



Premise

ENEPARC AUSTRALIA

Dunedoo

ABORIGINAL HERITAGE DUE DILIGENCE ASESMENT

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1. INTRODUCTION

1.1 Background

Premise has been commissioned by Eneparc Australia to prepare a Statement of Environmental Effects (SEE) to accompany a Development Application (DA) for proposed electricity generating works (5 Megawatt (MW) Solar Farm) at 126 Lawson Park Road, Dunedoo (the study area). The study area is located within the Warrumbungle Shire Council (WSC) Local Government Area.

As part of the DA an Aboriginal Heritage due diligence assessment has been prepared in accordance with the Department of Climate Change and Water (DECCW, 2010) [formerly Office of Environment and Heritage (OEH) now Heritage NSW] guidelines *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales*.

The aim of the guidelines is to assist individuals and organisations to exercise due diligence when carrying out activities that may harm Aboriginal objects. This assessment includes recommendations regarding Aboriginal heritage constraints for the proposed works.

1.2 Site Locality

The site is located approximately 2.8km north west of Dunedoo in New South Wales, a regional town between Dubbo to the south west and Muswellbrook to the east in the central western region of NSW. The site is legally defined as Lot 78 in DP 754309 and is referred to as 126 Lawson Park Road.

The site is located within the Warrumbungle Local Government Area (LGA) in the Parishes of Warrie and Murrumbidgee and County of Lincoln and is located within the boundary of the Dubbo Local Aboriginal Land Council (LALC).

The Talbragar River is located south of the study area, traversing the southern boundary of the site and flows to the east. The land is currently zoned RU1 – Primary Production. Land in the vicinity is predominately used for agricultural purpose, including grazing and cropping.

1.3 Study area

Lot 78 DP 754309 is bisected by Lawson Park Road. The proposed area of impact (study area) is rectangular in shape and is located in the northernmost portion of the site with a southern frontage to Lawson Park Road which intersects with Digilah Road in the west, providing access into Dunedoo. The site has a total area of approximately 180 hectares, of which the proposed solar farm would be anticipated to occupy a footprint of approximately 23.8 hectares.

The site is relatively flat and has been subject to extensive ground disturbance. At the time this report was prepared, the study area represents a bare cropping paddock, used for grazing cattle. Young tree plantings align with the eastern and western boundary. Two farm dams are located on the site, one on the northern boundary and one on the south western boundary.

The study area and site locality is shown in **Figure 1**.

1.4 Authorship and acknowledgments

This report was written by Latisha Ryall (Archaeologist, Premise). Management review was provided by Daniel Drum (Environmental Manager, Premise). The site inspection was undertaken by Latisha Ryall (Archaeologist, Premise) on 14 July 2022.

1.5 Report limitations

This report presents the results of an Aboriginal heritage due diligence assessment only. Aboriginal community consultation was not undertaken for this assessment.

Figure 1 – Study Area



LEGEND

-  Subject site
-  Mapped waterbodies
-  Development area
-  Mapped waterways
-  Cadastre

1.6 Proposed works

Eneparc proposed to develop electricity generating works in the form of a 5MW solar farm on the subject site. A solar farm is a form of electricity generating works as defined by the LEP.

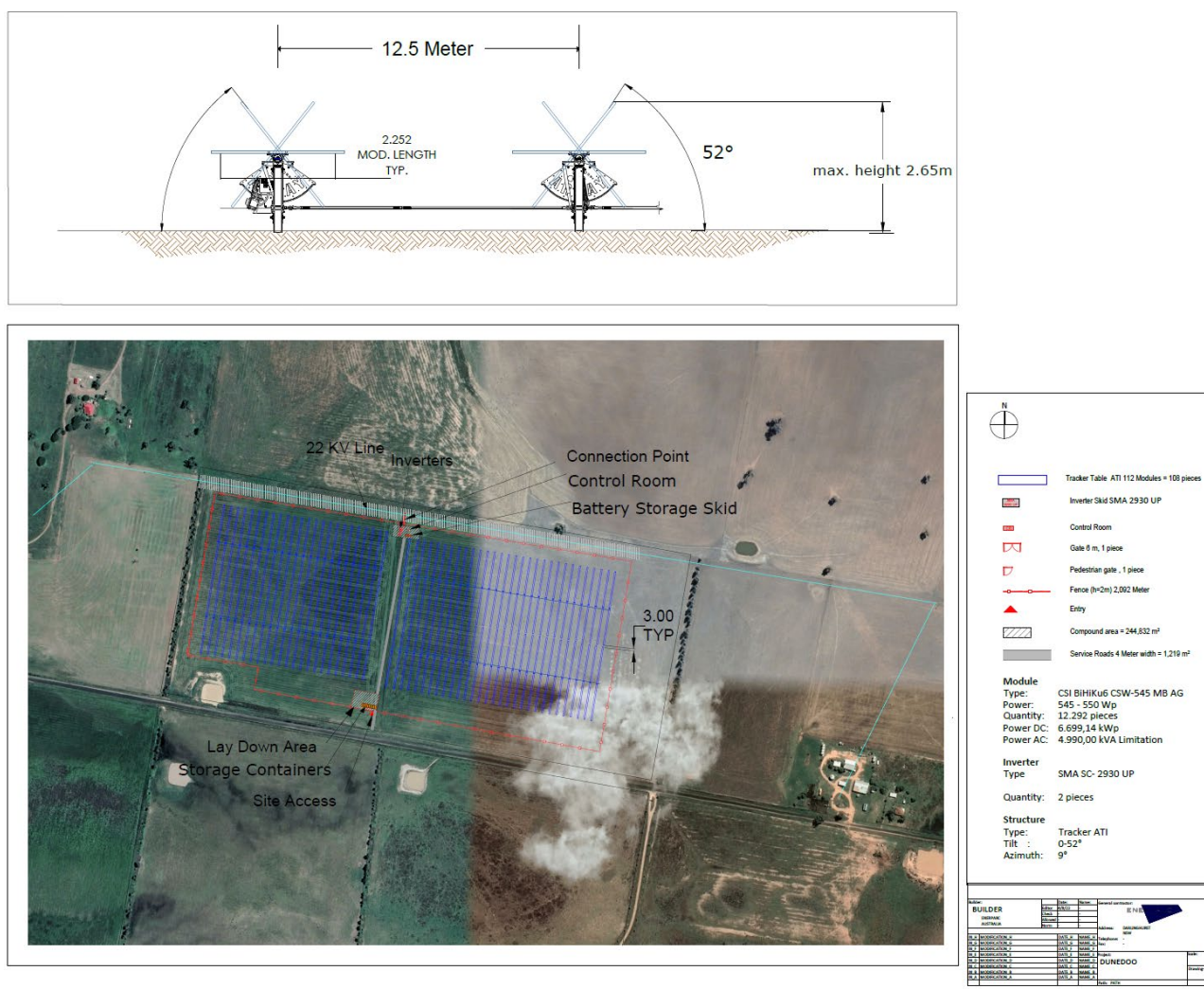
The proposed development would consist of an area of approximately 3,549m² occupying the majority of the site, focused in the north western portion of the site. It includes access from a central point along the site's boundary to the northern side of Lawson Park Road, leading to a secure gated entry which forms part of a man-proof fence around the facility.

Beyond the site access, the internal road leads to a lay down area and storage containers, the solar arrays and, near the northern boundary of the site, a battery storage skid, control room and connection to the 22kv overhead power line.

Approximately 2,051 poles would be distributed evenly across 12,292 modules over the site. The area of the road (304m x4m) would consist of approximately 1,219m² with the top laydown area consisting of 1,046m² and the bottom laydown area consisting of 1.329m²

Proposed works layout are shown in **Figure 2**.

Figure 2 – Proposed works layout



2. LEGISLATIVE CONTEXT

2.1 National Parks & Wildlife Act 1974

The National Parks & Wildlife Act 1974 (NP&W Act) provides statutory protection for all Aboriginal 'objects' (consisting of any material evidence of the Aboriginal occupation of NSW) and for 'Aboriginal Places' (areas of cultural significance to the Aboriginal community).

Under Section 86 of the NP&W Act, Aboriginal objects are afforded automatic statutory protection in NSW whereby it is an offence to:

'destroy, deface or damage the object or place, or.... move the object from the land on which it had been situated...'

The NP&W Act defines an Aboriginal 'object' as:

'any deposit, object or material evidence (not being a handicraft for sale) relating to the Aboriginal habitation of the area that comprises New South Wales, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction and includes Aboriginal remains.'

A due diligence assessment should take reasonable and practicable steps to ascertain whether there is a likelihood that Aboriginal sites will be disturbed or impacted during the proposed development. If it is assessed that Aboriginal sites exist or have a likelihood of existing within the development area and may be impacted by the proposed development, further archaeological investigations may be required along with an Aboriginal Heritage Impact Permit (AHIP). If it is found to be unlikely that Aboriginal sites exist within the study area and the Due Diligence Assessment has been conducted in accordance with the *Due Diligence Code of Practice* (DECCW 2010), proposed work may proceed without an AHIP.

The Due Diligence Code which set out the steps to identify whether or not Aboriginal objects are, or are likely to be, present in an area, were introduced in October 2010 by the Department of Environment, Climate Change and Water (DECCW 2010), formerly OEH now Heritage NSW. The aim of the guidelines is to assist individuals and organisations to exercise due diligence when carrying out activities that may harm Aboriginal objects.

This due diligence assessment seeks to comply with the guidelines and regulations associated with the NP&W Act, by assisting the proponent in meeting their obligations under the NP&W Act.

2.2 Environmental Planning & Assessment Act (1979)

The *Environmental Planning & Assessment Act 1979* (EP&A Act) is administered by the Department of Planning, Industry and Environment (DPIE) and provides planning controls and requirements for environmental assessment in the development approval process. The EP&A Act has three main parts of direct relevance to Aboriginal cultural heritage. Namely, Part 3 which governs the preparation of planning instruments, Part 4 which relates to development assessment and consent process for local government (consent) authorities and Part 5 which relates to infrastructure and environmental impact assessment activity approvals by governing (determining) authorities.

2.3 Native Title Act 1994

The *Native Title Act 1994* was introduced to work in conjunction with the *Commonwealth Native Title Act 1993*. Native Title claims, registers and Indigenous Land Use Agreements are administered under the Act. A search of the Native Title Register for the study area was undertaken on 8 June 2022.

One active Native Title claim has been identified in the broader region, which includes the study area (refer **Section 4.1**).

2.4 Aboriginal Lands Right Act 1983

The *Aboriginal Land Rights Act 1983* (ALR Act) established Aboriginal Land Councils (at State and Local levels). These bodies have a statutory obligation under the ALR Act to:

- (a) take action to protect the culture and heritage of Aboriginal persons in the council's area, subject to any other law, and
- (b) promote awareness in the community of the culture and heritage of Aboriginal persons in the council's area.

The study area falls within the Dubbo LALC boundary.

3. BACKGROUND

The purpose of this section is to assist in the prediction of Aboriginal use of the landscape for resources and settlement, as well as the likely distribution of the material traces of Aboriginal groups.

3.1 Environmental Context and Landscape

The study area is situated north east of the town of Dunedoo in NSW in the Warrumbungle Shire LGA. The Warrumbungle Shire traverses the Newell Highway, encompassing the towns of Baradine, Binnaway, Mendooran, Dunedoo, Coolah and Coonabarabran.

The study area and immediate surrounds falls within several environmental landscapes classified by the National Interim Biogeographic Regionalisation for Australia Regions (IBRA) and Mitchell Landscapes.

3.1.1 SOILS AND GEOLOGY

The study area falls within the IBRA New South Wales South Western Slopes Bioregion (NSS) (SEED 2022) which is characterised by an extensive area of foothills and isolated ranges. The bioregion falls within southern NSW, extending from north of Cowra through southern NSW into western Victoria comprising the lower inland slopes of the Great Dividing Range. The NSS bioregion extends from Albury in the south to Dunedoo in the northeast and is bound by six other bioregions in NSW.

The topography of the area varies significantly, characterised by changing geological formations of the landscape dividing the bioregion into two subregions. The study area falls within the Upper Slopes (Inland Slopes) subregion of the NSS. Geology, soils and vegetation are complex and diverse but typified by granites and meta-sediments, texture contrast soils and a variety of eucalypt woodlands. A description of the Inland Slopes subregion is provided in **Table 1**.

A search of the NSW Government's 'eSPADE' website (part of the NSW Natural Resource Atlas) was conducted to identify any existing soil profile information. There are no eSPADE soil profiles located in the study area or recorded soil landscapes for the area. However, alluvial sands and loams are more common than clays in most parts of the landscape.

Further landscape mapping as part of the Mitchell landscapes system (DECC 2002) shows the study area is characterised by a single landscape, the *Talbragar - Upper Macquarie Terrace Sands and Gravels*.

This landscape is derived from sandy Quaternary alluvial sediments associated with the floodplains and terraces of the Talbragar River with red brown and yellow earthy sands, with contrast yellow soils on valley margins with elevation ranging between 350-500m. Dunedoo generally experiences sub-humid climate characterised by hot summers and no dry season (DE&E 2016).

Table 1 – Inland Slopes Subregion

Geology	Characteristic Landforms	Soils	Vegetation
Ordovician to Devonian folded and faulted sedimentary sequences with inter-bedded volcanic rocks and large areas of intrusive granites.	Steep, hilly and undulating ranges and granite basins. Occasional basalt caps, confined river valleys with terrace remnants.	Shallow stony soils on steep slopes, texture contrast soils grading from red subsoils on upper slopes to yellow subsoils on lower slopes. Alluvial sands, loams and clays	Open forests and woodlands. Red stringybark on upper slopes with black cypress pine, kurrajong, red ironbark, white gum, white box, yellow box and Blakely's red gum on lower slopes. Merging west to yellow box, grey box and white cypress pine. Rough-barked apple on flats with river oak on upper tributaries and river red gum on lower and larger streams.

3.1.2 VEGETATION

Vegetation in the area is typified by a modified landscape as a result of extensive agricultural practices, suitable for grazing and productive croplands.

Prior to European modification of the landscape vegetation of the Upper Slopes subregion would likely to include species such as River red gum (*Eucalyptus camaldulensis*) along the channels, yellow box (*Eucalyptus melliodora*) and rough-barked apple (*Angophora floribunda*) with white cypress pine (*Callitris glaucophylla*) on the plain and native shrubs and grasses.

3.1.3 HYDROLOGY

The NSS bioregion includes parts of the Murray, Murrumbidgee, Lachlan and Macquarie River catchments (DE&E 2016).

The study area is located approximately 850m north of the Talbragar River, a perennial stream which is a part of the Macquarie -Barwon catchment within the Murray-Darling Basin. The Talbragar River is subject to flooding and as a result of the wide catchment rapid rise and falls tend to occur on a periodical basis. Flooding within Dunedoo occurs mostly on the northern portion of the town and across the low flats.

A drainage line is located in the north eastern portion of the study area and a farm dam is located in the south western portion of the study area. However most of the study area is subject to waterlogging across the flat landscape.

The proximity of these waterways across the landscape would likely have provided important subsistence resources for local Aboriginal groups who utilised the rivers for generations and exploited aquatic and terrestrial resources.

3.2 Aboriginal Histories of the Locality

For thousands of years Aboriginal groups occupied the savannah lands and river valleys in the Dunedoo dating to at least 40,000 years ago (Christo Aitken 2007: 65). This area formed part of the traditional lands of the Wiradjuri language group, spoken along the three rivers by which it is bound, the Macquarie, Lachlan, and Murrumbidgee River systems. Wiradjuri country is the largest tribal boundary within Australia and extends from Dubbo and Bylong in the north to Tallangatta in the south and west from Lithgow to the Hay Plain and Ivanhoe (Weir Phillips 2001: 12).

Aboriginal groups managed the rivers and the land, exploiting a broad range of natural resources accordingly such as fish, timber and the native flora and fauna. People moved around in small groups and the Macquarie River floodplain was a major Wiradjuri Aboriginal resource area, together with the Talbragar River, their frontages, marshes and billabongs providing a vital resource for food supply with recurrent and seasonably reliable water sources, however occupation was not restricted to the immediate river banks or associated alluvial terraces.

The dryer climate of the study area also served primarily as a hunting ground, the landscape subject to extensive firestick farming to flush out wildlife such as kangaroos and emus from the surrounding woodland, and during extensive dry periods at times reducing the river to still waterholes. Gathering of fruit, nuts, yams, wattle seeds, orchids and daisies were also food resources gathered on Country between the major rivers (HO and DUAP 1996)

The Wiradjuri people for thousands of years, utilised this area for its proximity to natural resources such as rivers, creeks, billabongs, and wetlands whilst occupying open campsites on higher ground.

3.2.1 POST CONTACT OF THE AREA - LANDUSE

Very little information is documented of local Aboriginal groups at the time of European settlement, however the earliest known accounts of European contact with Aboriginal people in the region was recorded by John Oxley explorer and Surveyor General of NSW. Oxley first reached the junction of the Macquarie and Talbragar Rivers south west of the study area in Dubbo during 1818 (NSW Environment online:134). He noted the occupation of Aboriginal people along the banks of the river and the suitability of the land for agriculture (NSW NPWS 2000).

During the early 1800s, the rapid expansion of European settlement west of the Blue Mountains severely impacted on the Wiradjuri people, who were subjected to violence, disease, sexual exploitation and, as a result of these and other factors such as diminished resources, population decline which led to fierce resistance from the Aboriginal people and conflict. (NSW Environment: 134). It is important to note that approximately a quarter of the inland Wiradjuri people died from smallpox between 1815 -1825 as disease spread through the community (Ellis 2014: 1). Clashes between the European settlers and the local Aboriginal people were common in this area particularly between 1839 and 1841.

Squatters and European settlers moved into the broader Dubbo and Dunedoo region and established remote pastoral stations during the 1820-30s, however squatting licences for grazing were not issued until 1836. Aboriginal groups were quickly displaced from their land by squatters and through the establishment of government land grants and stock stations were set up in the region by free settlers and emancipated convicts. Pastoral occupation around Dunedoo quickly escalated as it did throughout the colony (NSW Environment: 134).

In 1832, part of the Talbragar River was surveyed by Mortimer William Lewis who noted that large pastoral properties had developed along the river frontage. These properties included 'Cobbora' granted to Robert Martin, 'Merotherie' granted to William Bowman and upstream 'Tongay' was located, owned by Richard Fitzgerald (Cameron 1993, p.247). However, the area of present day Dunedoo was located on the 'Bolaro' Run on land owned and managed by brothers Robert and James Lowe covering an area of 16,000 acres (NGH 2020:27).

The Lawson family were also principal landowners in the district from the 1840s holding over 27,000 acres of freehold land and more than 17,000 acres of lease holdings operating as runs extending from Dunedoo, along the Talbragar and Coolaburragundy Rivers and to Coolah Creek (Dibden 2017:157). Sheep and cattle grazing were the predominant farming activity at the time and by the 1840s pastoralists occupied most of the Macquarie and Talbragar River frontages, the rough grazing of the plains was now more suited for cattle farming.

As settlement west of the mountains increased, a township soon developed in this area, originally known as 'Redbank' and by 1868 was surveyed and formalised, north of the current township. By 1870 the first allotments for Redbank were put up for auction in Dubbo, however it was not until 1875 when the first 10 lots were sold. The town was redesigned in the early 1900s and moved further south away from the river where new lots were sold, to make way for construction of the railway which was completed in 1910 (Cameron 1993:258).

The Wiradjuri people, disconnected from their traditional ways, now considered 'fringe dwellers', were succumbed to labourer work for survival (Scobie 2010: 6). However, local groups adapted to their changing environment and retained traditional beliefs and languages despite losing their lands and enforcements placed on them by European settlers.

In the 1890s, agriculture increased in the region and the conditions of dual occupation in larger areas such as Dubbo of the land ceased. As a result, Aboriginal communities were driven from their homelands and onto reserves on the outskirts of towns. In 1898 a settlement was established and comprised 18.75ha of land on the old watering reserve at the junction of the Macquarie and Talbragar Rivers where the local Aboriginal people were gathered together and became home to approximately 500 people. This was known as 'The Talbragar Aboriginal Reserve' (Christo Aitken 2007: 66). Land in the area has continued to be used for extensive farming practices since European settlement of the region from the 1800s. The Talbragar River has been subject to historical flooding since the 1920s.

Today, the Aboriginal community of Dunedoo consists of a large number of direct descendants of the original owners, including many Wiradjuri people who have resettled in the area.

3.2.2 ARCHAEOLOGICAL CONTEXT

A limited number of archaeological investigations or publications relating to Aboriginal Heritage have been prepared in the vicinity of the study area. However, histories of the wider local area and research into the AHIMS database provides some understanding of the broader archaeological context in the region of the Warrumbungle LGA.

In 1941 P.J Gresser undertook extensive site recording and analysis of stone artefacts of the Aboriginal archaeological resources in the Dubbo region, being one the earliest accounts of recorded Aboriginal occupation. Similar records were prepared by Garnsey in 1946 and much later by Kamminga in 1991. Garnsey's accounts of 'contact' with Dubbo Wiradjuri people, their society and lifestyle, is invaluable as a reference source on the region's Wiradjuri people, particularly during the late contact period (Everick 2019: 23).

A number of regional assessments providing predictive site modelling for Aboriginal occupation west of the study area in the Dubbo region was undertaken by Pearson in 1981 and Koettig in 1983, which still apply to the current study area.

In 1981 Pearson completed a major regional study of the Upper Macquarie River commencing from southeast of Dubbo at Wellington and continuing north of the study area. A site distribution model was developed based on excavation of three sites located further to the east. This assessment identified that there is a strong correlation between site location and proximity to water resources with a tendency for larger occupation sites to be located nearest permanent water resources. Characteristics for occupation include, elevated areas, with most sites located on undulating areas supporting woodland or found on river or creek banks. He concluded that in the plain's areas, Aboriginal movement toward the rivers may have been for the purposes of ensuring a continued food supply during drought, to gather seasonally available food items or to fulfil social obligations. Grinding groove or quarry sites were dependant on suitable stone outcrops, ceremonial and stone arrangements were located away from occupation sites associated with hills or knolls and burial sites likely occur where dry soil or sand deposits were present. Bora grounds were also located away from campsites; however, carved trees and scarred trees were located throughout a variety of landforms, with some carved trees were associated with burials

In 1983, Koettig undertook a survey of the Troy Junction area north of Dubbo where six sites were identified and areas of archaeological sensitivity, utilising a predictive model based on site distribution patterns and location of characteristic site types based on geological, topographic and previous land uses.

In 1985 Koettig undertook a series of surveys for a heritage assessment of the Dubbo City Local Government area and a predictive model of past Aboriginal occupation was developed. Koettig surveyed a 9km stretch of the Macquarie River between the Mitchell Highway and its confluence with Cumboogee Creek. In this sample unit the predominant sites were occupation sites and scarred trees. During this study Koettig indicated that water, underlying geology and food resources were the key factors for Aboriginal occupation. Large campsites were found and located near permanent water courses such as rivers, springs and natural wetlands, however smaller camps were also found in all landscape contexts. The study found that that intensive evidence of Aboriginal occupation in the Dubbo region is most likely to occur along the major river courses as a result of the dryer landscape. Predictive modelling suggests that shell middens/lens site types would only be associated along the Macquarie River, whilst grinding grooves were mostly associated with sandstone outcrops. Smaller campsites may be located anywhere with scarred trees likely to be found where older stands of timber are extant, and the evidence of stone arrangements are likely to occur on knolls.

In 2011, Everick prepared a due diligence assessment for a proposed residential subdivision at Aero Park, Gilgandra approximately 95 km north west of Dunedoo. The assessment identified extensive ground disturbance over the entire site had occurred and no archaeological sensitivity was identified. The study indicates that open sites may be located on elevated river terraces close to the Macquarie River and other water sources including swamps or wetlands and grinding grooves usually occur near water also, however isolated stone artefacts are likely to be found anywhere. Everick also noted that the area's history of clearing for agricultural purposes and road and highway construction has meant that many areas, which may have been relatively densely timbered at the time of first European settlement, have long since been cleared.

In 2017 NGH completed an Aboriginal Cultural Heritage Assessment Report for the proposed Beryl Solar Farm, located at approximately 33 kilometres south of Dunedoo. The proposed area of assessment covered 332 ha, with 46 ha surveyed. The assessment identified low numbers (six in total) of stone artefactual material. Site locations were found within 100-400 m to a water source, even in areas highly disturbed by farming activities (NGH Environmental 2017).

In 2019 Access Archaeology and Heritage (AA&H) completed an Aboriginal Heritage Due Diligence assessment for a proposed feedlot extension on the property "Corumbene", located approximately 4 km north-west of Dunedoo. The landform was assessed as being highly disturbed through historical agricultural practices, with cropped paddocks deemed to have low archaeological potential with no artefactual material observed. Low density artefact scatters consisting of quartz, chert, sandstone, fine grained volcanics and silcrete were found on a sandy levee adjacent to a creek in an undisturbed context. The majority of the artefacts were quartz with lesser numbers of chert, sandstone, fine grains volcanic and fine grained silcrete were recorded.

An ACHAR was prepared in 2020 by NGH for the Dunedoo Solar Farm, located approximately 2km south west from the current study area. An initial AHIMS search identified 95 recorded sites or places within an 18km radius of their study area, showing a dominance in scarred trees, especially where there are remnant stands of native trees. However other site types recorded included artefact, art, grinding grooves, potential archaeological deposits (PADs), fish traps, hearths, stone arrangements in one or more combinations. The results indicate that low to moderate density artefact scatters and isolated Aboriginal objects can occur throughout the landscape, even in areas of highly disturbed farming activities.

Results of previous archaeological surveys in the Dunedoo region demonstrated that there is a strong and varied pattern of human use and movement throughout the surrounding landscape. This behaviour is recorded as a range of artefact and site types distributed and concentrated in specific landforms across the region. Areas directly associated with water and or elevated ground appear to have the greatest potential for identification of Aboriginal cultural material.

Based on the previous archaeological investigations in the region, predictive modelling of the landform suggests that archaeological sensitive areas mainly occur along rivers and water courses, along crests or knolls where there are suitable stone resources, and the area has a high quantity of Aboriginal scarred trees.

3.3 Archaeological Implications

Previous archaeological investigations in the area have identified that landform modification and distance from watercourses are significant factors in determining archaeological sensitivity of a particular area.

A model of past Aboriginal occupation patterns for the Dunedoo area can be formulated by Koettig's research in Dubbo as part of a study undertaken in 1985. The predictive model suggests that intensive evidence of Aboriginal occupation in the region is most likely to occur along the major river courses as a result of the dryer landscape. Predictive modelling suggests that shell middens/lens site types would only be associated along the Macquarie River, whilst grinding grooves were mostly associated with sandstone outcrops. Smaller campsites may be located anywhere, whilst scarred trees likely to be found where older stands of timber remain, and the evidence of stone arrangements are likely to occur on knolls or where quarry resources were available.

Aboriginal occupation in the broader region including Dunedoo would have focused on major drainage lines such as the Talbragar River and its larger tributaries. Creek lines and associated ridge crests were considered important transient landscapes where group movement between major occupation areas occurred, as well as providing valuable resources for hunting and gathering (Kelton 1996b:13).

Previous archaeological investigations in the area have suggested a correlation between a close proximity to watercourses and areas of archaeological sensitivity. Areas near watercourses have higher potential to contain Aboriginal objects. Areas that have not been subject to disturbance also have high potential to contain artefactual material compared to those that have been disturbed.

The study area is located on a relatively flat portion of land, surrounded by low rolling hills and transitioning to flats of the Talbragar River. However, the area has been previously disturbed, through extensive agricultural cropping and grazing and through construction of Lawson Park Road.

4. ABORIGINAL HERITAGE INFORMATION MANAGEMENT SYSTEM (AHIMS) SEARCH

The locations and details of Aboriginal sites are considered culturally sensitive information. It is recommended that this information, including the AHIMS data, is removed from this report if it is to enter the public domain.

NSW Heritage (formerly OEH) maintains the Aboriginal Heritage Information Management System (AHIMS) database, a register of Aboriginal archaeological sites that have been recorded in New South Wales. A basic search of the AHIMS database within a 2km radius of the study area was undertaken on 8 June 2022 (Client ID: 689414). The AHIMS search provides an archaeological context for the area and identifies whether any previously recorded Aboriginal sites are located within or near the study area. The parameters of the search were as follows:

GDA 1994 MGA 55	Lot 78 in DP754309
Buffer	200 m
Number of sites	0

No previously recorded sites were identified in the search. A copy of the AHIMS search is shown in **Figure 3**.

Figure 3 – AHIMS search of the study area



AHIMS Web Services (AWS)
Search Result

Your RefPO Number : 222346_Dunedoo 200m
Client Service ID : 689414

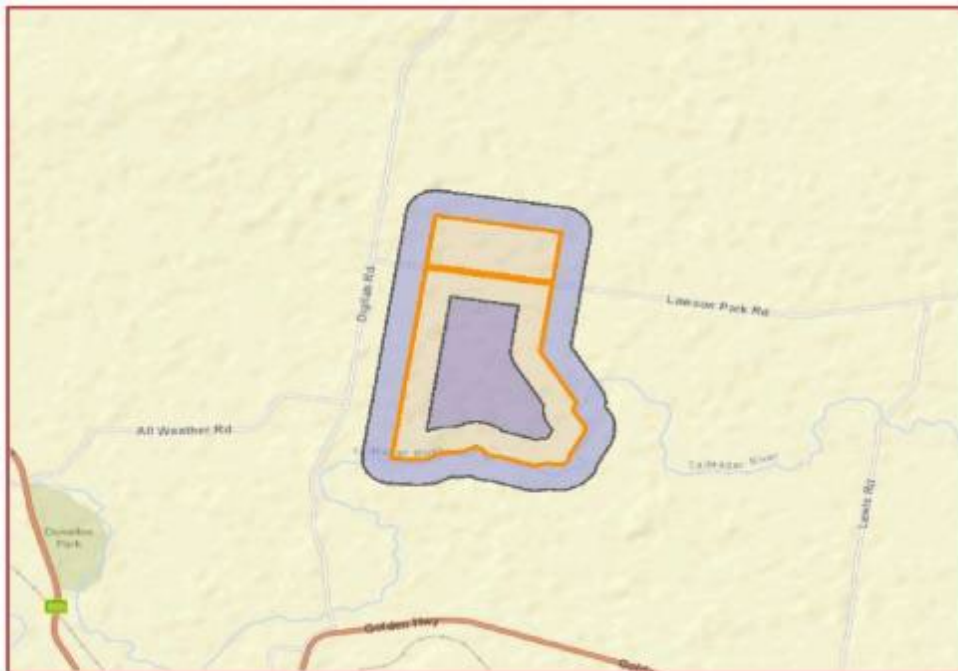
Premise Australia Pty Ltd
154 Peisley Street
Orange New South Wales 2800
Attention: Latisha Ryall
Email: latisha.ryall@premise.com.au

Date: 08 June 2022

Dear Sir or Madam:

AHIMS Web Service search for the following area at Lot : 78, DP:DP754309, Section : - with a Buffer of 200 meters, conducted by Latisha Ryall on 08 June 2022.

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of Heritage NSW AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

	0 Aboriginal sites are recorded in or near the above location.
	0 Aboriginal places have been declared in or near the above location. *

4.1 National Native Title Tribunal

A search of the Native Title Tribunal and Native Title Vision (NTV) online database was undertaken on 7 June 2022 for the Dunedoo region and Warrumbungle LGA to ascertain if any Native Title claims, determinations or registrations were associated with the study area.

One active Native Title claims, or determinations were identified in the study area as follows:

Applications (Schedule): NC2011/006 (Active Status) Date Registered 20 Jan 2012

Name Gomeroi People- Representative NTSCORP

Tribunal No NC2011/006

Fed Court No NSD37/2019

The study area falls on the boundary of this NTT registration which covers a substantial area in NSW covering approximately Area 111,317.60m sq km as shown in **Figure 4**.

Figure 4 – Native Title Vision Map relevant to the Study Area



5. SITE INSPECTION

The site inspection was undertaken by Latisha Ryall (Archaeologist, Premise) on 14 July 2022. The study area was traversed via pedestrian survey. The site inspection focused on the proposed impact area only. The southern portion of Lot 78 DP 754309 (south from Lawson Park Road) was not assessed. Some areas could not be assessed due to recent wet weather conditions and subsequent waterlogged ground cover; however locations were observed at a close distance.

The study area is located at 126 Lawson Park Road, south of Dunedoo in NSW. The study area is rectangular in shape and is bound to the north east and west by adjacent farming property and bound by Lawson Park Road on the southern boundary.

The study area is relatively flat, mostly cleared and devoid of remnant vegetation and has been subject to extensive cropping and grazing. Dark brown clay earths are visible along crop lines and drainage areas, with red alluvial earths located in areas of disturbance such as along fence lines, at the base of powerlines and trees or along dam banks. Two isolated stag trees were present one located on the northern boundary and one located closer to the southern boundary, however no cultural scarring was observed. Small basalt rocky outcrops were observed and became more condensed on the western portion of the study area. Larger rocks were piled around the base of one tree and lined the central electric fence, bisecting both paddocks. It is assumed that these rocks were moved to aid in crop practices and moved to a central point. Young tree plantings align with the eastern and western boundary and are out of the impact area.

Ground visibility was mostly high, with dense ground coverage located in the north eastern and western corners of the site. Ground visibility increased around the base of trees or along a vehicle access tracks. No archaeological material was observed during the site inspection. The site is shown below in **Figures 5-16**.

Figure 5 – View north west across study area



Figure 6 – View north along eastern boundary



Figure 7 – View east across the study area



Figure 8 – View west across the study area



Figure 9 – Dam & infrastructure on north boundary



Figure 10 – View south east across study area



Figure 11 – Areas of exposure along fencelines



Figure 12 – View south across central study area



Figure 13 – Stag with rock outcrop view south



Figure 14 – Dam in south west corner, view east



Figure 15 – Ground coverage waterlogged areas



Figure 16 – Ground visibility across most of the site



5.1 Previously identified sites

There are no previously recorded Aboriginal sites located in or near the study area (refer **Section 4**).

No Aboriginal sites or places were identified during the site inspection.

5.2 Archaeological sensitivity

This due diligence assessment provides a preliminary assessment of archaeological potential, that is to determine if there are or are likely to be Aboriginal objects in the study area. A more comprehensive and detailed investigation of the extent and nature of archaeological potential would be completed where required, under the OEH 'Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales'.

When assessing the study area for Aboriginal sensitivity it is essential to determine whether the site contains landscape features that indicate the likely existence of Aboriginal objects. Examples of such landscape features are rock shelters, sand dunes, waterways, waterholes, and wetlands. On assessing the site, considerations must be made if the proposed activity is:

- within 200m 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.

Archaeological sensitivity is closely related to the levels of ground disturbance. However, other factors are also considered when assessing archaeological potential as mentioned above, such as whether artefacts were located on the surface, and whether the area is within a sensitive landform unit according to the predictive statements.

This due diligence assessment has identified the study area has been subject to past ground disturbance through extensive historical cropping and grazing. The *Due Diligence Code of Practice* (DECCW 2010) defines disturbed land as:

Sec 7.5 (4) For the purposes of this clause, land is disturbed if it is has been the subject of human activity that has changed the lands surface, being changes that remain clear and observable.

This includes disturbed land via:

- (a) soil ploughing*
- (b) construction of rural infrastructure*
- (d) clearing of vegetation,*
- (e) construction of buildings and the erection of other structures,*
- (f) 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).*

The study area has been subject to extensive ground disturbance associated with farming practices. It has been cleared and utilised for grazing since the mid-1800s. Within the Dunedoo region there is a history of low and high intensity farming practices across the landscape. Soils observed in the study area had been disturbed by repeated cultivation and stock grazing. High intensity farming practices include the ploughing of fields and the initial creation of dams and paddocked areas, while lower intensity practices include pastoral activities and the grazing of stock.

The study area has also been subject to disturbance on the southern boundary due to the construction of Lawson Park Road. On review of aerial imaging (SixMaps 2022) an old drainage line of the Talbragar River is located in the north-eastern portion of the study area, however, visual inspection did not identify any defined bed or bank. A secondary drainage line is located parallel to Lawson Park Road in the road reserve. The Talbragar River is located within 840m south of the impact area.

The study area has been assessed as having nil-low sensitivity and no archaeological material was identified. The study area has been cleared of all vegetation. No other sensitive landforms were observed. Sensitive landforms are likely to occur closer (within 200m) to the banks of the Talbragar River or on higher crests or ridgelines to the north, all of which are located outside of the study area.

The proposed solar farm development will involve further ground disturbance. However, the proposed impact area would be categorised as disturbed through consistent farming practices over many decades through ploughing and tree clearing. It is recommended that further archaeological assessment be undertaken if works are to be done outside of the study area.

6. DUE DILIGENCE PROCESS

The results of the due diligence process are outlined in **Table 1**. The table contains a response to the questions included in the Due Diligence Code of Practice (DECCW 2010), which are intended to assist in determining whether or not a proposed activity may result in harm to Aboriginal objects, which are protected by the *National Parks and Wildlife Act 1974*. The nature and location of the proposed activity has not identified any Aboriginal objects, or areas of archaeological sensitivity, in the study area.

Table 2: Response to the due diligence process

1	Will the activity disturb the ground surface or any culturally modified trees?
	Yes, the proposed works will require ground disturbance for the purposes of a solar farm development and associated infrastructure.
	No culturally modified trees have previously been recorded on AHIMS. No culturally modified trees were identified during the site inspection.
2a	<i>Are there any relevant confirmed site records or other associated landscape feature information on AHIMS?</i>
	There are no recorded AHIMS sites within the study area.
2b	Are there any other sources of information of which a person is already aware?
	Yes one active Native Title application is located across the study area, however, does not impact on the proposed works.
2c	Are there any landscape features that are likely to indicate the presence of Aboriginal objects?
	The study area is not located within 200 m of the Talbragar River; however the study area has been subject to extensive clearing and ground disturbance. The Talbragar River in Dunedoo has been subject to historical flooding recorded in 1920, 1955 and most recently was flood prone in 2022.
	No Aboriginal objects or places were identified during the site inspection or are recorded in the study area; therefore, this area has been assessed as being of low significance.
3	Can harm to Aboriginal objects listed on AHIMS or identified by other source of information and/or can the carrying out of the activity at the relevant landscape features be avoided?
	There are no recorded or Aboriginal objects located within the study area or have been identified during the site inspection. The area had been subject to extensive ground disturbance.
4	Does a desktop assessment and visual inspection confirm that there are Aboriginal objects or that they are likely?
	This due diligence assessment has not identified Aboriginal objects, or areas of archaeological sensitivity, within the study area.

7. RECOMMENDATIONS

The following recommendations regarding Aboriginal heritage are based on consideration of:

- Statutory requirements under the *National Parks and Wildlife Act 1974* (as amended).
- *Due Diligence Code of Practice* (DECCW 2010).
- The results of the background research, site survey and assessment.
- The likely impacts of the proposed solar farm.

It was found that

- No previously recorded Aboriginal sites are located within the study area.
- No newly identified Aboriginal sites are located within the study area.
- One Native Title claim, determination or registration is located within the study area.
- The proposed activity is located within a disturbed context.

The following recommendations are made:

- In accordance with the OEH due diligence guidelines, this assessment has not identified Aboriginal objects, or areas of archaeological sensitivity, within the study area.
- No further Aboriginal archaeological assessment is recommended.
- If suspected Aboriginal objects are located during future works, works should cease, and an Aboriginal heritage consultant advised to assess the find and recommend if further investigation or permits are required.

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