APPENDIX



Lachlan River Bridge Modification Project

Aboriginal Due Diligence Assessment Report

STOCKINBINGAL TO PARKES REVIEW OF ENVIRONMENTAL FACTORS

DOCUMENT ACCESSIBILITY

Inland Rail is committed to providing digital content that is easily accessible to the widest possible audience, regardless of ability or technology.

If you encounter any accessibility issues within this document please contact us via email at irdigital@artc.com.au or via post at:

Digital Engagement Team Australian Rail Track Corporation Inland Rail GPO Box 2462 Brisbane Qld 4001

If English is your second language and/or you need help reading this document, please call 131 450. This is a free service.





View to the northwest showing the Lachlan River Rail Bridge.

ABORIGINAL DUE DILIGENCE ASSESSMENT REPORT

LACHLAN RIVER BRIDGE

FORBES NSW

OCTOBER 2021

2-0008-230-EAP-05-RP-7003

Report prepared by OzArk Environment & Heritage for WSP on behalf of ARTC

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

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.

EXECUTIVE SUMMARY

OzArk Environment and Heritage (OzArk) has been engaged by WSP on behalf of ARTC to complete a Due Diligence archaeological assessment for the track clearance works at the Lachlan River Bridge for the Stockinbingal to Parkes section of the Inland Rail. This report examines the works associated with the track clearance at the Lachlan River Bridge, which is in the Forbes Shire Council Local Government Area (LGA).

The study area extends across a 1.2 kilometre (km) stretch of railway corridor which is approximately 2.5 km southeast of the Forbes town centre.

A search of the Aboriginal Heritage Information Management System (AHIMS) returned no Aboriginal sites or places within the study area.

The undertaking of the Due Diligence process has resulted in the conclusion that the proposal will have an impact on the ground surface, however, no Aboriginal objects or intact archaeological deposits will be harmed by the proposal. This moves the proposal to the following outcome:

AHIP application not necessary. Proceed with caution. If any Aboriginal objects are found, stop work and notify Heritage NSW (131 555 or info@environment.nsw.gov.au). If human remains are found, stop work, secure the site and notify NSW Police and Heritage NSW.

To ensure the greatest possible protection to the area's Aboriginal cultural heritage values, the following recommendations are made:

- 1) The proposed work may proceed at the Lachlan River Bridge study area without further archaeological investigation under the following conditions:
 - a) All land and ground disturbance activities must be confined to within the study area, as this will eliminate the risk of harm to Aboriginal objects in adjacent landforms. Should the parameters of the proposal extend beyond the assessed areas, then further archaeological assessment may be required.
 - b) An unexpected finds procedure would be developed to provide a consistent method for managing any unexpected Aboriginal heritage items discovered during construction, including potential heritage items or objects, and human skeletal remains.
 - c) All staff and contractors involved in the proposed work should be made aware of the legislative protection requirements for all Aboriginal sites and objects.
- 2) This assessment has concluded that there is a low likelihood that the proposed work will adversely harm Aboriginal cultural heritage items or sites. However, during works, if

- Aboriginal artefacts or skeletal material are noted, all work should cease and the procedures in the *Unanticipated Finds Protocol* (**Appendix 2**) should be followed;
- 3) Work crews should undergo cultural heritage induction to ensure they recognise Aboriginal artefacts (see **Appendix 3**) and are aware of the legislative protection of Aboriginal objects under the NPW Act and the contents of the *Unanticipated Finds Protocol*.
- 4) The information presented here meets the requirements of the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales*. It should be retained as shelf documentation for five years as it may be used to support a defence against prosecution in the event of unanticipated harm to Aboriginal objects.

CONTENTS

EXECUTIVE	SUMMARY	IV
1 Intro	ODUCTION	1
1.1 Br	rief description of The Lachlan River Bridge Clearance	1
1.2 Ba	ackground	2
1.3 St	udy area	2
1.4 As	ssessment approach	2
2 Авог	RIGINAL DUE DILIGENCE ASSESSMENT	4
2.1 In	troduction	4
2.2 De	efences under the NPW Regulation 2009	4
2.2.1	Low impact activities	4
2.2.2	Disturbed lands	4
2.3 Ap	oplication of the Due Diligence Code of Practice to the proposal	5
2.3.1	Step 1	5
2.3.2	Step 2a	5
2.3.3	Step 2b	8
2.3.4	Step 2c	9
2.3.5	Step 3	9
2.3.6	Step 4	9
2.4 Co	onclusion	13
3 Man	AGEMENT RECOMMENDATIONS	14
REFERENC	ES	16
PLATES		17
Appendix 1	1: AHIMS SEARCH RESULTS	19
Appendix 2	2: ABORIGINAL HERITAGE: UNANTICIPATED FINDS PROTOCOL	21
Appendix (3: ABORIGINAL HERITAGE: ARTEFACT IDENTIFICATION	22
FIGURES		
•	Map showing the location of the proposal.	
•	Aerial showing the study area.	
_	Previously recorded sites in relation to the study area Landscape and disturbance inside the study area	
94.0 2 2.	-asosapo aa diotaroanioo niodo tilo otaaj diodi miniminiminiminiminiminiminiminiminimi	

Figure 2-3: Survey coverage within the study area.	12	
Tables		
Table 2-1: Determination of whether Due Diligence Code applies	5	
Table 2-2: Site types and frequencies of AHIMS sites near the study area	6	
Table 2-3: Due Diligence Process application.	13	
PLATES		
Plate 1: View to the east showing cluster of mature native trees along the Lachlan River just outside the		
study area	17	
Plate 2: View to the south showing areas targeted with higher GSV.	17	
Plate 3: View to the northeast showing the bridge and railway infrastructure that has caused ground and	ł	
sub surface disturbance directly adjacent to the Lachlan River	18	
Plate 4: View to the south showing the small windows of GSV amongst the grasses	18	

1 Introduction

1.1 Brief description of The Lachlan River Bridge Clearance

OzArk Environment & Heritage (OzArk) has been engaged by WSP, on behalf of ARTC to complete an Aboriginal Due Diligence heritage assessment for the proposed works on Lachlan River Bridge near Forbes NSW. The proposal is in the Forbes Shire Council Local Government Area (LGA) (**Figure 1-1**).

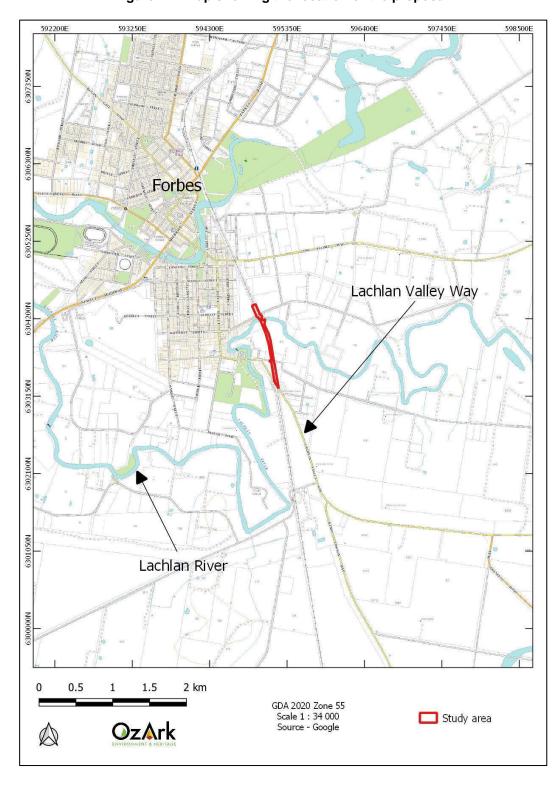


Figure 1-1. Map showing the location of the proposal.

1.2 BACKGROUND

The Australian Government has committed to delivering a significant piece of national transport infrastructure that will provide a safe, sustainable solution to the freight challenge that exists on Australia's east coast. The Inland Rail Program is a 1,700-kilometre interstate freight rail corridor that will connect Melbourne and Brisbane, via central-west New South Wales (NSW) and Toowoomba in Queensland QLD). The Stockinbingal to Parkes (S2P) section, is an enhancement project for Inland Rail Program. It is a 173-kilometre section of existing rail corridor located in regional NSW between the towns of Stockinbingal and Parkes.

A number of enhancement works (which do not constitute a complete upgrade of the track alignment) are required to be undertaken in this section, including modifications to, construction or removal of various structural and track assets along the alignment. Due to the number of enhancement works required along the S2P corridor, the environmental approvals have been split into four Review of Environmental Factors (REF) packages.

This Aboriginal heritage Due Diligence assessment has been prepared for the modification works to the Lachlan River Bridge (the proposal) in Forbes, NSW.

1.3 STUDY AREA

The study area is located within an approximate 1.2 kilometres (km) stretch of railway corridor, which is located just over two km south of the Forbes town centre. The study area is shown on **Figure 1-2**.

1.4 ASSESSMENT APPROACH

Aboriginal cultural heritage

The desktop and visual inspection component for the study area follows the *Due Diligence Code* of *Practice for the Protection of Aboriginal Objects in New South Wales* (Due Diligence; DECCW 2010). The field inspection followed the *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in New South Wales* (OEH 2011).

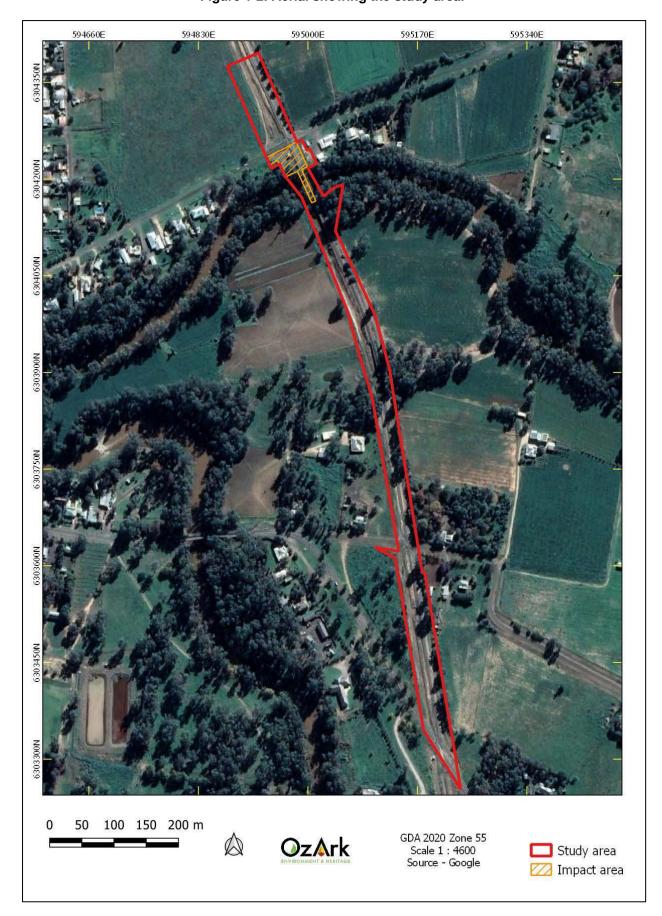


Figure 1-2: Aerial showing the study area.

2 ABORIGINAL DUE DILIGENCE ASSESSMENT

2.1 Introduction

The National Parks and Wildlife Regulation 2009 (NPW Regulation) made under the *National Parks and Wildlife Act 1974* (NPW Act) advocates a Due Diligence process to determining likely impacts on Aboriginal objects. Carrying out Due Diligence provides a defence to the offence of harming Aboriginal objects and is an important step in satisfying Aboriginal heritage obligations in NSW.

2.2 DEFENCES UNDER THE NPW REGULATION 2009

2.2.1 Low impact activities

The first step before application of the Due Diligence process itself is to determine whether the proposed activity is a "low impact activity" for which there is a defence in the NPW Regulation. The exemptions are listed in Section 80B (1) of the NPW Regulation (DECCW 2010: 6).

The activities of ARTC will involve ground surface disturbance within the railway corridor, as heavy earth moving machinery will be required on either side of the bridge. This is not an exempt activity or a "low impact activity", hence the Due Diligence process must be applied.

2.2.2 Disturbed lands

Relevant to this process is the assessed levels of previous land-use disturbance.

The NPW Regulation Section 80B (4) (DECCW 2010: 18) define disturbed land as follows:

Land is disturbed if it has been the subject of a human activity that has changed the land's surface, being changes that remain clear and observable.

Examples include ploughing, construction of rural infrastructure (such as dams and fences), construction of roads, trails and tracks (including fire trails and tracks and walking tracks), clearing vegetation, construction of buildings and the erection of other structures, construction or installation of utilities and other similar services (such as above or below ground electrical infrastructure, water or sewerage pipelines, stormwater drainage and other similar infrastructure) and construction of earthworks.

Much of the proposed work will occur on previously cleared land that contains the existing railway. It could therefore be considered that the proposed work is occurring in 'disturbed land'. However, as there is potential for sections of the study area to include portions where the land's surface has not been changed in a clear and observable manner, and the fact that the Lachlan River intersects the study area, the Due Diligence process must be applied.

In summary, it is determined that the proposal must be assessed under the Due Diligence Code. The reasoning for this determination is set out in **Table 2-1**.

Table 2-1: Determination of whether Due Diligence Code applies.

Reasoning	Answer
No, as the proposal does not trigger the thresholds for SSI. Instead, the proposal is being assessed under Division 5.1 of the EP&A Act	No
The proposal is not exempt under this Act or Regulation.	No
The activity will not occur in an Aboriginal place. No previous investigations have been conducted.	No
The proposal is not a low impact activity for which there is a defence in the NPW Regulation.	No
Much of the proposal is within areas of high modification, but not all.	No
	No, as the proposal does not trigger the thresholds for SSI. Instead, the proposal is being assessed under Division 5.1 of the EP&A Act The proposal is not exempt under this Act or Regulation. The activity will not occur in an Aboriginal place. No previous investigations have been conducted. The proposal is not a low impact activity for which there is a defence in the NPW Regulation. Much of the proposal is within areas of high modification, but not

Due Billigeriee Code of Fraction descessifiert is required

2.3 APPLICATION OF THE DUE DILIGENCE CODE OF PRACTICE TO THE PROPOSAL

To follow the generic Due Diligence process, a series of steps in a question/answer flowchart format (DECCW 2010: 10) are applied to the proposed impacts and the study area, and the responses documented.

2.3.1 Step 1

Will the activity disturb the ground surface or any culturally modified trees?

Yes, the proposal will impact the ground surface and may impact culturally modified trees.

The proposal will involve the upgrading of the current railway in order to accommodate for the use of double-stacked trains. This work will require the use of heavy earth moving machinery that will cause disturbance to the ground surface. From a desktop level, the study area also contains numerous mature trees, hence the visual inspection will determine whether any have cultural scarring or carving.

2.3.2 Step 2a

Are there any relevant confirmed site records or other associated landscape feature information on AHIMS?

No, there are no previously recorded sites within the study area.

A search of the AHIMS database was completed on 25 January 2021. The search encompassed a ten kilometre square (km²), centred on the town centre of Forbes (GDA Zone 55, eastings:

584831-604831, northings: 6294543-6314543, with no buffer). The search returned 48 Aboriginal sites and no Aboriginal places.

Figure 2-1 shows all previously recorded sites in relation to the study area and **Table 2-2** shows the types of sites that are close to the study area.

Table 2-2: Site types and frequencies of AHIMS sites near the study area.

Site Type	Number	% Frequency
Modified tree (carved or scarred)	24	50
Isolated find	12	25
Artefact scatter	4	8.3
Hearth	3	6.2
Hearth & artefact scatter	2	4.2
Burial	2	4.2
Massacre	1	2.1
Total	48	100

From the AHIMS data provided, a predictive model for site location in regard to the current study area can be formulated. The most frequent site type in the area, modified trees, are typically recorded in dense woodland areas or previously cleared woodlands that are comprised of mature native tree species. Modified trees are also common in close proximity to natural water sources, particularly river systems. In the case of the current study area, the Lachlan River intersects the study area, so modified trees are a possibility.

In addition, isolated finds can be recorded across all of Australia in any landscape, even when the land has been disturbed. Artefact scatters in the Forbes area appear to occur near waterways, in particular large rivers such as the Lachlan River, as these areas provide resources throughout all seasons, allowing for permanent occupation. In relation to the study areas, artefact scatters remain possible. Burials are usually a rare Aboriginal site within Australia due to the acidity of the soils across the country, although they do occur in low frequencies. In this case, the two burials within the AHIMS search area are located in a kink of the Bocobidgle Creek on a terraced landform, approximately 5-6 kms to the west Using this information, burials within the study area remain unlikely, due to the significant disturbance, both natural and anthropomorphic.

Therefore, the most likely Aboriginal site types that may be recorded within the study area are modified trees, isolated finds and/or artefact scatters according to the relevant AHIMS data.

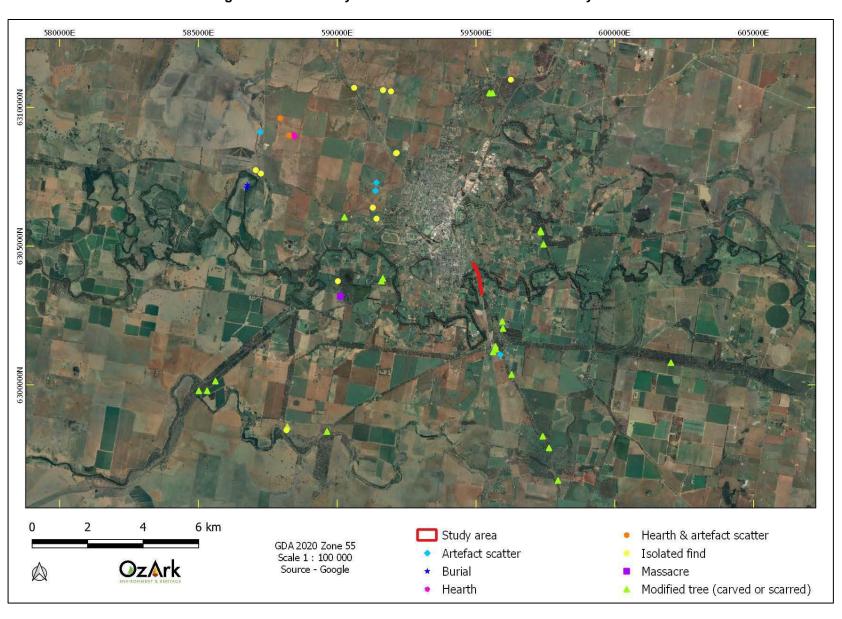


Figure 2-1: Previously recorded sites in relation to the study area.

2.3.3 Step 2b

Are there any other sources of information of which a person is already aware?

Regional and local context can help develop archaeological context for the study area. The current study area had not been previously assessed and the only available information that specifically relates to the study area is the AHIMS search

The study area is situated on the traditional lands of the Wiradjuri tribal and linguistic group (Tindale 1974). The Wiradjuri people referred to the Lachlan River as Galiyarr (Kass 2003). The Wiradjuri tribal area is situated within the Murray-Darling Basin, covering three primary physiographic divisions (White 1986):

- The riverine plains in the west;
- The transitional western slopes in between; and
- The highlands or central tablelands in the east.

A number of development-driven studies have been conducted in the Forbes area. During the 1990s, Kelton (1994a, 1994b, 1995a, 1995b, and 1996) recorded at least 14 scarred trees, five isolated finds and two open sites associated with gilgai landforms. As a result of these studies, Kelton postulated that scarred trees were commonly located within road corridors and public lands due to the fact that Aboriginal people were restricted to such areas during the historical period (Kelton 1996). One of these studies by Kelton (1995a) was an assessment for the Anglesey Rural subdivision. During the survey, Kelton (1995a) recorded six Aboriginal sites: two artefact scatters and four isolated finds. The artefacts consisted of yellow/brown chert flakes, silcrete and quartz. The flaked artefacts had evidence of retouch, crushing, striking platforms, negative scars and bulbs of percussion. Kelton also recorded small termite nest hearth stones at one of the artefact scatters. Kelton concluded that the sites recorded during the survey reflected occasional occupation (1995a: 17).

Also during the 1990s, Huys and Johnston (1995) identified seven Aboriginal open sites during a survey for a new road and 132kV electricity transmission line to the west of Forbes. Six of these sites were small, with low artefact densities. A seventh site was situated on raised ground overlooking the Lake Cowal flood plains and was considerably larger than the other six, with the authors recording a sample of 28 artefacts. The authors argued that the source of the chert and quartz materials was probably Wamboyne and the Manna Mountains, located to the north-west, whilst the silcrete was thought to be derived locally.

OzArk (2011) conducted surveys located to the north and west of Forbes in relation to Country Energy's proposed 66kV electricity transmission line. Four previously unrecorded Aboriginal sites—all scarred trees—were identified during that survey and two previously recorded Aboriginal sites (AHIMS #43-2-0025 and #26-3-0015) were ground-truthed.

The study area has not been previously assessed and information detailed in **Section 2.3.2** presents the only available information that specifically relates to the study area: an AHIMS search. There are no known cultural values or Aboriginal sites pertaining directly to the location of the proposed work. No Aboriginal community members accompanied the current visual inspection.

2.3.4 Step 2c

Are there any landscape features that are likely to indicate presence of Aboriginal objects?

Yes, portions of the study area contain landforms with identified archaeological sensitivity.

The Due Diligence guidelines recognise several landforms as having archaeological sensitivity. These landforms are:

- Within 200 m of waters, or
- · located within a sand dune system, or
- located on a ridge top, ridge line or headland, or
- located within 200m below or above a cliff face, or
- within 20m of or in a cave, rock shelter, or a cave mouth and is on land that is not disturbed land

The study area at the Lachlan River Bridge is situated right across and entirely within 200 m of the Lachlan River. Therefore, using the predictive modelling presented in **Section 2.3.2**, the study area has potential for modified trees, artefact scatters and isolated finds to be recorded during the survey.

2.3.5 Step 3

Can harm to Aboriginal objects listed on AHIMS or identified by other sources of information and/or can the carrying out of the activity at the relevant landscape features be avoided?

No. landforms with identified archaeological sensitivity may be impacted by the proposal.

Archaeologically sensitive landforms within the study area may be impacted by the proposed track clearance works at the Lachlan River Bridge. However, a visual inspection is required to determine whether any sensitive landforms or Aboriginal sites will be impacted.

2.3.6 Step 4

<u>Does a desktop assessment and visual inspection confirm that there are Aboriginal objects or that they are likely?</u>

No Aboriginal objects were identified within the study area and their presence in the study area is considered unlikely.

The visual inspection of the study area was conducted by OzArk Director and archaeologist, Dr Jodie Benton on 3 February 2021.

The study area was assessed using pedestrian transects; focusing on areas with high ground surface visibility (GSV) and terraces near the banks of the Lachlan River, as these are considered sensitive landforms. The majority of the vegetation inside the study area consisted of grasses and weeds. The clusters of native eucalyptus trees on the banks of the Lachlan River that appeared to be within the study area at a desktop level, are actually located outside the study and on private property (Plate 1). The GSV was low in the majority of the study area (Plate 4). Where higher levels of GSV were observed, these were in areas that had witnessed past disturbance (i.e. access tracks or railway line construction) (Plate 2). When examining the landforms directly adjacent to the Lachlan River, water wash erosion was evident. In addition, the railway line was substantially higher than the surrounding landscape, meaning that it had been terraced to prevent flood damage from the Lachlan River. This terracing has caused significant ground and sub surface disturbance across the entire study area, as the land adjacent to the railway line has been excavated away and used as the foundations for the railway. These high levels of disturbance may account for the lack of Aboriginal sites being recorded during the visual inspection, although it is also feasible that Aboriginal sites were never present within this very narrow study area corridor.

Figure 2-2 shows the ground disturbance in the study area from both past railway line construction, as well as the limited GSV.

Figure 2-2: Landscape and disturbance inside the study area.



View to the north showing limited GSV and the railway line constructed on an approach embankment



View to the south showing limited GSV and the embankment beneath the railway line.



View to the northwest of the Lachlan River Bridge showing ground disturbance from bridge construction.



View of the railway ballast screed across the ground surface.

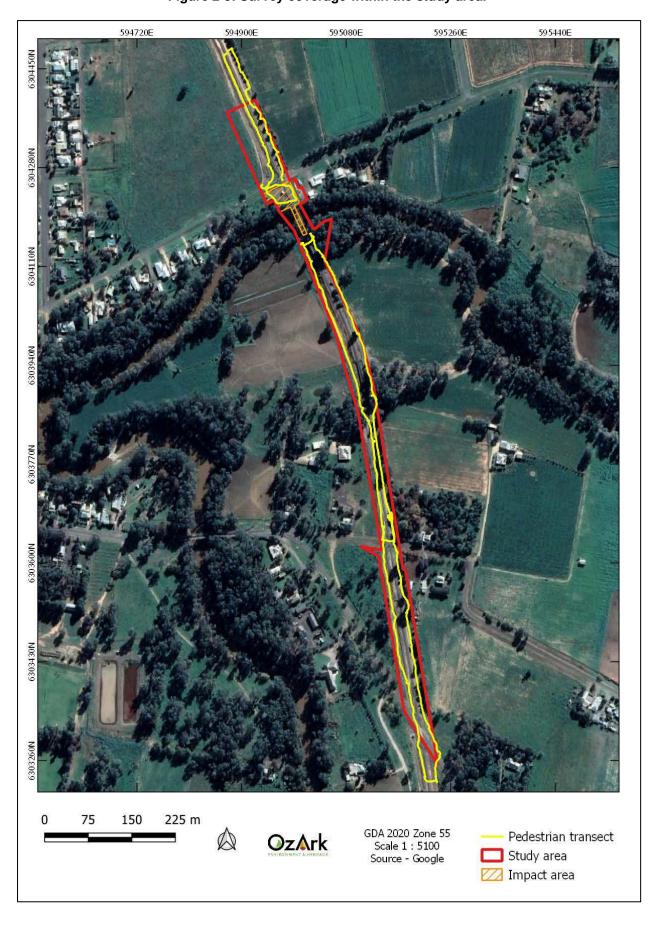


Figure 2-3: Survey coverage within the study area.

Discussion

The visual inspection confirmed all the landforms within the study area have been subject to previous ground surface disturbance, predominantly associated with the railway and bridge construction (**Plate 3**).

Although the visual inspection results did not confirm the predictive model formulated in **Section 2.3.2**, it can be concluded that the disturbance present in the study area may have already destroyed any Aboriginal objects or sites, if indeed they were ever present within the narrow confines of the study area.

In conclusion, an AHIP is not required as no sites were recorded in the study area.

2.4 CONCLUSION

The Due Diligence process has resulted in the outcome that an AHIP is not required. The reasoning behind this determination is set out in **Table 2-3**.

Table 2-3: Due Diligence Process application.

Item	Reasoning	Answer
Will the activity disturb either of the following: the ground surface where archaeological deposits are likely mature, native trees that may be culturally modified.	The proposed works would disturb the ground surface through excavation and construction. The ground surface was assessed as having clear and observable evidence of previous human disturbance. The proposal may impact mature trees, although the visual inspection confirmed no culturally modified scarring or carving.	No
Are there any relevant records of Aboriginal heritage on site (AHIMS or from other sources), or landscape features that are likely to indicate presence of Aboriginal objects?	AHIMS indicated no Aboriginal sites within the study area, however, two recorded scarred trees were confirmed in the vicinity. The landscape of the study area contained features that are likely to indicate the presence of Aboriginal objects, however, the visual inspection confirmed these features had all been significantly disturbed and no Aboriginal objects were present.	No
Will the activity impact Aboriginal objects or landforms with archaeological potential?	There are no known items of Aboriginal significance present in the study area, and landforms with identified archaeological sensitivity are not present as the visual inspection confirmed high levels of disturbance.	No
Does the desktop and/or visual assessment confirm that Aboriginal objects will be harmed?	Desktop searches found no known items of Aboriginal heritage in the study area. It is assessed that there is a low likelihood of there being subsurface archaeological deposits within the study area.	No
	AHIP not necessary. Proceed with caution.	

3 MANAGEMENT RECOMMENDATIONS

The undertaking of the Due Diligence process resulted in the conclusion that the proposal will have an impact on the ground surface, however, no Aboriginal objects or intact archaeological deposits will be harmed by the proposal. This moves the proposal to the following outcome:

AHIP application not necessary. Proceed with caution. If any Aboriginal objects are found, stop work and notify Heritage NSW (131 555 or info@environment.nsw.gov.au). If human remains are found, stop work, secure the site and notify NSW Police and Heritage NSW.

To ensure the greatest possible protection to the area's Aboriginal cultural heritage values, the following recommendations are made:

- 1) The proposed work may proceed at the Lachlan River Bridge study area without further archaeological investigation under the following conditions:
 - d) All land and ground disturbance activities must be confined to within the study area, as this will eliminate the risk of harm to Aboriginal objects in adjacent landforms. Should the parameters of the proposal extend beyond the assessed areas, then further archaeological assessment may be required.
 - e) All staff and contractors involved in the proposed work should be made aware of the legislative protection requirements for all Aboriginal sites and objects.
- 2) This assessment has concluded that there is a low likelihood that the proposed work will adversely harm Aboriginal cultural heritage items or sites. However, during works, if Aboriginal artefacts or skeletal material are noted, all work should cease and the procedures in the *Unanticipated Finds Protocol* (Appendix 2) should be followed;
- 3) Work crews should undergo cultural heritage induction to ensure they recognise Aboriginal artefacts (see **Appendix 3**) and are aware of the legislative protection of Aboriginal objects under the NPW Act and the contents of the *Unanticipated Finds Protocol*.
- 4) An unexpected finds procedure would be developed to provide a consistent method for managing any unexpected Aboriginal heritage items discovered during construction, including potential heritage items or objects, and human skeletal remains.
- 5) The information presented here meets the requirements of the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales*. It should be retained as shelf documentation for five years as it may be used to support a defence against prosecution in the event of unanticipated harm to Aboriginal objects.

6) If applicable: A requirement for cultural and historic heritage awareness training would be included in the Aboriginal cultural heritage management plan. Cultural heritage awareness training would be provided by an Aboriginal representative at the commencement of substantial works for the proposal.

REFERENCES

Burra Charter 2013	International Council on Monuments and Sites 2013. <i>The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance</i> .
DECCW 2010	DECCW. 2010. Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW. Department of Environment, Climate Change and Water, Sydney.
Huys and Johnston 1995	Huys S. and Johnston. 1995. <i>An Archaeological Survey of Areas Between Forbes and Lake Cowal</i> . A report to North Limited.
Kass 2003	Kass T. 2003. A Thematic History of the Central West: Comprising the NSW Historical Regions of Lachlan and Central Tablelands. NSW Heritage Office.
Kelton 1994a	Kelton J. 1994a. <i>An Archaeological Survey for the Proposed "The Mount" Cattle Feedlot Extensions, Near Forbes, NSW.</i> Report for Twynam Pastoral Company in Association with Development Consultants Hoynes Wheeler and Thorne.
Kelton 1994b	Kelton J. 1994b. A Supplementary Report to the Archaeological Survey for "The Mount" Cattle Feedlot, Proposed Extensions, Near Forbes, NSW. Report for Twynam Pastoral Company in Association with Development Consultants Hoynes Wheeler and Thorne.
Kelton 1995a	Kelton J. 1995. Archaeological Survey for the Proposed "Anglesey" Rural Sub-Division, Bogan Gate Road, Forbes, NSW. Report for Mr B. Adams, Forbes, in association with Development Consultants, Hoynes Wheeler and Thorne Pty. Ltd.
Kelton 1995b	Kelton J. 1995. <i>An Archaeological Survey on the Proposed Calarie Mining Lease Application, Calarie, Near Forbes.</i> Central West Archaeological and Heritage Services Pty. Ltd., Cowra.
Kelton 1996	Kelton J. 1996. <i>Documentation of Aboriginal Scarred Trees in the Lachlan Valley</i> . Central West Archaeological and Heritage Services Pty. Ltd., Cowra.
Mitchell 2002	Mitchell, Dr. Peter. 2002. Description for NSW (Mitchell) Landscapes Version 2. Department of Environment and Climate Change NSW.
OEH 2011	Office of Environment and Heritage. 2011. <i>Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in New South Wales</i> . Department of Environment, Climate Change and Water, Sydney.
White 1986	White I. 1986. Dimensions of Wiradjuri. Unpublished thesis. Department of Prehistory and Anthropology, Australian National University.

PLATES



Plate 1: View to the east showing cluster of mature native trees along the Lachlan River just outside the study area.



Plate 2: View to the south showing areas targeted with higher GSV.



Plate 3: View to the northeast showing the bridge and railway infrastructure that has caused ground and sub surface disturbance directly adjacent to the Lachlan River.



Plate 4: View to the south showing the small windows of GSV amongst the grasses.

APPENDIX



Lachlan River Bridge Modification Project

Aboriginal Due Diligence Assessment Report

Appendix 1 Aboriginal Heritage Information Management System search results

STOCKINBINGAL TO PARKES REVIEW OF ENVIRONMENTAL FACTORS



APPENDIX 1: AHIMS SEARCH RESULTS

<u>SiteID</u> 43-3-0038	<u>SiteName</u> Bundaburrah Creek Massacre	AGD	<u>Zone</u> 55		Northing 6303000	Context Open site	Site Status Valid	SiteFeature: Conflict:-		<u>SiteTypes</u> Massacre	Reports
	Contact	Recorders		Adrienne Ho	CONTRACTOR STATE				Permits		
43-2-0047	Morebain Burial	AGD		586655	6307004	Open site	Valid	Burial : 1			98707
	Contact	Recorders		n Hutchins		_			<u>Permits</u>		
43-2-0048	Morebain Man (relocated)	AGD		586626	6306918	Open site	Valid	Burial : 1			98707
	Contact	Recorders		n Hutchins	0.0000000000000000000000000000000000000	700	100000	100000000000000000000000000000000000000	Permits		
43-2-0055	Dog & Duck Lagoon	AGD	55	588088	6298313	Open site	Valid	Hearth:-			
	Contact T Russell	Recorders		Larry Towne		- Carlos Car	LAW BANK	WANT TOWN TO STREET STORY	Permits		
43-2-0056	Dog & Duck Lagoon 1	AGD	55	588088	6298316	Open site	Valid	Modified Tre (Carved or Se 2			
	Contact T Russell	Recorders		Larry Towne					Permits		
43-2-0057	Dog & Duck Lagoon 3	AGD	55	588057	6298179	Open site	Valid	Artefact: -			
	Contact T Russell	Recorders	Mr.l	Larry Towne	7				Permits		
43-2-0058	Dog & Duck Lagoon 5	AGD	55	589520	6298131	Open site	Valid	Modified Tre (Carved or So 1			
	Contact T Russell	Recorders	Mr.l	Larry Towne			11.50		Permits		
13-3-0031	C-IF-1 (Forbes)	AGD	55	596140	6310810	Open site	Valid	Artefact: -		Isolated Find	3543
	Contact	Recorders	Cen	tral West Arc	haeological an	d Heritage Servic	es Pty Ltd		Permits		
43-2-0063	Forbes-Jemalong Scarred Tree 1	GDA	55	590261	6306043	Open site	Valid	Modified Tre (Carved or Se			
	Contact	Recorders			ental and Herit	age Management	t,Mr.Toivo Kim Tuov		Permits		
43-3-0041	RB-ST-1	AGD	55	595590	6301200	Open site	Valid	Modified Tre (Carved or Se		Scarred Tree	
	Contact	Recorders	Cen	tral West Arc	haeological an	d Heritage Servic	ces Pty Ltd	1	Permits		
3-2-0031	GS-IF-1	AGD	55	589910	6303550	Open site	Valid	Artefact: -		Isolated Find	97833
	Contact	Recorders	Cen	tral West Arc	haeological an	d Heritage Servic	es Pty Ltd	- 1	Permits		
43-2-0032	GS-ST-1	AGD	55	591530	6303650	Open site	Valid	Modified Tre (Carved or Se	2000	Scarred Tree	97833
	Contact	Recorders	Cen	tral West Arc	haeological an	d Heritage Servic	es Pty Ltd	-	Permits		
43-3-0039	RB-ST-2	AGD	55	595600	6301100	Open site	Valid	Modified Tre (Carved or Se		Scarred Tree	
	Contact	Recorders	Cen	tral West Arc	haeological an	d Heritage Servic	es Pty Ltd		Permits		

GOVERNMENT	(1)	Extensive search - Site list rep					Client Service ID: 56345				
<u>liteID</u>	<u>SiteName</u>	200	ACADOMIC TO THE PARTY OF THE PA	Zone	Easting	Northing		Site Status	<u>SiteFeatures</u>	<u>SiteTypes</u>	Reports
3-3-0040	RB-ST-3	A	GD	55	595500	6301000	Open site	Valid	Modified Tree (Carved or Scarred):	Scarred Tree	
	Contact	<u>R</u>	ecorders	Cent	ral West Arc	haeological an	d Heritage Servic	es Pty Ltd	<u>Permits</u>		
13-3-0032	C-ST-1;	A	GD	55	595370	6310330	Open site	Valid	Modified Tree (Carved or Scarred):	Scarred Tree	
	Contact	R	ecorders	Cent	ral West Arc	haeological an	d Heritage Servic	es Pty Ltd	Permits		
43-3-0033	C-ST-3;	A	GD		595370	6310330	Open site	Valid	Modified Tree (Carved or Scarred):	Scarred Tree	
	<u>Contact</u>	<u>R</u>	ecorders	Cent	ral West Arc	haeological an	d Heritage Servic	es Pty Ltd	<u>Permits</u>		
13-3-0034	C-ST-2;	.At	GD	55	595480	6310330	Open site	Valid	Modified Tree (Carved or Scarred):	Scarred Tree	
	Contact	R	ecorders	Cent	ral West Arc	haeological an	d Heritage Servic	es Pty Ltd	Permits		
13-3-0035	Toms Lagoon;	A	GD	55	597210	6305380	Open site	Valid	Modified Tree (Carved or Scarred):	Scarred Tree	
	Contact	R	ecorders	L We	oods				<u>Permits</u>		
13-5-0008	Scarred Tree 3;	A	GD	55	585500	6299950	Open site	Valid	Modified Tree (Carved or Scarred):	Scarred Tree	
	Contact	R	ecorders	Doct	or.Jillian Cor	nber,Allan Goo	dwin,Mr.Steve W	oodhall	<u>Permits</u>		
13-5-0009	Scarred Tree 2;	A	GD	55	585200	6299600	Open site	Valid	Modified Tree (Carved or Scarred):	Scarred Tree	
	<u>Contact</u>		ecorders			nber,Allan Goo		0.000	<u>Permits</u>		
13-5-0010	Scarred Tree 1;	A	GD	55	584900	6299600	Open site	Valid	Modified Tree (Carved or Scarred) :	Scarred Tree	
	Contact	Re	ecorders	Doct	or.Jillian Cor	nber,Allan Goo	dwin		Permits		
3-2-0022	A-IF-2;	G	DA	55	592122	6308349	Open site	Valid	Artefact: -	Isolated Find	3082
	<u>Contact</u>		ecorders						vironmental at <u>Permits</u>		
13-2-0023	A-IF-3;	A	GD	55	591170	6306200	Open site	Valid	Artefact: -	Isolated Find	3082
	Contact		ecorders				d Heritage Servic		Permits		
3-2-0024			GD		591300	6305800	Open site	Valid	Artefact: -	Isolated Find	3082
0.0.000	Contact		ecorders	- 000000		-	d Heritage Servic		Permits		2002
3-2-0025	A-0S-1;	Gi	DA	55	591381	6306991	Open site	Valid	Artefact:	Open Camp Site	3082

SiteID	SiteName	<u>Datum</u>	Zone	Easting	Northing	Context	Site Status	SiteFeatur	es	SiteTypes	Reports
	Contact	Recorders	Cet	itral West An	chaeological an	d Heritage Servic	es Pty Ltd,OzArk Enviro	onmental ar	Permits		
13-2-0026	A-IF-1;	AGD	55	592030	6308170	Open site	Valid	Artefact: -		Isolated Find	3082
	Contact	Recorders	Cer	itral West An	chaeological an	d Heritage Servic	es Pty Ltd		Permits		
43-2-0028	Toms Lagoon ST 2;	AGD	55	597230	6305320	Open site	Valid	Modified To (Carved or -		Scarred Tree	
	Contact	Recorders	Bill	Allen					<u>Permits</u>		
13-3-0001	Red Bend;Forbes;	AGD	55	595763	6300898	Open site	Valid	Artefact: -		Open Camp Site	
	Contact	Recorders	ASI	RSYS					Permits		
43-2-0059	Forbes scar tree	GDA	55	591592	6303739	Open site	Valid	Modified To (Carved or -			
	Contact	Recorders	Pet	er Peckham					<u>Permits</u>		
13-2-0067	NHVB-IF1	GDA	55	591940	6310576	Open site	Valid	Artefact: 1			
	Contact	Recorders	02	Ark Environn	nental and Heri	tage Managemen	t,Ms.Morgan Wilcox		<u>Permits</u>		
13-2-0068	NHVB-IF2	GDA	55	591652	6310618	Open site	Valid	Artefact: 1			
	Contact	Recorders					t,Ms.Morgan Wilcox		Permits		
43-2-0069	NHVB-IF3	GDA	55	590610	6310705	Open site	Valid	Artefact: 1			
	Contact	Recorders	7,000	DANGE THE PROPERTY OF THE PROP	INCOMES AND INCOME THE PROPERTY OF THE PROPERT		t,Ms.Morgan Wilcox		<u>Permits</u>		
43-3-0107	Forbes North2	GDA	55	602023	6300801	Open site	Valid	Modified Ti (Carved or			
	Contact	Recorders	Mr	Larry Towne	y,Central Table	lands Local Land	Services - Orange		Permits		
13-2-0081	Mickeys Plain Creek OS-1	GDA	55	587068	6307735	Open site	Valid	Artefact: -			
	Contact	Recorders	02	Ark Environn	nental and Heri	tage Managemen	t,Doctor.Alyce Cameron		Permits		
13-2-0082	Mickeys Plain Creek IF-1	GDA	55	587253	6307612	Open site	Valid	Artefact: -			
	Contact	Recorders	02	Ark Environn	nental and Heri	tage Managemen	t,Doctor.Alyce Cameron	1	<u>Permits</u>		
43-2-0033	Cg-5(refer to 39-2-0038)	AGD	55	588309	6308831	Open site	Deleted	Hearth:1			
	Contact	Recorders	Da	n Witter					<u>Permits</u>		
43-2-0034	Cg-4(refer to site 39-2-0039)	AGD	55	588358	6308740	Open site	Deleted	Hearth:1			
	Contact	Recorders	Da	ı Witter					Permits		
43-2-0035	Cg-3(refer to 39-2-0040)	AGD		588153	6308806	Open site	Deleted	Hearth: 2,.			
43-2-0036	Contact Cg-29(refer to site 39-2-0041)	Recorders AGD		1 Witter 587110	6308928	Open site	Deleted	Artefact: 9	Permits		
13 2 0030	Contact	Recorders		ı Witter	0300720	Opensite	Deleteu	Arteract. 7			
	Contact	Recorders	Dai	1 Witter					<u>Permits</u>		

3-2-0037 Cg- Co 6-3-0015 A-C	eName -1(refer to 39-2-0042) ontact 05-2;Anglesey;	Datum AGD Recorders AGD		<u>Easting</u> 587832	Northing 6309424	Context Open site	Site Status	<u>SiteFeatures</u>	<u>SiteTypes</u>	Reports
<u>Co</u> :6-3-0015 A-C	ontact OS-2:Anglesey:	Recorders		587832	6309424	Onen site				
6-3-0015 A-C	OS-2;Anglesey;		Dan			Opensite	Deleted	Hearth: 1, Artefact:		
<u>Co</u>	A56 050	AGD	-50,000	Witter			2000000	<u>Permits</u>		
			55	591300	6307100	Open site	Valid	Artefact: -	Open Camp Site	
3-3-0064 GT	ontact	<u>Recorders</u>				d Heritage Service		<u>Permits</u>		
	scar tree 1	AGD	55	597318	6304878	Open site	Valid	Modified Tree (Carved or Scarred): 1		
	ontact S Scanlon	Recorders		Graeme Town				Permits		
3-3-0075 Gre	enfell Rd TSR	AGD	55	596167	6300184	Open site	Valid	Modified Tree (Carved or Scarred) : -		
Co	ontact T Russell	Recorders	Mr.C	Graeme Town	ney			<u>Permits</u>		
3-3-0076 Gre	enfell Forbes RD	AGD	55	597291	6297962	Open site	Valid	Modified Tree (Carved or Scarred):		
Co	ontact T Russell	Recorders	Mr.C	Graeme Town	iey			Permits		
3-3-0077 For	rbes Grenfell Rd	AGD	55	597515	6297542	Open site	Valid	Modified Tree (Carved or Scarred):		
Co	ontact T Russell	Recorders	Mr.C	Graeme Town	ney			Permits		
3-3-0078 Gre	enfell Forbes TSR	AGD	55	597836	6296372	Open site	Valid	Modified Tree (Carved or Scarred):		
Co	ontact T Russell	Recorders	Mr.C	Graeme Town	ney			Permits		
3-3-0105 Lau	ura	GDA	55	595950	6302290	Closed site	Valid	Modified Tree (Carved or Scarred) : -		
Co	ontact	Recorders	Mr.L	arry Towne	,Central Table	lands Local Land	Services - Orange	Permits		
3-3-0106 For	rbes South	GDA	55	595972	6302030	Open site	Valid	Modified Tree (Carved or Scarred):		
Co	ontact	Recorders	Mr.L	arry Towne	,Central Table	lands Local Land	Services - Orange	Permits		

APPENDIX



Lachlan River Bridge Modification Project

Aboriginal Due Diligence Assessment Report

Appendix 2 Aboriginal heritage: Unanticipated finds protocol

STOCKINBINGAL TO PARKES REVIEW OF ENVIRONMENTAL FACTORS



APPENDIX 2: ABORIGINAL HERITAGE: UNANTICIPATED FINDS PROTOCOL

An Aboriginal artefact is anything which is the result of past Aboriginal activity. This includes stone (artefacts, rock engravings etc.), plant (culturally scarred trees) and animal (if showing signs of modification; i.e. smoothing, use). Human bone (skeletal) remains may also be uncovered while onsite.

Cultural heritage significance is assessed by the Aboriginal community and is typically based on traditional and contemporary lore, spiritual values, and oral history, and may also take into account scientific and educational value.

Protocol to be followed in the event that previously unrecorded or unanticipated Aboriginal object(s) are encountered:

- 1. If any Aboriginal object is discovered and/or harmed in, or under the land, while undertaking the proposed development activities, the proponent must:
 - a. Not further harm the object;
 - b. Immediately cease all work at the particular location;
 - c. Secure the area so as to avoid further harm to the Aboriginal object;
 - Notify Heritage NSW as soon as practical on 131 555, providing any details of the Aboriginal object and its location; and
 - e. Not recommence any work at the particular location unless authorised in writing by Heritage NSW.
- In the event that Aboriginal burials are unexpectedly encountered during the activity, work must stop immediately, the area secured to prevent unauthorised access and NSW Police and Heritage NSW contacted.
- 3. Cooperate with the appropriate authorities and relevant Aboriginal community representatives to facilitate:
 - a. The recording and assessment of the find(s);
 - b. The fulfilment of any legal constraints arising from the find(s), including complying with Heritage NSW directions; and
 - c. The development and implementation of appropriate management strategies, including consultation with stakeholders and the assessment of the significance of the find(s).
- 4. Where the find(s) are determined to be Aboriginal object(s), recommencement of work in the area of the find(s) can only occur in accordance with any consequential legal requirements and after gaining written approval from Heritage NSW (normally an Aboriginal Heritage Impact Permit).

APPENDIX



Lachlan River Bridge Modification Project

Aboriginal Due Diligence Assessment Report

Appendix 3 Aboriginal heritage: Artefact identification

STOCKINBINGAL TO PARKES REVIEW OF ENVIRONMENTAL FACTORS



APPENDIX 3: ABORIGINAL HERITAGE: ARTEFACT IDENTIFICATION

