Congarinni North, 24 Coronation Rd – Aboriginal Due Diligence Assessment

Tony Owen Partners on behalf of Ron Pommering

ecological AUSTRALIA
A TETRA TECH COMPANY

1300 646 131
www.ecoaus.com.au

DOCUMENT TRACKING

Project Name	Congarinni North, 24 Coronation Rd - ADD
Project Number	20NEW 17585
Project Manager	**T**yler Beebe
Prepared by	**T**yler Beebe
Reviewed by	**K**aryn Mcleod
Approved by	**K**aryn Mcleod
Status	**Draft**
Version Number	**v0a**
Last saved on	**26 November 2020**

This report should be cited as 'Eco Logical Australia, 2020 Congarinni North, 24 Coronation Rd - ADD. Prepared for Ron Pommering'

ACKNOWLEDGEMENTS

This document has been prepared by Eco Logical Australia Pty Ltd with support from Raja Vignesh from Tony Owen Partners

Template 2.8.1

Contents

List of Figures

List of Tables

1. Introduction

1.1 Project background

Tony Owen Partners on behalf of Ron Pommering engaged Eco Logical Australia Pty Ltd (ELA) to undertake an Aboriginal Heritage Due Diligence Assessment of the property located at 24 Coronation Rd, Congarinni North NSW (hereafter referred to as 'the study area'; Figure 1).

Ron Pommering proposes to construct a Senior Living Development consisting of 282 lots within the study area. As such an Aboriginal due diligence assessment is required to identify if Aboriginal objects are likely to be located within the area of the proposed works and, if so, whether the proposed works have the potential to harm those objects.

A master plan showing the layout of the development has been provided by Tony Owen Partners (Figure 2).

This assessment outlines the findings of the Aboriginal Heritage Due Diligence Assessment of the study area, in accordance with the *Due Diligence Code of Practice for the protection of Aboriginal Objects in New South Wales* (DECCW 2010a).

1.2 Assessment process

The aims of this archaeological due diligence assessment are to:

- Undertake a search of the Aboriginal Heritage Information Management System (AHIMS) register to establish if there are any previously recorded Aboriginal objects or places within the study area;
- Undertake a search of the NSW State Heritage Inventory, the Australian Heritage Database, and the Nambucca Valley Local Government Area (LGA) Local Environment Plan (LEP) 2010 Schedule 5 (Environmental Heritage) in order to determine if there are any sites of archaeological significance or sensitivity located within the study area;
- Undertake a desktop review of relevant previous archaeological assessments to understand the local archaeological context and assist in predicting the likely occurrence of unrecorded archaeological sites or objects, and
- Undertake a site inspection to identify any Aboriginal sites and areas of sensitive landforms.
- Prepare an archaeological due diligence assessment determining if known objects or additional unrecorded objects are present within the study area, as well as indicate whether further assessment and/or an Aboriginal Heritage Impact Permit is required.

The due diligence process involves *"taking reasonable and practical measures to determine whether your actions will harm an Aboriginal object and, if so, what measures can be taken to avoid that harm"* (DECCW 2010a:4).

If an AHIP application is required, Heritage NSW necessitate that it is supported by an Aboriginal Cultural Heritage Assessment (ACHA) prepared in line with the *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in New South Wales* (DECCW 2010b), and a copy of the approval for the

development or infrastructure under Part 4 or Part 5 of the *Environmental Planning and Assessment Act 1979* (EP&A Act, New South Wales).

An archaeologically sensitive landscape is an area that has the potential for archaeological material to be present within it. According to the *Due Diligence Code of Practice* (DECCW 2010a), archaeologically sensitive landscapes can include areas:

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

The Due Diligence Code of Practice (DECCW 2010a:18) defines disturbed land as areas that have any land that:

> "*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*."

1.3 Due diligence assessment summary

Desktop assessment of the study area determined that there were no previously registered Aboriginal site/places nor any registered historic items within nor adjacent to the study area.

A site inspection conducted over the 24-25 November identified that the study area contained steep sloping ridgelines and deep valleys. Identified vegetation and artificial dams indicated that these deep valleys were frequently inundated from rain run off from the adjacent ridges. The site inspection did identify two broad flat terrace landforms along the northern boundary of the study area that contained a moderate to high potential to contain a subsurface archaeological deposit.

Figure 1: The Study Area

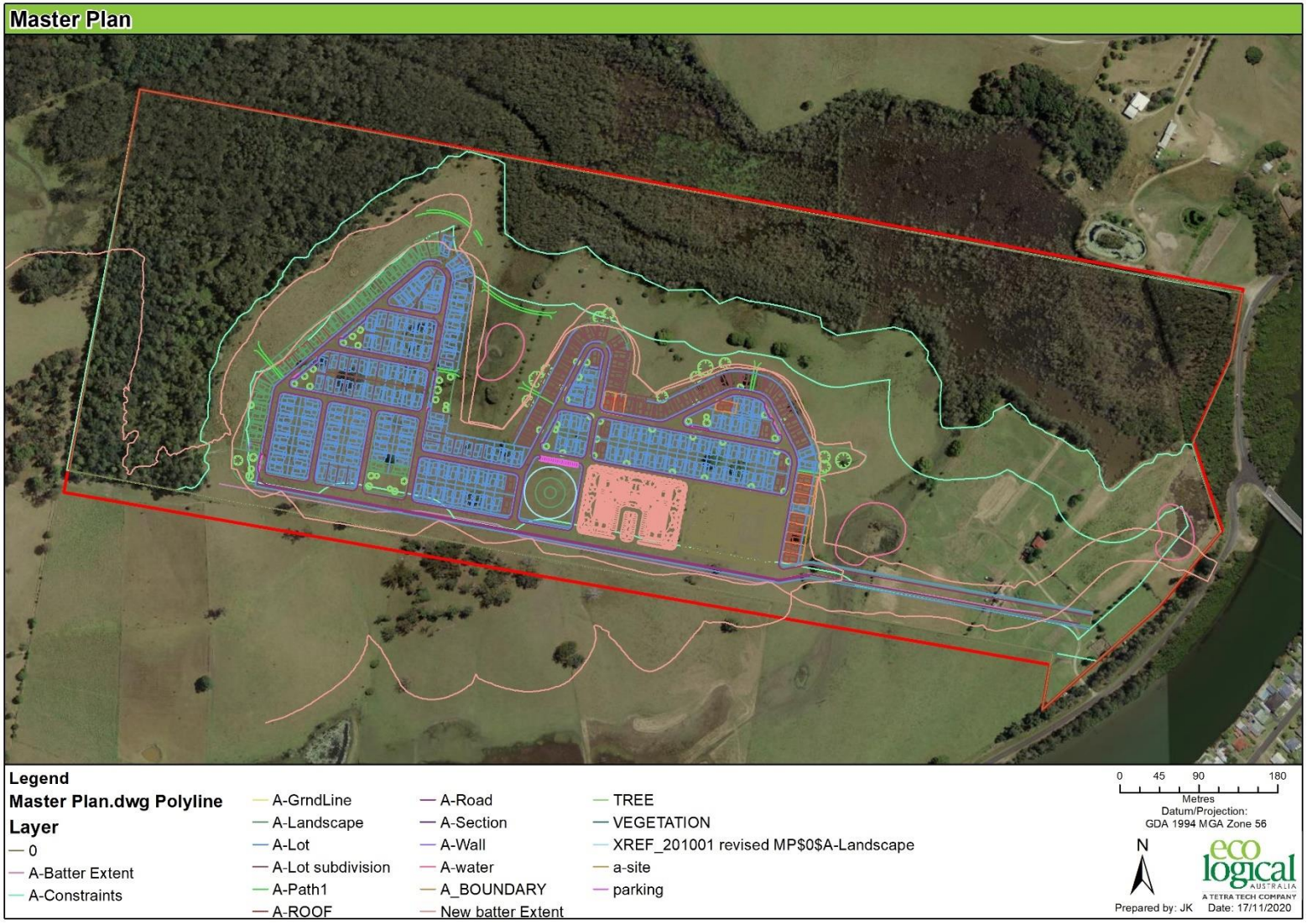

Figure 2: Proposed development masterplan. Courtesy of Tony Owen Partners

2. Basis for cultural heritage management

> *Places of cultural significance enrich people's lives, often providing a deep and inspirational sense of connection to community and landscape, to the past, and to lived experiences … they are irreplaceable and precious (Australia ICOMOS Burra Charter 2013:1).*

Traditionally, heritage and archaeological assessments have focused on the significance of the tangible elements of cultural heritage (Brown 2008). Items such as structures and archaeological artefacts have been considered predominantly in terms of their scientific/research potential and representativeness (New South Wales Heritage Office 2015:20-24). By focusing on the scientific qualities of heritage, many of the intangible qualities of heritage were not considered. This is especially crucial when participating in the management and protection of Aboriginal cultural heritage. By nature, Aboriginal cultural heritage is multi-faceted: it consists not only of tangible structures and objects of value for scientific investigations, but also of a deeply complex array of intangible expressions, such as stories, memories, and traditions. Many of the rights and interests of Aboriginal communities in their own heritage is formed on the basis of this intangibility. It stems from their spirituality, customary law, original ownership, and continuing custodianship (Australian Heritage Commission 2002:5). These intangible expressions often share a strong link with the landscape. Byrne *et al.* (2003:3) describe this connection in the form of a map, where individuals:

> *Carry around in* [their] *heads a map of the landscape which has all these places and their meanings detailed on it. When we walk through our landscapes the sight of a place will often trigger the memories and the feelings* [that] *go with them … it is the landscape talking to us.*

Crucially, those who are not connected to the landscape in question will not be able to discern these intangible meanings embedded in the landscape; they can only come to recognise the significance by consulting with local knowledge holders (Byrne *et al.* 2003:3). And, even so, they may vary between individuals, reflecting unique experiences.

By recognising the rights and interests of Aboriginal knowledge holders and community members in their cultural heritage, all parties involved in the identification, conservation, and management of this cultural heritage must acknowledge that Aboriginal people (Australian Heritage Commission 2002:6):

- Are the primary source of information on the value of their heritage and how this is best conserved;
- Must have an active role in any heritage planning processes;
- Must have input into primary decision-making in relation to their heritage so that they can continue to fulfil their obligations towards this heritage; and
- Must control the intellectual property and other information relating specifically to their heritage, as this may be an integral aspect of its heritage value.

As such, cultural heritage sites and objects are fundamental elements of Aboriginal peoples' identities, connections, and belonging to their communities. The careful protection and management of this heritage is essential for the preservation of connection between past, present, and future.

3. Assessment process

3.1 Identify if the proposed activity will disturb the ground surface

The proposed activity will include bulk earthworks associated with the construction of the senior living residential development

3.2 Database searches and known information sources

3.2.1 AHIMS search

The Aboriginal Heritage Information Management System (AHIMS) is a database maintained by Heritage NSW and regulated under Section 90Q of the *National Parks and Wildlife Act 1974.* AHIMS holds information and records regarding the registered Aboriginal archaeological sites (Aboriginal objects, as defined under the Act) and declared Aboriginal places that exist in NSW.

A search of the AHIMS database was conducted on 2 November 2020 to identify if any registered Aboriginal sites were present within, or adjacent to, the study area (**Appendix A**).

The AHIMS database search was conducted within the following lot/coordinates:

Table 1: Search Parameters for the AHIMS database search

Search Parameters	
GDA Zone	56
Eastings	490109 - 491544
Northings	6602823 - 6603781
Buffer	1 km

The AHIMS search result showed:

Table 2: Search results for the AHIMS database search

Search Results	
Aboriginal sites recorded	**4**
Aboriginal places declared	0

No Aboriginal sites have previously been recorded within the study area.

The distribution of recorded Aboriginal sites adjacent to the study area is shown in Figure 3. The frequencies of site types and contexts recorded within the AHIMS database search area are listed below.

Table 3: Frequencies of site types and contexts

Site Context	Site Features	Number	%
Open Site	Artefact	1	25%
	Aboriginal resource and gathering	2	50%

Site Context	Site Features	Number	%
	Habitation structure.	1	25%
	Total	**4**	**100%**

3.2.2 Local, state and national heritage registers

Searches of the Australian Heritage Database, the State Heritage Register (SHR) and the Nambucca Valley LEP 2010 utilising the term "Congarinni North" were conducted on 02-Nov-20 in order to determine if any places of archaeological significance are located within the study area.

No Aboriginal archaeological sites or heritage items were recorded on these databases within the study area.

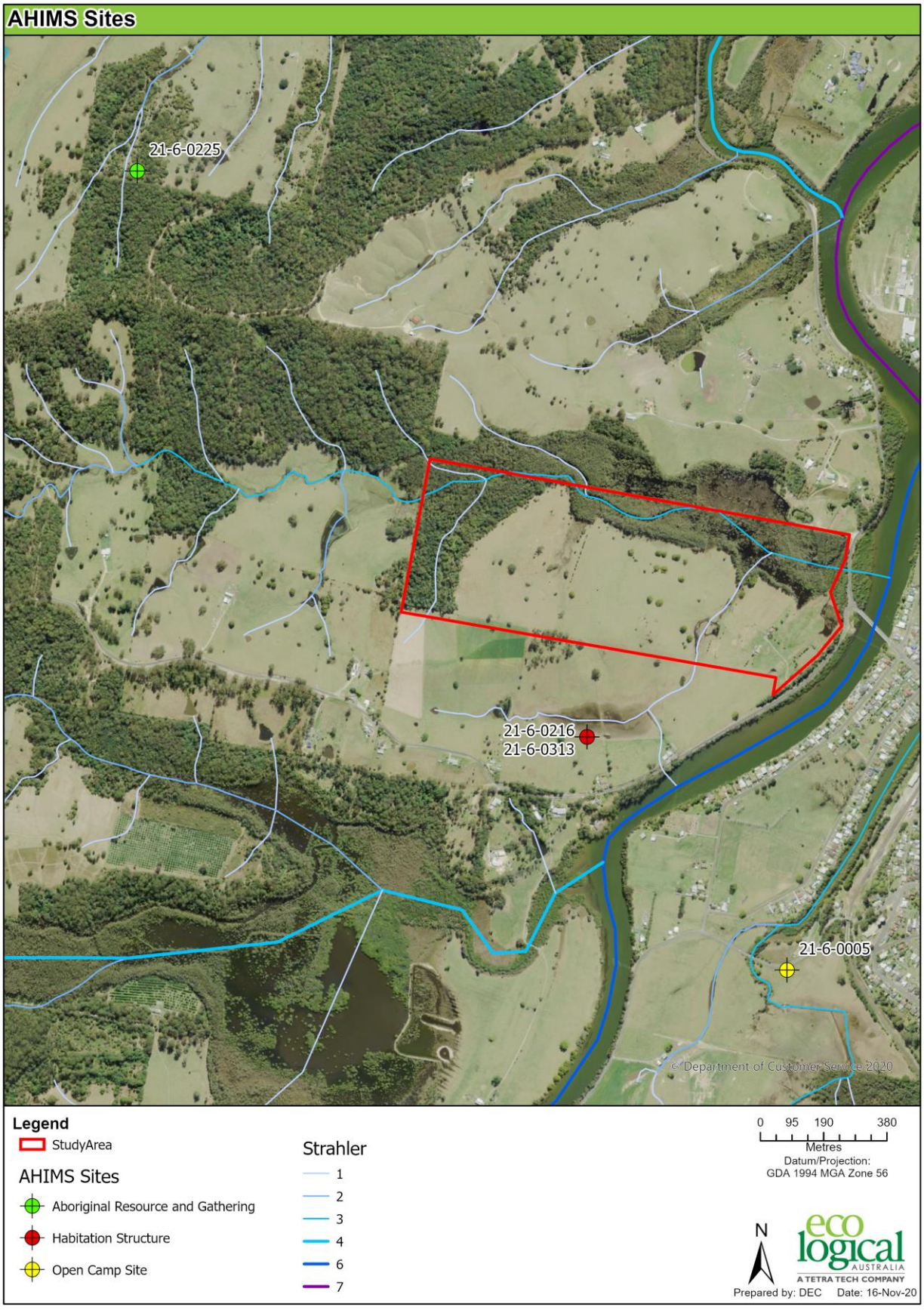

Figure 3: AHIMS registered sites in/within the vicinity of the study area

3.2.3 Previous archaeological investigations

There have been several large-scale regional heritage studies undertaken in the past that are relevant to the current assessment. A summary of those studies is discussed below.

Luke Godwin undertook one of the earliest heritage studies within the Nambucca Shire Council in the early to mid 1980's. His archaeological survey centred around the Township of Scotts Head, located approximately 10 km east of the current study area. Godwin used the surveys to develop a model for Aboriginal occupation of the area. The model he proposed can be summarised as:

- Aboriginal people lived on or near the coast for the whole of the year;
- Aquatic resources were favoured over land foods;
- The estuarine/tidal creek zone was the most heavily exploited over most of the year; and
- The hilly areas were used as refuge in times of flood.

He speculated that his model would result in a range of archaeological sites within the Nambuccca Shire LGA.

- Large middens near established creeks composed chiefly of estuarine/tidal creek species;
- Coastal sites consisting of less established perhaps ephemeral shell midden sites; and
- Ephemeral sites in the inland hills consisting mainly of stone artefact scatters.

Navin Officer Cultural Heritage Management (1991) undertook a series of archaeological surveys along the north coast associated with the upgrade and extension of the Pacific Highway. Based on existing records, Navin Officer proposed a tentative site location model for the Macksville/Nambucca area.
Navin Officer determined that existing sites and unidentified sites were likely to occur within the Nambucca River wetland corridor on elevated well drained ground adjacent to freshwater wetlands and creeks. The Nambucca River and adjacent wetlands would have presented an extensive, diverse and potentially prolific food source. Navin Officer further speculated that spur ridge lines were probably the preferred routes for Aboriginal people to access the Nambucca River and its associated wetland and flood plains as the good drainage and sparse undergrowth of the ridgeline forest offered the easiest travel conditions as opposed to dense vegetation of creek corridors and inundated wetland landscapes.

In May 2003, Susan McIntyre-Tamwoy prepared an Aboriginal Cultural Heritage Management Plan (ACHMP) for the Nambucca Shire Council. The ACHMP was commissioned by council in order to develop and present standards and guidelines towards the identification and conservation of known and unrecorded Aboriginal sites, places and landscapes across the LGA. Using the results of previous studies elsewhere on the NSW north coast, and previously developed Aboriginal settlement models, McIntyre-Tamwoy developed the following predictive statements regarding Aboriginal site locations within the Nambucca Shire LGA.

- Artefact sites are likely to be the most common site type within the LGA;
- Artefact scatters are most likely to occur on level, well drained soils adjacent to fresh water;
- The crests of low relief spurs are likely to be a focus for Aboriginal occupation due to there well drained and elevated context;
- Estuarine midden sites are located close to the estuarine environment on elevated ground;
- Burial sites are generally found in landforms characterised by deep soft soil profiles, such as aeolian sand and alluvium; and
- Scarred trees may occur in all topographies where old growth trees survive.

A regional model for artefact distribution in relation to stream order on the Cumberland Plain has been developed by White and McDonald (2010). Although this model was developed using data collected from the Cumberland Plan, west of Sydney, it's my opinion that data collected from excavations up and down coastal NSW supports their conclusions. They analysed artefact distribution on the north of the Cumberland Plain by examining the results from a number of archaeological investigations in the Rouse Hill area. This research found that artefact distribution varies significantly with stream order, with higher densities of artefacts located next to larger streams. First order streams had a mean density of 0.7 artefacts/m2, while second order streams had a mean density of 6.5 artefacts/m2. For fourth order streams this increased to 13.9 artefacts/m2. There was not enough data on third order streams to make a comparison (White & McDonald 2010:32).

White and McDonald (2010) also tested the significance of distance from water, as this was thought to be a primary determinant of where people camped and hence where artefact density would be represented in the archaeological record. For first order steams, distance from water was not statistically important, with artefact density around first order streams found similar to levels of background scatter. For second order streams, artefact density is highest within 50 m of water and declines with increasing distance from water. For fourth order streams, artefact density was found to be highest 51-100 m from the stream and lower closer to the stream (<50 m) and declining densities greater than 100 m from the stream (White & McDonald 2010:33).

White and McDonald (2010) also examined which landforms preserved the most artefacts. They found that terraces yielded the highest densities of artefacts. Terraces had a mean density of 20.8 artefacts/m2. Mean densities for other landforms are as follows: creek flat 3.8 artefacts/m2, lower slope 8.4 artefacts/m2, mid slope 3.8 artefacts/m2, and upper slope and ridge top 0.4 artefacts/m2 (White & McDonald 2010:33).

3.3 Landscape assessment

The study area is located with a landscape identified as the Manning Macleay Coastal Alluvial Plains. The alluvial plains are associated with the Nambucca River and its major tributaries such as Taylors Arm, located immediately east of the current study area. The study area itself is dominated by moderately steep to steep ridgelines and deep valleys all sloping dramatically from the southern boundary of the study area and terminating at the northern boundary

There are four soil landscapes located within the study area, Raleigh, Seven Oaks, Pine Creek and Bowra Creek landscapes. Raleigh and Seven Oaks soils consist of moderately well drained to poorly drained alluvial soils associated with the creeks, rivers, estuarine back swamps and flood basins (Atkinson et al. 1997). The soils tend to be extremely acidic and prone to flooding, potentially impacting on the survivability of Aboriginal objects.

The Bowra and Pine Creek soil landscapes are generally well drained soils often found on the low rolling hills and foot slopes of the region (Atkinson et al. 1997). These elevated well drained soil landscapes often found associated with fresh water would contain a moderate to high potential for survival of Aboriginal objects.

The study area is adjacent to Taylors Arm, a permanent tributary to the Nambucca River located approximately 350 metres to the east/northeast. The Nambucca River is a major landscape feature of

the region. In addition, the study area contains several first and second order tributaries to Taylors Arm. First order waterways are usually ephemeral and only contain water after periods of sustained rain. Second order waterways are generally named or unnamed waterways of intermittent flow depending on rainfall. The identified waterways within the study area all flow into a fourth order tributary that in turn flows into Taylors Arm. This tributary runs parallel to the northern boundary of the study area and is a permanent source of fresh water.

3.4 Predictive model

The predictive model outlined in Table 3 below has been developed for the study area based on the AHIMS search results, landscape assessment and regional and local Aboriginal archaeological context outlined above.

Table 3: Predictive model

Site Type	Description	Likelihood to occur
Open camp sites/stone artefact scatters/isolated finds	Open camp sites represent past Aboriginal subsistence and stone knapping activities, and include archaeological remains such as stone artefacts and hearths. This site type usually appears as surface scatters of stone artefacts in areas where vegetation is limited and ground surface visibility increases. Isolated finds may represent a single item discard event or be the result of limited stone knapping activity. The presence of such isolated artefacts may indicate the presence of a more extensive, in situ buried archaeological deposit, or a larger deposit obscured by low ground visibility.	Due to the presence of well drained soils within the study area and the presence of numerous creeks and creek lines, this site type is likely to occur within the study area
Potential Archaeological Deposit	Potential Archaeological Deposits (or PADs) are areas where there is no surface expression of stone artefacts, but due to a landscape feature there is a strong likelihood that the area will contain buried deposits of stone artefacts.	Due to the presence of well drained soils within the study area and the presence of numerous creeks and creek lines, this site type is likely to occur within the study area.
Scarred or carved trees	Tree bark was utilised by Aboriginal people for various purposes, including the construction of shelters (huts), canoes, paddles, shields, baskets and bowls, fishing lines, cloaks, torches and bedding, as well as being beaten into fibre for string bags or ornaments (sources cited in Attenbrow 2002: 113). Trees may also have been scarred in order to gain access to food resources (e.g. cutting toe-holds so as to climb the tree and catch possums or birds), or to mark locations such as tribal territories. Such scars, when they occur, are typically described as scarred trees.	If there is remnant old growth woodland located within the study area, this site type may occur.
Axe grinding grooves	Grinding grooves are the physical evidence of tool making or food processing activities undertaken by Aboriginal people. The manual rubbing of stones against other stones creates grooves in the rock; these are usually found on flat areas of abrasive rock such as sandstone.	The lack of suitable geology associated with this site type makes it unlikely to occur within the study area.
Bora/ceremonial	Aboriginal ceremonial sites are locations that have spiritual or ceremonial values to Aboriginal people. Aboriginal ceremonial sites may comprise natural landforms and, in some cases, will also have archaeological material. Bora grounds are a ceremonial site type, usually consisting of a	There is no record of this site type occurring within the immediate region making it less likely to

Site Type	Description	Likelihood to occur
	cleared area around one or more raised earth circles, and often comprised of two circles of different sizes, connected by a pathway, and accompanied by ground drawings or mouldings of people, animals or deities, and geometrically carved designs on the surrounding trees.	occur within the study area
Middens	Middens are the remains of edible shell fish and fish bones typically after cooking and eating. Middens may also contain animal bones, charcoal from cooking and stone artefacts. Middens may be the remains of single meal or many meals over a long period of time. Middens may be found on coastal sand dunes and beaches, estuaries and swamps on along the banks of inland rivers and creeks. Middens may contain a variety of edible shellfish, depending on the environment. Shellfish species are dependent on the environment, either coastal, estuarine or inland rivers and creeks.	Due to the presence of estuarine environments associated with the study area, there is a moderate potential for this site type to occur

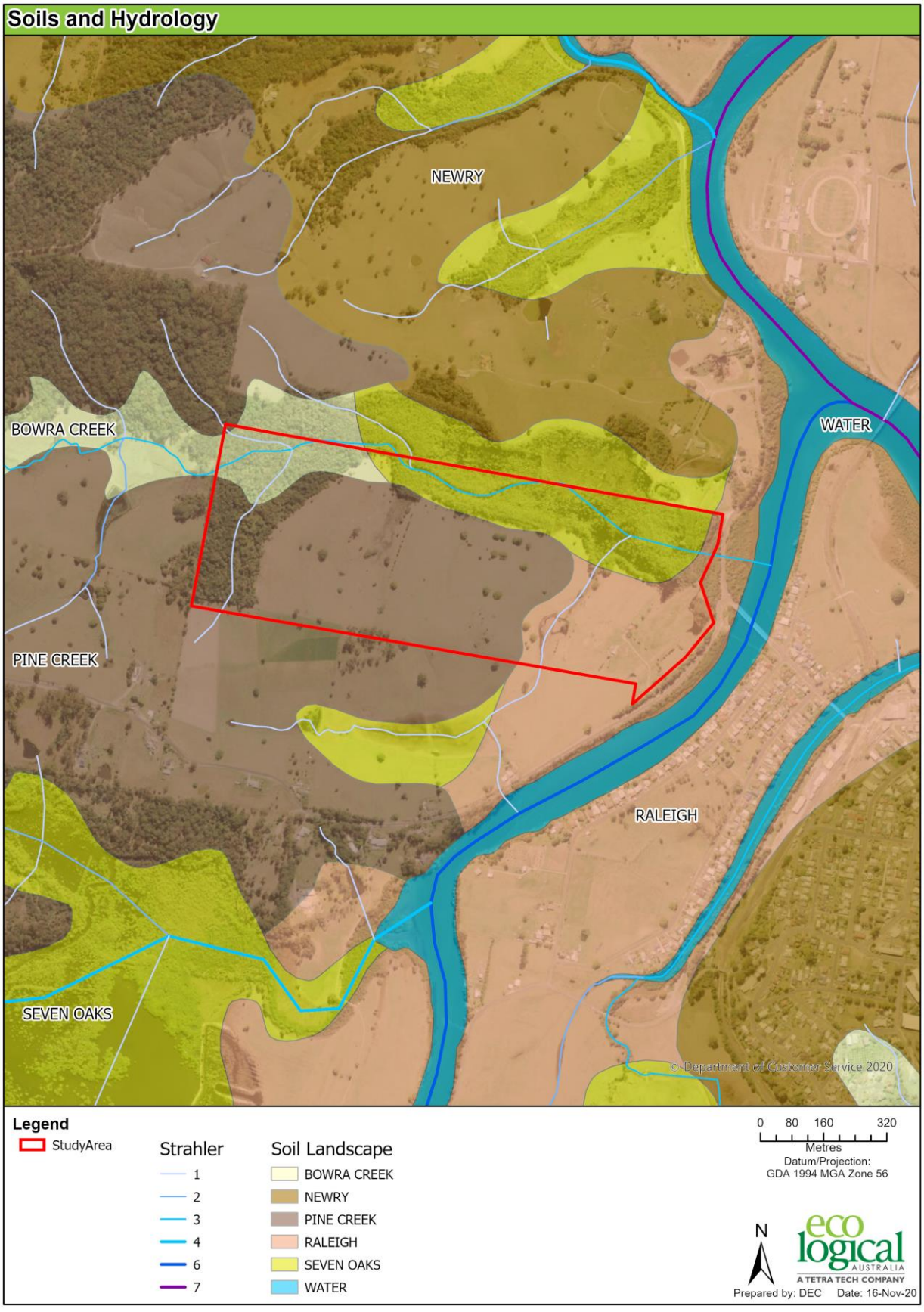

Figure 4: Soil landscapes and hydrology of the study area

3.5 Visual inspection

A visual inspection of the study area was undertaken by ELA Senior Archaeologist Tyler Beebe on 24 - 25 November 2020. Visual inspection aimed to identify Aboriginal objects if present and assess the archaeological potential of the study area. The study area was found to be dominated by steep ridges and deep valleys all sloping dramatically from south to north across the study area. The ground visibility across the study area was low to nil with short paddock grass and longer wetland type vegetation accounting for the majority of the ground cover. Any area of exposure encountered was the result of machine disturbance and machine boring, all areas of exposure were closely inspected for Aboriginal objects and none were observed. The study area along the north and western margin was bounded by young regrowth and wetland scrub, no remnant old growth trees were observed. There were larger trees within the open areas of the study area, all were inspected, and no cultural modifications were observed. There is a low to nil potential for the study area to contain any culturally modified or scarred trees.

In the addition, the dense areas of regrowth and scrub along the northern and western portions of the lot were within a low lying swamp like landscape associated with the Fourth order tributary and would have had a low potential to contain an archaeological deposit.

The steepness and degree of slope of the ridgelines indicated that they contained a low potential for an archaeological deposit. Subsequently the deep sloping valleys between the ridges contained artificial dams and vegetation that would indicate that these areas were wet most of the year, probably from water running of the ridgeline during sustained rains. Theses valleys were determined to have a low potential to contain an archaeological deposit. Most of the ridgelines observed across the study area terminated steeply along the northern and western boundary of the study area. If anything, these ridgelines would have been used solely as travel routes for Aboriginal people in the past and would exhibit a low potential to contain an intact subsurface archaeological deposit

The study area did contain two areas of moderate to high archaeological potential along the northern boundary of the study area (Figure 15). For clarity and ease of discussion they will be referred to as the eastern and western areas.

The eastern area of potential is a broad terrace landform bisected by the first order creek just to the south of its confluence with the larger fourth order tributaries. Past archaeological investigations have found that the confluence of two freshwater creeks have a been a focal point of past Aboriginal activity, as Aboriginal people moving through the area would have exploited the freshwater creeks and associated wetlands for resources.

The western area of potential is a small terrace landform near the confluence of two freshwater streams. The waterways and the associated wetlands would have been exploited for resources by Aboriginal people in the past.

Figure 5: Ephemeral 1st order drainage line

Figure 6: Machine disturbance

Figure 7: Young regrowth along northern boundary

Figure 8: Rolling ridges and valleys across the study area

Figure 9: Artificial dam catching runoff from ridge slopes

Figure 10: Artificial dam catching runoff from ridge slopes

Figure 11: Terrace landform with archaeological potential, eastern portion of study area

Figure 12: Terrace landform with 4th order tributary in background

Figure 13: Terrace landform with archaeological potential, western portion of study area

Figure 14: Terrace landform, western portion of study area

3.6 Impact avoidance assessment

If impacts to the above-mentioned areas of potential can't be avoided further assessment in the form of an Aboriginal Cultural Heritage Assessment (ACHA) including archaeological excavations would be warranted. Considered impacts to these areas include disturbances resulting from the movement of treaded machine/vehicles and any works impacting the ground surface.

The majority of the study area was identified as having low archaeological potential and proposed impacts can proceed with no further assessment warranted. Based on the development plan provide by Tony Owens it appears that the proposed development will avoid the identified areas of potential with maybe some small changes to the design plan. Any impacts to the identified areas of potential without further heritage assessment could be in violation of the National parks and Wildlife Act 1974.

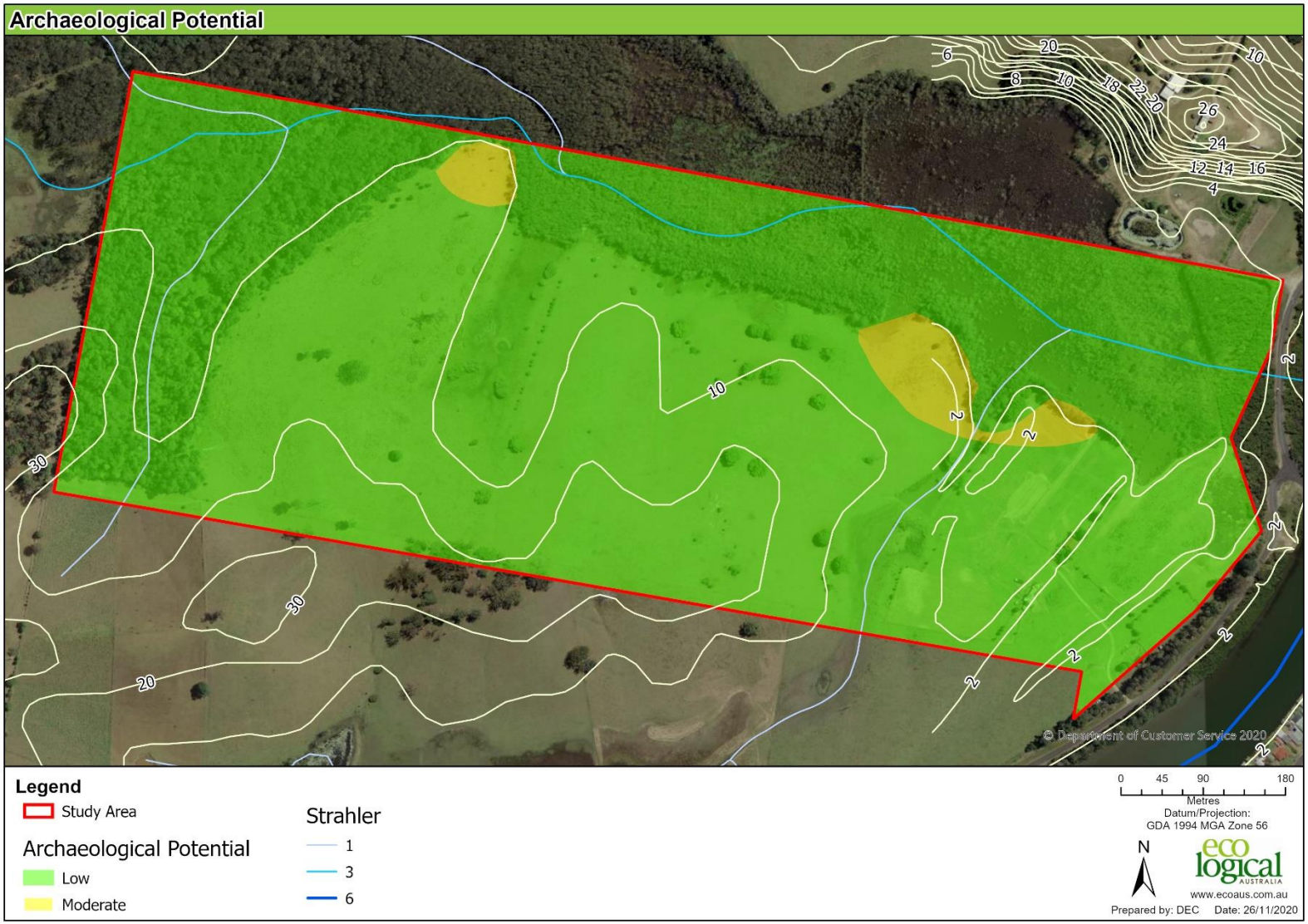

Figure 15: Areas of archaeological potential within the study area

4. Statutory requirements

Aboriginal objects and places in New South Wales are afforded protection under the NPW Act irrespective of whether they are registered on AHIMS. Strict penalties apply for engaging in activities that inflict harm to an Aboriginal cultural heritage site or object without consent for activities under the NPW Act. Under Part 6 of the NPW Act, consent or authorisation for harmful activities may be given under an AHIP. Should harm be inflicted upon an Aboriginal site or object, there are five defences:

- The harm was authorised under an AHIP;
- The proponent exercised due diligence prior to causing the harm and is able to demonstrate this;
- The harm was caused during activities that complied with a code of practice as described in Part 6A of the *National Parks and Wildlife Regulation 2009* (New South Wales). For example, undertaking archaeological test excavations in accordance with the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (DECCW 2010c);
- The harm was caused as part of a low-impact activity or omission under the regulation, and the proponent was not aware of the presence of Aboriginal cultural material; or
- The harm caused during activities that are exempted under Section 87A of the NPW Act. For example, emergency fire-fighting or bushfire hazard reduction work, as defined by the *Rural Fires Act 1997* (New South Wales).

To assess the requirement of an AHIP, Heritage NSW necessitates that an ACHA is prepared in accordance with the *Guide to Investigating, Assessing, and Reporting on Aboriginal Cultural Heritage in New South Wales* (DECCW 2010b) and the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales* (DECCW 2010a). These two guides establish a set of guidelines to aid land users in being aware of how their activities could damage Aboriginal cultural heritage sites and archaeologists in the requirements that must be followed during the investigation of Aboriginal cultural heritage sites. If an AHIP is required, Heritage NSW necessitates that it is further supported by a copy of the approval for the development or infrastructure issued under Part 4 or Part 5 of the EP&A Act.

5. Conclusions

The purpose of the Aboriginal heritage due diligence is to identify if there are registered Aboriginal sites and/or sensitive landforms which may indicate the presence of Aboriginal sites and may therefore require further assessment and approval under Part 6 of the *National Parks and Wildlife Act 1974*.

ELA has undertaken an extenstive search of the Aboriginal heritage Information Management System (AHIMS) database and a review of available background reports.

The AHIMS data has been mapped over on the preliminary development area (Figure 3) showing no previously registered sites within the study area

A site inspection undertaken by ELA Senior Archaeologist Tyler Beebe on 25 November 2020 identified low to nil ground surface across the majority of the study area which prevented the identification of Aboriginal objects if they did exist. Identified areas of exposure were the result of machine disturbance/boring, these areas were closely inspected for the presence of Aboriginal objects, none were identified. The site inspection identified that the majority of the landscape consisted of steeply sloping ridge lines and deep sloping valleys that would have been catchment areas for runoff from the adjacent slopes. These landforms were determined to have low archaeological potential.

The inspection identified two areas of moderate to high archaeological potential in the eastern and western extent of the study area. The broad flat terrace landforms were associated with the confluence of creek lines along the norther boundary of the study area and have the potential to be areas of focused past Aboriginal activity. If impacts to these areas can't be avoided, further assessment including archaeological excavation is warranted.

As the remainder of the study area was determined to have low archaeological potential no further assessment is warranted and works can proceed with caution.

5.1 Recommendations

Based on the findings of this due diligence and the requirement of the NP&W Act the following is recommended.

Recommendations 1 – General Measures

Aboriginal objects are protected under the NPW Act regardless if they are registered on AHIMS or not. If suspected Aboriginal objects, such as stone artefacts are located during future works, works must cease in the affected area and an archaeologist called in to assess the finds. If the finds are found to be Aboriginal objects, Heritage NSW must be notified under section 89A of the NPW Act. Appropriate management and avoidance or approval under a section 90 AHIP should then be sought if Aboriginal objects are to be moved or harmed.

In the extremely unlikely event that human remains are found, works should immediately cease, and the NSW Police should be contacted. If the remains are suspected to be Aboriginal, Heritage NSW may also be contacted at this time to assist in determining appropriate management.

Recommendation 2 – Impact avoidance

Based on the presence of areas containing moderate to high archaeological potential, if impacts can't be avoided to these areas, an Aboriginal Cultural Heritage Assessment (ACHA) should be prepared which would include an impact assessment of the proposed development. The ACHA would entail Aboriginal community consultation following the '*Aboriginal cultural heritage consultation requirements for proponents 2010' (DECCW 2010)* to identify Aboriginal cultural heritage values through consultation with Aboriginal stakeholders.

Further archaeological assessment including detailed field survey with Aboriginal stakeholders and archaeological test excavation should be undertaken to inform archaeological values across the developable area. The ACHA can be prepared in advance of any DA and inform areas of opportunity and constraint for development.

References

Atkinson, G et al 1997. Soil Landscapes of the Pacific Highway Corridor Hexham to Corindi. Department of land and Water Conservation, Grafton.

Australian Heritage Commission, 2002. *Ask First: A Guide to Respecting Indigenous Heritage Places and Values.*

The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance 2013.

Department of Environment, Climate Change and Water, 2010a*. Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales*.

Department of Climate Change and Water, 2010b. *Guide to Investigating, Assessing, and Reporting on Aboriginal Cultural Heritage in New South Wales.*

Department of Climate Change and Water, 2010c. *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales.*

Godwin, *no date.* Report to the Nambucca Shire Council on an Archaeological Survey of selected area around the township of Scotts Head, County of Raleigh; 1:25,000 sheets Eungai 9436-11-N and Macksville 9436-I-S. Unpublished report.

Navin Officer Cultural heritage Management, 1991. An archaeological survey of the preferred Pacific Highway By-Pass around Macksville NSW. Report prepared for GHD Group.

Susan McIntyre-Tamwoy Heritage Consultant, 2003. Nambucca Shire Council Aboriginal Cultural Heritage Management Plan. Prepared for Nambucca Shire Council.

White E & McDonald J 2010, 'Lithic artefact distribution in the Rouse Hill development area, Cumberland Plain' *Australian Archaeology* 70: 29-38.

Appendix A AHIMS Extensive Search Results

Office of Environment & Heritage

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

Your Ref/PO Number : 20NEW17585
Client Service ID : 546802

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
21-6-0225	Gins' Gully Fringe Camp	AGD	56	489250	6604300	Open site	Valid	Aboriginal Resource and Gathering : 1		99367
	Contact T Russell	Recorders	Mills Archaeological & Heritage Services Pty Ltd					Permits		
21-6-0313	Nambucca 18_O'Rourke's Settlement	AGD	56	490600	6602600	Open site	Valid	Aboriginal Resource and Gathering : 1		
	Contact	Recorders	Doctor,Susan Mcintyre-Tamwoy					Permits		
21-6-0216	Nambuca 18 O Rourkes Settlement	AGD	56	490600	6602600	Open site	Valid	Habitation Structure : -		
	Contact	Recorders	Doctor,Susan Mcintyre-Tamwoy					Permits		
21-6-0005	Macksville;Tilly Willy Camp Site;	AGD	56	491200	6601900	Open site	Valid	Artefact : -	Open Camp Site	1746,101029
	Contact	Recorders	Ray Kelly,Mr.Richard Kelly					Permits		

Report generated by AHIMS Web Service on 02/11/2020 for Tyler Beebe for the following area at Datum :GDA, Zone : 56, Eastings : 490109 - 491544, Northings : 6602823 - 6603781 with a Buffer of 1000 meters. Additional Info : Due Diligence. Number of Aboriginal sites and Aboriginal objects found is 4

This information is not guaranteed to be free from error omission. Office of Environment and Heritage (NSW) and its employees disclaim liability for any act done or omission made on the information and consequences of such acts or omission.

Page 1 of 1

ecological AUSTRALIA
A TETRA TECH COMPANY

1300 646 131
www.ecoaus.com.au