	Artefact:-		Open Camp Site	
	Contact	Recorders	Mrs.Robym	e Mills				Permits		
45-1-2554	IV-IF-1	AGD	56 2221	5 6304060	Open site	Valid	Artefact : -		Isolated Find	
	Contact	Recorders	Mrs.Robym	e Mills				Permits		
45-6-2354	Lamberts Creek 7	AGD	56 2255	0 6303350	Open site	Destroyed	Artefact : -		Open Camp Site	
	Contact	Recorders	Ms.Jillian C	mber,Ms.Laila Hag	dund			Permits	405	
45-6-2355	Lamberts Creek 6:	AGD	56 2254	0 6303070	Open site	Destroye d	Artefact:-		Open Camp Site	
	Contact	Recorders	Ms.Laila Ha	glund,Ms.Jilli an Co:	mber			Permits	405	
45-1-0066	Pipers Flat; Ivanhoe Colliery;	AGD	56 2227	0 6303710	Open site	Valid	Artefact:-		Open Camp Site	
	Contact	Recorders	Ms.Laila Ha	glund				Permits		
45-1-0067	Pipers Flat Ivanhoe Colliery	AGD	56 2227	0 6303780	Open site	Valid	Artefact : -		Open Camp Site	387
	Contact	Recorders	ASRSYS					Permits		
45-1-0071	Mt Piper;Lamberts Creek 1;	AGD	56 2253	5 6302130	Close d site	Valid	Artefact:-		Shelter with Deposit	2294
	Contact	Recorders		haw,Ms.Laila Hagl				Permits		
45-1-0072	Lamberts Creek 2	AGD	56 2252		Open site	Valid	Artefact : -		Open Camp Site	2294
	Contact	Recorders		haw,Ms.Laila Hagl				<u>Permits</u>		
45-1-0075	•	AGD	56 2234	0 6302290	Close d site	Valid	Artefact:-		Shelter with Deposit	
45-1-0076	Contact	Recorders	ASRSYS		0 "	** ** *		<u>Permits</u>	0 0 00	
45-1-00/6	Mt Piper;	AGD	56 2234	0 6302040	Open site	Valid	Artefact:-		Open Camp Site	
17 1 2227	Contact	Recorders	ASRSYS		0 "	** ** *		<u>Permits</u>	0 0 00	2222
45-1-0207	S8; Blackmans Flat;	AGD	56 2265		Open site	Valid	Artefact : -		Open Camp Site	2300
45 4 8085	Contact	Recorders		ch,Alice Gorman	0 11	** ** **	21.4	<u>Permits</u>	0 0 0	0000
45-1-0208	S5; Blackmans Flat;	AGD	56 2255	6303050	Open site	Valid	Artefact:-		Open Camp Site	2300

Page 1 of 4



#### **AHIMS Web Services (AWS)** Extensive search - Site list report

Your Ref/PO Number : McPhillamys Client Service ID: 522728

SiteID	SiteName Contact	<u>Datum</u> Recorders	Zone Eliza	Easting beth Rich	Northing	Context	Site Status	SiteFeatures Permits	SiteTypes 361	Reports
45-1-0209	S4; Wallerawang:	AGD	56	226300	6302550	Open site	Valid	Artefact:-	Open Camp Site	2300
	Contact	Recorders	Eliza	beth Rich				Permits		
45-1-0213	Lamberts Ck 4; Mt Piper;	AGD	56	225149	6302270	Closed site	Valid	Artefact : -	Shelter with Deposit	2294
	Contact	Recorders			Ms.Laila Haglu			<u>Permits</u>		
45-1-0214		AGD		225163	6302178		Valid	Artefact:-	Shelter with Deposit	2294
	Contact	Recorders			Ms.Laila Haglu	~ ~		<u>Permits</u>		
45-1-0215	Lamberts Ck 5; Mt Piper;	AGD	56	225300	6302480	Open site	Valid	Artefact : -	Open Camp Site	2294
	Contact	Recorders	Helen	a Brayshaw,	Ms.Laila Haglu	nd		<u>Permits</u>		
45-1-0218	57 - Blackmans Flat;	AGD	56	224400	6303650	Open site	Valid	Artefact:-	Open Camp Site	
	Contact	Recorders	Mr.N	eville Baker	Elizabeth Rich			Permits		
45-1-0234	Western main 2;	AGD	56	226020	6304680	Open site	Valid	Artefact : -	Open Camp Site	
	Contact	Recorders	Heler	n Brayshaw				Permits	427	
45-1-0236	Western main 1; same as 45-1-0241	AGD		226060	6304580	Open site	Valid	Artefact : -	Open Camp Site	
	Contact	Recorders	Heler	n Brayshaw				Permits	428	
45-1-0238	Mount Piper;	AGD	56	222590	6302870	Close d site	Valid	Artefact : -, Art (Pigment or Engraved) : -, Grinding Groove : -	Axe Grinding Groove, Shelter with Art, Shelter with Deposit	2907
	Contact	Recorders	Helen	n Brayshaw	Mary Dallas Co	nsulting Archaed	ologists (MDCA)	Permits	1000 <b>1</b> 0000	
45-1-0239	Irondale Creek:	AGD	56	222330	6302230	Open site	Partially Destroyed	Artefact : -	Open Camp Site	2907
	Contact	Recorders	Heler	a Brayshaw,	Mary Dallas Co	nsulting Archaec	ologists (MDCA)	<u>Permits</u>		
45-1-0242	Western main 3, same as 45-1-0235	AGD	56	225630	6304830	Open site	Valid	Artefact : -	Open Camp Site	2501
	Contact	Recorders	Helen	n Brayshaw				<b>Permits</b>		
45-1-0243	S12; Springvale Colliery;	AGD	56	224970	6303900	Open site	Destroyed	Artefact : -	Open Camp Site	
	Contact	Recorders	ASRS	YS				<u>Permits</u>	467	
45-1-0244	S13; Springvale Colliery;	AGD	56	224750	6304040	Open site	Destroyed	Artefact : -	Open Camp Site	
	Contact	Recorders	Eliza	beth Rich,E	Boney			Permits	467	
45-1-0093		AGD		228770	6305540	Open site	Valid	Artefact:-	Open Camp Site	950
	Contact	Recorders	Eliza	beth Rich,Sh	nelly Green, Doc	or.Susan Mcinty	re-Tamwoy	Permits		
45-1-0094		AGD		228290	6305550	Open site	Valid	Artefact : -	Open Camp Site	950
	Contact	Recorders	Eliza	beth Rich.St	nelly Green, Doc	or.Susan Meinty	re-Tamwoy	Permits		
45-1-0100	Angus Place 1;Ben Bullen State Forest;	AGD		227640	6305600	Closed site	Valid	Artefact : -	Shelter with Deposit	950

Report generated by AHIMS Web Service on 24/07/2020 for Alyce Cameron for the following area at Search using shape file Zone 56 AHIMS search.SHP with a buffer of 0 meters. Additional Info: Eackground update. Number of Aboriginal sites and Aboriginal objects found is 54
This information is not guaranteed to be free from error omission. Office of Environment and Heritage (NSW) and its employees disclaim liability for any act done or omission made on the information and consequences of such actors are income.

Page 2 of 4



#### AHIMS Web Services (AWS) Extensive search - Site list report Extensive search - Site list report

Your Ref/PO Number: McPhillamys Client Service ID: 522728

SiteID	SiteName	Datum 2	one Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
	Contact	Recorders	Doctor Susan M	cintyre-Tamwoy			Permits		
45-1-0203	S6; Blackmans Flat;	AGD	56 225180	6303220	Open site	Destroyed	Artefact:-	Open Camp Site	2300
	Contact	Recorders	S Fields, Elizabet	h Rich			<u>Permits</u>		
45-1-0019	Irondale;	AGD	56 225500	6302750	Gosed site	Valid	Artefact : -, Grinding Groove : -	Axe Grinding Groove,Shelter with Deposit	
	Contact	Recorders	RMiller				<u>Permits</u>		
45-1-2550	IV-OS-2	AGD	56 222130	6303520	Open site	Valid	Artefact : -	Open Camp Site	
	Contact	Recorders	Mrs.Robynne M	ills			<u>Permits</u>		
45-1-2587	WC1A	AGD	56 225991	6305123	Open site	Valid	Artefact: 1		98981
	Contact Bathurst LAIC	Recorders	Mr.John Appleto	n			Permits		
45-1-2588	NC-OS1 with PAD	AGD	56 225556	6305650	Open site	Valid	Artefact: 10, Potential Archaeological Deposit (PAD): 1		
	Contact T Russell	Recorders	OzArk Environn	nental and Herit	age Management		Permits		
45-1-2601	SVW-OS1 with PAD	AGD	56 225796	6303196	Open site	Valid	Artefact: 6		
	Contact	Recorders	Bathurst LALC,I	octor.Jodie Ben	ton,Mr.Phillip Ca	meron	Permits		
45-1-2602	WGJ1	GDA	56 223989	6303882	Open site	Valid	Artefact: 1		
	Contact Searle	Recorders	Navin Officer He	eritage Consulta	nts Pty Ltd		<u>Permits</u>		
45-1-0045	Ben Bullen Stone Arrangement; Ben Bullen State Forest;	AGD	56 226800	6305600	Open site	Valid	Stone Arrangement :	Stone Arrangement	
	Contact	Recorders	Doctor Susan M	dntyre-Tamwoy	•		<u>Permits</u>		
45-1-0235	Western main 3; same as 45-1-0242	AGD	56 225630	6304830	Open site	Valid	Artefact:-	Open Camp Site	
	Contact	Recorders	Helen Brayshaw				<u>Permits</u>	428	
45-1-0241	Western main 1, same as 45-1-0236	AGD	56 226060	6304580	Open site	Valid	Artefact : -	Open Camp Site	2501
	Contact	Recorders	Helen Brayshaw				Permits		
45-1-2753	Neubecks Creek Open Site 5	GDA	56 225938	6305155	Open site	Valid	Artefact: 1		
	Contact	Recorders	OzArk Environn	nental and Herit	age Management		Permits		
45-1-2720		GDA	56 225945	6303776	Open site	Valid	Artefact: 1		
	Contact	Recorders	Ms.Cheng-Yen L	oo.RPS East Aus	tralia Ptv Ltd - E	chuca Victoria	Permits		
45-1-2721		GDA	56 225953		Open site	Valid	Artefact: 1		
	Contact	Recorders	Ms.Cheng-Yen L				Permits		
45-1-2722	CS SU4-A3	GDA	56 225879		Open site	Valid	Artefact : 1		
	Contact	Recorders	Ms.Cheng-Yen L				Permits		
	CS SU4-A2	GDA GDA	56 225959		Open site	Valid	Artefact : 1		

Report generated by AHIMS Web Service on 24/07/2020 for Alyce Cameron for the following area at Search using shape-file Zone 56 AHIMS search. SHP with a buffer of 0 meters. Additional Info: Background update. Number of Aboriginal sites and Aboriginal objects found is 54
This information is a set guaranteed to be free from error consiston. Office of Environment and Heritage (MSW) and its employees disclaim liability for any act done or consiston made on the information and consequences of such acts or consiston.

Page 3 of 4



Report generated by AHIMS Web Service on 24/07/2020 for Alyce Cameron for the following area at Search using shape file Zone 56 AHIMS search.SHP with a buffer of 0 meters. Additional Info: Eackground update. Number of Aboriginal sites and Aboriginal objects found is 54
This information is not guaranteed to be free from error omission. Office of Environment and Heritage (NSW) and its employees disclaim liability for any act done or omission made on the information and consequences of such

Page 4 of 4