

**Horizontal Clearances** 

# Aboriginal Due Diligence Assessment Report

STOCKINBINGAL TO PARKES REVIEW OF ENVIRONMENTAL FACTORS



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View to the north at the Milvale Yard study area.

#### ABORIGINAL DUE DILIGENCE ASSESSMENT REPORT

# STOCKINBINGAL TO PARKES, INLAND RAIL - HORIZONTAL TRACK CLEARANCES

STOCKINBINGAL TO PARKES, NSW
OCTOBER 2021
2-0008-230-EAP-05-RP-0004

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

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#### 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 Inland Rail to complete a Due Diligence archaeological assessment for the proposed horizontal track clearances in several locations located from Milvale to Forbes, NSW. This report examines the proposed works associated with these horizontal track clearances, which are located in the Forbes Shire Council, Weddin Shire Council and Hilltops Council Local Government Areas (LGAs).

The six study areas are located along the 105 kilometre (km) rail easement between Stockinbingal and Parkes.

A search of the Aboriginal Heritage Information Management System (AHIMS) returned no Aboriginal sites within the six study areas.

A visual inspection of the study areas was undertaken by OzArk Director and archaeologist, Dr Jodie Benton, on Tuesday 2 February 2021 and Wednesday 3 February 2021. No Aboriginal sites were recorded.

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 project. This moves the proposal for the horizontal track clearances to the following outcome:

Aboriginal Heritage Impact Permit (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 for the horizontal track clearances without further archaeological investigation under the following conditions:
  - a) All land and ground disturbance activities must be confined to within the study areas, 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) 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.

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#### 1 Introduction

### 1.1 BRIEF DESCRIPTION OF HORIZONTAL TRACK CLEARANCES FOR THE STOCKINBINGAL TO PARKES SECTION OF THE INLAND RAIL

OzArk Environment & Heritage (OzArk) has been engaged by WSP, on behalf of ARTC to complete an Aboriginal Due Diligence heritage assessment for the horizontal track clearances in the Stockinbingal to Parkes section of the Inland Rail. The proposal is in the Forbes Shire Council Local Government Area (LGA), Weddin Shire Council LGA and Hilltops Council LGA (**Figure 1-1**).

#### 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 Project 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 Due Diligence report is relevant to the likely impacts of attaining the horizontal clearances required at specific locations along the Stockinbingal to Parkes section of the Inland Rail project to accommodate the operation of double stacked container trains.

#### 1.3 Proposed Works

**Table 1-1** outlines the proposed works at each of the six horizontal clearance studies areas.

Horizontal Track
Clearance location

Removal of redundant wiring from a water tank adjacent to the track.

Bribbaree Yard
Realignment of approximately 940m of track by up to 300mm and associated drainage works.

Quandialla Yard
Removal of redundant pipework from a water tank adjacent to the track.

Table 1-1: Proposed works at each of the six study areas.

Caragabal Yard	Realignment of approximately 250m of track by up to 30mm.
Wirrinya Yard	Realignment of approximately 520m of track by up to 350mm.
Forbes Station	Realignment of approximately 640m of track by up to 540mm and associated
	drainage works. Trimming of the Forbes Station awning.

#### 1.4 STUDY AREA

The study areas are spread across three LGA districts, spanning 105 km. **Table 1-2** below numbers the study areas from one to six and provides specific details regarding each, noting that they comprise a larger area than the proposed works will cover. The study areas are shown on **Figure 1-2**.

Table 1-2: Study areas.

No.	Horizontal Track Clearance	Description
1	Milvale Yard	Located within a 200 m stretch of railway corridor, which is approximately 38 km northeast of the Temora town centre.
		An northeast of the Termora town centre.
2	Bribbaree Yard	Situated in a 1.2 km section of a railway corridor, the Bribbaree Yard is 45 km
		to the east of Barmedman.
3	Quandialla Yard	Located within a 100 m length of railway corridor and is 286 m south of the
		First Street and Bimbi-Quandialla Road intersection.
4	Caragabal Yard	Located in a 485 m dirt access track and 814 m section of railway corridor, the
		study area is in the centre of the Caragabal township.
5	Wirrinya Yard	Situated just off the south side of Wirrinya Road in a 2.4 km length of railway
		corridor. The centre of Forbes is approximately 37 km to the north.
6	Forbes Station	Spanning an 821 m section of railway, the Forbes Station study area located in
		the town centre of Forbes.

#### 1.5 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).

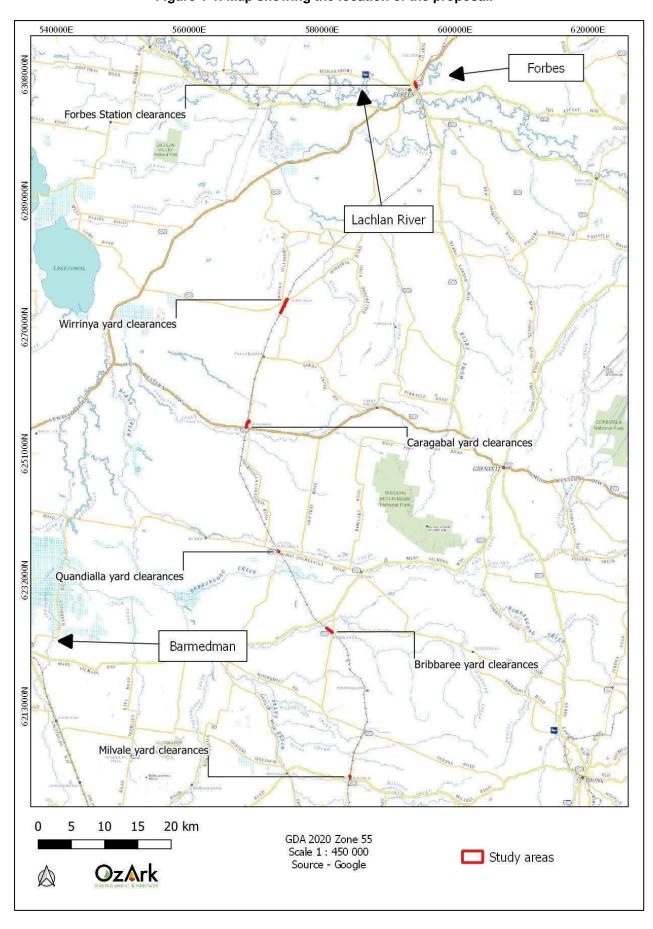


Figure 1-1. Map showing the location of the proposal.

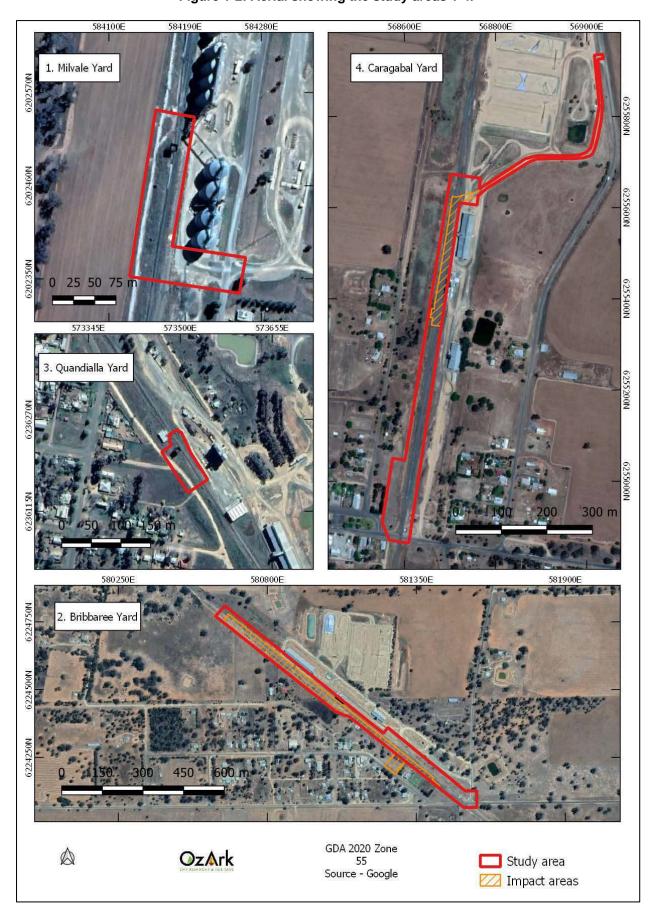


Figure 1-2: Aerial showing the study areas 1-4.

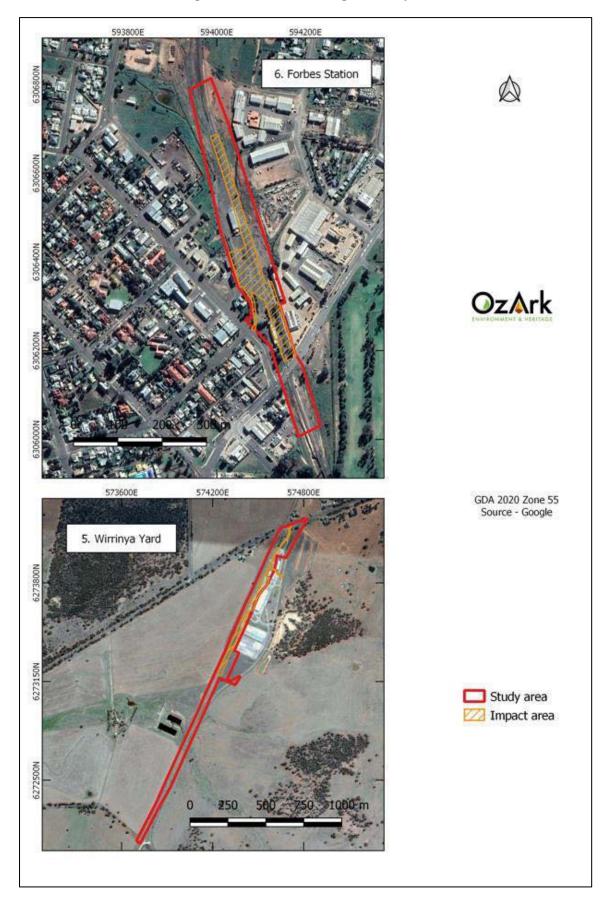


Figure 1-3: Aerial showing the study areas 5-6.

#### 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 disturbance, as heavy earth moving machinery will be required. Horizontal clearances allow double-stacked trains to utilise a railway and require earth disturbing construction. This is not 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.

The sections of the proposed works in each of the seven clearance yards will occur on previously cleared land that contains the existing railway. Therefore, portions of the study areas can be considered as 'disturbed land', however, as there is potential for undisturbed land to be present, the Due Diligence process is required.

In summary, it is determined that the horizontal track clearances for the Stockinbingal to Parkes section of the Inland Rail, will 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.

Item	Reasoning	Answer
Is the activity a Part 3A project declared under section 75B of the EP&A Act?	The proposal is assessed under Part 5 of the EP&A Act.	No
Is the activity exempt from the NPW Act or NPW Regulation?	The proposal is not exempt under this Act or Regulation.	No
Do either or both of these apply: Is the activity in an Aboriginal place? Have previous investigations that meet the requirements of this Code identified Aboriginal objects?	The activity will not occur in an Aboriginal place.  No previous investigations have been conducted.	No
Is the activity a low impact one for which there is a defence in the NPW Regulation?	The proposal is not a low impact activity for which there is a defence in the NPW Regulation.	No
Is the activity occurring entirely within areas that are assessed as 'disturbed lands'?	The proposal is not within areas of high modification.	No
Due	Diligence Code of Practice assessment required	·

Due Diligence Code of Practice assessment required

### 2.3 APPLICATION OF THE DUE DILIGENCE CODE OF PRACTICE TO HORIZONTAL TRACK CLEARANCES

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 realignment of sections of the existing 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. Some of the clearance yards contain trees and a visual inspection is required in order to determine whether they are mature and contain 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.

Multiple searches of the AHIMS database were completed on 25 January 2021. The AHIMS searches were divided into the individual study areas, as AHIMS does not allow a single search over such a large area.

The first search encompassed a five kilometre square (km²) area centred on the Milvale Yard clearance study area (GDA Zone 55, eastings: 579183 – 589183, northings: 6197505 – 6207505, with no buffer). The search returned 5 Aboriginal sites and no Aboriginal places.

The second search covered a five km<sup>2</sup> area centred on the Bribbaree Yard clearance study area (GDA Zone 55, eastings: 576065 – 586065, northings: 6219452 – 6229452, with no buffer). The search returned 1 Aboriginal site and no Aboriginal places.

The third search covered a five km<sup>2</sup> area centred on the Quandialla Yard clearance study area (GDA Zone 55, eastings: 568524 – 578524, northings: 6231202-6241202, with no buffer). The search returned no Aboriginal sites or places.

The fourth search covered a five km<sup>2</sup> area centred on the Caragabal Yard clearance study area (GDA Zone 55, eastings: 563655 – 573655, northings: 6250271 – 6260271, with no buffer). The search returned no Aboriginal sites or places.

The fifth search covered a five km<sup>2</sup> area centred on the Wirrinya Yard clearance study area (GDA Zone 55, eastings: 569386 – 579386, northings: 6268549 – 6278549, with no buffer). The search returned 1 Aboriginal site and no Aboriginal places.

The final search covered a ten km<sup>2</sup> area centred on the Forbes area to include the Forbes Station study area (GDA Zone 55, eastings: 584831 – 604831, northings: 6294543 – 6314543, with no buffer). The search returned 48 Aboriginal sites and no places.

Modified trees are the most frequent site type across the six AHIMS searches, comprising just over half of all the previously recorded sites in the area. This is followed by isolated finds (23.6%), artefact scatters (7.4%), hearths (5.5%), hearth and artefact scatter (3.6%), burials (3.6%), modified tree and burial (1.8%), and finally a single massacre site (1.8%). The high density of sites within the Forbes area in comparison to the other clearance study areas further south, can be linked to the number of local development-driven archaeological studies, as sites tend to be recorded as a result of assessments ahead of project developments, and these are concentrated in built up areas.

**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)	29	52.7
Isolated find	13	23.6
Artefact scatter	4	7.4
Hearth	3	5.5
Hearth and artefact scatter	2	3.6
Burial	2	3.6
Modified tree (carved or scarred) and burial	1	1.8
Massacre	1	1.8
Total	55	100

From the AHIMS data provided, a predictive model for site location in regard to the current study areas can be formulated. The most frequent site type in the area, modified trees, are typically recorded in dense woodland areas or previously cleared woodlands comprising of mature native tree species. Modified trees are also within proximity to a natural water sources such as creeks or rivers. All of the study areas are located within 700 m of a natural waterway.

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. The two burials within the AHIMS search area for this project are located in a kink of the Bocobidgle Creek on a terraced landform. Using this information, burials within the study areas remain unlikely, due to the significant disturbance they have undergone as a result of agricultural activities and rail infrastructure.

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

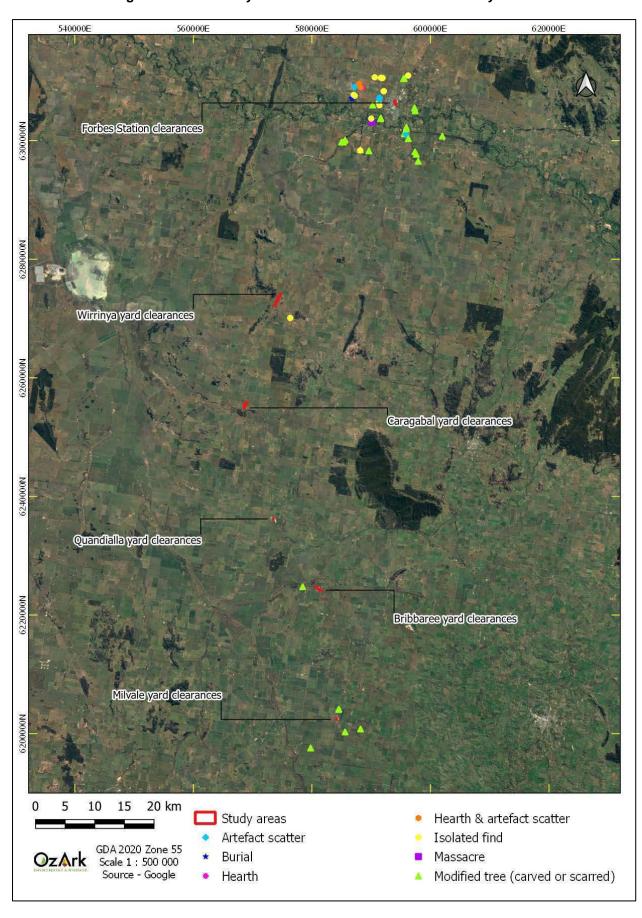


Figure 2-1: Previously recorded sites in relation to the study area.

#### 2.3.3 Step 2b

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

## Yes, there are other sources of information available, particularly around the Forbes township.

The greater area of Forbes has had numerous previous archaeological and heritage assessments conducted that can assist in determining potential Aboriginal cultural values present within some of the study areas.

According to Tindale's (1974) map of tribal boundaries, the Forbes area falls within the central area of the Wiradjuri country, as defined by the limits of the Wiradjuri 'tribal'/language group. According to Horton (1994), Wiradjuri country extends further south and west to encompass Griffith and Wagga Wagga, as well as the Lachlan and Murrumbidgee Rivers. The Wiradjuri are typically described as a large language group or tribal nation extending over a considerable area of New South Wales and comprising numerous sub-groups.

Within the Wiradjuri region, the presence of Aboriginal people in the Darling Basin has been dated to 40,000 years ago (Hope 1981 as cited in Haglund 1985). A spread east into the mountains is thought to have occurred between 14,000 to 12,000 years ago. The most significant reports and documents dealing with the archaeological heritage of the Lachlan Valley are Bell (1982), Paton and Hughes (1984), Silcox (1986), Huys and Johnston (1995) and Kelton (1996). Bell (1982) recorded carved trees throughout NSW, with three examples located in the vicinity of Forbes. Carved trees are concentrated along major rivers such as the Lachlan River, where the characteristic iconography was a zig-zag motif (Bell 1982). Open sites in Central Western NSW are dominated by quartz and chert artefacts and are concentrated along waterways (Paton and Hughes 1984; Silcox 1986). It is argued that this reflects a settlement pattern focussed on the Lachlan River and its wetlands.

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).

Also during the 1990s, Huys and Johnston (1995) identified seven (7) 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.

Finally, 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.

#### 2.3.4 Step 2c

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

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 areas are typically comprised of flat land all within 700 m from the closest water way. Some study areas are within 200 m of waters and also could be on land that is not disturbed.

In addition, the archaeological review presented in **Section 2.3.3** indicates that the study areas have potential for Aboriginal sites to be recorded. Isolated finds, artefact scatters and modified trees would be the most expected site types if any are 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 be avoided?

There are no previously recorded Aboriginal sites located within the six clearance yard study areas.

Therefore, yes, harm to Aboriginal objects listed on AHIMS will be avoided by the proposal at each of the horizontal track clearance locations.

#### 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, there are no Aboriginal objects within the study areas.

A visual inspection of the study areas was undertaken by OzArk Director and archaeologist, Dr Jodie Benton, on Tuesday 2 February and Wednesday 3 February 2021.

The study areas were assessed using pedestrian transects, focusing on the portions of the study area that either intersect waterways, or provided good ground surface visibility (GSV). The majority of vegetation in each of the study areas comprised dense weeds and grasses. The GSV of all study areas was low due to not only the thick grass and weeds, but also the railway ballast that was screed across the land adjacent to the rail line, often extending all the way to corridor fences. Areas of exposure were examined, however, the potential for Aboriginal objects and sub surface deposits was determined as low due to the significant ground surface disturbance from the construction of the railway.

As mentioned, the inspection focused on land with the greatest GSV, which were either nearby access tracks or simple exposures in the weed or grass. **Figure 2-2** shows the general state and condition of the study areas, while **Figure 2-3** shows survey coverage across the seven study areas.

Figure 2-2: Landscape and disturbances inside the study areas.



1. View to the north of the Milvale study area showing weed and grass cover as well as past disturbances.



2. View of the disturbances in the Bribbaree yard, culverts and previous construction of the railway line.



3. View to the north of the Quandialla yard showing 100% GSV on an access adjacent to the railway.



4. View to the south at Caragabal yard showing high GSV on the access track eastern of the railway line.



5. View to the south at the Wirrinya yard showing ground disturbance immediately adjacent to the railway line, where the ground surface has been excavated to raise the railway line.



6. View to the north at Forbes Station showing the flat landform with significant disturbance due to past construction of railway infrastructure.

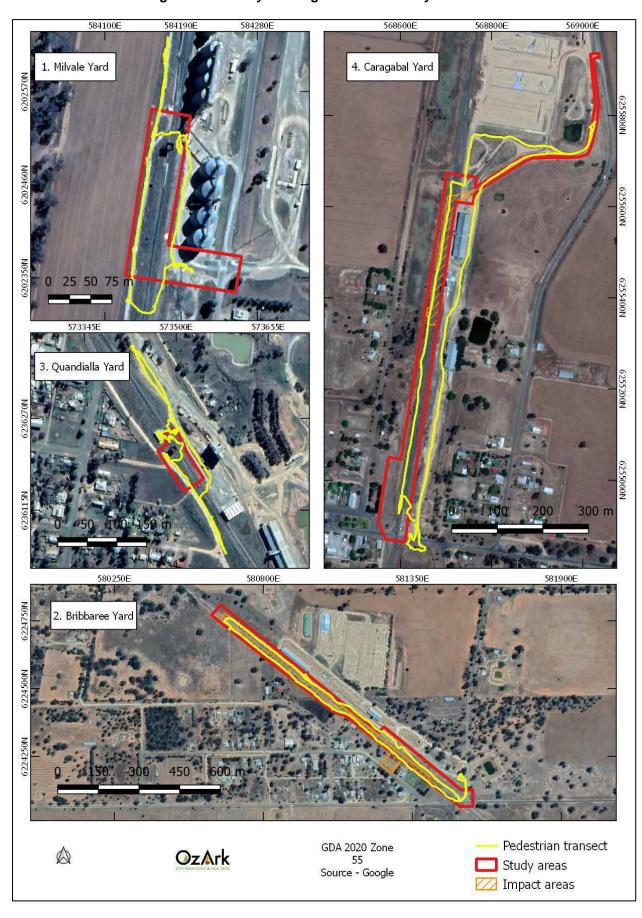


Figure 2-3: Survey coverage within the study areas 1-4.

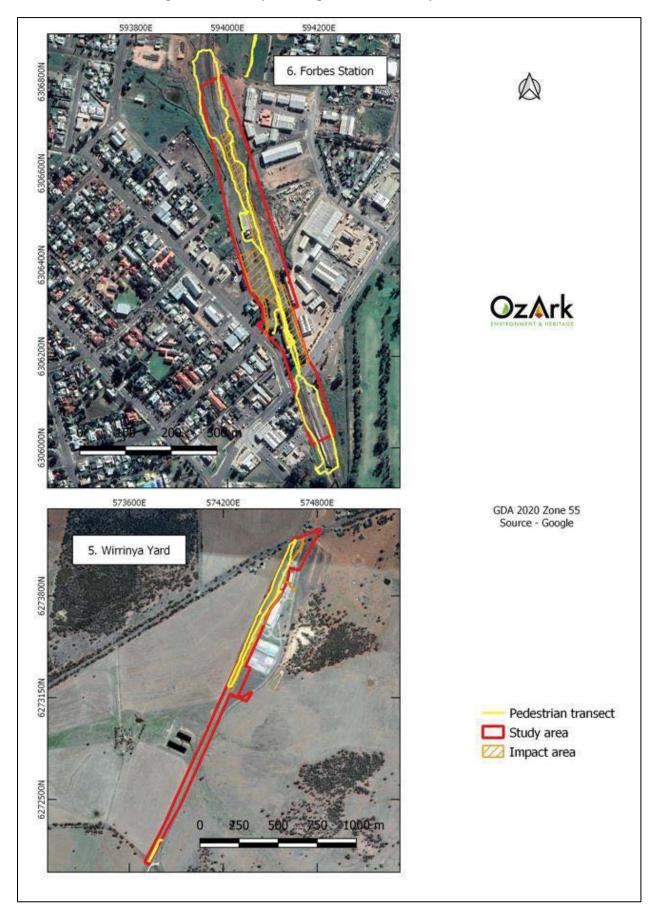


Figure 2-4: Survey coverage within the study areas 5-6.

#### **Discussion**

No Aboriginal sites were recorded during the survey of any of the horizontal clearance yards. The lack of sites is most likely due to the highly disturbed nature of each of the horizontal clearance study areas, as they have been subject to impacts from agriculture to railway construction since colonial occupation.

#### 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 to upgrade the railway line to support double-stacked trains. The ground surface was assessed as having clear and observable evidence of previous human disturbance.  The proposal will impact mature, native vegetation, although no culturally modified trees will be impacted.	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 areas.  No landscape features in the study areas indicate the likely presence of Aboriginal objects.	No
Will the activity impact Aboriginal objects or landforms with archaeological potential?	There are no known items of Aboriginal significance present in the study areas, and landforms with identified archaeological sensitivity are not present.	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 areas. It is assessed that there is a low likelihood of there being subsurface archaeological deposits within the study areas.	No
	AHIP not necessary. Proceed with caution.	

#### 3 MANAGEMENT RECOMMENDATIONS

The undertaking of the Due Diligence process resulted in the conclusion that the proposed works 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 for the horizontal track clearances without further archaeological investigation under the following conditions:
  - a) All land and ground disturbance activities must be confined to within the study areas, 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) 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.

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Burra Charter 2013 International Council on Monuments and Sites 2013. The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance. **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. Horton 1994 Horton, D (ed). 1994 The Encyclopedia of Aboriginal Australia: Aboriginal and Torres Strait Islander history, society and culture. Aboriginal Studies Press for the Australian Institute of Aboriginal and Torres Strait Islander Studies. Huys and Johnston 1995 Huys S. and Johnston. 1995. An Archaeological Survey of Areas Between Forbes and Lake Cowal. 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. An Archaeological Survey for the Proposed "The Mount" Cattle Feedlot Extensions, Near Forbes, NSW. 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. An Archaeological Survey on the Proposed Calarie Mining Lease Application, Calarie, Near Forbes. Central West Archaeological and Heritage Services Pty. Ltd., Cowra. Kelton 1996 Kelton J. 1996. Documentation of Aboriginal Scarred Trees in the Lachlan Valley. 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. Guide to Investigating, Assessing
	and Reporting on Aboriginal Cultural Heritage in New South Wales.
	Department of Environment, Climate Change and Water, Sydney.
Tindale 1974	Tindale, A. Aboriginal Tribes of Australia. University of California Press.
White 1986	White I. 1986. Dimensions of Wiradjuri. Unpublished thesis. Department of
	Prehistory and Anthropology, Australian National University.

# APPENDIX

**Horizontal Clearances** 

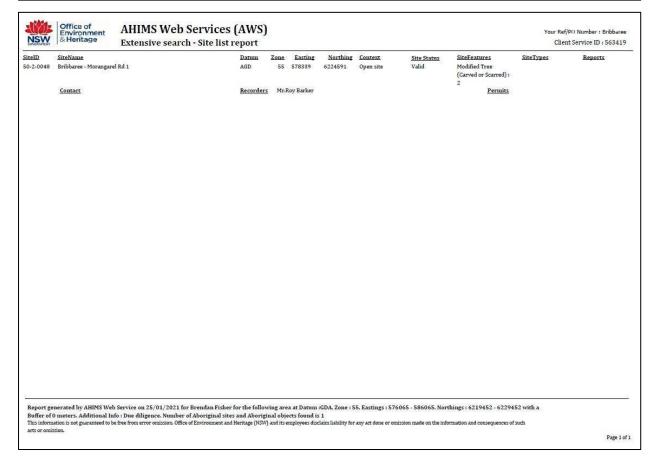
# Aboriginal Due Diligence Assessment Report

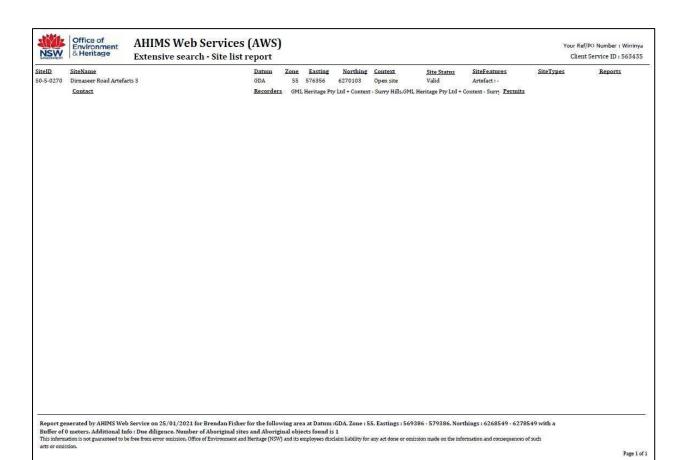
**Appendix 1** Aboriginal Heritage Information Management System search results



#### **APPENDIX 1: AHIMS SEARCH RESULTS**

NSW	Office of Environment & Heritage	AHIMS Web Service Extensive search - Site l									f/PO Number : Milvale Service ID : 563404
iteID 3-5-0007	SiteName Scarred Tree 4;		Datum AGD	Zone 55	Easting 585500	Northing 6200100	Context Open site	<u>Site Status</u> Valid	SiteFeatures Modified Tree (Carved or Scarred):	SiteTypes Scarred Tree	Reports
	Contact		Recorders	Doc	tor.Jillian Co	nber.Allan Goo	dwin.Mr.Steve V	Voodhall	Permits		
0-2-0003	Geraldra Temora		AGD		579683	6197389	Open site	Valid	Modified Tree (Carved or Scarred): -, Burial:-	Burial/s,Carved Tree	65,1216
0-2-0020	Contact Milvale Tubbul 1		Recorders AGD		584410	6203902	Open site	Valid	Permits  Modified Tree (Carved or Scarred):		98226
	Contact		Recorders	And	annological P	ick Accorrman	Countries (ADAS	Mu Gilor (dun ID#1	2832) Hamm Permits		
0-2-0021	Milvale Tubbul 2		AGD		584450	6203928	Open site	Valid	Modified Tree (Carved or Scarred):		98226
	Contact		Recorders	Arcl	naeological R	isk Assessmen	Services (ARAS	),Mr.Giles (dup ID#1	2832) Hamm Permits		
0-2-0019	Milvale		AGD	55	588100	6200600	Open site	Valid	Modified Tree (Carved or Scarred):		98226
	0 meters. Additional In	b Service on 25/01/2021 for Brendan Fi fo : Due diligence. Number of Aborigina se free from error omission. Office of Environme	l sites and Aborigi	nal obje	ects found is	5					
		e tree troth error omission. Onice of Environme	nt and Heritage (NSW)	and its e	ampioyees disc	taim naminty for	any act done or on	nission made on the ini	ormation and consequences or s	uch	





SiteID 13-3-0038	SiteName Bundaburrah Creek Massacre	Datum	Zone	Easting 590000	Northing 6303000	Context Open site	Site Status Valid	SiteFeatu Conflict:		SiteTypes Massacre	Reports
13-3-0030		Recorders				open site	valid	Commer.	Permits	riassacre	
13-2-0047	Contact Morebain Burial	AGD	ALCOHOL:	drienne How 586655	6307004	Open site	Valid	Burial: 1	Permits		98707
13-2-0017					0307004	Open site	valia	Din iai - 1			30707
3-2-0048	Contact Morebain Man (relocated)	Recorders AGD		Hutchins 586626	6306918	Open site	Valid	Burial: 1	Permits		98707
13-2-0040					0300710	open site	valid	Durian: 1	-		38707
3-2-0055	Contact Dog & Duck Lagoon	Recorders AGD		Hutchins 588088	6298313	Open site	Valid	Hearth:-	Permits		
13-2-0055					6298313	Open site	valid	neartn:-			
	Contact T Russell	Recorders		arry Towney				Modified T	Permits		
13-2-0056	Dog & Duck Lagoon 1	AGD	55	588088	6298316	Open site	Valid	10-10-10-10-10-10-10-10-10-10-10-10-10-1	Scarred):		
	Contact T Russell	Recorders	Mr.L	arry Towney					Permits		
3-2-0057	Dog & Duck Lagoon 3	AGD	55	588057	6298179	Open site	Valid	Artefact:			
	Contact T Russell	Recorders	Mr.L	arry Towney					Permits		
13-2-0058	Dog & Duck Lagoon 5	AGD	55	589520	6298131	Open site	Valid	Modified 7 (Carved or 1	ree Scarred):		
	Contact T Russell	Recorders	Mr.L	arry Towney					Permits		
3-3-0031	C-IF-1 (Forbes)	AGD	55	596140	6310810	Open site	Valid	Artefact:		Isolated Find	3543
	Contact	Recorders	Cent	ral West Arcl	naeological an	d Heritage Service	es Pty Ltd		Permits		
13-2-0063	Forbes-Jemalong Scarred Tree 1	GDA	55	590261	6306043	Open site	Valid	Modified 7 (Carved or	Tree : Scarred) :		
	Contact	Recorders	OzAr	k Environme	ental and Heri	tage Management	Mr.Toivo Kim Tuov	inen	Permits		
13-3-0041	RB-ST-1	AGD	55	595590	6301200	Open site	Valid	Modified 7 (Carved or	ree Scarred):	Scarred Tree	
	Contact	Recorders	Cent	ral West Arcl	naeological an	d Heritage Service	es Pty Ltd		Permits		
3-2-0031	GS-IF-1	AGD	55	589910	6303550	Open site	Valid	Artefact:		Isolated Find	97833
	Contact	Recorders	Cent	ral West Arcl	naeological an	d Heritage Service	es Pty Ltd		Permits		
13-2-0032	GS-ST-1	AGD	55	591530	6303650	Open site	Valid	Modified 7 (Carved or	ree Scarred):	Scarred Tree	97833
	Contact	Recorders	Cent	ral West Arcl	naeological an	d Heritage Service	es Pty Ltd		Permits		
43-3-0039	RB-ST-2	AGD	55	595600	6301100	Open site	Valid	Modified 7 (Carved or	Tree : Scarred) :	Scarred Tree	
	Contact	Recorders	Cent	ral West Arcl	naeological an	d Heritage Service	es Pty Ltd	-	Permits		

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
43-3-0040	RB-ST-3	AGD	55	595500	6301000	Open site	Valid	Modified Tree (Carved or Scarred):	Scarred Tree	A CONTRACTOR OF THE CONTRACTOR
	Contact	Recorders	Cen	tral West Arc	haeological an	d Heritage Service	es Pty Ltd	Permits		
43-3-0032	C-ST-1;	AGD	55	595370	6310330	Open site	Valid	Modified Tree (Carved or Scarred):	Scarred Tree	
	Contact	Recorders	Cen	tral West Arc	haeological an	d Heritage Service	es Pty Ltd	Permits		
43-3-0033	C-ST-3;	AGD	55	595370	6310330	Open site	Valid	Modified Tree (Carved or Scarred):	Scarred Tree	
	Contact	Recorders	Cen	tral West Arc	haeological an	d Heritage Service	es Pty Ltd	<u>Permits</u>		
43-3-0034	C-ST-2;	AGD	55	595480	6310330	Open site	Valid	Modified Tree (Carved or Scarred):	Scarred Tree	
	Contact	Recorders	Cen	tral West Arc	haeological an	d Heritage Servic	es Pty Ltd	Permits		
13-3-0035	Toms Lagoon:	AGD	55	597210	6305380	Open site	Valid	Modified Tree (Carved or Scarred):	Scarred Tree	
	Contact	Recorders	LW	oods	Transcent of the			<u>Permits</u>	1000	
43-5-0008	Scarred Tree 3;	AGD	55	585500	6299950	Open site	Valid	Modified Tree (Carved or Scarred):	Scarred Tree	
	Contact	Recorders				odwin,Mr.Steve W		Permits		
13-5-0009	Scarred Tree 2;	AGD	55	585200	6299600	Open site	Valid	Modified Tree (Carved or Scarred):	Scarred Tree	
	Contact	Recorders	Doc	tor.Jillian Co	mber,Allan Goo	odwin		<u>Permits</u>		
13-5-0010	Scarred Tree 1;	AGD	55	584900	6299600	Open site	Valid	Modified Tree (Carved or Scarred):	Scarred Tree	
	Contact	Recorders	Doc	tor.Jillian Co	nber,Allan Goo	odwin		Permits		
3-2-0022	A-IF-2;	GDA	55	592122	6308349	Open site	Valid	Artefact : -	Isolated Find	3082
	Contact	Recorders	Cen	tral West Arc	haeological an	d Heritage Service	es Pty Ltd,OzArk En	vironmental as Permits		
13-2-0023	A-IF-3;	AGD	55	591170	6306200	Open site	Valid	Artefact:-	Isolated Find	3082
	Contact	Recorders	Cen	tral West Arc	haeological an	d Heritage Servic	es Pty Ltd	<u>Permits</u>		
3-2-0024	A-IF-4;	AGD	55	591300	6305800	Open site	Valid	Artefact:-	Isolated Find	3082
	Contact	Recorders	-			d Heritage Service		<u>Permits</u>	5. NO 50 (18 NO 50	1734-7701-21
	A-OS-1;	GDA	55	591381	6306991	Open site	Valid	Artefact : -	Open Camp Site	3082

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatur	es	SiteTypes	Reports
	Contact	Recorders	Centr	al West Arc	haeological an	d Heritage Service	s Pty Ltd,OzArk Envi	ronmental ar	Permits		
43-2-0026	A-IF-1;	AGD	55	592030	6308170	Open site	Valid	Artefact:-		Isolated Find	3082
	Contact	Recorders	Centr	al West Arc	haeological an	d Heritage Service	s Pty Ltd		Permits		
43-2-0028	Toms Lagoon ST 2;	AGD	55	597230	6305320	Open site	Valid	Modified T (Carved or		Scarred Tree	
	Contact	Recorders	Bill A	llen					Permits		
43-3-0001	Red Bend;Forbes;	AGD	55	595763	6300898	Open site	Valid	Artefact:-		Open Camp Site	
	Contact	Recorders	ASRS	YS					Permits		
43-2-0059	Forbes scar tree	GDA	55	591592	6303739	Open site	Valid	Modified T (Carved or	3333		
	Contact	Recorders	Peter	Peckham					Permits		
43-2-0067	NHVB-IF1	GDA	55	591940	6310576	Open site	Valid	Artefact: 1			
	Contact	Recorders	OzAr	k Environm	ental and Heri	tage Management.	Ms.Morgan Wilcox		Permits		
43-2-0068	NHVB-IF2	GDA	55	591652	6310618	Open site	Valid	Artefact: 1			
	Contact	Recorders	OzAr	k Environm	ental and Heri	tage Management.	Ms.Morgan Wilcox		Permits		
43-2-0069	NHVB-IF3	GDA	55	590610	6310705	Open site	Valid	Artefact: 1			
	Contact	Recorders	OzAr	k Environm	ental and Heri	tage Management.	Ms.Morgan Wilcox		Permits		
43-3-0107	Forbes North2	GDA		602023	6300801	Open site	Valid	Modified T (Carved or	ree		
	Contact	Recorders	Mr.La	rry Towner	Central Table	lands Local Land S	Services - Orange	13	Permits		
43-2-0081	Mickeys Plain Creek OS-1	GDA		587068	6307735	Open site	Valid	Artefact: -			
	Contact	Recorders	OzAr	k Environm	ental and Heri	tage Management.	Doctor.Alyce Camero	in .	Permits		
43-2-0082	Mickeys Plain Creek IF-1	GDA		587253	6307612	Open site	Valid	Artefact:-			
	Contact	Recorders	OzAr	k Environm	ental and Heri	tage Management.	Doctor Alyce Camero	n	Permits		
43-2-0033	Cg-5(refer to 39-2-0038)	AGD		588309	6308831	Open site	Deleted	Hearth: 1	-		
	Contact	Recorders	Dan V	Vitter					Permits		
43-2-0034	Cg-4(refer to site 39-2-0039)	AGD	55	588358	6308740	Open site	Deleted	Hearth: 1			
	Contact	Recorders	Dan V	Witter					Permits		
43-2-0035	Cg-3(refer to 39-2-0040)	AGD	55	588153	6308806	Open site	Deleted	Hearth: 2,	Artefact:		
	Contact	Recorders	NAME OF TAXABLE PARTY.	Vitter	C-100000000000		and Assert Co.		Permits		
43-2-0036	Cg-29(refer to site 39-2-0041)	AGD	5750	587110	6308928	Open site	Deleted	Artefact: 9			
	Contact	Recorders	Dan V	Witter					Permits		

SiteID	SiteName		Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
43-2-0037	Cg-1(refer to 39-2-0042	)	AGD		587832	6309424	Open site	Deleted	Hearth: 1, Artefact:		
26-3-0015									6		
	Contact		Recorders		Witter	C005400		** 1: 1	Permits	0 0 0	
	A-OS-2;Anglesey;		AGD		591300	6307100	Open site	Valid	Artefact : -	Open Camp Site	
43-3-0064	Contact GT scar tree 1		Recorders AGD		ral West Ard 597318	haeological an 6304878	d Heritage Service Open site	s Pty Ltd Valid	Permits Modified Tree		
43-3-0064	G1 Scar tree 1		AGD	55	59/318	6304878	Open site	vand	(Carved or Scarred):		
	Contact S Scanlo	n	Recorders	130000000	raeme Town		Charles States and	100000	Permits	4	
43-3-0075	Grenfell Rd TSR		AGD	55	596167	6300184	Open site	Valid	Modified Tree (Carved or Scarred):		
	Contact T Russel	19	Recorders	Mr.C	raeme Tow	ney		1000	Permits		
43-3-0076	Grenfell Forbes RD		AGD	55	597291	6297962	Open site	Valid	Modified Tree (Carved or Scarred):		
	Contact T Russel	1	Recorders	Mr.C	raeme Town	ney			Permits		
43-3-0077	Forbes Grenfell Rd		AGD	55	597515	6297542	Open site	Valid	Modified Tree (Carved or Scarred) : -		
	Contact T Russel	1	Recorders	Mr.C	raeme Tow	ney			Permits		
43-3-0078	Grenfell Forbes TSR		AGD	55	597836	6296372	Open site	Valid	Modified Tree (Carved or Scarred):		
	Contact T Russel	1	Recorders	Mr.Graeme Towney					Permits		
43-3-0105	Laura		GDA	55	595950	6302290	Closed site	Valid	Modified Tree (Carved or Scarred):		
	Contact		Recorders	Mr.L	arry Towne	y,Central Table	lands Local Land S	Services - Orange	Permits		
43-3-0106	Forbes South		GDA	55	595972	6302030	Open site	Valid	Modified Tree (Carved or Scarred):		
	Contact		Recorders	Mr.L	arry Towne	y,Central Table	lands Local Land	Services - Orange	Permits		

# 

Horizontal Clearances

# Aboriginal Due Diligence Assessment Report

**Appendix 2** Aboriginal heritage: Unanticipated finds protocol



#### 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

**Horizontal Clearances** 

# Aboriginal Due Diligence Assessment Report

**Appendix 3** Aboriginal heritage: Artefact identification

STOCKINBINGAL TO PARKES REVIEW OF ENVIRONMENTAL FACTORS



#### **APPENDIX 3: ABORIGINAL HERITAGE: ARTEFACT IDENTIFICATION**

