

Aboriginal Cultural Narratives

University of New England Tamworth

YERRABINGIN DESKTOP RESEARCH REPORT PREPARED FOR ARCHITECTUS, MAY 2023



Authorship

This research report has been created by Yerrabingin for Architectus.

At Yerrabingin, we acknowledge and respect the traditional custodians and ancestors of the lands we walk across.

The terms First Nations, Indigenous and Aboriginal are used interchangeably throughout this report. When referring to a specific group or individual, nation or language group names are used.

This report includes reproduction of words and descriptions in historic quotes written in the past that may be confronting and would be considered inappropriate today.

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Limitations

This report is the result of a desktop study into existing resources available on Aboriginal Cultural Heritage in the study area. No community consultation or primary research was completed as part of the study.

Spelling

There is some variation within this report with the spelling of Gamilaroi, Kamilaroi, Gamaroi and Gamilaraay. The terms are used interchangeably throughout this report however they all refer to the same Country.

Cover image

Figure 1. An image of the night sky depicting the Milky, Warambul I Lonely Planet

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ACKNOWLEDGING COUNTRY

We acknowledge Country, the Cultural Landscape that we are working upon. We acknowledge the custodianship of its people and the privilege and responsibility to Connect with Country.

As a team we are guided by the inspiration of Country, the stories and knowledge this place contains and has to share. We acknowledge its contribution to wellbeing both mental and physical, providing a refuge and safe place to learn and share.

Our vision is that sensing and caring for Country is something that transcends cultural difference and highlights the many values that are similar across the cultures of our contemporary communities. Supporting a socially inclusive, resilient and innovative community based on, honouring the wisdom and kinship of all cultures, captured through the lens of custodianship.

We have sought to observe and share protocols of Australian First Nations cultures about Country, custodianship and clan relationships.

Often words of acknowledgment are given to Country. But to know and introduce yourself to Country you must sense and feel its presence, hear its stories, the sounds, the colours, the smells and her spirit. It is not the words as ritual, but the feeling that connects us to her and each other and reminds us of our custodial responsibility.

Country is the Codex that unlocks the largest and oldest environmental and cultural database in the world, it has millions of authors, rich with wisdom and a story that continues to grow with each new generation of custodians.

Exploring Gamilaroi Country, the unique landforms, climate, seasons, flora and fauna, spirituality and the connection her people have with Country through language, custodianship, and ceremony.

Aboriginal culture values sustainability, using local materials, an interconnected view of humans and the environment and using natural variations in weather and seasonality in designs. These values are evident in the material culture of Aboriginal people within the North East of NSW, Australia and will be drawn on in developing design opportunities. If we look after Country, it will look after us.

PROJECT OVERVIEW

The project involves the new development of a University of New England university campus in Tamworth. It will occupy what is currently the unused velodrome site on Peel Street, bordering the Peel river. The campus will extend upon the current UNE campuses, with a strong focus on local community and industry connections (University of New England 2020).

The vision for the development as stated in the University of New England Tamworth plan (2020), includes five Strategic goals:

- Responsive to the needs of industry and community
- Innovative and future-focused
- Accessible, flexible and inclusive
- Celebrate Aboriginal culture and heritage
- Supported by world class, open collaborative facilities

As part of the project, Architectus have engaged Yerrabingin to produce a desktop research report identifying key Aboriginal cultural heritage narratives for the site to provide context for the design. This report presents the research findings, including the site context, the narratives and some initial design ideas related to the narratives.

DESIGNING FOR COUNTRY AND CONNECTING WITH COUNTRY

Recent research and recommendations about creating culturally appropriate and meaningful design in the public sphere have been developed by government bodies such as Government Architect NSW (GANSW) and the NSW Department of Planning, Industry and Environment (DPI&E).

DESIGNING FOR COUNTRY DISCUSSION PAPER

Relevant to the University of New England Tamworth, the GANSW *Designing with Country* discussion paper introduces the importance of engagement with Aboriginal people and organisations in the design process of public spaces and buildings to achieve the best design outcomes. It explores good design in Australia as including the Aboriginal worldview of Country.

DRAFT CONNECTING WITH COUNTRY FRAMEWORK

Following the *Designing with Country* discussion paper, GANSW have developed the Draft *Connecting with Country* framework, to guide how Aboriginal knowledge can be used in the design and planning of places. GANSW worked with Aboriginal consultants, organisations and LALCs and local and state government to draft the framework. The framework emphasises that good design in Australia will be informed by the Aboriginal concept of Country. It will prioritise Aboriginal ways of knowing and connecting to Country and require co-design of projects with Aboriginal people.

The strategic goals and long-term commitment for people working with the *Connecting with Country* framework is that:

Through our projects, we commit to helping support the health and wellbeing of Country by valuing, respecting, and being guided by Aboriginal people, who know that if we care for Country - it will care for us.

The *Connecting with Country* framework recommends considering project life cycles with an Aboriginal perspective. As illustrated in the graphic below, this is broken into four steps: Sensing, Imagining, Shaping and Caring for Country.



This report contributes to the *Sensing* and *Imagining* stages, by gathering existing resources on Aboriginal cultural heritage that could be used for discussion in co-design with Aboriginal advisors. This research report has been guided by the following questions, as outlined in the *Imagining* stage:

- What is the story of the place?
- What are the indicators for success?
- What is the history of the site?
- What are the needs of the place?
- What is the purpose of this place?

The *Ngara Bamal* (Listen to Country) design methodology developed by Yerrabingin is aligned to the principles outlined in the GANSW *Connecting with Country* framework. The *Ngara Bamal* process will be used by Yerrabingin in co-designing options to incorporate Aboriginal cultural heritage values of the site into the design and delivery.

GAMILAROI COUNTRY

Tamworth is in Gamilaroi Country. Gamilaroi Country extends from the Upper Hunter Valley through to the Warrumbungle Mountains in the west and up through the towns of Coonabarabran, Quirindi, Tamworth, Narrabri, Walgett, Moree and Mungindi in NSW and Nindigully in southwest Queensland. Gamilaroi nation is surrounded by the Wailwan, Bigambul, Ngarabal and Nganyaywana nations (Carpenter n.d). Groups within the Gamilaroi nation in the Tamworth area are Gonoo Gonoo, Gunnedah, Manilla and Moonbi tribes (McAdam & Wilson 2000, p.10).

Within Gamilaroi Country are mountain ranges, rivers, creeks and extensive plains. Within Tamworth, the Peel River, known as *Calala* in Gamilaroi (McAdam & Wilson 2000, p.85), intersects the town. *Calala* has a wide riverbed, and it's morphology has continuously changed over the years. On the northeast of *Calala* are hills, mountains, and diverse ecology; on the southwest are river flats and undulating plains.

Site location

The location of the site is at 545 Peel Street, Tamworth, which sits alongside the Peel river as pictured below.



Figure 3. Arial view of the UNE site, capturing the current velodrome \mid SIX maps



Figure 4. Arial view of Tamworth | SIX Maps

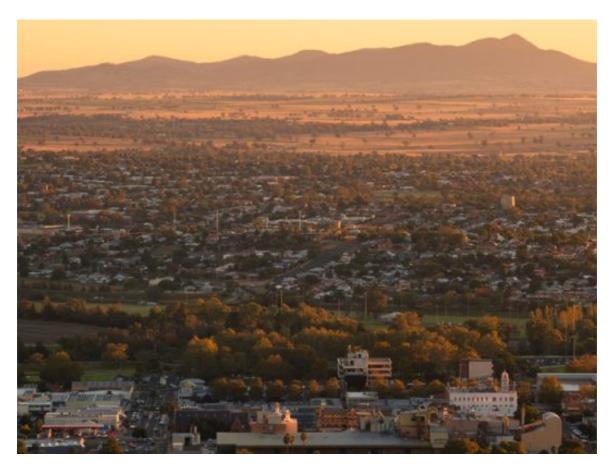


Figure 5. Sunset over Tamworth | Australian Traveller

ELEMENTS OF COUNTRY

A way to think and learn about Country is to consider Country as made up of a series of interconnected layers: Sky Country, Wind Country, Water Country, Forest Country, Below Country and On Country. This allows us to look at different parts of Country and the role they play in an overall system.

Yerrabingin has developed an 'Elements of Country' Framework for use in designing with Country for development of masterplans and regenerative urban design projects. Below is an overview of the Elements of Country as found across Gamilaroi Country and the UNE site. The wider environmental and cultural context surrounding the site is taken into consideration when looking at the Elements of Country, as they are made up of interconnected systems that reach far from the site yet maintain meaning and connection to the site.

Water Country

Water Country is the connective tissue, the circulatory system, the confluences and paths within and between Country. The meeting of salt and fresh water, where one drop forms setting a path through Country, connecting with story and landscape. Water Country is the giver of life – it is what connects and defines landscapes, carrying salt and freshwater stories.

The Calala, Peel River, is Tamworth's primary watercourse, running through the city's centre and past the UNE site, where it sits on the NE side of one of its bends. The river has been embedded with a multitude of cultural and historical meanings pre and post-colonisation whilst also being a significant resource for humans, flora and fauna. It rises in the Liverpool Ranges to the southeast and runs through Tamworth to the northeast. The major tributaries of Calala are the Cockburn River which flows into Calala near Nemingha, and Goonoo Goonoo Creek which joins Calala to the east of the city. In the east is also Calala Creek and Calala Anabranch, once a main channel of Calala. To the north of Tamworth, Calala is joined by Spring Creek and Long Gully and other small tributaries, though these have been changed over time during the area's urbanisation (McAdam & Wilson 2000, p.23).

Pre colonisation, the *Calala* and larger tributaries were reliable water sources for the Gamilaroi, providing extensive habitats for flora and fauna to flourish and clean water for drinking and washing. During the drier periods, it also allowed the Gamilaroi to remain in the area as water was a life-sustaining resource. There is the suggestion that the more significant Aboriginal camp sites could have been situated along the Peel river banks, however, due to moving waters from flooding and cracking land from droughts, artefacts have been displaced (McAdam & Wilson 2000, p.24). The *Calala* is not just a physical resource for the local Gamilaroi people, it also provides a significant cultural and spiritual connection to Water Country. For them, everything is interconnected, the river is much a part of their family as their human-kin.

"The rivers were our classroom. It is here that we learnt the stories of our old people, how to find food and survive in the bush. The river has always been, and still is, the source of life for the Kamilaroi people" (Catchment Management Authority, n.d).

The morphology of the river has changed from both natural and human forces, affecting its flow and subsequently its internal ecosystems. This has had a significant impact in altering the rivers biological processes, the habitats which support organisms and the physical nature of the channel (Thoms et al. 1999). As the watercourse is prone to flooding, the course of the river has moved back and forth across its floodplain throughout history (McAdam & Wilson 2000, p.24). However, colonisation and urbanisation have had the most significant impact on its course and its health. Due to the river threatening to impact the city, a straight channel was cut in 1988 to bypass the large bend. However, the town was still impacted by flooding, with the 1910 flood recorded as

one of the worst. Whilst this significant original section of the *Calala* was reshaped, sand and gravel removal has occurred as a result of urbanisation, however, this has only accelerated erosion and caused instrumental affects to its health (McAdam & Wilson 2000, p.24). Due to these impacts, the original bends and curves have now taken on a more linear structure within the river, evidenced in the contrasting images below:

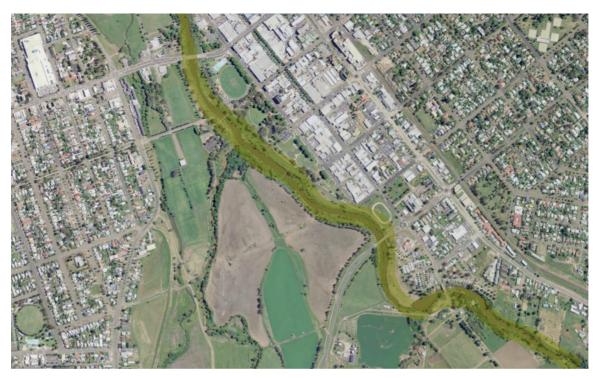


Figure 6. Arial view of the Peel River | SIX Maps

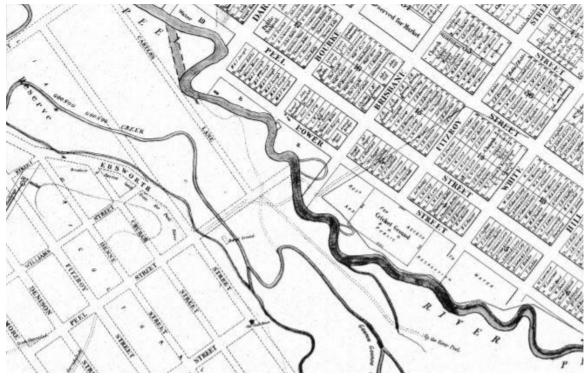


Figure 7. Arial view of the Peel River 1880's | The Northern Leader



Figure 8. The Milky Way, Warambul | First Knowledges Astrology

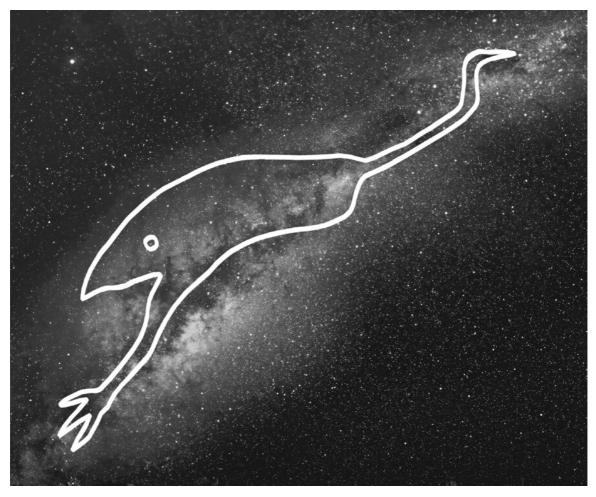


Figure 9. The Dark Emu, Gawarrgay | First Knowledges Astrology

Sky Country

Sky Country is a place of spirits and the ancestors and includes knowledge about navigation, the seasons, time and Song lines. It is also an important component of ceremony as it allows engagement with our ancestors and spiritual beings.

Sky Country is a keeping place for knowledge on navigation, Songlines and seasons. Through ceremony, Sky Country allows us to connect with our ancestors and spiritual beings.

The Gamilaroi hold a strong connection to Sky Country as many of their dreaming stories are held in the night sky. These stories have been passed on orally through thousands of generations. For them, the land and the sky are intertwined and interlinked as "what is observed in the sky is mirrored in land, and what is observed on land is echoed in the sky" (De Napoli & Noon 2022, p.43).

Warumbul and Gawarrgay are two significant stories within their culture which capture the Milky Way and The Dark Emu. There are many more, however for the purpose of this report these two are noted below:

Warumbul | Milky Way

"The big rip across the sky is not just the home of our many beloved dark sky constellations but also stands as a visual remnant of a critical moment during the Dreaming. To some, the land and the sky were initially one. The universe was a whole until it was ripped in two. The Milky ways dark shadow is the scar that remains showing the boundary between the land and the sky world above" (De Napoli & Noon 2022, p.43).

"..this is the Warambul, meaning watercourse or river, and the place where everything once was, until the Universe was turned upside down and everything ended up on Earth. Many of the creation beings are still to be found in the Warambul, and many objects and stories have mirror places on Earth. Behind the Milky Way is Bulimah, the sky camp, where persons go after their life on Earth" (Australian Indigenous Astrology, n.d).

"One story of the Milky Way is about the sons of the cultural hero, Baiame, who, after his sons disobeyed him, turned them into large rocks which can be seen today on either side of the fish traps on the Barwon River at Brewarrina, NSW. The two bright patches on either side of the Milky Way in the constellation of Sagittarius are the spirits of the sons, but their bodies are the rocks" (Robert Fuller 2014).

Gawarrgay | The Dark Emu

"The Coalsack is a dark cloud just below the Southern Cross. For many Aboriginal people across Australia, this is the head of the Emu in the Sky, which stretches from the Southern Cross along the dust lanes of the Milky Way to the constellation Scorpius. Unlike nonAboriginal people, the Kamilaroi and their neighbours see the dark spaces (dust lanes) of the Milky Way, rather than the stars, as important, because this is where the Emu in the Sky is seen. The Kamilaroi call the Emu Gawarrgay, rather than Dhinawan, which is the name for the emu bird.

The Emu first becomes visible as the Milky Way rises in the evening in April and May, and at this time the Emu appears to be running. The Kamilaroi see this as when the emus on Earth are breeding, and the female is chasing the male. This also means that the female emu will be laying eggs, so it is time to start collecting emu eggs for food.

Come August, everyone has been in their winter camp, and it is time to start planning ceremonies for the summer, particularly the bora, the male initiation ceremony. Because the male emus care for the chicks, there is a connection with the bora, where the men care for the young men, so the Emu in the Sky is vertical over the South, which is the direction that the bora site, which is two circles connected by a path, is oriented. The Emu can also look like two eggs, which is a sign that the eggs are hatching, and should no longer be collected.

Later in the year, the Milky Way and the Emu dip close to the Earth, and the Emu is thought to be sitting in a waterhole, which is full from the spring rain. The Emu is also thought to be a featherless emu which travels to waterholes and looks after everything that lives there. The Euahlayi also call this Emu ngurran.gali, which translates to "emu in water". After the Emu in the Sky is no longer seen during summer, the Kamilaroi and Euahlayi say that the Emu has travelled to Earth, and is seen as the black emu bird, which is very rare." (Australian Indigenous Astrology, n.d)

Non-Human Kin Country

Non-human Kin Country fills the senses with colour, smells and sounds, on Country we are surrounded by our kin the animals and plants. This is where we learn about the connection of all living things and our responsibilities and roles within this web of connections.

Plants and animals are our non-human kin; they are our family. We are able to learn from them, seek refuge in their company, look after them and be nourished by them.

The Tamworth region is diverse in soil types, water ways, vegetation and animals, however, due to colonisation and urbanisation these have all significantly decreased over the years. The land has been impacted by population and developmental growth, causing ground disturbance, a decline in water health and a great loss of native species and habitats.

The first colonist, John Oxley, to record his depiction on the land in 1818, wrote:

"It would be impossible to find a finer and more luxuriant country... This space between the bounding hills is not altogether level, but rises into gentle inequalities, and independently of the river is well watered; the grass was most luxuriant; the timber good and not thick; in short, no finer place in the world can afford more advantages to the industrious settler, than this extensive vale" (McAdam & Wilson 2000, p.29).

The richness and diversity of plant species within the region allowed Aboriginal people to utilise these within their day to day lives, these species are noted as *Economic Plants*. They were recorded within the 1990's from the areas surrounding the city, as the internal city area held mostly introduced species. The species are listed below, however due to land clearance, developments, cultivation and agricultural practices, these species will most have likely drastically reduced.

Common & Scientific Name	Use
Bulbine Lily, Bulbine bulbosa	Tuber eaten raw or roasted
Bulrush, Typha sp.	New shoots, flowering head and bulb eaten, fibre from bulb used for string
Chocolate Lily, Dichopogon strictus	Rough-barked Apple (Angophora floribunda)
Common Reed, Phragmites Australia	Canes used for spear shafts, leaves twisted into string for weaving, sections of hollow stems used for necklaces or nose ornaments, underground shoots eaten

Cycad, Macrozamia sp.	Highly toxic seeds ground and leached to remove toxins before being made into damper and roasted
Glossy Nightshade, solanum Americanum	Berries eaten when ripe (black)
Field mushroom, agaricus campestris	Whole fungi eaten
Gargarloo, Parsonia lanceolata	Fruit and tap root (yam) eaten
Grass tree, xanthorrhoea australis	Base of leaves and pith inside eaten, resin used for hafting stone tools, flowering stems used for spear shafts
Kangaroo grass, themeda australis	Seeds ground for flour. Leaves and stem used for fibre
Kurrajong, brachychiton populneus	Seeds eaten, underbark used to make string, tap roots of young trees eaten, roots can be used as a water source
Matt rush, lomandra longifolia	Long pliable leaves used for weaving baskets, leaf bases and flowers edible
Mistletoe, amyema sp.	Berries eaten
Native cherry, exocarpos cupressiformis	Fruit eaten
Native geranium, geranium sp.	In some species root eaten in others with a high tan- nin content the roots were used to treat diarrhoea
Native millet, panicum decompositum	Seeds ground for flour
Native raspberry, rubus parvifolius	Fruit eaten
Native willow, acacia salicina	Bark used as a fish poison
Pigweed, portulaca oleraca	Seeds, leaves, stems and root eaten
River Red Gum, E. camaldulensis	Bark used to manufacture canoes
Rushes and sedges, Juncus, carex and Cyperus sp.	Underground stem or tuber can be eaten in some species, leaves used for weaving
Rusty fig, ficus rubiginosa	Fruit eaten, roots used to make dye
Smooth flax lily, dianella laevis	Leaves split and used to make ties, berries can be eaten
Stinging nettle, urtica incisa	Leaves eaten
Swamp dock, rumex brownie	Root and leaves eaten
White box, eucalyptus albens	Bark used for bowls, shields, shelter etc
Wild orange, cappis mitchellii	Fruit eaten
Wonga vine, pandorea pandorana	Canoes used for spears
Yellow box, E. melliodora	Yellow box, E. melliodora

Figure 10. Economic plant species | Table adapted from Wilson & McAdams Archeological report

The following species of native trees have been noted to be found in the Tamworth region more recently; their location determined by factors such as soil depth, altitude, drainage and soil type. Within the vicinity of the *Calala*, Peel river, the River Red Gum, She-Oak and Yellow Box species are essential for the banks and health of the river.

Native Trees

River Red Gum (Eucalyptus camaldulensis)	She-Oak (Casuarina cunninghamiana)
Yellow Box (Eucalyptus melliodora)	Blakelys Red Gum (Eucalyptus blakelyi)
White Box (Eucalyptus albens)	Kurrajong (Brachychiton populneus)
Pine (Callitris gJaucophylla)	Rough-barked Apple (Angophora floribunda)

Figure 11. Native Tree Species | Own table, information gained from Wilson & McAdams Archeological report

The *Calala* is capable of supporting significant levels of biodiversity, however this is highly dependent on the health of the river. The river provides a home for many migratory bird species and is a vital habitat for many native fish. Thirty seven water-dependent bird species have been recorded on the river, including Latham's Snipe and the Eastern Great Egret (NSW department of Planning,Industry and Environment 2020).



Figure 12. Eastern Great Egret | Bird Forum

The following fish species have been recorded within the river, with the Murray Cod and Silver Perch currently both being classified as threatened species.

Native Fish

Unspecked Hardyhead	Murray-Darling Rainbowfish
Obscure Galaxias	Bony Herring
Silver Perch *	Purple-Spotted Gudgeon
Golden Perch	Spangled Perch
Murry Cod *	Carp Gudgeon
Australian Smelt	Mountain Galaxias

Figure 13. Peel River Native Fish | Table created from NSW department of Planning, Industry and Environment information.



Figure 14. A juvenile Silver Perch | Department of primary industries

Wind Country

It carries the messages of seasonal change, the songs and words of our ancestors across Country. Where the landscape and light vibrates to a rhythm, be it the trees and the grass, or the clouds racing across the sky.

Wind Country is the messenger of seasonal change and plays an important role in the pollination and nourishment of plants. You can feel Wind Country vibrate across landscapes, from rustling leaves to the clouds in the sky.

We can observe Wind Country in seasonal changes in plants and weather patterns. Plants flower and seed across the seasons as outlined above, making a cyclical journey that includes animals and the sun, wind and rain. We can support Wind Country by ensuring protection and regeneration of endemic plants and animals to ensure that wind can work with the plants, animals and weather patterns through the seasonal changes.



Figure 15. Red River Gum in flower | Native Plants

Learning about the twelve seasons of the Gamilaroi calendar, which follows the Emu in the Sky story, can help us to engage with Wind Country. A seasonal calendar for Gamilaraay was created by Elders in a language program in Walgett. The calendar is divided into Yaraaybaa (sun time) and Dhandarraa (frost time). Yarraybaa begins with Yarragaa, the time of the Yarragaa winds between September and October.

October is Guwadhaa-gil, quandong month. November is Mugiin.gaa-gil, sandfly month, December is native orange month, January is desert lime month, February is Gaagulu-gil, bush banana month, March is Ngaybann-gil, nepine fruit month. Then comes Bariganbaa, Naipan fruit time and into Dhandarraa, frost time. April is Bulawaa-gil, emu pair month. May is Guduu-gil, Murray Cod month. June is Garriil-gil, cold month. July is Barrgay-gil, emu chick month. August is Giirray-gil, yabby month. September is Maalinha-gil, southwest wind month (Gamilaraay 2021).

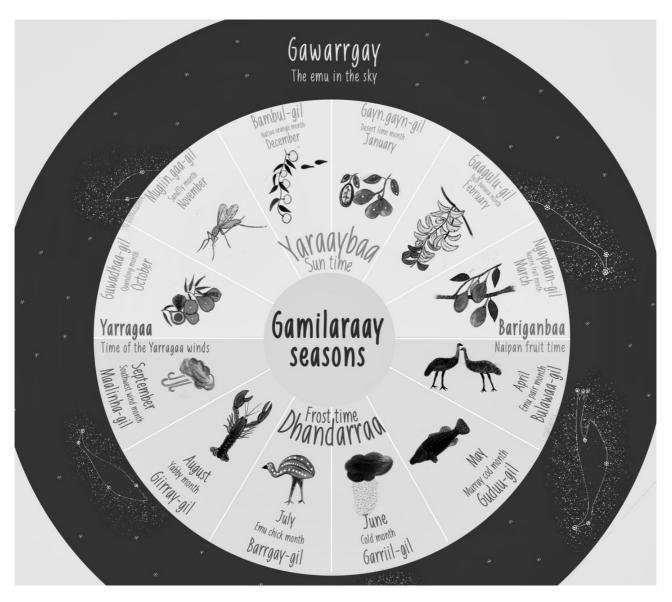


Figure 16. Edited version of the Gimiliraay Calendar | Winanga-Li - https://www.winanga-li.org.au/yaama-gamilaraay/topics/gilaymaal-months/

Move with Country

At the heart of Country is people and community, where our spirituality is embedded in environmental consciousness. To Move with Country is to be a Custodian of Country, it is where we record and share our knowledge through story, song, dance and art.

Country needs people and people need Country. We are essential to keep each other healthy and happy. We are able to learn about and share Country through dance, art, song and storytelling. We create community and culture through these activities, fostering a spirituality and identity that is deeply connected to the environment around us.

There is a strong indication from the 2000 Tamworth City Aboriginal / Archaeological site study that suggests that there were large Aboriginal camps along the peel river. The largest artefact sites found in the area were near the permanent Rivers, with the Calala, Peel, being one if them, showcasing the widest variety of artefact types (McAdam & Wilson 2000, p.66)

Garawul Gurar | Botanical Gardens | Artefact scatters

"The site located within the Botanic Gardens area was named uGarawu/ Gurar" which is GamiJaroi for "Gully Long" a reference to the watercourse (Long Gully), which subdivides the gardens and the Aboriginal site, that was located on both its eastern and western terraces. The aspect of the site is generally to the south, south-west and the slope varied from O· to approximately 5·. At the time of the site's location only an estimated 10% sample of the artefacts were recorded (30). Artefact types consisted of flakes, flaked pieces, cores, a stone chisel and a hammerstone. Raw materials recorded consisted of chalcedony, quartzite, quartz, chert, hornfels, cherty argillite and andesitic greywacke...It was suggested (Gaynor and Wilson 1997:60) that the total number of artefacts still remaining in the preserved area of the site would be in excess of 500 and that this makes this site the largest Aboriginal site known in the Tamworth City area" (McAdam & Wilson 2000, p.48).

It is suggested from the artefacts found that they were manufactured from the pebbles from the river, that it was the people camped by the Peel river that were frequenting the site.

Kamilaroi Walking Track | Oxley Lookout | Artefact scatters

"An Aboriginal artefact scatter was uncovered during construction of the Kamilaroi Walking Track from the Oxley Lookout to Brisbane Street in 1969...The artefacts were retained in the private collection of the archaeologist who undertook the collection, Mr Eugene Stockton. Of interest was an artefact described by Stockton on the NPWS recording form as "a concave scraper made on thick green glassn. A glass artefact indicates that Aboriginal people were still camping in this area after European settlement. Other artefacts collected by Stockton were de-

scribed as a segment of an edge ground axe, roughly worked stone choppers, a deeply serrated flake, large elouera-like flakes and a Bondi point. Stockton did not elaborate on the raw material types represented by these artefacts" (McAdam & Wilson 2000, p.57)

Boundary Rock | Moonbi ranges | Ceremonial site

A significant sacred Indigenous site within in the region lies up in the Moonbi ranges, the mountains that are behind Tamworth city. 'Boundary Rock' is believed to be over 500 years old, a meeting place between the Gomeroi and the neighbouring Anaiwan tribes.

"The Dramatic Panel of rock art is painted in red ochre on a large granite boulder and depicts figures, lines and circles, all typical of other rock art assemblages over the northern tablelands. The meaning of the story depicted has been passed down using Songlines and records that Boundary Rock was a meeting place where tribes from different nations conducted ceremonies. It is believed the images on the rock tells the story of the boundary between nations and depicts a ceremony taking place with the circles being the ceremonial areas and the stick figures representing the people" (Arts North West 2018).

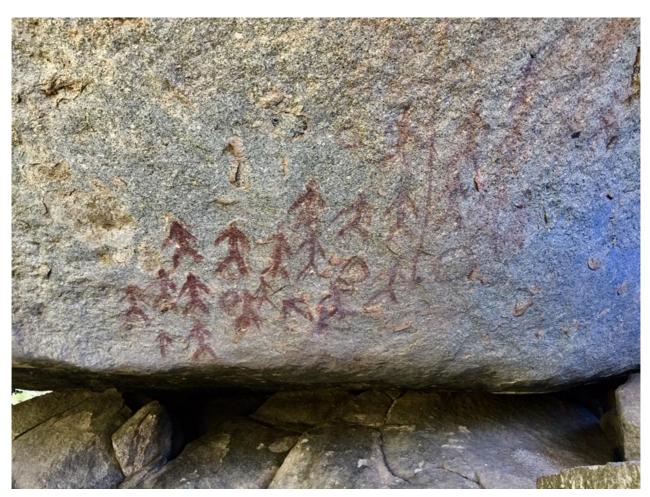


Figure 17. Boundary Rock, Aboriginal Art | Arts North West

Deep Country

Deep country is the most ancient of connections and one that we honour for the many gifts it shares, such as the greenstone axe and the ochres that we paint with. When we dance we are celebrating and honouring the spiritual beings below our feet and their kin in Sky Country, representing the extent and connection of Country.

Tamworth is characterised by hills and mountains and the southern area by the gently undulating river plains. The geology of the area is noted in the Tamworth Aboriginal / Archaeological site study as follows:

"The geology of the eastern sector of Tamworth City is dominated by the early to mid Devonian Tamworth Group of marine sedimentary sequences which were laid down approximately 410 to 380 million years ago. In the Tamworth City area this group of rocks includes cherty argillites, mudstones, andesitic greywacke and limestone. Further to the west (approximately west of Moore Creek Road) these sequences are overlain by the late Devonian Baldwin Formation (approximately 380 ma) andesitic greywackes and mudstones. Both the Tamworth and Baldwin Formations are themselves overlain in part by the Quarternary (2 ma to present) alluviums, silts, sands and gravels associated with the flood plains of the major watercourses.

The rock strata of Tamworth City to the north of the Peel River has been contact metamorphosed to varying degrees by the intrusion of the Permian (248 ma) Moonbi Adamellite to the north east. This large mass of intruding magma has caused mineralogical and physical changes in the structure of those rocks that were in contact with the immense heat and pressure they caused as they rose up through the earth's crust. The degree of metamorphism and deformation the rocks underwent was directly related to their distance from this intrusion" (McAdam & Wilson 2000, p.26).

It is recorded that the Gamilaroi have used the following rocks and stones within the area:

Andesitic greywackle	Cherty argillite
Adamellite	Hornefels
Quartz	Aplite
Sandstone	Chert
Basalt	

Figure 18. Stone and rocks used by Gamilaroi | McAdams & Wilson 2000

NARRATIVES

Culture is not static, it is lived, dynamic and evolving. It is what we do, say, think, and how we live. In design, public art and heritage interpretation culture is created and celebrated. The narratives and storylines that are chosen to be communicated through design, public art and interpretation can create new meanings and reinforce existing meanings for a place.

The narratives and storylines developed for the Tamworth area have been synthesised based on the historical information about the region and the Elements of Country for the site discussed above.

In relation to the Draft Connecting with Country framework, this research report is contributing to the imagining stage of the project. In this stage, in regard to developing narratives and storylines to guide the public domain design, this report is focused on examining:

- What is the story of the place?
- · What is the history of the site?
- What are the needs of the place?
- What is the purpose of this place?

The following narratives and storylines will be explored below:

- The voice of the River | Water Country
- Interwoven knowledges | Indigenous and Western knowledge
- As above, echoed below | Sky Country

The voice of the River | Water Country

The *Calala*, Peel River, is a dynamic, living system that has held a central significance to human and non-human kin for centuries. For Gamilaroi people it is a living ancestral being that must be cared for and protected. Its banks, water and flow act as routes of communication, carrying cultural stories, knowledge and wisdom.

There has been a significant decline in the health of the *Calala*, Peel River, post colonisation, seeing it's flora, fauna and water quality decrease instrumentally. A result from urbanisation alongside a colonial viewpoint, detached from nature and our impact on it. However, in more recent years, there has been significant importance placed on healing the Peel through replanting it's riparian zone in aim to increase its biodiversity and fish species.

Whilst this has improved it's health, much more work needs to be done and upheld if it is to return to the thriving and diverse ecosystem it once was. The river not only relies on continuous ecological restoration, yet also an acknowledgement and awareness of an individuals enmeshment with the natural world, and thus their impact on it. Acknowledging and caring for our ecologies will in turn nurture and enhance both the human and more-than-human worlds.

As the UNE site sits on the fringe of the river, it provides the opportunity to integrate elements that may echo integral aspects of the river through using the site as a platform to highlight the importance of the *Calala* to the overall ecosystem, the cultural connections it holds and the significance of humans impact on it. The sites proximity to the river also lends itself to considering how the overall design response speaks to and connects with the river; reflecting on a larger scale the importance between human and nature relationships, and their reliance on each other.

There are several initial design opportunities identified below related to bringing in elements which reflect the significance of the River:

- Incorporating Biophillic design principles to guide elements of the overarching design. Increasing the connection to the surrounding natural environment, through open and interconnected spaces.
- Echoing the morphology of the Peel river pre-colonisation through the curves, movement and linear patterns within the building and landscape architecture — reflective of the morphing of knowledges and learning.
- Creating a building which works in reciprocity with the River incorporating key vantage points and spaces so students can sensorially connect with the river. Replanting endemic plant species around the river to rehabilitate previously disturbed areas.



Figure 19. Arial view of the River Rocks building | David Luck Architecture

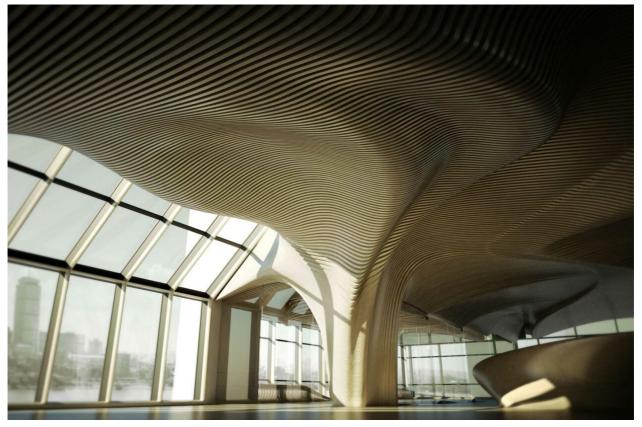


Figure 20. Interior of the Main One building | DeCOi Architects

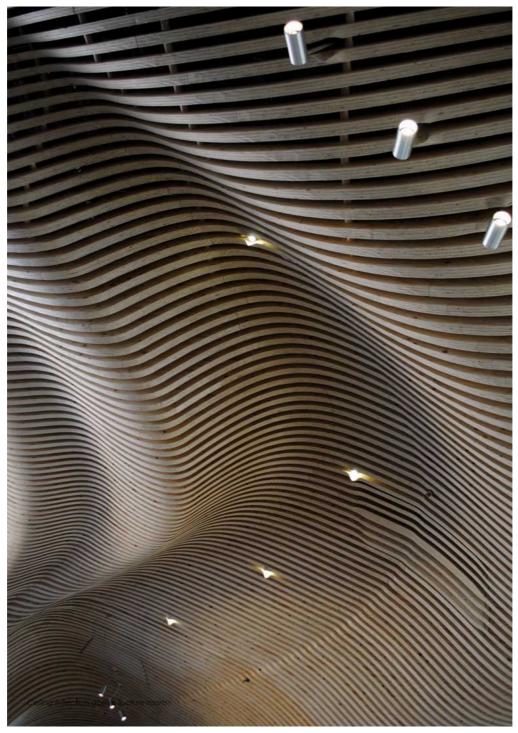


Figure 21. Roof details of the Main One building | DeCOi Architects



Figure 22. Detail of the Luhu Art & Sculpture Park steps | World Landscape Architecture



Figure 23. Modernist Garden Path, Brazilian Modern | Burle Marx

Interwoven knowledges | Indigenous and Western knowledge

Indigenous Knowledge believes equal reciprocity between all things is pertinent to our existence as "the relationship between land and humans is held together by an intricate web of relatedness that envelopes all entities" (Tynan 2021, p.603).

Our knowledge; ancestral or learnt, forms the relationships we hold today with our human and non-human kin. Our relationships "are mediated through empathy, responsibility and reciprocity - a set of responsive behaviours that influence our decision making" (Cameron 2022, p.30). Indigenous knowledge is ancestral, they hold an inherent connection with Country and a reciprocal respect and responsibility for it. On the contrary, there is a permeating gap within Western knowledge surrounding our embeddedness with ecosystems and our non-human kin. However, caring for Country can be learnt, with this site providing a perfect opportunity to intertwine the two knowledges, provoking thought, consideration and change.

The site is situated upon a place that holds significant knowledge and has for many generations; the knowledge of the Gamilaroi, holding rich cultural and spiritual meanings. The development of a higher education building, The University of New England, is a place to inspire, teach, research and develop a new generation of individuals. The site has the potential to intertwine elements to provoke conversation around Country, and the importance of the two knowledges coming together.

The Gamilaroi engage with the environment through their senses. Sensory engagement is "..a conceptual tool to gain wisdom through an ability to feel, acknowledge and respond. It is, therefore, not a simple kind of phenomenal consciousness but a rudimentary individual and collective perspective from which phenomena are experienced. The best way to become familiar with consciousness is to experience it through using all our senses and feel their results. For instance, using our senses as guides influences our perspectives where often environmental experiences translate into empathy for Country as we feel its needs" (Cameron 2022).

Creating spaces that allow individuals to connect through sensorial experiences may transpire into responsive and reflective actions surrounding caring for Country.

There are several initial design opportunities identified to amplify the meeting of two knowledges for the site:

- Including reflective spaces; focusing on a connection to the environment, provoking thought and consideration. A space void of distraction, allowing embodied experience to be had through seeing and hearing. "The Sounds of Country play an integral role in examining ecologi-

cal changes that build awareness of our surroundings.. Hearing Country can reveal an immense spectrum of information about a particular place" (Cameron 2022, p.30).

- Cross-collaborating with a local artist to convey knowledge and stories, conveying narratives
 about the Country they are walking upon; see Kuanitz Yeung precedent of aluminium art
 screens below. A focus on Knowledge sharing about the Gamilaroi culture, stories and connection to place.
- Incorporating materiality and forms which reflect movement, connecting entities, and flow within the building, suggestive of the two knowledges coming together.
- Incorporating materials which reflect the tactility, colours and textures from Country, incorporating surfaces which can be touched and connected to by students eg. Rammed Earth. As Cameron States "We navigate our environment through active exploration with out hands, to feel, judge and respond to the roughness, consistency, warmth and humidity of surfaces" (2022, p.30).



Figure 24. Wanarn Clinic | Kuanitz & Yeing



Figure 25. Detail of the rammed earth at the Bushey Cemetery | Elliot Wood



Figure 26. Details of the materiality in the Reconstructed Past building | Marbire Reich Architectes



Figure 27. Contemplation mediation hall, Eastern China | Hilarchitects



Figure 28. Stanford Contemplative Centre | Alex Wright

As above, echoed below | Sky Country

Within the Indigenous worldview, everything has a place and is interconnected, the land, the sky, the sea, and the waterways; there is no 'outer space' (De Napoli & Noon 2022) as everything orbits together. The Gamilaroi hold a strong cultural and spiritual connection with Sky Country, it is a connective tissue that links the below with the above, the land and the sky. It holds a richness of stories and knowledge that have been orally transferred through thousands of generations (De Napoli & Noon 2022).

Aboriginal people believe that what we do on land is mirrored in the sky above. Whilst we can visually see degradation and depletion happening within Deep Country and upon our non-human kin, a reflective response is also happening above.

The Milky Way, known by the Kamilaroi as 'Warambul', captures a watercourse mapping the rivers and streams of Gamilaroi Country. It is a ".. place where everything once was, until the Universe was turned upside down and everything ended up on Earth. Many of the creation beings are still to be found in the Warambul, and many objects and stories have mirror places on Earth" (Australian Indigenous Astronomy n.d).

A responsibility needs to be undertaken to not only move towards restoring our land, yet restoring the complexity and richness of our dark skies. If this is depleted, so is the integral knowledge and information it holds.

There are several initial design opportunities identified related which suggest incorporating elements into the design which allow a connection between the land and sky:

- Consider all elements of lighting for the space to not cause light pollution or distract from the night sky illuminance, direction, luminaries, control systems, dimmers, circadian lighting.
- Incorporating wide open voids within the design to create a connection between the above and below- a space students can be immersed within the two.
- To support a vibrant and thriving Country and thus Sky, bringing in endemic and culturally significant plants into the courtyard, landscape design and other applicable spaces.



Figure 29. The Milky Way, Warambul | Lonely Planet



Figure 30. Rammed Earth Health Hub | Kuanitz & Yeung





Figure 31 & 32. River Rocks building | David Luck Architecture



Figure 33. Roof details of the Night Sky building | Peter Stutchbury Architecture



Figure 34. Believe School | Robbert Pettus

CONCLUSION

This report has presented the findings of the desktop review into existing resources on Aboriginal cultural heritage in the Tamworth area. Resources located and reviewed included books and chapters by historians, archaeological reports, research project findings including oral histories, historical images and documents, publications by Aboriginal people and corporations, heritage assessment reports, management and strategic planning documents and visitor information websites.

Based on the review of these documents, and considering the local context of the site in the wider context of New South Wales, the following themes and storylines are suggested to be further explored:

- The voice of the River | Water Country
- Interwoven knowledges | Indigenous and Western knowledge
- As above, echoed below | Sky Country

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ABORIGINAL CULTURAL HERITAGE ASSESSMENT



University of New England Tamworth Central Project

Aboriginal cultural heritage assessment

Prepared for Touchstone Partners Pty Ltd on behalf of University of New England

December 2023

University of New England Tamworth Central Project

Aboriginal cultural heritage assessment

Touchstone Partners Pty Ltd on behalf of University of New England

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Executive Summary

The University of New England (UNE) proposes to create a Tamworth Central Campus where it will provide flexible teaching and support places, an Aboriginal centre, staff workspaces, and shared community spaces. The project will deliver a modern, integrated, community-centred approach to teaching, research and engagement that benefits the entire New England North West region, and the state of NSW. The project is proposed to be established at 545 Peel Street, Tamworth, NSW. The project is proposed to be assessed under Part 4 of the *Environmental Planning and Assessment Act 1979.* To support this application, EMM Consulting Pty Limited (EMM) has been engaged by Touchstone Partners Pty Limited (on behalf of UNE) to undertake an Aboriginal Cultural Heritage Assessment (ACHA) to provide information on the location, distribution and significance of Aboriginal objects within the study area, identify the likely harm to objects by proposed development, and develop suitable management strategies.

Aboriginal consultation was undertaken for the project in accordance with Heritage NSW's Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 (DECCW, 2010). The consultation process initially identified 30 Aboriginal stakeholder organisations who may have had an interest in the project. Following notification of these organisations, 10 responded as wishing to be registered for subsequent consultation through the project. These included the Tamworth LALC, Gomeroi native title applicant and a number of locally based traditional owners. Several of these participated in the on-site investigations undertaken for the project.

Desktop information indicated that the banks of the Peel River on which the study area is situated, would have been used by Aboriginal people in the past, and various densities of stone artefacts and culturally modified trees were prevalent. However, historical data indicated that the study area had been subject to extensive development activities in the past, including the establishment of a velodrome in the 1990s. Notable, geotechnical investigations suggested several metres of modern fill overlying a natural soil profile was present in most parts of the site. Field investigations validated the desktop information identifying modern fill beneath which was a truncated residual soil profile. The latter suggesting that extensive alluvium was unlikely to be present and the upper soil profile where cultural materials are commonly encountered had been lost. Sieving of all sediments, both fill and underlying silty clay, recovered no cultural materials.

Based on this assessment, it is considered improbable that cultural materials (if ever present) have survived within the study area. As such, the proposed development is considered unlikely to have an impact upon cultural materials. Discussions with RAPs did not identify any cultural or intangible values within the study area which may be impacted by proposed activity.

The following recommendations are proposed to be integrated into the management for the project:

- Previous disturbance validated by site inspection and test excavation indicates a low likelihood of Aboriginal objects being present within the study area. Works may proceed with caution, and without further assessment. However, the nature of the disturbance within these areas does not preclude the potential for isolated finds, which is a common site type across the region, even in disturbed contexts. In the event that unexpected Aboriginal objects, sites or places (or potential Aboriginal objects, sites or places) are discovered during construction, all works in the vicinity of the find should cease and contact with a heritage professional undertaken to inform next steps.
- The Construction Environment Management Plan (CEMP) or equivalent, should ensure the implementation of suitable cultural awareness inductions for key project team members and a protocol to manage unexpected finds in the event of their discovery. The cultural awareness inductions should be undertaken by a heritage professional and/or Aboriginal representative.

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- If human skeletal material is discovered, the NSW *Coroners Act 2009* requires that all works should cease, and the NSW Police and the NSW Coroner's Office be contacted. Once direction from these organisations has been undertaken and, where relevant, the current WINSW guidelines for managing the unexpected discovery of Aboriginal objects, sites and/or human remains should be implemented.
- If any part of the study area is located outside the areas identified in this ACHA, or if any alteration is proposed that could result in additional impact to material culture, further assessment of these area(s) should be undertaken to identify and appropriately manage Aboriginal objects and/or sites that may be present.
- Consultation should be maintained with the RAPs during the finalisation of the assessment process and throughout the project.
- A copy of the ACHA should be lodged with AHIMS and provided to each of the RAPs.

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1 Introduction

1.1 Background

The University of New England (UNE) proposes to create a Tamworth Central Campus where it will provide flexible teaching and support places, an Aboriginal centre, staff workspaces, and shared community spaces. The project will deliver a modern, integrated, community-centred approach to teaching, research and engagement that benefits the entire New England North West region, and the state of NSW. The project is proposed to be established at 545 Peel Street, Tamworth, NSW (Figure 1.1 and Figure 1.2).

The project is proposed to be assessed under Part 4 of the *Environmental Planning and Assessment Act 1979*. To support this application, EMM Consulting Pty Limited (EMM) has been engaged by Touchstone Partners Pty Limited (on behalf of UNE) to undertake an Aboriginal Cultural Heritage Assessment (ACHA) to provide information on the location, distribution and significance of Aboriginal objects within the study area, identify the likely harm to objects by proposed development, and provide recommendations for the management of such harm. The objectives of the investigation were to:

- liaise and consult with key Aboriginal community members and knowledge holders to identify areas and places of cultural value within or in the vicinity of the study area
- compile a review of existing environmental, historical and archaeological information for the study area, by identifying and summarising known and previously recorded Aboriginal heritage places, cultural values areas and landforms of archaeological interest in its immediate surrounds
- determine if any Aboriginal objects, places, cultural values areas, or areas of archaeological potential are
 present (or are likely to be present) within the Project Area, as well as areas of existing disturbance,
 through ground-truthing
- identify the type, nature, and extent of any Aboriginal sites, objects, archaeological deposits, potential archaeological deposits, and cultural values areas within the study area
- map the locations of known and potential Aboriginal sites, objects and deposits and cultural values areas identified
- assess the archaeological and cultural significance of the study area
- assess and identify heritage constraints and opportunities and the potential impacts of the project
- identify and recommend measures to mitigate any heritage impacts and risks to the project.

This report has been developed in accordance with the following relevant guidelines:

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

1.2 Study area

The UNE Tamworth Central project site is located at 545 Peel Street, Tamworth, in the Parish and Town of Tamworth, County of Inglis, in the Tamworth Regional local government area (LGA) (Figure 1.1 and Figure 1.2). Specifically, the UNE Central project is proposed for the rectangular south-east portion of Lot 73 DP 1107041, at the corner of Peel and Roderick Streets. The property is orientated north-west/south-east and bounded by Rodrick Street to the north, Peel Street to the east, Murray Street/Scott Road to the south and the Peel River is approximately 20 m to the west. The study area is in the curtilage of the Bicentennial Park precinct on the east bank of the Peel River (Calala River). The majority of the study area is zoned E2 Commercial Centre on the *Tamworth Regional Local Environmental Plan 2010* (LEP), with the south-west and south-east boundaries, the location of a public bike path, zoned RE1 for Public Recreation.

Currently, the study area contains a former open-air velodrome, which is no longer in use. The sloped concrete track and tunnel giving access to the centre of the velodrome is the only infrastructure to survive. The topography of the study area is the result of the velodrome construction with earthwork embankments on the north and east of the site varying from 0 m to ~3 m above street level and the topography of the south and west sides of the site is aligned with the surrounding street and park ground surface. The centre of the velodrome bowl is below the current street level. The surrounding landform is gently undulating; however, the Peel River flood levee embankments means the banks of the river are more steeply graded toward the waterway.

The study area is located towards the southern edge of the Tamworth City commercial centre. As a result, the surrounding landscape is dominated by commercial development and public parkland with agricultural land across the Peel River to the west. Individual mature native and non-native trees are present along the streetscape, with the riverside featuring a more densely vegetated riparian corridor. A multi-storey shopping complex constructed between 2014 and 2017 on Parry Street, opposite the study area, is the most recent development in the local area.

1.2.1 Proposed development

The redevelopment of the Prince of Wales Park will accommodate a new university campus. The objective of the redevelopment is to create a modern, flexible learning environment, which will accommodate UNE's needs in the present and into the future (Figure 1.3). The proposed schematic design aims to create a cohesive, flexible, and campus efficient layout that caters to modern educational needs and community connection (Architectus, 2023). The plan is to integrate the proposed four-storey campus building and surrounding infrastructure with the local environment and history of place through the use of materials and design (Architectus, 2023).

Early concept designs and a Connection to Country has been previously initiated for this project by Architectus in partnership with Yerrabingin, and this has included some engagement with the local Aboriginal community. In parallel with these design processes is the need to identify and assess environmental and heritage impacts as part of the planning and assessment process.

The proposed works are summarised below:

- Construction of the four-storey main campus building.
- Placement of utilities buildings containing, plant, fire pump room and refuse area.
- Addition of carpark and footpaths.
- Landscaping of green areas.
- Installation of utilities and services including lighting.
- Additions of drainage to manage and control the flow of water.

- Installation of a rainwater reuse filtration and plumbing system.
- Installation of new perimeter fencing.
- Preparation of site for pop up kiosks and future expansion.

1.3 Legislative context

There are several Commonwealth and State Acts (and associated regulations) that manage and protect Aboriginal cultural heritage. These are summarised in Table 1.1 and Appendix A.

 Table 1.1
 Commonwealth and State legislation relevant to the project.

Legislation	Description	Relevant to the project?	Details
Commonwealth			
Environment Protection and Biodiversity Conservation Act 1999	Recognises sites with universal value on the World Heritage List (WHL). Protects Indigenous heritage places with outstanding heritage value to the nation on the National Heritage List (NHL), and significant heritage value on the Commonwealth Heritage List (CHL).	No	There are no Indigenous heritage places within the study area that are listed on the WHL, NHL, or the CHL.
Native Title Act 1993	Administers rights and interests over lands and waters by Aboriginal people. Provides for negotiation and registration of Indigenous Land Use Agreements (ILUAs).	Yes	Searches of the National Native Title Tribunal (NNTT) Register of Native Title Applications, Registration Decisions and Determinations completed on 27/07/2023 identified no determined native title or land claims over the study area.
	Often used in NSW to identify relevant stakeholders for consultation.		The study area falls within the boundary of an active native title application, "Gomeroi People" (Tribunal No NC2011/006, Fed Court No NSD37/2019; extract provided in Appendix B.4). The application was registered on 20 December 2011 and covers an area of 11,317.54 km2 incorporating lands within the New England and North West region, including Tamworth, Moree and Inverell local government areas.
Aboriginal and Torres Strait Islander Heritage Protection Act 1984	Preserves and protects areas and objects of particular significance to Aboriginal people that are under threat from injury or desecration.	No	There are no areas or objects within the study area subject to a Declaration under the Act.

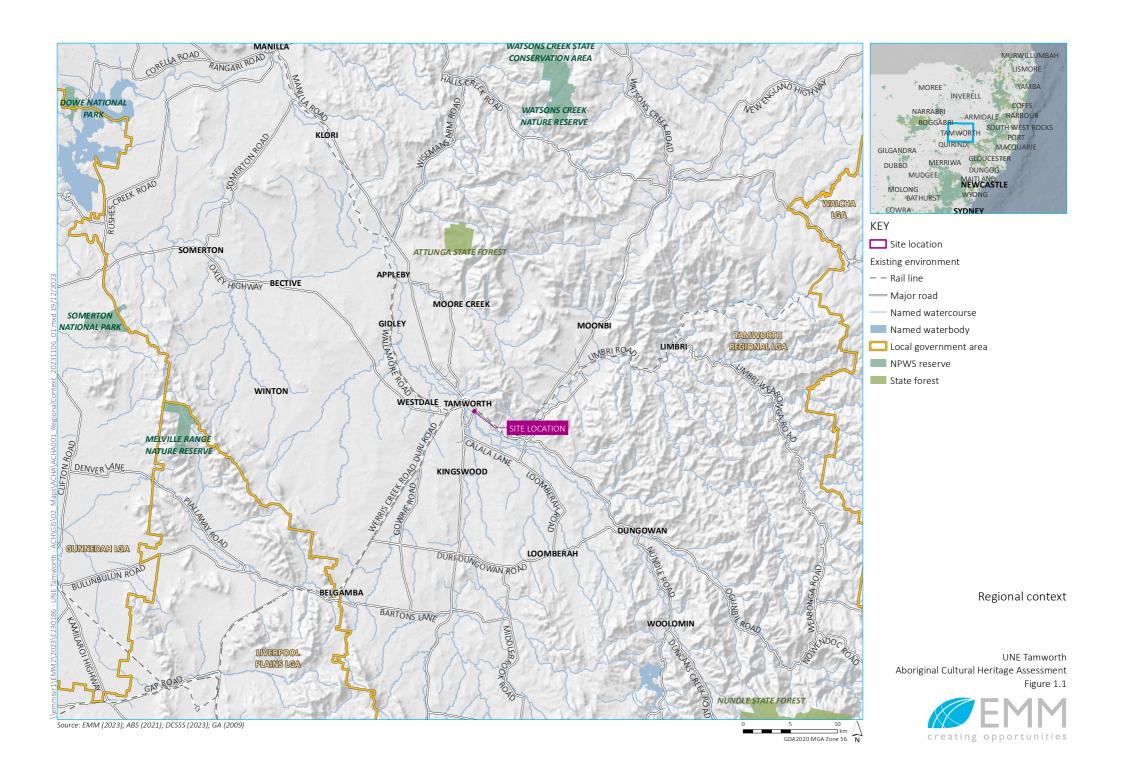
Table 1.1 Commonwealth and State legislation relevant to the project.

Legislation	Description	Relevant to the project?	Details
State			
Environmental Planning and Assessment Act 1979	Requires environmental impacts, including to Aboriginal heritage, to be considered in land use planning. Provides for the development of environmental planning instruments, including State Environmental Planning Policies and Local Environmental Plans.	Yes	The proposed activity is being assessed by the Tamworth Regional Council under a Development Application (DA) under Part 4 of this Act. This requires that Aboriginal heritage is investigated and considered as part of the application.
National Parks and Wildlife Act 1974	Provides blanket protection for all Aboriginal objects and declared Aboriginal places. Includes processes and mechanisms for development where Aboriginal objects are present, or where Aboriginal Places are proposed for harm.	Yes	The proposed activity is subject to the requirements of this Act and is subject to Heritage NSW guidelines and processes.
Aboriginal Land Rights Act 1983	Establishes Local Aboriginal Land Councils (LALCs). Allows transfer of ownership of vacant crown land to a Local Aboriginal Land Council. The Office of the Registrar, Aboriginal Land Rights Act 1983 (ORALRA), registers Aboriginal land claims and maintains the Register of Aboriginal Owners. Often used in NSW to identify relevant stakeholders for consultation.	No	A search of the Register of Aboriginal Land Rights on 27 July 2023 found there are currently no Registered Aboriginal Owners for the study area pursuant to Division 3 of this Act.

1.4 Limitations

This report is based on existing and publicly available environmental and archaeological information (including AHIMS data) and reports about the study area. The background research did not include any independent verification of the results and interpretations of externally sourced existing reports (except where the ground-truthing was undertaken through archaeological survey). The report further makes archaeological predictions based on these existing data and targeted ground-truthing, and which may contain errors depending on the accuracy of these third party studies and the extent of ground-truthing (constrained to surface) investigations.

This report does not consider historical (non-Aboriginal) or built heritage unless specifically indicated.





Site location

Strahler stream order

---- 3rd order

____ 7th order

= 8th order

Existing environment

— Major road

— Minor road

---- Contour (2 m interval)

Named waterbody

Local context

UNE Tamworth Aboriginal Cultural Heritage Assessment Figure 1.2





Development footprint

UNE Tamworth Aboriginal Cultural Heritage Assessment Figure 1.3



2 Aboriginal consultation

2.1 Key findings

- The assessment adopted the processes and methods outlined in DECCW's Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 (DECCW, 2010).
- The consultation process initially identified 30 Aboriginal stakeholder organisations who may have had an interest in the project. Following notification of these organisations, 10 responded as requesting to be consulted upon the project. These included a number of locally based Gomeroi traditional owners, as well as Aboriginal communities from the broader region interested in cultural heritage management.
- A field survey was undertaken on 13 October 2023, followed by a three day test excavation program (16-18 October 2023). These included representatives of the locally based Gomeroi organisations, including Tamworth Local Aboriginal Land Council, AT Gomilaroi Cultural Consultancy, Gomery Cultural Consultants and DFTV Enterprises as well as The Gomeroi native title applicants.
- Feedback from the RAPs during the project has been generally positive, and focussed on who speaks for Country, the tangible sites and places identified, and cultural management. These are all acknowledged in this report in Section 2.4 and Appendix B.5.

A summary of the consultation process is provided below and full documentation of the consultation process is provided in Appendix B.

2.2 Heritage NSW process

The Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW 2010b) guidelines identify a five stage process:

- 1. Pre-notification identification of the Aboriginal individuals and/or communities relevant to the study area by contacting several State government agencies.
- 2. Notification contacting all Aboriginal individuals and/or communities identified in (1) to determine their interest in being consulted during the project. This includes direct communication and the placement of advertisements in local media seeking further expressions of interest from Aboriginal individuals and/or communities that may have been missed through (1). Those Aboriginal individuals and/or communities that wish to be consulted become a RAP.
- 3. Presentation of project information/assessment methodology briefing RAPs about the project and scope of any Aboriginal heritage assessment and investigations. This is usually undertaken through written correspondence, but can include meetings, and may undergo several iterations through the project as the nature of the assessment changes (e.g. surface ground-truthing may lead to a requirement for test excavations).
- 4. Impacts and mitigation strategies discussion of potential impacts to cultural materials and mitigation options with the RAPs prior to developing the ACHA. This is often undertaken either on-site at the end of any field program and/or as part of (5).
- 5. Report review the RAPs are provided an opportunity to review and comment upon the draft ACHA, to contribute input into the overall findings, significance and management of cultural heritage.

2.3 Consultation for this project

Prior to the initiation of the ACHA, Architectus (2022) undertook a Connection to Country report for the site with a number of locally based Aboriginal participants. These participants were generally associated with UNE or the academic system, and few became involved in the ACHA despite invitation. Further information on this report is provided in Section 4.

Aboriginal consultation for this ACHA has been undertaken in accordance with the Heritage NSW process described above. A complete log of actions and correspondence regarding Aboriginal community consultation to date is included in Appendix B and summarised in Table 2.2.

EMM distributed Stage 1 pre-notification letters to Heritage NSW (Northern Branch), TLALC, Mid-Western Regional Council, the National Native Title Tribunal (NNTT), Native Title Services Corporation (NTSCorp), the Central Tablelands Local Land Services (LLS) and ORALRA on 27 July 2023. This included information about the proposed project and proponent contact details, and a request to provide contact details for any potential interested parties. A request to search the ORALRA register of Aboriginal Owners and the NNTT Schedule of Native Title Determination Applications, Register of Native Title Claims, Native Title Tribunal and Indigenous Land Use Agreements was also made (Appendix B).

This process identified thirty Aboriginal stakeholders in the region. A public notice informing potential stakeholders of the project was published in *The Daily Leader* on 11 August 2023, inviting interested parties to register an interest in being consulted for the project. Notification letters were emailed and/or posted to the identified stakeholders on the same day (Appendix B). Ten groups registered an interest in the project. The RAPs for this project are provided in Table 2.1. The list of registered Aboriginal stakeholders was provided to Heritage NSW and Tamworth LALC (TLALC) on 11 September 2023 (Appendix B).

The RAPs included the Tamworth LALC, the Gomeroi native title applicant, Gomeroi traditional owners, and a range of other contemporary Aboriginal organisations that live in the region (Table 2.2). Subsequent project information and a proposed assessment methodology was provided to these registered organisations in late August and September 2023 (Appendix B.3), with limited feedback received.

Targeted archaeological survey of the development footprint was undertaken on 13 October 2023. Five Aboriginal participants were invited to participate in the survey. Ultimately, three organisations participated in the archaeological field survey, the TLALC, AT Gomilaroi Cultural Consultancy and DFTV Enterprises. Gomery Cultural Consultants and the Gomeroi Native Title applicant were unable to participate. A five day test excavation program was initiated on 16 October 2023, with similar organisations invited. Ultimately following initial findings, this was reduced to a three day excavation.

Table 2.2 provides a summary of the main steps undertaken to conform with Heritage NSW guidelines. Overall, some 100 interactions have been undertaken over the four-month program. These have primarily focussed on the fieldwork, as well as broader socio-economic and employment opportunities. Subsequent communications have been focussed on logistical requirements to participate in the field work.

Table 2.1 List of RAPs for the project

Organisation	Date of registration
Tamworth LALC	27 July 2023
Malcom Talbot	1 August 2023
AT Gomilaroi Cultural Consultancy	11 August 2023
Konanggo Aboriginal Cultural Heritage Services	11 August 2023
Nunawanna Aboriginal Corporation	11 August 2023

Table 2.1 List of RAPs for the project

Organisation	Date of registration
Gomery Cultural Consultants	11 August 2023
Didge Ngunawal Clan	11 August 2023
D F T V Enterprises	14 August 2023
Gomeroi Native Title applicant (via NTS Corp)	18 August 2023
Lisa Shipley	22 August 2023

Table 2.2 Summary of Aboriginal consultation steps required by Heritage NSW guidelines

Consultation stage	Description	Date started	Date completed	Notes
1	Government agency pre-notification	27.07.2023	10.08.2023	Additional details provided in Appendix B.4.
	Advertisement in The Daily Leader	11.08.2023		A tearsheet is provided in Appendix B.4.
	Notification and registration of potential Aboriginal stakeholders	11.08.2023	25.08.2023	Additional details provided in Appendix B.4.
	Advising Heritage NSW and MLALC of RAPs	11.09.2023		Additional details provided in Appendix B.4.
2/3	Presentation of information about the proposed project; and gathering information about cultural significance.	08.09.2023	06.10.2023	Additional details provided in Appendix B.5.
	Archaeological survey	13.10.2023	13.10.2023	Additional details provided in Section 6.2.
	Test excavation	16.10.2023	18.10.2023	Additional details provided in Section 6.3.
4	Review of draft report	15.11.2023	13.12.2023	Additional details provided in Section 2.4.

2.4 Aboriginal stakeholder feedback

A draft version of this report, which included all background information, results, draft significance assessment and draft management recommendations, was issued to all RAPs on 15 November 2023 accompanied by an email specifying a 28-day timeframe for review. Any responses are summarised below and provided in full in Appendix B.6.

• One response was received from Konanggo Aboriginal Cultural Heritage Services commenting that the report was informative

3 Existing environment

3.1 Key findings

- The study area has a diverse geological and geomorphological landscape, which results in a range of environments and ecotones that would have likely been attractive resources to past Aboriginal people. Its proximity to the Peel River, a major water source, would likely have provided desirable areas for activity in the past.
- The study area is dominated by flat relief and residual soil profiles, limiting site types to surface and/or shallowly buried cultural materials (stone or shell artefacts). The potential for rockshelters, grinding grooves et cetera is considered unlikely based on the geomorphology. Similarly past clearance has limited the potential for culturally modified trees.
- The Project Area has been subjected to extensive disturbance in the past from the establishment of the velodrome in the 1990s. This has resulted in large-scale earthworks and introduced material heavily impacting the natural characteristics of the study area. Geotechnical information indicates that some parts of the site may have over 4 m of modern fill present.

3.2 Rationale

Understanding environmental context assists with predictions of archaeological potential, such as the likelihood of archaeological material being present in the landscape, its spatial distribution and its preservation. Landscape features were an important factor for the choice of camping and transitory and ceremonial areas used by Aboriginal people. Similarly, these landscape features and historical land use plays a role in the level of preservation and the integrity of archaeological sites.

A landscape consisting of suitable topography, hydrology, geology and soils has strong links with natural resources that would have been available to, and sought after, by Aboriginal people. Flora and fauna would have provided food, tools and ceremony (such as culturally modified trees); proximity to fresh water was necessary for life and growing crops, as well as gathering fish and eels. Landscape features, such as sandstone overhangs, were useful for shelter; stone artefacts were manufactured from raw stone material that was collected from quarry sites; and stone arrangements relied on the landscape.

3.3 Landscape overview

Bioregions are relatively large land areas characterised by broad, landscape-scale natural features and environmental processes that capture large-scale geophysical patterns at an ecosystem scale. Sub-regions delineate significant geomorphic patterns within a bioregion, and are based on finer differences in geology, vegetation and biophysical attributes (Bannerman & Hazelton 1990).

The study area is within the Nandewar bioregion, a region characterised by the Palaeozoic sedimentary rocks on the western edge of the Northern Tablelands to the Tertiary basalts of Inverell and Kaputar. The study area is situated in the Peel sub-region of the Nandewar bioregion, and is characterised by low peaked hills with north-westerly alignment, moderately sloped, with flat river valleys following the major waterways (e.g. the Peel River).

Elevation of the study area generally varies between 378 m AHD at the northwestern boundary and 382 m AHD at the southeastern boundary of the study (Figure 3.1). At the centre of the study area which is also the centre of the velodrome the elevation is 378 m AHD. The land surrounding the study area, is relatively flat south of the Peel River and undulated north towards the mountains to the east. Elevation of the surrounding area ranges between 400 m in the town centre to 800 m in the mountains.

The geology of the Peel subregion is characterised by Quaternary Alluvium, made up of gravels, sand, silt and clay which formed during the Cenozoic era (66 million years ago – present). Quaternary Alluvium is often associated with the floodplains of major watercourses (i.e. Peel River). The geology surrounding these floodplains in the greater area of Tamworth is dominated by the Tamworth Group of the middle to lower Devonian of the Palaeozoic era (419–358 million years ago). This group is made up of cherty agrellites, mudstones, andesitic greywacke and limestone. The depth of bedrock ranges between 2–10 m.

The study area is located adjacent to the Peel River, situated on an alluvial flood plain and was prone to flooding prior to the creation of the Levey that that now runs parallel to the river. Natural vegetation has been cleared has been and intensive earthworks have been undertaken for the construction of the velodrome, that takes up the majority of the study area.

3.4 Hydrology

The study area is located within the Namoi catchment, a northern catchment of the Murry Darling Basin and equates to 4% of the total basin area. The study area is situated on the banks of the Peel River (Figure 3.1), a major river within the Namoi catchment which begins in the Great Dividing Range in the east and ends near Gunnedah in west, where it joins the Namoi River, ~60 km downstream of Tamworth. Major tributaries of the Peel River include Cockburn River, Goonoo Goonoo Creek and Dungowan Creek. Chaffey dam, built during the late 1970's, is situated on the Peel River, 35 km south-east of Tamworth. This dam was created to store large amounts of water for the irrigation, stock and domestic use of the surrounding region. It was also created to aid in suppling the water for the rapidly growing town of Tamworth which otherwise relied in the small dam located on Dungowan Creek (Dungowan Dam) for water. These modifications have affected the flow of the Peel River and its more recent formation history.

Based on a series of historical aerial photographs (Appendix C), the Peel River has been present and remained relatively unchanged since the 1960's. The river is also prone to flooding. Since records began in 1925, over 40 floods of the Peel River in Tamworth have been recorded with flooding events occurring in 1955, 1976, 1984, 1998 and 2022 all exceeding 5.1 m in height. The highest flood on record occurred in 1955 and reached a peak height of 7.16 m (SES 2023). Flooding can greatly impact the presence of Aboriginal sites, with flood waters, unearthing, or destroying those that were once located along the river.

The Peel River is perennial watercourse that would have been a place of occupation for the Aboriginal people moving throughout the landscape.

3.5 Geology

The study area geology is detailed in the Tamworth 1:250,000 geological mapping (Benson et al. 1967). The site occurs on one primary geological landscape - Quaternary Alluvium, made up of gravels, sand, silt and clay, which formed during the Cenozoic era (66 million years ago – present) (Figure 3.2). Quaternary Alluvium is often associated with the floodplains of major watercourses (i.e. Peel River). The geology surrounding these floodplains in the greater area of Tamworth is dominated by the Tamworth Group of the middle to lower Devonian of the Palaeozoic era (419—358 million years ago). This group is made up of cherty agrellites, mudstones, andesitic greywacke and limestone. The depth of bedrock ranges between 2–10 m.

The geology of the Tamworth Group is known to have been utilised by Aboriginal people. Andesitic greywacke, while rare, is known to have been utilised for axe making. Mount Daruka, located 4 km northeast of the study area, is a known axe quarry (Wilson and McAdams 2000). Aplite has also been located west of Tamworth and is known to have been used as grinding stones. Grinding stones made of aplite have been found in a rock shelter in Moore Creek, located ~ 9 km north of the study area. Since sandstone, the more common stone for grinding, does not occur naturally in the Tamworth region, aplite has been documented as a suitable replacement in the region.

3.6 Soil landscapes

Soil landscape classifications and their boundaries provide pre-defined areas that are classified by several geographic features, and which are informative for the archaeological investigation. They provide localised information including landform patterns, soils, geology, rock outcrop percentage, land use and vegetation. This information provides another layer to categorise the landscape for the predictive model, additional to what a topographic description can provide. Soil landscape information builds on underlying geology and describes the depths of residual soils and colluvial soils and identifies areas that are characterised by erosion or skeletal soils and exposed bedrock versus those that may contain a deeper profile where cultural material may be buried.

The study area contains two soil landscapes: The Forest and Peel soil landscapes that are defined within the NSW Soil and Land Information (SALIS) System 'eSPADE' Soil Profile Database (Version 2.2, DPIE 2022). The soil landscapes of the study area and a summary of their implications for archaeological material are described in Table 3.1 and Figure 3.3.

The Forest soil landscape is located in the eastern half of the study area. Soils of this landscape are relatively homogeneous. The upper foot slopes are dominated by a hard setting loamy topsoils (0-20 cm) overlaying reddish brown clay subsoils (60-110 cm). Mid slopes are dominated by hard stetting silty clay topsoils (0-15 cm) overlaying reddish brown clay subsoils (15-110 cm). The lowers lopes are dominated by red cracking clay topsoils (0-5 cm) overlaying strongly structured dark reddish brown clay subsoils (5-40 cm) overlaying a strongly structed calcareous yellowish red clay subsoil (40-300 cm).

The Peel soil landscape is located in the western half of the study area. Soils of this landscape are relatively individually extensive dependant on the stream distribution pattern associated with the landscape. There are four common profiles associated with the flats. Strongly structed dark crumbly clayey soils (0- 10 cm) overlaying polyhedral granular dark clay subsoils (10-120 cm). Strongly structed dark crumbly clayey soils (0-20 cm) overlaying dark cracking clay subsoils (20-160 cm). Dark strongly cracking clay topsoils (0-10 cm) overlaying polyhedral granular dark clay subsoils (10-130 cm). Strongly structed dark crumbly clayey soils (0-10 cm) overlaying brown subsoils of hard setting soils (10-40 cm) overlaying strongly structed dark crumbly clayey soils (40-70 cm).

These geological formations and landscape factors have several implications for the type of cultural material and sites that may be present in the project area. The underlying geology characteristics does not outcrop and results in gentle undulating slopes, which limits the potential for rockshelters or associated deposits, nor grinding grooves. Sandstone rock outcrop is rare (<25%), so corresponding rockshelter sites, grinding grooves and art sites are unlikely to occur within the study area. Therefore stone artefact scatters and isolated finds are instead more commonly found in the region due to the abundance of locally available raw material as well as the shallow, eroding soil profiles, which tends to expose (rather than bury) artefacts.

However, the shallow topsoil has two major implications for cultural materials. Firstly, it typically precludes the presence of deep, stratified deposits, which are often of greater antiquity and value in this region. Secondly, even minor to moderate disturbance may truncate or remove the topsoil unit, and any associated cultural materials.

Table 3.1 Soil landscapes of the study area

Soil landscape and type	Landform pattern and hydrology	Landform elements	Slope and relief	Geology	Soil summary	Implications for archaeology
The Forest (fo) (transferral)	Long waning foot slopes and drainage plains	Upper to mid- footslopes: Red Chromosols (Red-brown Earths) Lower Footslope: Red Ferrosols (Euchrozems) and Red Vertosols (Red Clays).	Slopes <8%, relief <120 m, and elevation ~360–520 m	Alluvium and colluvium derived from Devonian argillite, cherty argillite and greywacke of the Baldwin and Yarrimie Formation. Depth to bedrock ranges 2–10 m.	Hard stetting loamy, silty clay or clay topsoils (to depths of <20 cm), overlying heavy clay	Potential to preserve buried or surface cultural material, most likely in the form of stone artefacts, stone arrangements or modified trees – elevated movement corridors.
Peel (pe) (alluvial)	Level to gently undulating moderately broad floodplains	Floodplains and streambanks	Slopes <1 %, relief <9 m, and elevation ~355-400 m	Quaternary (Qa) and recent alluvium of the Peel and lower Cockburn Rivers. Depth of alluvium ranges 10– 35 m	Crumbly cracking clayey soils (to depths of <40 cm), overlying heavy clay	Potential to preserve buried or surface cultural material, most likely in the form of stone artefacts, stone arrangements or modified trees – elevated movement corridors.

3.6.1 Geotechnical information

The study area has been subject to geotechnical investigations as part of the project (JKGeotechnics 2023). These consisted of 15 boreholes situated in three northwest-southeast rows across the study area (Plate 3.1). The boreholes all found broadly consistent findings of fill overlying a brown silty clay, which was interpreted as alluvium. Subsequent archaeological investigations determined that this lower unit was more consisted with a B2 horizon of a residual soil landscape (Section 3.6).

With the exception of bore-holes 9 and 10, fill across the remainder of the study area ranged between 1.5 m and >4 m (e.g. Plate 3.2). This amount of fill indicates significant modification of the study area in the past. Bore-holes 9 and 10 are within the centre of the velodrome, and is hypothesised to have been excavated as part of the velodrome establishment. Here fill materials are only 30–40 cm before encountering brown silty clay.

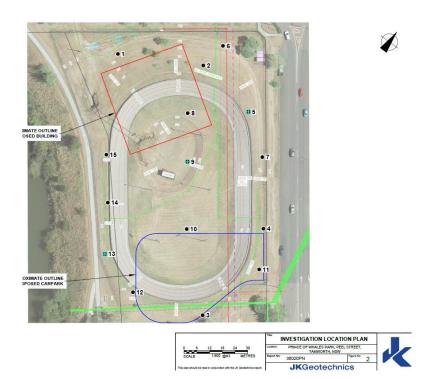


Plate 3.1 The location of geotechnical investigations across the study area. (Source: JKGeotechnics 2023)

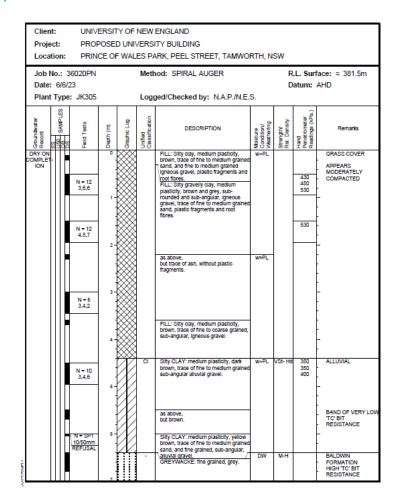
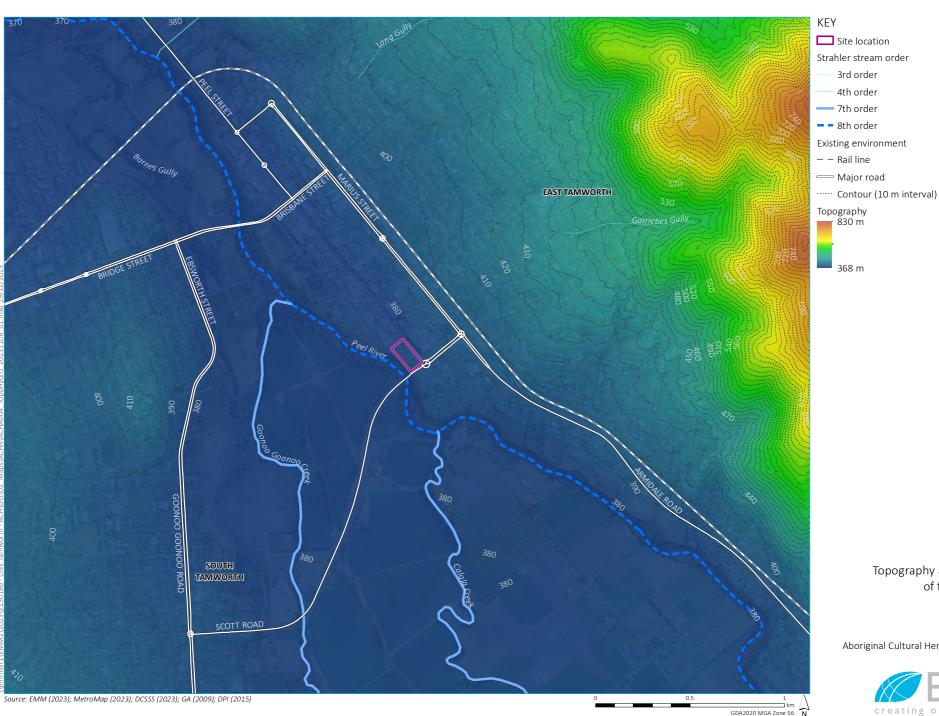


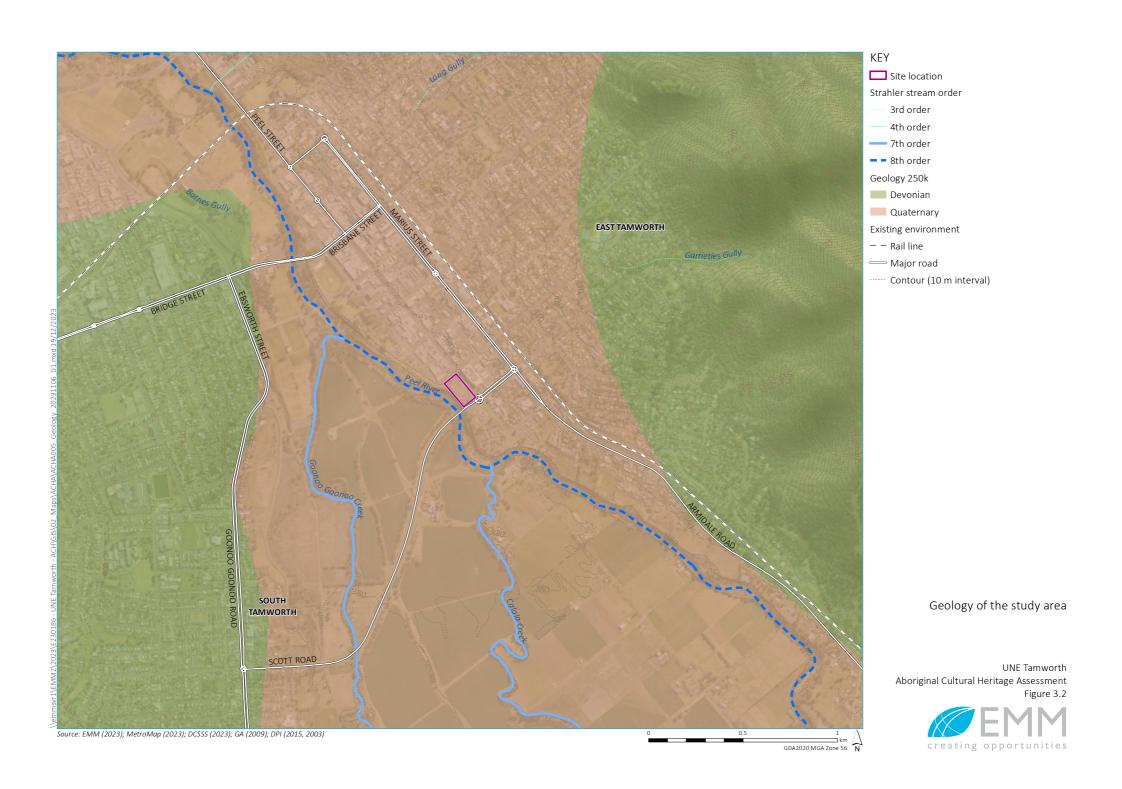
Plate 3.2 An extract from the geotechnical investigations showing the amount of modern fill (>4 m here) found across the majority of the study area. (Source: JKGeotechnics 2023)

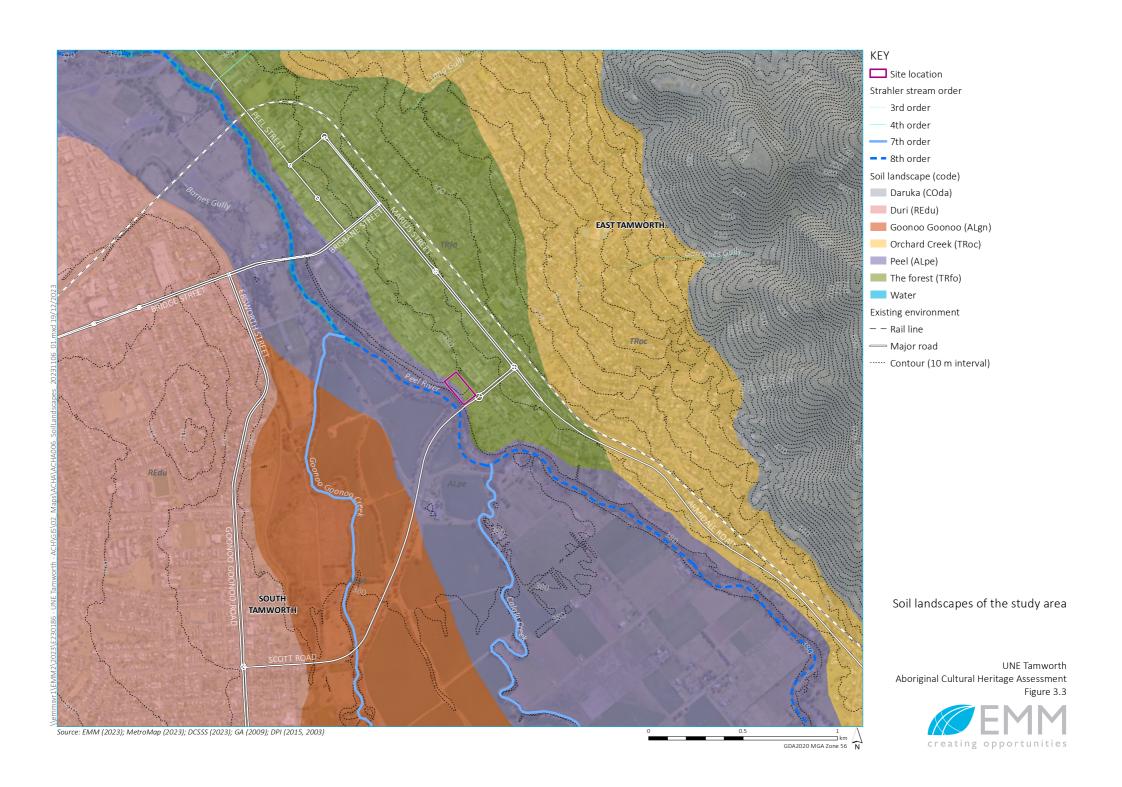


Topography and hydrology of the study area

UNE Tamworth Aboriginal Cultural Heritage Assessment Figure 3.1







3.7 Vegetation

The presence of remnant vegetation is an important consideration for Aboriginal archaeological assessments, as areas with remnant bush may contain culturally modified trees and bush tucker and are generally less disturbed than other areas.

Prior to European settlement, the vegetation of the subregion was dominated by the woodlands on the lower slopes, box gums on the flats, and river oaks and gums along the major waterways. Stringybark is prevalent on steeper slopes, particularly in the east, while ironbark thrives on basalt caps, and cypress pine and kurrajong flourish on stony areas in the west and north.

The Peel River is dominated by the Eastern Riverine Forests vegetation class. This tall open woodland incudes species of trees such as River Oak (*Casuarina cunninghamiana*), Rough-barked Apple (*Angophora floribunda*), River Red Gum (*Eucalyptus camaldulensis*), Yellow Box (*E. melliodora*), Blakelys Red Gum (*E. blakelyi*) and White Box (*E. albens*). A sparse shrub layer also occurs with Hickory Wattle (*Acacia implexa*) and various tea-tree species (*Leptospermum* spp.) present.

A number of faunae is known to have inhabited the area with many currently listed as threatened, endangered or extinct. Within the bioregion, 26 snake species have been identified with the pale-headed snake (*Holocephalus bitoquatus*) having been known from historical records in the bioregion but has not been recently sighted. 12 lizard species, a number of turtle species, 252 diurnal bird species, including regent honey eater, musket lorikeets and fairy wrens, as well as the more common kookaburra, cockatoos and lorikeets. 11 nocturnal birds' species have been identified including several owls such as the tawny frogmouth and the bush stone curlew. Nine native arboreal mammals are known to inhabit the area the including koalas, possums, squirrel gliders and a number of bats. All of these animals would have been a useful resource of Aboriginal people.

However, while historically such flora and fauna may have been present within the study area, it has currently been subject to extensive earthworks in the 1990s. Vegetation today is dominated by low-lying grass cover and disparate young box trees (most likely *E.melliodora*).

3.8 Land use and disturbance

Previous land disturbance has a significant impact to the survivability of cultural materials if present. While there are natural processes that can disturb and/or destroy cultural material, more frequently it is increasing urbanisation over the last 200 years that has resulted in the most significant impacts.

Early maps of the Liverpool Plains region indicates that the study area was on the boundary of the *Wallamoul* and *Waldoo* squatting runs, the former was established by 1831 (*The North Western Courier*, 31 August 1933:22; *The Gloucester Advocate*, 1 March 1938:4). It is not clear; however, if grazing and the associated activities occurred in the vicinity of the study area. The AAC established the *Goonoo Goonoo* estate in 1834 and while the company was focused on the west side of the Peel River, the waterbody needed to be crossed to access the estate (Ferry, 2002:27-29). The primary crossing was located in the vicinity of present-day Darling Street, approximately 1 km north of the study area, but crossing likely occurred at any place deemed appropriate along the River (Newling, 2016).

The study area was occupied by the Commissioner of Crown Land from about 1841 (Newling, 2016). The 1874 Town of Tamworth map indicates the commissioner's residence was located outside of the study area on the north-east side of the present-day Peel Street in the boundary of Lot 56 DP 1212053 (Plate 3.3). The plan shows the footprint of the Commissioner's fenced garden was in the north-east corner of the study area and a fence line ran along the bank of the Peel River. The Commissioner's garden, which more than likely functioned as an agricultural allotment, covered an area of 40 m² (Newling, 2016). An 1883 article, the *Illustrated Sydney News* remarks that:

residents of recent date will remember the garden being on Peel Street, and that the obstruction was not removed until the town was incorporated (*Illustrated Sydney News*, 4 August 1883:3).

The study area was surveyed as Section 7 of the Tamworth town subdivision in 1850 and was set aside as reserve land prior to 1874 (NSW Land Registry Service, no date). The property was notified as a reserve for water access on 9 November 1889 and applications to erect levee embankments along the Peel River were made at this time (NSW Land Registry Service, no date). The study area remained a water reserve until the end of the First World War when the property lot was subdivided into two (Plate 3.4). The south portion remained a water reserve and the north portion was notified as a reserve for public recreation becoming known as Prince of Wales Park. The southern portion became general reserve land in 1922 and around this time the council implemented a beautification scheme across the city, planting trees with palms the primary species planted in the parks and along streets and willows planted along the riparian corridor (NSW Land Registry Service, no date; Tamworth New State League, 1924:3).

The next change to the status of the study area came in 1966 when the land was designated as a public recreation and athletics ground, which became known as Prince of Wales Oval (Tamworth Regional Council, 2017:5). The site was resumed by Tamworth Council in 1976 and became part of the council's land holdings (Tamworth Regional Council, 2017:5). A velodrome was built on the site from 1993 and the arena was opened in 1994. The reserve status of the study area was removed in 2002 (Tamworth Regional Council, 2017:5). The Prince of Wales Park area was recently renamed Bicentennial Park (Tamworth Regional Council, 2017:5).

Aerial photos from the 1970s onward seem to show that the landscape was flat with embankments in the east and south along the river. There was also structure in the northeast corner of the site facing Peel Street, and after conversions with RAPs its was said that this building was a toilet block. The 1992 aerial captures the velodrome in mid construction which it appeared to have involved extensive earthmoving.

It is unknown whether fill has been brought in to build up the Velodrome walls or if the soils from the centre were excavated and re-used instead. There are numerous hard stand areas, including the concrete track for the velodrome, and a concrete tunnel that connects the centre of the velodrome to the outside. Underground stormwater drains run around the outside of the velodrome with several positioned in the centre also. According to old imagery of the Velodrome five large stadium lights where also located in the centre of the feature.

The velodrome has been shut since 2013. A new velodrome was built at the Northern Inland Centre of Sporting Excellence which opened in 2019. The site has remained unused since that time.

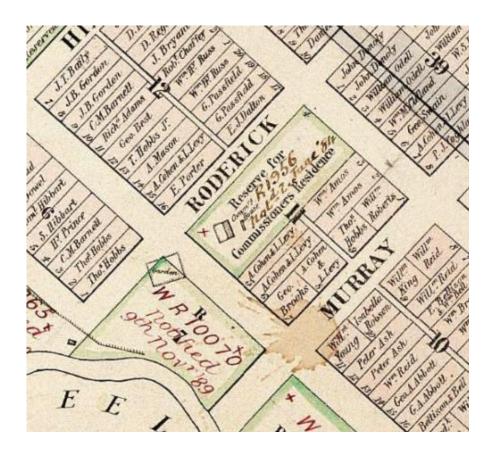


Plate 3.3 1874 map of the current study area, showing garden and fence in the northeast corner

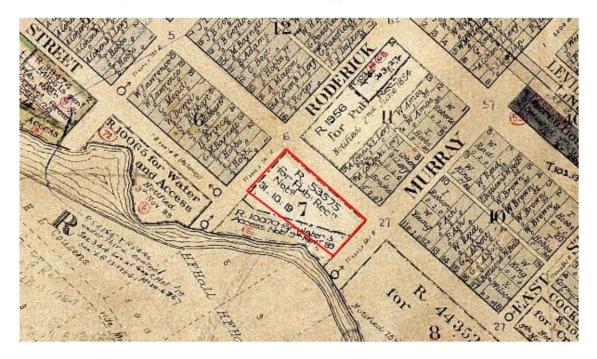


Plate 3.4 1912 Town of Tamworth, County of Inglis plan. The study area is outlined in red

4 Ethnography

4.1 Key findings

- Aboriginal people of the study area spoke the Gamilaroi language (also known as the Gamilaraay), whose
 territory extended across a vast area from Singleton in the Hunter Valley through to the Warrumbungle
 Mountains in the west and up to Nindigully in south west Queensland. Gamilaroi groups were distinguished
 as 'greater' or 'lesser' country depending on whether they inhabited the uplands or lowlands of this area.
- The study area was occupied by the Corbon Gamilaroi, a subgroup of the Gamilaroi, whose traditional land covered the Liverpool Plains, and includes the area around the Peel River and its tributaries. The Corbon Gamilaroi likely moved along the landscape, following the major watercourses in the drier months and the minor tributaries when adequate rainfall could support them.

4.2 Documentary ethnography

4.2.1 Regional information

Information about the socio-cultural structure of Aboriginal society prior to European contact largely comes from ethno-historical accounts made by colonial settlers. These accounts and observations were often made after significant social disruption due to disease and displacement. As a result, this information is often contentious, particularly in relation to language group boundaries. Therefore, it is likely that language group boundaries were far more diffuse than the arbitrary demarcations drawn by colonial observers.

The study area falls largely within the traditional country of the Gamilaroi (also rendered Kamilaroi; Tindale (1974) recorded over 30 spellings), language group that extends as far west as Lightning Ridge, and with the Tamworth region forming the easternmost border (Tindale 1974). However, the study area is on a border of this boundary, and may also have associations with the Nganyaywana language group to the north, Birpai language to the east and Geawegal language to the south. It is important to remember that these groupings represent an account of Aboriginal groups post contact, they may not necessarily present an accurate picture of the way lands were occupied or used in the past. Tindale (1974) estimates that the territory of the Kamilaroi extended across an area approximately 75,400 km² and represents one of the largest tribes in eastern Australia, surpassed only by the Wiradjuri whose territory lies on their southern border. Within the Gamilaroi tribal group, there are two subdivsions; the Corbon Gamilaroi (meaning "the people of the greater country of Gamilaroi") whose territory included the Liverpool Plains and beyond, and the Gammon Gamilaroi (meaning "the people of the lesser country of the Gamilaroi") whose territory included the more southern area from Murrurundi to a very narrow corridor south into the Hunter Valley (Boileau, 2007; Milliss 1980; Telfer & Milliss 1980). The Aboriginal people living around the Peel River and its tributaries, the area of which comprises the study area, were part of the Corbon Gamilaroi. The clans within the Gamilaroi language group that lived within the Tamworth area, and by extension at least part of the study area, were reported to have been the Goonoo Goonoo, Gunnedah, Manilla and Moonbi peoples (Wilson & McAdam 2000:10).

¹ It is important to note that information about the socio-cultural structure of Aboriginal society prior to European contact largely comes from ethnohistorical accounts made by colonial settlers. Most ethnographical accounts of Aboriginal life during contact were written in the context of a period of immense change through death and disease, displacement, and a loss of culture, country and knowledge. As a result, this information is often limited and can be contentious.

In 1842, it was estimated by Edward Mayne, the first Commissioner of Crown Lands and 'Protector' of Aborigines of Liverpool Plains, that there were 4,000 Aboriginal people living between the Peel, Namoi and Gwydir Rivers (Mayne 1942:169-171). However, this number reflects a population severely impacted by at least two decades of direct European contact, which brought both the loss of resources and the introduction of diseases. Disease in particular decimated Aboriginal populations in the post-contact period; in many instances, diseases spread ahead of the settlement frontier, so that by the time the colonialists settled in the area, the local resistance had already been weakened or destroyed by disease. Indeed, there are reports of a *Gamilaroi* story that testifies to the spread of smallpox ahead of white settlement (Ferry 1978:5, cited in Wilson & McAdam 2000:11).

4.2.2 Local beliefs and ceremonial practices

The Northern Tablelands have a high number of ceremonial sites including Bora rings, stone pathways, carved trees and rock art. It is commonly known that the area is spiritually linked to *Baimai* (creator god), *Birrahgnooloo* (his emu-wife) and *Daramulan* (son of *Baimai*) (Flood 2010, p.238). There are gaps in knowledge regarding information of the use of Bora rings and other ceremonies because Aboriginal people were often unwilling to have Europeans present at the ceremonies, therefore, records of the events tend to be disjointed and mostly speculations.

Through oral recounts recorded at the turn of the 21st century, Moore Creek (~15 km north of the study area) was highlighted as an important ceremonial gathering place for the local area (Wilson & McAdam 2000:34-40). It was reported that sites may be located in the Moore Creek area that are related to the use of the area by local clevermen. These sites are likely to be ritual/ ceremonial in nature and may include art sites and engraving sites. During the course of these interviews, it was reported that there was also a natural mythological site reported at Coledale (>5 km south west of the study area) in 1970s; the status of this site came under dispute when people reportedly moved stones located in the site to form a "bora" ring. However, this may not discount its original recording as a mythological story place; unfortunately, no further details are known of this story (Wilson & McAdam 2000:39).

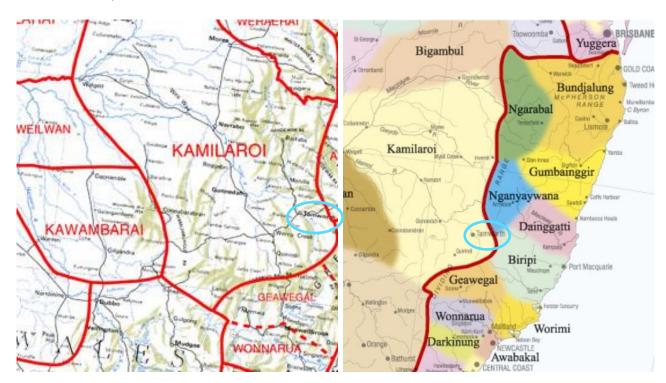


Plate 4.1 Left: Tindale's map (1974) showing the location of the Kamilaroi (area of interest circled blue).

Right: The Encyclopaedia of Aboriginal Australia (AIATSIS) follows Tindale's (area of interest circled blue).

4.2.3 Tools, weapons and apparel

Observations of the local Aboriginal people to Tamworth and surrounds was made initially by Surveyor-General John Oxley in 1818 during an exploration of the Macquarie River, which resulted in numerous interactions with the Aboriginal people his party encountered along the way. Oxley noted that the groups of Aboriginal people were much more numerous (<25 per group) and different family groups and abandoned campsites much more frequent (<40) than his recent Lachlan expedition. Abandoned campsites were numerous and occurred along the riverbank and elevated land near to the rivers. The men often carried clubs or waddies and banged them together to create noise in an attempt to scare away Oxley's party. The men were carrying spears more like big jagged lances, clubs, chisels, and several workbags filled with feathers, necklaces of teeth, and nets for the head with thread from the sinew of possum tails (Oxley 1820:236-237), while the characteristic possum cloaks were also observed. During his mapping of the Macquarie River, Oxley noted the presence of many fires in the distance when they camped down at night. They came across a burial similar to that at the Lachlan River, encompassing an earthen mound surrounded by carved trees, and somewhat different to the traditions along the east coast.

Ethno-historical information lists an array of tools and weapons and also mentions areas of raw material procurement. Many items are unlikely to have survived as artefacts in the archaeological record because they are susceptible to decomposition. Items made of wood are a primary example. Ethnographic accounts of tools in the Northern Tablelands focus on spears, clubs, waddies (a type of hunting stick) and boomerangs among wooden artefacts and on axes and stone implements such as stone tools (McBryde 1974, p.13). Rugs and cloaks were made of kangaroo and possum skins with the aid of bone needles and animal sinews for thread. Wood, bark and animal materials were also used to make items like bags, fishing nets and wooden vessels (McBryde 1974, p.13).

4.3 Contact history

During his exploration in 1818 Oxley did not record any official observations of Aboriginal people. However, without recognising what he saw, he did make notes of the quarrying of andesitic greywacke outcrops for axe manufacture at Mount Daruka, briefly mentioned in Section 3.5:

Ascending two of the highest ridges, several circular orifices were observed on them about twelve feet in diameter, and five feet deep. Great quantities of small stones resembling basalts were in heaps around the edges (Oxley 1820: 285).

Tensions between Aboriginal people and settlers mounted throughout the early to mid-19th century. During the 1830s, Northern Tablelands formed one corner of the government's Mounted Police who were often responsible for the escalation of armed conflict and violence in rural districts. The contact period on pastoral runs in the Northern Tablelands featured many interactions with Aboriginal people. These included massacres that increased through the broader region, with the closest at Waterloo Plains (>45 km north of Tamworth) in 1835 (Ryan et al 2019).

Much of the contact history of local Aboriginal people and the Europeans of Tamworth and the surrounding country is attributed to the recollections of William Telfer Jnr (1841 – c. 1903). Born at Calala in July 1841, his journal was published in 1980 as *The Wallabadah Manuscript*, and describes life in Tamworth and the surrounding country from the 1840s to the years after Federation. Among these recollections, Telfer reported a corroboree he witnessed in his childhood (c 1844) of 250 Aboriginal males and females, likely including Aboriginals from outside the Tamworth area, near an unnamed watercourse (Telfer & Milliss 1980; Wilson & McAdam 2000). It is assumed this activity is referencing the nearby Peel River.

Development of land for grazing by settlers followed, primarily for cattle. Although by the end of the 19th century, this had largely changed to sheep grazing. Aboriginal people often worked as stockmen on the stations. By 1851, the town of Tamworth had a white population of over 250. At around the same time, the number of Aboriginal people in the Northern Tablelands region was estimated by Commissioner George McDonald to be around 600 (McDonald 1845 in Hudson 2006). He also noted the impact of disease and land clearance for sheep grazing (in diminishing macropod numbers) on the Aboriginal population.

By the late 19th century, many of the surviving Aboriginal peoples of the Peel River clans were reported to be living in "a blacks' camp at Calala" (Hobden 1988:7). In 1889, the Daily Telegraph published the reminiscence of a man travelling to open store on Australian Agricultural Company station in c. 1835. The story references a "tribe of blacks" encamped near a waterhole on the Peel River at Kalahlah (a historical spelling of 'Calala'), in the vicinity of a sheep station ("Tamworth in embryo" 1889). Ultimately, however, the exact location of this camp, and any notion of its permanency, appears to be unknown (Wilson & McAdam 2000:19).

4.4 Connection to Country

As part of the initial concept designs for the project, Yerrabingin (2023) undertook a Connection to Country report. This initially included a review of desktop information, an identification of Aboriginal participants and then a series of workshops to explore traditional and contemporary values and how they could be integrated into the project.

The meetings included representatives of the Tamworth LALC, Aboriginal Affairs and from the academic sector. They included representatives of family groups known in the region, including Waters, Fraser, Sutherland, Johnson, Trindall and Munro.

The activities did not identify any project specific traditional values for the study area. However, they identified a number of more general values known to be important to Aboriginal people more broadly. In the context of the ACHA, relevant values included (Yerrabingin 2023):

- emphasis on a connection to the River
- a connection to sky
- a connection to the mountains
- emphasis views of Country
- incorporating water and the river into the building
- re-naturalising the space with endemic vegetation.

4.5 Information provided by RAPs

No project specific ethnographic or cultural values were captured during the consultation process.

5 Archaeological context

5.1 Key findings

- Regional studies of New England suggest that Aboriginal people had inhabited the area by ~5,000 years ago. Currently, a basal age of ~18,000 years ago at the Crazy Man rock shelter site (near Coonabarabran) has been referenced in the wider literature as reflecting the earliest evidence of the peopling of the region to date. Initial archaeological research by University of New England indicated that Aboriginal occupation of the Northern Tablelands was seasonal and transitory due to the cold climate during winter and the associated lack of resources for subsistence (Bowdler 1981). However, more recent studies suggest that the region may have been occupied all year round by small mobile groups who could adapt more quickly to the harsh conditions of the region.
- Previous studies of the region are extremely sparse, and primarily constrained to cultural heritage management studies for various residential and/or industrial activities. Where available, these studies suggest ephemeral past use of the Peel River valley, a prevalence for the use of local lithic material for tool production (such as chert, etc), and activities focussed on areas of elevation (particularly highlighting lower slopes) with a low gradient, near creeks (generally <150 m); and very rarely on other hilly relief.
- A review of Heritage NSW's AHIMS database identified 108 previously documented sites in the region. These were similarly dominated by sites of varying densities of stone artefacts (n=87, 82 %); followed by but also included rarer site types such as art, stone quarry and culturally modified trees. Prior to fieldwork undertaken for this assessment, no previously documented sites were identified within the study area, with the nearest being ~500 m away and the majority further than 2 km.

5.2 Regional archaeological context

Without discounting that many contemporary Aboriginal cultures note their custodianship of the landscape since time immemorial, from an archaeological perspective the first peopling of Australia by reasonably large groups of hunter-gatherers occurred ~50 ka (thousand years ago) (Bradshaw et al. 2019; O'Connell et al. 2018). The peopling of the continent was rapid, with sites such as Devil's Lair (WA), Warratyi (SA), and Lake Mungo (NSW) all occupied within a few thousand years of arrival (Bowler et al. 2003; Hamm et al. 2016; Turney et al. 2001). Genomic research has shown that following these initial explorations of the continent, regional populations or nomadic sedentism, was established by ~40 ka (Tobler et al. 2017). These small populations were highly mobile, but remained within a broad spatial geographic area, dictated in general by the nature of resources and water availability. In the case of some of the arid parts of the continent, mobility encompassed thousands of square kilometres (Gould 1977), while major riverine corridors such as the Murray River had near permanent settlements (Pardoe 1995).

In NSW, the earliest evidence of Aboriginal people are human remains recovered from the lunette in Lake Mungo and dating to ~42 ka (Bowler et al. 2003; O'Connell et al. 2018). The presence of red ochre covering the remains representing a society with significant cultural and symbolic complexity (Langley et al. 2011). Near the coastal edge, the earliest populations were found at Cranebrook Terrace, near Penrith. Here a handful of rudimentary stone tools were found in an alluvial unit, some 8 m below the current surface, which were dated to ~40-45 ka (Williams et al. 2017). However, it is not until ~35 ka, that regional populations appear to have become established in the Sydney Basin, and which appeared to consist of small bands of people focussed mainly along major river systems, including the Hawkesbury-Nepean, Parramatta, Georges and Hunter Rivers (Hughes et al. 2014; Williams et al. 2012; 2014). These rivers formed key ecological refuges that hunter-gatherer groups used to survive major climatic events such as the Last Glacial Maximum (21±3 ka) – a cool and arid climatic period. Well-established archaeological models suggest populations experienced a major reduction in size (by as much as 60%), and settlement contraction and abandonment across much of the continent during this time (Veth 1993;

Williams et al. 2013). Although, recent research suggests that the story may be more complex than this (e.g. Tobler et al. 2017).

The terminal Pleistocene and early Holocene (~18-8 ka) was characterized by significant environmental change, notably the rapid inundation of much of the coastal shelf, resulting in the reduction of the continent by ~21% (~2 million km²) (Williams et al. 2018), in tandem with improving climatic conditions – the Holocene climatic optimum (Williams et al. 2015a; 2015b). More broadly, these conditions resulted in increasing population growth, expansion of ranging territories, increasing sedentism (longer patch residence time) and the beginnings of low-level food production (e.g. aquaculture), and ultimately the initiation of social and cultural groupings observed in the late Holocene (Williams et al. 2015b). Within the Sydney Basin, a large number of sites are first initiated during this time, including Burrill Lake (~20 ka), Bass Point (~17 ka), and Loggers Shelter in Mangrove Creek (~11 ka) (Bowdler 1970; Lampert 1971; Attenbrow 2004). This is also the case in the greater Blue Mountains area, where dated rockshelter sites in the area suggest that Aboriginal occupation extended as far back as 14,000 years ago, and potentially as early as 22,000 years ago (Stockton 1973; Stockton & Holland 1974).

More broadly, at this time we see a much broader range of archaeological site types occurring, such as the Roonka Flat burial ground on the banks of the Murray River within which some 147 individuals were interred through the Holocene (Pate et al. 1998), and the increasing use of marine resources. Many of the previous refuges were subject to abandonment or a re-structuring of land use (Dortch 1979; Fitzsimmons et al., 2019). These activities suggest the ability to undertake large-scale movements to mitigate environmental distress was becoming increasingly difficult and was addressed through diversification of hunter-gathering behaviours and, at least in part, technological advances and investment (Williams et al. 2015b).

The late Holocene saw significant population increase, with hunter-gatherers reaching their zenith of ~1.2 million at 0.5 ka, a tenfold increase on Pleistocene levels (Williams, 2013). Data suggests that the highest populations during this time were in the southeast of Australia. Williams et al. (2015b) suggest that this increase was likely a result of intensification of earlier technological advancements, including hafting-technology, plant and seed processing, and localised landscape management (using fire), allowing climatic downturns to be successfully weathered. These included strong arid El Nino Southern Oscillation (ENSO) conditions between 4-2 ka, and increasingly turbulent climatic conditions during the Medieval Climatic Anomaly (1.3-1 ka) (generally wetter) and Little Ice Age (0.3-0.5 ka) (generally drier) (Williams et al. 2010; 2015a). More dense populations resulted in decreased freedom of movement and the formation of strong classificatory kinship systems, complex cultural and symbolic landscapes based on geographic totemism (the 'Dreaming'), distinctive graphic art systems, land rights in the form of ritual property, and formalized exchange networks (Williams et al. 2015a). For the Sydney Basin, these conditions resulted in a significant increase in the archaeological visibility of past Aboriginal populations, with sites occurring in a much wider range of locations, and generally indicative of a more intensive use of the landscape. In the greater Blue Mountains region, rockshelter use intensified about 5-4 ka (Attenbrow 1981; Stockton 1973; Kohen et al. 1981). Assemblages at this time contain a much larger proportion of fine-grained raw materials, with backed implements appearing before 3,000 years ago. Flake debris and artefacts also tend to be smaller in size.

In the last 1,000 years there is a marked increase in the presence of quartz flakes and quartz bipolar cores, and a decline in fine-grained materials. Bondi points and geometric backed artefacts were less common and there was a shift towards the production of eloueras (McDonald 1997).

5.3 An overview of research in the local area

Previous studies of the region are extremely sparse, and primarily constrained to cultural heritage management studies as part of various residential and/or industrial activities. Aside from the studies presented below, which focus on studies in close proximity to the study area, a handful of other studies have been undertaken, and similarly suggest increased use of areas with local lithic material for tool production (such as chert, etc), activities focussed on lower slopes with a low gradient, near creeks (generally <150 m but up to 250 m) but above inundation, and occasionally on hilly relief (Davis et al. 1993; Gaynor 2011; Gaynor & Wilson 1995; Wilson & McAdam 2000). It must, however, be noted that ceremonial and natural resource sites do not necessarily

conform with these patterns, since they are not necessarily based on resource requirements, and as such may be found in a range of other environmental conditions.

Below are presented a number of nearby studies that more accurately reflect the likely cultural materials within the study area.

i Wilson, J & McAdam, L (2000) The Tamworth Aboriginal/Archaeological Site Study

This study was undertaken to produce a preliminary predictive model for Aboriginal site location within the Tamworth region, including the study area, undertake fieldwork on crown and council land to test the predictive model, and to refine the predictive model based on the findings. The report included recommendations to ensure the long-term conservation of some of the sites, based on their significance.

A total of 28 sites were identified as previously recorded within the study's project area, additional fieldwork identified and recorded 38 sites, bringing the total number of sites to 66. These sites comprised isolated objects (n=20, 30%), artefact scatters (n=40, 61%), scarred trees (n=5, 8%), and a stone quarry (n=1, 1%). The most notable of these sites included the identification of some 10,000 artefacts on the banks of Timbumbri Creek. Timbumbri Creek is a 5th order waterway \sim 5 km from the study area.

Of the 66 sites, three sites were located within X from the current study area . An artefact scatter, measuring 100 x 150 m, was identified on a upper slope and comprised of 33 flaked artefacts of hornfels, and esitic greywacke, chert, cherty argillite and quartz. A single and esitic greywacke flake, within 500m from the artefact and a low density artefact scatter (n=8) comprising of hornfels, chert, quartz, cherty argillite, located on a upslope and vehicle track over an area of $40 \text{ m} \times 3 \text{ m}$.

Based on background research and ground truthing, the study made predictions for the types of Aboriginal sites within the study's project area, and where they may occur. It also identified that past land use and disturbance playing a key role in the perceived survivability of Aboriginal objects (Wilson & McAdam 2000:174-196). The report uses land zoning as a tool to group site predictions. Of relevance to this ACHA are the predictions provided for business zone, for where the current study area sits. The following site predictions were made:

- In business zones:
 - Isolated finds and artefact scatters in areas of low slope near watercourses.
 - Scarred trees may occur within 100 m of a watercourse (in areas retaining mature red gums or white box).
 - Ceremonial sites and carved trees in areas within 600 m of an ecotone and out of sight of the local watercourse.

Due to the lack of surface visibility in these areas and high disturbance activities since European settlement, the possibility of relocating these sites is considered highly unlikely. Any remnant artefact scatters would unlikely retain any archaeological integrity due to various ground disturbance activities (including clearing, grazing, cultivation, buildings and associated infrastructure, trenching and import of fill). There is an exception that occasional scarred trees may be present as not all mature trees (generally white box eucalypt) were initially cleared in the area (Wilson & McAdam 2000:101).

ii Gaynor, P (2004) An Archaeological Survey of the Projected Levee Bank Route around the Taminda Section of Tamworth in Northwestern NSW.

In 2004, Pat Gaynor carried out an archaeological survey along the Peel River for the route of the proposed levee bank construction in Taminda, Tamworth. A single flake was identified under a pepper tree along Barnes gully – located <2 km from the current study area. Gaynor argued that the pepper tree had provided sufficient protection from the disturbance prone to the area and thus the artefact was in situ. They also stated that the artefact type was typical of those found in the Tamworth area.

iii Gaynor, P (2011), Archaeological survey of part Lot 191 DP 1107583 near Calala Lane at Tamworth in north western NSW

This archaeological survey was undertaken in advance of undisclosed development in Calala. Based on present aerials, it may have been associated with a recreation area south of Calala Creek near the residential area on Warrah Drive. The study area was a small lot adjacent south to Calala Creek, near the residential development area, located ~4 km south of the current study area.

Prior to the survey, one recorded site, a small (n=5, 6 x 2 m) artefact scatter (AHIMS #25-2-0006), was identified within the project area. During the field survey, visibility was noted as very low with little exposures outside access tracks. Attempts were made during the survey to relocate #25-2-0006. None of the original artefacts were identified, however one grey chert core was identified adjacent to the reported location. This artefact was considered likely to relate to the originally recorded site. No updated site extent was provided. No subsurface potential was observed at the time of recording.

iv Everick Heritage Consultants (2014a & b). Cultural Heritage Due Diligence Assessments of the Tamworth Council's South Tamworth Rural Lands Master Plan for the Goonoo Goonoo Road Site, Tamworth, NSW and the Duri Road Site, Tamworth, NSW.

In 2014, Everick Heritage Consultants undertook two Aboriginal due diligences immediately south of Tamworth, along Goonoo Goonoo Road and Duri Road, <10 km south of the current study area. Twenty new sites were recorded, with the majority being artefact scatters located along ephemeral watercourses. Four artefact scatters, two with associated culturally modified trees, were located between 500 m and 1 km from the nearest water source. All four sites were located on a prominent ridge line and contained high-quality metamorphic cobbles nearby. Everick concluded that these cobbles were representative of a local stone source. Overall, the sites were highly disturbed due to rock picking, and ploughing.

v Virtus Heritage (2019) Due diligence assessment for the Chaffey Dam Pipeline

This due diligence assessment, and associated survey, was undertaken in advance of works relating to the proposed construction of a pipeline to connect to the existing Chaffey Dam to Tamworth water supply pipeline, located ~22 km south east of the current study area. The purpose of the due diligence assessment was to: identify whether or not Aboriginal objects are, or have potential to occur, within the project area; if objects are present, whether or not the proposed activity is likely to harm the objects; and, if harm cannot be avoided, determine whether further assessment or an Aboriginal Heritage Impact Permit (AHIP) was required.

The environmental and archaeological background research determined that the project area was within a sensitive cultural landscape due to the proximity to water, and Aboriginal objects, namely isolated artefacts and artefact scatters, had high potential of occurring within the project area, notably within 100 m of watercourses. The survey undertaken for the assessment identified three isolated finds, two potential scarred trees, two artefact scatters with associated potential archaeological deposit (PADs), one isolated find with a PAD, and a further PAD. All sites identified were within 200 m of the Peel River and/or on areas of elevated ground within the associated floodplain.

Two areas of cultural sensitivity were also identified by Donny Fermor of the Tamworth LALC, as retaining potential for cultural deposits. Both areas were in association with lower slopes <250 m from the Peel River. Neither area exhibited material evidence of Aboriginal occupation nor exhibited intact topsoil units. However, their identification was consistent with site prediction models based on regional studies.

The report concluded that should construction methods not be altered to avoid these sites and locales, further impact and significance assessment as part of an ACHA would be required. Ultimately, it is understood that the pipeline alignment was altered to avoid impact to identified cultural heritage.

vi Navin Officer (2012; 2015) Aboriginal Cultural Heritage Assessment for the Chaffey Dam Augmentation and Safety Upgrade Project; Chaffey Dam Augmentation and Safety Upgrade – Aboriginal Subsurface Testing & Salvage Collection Program

This archaeological assessment was undertaken in advance of works relating to the raising of the Chaffey Dam wall and associated inundation (increasing storage capacity from 62 GL to 100 GL). The assessment determined if any impacts to Aboriginal cultural heritage were likely to occur as a result of the proposed works, and where impacts were identified the aim was to: outline proposed mitigation and management measures; and, demonstrate an appropriate archaeological assessment methodology was undertaken, including reporting on results of the assessment method.

The preliminary results of the assessment noted that while the cumulative impact of European land use practices would likely have reduced both the number of sites in the project area, as well as reduced the integrity of any remaining sites. However, a number of previous studies related to the dam had identified artefacts in the vicinity of the inundation area, albeit largely in disturbed contexts, and the potential for further material evidence was identified.

The fieldwork for this assessment comprised two days of field survey in July/August 2012. It should be noted that at this time, the dam was at 100% capacity. When combining existing data and newly identified information, the assessment ultimately identified 32 sites within the additional inundation zone. These included artefact scatters (n=12), isolated Aboriginal objects (n=20), and a potential quarry (n=1). Six artefact scatters were associated with subsurface archaeological deposits, as were two of the isolated finds. A further eight areas of subsurface potential were also identified, bringing the total number of sites (observed and potential) to 40.2 As the assessment was undertaken in an area dammed in 1979, the relationship of these sites to the natural environment (eg proximity to creeklines) is difficult to assess; and it is also likely that the changing dam supply level has played a role in the observation of these sites (eg through sheet or rill erosion). The areas of subsurface potential were associated with alluvial terraces, basal slopes and spur crests based on the current environment, but which may reflect similar landforms adjacent the now inundated Peel River, especially in the southern part of the dam where flooding was less substantial.

As a result of the findings, a program of mitigation measures was proposed, including surface salvage (artefact collection), and subsurface test and salvage excavations (conservation ex situ). The test and salvage excavations took place over an unspecified number of days in September and October 2014. The excavation comprised five transects, which aimed to sample all landforms represented in the project area, rather than solely targeting areas of high archaeological potential. Additional excavation was undertaken at four Aboriginal sites identified during the survey. Over the course of the test excavation program, 145 0.5 x 1m test pits³ were excavated, with 67

This number was calculated by adding the number of sites assessed in the significance assessment (n=32) and the eight areas of archaeological potential (n=8) which were specifically noted as *not* included in the significance assessment. The report does not specify a total number of sites assessed within the study area. There are 43 sites currently recorded on AHIMS around the Chaffey Dam inundation area.

The number of test pits excavated during the course of the program is inconsistent throughout the report, and varies between 112 and 145.

The number 145 is used here and reflects the sum of tests pits excavated per landform.

placed on alluvial terraces, 57 on spur crests, and 21 test pits on basal slopes. In addition, surface salvage was carried out at 25 sites identified during the survey, and along the five test excavation transects.

A total of 903 stone artefacts were recovered during the course of the works, with 140 artefacts from the surface salvage, and 763 artefacts from excavation. These were all found in shallow duplex soils <30 cm composed of silty clay overlying various geological substrates. The assemblage was dominated by hornfels and fine-grained siliceous raw materials and unretouched flakes – an indication of brief and intermittent visitation in the past. The age of the deposits were not explored in the report, but appear likely of late Holocene age (<5,000 years). Three sites were noted to contain high artefact densities:

- CDAS4, an alluvial terrace at the confluence of Hydes Creek and another waterway, west of the dam, and within which 508 artefacts were recovered from an area some 100×50 m in size. The report suggests an artefact density of $\sim 14/\text{m}^2$ and potentially some 18,000 objects present within the deposit
- CDAS8, an alluvial terrace adjacent a minor tributary feeding into the western side of the dam, within which 126 artefacts were recovered from an area some 40 x 20 m in size
- CDAS13, a probable alluvial terrace/lower slope of Peel River, within which 111 artefacts were recovered from an area some 25 x 25 m in size.

The assessment considered three sites of high (CDAS4) and moderate significance (CDAS8 and CDAS13), with the remainder having low values. As a post-approval mitigation report, recommendations were constrained to the ongoing management and protection of those sites found outside the inundation zone.

vii EMM Consulting (2022a) Replacement pipeline between Dungowan Village and Calala: Aboriginal cultural heritage assessment

This study was undertaken in advance of the Dungowan Dam and pipeline project. During the course of the fieldwork activities for this assessment, comprising archaeological survey and test excavation, seven Aboriginal objects and/or sites were identified within the study area. These consisted of six isolated stone artefacts (DEW IF1-IF6 inclusive); and a low density stone artefact scatter (Sandy Creek artefact scatter) associated with the riverbanks of Sandy Creek, a 4th order tributary of the Peel River. The extant stone artefacts were all found in fairly disturbed, primarily agricultural landscapes, while archaeological excavations documented a low density of cultural materials in the upper 30 cm of the soil profile adjacent Sandy Creek.

AHIP 4899 was issued in May 2022, authorising impacts to all isolated finds and parts of the Sandy Creek artefact scatter. This AHIP does not intersect with the current study area.

viii EMM Consulting (2022b) Dungowan Dam and pipeline EIS: Aboriginal cultural heritage assessment

In 2022, EMM consulting undertook an ACHA as part of a larger EIS for the Dungowan Dam and pipeline project. The assessment undertook cultural mapping, archaeological field survey and test excavations to explore and document the Aboriginal objects, site and places within the project footprint, and to align them within the regional context. Overall, the findings largely conformed with the regional models, although an increasing focus on intangible and spiritual values was undertaken to supplement the observed archaeological record. When combining and ratifying the findings of these various activities, there are some 17 identified sites and places, along with a continuous and complex distribution of surface and shallowly buried stone artefacts distributed across the project footprint. These can be broken down as:

• Six cultural sites, including a gender-specific site (DDCS1) encompassing parts of Terrible Billy Creek, a stone arrangement associated with a Creation Ancestor story (DDSA3), two culturally modified trees (DDST1, DDST2), a grinding groove (DDGG1), and the former Dungowan Station where post-contact activities are believed to have occurred (DDPC1). Three social history places, reflecting locales of importance to the specific Aboriginal participants, and including a former residence (DDCS3), an environmental reserve

(DDCS4) and a former school site (DDCS5). Three purported cultural sites that were identified by RAPs, but which cannot be anthropologically or scientifically validated as part of the ACHA, and including a natural ambush site (DDCS2), and two stone arrangements that were considered to reflect burials (DDB1, DDB3).

- Five archaeological sites, including three stone arrangements (DDB2, DDSA1, DDSA2) and two potentially culturally modified trees (DDST3, DDST4), all of which are assigned a 'tentative' classification with further research recommended.
- A stone artefact background scatter across the entire project footprint and extending beyond its limits within which artefact densities of 10-15/m² may be expected, and that includes identified isolated Aboriginal objects (DDIF2-11 inclusive) and low density artefact scatters (DDOS3, 8-14 inclusive). These sites are typically of low significance and reflect the long-term use of the entire landscape by Aboriginal people in the past. Eight areas of past foci and activity (DDFA A-H inclusive) within the dam and inundation footprint, characterised by high densities of primarily sub-surface artefacts ranging from 30->272/m², and that reflect long term and/or repeat visitation and occupation by people over at least the last 5,000 years (5ka). Several of the field observations are also encompassed within these site's curtilage (DDIF1, DDOS1, 2, 4-7 inclusive). These foci are generally small, <2,800 m² (<60 x 60 m), but in some areas extended 350 m in length along the river's edge.
- A zone of 69 m either side of major creeks and tributaries (>3rd order) within which higher densities of stone artefacts and/or other areas of past foci may be expected to be present.

While a range of significance, potential impacts and future management was proposed, including the need to consider cultural flows (a first for the Tamworth region), the project was ultimately discontinued. As such, beyond identification and characterisation of the sites listed above, no further action on the project occurred.

5.4 AHIMS data

The Aboriginal Heritage Information Management System (AHIMS) database is managed by Heritage NSW and includes a location and description of Aboriginal objects and sites recorded through academic research and cultural resource management (see Appendix 3.1 of the ACHA for further explanation of Aboriginal site features). EMM conducted a search of the AHIMS database on 09 August 2023, for an area 95 km² centred on the study area and extending beyond its boundary. The search returned 108 Aboriginal cultural heritage sites, none of which are located within the study area. The search identified any Aboriginal sites or places registered within the study area; and aids predictions for the study area by showing the frequency and distribution of Aboriginal site types in the broader landscape. The results are summarised in Table 5.1, illustrated in Figure 5.1, and provided in full in Appendix D.2.

Of these 108 sites, four have been listed as destroyed (AHIMS #29-2-0296, #29-2-0298, #29-2-0300, #29-2-0297). Two sites were listed as 'restricted', #29-2-0297 and #29-2-0309, and which is typically indicative of ancestral remains. The former has been listed as previously destroyed. EMM contacted the AHIMS register on 4 October 2023 and received confirmation that #29-2-0309 is not located in the study area. These two sites have been removed from further analysis and the remaining 106 sites have been categorised in Table 5.1 below.

Open camp sites (artefact scatters and isolated finds) represent the dominant site type for the area (n=87, 82 %), followed by culturally modified trees (n=16, 15%). Spatially, these are located east of the Tamworth township in relatively undeveloped bushland on the flanks of Flagstaff mountain. The cultural assemblage is consistently found in proximity to creeklines, such as Long Gully, Fox Gull y and Burkes Gulley, and indicates a strong relationship between these types of site and water availability.

No previously documented sites are found within or in close proximity to the study area. The nearest is an isolated artefact found some 500 m southeast within Tamworth township, while most of >2 km away.

Table 5.1 Summary of AHIMS site types within the search area

Site type	Number	Percentage (%)
Art site (pigment or engraved)	1	0.9
Isolated find	35	33.0
Low density artefact scatter (<20)	14	13.2
Medium density artefact scatter (21 - 50)	4	3.8
High density artefact scatter (>50)	2	1.9
Undefined artefact scatter	32	30.2
Stone quarry with undefined artefact scatter	2	1.9
Culturally modified tree	13	12.3
Culturally modified tree with high density artefact scatter (>50)	1	0.9
Culturally modified tree with isolated find	2	1.9
TOTAL	106	100

5.5 Predictive model

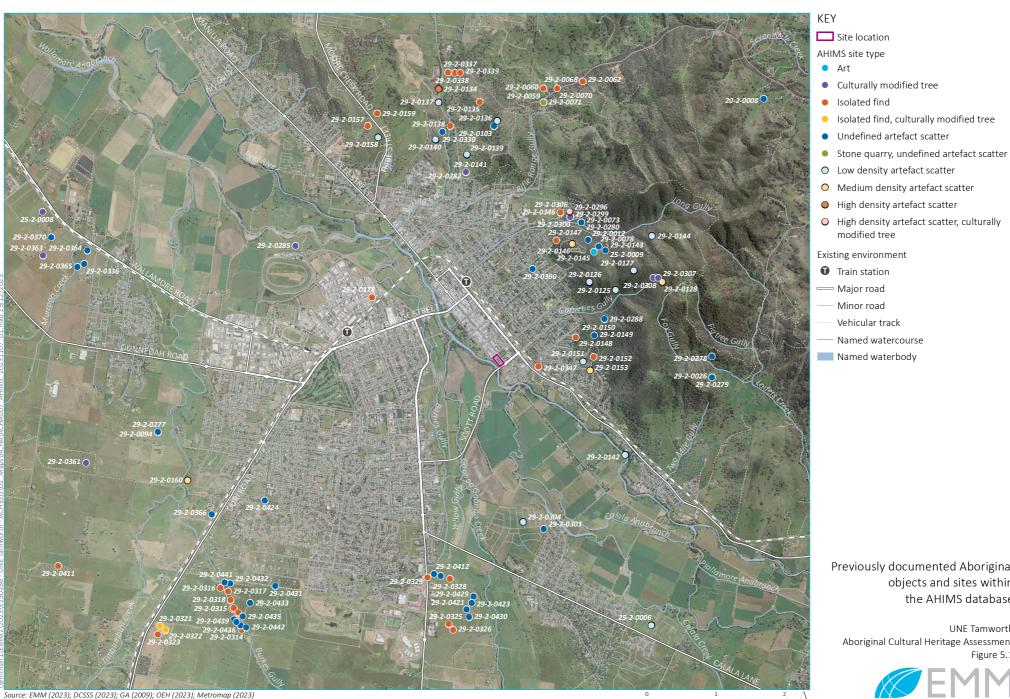
Aboriginal occupation of the study area in the past is considered likely. Aboriginal objects and/or sites are frequently found on terraces and/or elevations in close proximity to major creek lines, often on flat or near flat surfaces. The most common site type is likely to be surface and/or subsurface stone artefactual material reflective of past visitation and/or occupation. Available data suggests that such sites frequently contain few Aboriginal objects (<20) and are reflective of an ephemeral use of the region. No high-density artefact scatters are documented in the available data, so it remains unclear the threshold at which transient use shifts to occupation foci, although Wilson and McAdam (2000: 166) makes reference to a site on Timbumburi Creek (#29-2-0052) numbering close to 10,000 artefacts; and more regionally 20-30/m² are often adopted. The presence of alluvial soil profiles along the major waterways may potentially contain deeply buried and/or stratified cultural material, though these waterways have likely been impacted by changes in morphology (increased erosion/sediment deposition).

A range of other site types are known in lesser abundance, and arguably of higher significance, including culturally modified trees, ceremonial sites, quarries, stone arrangements, grinding grooves, rock shelters, habitation structures, and natural resource sites. Several of these sites are considered unlikely to be present due to the environmental context – a lack of geological exposures or vertical escarpments limiting the likelihood of rockshelters, grinding grooves and/or quarries, for example.

The proposed activity is within a study area where substantive earthworks and development activities has occurred, and which have likely affected the upper soil profile. Geotechnical information indicates if present, they would be situated beneath several metres of modern fill. As such, the survival of cultural material, if ever present, would be found in disturbed contexts. The environmental context indicates that Aboriginal visitation within the study area may have largely been restricted to transient use, as much of the study area is prone to flooding.

On the basis of the archaeological sites registered in the region, a review of previous archaeological studies and the environmental context, the following conclusions can be drawn regarding the potential presence and location of Aboriginal sites within the study area:

- Isolated finds, artefact scatter sites and potential archaeological deposits are the most common sites within the region and can occur across most landforms, even in disturbed contexts. Open stone artefact sites are usually found close to streams but above flood level, on elevated, level to gently inclined landforms, such as hill crests and hill spur crests, and alluvial terraces. The most common site type is likely to be surface and/or subsurface stone artefactual material reflective of past visitation and/or occupation. Available data suggests that such sites frequently contain few Aboriginal objects (<20) and are reflective of an ephemeral use of the region. No high-density artefact scatters are documented in the available data, so it remains unclear the threshold at which transient use shifts to occupation foci, although values of >10,0000 artefacts are documented relatively nearby.
- Rock shelters and/or rock art and engravings are very rare in the regional context, likely due to the lack of
 suitable topography in settled areas; where they do occur, they are in areas with sandstone outcropping or
 near vertical escarpments. This site type is more likely to occur in the rugged Moonbi Ranges to the north
 east rather than the alluvial flats which comprise the study area. There is a very low likelihood that rock
 shelters, engravings and rock art are present within the study area.
- Grinding grooves and engraving sites are most likely to be present on outcropping sandstone in stream beds or adjacent to streams. Based on previous regional studies in the region, engraving sites have not been documented previously on the Peel River.
- Culturally modified trees are well documented in the broader region. They may exist where native
 vegetation has been retained, or can remain present in the landscape for a considerable time where dead
 or felled trees have been left. The study area has been entirely cleared in recent years, and is there is
 therefore low potential for such sites to be present.
- Middens of bone, charcoal, stone and freshwater shells may occur along extensive and reliable river systems. However, none are recorded in the regional landscape, and are unlikely to occur within the study area. If present, they are most likely to occur in association with open camp sites on waterways.
- Stone arrangements are most likely to occur on elevated and relatively flat landforms (eg crests, terraces, ridges) near sources of outcropping cobbles or small boulders capable of being moved manually. Where recorded in the landscape, this site is located on the steeply elevated topography of the Moonbi Ranges. Within the context of the study area, this site type is restricted to suitably flat areas on locally elevated hills.
- Burials can occur anywhere in the landscape, but are notably more likely on watercourses or under rock
 ledges; their identification in the landscape is rare. Generally, they would be identified by mounds of earth,
 carved trees or stone markers. Evidence of burials is generally rare because human bodies are susceptible
 to the generally acidic Australian environments and other taphonomic processes. Where sub-surface burial
 is not performed, human bodies can have limited preservation in the archaeological record. Such sites and
 their component parts are also more susceptible to the impacts of low-level development (such as farming)
 than other sites.



- O High density artefact scatter, culturally

Previously documented Aboriginal objects and sites within the AHIMS database

UNE Tamworth Aboriginal Cultural Heritage Assessment Figure 5.1

GDA2020 MGA Zone 56 N



6 Field investigations

6.1 Key findings

- Archaeological survey and excavation were completed by EMM archaeologists and representatives of three
 Aboriginal participants in mid October 2023. Given the small size of the study area, the field activities
 encompassed the entire site, with a focus on the periphery where previous impacts were considered less.
- The field investigations confirmed the findings and predictions of the desktop assessment. Specifically, the survey indicated that major earthworks from the construction of the velodrome had resulted in modifications to all areas of the study area. Test excavations focussing on areas where more established vegetation (southwest), the periphery and the centre was predicted to be less was undertaken. These confirmed modern fill in all locations, and that the under-lying silty clay documented in the geotechnical information was the remnants of a B2 horizon from a residual soil profile.
- No Aboriginal sites were identified, and it was concluded that the study area had been impacted by historical and modern disturbances, which have truncated the upper layers of the soil profile where cultural materials would be expected to occur if present.
- No intangible values or places within the study area were identified by the participating RAPs.

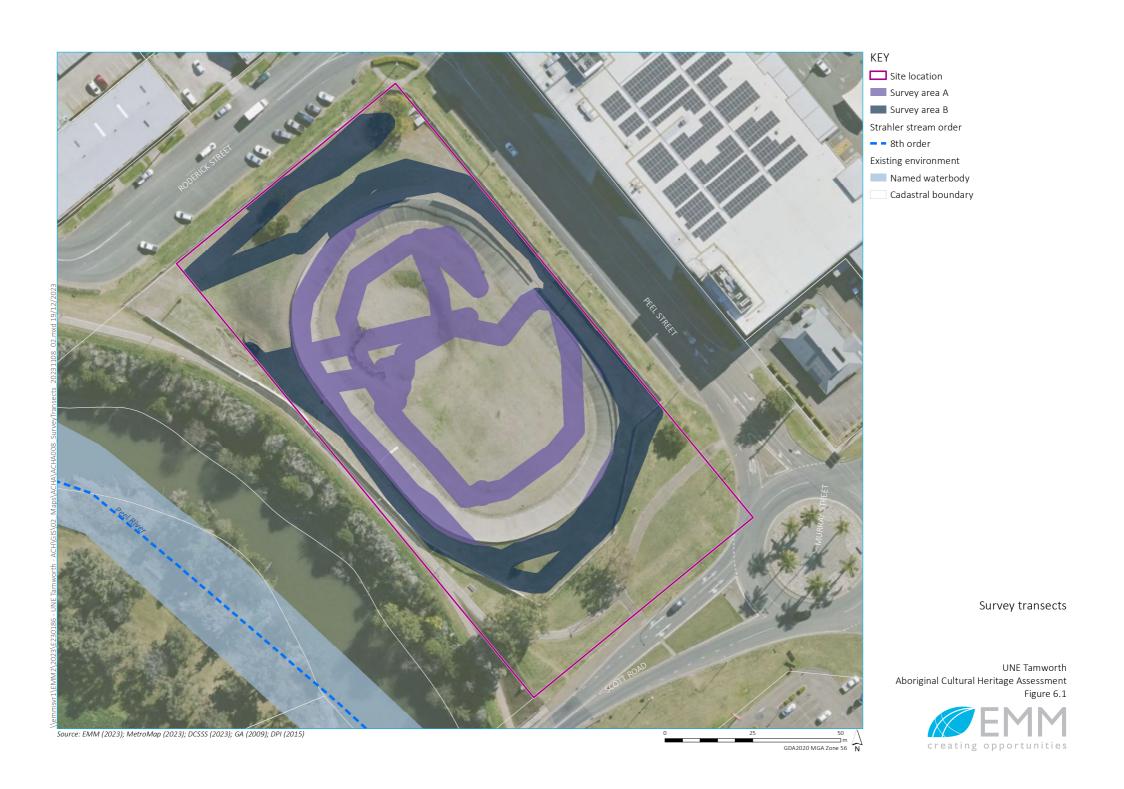
6.2 Archaeological survey

6.2.1 General aims

EMM archaeologists Alan Williams and Amber Morgan conducted an archaeological field survey of the study area with the assistance of three Aboriginal participants on 13 October 2023 (see Section 3.2). An overview of the survey tracks completed for the survey is shown on Figure 6.1.

The primary aims of the survey were to:

- identify Aboriginal archaeological sites and/or Aboriginal places with the assistance of Aboriginal knowledge holders
- characterise the landscape to aid predictions of archaeological potential
- identify sites or areas that would require further investigation if planned for development as part of the project
- identify sites or areas to be avoided by development, where possible
- identify areas with minor or negligible Aboriginal cultural heritage values that are most suitable for development.



6.2.2 Approach and methods

The archaeological survey and data collection methods followed Section 2.2 of the *Code of Practice for the Archaeological Investigation of Aboriginal Objects in NSW* (DECCW 2010a). Where feasible, each survey participant was spaced approximately 10 m apart, and the survey area was covered using these transects (Table 6.1). This method was considered to be suitable for undulating nature of the of the site, whereby suitable ground exposures were easy to identify and be targeted at this spacing. Due to low visibility across the entire study area, the assessment calculations assume that each participant could identify and inspect exposures within 5-10 m either side of them, therefore effectively surveying all accessible ground surface exposures within the study area.

The effectiveness of the survey is determined through recording and analysing survey coverage data. It is evaluated for its effectiveness in identifying the distribution of Aboriginal objects across the landscape, taking into account the potential for archaeological deposits. The percentage of the ground surface exposed in each landform and the visible ground surface within exposures (as ground exposures are often obscured by vegetation, gravels, etc.) influences the survey results. For example, an archaeologically sensitive landform surface that is highly exposed by erosion is likely to reveal Aboriginal objects, whereas a similar landform that is thickly grassed will obscure surface artefacts if they are present. Overall, calculation of effective survey coverage is used to estimate not only how much area was physically surveyed, but also how favourable the survey conditions were for the identification of Aboriginal sites.

Survey transects were recorded as tracks on GPS units and detailed information about each transect recorded on a separate Survey123 form created by EMM. The Survey123 form allowed for survey transects starting points, details and representative photographs to be recorded. The course of survey transects were recorded as tracks on hand-held non-differential GPS units which were linked to the Survey123 forms.

6.2.3 Results

Overall, the field investigation encompassed two survey areas covering $^{\circ}920 \text{ m}^2$ of the study area (Table 6.1). Overall, exposure was relatively low (\bar{x} =25%) with an average effective visibility of $^{\circ}10\%$ (Table 6.1). Grass cover was consistent across the study area with areas of exposure constrained to the fence lines and around the base of the several trees and shrubs. The survey units are broadly landform based, with Survey Unit A encompassing the flat base of centre of the velodrome; and Survey Unit B encompassing the modified slopes and ground surrounding the velodrome structure (Plate 6.1 – Plate 6.10 inclusive).

As predicted in the desktop information, the survey indicated that the study area had been subjected to extensive earthworks, and few areas considered to reflect a natural landscape were evident. The study area was dominated by the 1990s velodrome, an oval concrete track angled and supported by massive mounds of dirt. The presence of a 1.8 m high concrete tunnel in the northwest corner of the site, which could be accessed from the surrounding ground surface, into the velodrome centre provides an indication of the level of earthworks that must have occurred to allow its establishment. In addition, along the western edge of the study area was an embankment running along Peel River, and which based on its artificial appearance to the north (outside the study area) was similarly some form of modern earthworks. The peripheries of the study area were comparable with the roads outside the site, and the presence of well established eucalypts in the southwest corner provided some indication that these areas may have been subject to less impact in the past. This was not supported by the geotechnical information, but provided a focus for subsequent test excavations.

In addition to the broader earthworks, various services were found across the site, and a substation in the northeast corner. These included a drainage system through the velodrome which was visibly 0.5–1m in depth wherever encountered.

Table 6.1 Survey effective coverage summary.

Survey unit	Landform	Area (m²)	Exposure (%)	Visibility (%)	Effective Coverage (sq m)	Effective Coverage (%)	Aboriginal sites identified
Survey Unit A	Flat (base of velodrome)	3,917	20	40	313.6	8	0
Survey Unit B	Modified slope (ground surrounding velodrome)	5,056	30	40	606.72	12	0
Average	-	4,486.5	25	40	460.16	10	0
Total	-	8,973	-	-	920.32	-	0



Plate 6.2



Plate 6.1 The northwest corner of the study area, looking southeast. The photographer is standing on the Peel River artificial levee bank

Overview of velodrome showing inner bowl and at the mouth of the entry tunnel, view east





Plate 6.3 The velodrome looking northwest towards the entry tunnel and Peel River in the background (shown by vegetation)

Plate 6.4 Tunnel exit within the centre of velodrome, and providing an indication of the scale of earthworks that has occurred



Plate 6.5 The western edge of the study area showing the outside of the velodrome, with artificial levy to the left (west)



Plate 6.6 The southern edge of the study area, looking east. This area had more established trees and aligned with the surrounding roads



Plate 6.7 The northern edge of the study area, looking south



Within the base of the velodrome, looking east up to wards the surrounding roads, and indicating several metres of excavation have occurred



Plate 6.9 A former lighting pole within the velodrome



Plate 6.10 A drainage systems within the base of the velodrome

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Plate 6.8

6.3 Test excavation

6.3.1 Approach and methods

EMM conducted an archaeological test excavation of three localised areas, with the assistance of RAPs over a three day period (16 to 18 October 2022). These works consisted of small manually dug test pits in a systematic grid across the study area. The excavation was directed by Megan Sheppard Brennand (EMM Senior Archaeologist) with the archaeological team consisting of Amber Morgan and Courtney Culley (EMM archaeologists). A number of stakeholder groups were represented throughout the course of the excavation program; a list of these groups is presented in Table 6.2.

The primary aims of the excavations were as follows:

- Identify, map and characterise the nature, age, extent, integrity and significance of the Aboriginal cultural material within the study area.
- Identify, map and characterise the natural soil profiles of the study area.
- Better assess the significance and historical meaning of the cultural materials that exist within the study area so that future archaeological investigation can advance our understanding of past Aboriginal cultural behaviour and environmental adaptation.
- Direct future heritage activities and mitigation measures (if required) for the project footprint.

To achieve these aims, a localised systematic grid of test pits was proposed across the entirety of the study area. Following the survey, this grid was revised with test pits being proposed in the centre of the velodrome and the periphery of the site, where it was considered more probable a natural soil profile may be encountered. Overall, eight test pits were completed, two in the centre of the velodrome, one on the northeastern side, three in the south east corner and two on the northwestern side (Figure 6.2). The proposed test excavation layout was undertaken in discussion with the RAP representatives.

Archaeological test excavations were implemented in accordance with Requirements 16 and 17 of the *Code of Practice for the Investigation of Aboriginal Objects in NSW* (DECCW 2010). In summary, the following methods were adopted for the excavation:

- all test excavation pits were spatially located using a differential GPS device
- manual excavation of 1 m² test pits in a systematic grid across areas of archaeological interest within the impact footprint
- additional test pits would have been excavated in areas where dense concentrations of artefacts were recovered, in order to identify the extent of high density deposits
- all excavation used hand tools, such as shovels, mattocks and trowels
- excavation of the first unit was in 5 cm spits, with subsequent excavation in 10 cm spits
- manual excavation continued to either: i) the base of the cultural deposits; ii) to the depth of the underlying geology; or iii) to the maximum depth possible via hand excavation ($^{-1}-1.5$ m)
- wet sieving of all manually excavated material through a 5 millimetre (mm) sieve
- soil profiles were recorded in accordance with the Code of Practice, including scaled drawings, photographs, and written descriptions

• soil samples were proposed to be collected for description, sedimentological and chronological analysis where such analysis was considered likely to contribute significant information.

 Table 6.2
 Aboriginal representatives involved in the test excavation

Organisation	Representative
D F T V Enterprises	Derrick Vale
AT Gomilaroi Cultural Consultancy	Shirley Talbot
Gomery Cultural Consultants	Leanne Kirkman
Tamworth LALC	Len Waters
Gomeroi native title applicant	Peter White

6.3.2 Results

This section provides a summary of the excavations and subsequent analysis (Plates 6.11 - 6.18 inclusive and Figure 6.2). Further details of the test pit locations and photographs of these works are presented in Appendix E.

Overall, a total of eight test pits (1 m²) were excavated across the study area (see Figure 6.2). The depth of excavation across the test pits averaged ~30 cm (below current ground surface). No Aboriginal artefacts were recovered. The soil profiles of all test pits (excluding TP 6 and TP 7) were heavily disturbed, consisting of an extremely thin layer of modern topsoil overlaying consolidated fill.

The maximum depth of excavation was 60 cm in TP7. Both TP 6 and 7 were located in the western corner of the study area where it was considered the levels were comparable with the surrounding road, and therefore potentially more natural than other parts of the site. Indeed, TP 7 revealed a weak brown silty loam to 40 cm with few inclusions, and which was considered likely a B2 horizon associated with a residual soil profile; and comparable with the Peel and The Forest soil landscapes. Several large cobbles were identified at depth along with brick and metal fragments, and suggest some mixing between the modern fill and under-lying soil profile has occurred. Soils become a dark brown clay loam and increasingly clayey with depth. Excavations were ceased at 60 cm. TP 6, offset from TP 7 and located further back from the road, revealed an extremely compacted, concrete like loamy silt that became denser with depth. Excavation ceased at 30cm as further excavation became impossible due to the indurated nature of the soil profile. Here to the unit was considered likely to reflect a B2 horizon. The discovery of a B2 horizon within the study has two important implications: i) it suggests that deep alluvium or similar deposits are not present, if the site is characterised by residual soil profiles; and ii) the study area has been truncated to the B2 horizon, which means the topsoil (A1 horizon) - within which cultural materials if present are typically found - has been removed.

The test pits located in the centre of the velodrome (TP 1 and 2) were similar in composition and also reflected a truncated B2 horizon unit. Specifically, the both encountered a compact brownish grey clay loam with irregular, poorly sorted gravel inclusions. This shallow deposit overlaid indurated heavy clay of the same colour and perhaps reflect a less disturbed portion of these under-lying subsoils.

The remainder of the test excavations encountered modern fill to the maximum depths that could be achieved. This unit was compact and indurated and limited excavation, but nonetheless validate the geotechnical information. Despite being fill, these units were still investigated for cultural materials to determine whether they may be present albeit disturbed. No cultural materials were recovered.

Overall, the test excavations validate the desktop information that the site has been subject to extensive earthworks and introduced fill. Importantly, however, where natural soil profiles were encountered, they

demonstrate extensive truncation and the loss of upper soil units. Given these upper soil units are where cultural materials are typically found, it suggests that they are unlikely to occur within the study area.

Table 6.3 Summary of test pits

Test pit	Eastings	Northings	Depth (cm)	Size (m ₂)	Artefact count (n)	Soil description
1	303099.193	6557752.508	20	1	0	Compacted brownish grey clay loam with irregular, poorly sorted gravel inclusions. Thin roots constrained to the top 5cm of the pit. Shallow deposit atop a hardened clay base of the same colour. May be remnant base deposit of eroded fill.
2	303099.468	6557737.726	15	1	0	Compacted brownish grey clay loam with irregular, poorly sorted gravel inclusions. Thin roots constrained to the top 5cm of the pit. Shallow deposit atop a hardened clay base of the same colour. May be remnant base deposit of eroded fill.
3	303113.220	6557682.533	30	1	0	Dark brown silty loam introduced topsoil onto heavy clay loam with frequent gravel inclusions onto gravelly shale, onto heavy, dense shale with large brick inclusions.
4	303127.392	6557690.190	30	1	0	Moderately compacted brownish grey clay loam with irregular, poorly sorted gravel inclusions atop a yellowish brown clay with abundant shale/gravel inclusions (starting at 10cm). Thin roots constrained to the top 5cm of the pit.
5	303134.172	6557753.159	50	1	0	Dark brown loamy introduced topsoil onto orange red plastic clay onto brow clay loam with abundant gravel inclusions including brick and glass onto heavy red brown clay (still fill but impossible to dig through)
6	303022.530	6557769.563	30	1	0	Extremely compacted, concrete like loamy silt. Become more dense with depth. Almost impossible to break through at 30cm. Likely flood zone and sand from river. Compacted through heavy machinery from velodrome construction.
7	303022.324	6557780.649	60	1	0	Brown silty loam, weak to 40cm with few inclusions. Some large cobbles at depth and brick and metal fragments. Unlikely fill, more likely has moved through the loose soil. Onto dark brown clay loam that becomes more clayey with depth.
8	303133.339	6557712.480	10	1	0	Dark brown silty loam onto clay loam at 3cm with heavy shale and frequent brick inclusions. Same as TP4 and 3
Average			30.63	1	0	
Total				8	0	



Plate 6.11 The landscape in the centre of the study area. TP2, view north



Plate 6.12 TP 2, north section, showing compact clay base and thin gravelly topsoil



Plate 6.13 TP 3, view north



Plate 6.14 TP 3, north section, showing compact shale and clay fill with thin gravelly topsoil



Plate 6.15 TP 5, view north



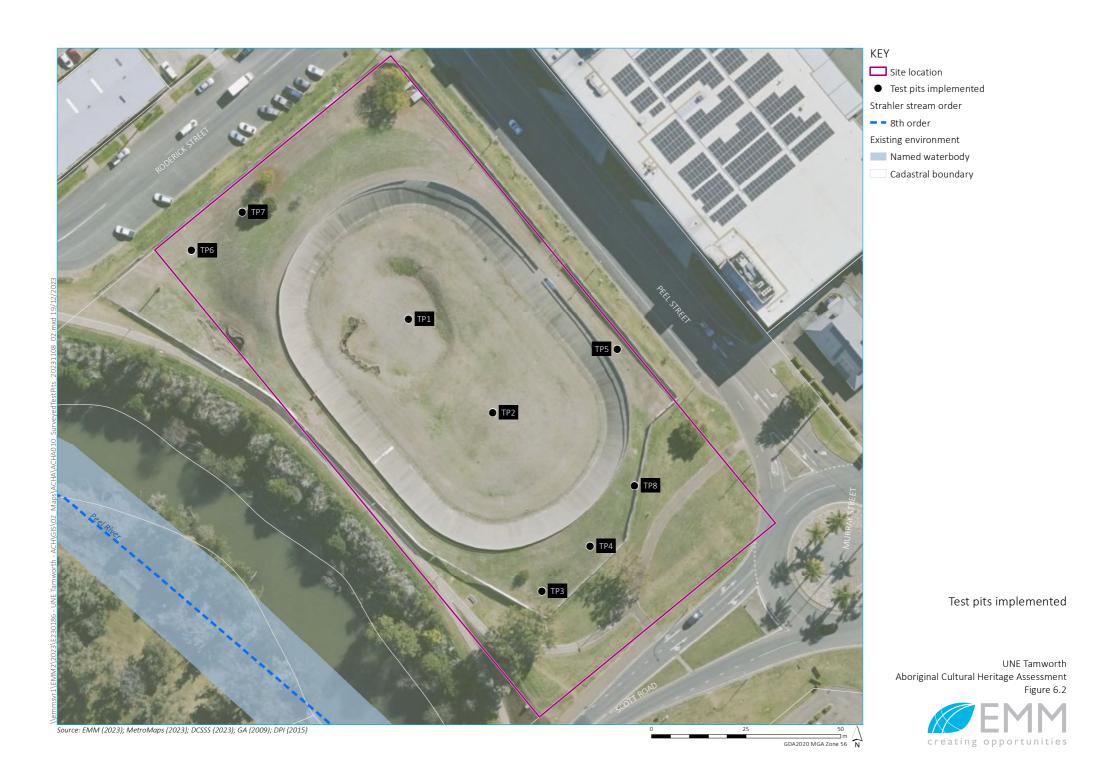
Plate 6.16 TP 5, north section, showing the stratified layers of compact fill







TP6 north section, showing a silty clay B2 horizon, with increasing compaction at depth **Plate 6.18**



7 The archaeological resource

7.1 Key findings

- The desktop information indicated that the region was dominated by both surface and buried stone
 artefacts, as well as culturally modified trees. Information specific to the study area indicated that
 substantive earthworks had occurred in the 1990s removing any established vegetation and adversely
 affecting the natural soil profile.
- The assessment undertook archaeological field survey and test excavations to explore and document the
 Aboriginal objects, sites and places within the study area, and to align them within the regional context.
 These activities validated the desktop information and demonstrated considerable fill present within the
 study area, and natural soil profiles where present had been truncated. As such, the former surface and
 upper soil profiles within which cultural materials may have been deposits are no longer present within the
 study area.
- No Aboriginal sites were identified during the assessment. Discussions with the local Aboriginal community
 have not identified any project-specific cultural places or values to date that would be affected by the
 project. A Connection to Country report has occurred and identified the broader importance of the Peel
 River to traditional and contemporary Aboriginal people.

7.2 Results and synthesis

Past studies and previously documented Aboriginal heritage show that cultural materials within the regional context is generally characterised by stone artefactual sites, most frequently as isolated finds or low density (<20) distributions. While other site types, such as culturally modified trees and grinding grooves are present in the surrounding region, they will only be present where native remnant vegetation remains and within and close to creek lines. Given the large proportion of land clearing for agriculture in the region both of these site types are considered to occur in much fewer numbers. The majority of the stone artefact scatters are located on landforms such as major creek banks that overlooked the surrounding landscape and upper flats which provides higher elevation over the immediate adjoining slopes. The culturally modified trees have been identified along rivers and creeks (Peel River and its tributaries). The available evidence suggests that the majority of the archaeological sites documented, and their cultural materials, almost exclusively exhibit late Holocene characteristics (<5,000 years ago) and have been shown to extend into the contact period.

These Aboriginal sites – notably artefactual sites – are observed in all contexts, disturbed and undisturbed in the region, but are usually focussed on areas of elevation (particularly lower slopes) with a low gradient, near creeks (<200 m). Given that the study area is located in very close proximity to the Peel River it would have likely been used by Aboriginal people in the past, and the presence of cultural material would be expected.

However, desktop information indicated that the study area has been subject to previous disturbance that may have adversely affected the presence and/or survivability of cultural materials. These primarily consisted of the establishment of a velodrome in the 1990s. As a result of this development, a comprehensive geotechnical investigation across the site revealed modern fill units in excess of 3 m across much of the study area before alluvial units were reached. In the centre of the study area (and of the velodrome), these 'alluvial' units were present within about 50 cm of the surface.

A program of ground-truthing was undertaken to validate the desktop information and to further investigate the 'alluvial' deposits within which cultural materials associated with the past use of Peel River may be present. Archaeological excavations across the study area, and focusing on two locales where the fill was limited, were undertaken. Rather than encountering alluvium, they found a B2 horizon consistent with the residual soil profiles known to occur in the region. This finding indicates that the original surface and upper soil profiles within which

cultural materials are usually found, has likely been lost across the study area as a result of development. Further, investigation of the fill units across several parts of the study area failed to identify cultural materials even in disturbed contexts. Based on these findings, it is considered that the survival of cultural materials within the study area is improbable.

Discussions with the local Aboriginal community (Section 2) has not identified any project specific cultural places or values that would be affected by the project. A series of large or important sites are scattered throughout the broader Tamworth region, but these are generally concentrated along the tributaries of the Peel River and in areas of elevation, most notably Flagstaff Mountain and Mount Daruka. The proposed development would not affect these areas. Given the level of existing disturbance within the development footprint, it is considered that the broader cultural landscape would be unaffected by the project.

8 Significance assessment

8.1 General

All Aboriginal objects in NSW are protected under the *National Parks and Wildlife Act 1974*. It is recognised that the destruction of sites may be necessary to allow other activities or developments to occur. In order for the consent authority to make informed decisions on such matters, an important element of cultural resource management is determining the significance of cultural heritage places and objects to understand what may be lost; and how best it can be mitigated.

Cultural significance is outlined in Article 1.2 of the Burra Charter, the best practise document for managing cultural heritage – as 'aesthetic, historic, scientific, social or spiritual value for past, present or future generations' (Australia ICOMOS 2013). These values are reiterated in the NSW guidelines, which determines cultural significance of a place can be assessed by identifying the values that are present across the subject area and assessing what is important and why (OEH 2011). In assessing the scientific significance of sites, aspects such as rarity and representativeness and the integrity must be considered. Generally speaking a site or object that is rare will have a heightened significance, although a site that is suitable of conservation as 'representative' of its type will also be significant. Conversely an extremely rare site may no longer be significant if its integrity has been sufficiently compromised.

The criteria adopted for this report are defined in Table 8.1. The management implications of these sites' significance are discussed in subsequent sections, noting that the proposed development poses no potential impacts to the identified Aboriginal sites.

Table 8.1 A summary of criteria used to assess the cultural significance (OEH 2011, 8–10)

Criterion	Definition
Social/cultural value —Does the place have a strong or special association with a particular community or cultural group for social, cultural or spiritual reasons?	Social (or cultural) value refers to the spiritual, traditional, historical or contemporary associations and attachments the place or area has for Aboriginal people. Social or cultural value is how people express their connection with a place and the meaning that place has for them. Social or cultural value can only be identified through consultation with Aboriginal people.
Historic value —Is the place important to the cultural or natural history of the local area and/or region and/or state?	Historic value refers to the association of a place with a historically important person, event, phase or activity. Historic places do not always have physical evidence of their historical importance (such as structures, planted vegetation or landscape modifications). They may have 'shared' historic values with other (non-Aboriginal) communities.
Scientific (archaeological) value—Does the place have potential to yield information that will contribute to an understanding of the cultural or natural history of the local area and/or region and/or state?	Scientific (archaeological) value refers to the importance of a landscape, area, place or object because of its rarity, representativeness and the extent to which it may contribute to further understanding and information. Information about scientific values is gathered through archaeological investigation undertaken in this report.
Aesthetic value —Is the place important in demonstrating aesthetic characteristics in the local, regional, and/or State environment?	Aesthetic value refers to the sensory, scenic, architectural and creative aspects of the place. It is often linked with social value, and can consider form, scale, colour, texture and material of the fabric or landscape, and the smell and sounds associated with the place and its use. This value is only relevant to archaeological sites on only rare occasions, such as rockshelters that contain art, or culturally modified trees in prominent positions, etc.

8.2 Statement of significance

No cultural materials were recovered as part of the assessment. As such the study area is considered to have no archaeological scientific significance. Further, despite being near the Peel River, which in other locations retains aesthetic values as part of the broader cultural landscape, here the study area has been subject to extensive earthworks and environmental change. It is considered that none of the cultural landscape remains within the study area, and as such it does not meet any thresholds for aesthetic significance. No historical significance was identified through the desktop information for the site.

No project specific cultural values have been recorded for the study area to date. Discussions with Aboriginal participants have not identified any important ecological or cultural areas within the study area, and no connection between important sites elsewhere in the region and the study area have been advised. As such, it is concluded that the study area has no specific cultural values.

9 Impact assessment

9.1 Key findings

- Construction activities would result in major earthworks, removal of existing underground electrical cabling
 and redirection or removal of underground drains to accommodate the new campus. Multi-storey
 structures are proposed to the north of the study area, while major landscape features and carparking is
 proposed at the southern end of the site. These activities would result in disturbance and impacts to the
 soil profiles and vegetation currently present within the study area.
- No cultural materials were identified during the assessment. As such, it is considered improbable that Aboriginal heritage would be adversely affected by the project.
- The project would result in negligible intergenerational/cumulative loss to cultural materials.

9.2 Project impacts

As outlined in Section 1, the proposed activity involves the construction of a new university campus with associated structures and landscaping (Figure 1.3).

Construction activities would result in extensive earth works across portions of the study area to accommodate the new building. Specifically, ground leveling, removal of existing underground electrical cabling and redirection or removal of underground drains would be required. New areas of hard stand and car parking will also be constructed, mainly in the south end of the site.

These activites would result in substantive impacts to the vegetation and soil profile currently encompassed within the study area.

9.3 Potential Aboriginal heritage impact

Two types of potential impact are considered, direct and indirect. Direct impacts relate to the construction activities and their removal, truncation and/or disturbance of the ground surface. This would include the removal of vegetation, removal or modification of geological outcropping and the removal or disturbance of the upper soil profile. Indirect impacts are the result of both construction and post-construction activities that may result in environmental changes that would affect cultural material within, or near the project activities. A general example of indirect impact may include the burial of a soil profile resulting in its compression and indirectly damaging buried cultural material.

No Aboriginal objects, places or deposits were identified within the study area. The excavations demonstrate that the study area is dominated by modern fill to depths of several metres, which has truncated the under-lying natural residual soil landscape. There was no evidence of cultural materials within the fill units, and the absence of a former topsoil (A1 horizon) limits the potential for any in situ cultural materials to be present. As such, it is considered that the development activities proposed is unlikely to result in harm or impacts to cultural materials.

Further, the study area has been previously subject to extensive development activities, and the previous or original cultural landscape is indiscernible. The development activities would therefore be unlikely to negatively affect any cultural landscape values. Conversely, if the Connection to Country concepts and designs are adopted (Section 4.4), the project may remediate or rehabilitate the cultural landscape of the site.

9.4 Inter-generational equity

Intergenerational equity is the principle whereby the current generation should ensure the health, diversity and longevity of the environment for the benefit of future society. For Aboriginal heritage management, intergenerational equity can be considered primarily in terms of the cumulative impacts to Aboriginal objects, sites and/or places in a region. If few Aboriginal objects and places remain in a region (e.g. due to development impacts), there are fewer opportunities for future generations of Aboriginal people and the broader community to enjoy the cultural benefits. However, the works are extending through a cultural landscape that contains cultural materials, and indirect impacts, as well as any design changes, need to be carefully managed as the project progresses. integrity, rarity and representativeness of the Aboriginal objects, sites and places that may be impacted, and how they inform the past visitation and occupation of land by Aboriginal people, are relevant to the consideration of intergenerational equity and the understanding of the cumulative impacts of a project.

As outlined in Section 9.3, the proposed works are within areas of existing disturbance and/or past impacts where there is a low likelihood of cultural material being present. No cultural material or intangible values were identified as part of the ACHA investigation. It is therefore considered that the project would have negligible intergenerational loss to Aboriginal archaeological and cultural resources of the region.

10 Management strategy and recommendations

10.1 Key findings

- The ACHA concludes that no Aboriginal objects, sites or values have been identified within the study area. This ACHA process, which included consultation with the Aboriginal community and field investigation, identified no cultural materials on the surface or in the heavily disturbed soil profile. Despite being within a region known to have been inhabited by Aboriginal people for millennia, the study area has been subject to a range of development activities that has entirely disturbed and modified the study area over the last 50+ years.
- The project as currently proposed is unlikely to adversely affect or harm cultural materials.
- Recommendations are proposed for inclusion in the project approval to guide post approval requirements for Aboriginal heritage (Section 10.3).

10.2 Management strategy

This ACHA process, which included consultation with the Aboriginal community and a field investigation, identified no Aboriginal objects, sites, or values within the study area. Despite being within a region known to have been inhabited by Aboriginal people for millennia, the study area has been subject to extensive modification and disturbance over the last 50 years. This includes vegetation clearance, and the establishment of a velodrome requiring major landscape re-modelling. Geotechnical information indicated that the study area was generally covered by a modern fill unit several metres thick, and which overlaid alluvium. On-site activities validated these findings, but has interpreted the alluvium as a clay subsoil more characteristic of the lower units of residual soil profiles known to occur in the region. This then indicates that the earlier upper soil profile within which cultural materials would occur if present has been lost through development activities.

Based on this it is concluded that there is low likelihood of cultural materials being present within the study area. The project would therefore be unlikely to result in potential impacts to cultural materials or the cultural landscape – the latter severely compromised by development activities. Conversely, through implementation of Connection to Country recommendations, the development may remediate or rehabilitate the cultural landscape of the study area. Consultation with the local Aboriginal community did not identify any project specific cultural values attached to the study area.

In NSW, the management of Aboriginal cultural heritage is dictated in the *National Parks and Wildlife Act 1974* and associated guidelines. Where cultural materials are identified and may be harmed, they require that an Aboriginal heritage impact permit (AHIP) from Heritage NSW is sought to allow the works to proceed. However, given the assessment has not encountered any cultural materials and considered them unlikely to survive within the study area, such approval is not required. It is concluded that the development activities may proceed with caution. Recommendations include the need to ensure personnel are suitably inducted and have unexpected finds protocols established in the unlikely event that cultural materials are encountered.

10.3 Recommendations

The following recommendations are proposed to be integrated into the management for the project:

• Previous disturbance validated by site inspection and test excavation indicates a low likelihood of Aboriginal objects being present within the study area. Works may proceed with caution, and without further assessment. However, the nature of the disturbance within these areas does not preclude the potential for isolated finds, which is a common site type across the region, even in disturbed contexts. In the event that unexpected Aboriginal objects, sites or places (or potential Aboriginal objects, sites or

places) are discovered during construction, all works in the vicinity of the find should cease and contact with a heritage professional undertaken to inform next steps.

- The Construction Environment Management Plan (CEMP) or equivalent, should ensure the implementation of suitable cultural awareness inductions for key project team members and a protocol to manage unexpected finds in the event of their discovery. The cultural awareness inductions should be undertaken by a heritage professional and/or Aboriginal representative.
- If human skeletal material is discovered, the NSW *Coroners Act 2009* requires that all works should cease, and the NSW Police and the NSW Coroner's Office be contacted. Once direction from these organisations has been undertaken and, where relevant, the current WINSW guidelines for managing the unexpected discovery of Aboriginal objects, sites and/or human remains should be implemented.
- If any part of the study area is located outside the areas identified in this ACHA, or if any alteration is proposed that could result in additional impact to material culture, further assessment of these area(s) should be undertaken to identify and appropriately manage Aboriginal objects and/or sites that may be present.
- Consultation should be maintained with the RAPs during the finalisation of the assessment process and throughout the project.
- A copy of the ACHA should be lodged with AHIMS and provided to each of the RAPs.

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Abbreviations

AHD	Australian Height Datum
ACHA/ACHAR	Aboriginal cultural heritage assessment report
AHIMS	Aboriginal Heritage Information Management System
ACHMP	Aboriginal Cultural Heritage Management Plan
ВР	Years before present
C.	circa
СЕМР	Construction Environment Management Plan
cm	centimetres
DEC	Department of Environment and Conservation, now DPC
DECCW	Department of Environment Climate Change and Water, now DPC
DPC	Department of Premier and Cabinet
DPE	Department of Planning and Environment, now DPIE
DPIE	Department of Planning, Industry and Environment
EIS	Environmental Impact Statement
EMM Heritage	EMM Consulting
EP&A Act	Environmental Planning and Assessment Act 1979
ERM	Environmental Resources Management
ESD	Ecologically sustainable development
FGS	Fine grained siliceous
g	grams
GIS	geographical information system
GPS	global positioning system
ha	hectare
ICOMOS	International Council on Monuments and Sites
IMTC	Indurated mudstone/tuff/chert
ka	Thousand years ago
km	kilometres
LALC	Local Aboriginal Land Council
LEP	Local Environmental Plan
LGA	Local Government Area
m	metres
m ²	square metres

m³	Cubic metres
mm	millimetres
n	Number
NSW	New South Wales
OEH	Office of Environment and Heritage, now DPIE
PAD	Potential archaeological deposit
MLALC	Mudgee Local Aboriginal Land Council
RAP	Registered Aboriginal Party
t	Tonne
TP	Test pit

Glossary

Many of these definitions have been taken from the *Code of Practice for archaeological investigation of Aboriginal objects in NSW* (DECCW 2010).

Aboriginal object: A physical manifestation of past Aboriginal activity. The legal term is defined in the *National Parks and Wildlife Act 1974* section 5 as: any deposit, object or material evidence (not being a handicraft made 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.

Typical examples include stone artefacts, grinding grooves, Aboriginal rock shelters which by definition include physical evidence of occupation, midden shell, hearths, stone arrangements and other landscape features which derive from past Aboriginal activity.

Archaeological survey: A method of data collection for Aboriginal heritage assessment. It involved a survey team walking over the land in a systematic way, recording information. Activities are not invasive or destructive.

Aboriginal culturally modified tree: A tree of sufficient age to have been mature at the time of traditional Aboriginal hunter-gatherer life and therefore generally of more than 220 years ago with evidence of bark or cambium wood removal for the purpose of implement manufacture, footholds, bark sheet removal for shelter, or extraction of animals or other food. Care must be taken to distinguish Aboriginal scars from the much more common natural causes of branch tear, insect attack, animal impact, lightning strike and dieback. Culturally modified tree recognition guidelines exist to distinguish these features. Naturally scarred trees are often misidentified as Aboriginal culturally modified trees.

Aboriginal site: The location where a person in the present day can observe one or more Aboriginal objects. The boundaries of a site are limited to the extent of the observed evidence. In the context of this report a 'site' does not include the assumed extent of unobserved Aboriginal objects (such as archaeological deposit). Different archaeologists can have varying definitions of a 'site' and may use the term to reflect the assumed extent of past Aboriginal activity beyond visible Aboriginal objects. Such use of the term risks defining all of Australia as a single 'site'.

Aboriginal stone artefact: A stone object with morphological features derived from past Aboriginal activity such as intentional fracture, abrasion or impact. Artefacts are distinguished by morphology and context. Typically flaked stone artefacts are distinguished from naturally broken stone by recognition of clear marginal fracture initiation (typically herzian/conchoidal or wedging initiation) on highly siliceous stone types which can often be exotic to the area. Care must be taken to distinguish modern broken stone in machine impacted contexts and therefore context must be carefully considered as well as morphology.

Aggradation: a term used in geology for the increase in land elevation, typically in a river system, due to the deposition of sediment.

AHIMS: Aboriginal Heritage Information Management System — a computer software system employed by the Office of Environment and Heritage to manage many aspects of Aboriginal site recording and permitting. AHIMS includes an Aboriginal sites database which can be accessed via an internet portal.

Archaeological deposit: Aboriginal objects occurring in one or more soil strata. The most common form of archaeological deposit relates to the presence of a single conflated layer of Aboriginal stone artefacts worked into the topsoil through **bioturbation**.

Backed artefact: A thin flake or blade-flake that has been shaped by secondary flaking (**retouch**) along one lateral margin. The retouched margin is typically steep and bipolar to form a blunt 'back' in the manner of a modern scalpel blade. Distinctive symmetrical and asymmetrical forms are typically found called geometric **microliths** and Bondi points respectively. A thick symmetrical form, called an Elouera, is typically the size of a mandarin segment.

Bioturbation: is the reworking of soils and sediments by animals or plants. Its effects include changing texture of sediments (diagenetic), bioirrigation and displacement of microorganisms and non-living particles.

Bipolar flaking: Where the stone to be worked is rested on an anvil or other stone before being hit by the hammerstone. This results in the presence of negative flake scars on both ends of the core.

Bondi point: See backed artefact definition.

Brown podosols: Topsoils have loamy textures. A2 horizons are common, there is a clear boundary onto the B horizon. They have a sandy clay to heavy clay texture (typically occur on upper and mid-slopes).

Chocolate Soils: Soils that are typically formed in a basaltic parent material where slope or bedrock strata influence drainage. Surface horizons comprise loam, clay loam or silty clay loam. There is a gradual boundary to a brown or brownish black B horizon. There is no A2 horizons.

Conchoidal: A term used in relation to fracture surfaces on Aboriginal stone artefacts - bulb-like in the manner of a bulbous protrusion on a bivalve shell.

Elouera: See backed artefact definition.

Eraillure scar: The small flake scar on the dorsal side of a flake next to the platform. It is the result of rebounding force during percussion flaking.

Exposure: estimates the area with a likelihood of revealing buried artefacts or deposits, not just an observation of the amount of bare ground.

Geometric microlith: See backed artefact definition.

Grinding grooves: Grinding grooves typically derive from the sharpening of stone hatchet heads on sandstone rock. Grooves appear as elliptical depressions of around 25 cm length with smooth bases. Although mostly occurring in association with water to wash the abraded stone dust away from the groove, such sites have been recorded away from water. Narrow grooves or broad abraded areas may occur less commonly and may be derived from spear sharpening or other grinding activities.

Haematite: a pigment featured in ochre used for tinting with a permanent colour.

Hafting technology: the process by which a stone artefact is attached to a haft (handle or strap).

Holocene: A period of time generally 10,000 years, which marks the end of the last ice age, to the present.

Igneous: relating to or involving volcanic or plutonic processes.

Indurated mudstone/tuff (IMT): the fine textured, very hard, yellowish, orange, reddish-brown or grey rocks from which stone artefacts are made.

Isotropic: Having a physical property that has the same value when measured in different directions. In relation to stone used for stone tools a fracture path is not hindered by layer boundaries or other favoured plane of cleavage.

Microlith: Very small fragments of flakes retouched into geometric shapes and usually present on tools like barbed spears, arrows and sickles.

Midden: A collection of shells and associated economic remains resulting from Aboriginal food gathering and processing activity. Middens comprise shellfish remains of consistent size in a rich dark earth matrix commonly associated with stone artefacts, fish bone and animal bone although shells are commonly the most obtrusive element.

Keeping place: A room or facility with the express and exclusive purpose of storing Aboriginal cultural heritage materials with accompanying documentation in a secure and accessible manner which protects their cultural heritage values.

Krasnozems: Mainly loams, clay loams and silty clay loams with a clear or gradual boundary to a dark reddish brown B horizon. Clays are typically light to medium and occasionally heavy.

Lithosols: Soils that have little or no profile development. They occur on steep slopes and are usually shallow and are left mainly as uncleared native bushland.

Open stone artefact site/stone artefact site: An unenclosed area where Aboriginal stone artefacts occur — typically exposed from a topsoil archaeological deposit by erosion. Typically the term is used to refer to two or more artefacts although this is an arbitrary distinction. A general 'rule of thumb' boundary definition employed by archaeologists is that artefacts or features more than 50 m apart are regarded as separate sites, however there is no theoretical imperative dictating such as rule. (The 50 m separation rule is used for the most part in EMM's work).

Pirri point: A leaf-shaped stone implement with unifacial retouch extending from the lateral margins to a central keel running the length of the dorsal surface.

Pleistocene: A period of time 2.6 million years ago to 10,000 years ago. Reference to 'Pleistocene sites' generally means reference to sites older than 10,000 years.

Podosols: Soils with accumulations of organic matter, iron and aluminium. They are usually sand textured to depth. Yellow and red podosols are generally acid neutral. Yellow podosols have coarse to medium textured A horizons.

Point cluster: A group of GPS points used to identify the locations of individual artefacts in the field.

Potential Archaeological Deposit (PAD): An area where there is an inferred presence of Aboriginal objects in the soil based on the environmental context which is typically associated with discovery of Aboriginal objects in analogous areas. This is not strictly a 'site' type, although AHIMS records it as such for the purpose of associating Aboriginal heritage Impact Permits with geographical areas.

Red podosols: Podsols with a pronounced texture contrast and clear to abrupt boundaries between A and B horizons. A2 is often massive and gravelly.

Retouch: The modification of the edges of a flake or tool by the removal of a series of small flakes.

Siliceous Sands: Sands that are usually found on coarse-grained sandstones and in sandstone colluvium. They are often sandstone outcrops present in the landscape. The topsoil has a loamy sand to light sandy clay.

Scarp: a steep slope characterised by outcropping bedrock. In this report, scarp refers to a combination of landform elements including scarp foot slopes, scarps, and cliff lines where outcropping sandstone is present in the landscape 10% and above.

Spur: the lateral crests of land that descend from the summit of hills or ridges. Spurs typically extend, with decreasing elevation, closer to streams and valley floors than the main crest of a hill.

Taphonomic: the events and processes, such as burial in sediment, leading to the degradation, decomposition or preservation of objects.

Thumbnail scraper: A thumbnail sized thin flake with steep unidirectional retouch or use-wear around a convex working edge.

Transect: A sample unit which is walking line or corridor across the study area.

Upsidence: phenomena that occurs when mining approaches and undermines river valleys. It can result in cracking and buckling of river beds and rock bars and localised loss of water flow.

Visibility: The amount of bare ground on exposures which might reveal artefacts or other archaeological materials.

Yellow earths: predominantly sandy-textured soils with earthy porous fabric, weak profile differentiation and gradual or diffuse boundaries except for the darker A1 horizon.

Yellow podosols: Podsols which typically occur on the upper slopes of steep landscapes and on the mid to lower slopes of others. The A2 soil horizon is present in most profiles and the boundary change to the B horizon is generally clear. The B horizon is typically sandy clay to heavy clay.

Appendix A Legislative context



A.1 Commonwealth

A.1.1 Aboriginal and Torres Strait Islander Heritage Protection Act 1984

The Aboriginal and Torres Strait Islander Heritage Protection Act 1984 preserves and protect areas (especially sacred or intangible sites) and places of particular significance to Aboriginal people from damage or destruction. Steps necessary for the protection of a threatened place are outlined in a gazetted Ministerial Declaration (Sections 9 and 10); and which can result in a cessation of any development activity.

In addition, the Act also protects objects by Declaration, notably Aboriginal skeletal remains (Section 12). This can be applied at a State level where a State is unwilling or unable to provide such protection.

A.1.2 Environment Protection and Biodiversity Conservation Act 1999

The Environment Protection and Biodiversity Conservation Act 1999 provides for protection of natural and cultural heritage places. The Act establishes a National Heritage List (NHL) and a Commonwealth Heritage List (CHL) upon which places of natural or cultural significance can be listed. Sites at a national level and can be in public or private ownership. The CHL is limited to places owned by the Commonwealth, and most frequently encompass Department of Defence sites. Sites and places listed on the NHL are considered to be of State and local heritage value, even if they are not listed or documented as such at a State level.

The values of sites and places on the NHL/ CHL are protected under the EPBC Act. The Act requires that the Minister administering the Act assess any action which has, will have, or is likely to have, a significant impact on the heritage values. Where relevant, a referral is made to the relevant Commonwealth Department, and either approval, approval with controls, or rejection of the proposed action is determined.

A.1.3 Native Title Act 1993

The *Native Title Act 1993* provides recognition and protection for native title. The Act establishes the managing body, National Native Title Tribunal, who administers native title claims to rights and interests over lands and waters by Aboriginal people. It also administers the future act processes that allow proponents to identify and manage potential native title issues for a given activity on a site where a claim has yet to be made or finalised.

In addition, the Act provides for Indigenous Land Use Agreements (ILUA), which is an agreement between a native title group and others about the use and management of land and waters. ILUAs were introduced as a result of amendments to the Act in 1998. They allow people to negotiate flexible and bipartisan agreements to suit their particular circumstances often circumventing lengthy timeframes associated with the native title process. An ILUA can be negotiated over areas where native title has, or has not yet, been determined. They can be part of a broader determination or settled separately.

A.2 State

A.2.1 Environmental Planning and Assessment Act 1979

The *Environmental Planning and Assessment Act 1979* (EP&A Act) is the over-arching Act that dictates the nature of assessment and management of the environment during a development project, and within which heritage forms a component. requires that environmental and heritage impacts are considered by consent authorities prior to granting development approvals.

The Act has two main approval pathways within which heritage needs to be considered. Generally for smaller scale (either financially or spatially), Parts 4 (Division 4.1) and 5 (Division 5.1) of the Act are implemented. Part 4 requires that a proponent submits a Development Application (DA) to local council for a given development, and within this document a consideration of Aboriginal and historical heritage is required. The specific nature of the assessment is usually determined at a pre-DA meeting with the council, and in relation to the relevant heritage Acts. Where Aboriginal heritage is identified as an issue, the DA may become Integrated Development, whereby the State government is also required to review and provide comments on the DA prior to its issue. Part 5 of the Act is a similar process, but only relates to approvals developed and issued by State government departments. Each State government department has their own internal approach to considering environmental issues, but ultimately must develop a Review of Environmental Factors (REF), which is comparable to a DA, and which requires consideration and management of heritage. Similarly where heritage is identified as an issue, liaison with relevant State consent authorities and approvals under other Acts may still be required.

The other approval pathway relates to State Significant Development and/or Infrastructure (Parts 4.7 and 5.2, respectively). These processes require an Environmental Impact Statement (EIS) to be developed for a project and assessed currently by the Department of Planning, Industry and Environment. Importantly, the SSD and SSI processes turns off a number of pieces of other legislation, including parts of the *National Parks and Wildlife Act* 1974. In the case of Aboriginal heritage, both the assessment and approval for harm are dictated by the Secretary's Environmental Assessment Requirements (SEARs) outlining the contents and scope of the EIS, and the project approval that dictates controls on how a development should proceed.

A.2.2 National Parks and Wildlife Act 1974

The National Parks and Wildlife Act 1974 (NPW Act) provides protection for Aboriginal objects and places across NSW:

- An Aboriginal object is defined as: Any deposit, object or material evidence (not being a handicraft made 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.
- An Aboriginal place is: any place declared to be an Aboriginal place under section 84. This is a very specific piece of legislation that provides process and management of Aboriginal sites of cultural, but not necessarily scientific, values. They are commonly, but not always associated with intangible values.
- Any place declared to be an Aboriginal place by the Minister for the Environment, under Section 84 of the Act.

It is an offence to disturb Aboriginal objects or places without an Aboriginal Heritage Impact Permit (AHIP), which is outlined in Section 90 of the Act. Currently, such permits can be sought from the Chief Executive of the NSW Department of Premier and Cabinet (DPC), with the recent relocation of the Office of Environment and Heritage.

To obtain an AHIP, certain assessment and documentation (outlined in this report) must be provided to DPC for their consideration. Once satisfied, they may endorse an AHIP to harm cultural heritage either conditionally or unconditionally. They can also refuse an application as outlined in Section 90C of the Act, and which can be appealed in accordance with Section 90L.

A.2.3 Aboriginal Land Rights Act 1983

The Aboriginal Land Rights Act 1983 provides process and protocols for the transfer of vacant Crown land ownership to a Local Aboriginal Land Council, where the land is not for an essential purpose or for residential land. These lands are then managed and maintained by the Local Aboriginal Land Council.

For the purposes of this report, the Act is primarily important to inform relevant Aboriginal communities for consultation; and where Crown land forms part of the development area may require additional liaison with the LALC as a potential, or existing, landowner.

Appendix B

Aboriginal community consultation



B.1 Consultation log and communications record

riginal Consultation Require		s (DECCW 2010)*				
RIGINAL COMMUNICATION					Duciost #, F22010	
ect Name: Tamworth UNE C	OUTGOING /				Project #: E23018	
DATE	INCOMING	ORGANISATION	CONTACT MADE BY	CONTACT TO	CONTACT TYPE	
27-Jul-23	Outgoing	Heritage NSW	Alan Williams (EMM)	-	Email	Sought information on known stakeholders within the region
27-Jul-23 27-Jul-23	Outgoing Outgoing	NTS Corp Tamworth City Council	Alan Williams (EMM) Alan Williams (EMM)	-	Email Email	Sought information on known stakeholders within the region Sought information on known stakeholders within the region
27-Jul-23	Outgoing	Tamworth Local Aboriginal Land Council	Alan Williams (EMM)		Email	Sought information on known stakeholders within the region
27-Jul-23	Outgoing	Native Title Tribunal	Alan Williams (EMM)	-	Email	Sought information on known stakeholders within the region
27-Jul-23	Outgoing	Office of the Registrar	Alan Williams (EMM)	-	Email	Sought information on known stakeholders within the region
27-Jul-23	Outgoing	North West Local Land Services	Alan Williams (EMM)	-	Email	Sought information on known stakeholders within the region
27-Jul-23	Incoming	Office of the Registrar	Brendan Smith	Alan Williams (EMM)	Email	Advised of no traditional owners, but directed the project to Tamworth LALC
27-Jul-23	Incoming	Native Title Tribunal	-	Alan Williams (EMM)	Email	Advised that the land intersected with the Gomeroi native title application, but was on freehold land.
31-Jul-23	Incoming	Heritage NSW	Barry Gunther	Alan Williams (EMM)	Email	Provided a list of some 30-50 individuals and/or organisations working within the Tamworth LGA
·				TO REGISTER INTEREST	T .	
27-Jul-23	Incoming	Tamworth Local Aboriginal Land Council	Fiona Snape	Alan Williams (EMM)	Email	Sought to register an interest in the project
01-Aug-23	Incoming	Malcolm Talbot	Malcolm Talbot	Anna Pham	Email	Sought to register an interest in the project
11-Aug-23	Outgoing	Gomeroi Native Title applicant (via NTS Corp)	Amber Morgan (EMM)	Alican Sampson	Email	Invited to register for project
11-Aug-23 11-Aug-23	Outgoing Outgoing	Alison Sampson AT Gomilaroi Cultural Consultancy	Amber Morgan (EMM) Amber Morgan (EMM)	Alison Sampson Aaron Talbot	Email Email	Invited to register for project Invited to register for project
11-Aug-23 11-Aug-23	Outgoing	Barraby Cultural Services	Amber Morgan (EMM)	Lee Field	Email	Invited to register for project
11-Aug-23	Outgoing	BJC Cultural Management	Amber Morgan (EMM)	Ben Cameron	Post	Invited to register for project
11-Aug-23	Outgoing	Brent Mathews	Amber Morgan (EMM)	Brent Mathews	Post	Invited to register for project
11-Aug-23	Outgoing	Brian Draper	Amber Morgan (EMM)	Brian Draper	Post	Invited to register for project
11-Aug-23	Outgoing	Cacatua General Service (Cacatua Culture Consultants)	Amber Morgan (EMM)	Donna	Post	Invited to register for project
11-Aug-23	Outgoing	Christine Archbold	Amber Morgan (EMM)	Christine Archbold	Post	Invited to register for project
11-Aug-23	Outgoing	Clifford Matthews	Amber Morgan (EMM)	Clifford Matthews	Post	Invited to register for project
11-Aug-23	Outgoing	Coonabarabran LALC	Amber Morgan (EMM)	Chairperson	Post	Invited to register for project
11-Aug-23	Outgoing Outgoing	Corroboree Aboriginal Corporation D F T V Enterprises	Amber Morgan (EMM) Amber Morgan (EMM)	Marilyn Carrol-johnson Derrick Vale	Email Email	Invited to register for project
11-Aug-23 11-Aug-23	Outgoing	Darrell Mathews	Amber Morgan (EMM)	Darrell Mathews	Post	Invited to register for project Invited to register for project
11-Aug-23	Outgoing	Didge Ngunawal Clan	Amber Morgan (EMM)	Lillie Carroll	Email	Invited to register for project
11-Aug-23	Outgoing	Edgerton kwiembal AC	Amber Morgan (EMM)	Liza Talbot	Email	Invited to register for project
11-Aug-23	Outgoing	Galamaay Cultural Consultants (GCC)	Amber Morgan (EMM)	Robert Slater	Email	Invited to register for project
11-Aug-23	Outgoing	Gilay Consultants	Amber Morgan (EMM)	Carol Slater	Email	Invited to register for project
11-Aug-23	Outgoing	Glen Morris	Amber Morgan (EMM)	Glen Morris	Email	Invited to register for project
11-Aug-23	Outgoing	Guyinbaraay people Clan group	Amber Morgan (EMM)	Greg Griffiths	Email	Invited to register for project
11-Aug-23	Outgoing	Gomery Cultural Consultants	Amber Morgan (EMM)	David Horton	Email	Invited to register for project
11-Aug-23	Outgoing	Hazel Collins	Amber Morgan (EMM)	Hazel Collins	Post	Invited to register for project
11-Aug-23	Outgoing	Jeff Matthews	Amber Morgan (EMM)	Jeff Matthews	Post	Invited to register for project
11-Aug-23 11-Aug-23	Outgoing Outgoing	John Matthews Joshua Matthews	Amber Morgan (EMM) Amber Morgan (EMM)	John Matthews Joshua Matthews	Post Post	Invited to register for project Invited to register for project
11-Aug-23	Outgoing	Justin Matthews	Amber Morgan (EMM)	Justin Matthews	Post	Invited to register for project
11-Aug-23	Outgoing	Kevin Sampson	Amber Morgan (EMM)	Kevin Sampson	Post	Invited to register for project
11-Aug-23	Outgoing	Konanggo Aboriginal Cultural Heritage Services	Amber Morgan (EMM)	Robert Young	Email	Invited to register for project
11-Aug-23	Outgoing	Len Waters	Amber Morgan (EMM)	Len Waters	Post	Invited to register for project
11-Aug-23	Outgoing	LLoyd Matthews	Amber Morgan (EMM)	LLoyd Matthews	Post	Invited to register for project
11-Aug-23	Outgoing	Lorraine Towney	Amber Morgan (EMM)	Lorraine Towney	Post	Invited to register for project
11-Aug-23	Outgoing	Luke Cameron Cultural Management	Amber Morgan (EMM)	Luke Cameron Cultural Management	Post	Invited to register for project
11-Aug-23	Outgoing	Mavonia Welsh	Amber Morgan (EMM)	Mavonia Welsh	Post	Invited to register for project
11-Aug-23	Outgoing	ME Griffiths Cultural Management	Amber Morgan (EMM)	Marie-Ellen Griffiths	Post	Invited to register for project
11-Aug-23	Outgoing	Michelle Saunders	Amber Morgan (EMM)	Michelle Saunders	Email	Invited to register for project
11-Aug-23 11-Aug-23	Outgoing	Mooki Plains Management Mooki River Consultants	Amber Morgan (EMM) Amber Morgan (EMM)	- Wyane Mathews	Post Post	Invited to register for project Invited to register for project
11-Aug-23 11-Aug-23	Outgoing Outgoing	Muswellbrook Cultural Consultants	Amber Morgan (EMM) Amber Morgan (EMM)	Brian Horton	Post	Invited to register for project
11-Aug-23	Outgoing	Nammoypathways Aboriginal Corporation	Amber Morgan (EMM)	Viki Devine	Post	Invited to register for project
11-Aug-23	Outgoing	Natasha Rodgers	Amber Morgan (EMM)	Natasha Rodgers	Post	Invited to register for project
11-Aug-23	Outgoing	Ngambaa Cultural Connections	Amber Morgan (EMM)	Kaarina Slater	Email	Invited to register for project
11-Aug-23	Outgoing	Nunawanna Aboriginal Corporation	Amber Morgan (EMM)	Colin Ahoy	Email	Invited to register for project
11-Aug-23	Outgoing	Nyakka Aboriginal Corporation	Amber Morgan (EMM)	Rhonda Kitchener	Email	Invited to register for project
11-Aug-23	Outgoing	Paul Moodie	Amber Morgan (EMM)	Paul Moodie	Post	Invited to register for project
11-Aug-23	Outgoing	Rick Slater	Amber Morgan (EMM)	Rick Slater	Email	Invited to register for project
11-Aug-23	Outgoing	Rodney Mathews	Amber Morgan (EMM)	Rodney Mathews	Post	Invited to register for project
11-Aug-23	Outgoing	Ron Smith	Amber Morgan (EMM)	Ron Smith	Post	Invited to register for project
11-Aug-23	Outgoing Outgoing	Rona Slater Roslyn Smith	Amber Morgan (EMM) Amber Morgan (EMM)	Rona Slater Roslyn Smith	Post Post	Invited to register for project
	Outgoing					Invited to register for project
11-Aug-23	Outgoing	IScott Smith				
11-Aug-23	Outgoing	Scott Smith T&G Culture Consultants	Amber Morgan (EMM) Amber Morgan (FMM)	Scott Smith Tony Griffiths	Post	Invited to register for project
	Outgoing Outgoing Outgoing	Scott Smith T&G Culture Consultants Talcon Pty Ltd	Amber Morgan (EMM) Amber Morgan (EMM) Amber Morgan (EMM)	Tony Griffiths Ricky Talbot	Post Post Post	Invited to register for project Invited to register for project

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11-Aug-23	Outgoing	Tania Mathews	Amber Morgan (EMM)	Tania Mathews	Post	Invited to register for project
11-Aug-23	Incoming	AT Gomilaroi Cultural Consultancy	Aaron Talbot	Amber Morgan (EMM)	Email	Registered for project
11-Aug-23	Incoming	Konanggo Aboriginal Cultural Heritage Services	Robert Young	Amber Morgan (EMM)	Email	Registered for project
11-Aug-23	Incoming	Nunawanna Aboriginal Corporation	Colin Ahoy	Amber Morgan (EMM)	Email	Registered for project
11-Aug-23	Incoming	Gomery Cultural Consultants	David Horton	Amber Morgan (EMM)	Email	Registered for project
		,				
11-Aug-23	Incoming	Didge Ngunawal Clan	Lillie Carroll	Amber Morgan (EMM)	Email	Registered for project
14-Aug-23	Incoming	D F T V Enterprises	Derrick Vale	Alan Williams (EMM)	Email	Registered for project
						Registered the Gomeroi Native Title applicants for the project and asked that all
18-Aug-23	Incoming	Gomeroi Native Title applicant (via NTS Corp)	Olivia Charles (NTSCORP)	Alan Williams (EMM)	Email	communicatiosn for them go through their legal representitive William Scott at
_	_					notifications@ntscorp.com.au
22-Aug-23	Incoming	Lisa Shipley	Lisa Shipley	Alan Williams (EMM)	Email	Registered for project
			Viki Devine	Alan Williams (EMM)	+	i - · · ·
22-Aug-23	Incoming	Nammoypathways Aboriginal Corporation		,	Post	Return to sender - address does not exist
23-Aug-23	Incoming	Tania Mathews	Tania Mathews	Alan Williams (EMM)	Post	Return to sender - no longer at address
23-Aug-23	Incoming	Jeff Matthews	Jeff Matthews	Alan Williams (EMM)	Post	Return to sender - no longer at address
		STA	GE 2/3 - PRESENTATION OF INFORMATION	AND PROPOSED ASSESSMENT METHODS	;	
					- :	
08-Sep-23	Outgoing	All RAPs	Alan Williams (EMM)	-	Email	Distributed project information and assessment methodology for review and comment
						Responded to methodology, providing valuble cultural detail on the project site and
11-Sep-23	Incoming	AT Gomilaroi Cultural Consultancy	Aaron Talbot	Alan Williams (EMM)	Email	
						surrounds
11-Sep-23	Outgoing	Heritage NSW	Amber Morgan (EMM)	-	Email	Notification of Registered Aboriginal Parties
11-Sep-23	Outgoing	Tamworth Local Aboriginal Land Council	Amber Morgan (EMM)	Fiona Snape	Email	Notification of Registered Aboriginal Parties
25-Sep-23	Outgoing	All RAPs	Amber Morgan (EMM)	-	Email	Distubited supplementary email with proposed test pits and figure
25-Sep-23	Incoming	Didge Ngunawal Clan	Lillie Carroll	Amber Morgan (EMM)	Email	thanked for the info
25-Sep-23	Incoming	Gomery Cultural Consultants	David Horton	Amber Morgan (EMM)	Email	Had no questions and said 1x1m pits sounded great.
25-3ep-25	IIICOIIIIIIg	domery Cultural Consultants	FIELDWO		EIIIdii	nau no questions and said 1x1m pits sounded great.
			FIELDWO	JRK I		
25-Sep-23	Outgoing	D F T V Enterprises and AT Gomilaroi Cultural Consultancy	Amber Morgan (EMM)	Aaron Talbot and Derrick Vale	Phone	Called to ask if they would be available for the upcomming survey and test ex happening in
23-3ер-23	Outgoing	DT TV Enterprises and AT Commaror Cultural Consultancy	Alliber Worgan (Livivi)	Aaron Taibot and Derrick Vale	FIIOTIE	mid october.
						Asked if they would have a field repersentived available for the upcomming survey and test
25-Sep-23	Outgoing	Tamworth Local Aboriginal Land Council	Amber Morgan (EMM)	Fiona Snape and admin	Email	av
						A short if the control have a field representative developing for the concernation control and test
25-Sep-23	Outgoing	Gomeroi Native Title applicant (via NTS Corp)	Amber Morgan (EMM)	admin and William Scott	Email	Asked if they would have a field repersentived available for the upcomming survey and test
·			s , ,			ex
25-Sep-23	Outgoing	AT Gomilaroi Cultural Consultancy	Amber Morgan (EMM)	Aaron Talbot	Email	sent two emails regarding upcoming survey and test ex details including time and place to
25-3ep-25	Outgoing	AT Gorillar of Cultural Consultancy	Alliber Morgan (EMM)	Adion faibot	Ellidii	meet.
						sent two emails regarding upcoming survey and test ex details including time and place to
25-Sep-23	Outgoing	D F T V Enterprises	Amber Morgan (EMM)	Derrick Vale	Email	meet.
					+	
25-Sep-23	Incoming	Tamworth Local Aboriginal Land Council	Brittni Wann	Amber Morgan (EMM)	Email	replied saying site officer wasn't available but gave dates of the 9th 10th and 13th that he
	0			, ,		was
25 50= 22	Outraina	Townworth Local Aboriginal Land Council	Amber Morgan (EMM)	Brittni Wann	Email	replied saying we can change to the 13th and sent two emails regarding upcoming survey
25-Sep-23	Outgoing	Tamworth Local Aboriginal Land Council	Alliber Morgan (EMM)	Brittiii Waliii	Ellidii	and test ex details including time and place to meet
						Called to ask if they would be available for date change the upcomming survey - went to
26-Sep-23	Outgoing	D F T V Enterprises and AT Gomilaroi Cultural Consultancy	Amber Morgan (EMM)	Aaron Talbot and Derrick Vale	Phone	voicemail
26.6 22	1	DETVEN	Description (1)	A b A A (53 48 4)	Diverse	
26-Sep-23	Incoming	D F T V Enterprises	Derrick Vale	Amber Morgan (EMM)	Phone	texted that he would be
26-Sep-23	Outgoing	Gomeroi Native Title applicant (via NTS Corp)	Amber Morgan (EMM)	admin and William Scott	Email	asked if they would have a field rep available for the new survey date
26-Sep-23	Outgoing	AT Gomilaroi Cultural Consultancy	Amber Morgan (EMM)	Aaron Talbot	Email	asked if they would have a field rep available for the new survey date
26-Sep-23	Outgoing	D F T V Enterprises	Amber Morgan (EMM)	Derrick Vale	Email	Confirmed the text with an email confirming date change
26-Sep-23	Outgoing	Heritage NSW	Amber Morgan (EMM)		Email	notified of upcoming test ex
03-Oct-23				William Scott	Phone	
U3-UCL-23	Outgoing	Gomeroi Native Title applicant (via NTS Corp)	Amber Morgan (EMM)	vviiiiaIII 3CULL	riione	asked if they would have a reild rep availaible for the field survey and test ex.
04-Oct-23	Outgoing	Gomeroi Native Title applicant (via NTS Corp)	Amber Morgan (EMM)	William Scott	Email	sent two emails regarding upcoming survey and test ex details including time and place to
2 : 300 20						meet.
06-Oct-23	Outgoing	AT Gomilaroi Cultural Consultancy	Amber Morgan (EMM)	Aaron Talbot	Email	emailed to change time of survey
06-Oct-23	Outgoing	Tamworth Local Aboriginal Land Council	Amber Morgan (EMM)	Brittni Wann	Email	emailed to change time of survey
06-Oct-23	Incoming	D F T V Enterprises	Derrick Vale	Alan Williams (EMM)	Phone	Called to say he was on site
				` '	+	
06-Oct-23	Outgoing	D F T V Enterprises	Amber Morgan (EMM)	Derrick Vale	Phone	Called to see how he was going - he hadn't started yet but would call when he does.
06-Oct-23	Incoming	D F T V Enterprises	Derrick Vale	Amber Morgan (EMM)	Phone	Called to say gate was already unlocked and that he would call again once finshed.
			1	1	1	Called to give an update on survey findings - few exposures, fill or dug out - more test pit in
00.0 : 00		D F T V F stranging	Demilal Wala	A h A (FA 4: 5)	Dhara	centre of veledrome (possible original ground level). Need to reloctae some test pits as they
09-Oct-23	Incoming	D F T V Enterprises	Derrick Vale	Amber Morgan (EMM)	Phone	are on retaining walls or tunnels. Mentioned flooding and water retention in the velodrome.
			1	1		ex situ artefacts?
20.0-4.22	to a contra	Communication of the section of the	De delle de la	A b A (53 43 4)	F11	
09-Oct-23	Incoming	Gomery Cultural Consultants	David Horton	Amber Morgan (EMM)	Email	Emaillled to ask update on test exvation schedule
10-Oct-23	Outgoing	Tamworth Local Aboriginal Land Council	Amber Morgan (EMM)	Brittni Wann	Phone	called to confirm change time of survey and to ask that contracts and subconsultants
10-001-25	Outgoing	Talliworth Local Aboriginal Land Council	Alliber Morgan (EMM)	Brittiii Waliii	riione	agreements be signed and sent back
				L		Called to ask to speak to Willaim scott regarding Gomeroi Applicnat field Rep for upcomming
10-Oct-23	Outgoing	Gomeroi Native Title applicant (via NTS Corp)	Amber Morgan (EMM)	Reception	Phone	survey and test ex
10.0 = 33	0	Gomeroi Native Title applicant (via NTS Corp)	Ambay Mayron (FDAC4)	Decembion	Dhana	,
10-Oct-23	Outgoing	Gorneroi Native Title applicant (Via NTS Corp)	Amber Morgan (EMM)	Reception	Phone	Called to say we have had to invite someone else
10-Oct-23	Outgoing	Gomery Cultural Consultants	Amber Morgan (EMM)	David Horton	Phone	Called to invite for survey and test ex - unavailible for survey but can do mon, tues, thurs and
10 300 25	Sargonig					fri of test ex
10-Oct-23	Outgoing	Gomery Cultural Consultants	Amber Morgan (EMM)	David Horton	Email	Sent email regarding upcoming test ex details including time and place to meet.
10-Oct-23	Incoming	Gomeroi Native Title applicant (via NTS Corp)	William Scott	Amber Morgan (EMM)	phone	Called to say he had a RAP avaiaible
			William Scott		Email	
10-Oct-23	Incoming	Gomeroi Native Title applicant (via NTS Corp)		Amber Morgan (EMM)		Provided details of Field representitive
10-Oct-23	Incoming	Gomery Cultural Consultants	David Horton	Amber Morgan (EMM)	Email	Sent contracts and notified that they would be sending Leanne Kirkman
10-Oct-23	Incoming	Gomery Cultural Consultants	David Horton	Amber Morgan (EMM)	Email	Sent signed subconsultants agreement

10-Oct-23	Outgoing	Gomeroi Native Title applicant (via NTS Corp)	Amber Morgan (EMM)	Peter White	Email	Apologised that we only have two days available for test ex for their RAP - proposed the 18th and another day of their choosing - sent email regarding upcoming test ex details including time and place to meet.
10-Oct-23	Outgoing	AT Gomilaroi Cultural Consultancy	Amber Morgan (EMM)	Aaron Talbot	Email	fieldwork reminder and asked to send through insurances and sign subconsultant agreement
10-Oct-23	Incoming	AT Gomilaroi Cultural Consultancy	Aaron Talbot	Amber Morgan (EMM)	Email	Replied saying they would get on to it now and that they would be sending his mum Shirley Talbott
10-Oct-23	Incoming	Tamworth Local Aboriginal Land Council	Brittni Wann	Amber Morgan (EMM)	Email	Said Len Waters wouln't be available for survey untill 12:30 and asked to resend subconsultants agreement
10-Oct-23	Outgoing	Tamworth Local Aboriginal Land Council	Amber Morgan (EMM)	Brittni Wann	Email	Sent subconsultants agreements and said that Len can join us then but we will have to start with the other RAPs at 11:30 - we will redo areas with Len once he gets there.
10-Oct-23	Incoming	Gomeroi Native Title applicant (via NTS Corp)	Peter White	Amber Morgan (EMM)	Phone	Call to provide cultural knowledge of the area and said he will get back to me tomorrow regarding date of second day of work.
10-Oct-23	Incoming	Tamworth Local Aboriginal Land Council	Brittni Wann	Amber Morgan (EMM)	Email	Said it would be fine to redo areas with Len when he gets there and provided signed sub- consultants agreement.
13-Oct-23	Outgoing	DFTV Enterprises, Tamworth LALC, AT Gomilaroi Cultural Consultancy	Alan Williams (EMM)	-	Fieldwork	Field survey and meeting to discuss the project
16-18 October 23	Outgoing	DFTV Enterprises, Tamworth LALC, AT Gomilaroi Cultural Consultancy, Gomeroi native title applicant, Gomery Cultural Consultant	Megan Brennand Sheppard (EMM)	-	Fieldwork	Undertook test excavations of the site
			STAGE 4 - DRAFT	ACHA REVIEW		
15-Nov-23	Outgoing	All RAPs	Amber Morgan (EMM)	-	Email	Sent Draft ACHA - period ends 13th December 2023
15-Nov-23	Incoming	Gomery Cultural Consultants	David Horton	Amber Morgan (EMM)	Email	Provided postal adress for draft acha to be sent to.
16-Nov-23	Outgoing	Gomery Cultural Consultants	Debbie Isaacs	David Horton	Post	Sent draft ACHA to provided address
07-Dec-23	Outgoing	All RAPs	Amber Morgan (EMM)	-	Email	Sent reminder email that draft ACHA period ends 13th December 2023
07-Dec-23	Incoming	Konanggo Aboriginal Cultural Heritage Services	Robert Young	Amber Morgan (EMM)	Email	Has reviewed the ACHA and said it was very informative - has no other recommendations to submit.

B.2 List of identified Aboriginal stakeholders in the region

- Gomeroi Native Title applicant (via NTS Corp)
- Alison Sampson
- AT Gomilaroi Cultural Consultancy
- Barraby Cultural Services
- BJC Cultural Management
- Brent Mathews
- Brian Draper
- Cacatua General Service (Cacatua Culture Consultants)
- Christine Archbold
- Clifford Matthews
- Coonabarabran LALC
- Corroboree Aboriginal Corporation
- D F T V Enterprises
- Darrell Mathews
- Didge Ngunawal Clan
- Edgerton kwiembal AC
- Galamaay Cultural Consultants (GCC)
- Gilay Consultants
- Glen Morris
- Guyinbaraay people Clan group
- Gomery Cultural Consultants
- Hazel Collins
- Jeff Matthews
- John Matthews
- Joshua Matthews
- Justin Matthews

- Kevin Sampson
- Konanggo Aboriginal Cultural Heritage Services
- Len Waters
- LLoyd Matthews
- Lorraine Towney
- Luke Cameron Cultural Management
- Mavonia Welsh
- ME Griffiths Cultural Management
- Michelle Saunders
- Mooki Plains Management
- Mooki River Consultants
- Muswellbrook Cultural Consultants
- Nammoypathways Aboriginal Corporation
- Natasha Rodgers
- Ngambaa Cultural Connections
- Nunawanna Aboriginal Corporation
- Nyakka Aboriginal Corporation
- Paul Moodie
- Rick Slater
- Rodney Mathews
- Ron Smith
- Rona Slater
- Roslyn Smith
- Scott Smith
- T&G Culture Consultants
- Talcon Pty Ltd
- Tamworth LALC

Tania Mathews

B.3 List of registered Aboriginal parties following notification

- Tamworth LALC
- Malcom Talbot
- AT Gomilaroi Cultural Consultancy
- Konanggo Aboriginal Cultural Heritage Services
- Nunawanna Aboriginal Corporation
- Gomery Cultural Consultants
- Didge Ngunawal Clan
- D F T V Enterprises
- Gomeroi Native Title applicant (via NTS Corp)
- Lisa Shipley

B.4 Stage 1 – Notification and registration

This section contains the following documents:

- Government agency requests and responses
- Public media notifications
- Aboriginal party invitation to register for the project
- Aboriginal party registrations of interest
- Notification to Heritage NSW (formerly DPIE) and the Tharawal LALC of registered parties.





27 July 2023

Re: UNE Tamworth Central Project- Aboriginal cultural heritage assessment - request for information

Dear Sir/Madam,

EMM Consulting Pty Limited (EMM) has been commissioned by University of New England (UNE) to complete the Aboriginal cultural heritage assessment (ACHA) for the proposed UNE Tamworth Central Project (Tamworth LGA). The project is located at 545 Peel Street, Tamworth (Lot 73 DP 1107041), NSW. UNE is proposing the redevelopment of the site to provide flexible teaching and support places, an Aboriginal centre, staff workspaces, and shared community spaces. The project will deliver a modern, integrated, community-centred approach to teaching, research and engagement that benefits the entire New England North West region, and the state of NSW.

The aim of the ACHA is to inform the assessment of Aboriginal cultural heritage in relation to the project and to develop suitable avoidance, minimisation, mitigation and/or management measures to facilitate the approval process.

The proponent contact is: Anna Pham, Project Manager, Touchstone Partners Pty Ltd, T: 0400 210 954; E: annap@touchstonepartners.com.au.

In accordance with NSW State government's *Aboriginal cultural heritage consultation requirements for proponents 2010*, I am writing to you to seek information on relevant Aboriginal individuals and/or communities that you are aware of in the region, and who may hold cultural knowledge and/or information about Aboriginal objects and sites in the vicinity of the site. I kindly request you please provide me with this information as soon as possible at the Sydney address above, or awilliams@emmconsulting.com.au.

If you have any questions or enquiries, please don't hesitate to contact me on 02 9493 9500.

Yours sincerely

Dr Alan WilliamsTechnical Lead, Aboriginal Heritage
awilliams@emmconsulting.com.au

E230186 | C#1 | v1

Amber Morgan

From: Barry Gunther <Barry.Gunther@environment.nsw.gov.au>

Sent: Monday, 31 July 2023 11:59 AM

To: Alan Williams

Subject: DPE Aboriginal stakeholder list for UNE Tamworth Central Project.

Attachments: Aboriginal Stakeholder letter UNE Tamworth Central Project.docx; E230186

_AgencyRequest_v1.0.pdf; Aboriginal Stakeholder List- Tamworth Local Government Area - LIST OF ABORIGINAL STAKEHOLDERS FOR THE DEPARTMENT of PLANNING

and ENVIRONMENT.docx

CAUTION: This email originated outside of the Organisation.

Hi Alan,

Please find attached the DPE Aboriginal stakeholder list for UNE Tamworth Central Project.

regards

Barry Gunther, Aboriginal Senior Assessment Officer Environment and Heritage – Heritage NSW Department of Planning and Environment T: 02 9995 6830 | barry.gunther @environment.nsw.gov.au Heritage.nse.gov.au and dpie.nsw.gov.au Locked Bag 5020 Parramatta NSW 2124

Heritage NSW Department of Planning and Environment

Please lodge all Applications to Heritagemailbox@environment.nsw.gov.au

Website Facebook Instagram LinkedIn

The Heritage Management System is live from 31 May. More information is available here

I acknowledge and respect the traditional custodians and ancestors of the lands I work across.

Heritage NSW and coronavirus (COVID-19)

Heritage NSW has taken steps to protect the safety, health and wellbeing of our staff, communities and customers. Whilst our offices remain open, we have put in place flexible working arrangements for our teams across NSW and continue to adapt our working arrangements as necessary. Face-to-face meetings and field work/site visits with our customers are subject to rules on gatherings and social distancing measures. We thank you for your patience and understanding at this time.

This email is intended for the addressee(s) named and may contain confidential and/or privileged information. If you are not the intended recipient, please notify the sender and then delete it immediately. Any views expressed in this email are those of the individual sender except where the sender expressly and with authority states them to be the views of the NSW Office of Environment, Energy and Science.

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Request for Spatial Search of Tribunal Registers

1: Your details

Your name:	Alan Williams				
Your company:	EMM Consulting Pty Ltd				
E-mail address:	awilliams@emmconsulting.com.au Phone: 0438 104 740				
Your reference:	E230186 Your state: New South Wales				
\boxtimes	I have read and acknowledge the terms and conditions on the next page.				

2: Areas to be searched

Jurisdiction to be searched:	New South Wales	Tenure to be searched:	Select one.
------------------------------	-----------------	------------------------	-------------

Parcel or tenement identifiers (add up to 20 separate identifiers). Please see over for parcel identifiers.

Parcel 1:	Lot 73 DP 1107041	Parcel 2:	
Parcel 3:	Click or tap here to enter text.	Parcel 4:	Click or tap here to enter text.
Parcel 5:		Parcel 6:	Click or tap here to enter text.
Parcel 7:	Click or tap here to enter text.	Parcel 8:	Click or tap here to enter text.
Parcel 9:	Click or tap here to enter text.	Parcel 10:	Click or tap here to enter text.
Parcel 11:	Click or tap here to enter text.	Parcel 12:	Click or tap here to enter text.
Parcel 13:	Click or tap here to enter text.	Parcel 14:	Click or tap here to enter text.
Parcel 15:	Click or tap here to enter text.	Parcel 16:	Click or tap here to enter text.
Parcel 17:	Click or tap here to enter text.	Parcel 18:	Click or tap here to enter text.
Parcel 19:	Click or tap here to enter text.	Parcel 20:	Click or tap here to enter text.

If your search area is not a parcel or mining or petroleum tenement, you can enter other tenure or administrative regions here (e.g. local government area, townsite or county). Please provide as much detail as you can.

This request is made in accordance with Heritage NSW guidelines, which we acknowledge NNTT is seeking to remove themselves from. Unfortunately, the guidelines have yet to be changed.

I am unsure of the tenure of these parcels of land, but suspect they may be freehold.

E-mail the completed form to GeospatialSearch@NNTT.gov.au

Parcel Identifiers

In most jurisdictions please identify parcels using lot on plan, or lot/section/plan as appropriate. The NNTT is generally not able to identify parcels using land title information. Where possible, the NNTT uses the terminology and formatting of unique identifiers used in each state to uniquely identify a land parcel. More details are below:

- 1. Lot on plan. Use for Western Australia and Queensland.
- Lot/Section/Plan. Use for New South Wales.
- LAISKEY. Use for the Northern Territory. The laiskey is a unique identifier for each parcel comprised of the location code, LTO code (derived from the survey plan) where applicable and the parcel number.
- 4. Parcel ID Use for South Australia. Concatenation of Parcel Type, Parcel, Plan Type and Plan.
- 5. SPI (Standard Parcel Identifier) Use for Victoria.

Terms and Conditions

Specify only one jurisdiction (e.g. Queensland) and one type of tenure (e.g. mining tenement) per form. You can add up to 20 separate tenements or parcels per search request. For more than 20 parcels or tenements please submit additional search requests or contact GeospatialSearch@NNTT.gov.au to discuss your requirements.

Note: if your area of interest cannot be clearly identified from the search form, or is not held in NNTT datasets, we may instead provide search results for a surrounding local government area, or other suitable regional area.

Freehold land.

Under the Native Title Act 1993 (Cth), the valid grant of a freehold estate (other than certain types of Aboriginal and Torres Strait Islander land) on or before 23 December 1996 is known as a 'previous exclusive possession act'. This means that native title has been extinguished over the area. Native title claimants are not allowed to include land and waters covered by previous exclusive possession acts in their applications; therefore they would normally exclude freehold areas. A native title application may, however, be made over freehold land on the basis that freehold was invalidly granted, but the chances of this happening are very low.

Cultural Heritage in NSW.

The National Native Title Tribunal has undertaken steps to remove itself from the formal list of sources for information about indigenous groups in development areas. The existence or otherwise of native title is quite separate to any matters relating to Aboriginal cultural heritage. Information on native title claims, native title determinations and Indigenous Land Use Agreements is available on the Tribunal's website.

4. Spatial searches rely on data obtained from the relevant custodian. Whilst efforts are taken to update such datasets on a regular basis, the collection and interpretation of such datasets may be influenced by a number of factors that can impact of the completeness and accuracy of your search results.

Disclaimer

While the National Native Title Tribunal (NNTT) and the Native Title Registrar (Registrar) have exercised due care in ensuring the accuracy of the information provided, it is provided for general information only and on the understanding that neither the NNTT, the Registrar nor the Commonwealth of Australia is providing professional advice. Appropriate professional advice relevant to your circumstances should be sought rather than relying on the information provided. In addition, you must exercise your own judgment and carefully evaluate the information provided for accuracy, currency, completeness and relevance for the purpose for which it is to be used.

The information provided is often supplied by, or based on, data and information from external sources, therefore the NNTT and Registrar cannot guarantee that the information is accurate or up-to-date.

The NNTT and Registrar expressly disclaim any liability arising from the use of this information.

This information should not be relied upon in relation to any matters associated with cultural heritage.

Amber Morgan

From: Geospatial Search Requests < GeospatialSearch@NNTT.gov.au>

Sent: Thursday, 27 July 2023 11:53 AM

To: Alan Williams

Cc: Megan Sheppard Brennand

Subject: RE: SR23/1221 - UNE Tamworth Central Project - Aboriginal heritage - request for

information - SR23/1221 [SEC=OFFICIAL]

CAUTION: This email originated outside of the Organisation.

OFFICIAL

Your ref: *E230186* Our ref: *SR23/1221*

Dear Alan Williams,

Thank you for your search request, please find your results below.

Search Results

The results provided are based on the information you supplied and are derived from a search of the following Tribunal databases:

- Schedule of Native Title Determination Applications
- Register of Native Title Claims
- Native Title Determinations
- Indigenous Land Use Agreements (Registered and notified)

Results for overlapping native title matters in NSW:

Feature ID	Tenure	Cadastre Data As At	Feature Area SqKm		Overlappin
73//DP1107041	FREEHOLD	4/05/2023	0.1459	NNTT File Number	Name
				NC2011/006	Gomeroi People
				NC2011/006	Gomeroi People

For more information about the Tribunal's registers or to search the registers yourself and obtain copies of relevant register extracts, please visit our <u>website</u>.

Information on native title claims and freehold land can also be found on the Tribunal's website here: <u>Native title</u> claims and freehold land.

Please note: There may be a delay between a native title determination application being lodged in the Federal Court and its transfer to the Tribunal. As a result, some native title determination applications recently filed with the Federal Court may not appear on the Tribunal's databases.

The search results are based on analysis against external boundaries of applications only. Native title applications commonly contain exclusions clauses which remove areas from within the external boundary. To determine

whether the areas described are in fact subject to claim, you need to refer to the "Area covered by claim" section of the relevant Register Extract or Schedule Extract and any maps attached.

Search results and the existence of native title

Please note that the enclosed information from the Register of Native Title Claims and/or the Schedule of Applications is **not** confirmation of the existence of native title in this area. This cannot be confirmed until the Federal Court makes a determination that native title does or does not exist in relation to the area. Such determinations are registered on the National Native Title Register.

The Tribunal accepts no liability for reliance placed on enclosed information

The enclosed information has been provided in good faith. Use of this information is at your sole risk. The National Native Title Tribunal makes no representation, either express or implied, as to the accuracy or suitability of the information enclosed for any particular purpose and accepts no liability for use of the information or reliance placed on it.

If you have any further queries, please do not hesitate to contact us via GeospatialSearch@NNTT.gov.au

Regards,

Geospatial Searches

National Native Title Tribunal | Perth

Email: <u>GeospatialSearch@nntt.gov.au</u> | <u>www.nntt.gov.au</u>

From: Alan Williams <a williams@emmconsulting.com.au>

Sent: Thursday, 27 July 2023 7:48 AM

To: Geospatial Search Requests < Geospatial Search@NNTT.gov.au>

Cc: Megan Sheppard Brennand <msheppardbrennand@emmconsulting.com.au>

Subject: SR23/1221 - UNE Tamworth Central Project - Aboriginal heritage - request for information

Caution: This is an external email. DO NOT click links or open attachments unless you recognise the sender and know the content is safe.

Dear Sir/Madam,

EMM Consulting Pty Limited (EMM) has been engaged by the University of New England to undertake an Aboriginal cultural heritage assessment of a proposed re-development adjacent Peel River within Tamworth. As part of the assessment, we will be undertaking consultation with the local Aboriginal community.

In accordance with Heritage NSW guidelines, I am writing to your organisation to request information on any Aboriginal individuals and/or organisations that you may be aware of that would be interested in being consulted upon the project. Please find your search request form attached.

Happy to discuss,

Best wishes

Αl

Dr Alan Williams FSA FRSA FRSN MAACAI MEIANZ

Technical Lead, Aboriginal Heritage | Associate Director



T 02 9493 9500

M 0438 104 740

LI Connect on LinkedIn

SYDNEY | Ground floor, 20 Chandos Street, St Leonards NSW 2065



Associate Investigator ARC Centre of Excellence for Australian Biodiversity and Heritage (CABAH) University of New South Wales Sydney, NSW 2052 Adjunct Senior Lecturer School of Biological, Earth and Environmental Sciences University of New South Wales, Sydney, NSW 2052 Industry Institute of University Ultimo, N









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Office of the Registrar, Aboriginal Land Rights Act 1983. January 2020

REQUEST FOR SEARCH OF LAND CLAIM REGISTER



02 8633 1266 PO Box 5068 Parramatta NSW 2124

Please print all details clearly using block letters

1.	Cor	nta	ct	de	ta.	ile
	CUI	ILA	L.L	ue	:La	ILS

Full name:	Alan Williams			
Name of company:	EMM Consulting Pty Ltd			
Postal address:	Ground Floor, 20 Chandos Street St Leonards NSW 2065			
Email address:	awilliams@emmconsulting.com.au			
Telephone number:	0438 104 740			
. Real Property Details	s (if more than one parcel please attach separate table)			
Lot / Section / Deposited Plan:	Lot 73 DP 1107041			
Parish:	Tamworth			
County:	Inglis			
Attached is a copy of	the current title search(es), please tick (🗸):			
. To assist our office in	assigning priorities please provide:			
a. The purpose for w	hich information is required:			
In accordance with Heritage NSW guidelines, we are seeking this information to inform an Aboriginal cultural heritage assessment				
b. The reason for urg	ency (when urgent consideration is required):			

Please note:

- i. Searches will only be performed on Crown Land.
- ii. In order to process a search we require a copy of a current title search for the relevant land.
- iii. Subject to demand, searches are normally completed within 10 working days. Complex searches may take longer.
- iv. If your search is urgent, please indicate why at point 3b above.
- v. Please send the completed form together with current relevant title search(es) via email to: **ALC@oralra.nsw.gov.au**

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27 July 2022



By email: awilliams@emmconsulting.com.au

Dr Alan Williams Technical Lead, Aboriginal Heritage (Associate Director) EMM Consulting P/L Ground Floor, 20 Chandos St ST LEONARDS NSW 2065

Dear Alan,

Aboriginal Cultural Heritage assessment request – proposed UNE Tamworth Central redevelopment project adjacent to the Peel River, Tamworth, NSW: inquiry about potential Aboriginal stakeholders

We refer to your letter and email to this Office, dated 27 July 2023, seeking contact information for Aboriginal organisations, stakeholders and/or people who may have cultural knowledge relevant to the proposed UNE Tamworth Central redevelopment project, adjacent to the Peel River, Tamworth, NSW, as part of an Aboriginal Cultural Heritage Assessment (ACHA).

Under Section 170 of the *Aboriginal Land Rights Act* 1983 (NSW), the Office of the Registrar is required to maintain the Register of Aboriginal Owners (RAO) for New South Wales. A search of the RAO has shown that there are currently no Registered Aboriginal Owners in the project area.

The project area identified falls within the boundaries of Tamworth Local Aboriginal Land Council. We suggest you contact Tamworth LALC (contact details provided below), as they may wish to participate or contribute.

Yours sincerely

Manchel

Brendan Smith

Senior Project Officer

Office of the Registrar, Aboriginal Land Rights Act 1983

Tamworth Local Aboriginal Land Council

PO Box 57

Tamworth NSW 2340

Ph: (02) 6766 9028

Email: Fiona@tamworthlalc.com.au

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Funeral Notices



HAMBLIN, Neville John

Peacefully at Eloura, Quirindi 7th August, 2023

Much loved husband of Lorna (dec'd) and Esther. Dearly loved father and father-in-law of Janelle & Stephen, Colin & Vivian, David & Naomi, Robert & Fiona and Phillip & Naomi. Much loved grandfather and great grandfather of their families.

Aged 83 Years

The family and friends of **NEVILLE** are warmly invited to attend his Funeral Service to be held at the Graveside in the Quirindi Lawn Cemetery, Russell Street, Quirindi Cemetery, Russell Street, Quirindi commencing at 2.30pm, Monday 14th August, 2023.

The Service will be live streamed from 2.30pm. For those wishing to view the service please refer to the link on the Shaun Hamilton Funerals Pty Ltd website or Facebook Page.

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Public Notices

Invitation for Registrations of Interest Aboriginal Cultural Heritage Assessment
UNE Tamworth Central Project, Tamworth LGA

University of New England (UNE) is proposing the development of the UNE Tamworth Central Project, 545 Peel Street, Tamworth (Lot 73 DP 1107041). UNE is proposing the redevelopment of the site to provide flexible teaching and support places, an Aboriginal centre, staff workspaces, and shared community spaces. The project will deliver a modern, integrated, community-centred approach to teaching, research and engagement that benefits the entire New England North West region, and the state of NSW. Initial concepts and designs for this project, including engagement with the Aboriginal community, has been initiated

Early concept designs and a Connection to Country has been previously initiated for this project by Architectus in partnership with Yerrabingin, and this has included some engagement with the local Aboriginal community. In parallel with these design processes is the need to identify and assess environmental and heritage impacts as part of the planning and assessment process. EMM, on behalf of UNE, invites Aboriginal individuals and organisations who hold cultural knowledge relevant to determining the significance of Aboriginal objects and/or places in the area, and who wish to be involved in the consultation process undertaken as part of the assessment, to register their interests.

The purpose of Aboriginal community consultation is: 1) to inform the assessment of cultural heritage values of the area; 2) to assist NSW Government in the assessment of Aboriginal heritage reports prepared for this project; and 3) to support any future applications or approvals for the project sought under the NSW *Environmental Planning and* Assessment Act 1979 andr the NSW National Parks and Wildlife Act

The proponent contact is Louise Norton, Project Director Touchstone Partners Pty Ltd

T: 0499 009 278 E: louisen@touchstonepartners.com.au

Registrations of interest are to be provided by no later than **25th August 2023** to:

Alan Williams

⋈ awilliams@emmconsulting.com.au

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Amber Morgan

From: Amber Morgan <amorgan@emmconsulting.com.au>

Sent: Friday, 11 August 2023 3:19 PM **To:** Megan Sheppard Brennand

Cc: Alan Williams; Megan Sheppard Brennand

Subject: UNE Tamworth Central Project - Invitation to register for consultation

Attachments: E230186_Notification Letter.pdf

Dear all,

EMM Consulting Pty Limited has been engaged to undertake an Aboriginal Cultural Heritage Assessment (ACHA) for the proposed development of the University of New England (UNE) Tamworth Central Project. The project is located at 545 Peel Street, Tamworth, on Lot 73 DP 1107041 and will include the redevelopment of the site to provide flexible teaching and support places, an Aboriginal centre, staff workspaces, and shared community spaces. The project will deliver a modern, integrated, community-centred approach to teaching, research and engagement that benefits the entire New England North West region, and the state of NSW.

You or your organisation has been identified as a potential stakeholder in the area, and in accordance with Heritage NSW consultation guidelines, we are seeking registrations of interest in the project (please see attached document).

If you'd like to be involved in the project, please provide a registration of interest by no later than COB **Friday 25 August 2023**.

Kind regards, Amber

Amber Morgan

Graduate Archaeologist | Ecology & Heritage



T 02 9493 9500

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SYDNEY | Gamaraigal Country, Ground floor, 20 Chandos Street, St Leonards NSW 2065



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11 August 2023

Re: UNE Tamworth Central Project- Aboriginal cultural heritage assessment - notification

Dear Sir/Madam,

University of New England (UNE) is proposing the development of the UNE Tamworth Central Project, 545 Peel Street, Tamworth (Lot 73 DP 1107041) (Plate 1). UNE is proposing the redevelopment of the site to provide flexible teaching and support places, an Aboriginal centre, staff workspaces, and shared community spaces. The project will deliver a modern, integrated, community-centred approach to teaching, research and engagement that benefits the entire New England North West region, and the state of NSW.

Early concept designs and a Connection to Country has been previously initiated for this project by Architectus in partnership with Yerrabingin, and this has include some engagement with the local Aboriginal community. In parallel with these design processes is the need to identify and assess environmental and heritage impacts as part of the planning and assessment process. EMM has been engaged to undertake an Aboriginal cultural heritage assessment (ACHA) in accordance with Heritage NSW guidelines to inform these processes and provide the supporting documentation for any further approvals that may be needed. The proposal is being assessed as a Development Application under Division 4.3 of the *Environmental Planning and Assessment Act 1979*, and will be submitted to the Tamworth Regional Council for consideration and approval.

The proponent contact is: Louise Norton, Project Director, Touchstone Partners Pty Ltd, T: 0499 009 278; E: louisen@touchstonepartners.com.au

The assessment of the proposal is being undertaken in accordance with NSW State government's *Aboriginal cultural heritage consultation requirements for proponents 2010*. As per the first stage of the NSW State government consultation guidelines, I am writing to notify you of the proposal and seek you and/or your organisation's interest in being registered for subsequent consultation and involvement. We are interested in Aboriginal individuals and/or organisations who may hold relevant cultural knowledge for determining the Aboriginal cultural heritage of the area, and who wish to be involved in the project.

The purpose of consultation is to assist EMM to:

- 1. Assess the Aboriginal heritage values of the area.
- 2. Assist NSW Government in the assessment of Aboriginal heritage reports prepared for this project.
- 3. Support any future applications or approvals for the project sought under NSW *Environmental Planning* and Assessment Act 1979 and/or NSW National Parks and Wildlife Act 1974.

E230186 | N#1 | v1

If you wish to register your interest as an Aboriginal party in subsequent consultation, please contact Alan Williams at the below details by **25 August 2023**.

Alan Williams

E: awilliams@emmconsulting.com.au

T: 02 9493 9500

A: EMM Consulting Pty Ltd, 20 Chandos Street, St Leonards, NSW 2065

In your response, please provide the following information:

- clear identification of the individual and/or organisation registering an interest. Please ensure all individuals and/or organisations registering provide their contact details including relevant phone, address and email (if available)
- preferred communication method (eg email, phone) during the consultation of this project, along with your organisation's nominated contact person and their details
- the level of project involvement you or your organisation wishes, including attendance of meetings, fieldwork participation and/or simply reviewing documentation
- identification of any procedures, protocols or requirements for the use and reproduction of any cultural information or materials you or your organisation provides EMM as part of this project
- identification of any Aboriginal objects, sites and/or areas of cultural value that you are aware of in, or near, the project investigation area.

As required by the consultation guidelines, details of people registering as Aboriginal Parties will be forwarded to Heritage NSW and the relevant Local Aboriginal Land Council unless you specify otherwise in your response.

If you have any questions or enquiries, please don't hesitate to contact us.

Yours sincerely

Dr Alan Williams FRSA FSA FRSN MAACAI MEIANZ

Technical Lead, Aboriginal Heritage awilliams@emmconsulting.com.au

E230186 | N#1 | v1



Plate 1 Project area located within Lot 1 DP 1107041 at 545 Peel Street, Tamworth.

E230186 | N#1 | v1

From: Fiona <fiona@tamworthlalc.com.au>
Sent: Thursday, 27 July 2023 12:22 PM

To: Alan Williams

Cc: Megan Sheppard Brennand

Subject: RE: UNE Tamworth Central Project - Aboriginal heritage - request for information

CAUTION: This email originated outside of the Organisation.

Hi Alan

Tamworth Local Aboriginal Land Council would like to register as an interested party

Regards

Fiona Snape CEO

Tamworth Local Aboriginal Land Council

PO Box 57

Tamworth NSW 2340 Phone: 02 6766 9028 Fax: 02 6766 9036 Mobile: 0458 764 197





I would like to acknowledge the traditional custodians of the Gamilaroi/Gomeroi/Kamilaroi nation and it's people. I recognise their continuing connection to the land I work on and I pay my respects to Elders past and present, and also acknowledge the youth of whom will be our future leaders.

Consider the environment. Please don't print this e-mail unless really necessary.

From: Alan Williams <a williams@emmconsulting.com.au>

Sent: Thursday, 27 July 2023 9:45 AM

To: Alan Williams <a williams@emmconsulting.com.au>

Cc: Megan Sheppard Brennand <msheppardbrennand@emmconsulting.com.au> **Subject:** UNE Tamworth Central Project - Aboriginal heritage - request for information

Dear Sir/Madam,

EMM Consulting Pty Limited (EMM) has been engaged by the University of New England to undertake an Aboriginal cultural heritage assessment of a proposed re-development adjacent Peel River within Tamworth. As part of the assessment, we will be undertaking consultation with the local Aboriginal community.

In accordance with Heritage NSW guidelines, I am writing to your organisation to request information on any Aboriginal individuals and/or organisations that you may be aware of that would be interested in being consulted upon the project. Please find further information in the attached letter.

Happy to discuss,

Best wishes Al

Dr Alan Williams FSA FRSA FRSN MAACAI MEIANZ

Technical Lead, Aboriginal Heritage | Associate Director



- 02 9493 9500
- M 0438 104 740
- LI Connect on LinkedIn

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Associate Investigator ARC Centre of Excellence for Australian Biodiversity and Heritage (CABAH) University of New South Wales Sydney, NSW 2052 Adjunct Senior Lecturer School of Biological, Earth and Environmental Sciences University of New South Wales, Sydney, NSW 2052 Industry I Institute o University Ultimo, N









I work flexibly. I'm sending you this message now because it's a good time for me, but do not expect you to read, respond or

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Megan Sheppard Brennand

From: Megan Sheppard Brennand

Sent: Wednesday, 2 August 2023 1:46 PM **To:** malcomtalbot@bigpond.com

Cc: Alan Williams

Subject: RE: ACHA UNE Tamworth Central Project

Hi Malcolm,

Anna passed on your email, I will register you for the project and be in touch with further details as the project progresses.

Thanks, Megan

Megan Sheppard Brennand

Senior archaeologist

Note: My work days are Monday to Thursday

T 02 9493 9500M 0407 656 226

www.emmconsulting.com.au

From: Mal <<u>malcomtalbot@bigpond.com</u>>
Sent: Tuesday, August 1, 2023 3:04 PM

To: Anna Pham <<u>annap@touchstonepartners.com.au</u>>

Subject: ACHA UNE Tamworth Central Project

My name is Malcolm Talbot and I,m a RAP who as Cultural Knowledge of the area as I'm a TO of the Gomeroi Nation. I can be contacted on (m) 0459354246 or Email malcomtalbot@bigpond.com.

Yours

Malcolm Talbot.

Sent from Mail for Windows

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From: Aaron Talbott <ngurrugu74@outlook.com>

Sent: Friday, 11 August 2023 3:24 PM

To: Amber Morgan; Megan Sheppard Brennand
Cc: Alan Williams; Megan Sheppard Brennand

Subject: Re: UNE Tamworth Central Project - Invitation to register for consultation

CAUTION: This email originated outside of the Organisation.

Yaama Amber

Confirming Registration for the project. Look forward to further communication.

Yaluu

Aaron Talbott & Natalene Mercy M 0477 239 021 E ngurrugu74@outlook.com

From: Amber Morgan <amorgan@emmconsulting.com.au>

Sent: Friday, August 11, 2023 3:18:31 PM

To: Megan Sheppard Brennand <msheppardbrennand@emmconsulting.com.au> **Cc:** Alan Williams awilliams@emmconsulting.com.au; Megan Sheppard Brennand

<msheppardbrennand@emmconsulting.com.au>

Subject: UNE Tamworth Central Project - Invitation to register for consultation

Dear all,

EMM Consulting Pty Limited has been engaged to undertake an Aboriginal Cultural Heritage Assessment (ACHA) for the proposed development of the University of New England (UNE) Tamworth Central Project. The project is located at 545 Peel Street, Tamworth, on Lot 73 DP 1107041 and will include the redevelopment of the site to provide flexible teaching and support places, an Aboriginal centre, staff workspaces, and shared community spaces. The project will deliver a modern, integrated, community-centred approach to teaching, research and engagement that benefits the entire New England North West region, and the state of NSW.

You or your organisation has been identified as a potential stakeholder in the area, and in accordance with Heritage NSW consultation guidelines, we are seeking registrations of interest in the project (please see attached document).

If you'd like to be involved in the project, please provide a registration of interest by no later than COB **Friday 25 August 2023**.

Kind regards, Amber

Amber Morgan

Graduate Archaeologist | Ecology & Heritage



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From: lilly carroll <didgengunawalclan@yahoo.com.au>

Sent: Friday, 11 August 2023 5:35 PM

To: Amber Morgan; Megan Sheppard Brennand
Cc: Alan Williams; Megan Sheppard Brennand

Subject: Re: UNE Tamworth Central Project - Invitation to register for consultation

CAUTION: This email originated outside of the Organisation.

Hi Amber

DNC would like to register an interest into UNE Tamworth central project

Kind regards
Paul boyd and Lily Carroll
Directors DNC
0426 823 944

Sent from Yahoo Mail for iPhone

On Friday, August 11, 2023, 3:18 pm, Amber Morgan <amorgan@emmconsulting.com.au> wrote:

Dear all,

EMM Consulting Pty Limited has been engaged to undertake an Aboriginal Cultural Heritage Assessment (ACHA) for the proposed development of the University of New England (UNE) Tamworth Central Project. The project is located at 545 Peel Street, Tamworth, on Lot 73 DP 1107041 and will include the redevelopment of the site to provide flexible teaching and support places, an Aboriginal centre, staff workspaces, and shared community spaces. The project will deliver a modern, integrated, community-centred approach to teaching, research and engagement that benefits the entire New England North West region, and the state of NSW.

You or your organisation has been identified as a potential stakeholder in the area, and in accordance with Heritage NSW consultation guidelines, we are seeking registrations of interest in the project (please see attached document).

If you'd like to be involved in the project, please provide a registration of interest by no later than COB **Friday 25 August 2023**.

Kind regards, Amber

Amber Morgan

Graduate Archaeologist | Ecology & Heritage



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From: Leanne Kirkman <leannekirkman1964@gmail.com>

Sent: Friday, 11 August 2023 4:43 PM

To: Amber Morgan

Subject: Re: UNE Tamworth Central Project - Invitation to register for consultation

Attachments: Outlook-1ow44uau.png

CAUTION: This email originated outside of the Organisation.

Hi Amber I would like to register for mention project thanks David horton gomery cultural consultants thanks, as I'm a gomeroi person and hold significant knowledge of the area, hopefully to get some work thanks any questions ring number provided 0458532707 or email me daveyhorton69@gmail.com thank you.

On Fri, 11 Aug 2023, 3:18 pm Amber Morgan, amorgan@emmconsulting.com.au wrote: Dear all,

EMM Consulting Pty Limited has been engaged to undertake an Aboriginal Cultural Heritage Assessment (ACHA) for the proposed development of the University of New England (UNE) Tamworth Central Project. The project is located at 545 Peel Street, Tamworth, on Lot 73 DP 1107041 and will include the redevelopment of the site to provide flexible teaching and support places, an Aboriginal centre, staff workspaces, and shared community spaces. The project will deliver a modern, integrated, community-centred approach to teaching, research and engagement that benefits the entire New England North West region, and the state of NSW.

You or your organisation has been identified as a potential stakeholder in the area, and in accordance with Heritage NSW consultation guidelines, we are seeking registrations of interest in the project (please see attached document).

If you'd like to be involved in the project, please provide a registration of interest by no later than COB **Friday 25 August 2023**.

Kind regards, Amber

Amber Morgan

Graduate Archaeologist | Ecology & Heritage

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From: Robert Young <konanggo_consultancy@hotmail.com>

Sent: Friday, 11 August 2023 3:39 PM

To: Amber Morgan; Megan Sheppard Brennand

Cc: Alan Williams

Subject: Re: UNE Tamworth Central Project - Invitation to register for consultation

CAUTION: This email originated outside of the Organisation.

Good afternoon, all,

I would like to register an (EOI) expression of interest on behalf of (KACHS) Konanggo Aboriginal Heritage Cultural Services for the proposed development of the University of New England (UNE) Tamworth Central Project

As a Kamilaroi/Gomeroi traditional descendant through my Fathers Robert Young (Nean) & Mothers Pamela Young (Tighe) bloodlines & lineages through this Country, I would like to participate to be involved in this project, to protect, preserve & to conserve my culture

Thank you for the email to be invited on this project

Yours In Culture,

Robert Young

Konanggo Aboriginal Cultural Heritage Services 2/42 Crawford Road, Brighton Le Sands 2216 NSW Email: konanggo_consultancy@hotmail.com

Phone: 0450497270

From: Amber Morgan <amorgan@emmconsulting.com.au>

Sent: Friday, 11 August 2023 3:18 PM

To: Megan Sheppard Brennand <msheppardbrennand@emmconsulting.com.au> **Cc:** Alan Williams <awilliams@emmconsulting.com.au>; Megan Sheppard Brennand

<msheppardbrennand@emmconsulting.com.au>

Subject: UNE Tamworth Central Project - Invitation to register for consultation

Dear all,

EMM Consulting Pty Limited has been engaged to undertake an Aboriginal Cultural Heritage Assessment (ACHA) for the proposed development of the University of New England (UNE) Tamworth Central Project. The project is located at 545 Peel Street, Tamworth, on Lot 73 DP 1107041 and will include the redevelopment of the site to provide flexible teaching and support places, an Aboriginal centre, staff workspaces, and shared community spaces. The project will deliver a modern, integrated, community-centred approach to teaching, research and engagement that benefits the entire New England North West region, and the state of NSW.

You or your organisation has been identified as a potential stakeholder in the area, and in accordance with Heritage NSW consultation guidelines, we are seeking registrations of interest in the project (please see attached document).

If you'd like to be involved in the project, please provide a registration of interest by no later than COB **Friday 25 August 2023**.

Kind regards, Amber

Amber Morgan

Graduate Archaeologist | Ecology & Heritage



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From: Colin Ahoy <cahoy7@myune.edu.au>
Sent: Friday, 11 August 2023 4:01 PM

To: Amber Morgan; Megan Sheppard Brennand
Cc: Alan Williams; Megan Sheppard Brennand

Subject: RE: UNE Tamworth Central Project - Invitation to register for consultation

Attachments: EOI_UNE Tamworth Central Project.pdf

CAUTION: This email originated outside of the Organisation.

Hi Amber,

Please see attached the expression of interest for Nunawanna Aboriginal Corporation regarding the UNE Tamworth Central Project.

Regards Colin

Sent from Mail for Windows

From: Amber Morgan

Sent: Friday, 11 August 2023 2:49 PM **To:** Megan Sheppard Brennand

Cc: Alan Williams; Megan Sheppard Brennand

Subject: UNE Tamworth Central Project - Invitation to register for consultation

Dear all,

EMM Consulting Pty Limited has been engaged to undertake an Aboriginal Cultural Heritage Assessment (ACHA) for the proposed development of the University of New England (UNE) Tamworth Central Project. The project is located at 545 Peel Street, Tamworth, on Lot 73 DP 1107041 and will include the redevelopment of the site to provide flexible teaching and support places, an Aboriginal centre, staff workspaces, and shared community spaces. The project will deliver a modern, integrated, community-centred approach to teaching, research and engagement that benefits the entire New England North West region, and the state of NSW.

You or your organisation has been identified as a potential stakeholder in the area, and in accordance with Heritage NSW consultation guidelines, we are seeking registrations of interest in the project (please see attached document).

If you'd like to be involved in the project, please provide a registration of interest by no later than COB **Friday 25 August 2023**.

Kind regards, Amber

Amber Morgan

Graduate Archaeologist | Ecology & Heritage



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From: Derrick Vale <derrick@dftventerprisesic.com.au>

Sent: Monday, 14 August 2023 8:15 AM

To: Alan Williams

Subject: UNE Tamworth Central Project

CAUTION: This email originated outside of the Organisation.

G'day Dr Alan

DFTV Enterprsises would like to register an interest in the UNE Tamworth Central Project- Aboriginal cultural heritage assessment.

Kind regards Mr Derrick Vale Managing Director



2/4 Young Street East Maitland 2323

M. 0438 812 197

 $DFTV\ ENTERPRISES\ Indigenous\ Corporation\ acknowledges\ the\ traditional\ custodians\ of\ country\ throughout\ Australia.\ We\ pay\ our\ respect\ to\ them,\ and\ to\ the\ Elders\ past,\ present\ and\ future$

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From: NTSCORP Notifications <notifications@ntscorp.com.au>

Sent: Friday, 18 August 2023 1:00 PM

To: Alan Williams
Cc: William Scott

Subject: FW: UNE Tamworth Central Project - Aboriginal heritage - request for information

Attachments: E230186_AgencyRequest_v1.0.pdf

CAUTION: This email originated outside of the Organisation.

Dear Alan,

Thank you for your email.

NTSCORP requests that you register the Gomeroi Applicant as knowledge holders for this project and as a party to be notified and involved throughout the assessment process.

The Gomeroi Applicant are the registered native title claimants for this region and are contactable via their legal representatives William Scott at notifications@ntscorp.com.au. Please send all correspondence to this address **only**.

Kind regards,

Olivia Charles | Law Graduate



NTSCORP proudly acknowledge that our office is situated on the country of the Gadigal People. We also acknowledge and pay our respect to their Elders past and present.

t 61 2 9310 3188 f 02 9310 4177

e: ocharles@ntscorp.com.au | w www.ntscorp.com.au

Level 1, 44-70 Rosehill Street, Redfern, NSW 2016 Australia

NTSCORP is committed to supporting local Aboriginal businesses where possible through the purchase of goods and services.

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From: Alan Williams <a williams@emmconsulting.com.au>

Sent: Thursday, July 27, 2023 9:45 AM

To: Alan Williams < <u>awilliams@emmconsulting.com.au</u>>

Cc: Megan Sheppard Brennand <<u>msheppardbrennand@emmconsulting.com.au</u>> **Subject:** UNE Tamworth Central Project - Aboriginal heritage - request for information

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Sir/Madam,

EMM Consulting Pty Limited (EMM) has been engaged by the University of New England to undertake an Aboriginal cultural heritage assessment of a proposed re-development adjacent Peel River within Tamworth. As part of the assessment, we will be undertaking consultation with the local Aboriginal community.

In accordance with Heritage NSW guidelines, I am writing to your organisation to request information on any Aboriginal individuals and/or organisations that you may be aware of that would be interested in being consulted upon the project. Please find further information in the attached letter.

Happy to discuss,

Best wishes

Dr Alan Williams FSA FRSA FRSN MAACAI MEIANZ

Technical Lead, Aboriginal Heritage | Associate Director



02 9493 9500

M 0438 104 740

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Associate Investigator ARC Centre of Excellence for Australian Biodiversity and Heritage (CABAH) University of New South Wales Sydney, NSW 2052

Adjunct Senior Lecturer School of Biological, Earth and Environmental Sciences University of New South Wales, Sydney, NSW 2052 Industry I Institute o University Ultimo, N









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From: Lisa Shipley < lisashipleyconsultancy@outlook.com>

Sent: Monday, 21 August 2023 6:05 PM

To: Alan Williams

Subject: Registration of interest

CAUTION: This email originated outside of the Organisation.

Dear Allan,

I would like to register my interest for the Cultural Heritage Assessment UNE Tamworth Central Project, Tamworth

Kind regards,

Lisa

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From: Amber Morgan <amorgan@emmconsulting.com.au>

Sent: Monday, 11 September 2023 2:43 PM

To: OEH HD Heritage Mailbox

Cc: Alan Williams; Megan Sheppard Brennand

Subject: UNE Tamworth Central Project - Notification of Registered Aboriginal Parties (RAP)

Attachments: E230186_Agency notification letter_HeritageNSW.pdf

To whom it may concern,

EMM Consulting is undertaking an Aboriginal Cultural Heritage Assessment (ACHA) for the proposed UNE Tamworth Central Project, located in Tamworth NSW. In accordance with Requirement 4.1.6 of the *Aboriginal cultural heritage consultation for requirements for proponents 2010*, we are writing to inform you of the Aboriginal parties who have registered an interest in the project.

Please contact myself or Megan Sheppard Brennand (cc'd in this email) if you have any questions.

Kind regards, Amber

Amber Morgan

Graduate Archaeologist | Ecology & Heritage



02 9493 9500

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11 September 2023

HeritageNSW Level 6, 10 Valentine Ave Parramatta NSW 2150

Re: Notification of registered Aboriginal parties - UNE Tamworth Central Project

To whom it may concern,

EMM Consulting Pty Limited (EMM) has been commissioned by University of New England (UNE) to complete the Aboriginal cultural heritage assessment (ACHA) for the proposed UNE Tamworth Central Project (Tamworth LGA). The project is located at 545 Peel Street, Tamworth (Lot 73 DP 1107041), NSW. UNE is proposing the redevelopment of the site to provide flexible teaching and support places, an Aboriginal centre, staff workspaces, and shared community spaces. The project will deliver a modern, integrated, community-centred approach to teaching, research and engagement that benefits the entire New England North West region, and the state of NSW.

We are implementing the *Aboriginal cultural heritage consultation for requirements for proponents 2010.* In accordance with 4.1.6 of those requirements, we are providing a list of the ten Aboriginal parties who have registered for consultation on the project.

As per the consultation requirements, the Registered Aboriginal Parties can be found in Table 1 and the forms of notification are attached to this letter.

Table 1 List of Registered Aboriginal Parties for the UNE Tamworth Central Project, Beryl NSW.

Organisation (if applicable)	Contact person
Tamworth LALC	Fiona Snape
Malcom Talbot	Malcom Talbot
AT Gomilaroi Cultural Consultancy	Aaron Talbot
Konanggo Aboriginal Cultural Heritage Services	Robert Young
Nunawanna Aboriginal Corporation	Colin Ahoy
Gomery Cultural Consultants	David Horton
Didge Ngunawal Clan	Lillie Carroll

E230186 | L4 | v1 1

Table 1 List of Registered Aboriginal Parties for the UNE Tamworth Central Project, Beryl NSW.

Organisation (if applicable)	Contact person
D F T V Enterprises	Derrick Vale
Gomeroi Native Title applicant (via NTS Corp)	William Scott
Lisa Shipley	Lisa Shipley

If you require further information, please do not hesitate to contact me.

Yours sincerely

Amber Morgan

Graduate Archaeologist

amorgan@emmconsulting.com.au

E230186 | L4 | v1 2

From: Amber Morgan <amorgan@emmconsulting.com.au>

Sent: Monday, 11 September 2023 2:43 PM

To: fiona@tamworthlalc.com.au

Cc: Alan Williams; Megan Sheppard Brennand

Subject: UNE Tamworth Central Project - Notification of Registered Aboriginal Parties (RAP)

Attachments: E230186_Agency notification letter_TamworthLALC.pdf

Hi Fiona,

EMM Consulting is undertaking an Aboriginal Cultural Heritage Assessment (ACHA) for the proposed UNE Tamworth Central Project, located in Tamworth NSW. In accordance with Requirement 4.1.6 of the *Aboriginal cultural heritage consultation for requirements for proponents 2010*, we are writing to inform you of the Aboriginal parties who have registered an interest in the project.

Please contact myself or Megan Sheppard Brennand (cc'd in this email) if you have any questions.

Kind regards, Amber

Amber Morgan

Graduate Archaeologist | Ecology & Heritage



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11 September 2023

Tamworth Local Aboriginal Land Council 123 Marius St Tamworth NSW 2340

Re: Notification of registered Aboriginal parties - Bellambi Heights Renewables Project

To whom it may concern,

EMM Consulting Pty Limited (EMM) has been commissioned by University of New England (UNE) to complete the Aboriginal cultural heritage assessment (ACHA) for the proposed UNE Tamworth Central Project (Tamworth LGA). The project is located at 545 Peel Street, Tamworth (Lot 73 DP 1107041), NSW. UNE is proposing the redevelopment of the site to provide flexible teaching and support places, an Aboriginal centre, staff workspaces, and shared community spaces. The project will deliver a modern, integrated, community-centred approach to teaching, research and engagement that benefits the entire New England North West region, and the state of NSW.

We are implementing the *Aboriginal cultural heritage consultation for requirements for proponents 2010.* In accordance with 4.1.6 of those requirements, we are providing a list of the ten Aboriginal parties who have registered for consultation on the project.

As per the consultation requirements, the Registered Aboriginal Parties can be found in Table 1 and the forms of notification are attached to this letter.

Table 1 List of Registered Aboriginal Parties for the Bellambi Heights Renewables Project, Beryl NSW.

Organisation (if applicable)	Contact person
Tamworth LALC	Fiona Snape
Malcom Talbot	Malcom Talbot
AT Gomilaroi Cultural Consultancy	Aaron Talbot
Konanggo Aboriginal Cultural Heritage Services	Robert Young
Nunawanna Aboriginal Corporation	Colin Ahoy
Gomery Cultural Consultants	David Horton
Didge Ngunawal Clan	Lillie Carroll

E230186 | L4 | v1 1

Table 1 List of Registered Aboriginal Parties for the Bellambi Heights Renewables Project, Beryl NSW.

Organisation (if applicable)	Contact person
D F T V Enterprises	Derrick Vale
Gomeroi Native Title applicant (via NTS Corp)	William Scott
Lisa Shipley	Lisa Shipley

If you require further information, please do not hesitate to contact me.

Yours sincerely

Amber Morgan

Graduate Archaeologist

amorgan@emmconsulting.com.au

E230186 | L4 | v1 2

B.5 Stages 2 and 3 – presentation of information and gathering cultural information

This section contains the following documents:

• project information and assessment methodology letter.

E230186 | RP1 | v1

From: Alan Williams

Sent: Friday, 8 September 2023 10:30 AM

To: Alan Williams

Cc: Megan Sheppard Brennand; Amber Morgan

Subject: UNE Tamworth Central Project - ACH - Assessment Methodology

Attachments: E230186_Methodology_v1.0.pdf

Dear All,

Thank you for registering an interest in the UNE Tamworth Central Project. In accordance with Heritage NSW consultation requirements, please find attached a document that outlines further information on the project, including some initial connection to Country works on the design, and our proposed assessment methodology for the Aboriginal cultural heritage assessment (ACHA) process. The latter including a site inspection, and potential test excavations of the site.

If you wish to provide inputs, comments and/or feedback (there are a number of questions in Section 5), please can you do so by the 6 October 2023. Once we have all agreed on the various assessment and approach, we will look to undertake site investigations in early to mid-October. We'll be in touch in the next few weeks to begin to progress this.

Happy to discuss

Thanks

Αl

Dr Alan Williams FSA FRSA FRSN MAACAI MAIATSIS MEIANZ

Technical Lead, Aboriginal Heritage | Associate Director



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- M 0438 104 740
- LI Connect on LinkedIn

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SYDNEY | Kameraigal Country | Ground floor, 20 Chandos Street, St Leonards NSW 2065



Associate Investigator ARC Centre of Excellence for Australian Biodiversity and Heritage (CABAH) University of New South Wales Sydney, NSW 2052 Adjunct Senior Lecturer School of Biological, Earth and Environmental Sciences University of New South Wales, Sydney, NSW 2052 Industry Institute of University Ultimo, N









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8 September 2023

Re: University of New England Tamworth Central Project - Aboriginal cultural heritage assessment - project information and assessment methodology

Dear Sir/Madam,

1 Introduction

Thank you for your interest in the proposed University of New England (UNE) Tamworth Central Project (hereafter 'the project'). The project is located at 545 Peel Street, Tamworth (Lot 73 DP 1107041) (Figure 1.1). UNE is proposing the redevelopment of the site to provide flexible teaching and support places, an Aboriginal centre, staff workspaces, and shared community spaces. The project will deliver a modern, integrated, community-centred approach to teaching, research and engagement that benefits the entire New England North West region, and the state of NSW.

Early concept designs and a Connection to Country has been previously initiated for this project by Architectus in partnership with Yerrabingin, and this has included some engagement with the local Aboriginal community. In parallel with these design processes is the need to identify and assess environmental and heritage impacts as part of the planning and assessment process. EMM has been engaged to undertake an Aboriginal cultural heritage assessment (ACHA) in accordance with Heritage NSW guidelines to inform these processes and provide the supporting documentation for any further approvals that may be needed.

The proposal is being assessed as a Development Application under Division 4.3 of the *Environmental Planning* and Assessment Act 1979, and will be submitted to the Tamworth Regional Council for consideration and approval.

The proponent contact is: Louise Norton, Project Director, Touchstone Partners Pty Ltd, T: 0499 009 278; E: louisen@touchstonepartners.com.au

EMM's contact for this project will be Megan Brennand Sheppard, Senior Archaeologist, T: 0407 272 976; E: msheppardbrennand@emmconsulting.com.au

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2 Project information

2.1 Project elements

UNE's vision for project is to create a multifunctional environment, with shared spaces, that accommodates not only the current needs of UNE but the future needs too. Early concept designs and a Connection to Country has been previously initiated for this project by Architectus in partnership with Yerrabingin, which has included engagement with the local Aboriginal community. The Connection to Country contains six design principles that are detailed in Table 2.1.

Detailed designs of the project centre are yet to be finalised, but the current concept designs include the following spaces and functions:

- Shared community and student support spaces
- The Oorala Aboriginal Centre
- Flexible Teaching Spaces and Staff Workspaces
- Shared meeting places
- Clinical Simulation Spaces
- Spaces for the SMART (Sustainable, Manageable, Accessible, Rural Technologies) Region Incubator
- Building support spaces

The project is constrained by a number of elements, including the flood levee next to the Peel River, multiple easements and the visually heavy loading dock across the road to the east. Despite this, the site is designed to facilitate a number of opportunities including connection to and celebration of the river, activation of the urban edges, and the opportunity to create a significant destination book end to Peel Street.

Table 2.1 Six design principles of the Connection to Country

Design principle	Description
Connection to River	Acknowledging and connecting to Water Country within the site will allow students to understand its cultural significance to the Kamilaroi and our non-human kin. The site should reference and celebrate its flow, original curves and bends and the diverse ecosystems it holds through the architecture and landscape
Sensory experiences	Sensory experiences can be included within the site by incorporating natural materials which reflect the geology, textures, and colours of the landscape. Incorporating endemic seasonal plants touching on smell and including elements of water for touch to create dynamic and changing experiences
Connection to wider context	Creating physical and spiritual connections to the significant cultural landscape within the wider area. Incorporating vantage points and seating areas for reflective thought out to the river and up to the mountain range.
Interconnected landscapes	Reflecting the wider natural context by drawing inspiration from Tamworth's rich and diverse ecologies through design elements. Creating a set of interconnected landscapes within the site that celebrate the contrast between the different ecologies to create spaces with their own unique identities on the site.

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Table 2.1 Six design principles of the Connection to Country

Design principle	Description
Connection to Sky Country	Creating a physical connection to Sky Country for the users of the space through openings and outdoor spaces. This will enhance the wellbeing aspect of the site and allow people to develop an understanding of the Kamilaroi's strong connection to Sky Country.
Intergenerational learning.	An understanding of Country leads to the ability to learn from Country. The site should encourage people to learn from the land and from each other. Designing spaces for informal and formal learning, and for people of all ages and abilities to learn about Kamilaroi life and culture on site.

2.2 Past use and previous investigations

The project area was previously the home to the Tamworth velodrome site at the Prince of Wales Park. According to historical aerials the velodrome was constructed sometime after 1993. The velodrome still stands today but will be demolished for the future construction of the project.

The township of Tamworth lacks many archaeological studies with the majority of them focusing on the region and undeveloped outskirts of the town. An Aboriginal Heritage Information Management System (AHIMS) database search was conducted in August (Figure 2) which depicts no sites within the study centre and overall, a lack of recorded sites within the urbanised centre of Tamworth. The closest recorded site to the project area is AHIMS site # 29-2-0347, an isolated find located 500 m to the east. Majority of the sites are located on the outskirts of town in undeveloped areas. These sites are dominated by undefined artefact scatters. No sites within the search have been recorded along the Peel River.

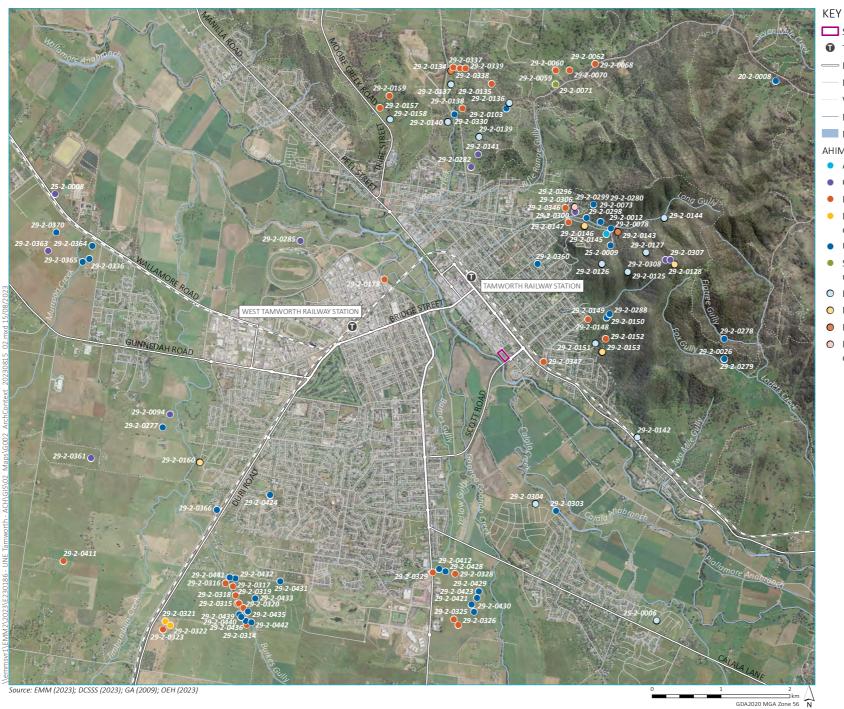
Several archaeological studies have been produced in the broader Tamworth region. The findings of several of these are listed below.

In 2004, Pat Gaynor carried out an archaeological survey along the Peel River for the route of the proposed levee bank construction in Taminda, Tamworth. A single flake was identified under a pepper tree along Barnes gully – located <2 km from the current project area. Gaynor argued that the pepper tree had provided sufficient protection from the disturbance prone to the area and thus the artefact was in situ. They also stated that the artefact type was typical of those found in the Tamworth area.

In 2014, Everick Heritage Consultants undertook two Aboriginal due diligences immediately south of Tamworth, along Goonoo Goonoo Road and Duri Road. 20 new sites were recorded, with the majority being artefact scatters located along ephemeral watercourses. Four artefact scatters, two with associated culturally modified trees, were located between 500 m and 1 km from the nearest water source. All four sites were located on a prominent ridge line and contained high-quality metamorphic cobbles nearby. Everick concluded that these cobbles were representative of a local stone source. Overall, the sites were highly disturbed due to rock picking, and ploughing.

In 2020, EMM undertook an ACHA as part of the Review of Environmental Factors (REF) for the pipeline alignment between the Chaffey pipeline connection (near Dungowan Village) and Calala water treatment plant. Desktop analysis and ground-truthing identified three Aboriginal objects and/or sites within the project area. These consisted of three potential archaeological deposits (PADs) associated with the riverbanks and terraces of the Peel River near Calala, Reedy Creek and Sandy Creek. The deposits along Sandy Creek also included evidence of a low-density artefact scatter. All three sites are identified as areas where buried cultural material would be expected to occur based on regional archaeological models and ground-truthing.

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- Site location
- Train station
- Major road
- Minor road
- Vehicular track
- Named watercourse
- Named waterbody

AHIMS site type

- Art
- Culturally modified tree
- Isolated find
- Isolated find, culturally modified tree
- Undefined artefact scatter
- Stone quarry, undefined artefact scatter
- O Low density artefact scatter
- O Medium density artefact scatter
- High density artefact scatter
- O High density artefact scatter, culturally modified tree

Archaeological context

UNE Tamworth Methodology letter Figure 2



3 Aboriginal stakeholder engagement

In accordance with the consultation process, EMM contacted a number of State and Commonwealth government organisations to provide information on Aboriginal individuals and organisations known to participate in cultural heritage management in the relevant Local Government Areas(LGAs). This was undertaken in July 2023. Once this information was obtained, a process of notifying these individuals and organisations was undertaken. This included distribution of letters advising them of the project in August 2023, and publication of the project in the newspaper local to the project area.

Following this notification process undertaken during August 2023, 10 Aboriginal stakeholders have expressed an interest in being involved in the project:

- Tamworth Local Aboriginal Land Council
- AT Gomilaroi Cultural Consultancy
- Konanggo Aboriginal Cultural Heritage Services
- Nunawanna Aboriginal Corporation
- Gomery Cultural Consultants
- Didge Ngunawal Clan
- D F T V Enterprises
- Gomeroi Native Title applicant (via NTS Corp)
- Malcolm Talbott
- Lisa Shirpley

From here on, these stakeholders are referred to as Registered Aboriginal Parties (RAPs). The roles, functions and responsibilities of all stakeholders involved in the consultation process are outlined in Table 3.1.

The information and feedback relevant to this project assessment we are currently requesting from RAPs is detailed in Section 5 of this letter.

Table 3.1 Roles and responsibilities

UNE/EMM	Undertake the ACHA in accordance with the relevant policies, legislation and guidelines, including coordinating and directing the fieldwork.
	Demonstrate awareness and understanding of the opportunities to provide input in the ACHA and management recommendations for the continued design, construction and operation of the project. Identify, raise, and discuss cultural concerns, perspectives and assessment requirements (if any).
	Have an awareness and understanding of the commercial environment and constraints in which the applicant operates.
	Provide Aboriginal site representatives for archaeological fieldwork (if desired, and representatives are suitably qualified and insured.
	Indicate areas of cultural significance.
RAPs	Provide cultural perspective, views, knowledge and advice to EMM.

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Table 3.1 Roles and responsibilities

RAPs	Provide cultural perspective, views, knowledge and advice to EMM.
	Indicate areas of cultural significance.
	Provide Aboriginal site representatives for archaeological fieldwork (if desired, and representatives are suitably qualified and insured.
	Have an awareness and understanding of the commercial environment and constraints in which the applicant operates.
	Demonstrate awareness and understanding of the opportunities to provide input in the ACHA and management recommendations for the continued design, construction and operation of the project.
	Identify, raise, and discuss cultural concerns, perspectives and assessment requirements (if any).
	Facilitate the Aboriginal consultation process.
	Consider the cultural perspectives, views, knowledge and advice of the RAPs in assessing cultural significance and developing management measures.
	Provide clear management measures that comply with relevant legislation, guidelines and significance.
All stakeholders	Mutual respect (each person has the right to have a say and be heard).
	Communicate in a professional manner.

4 Assessment methodology

4.1 Overview

The purpose of the assessment is to identify and manage the Aboriginal cultural heritage sites and values of all areas that will be affected by the project. In summary, this will involve:

- consultation with the Aboriginal stakeholders to identify socio-cultural values of the study area and places
 of special significance that should be considered;
- a search of the AHIMS register for records of previously registered Aboriginal sites
- a review of past Aboriginal heritage reports covering the study area
- environmental landscape analysis to identify past Aboriginal resources and suitable occupation areas
- synthesis of background research to develop a predictive model of Aboriginal site locations
- field investigation to validate the findings of the desktop assessment and identify any previously undocumented cultural material. This would include surface inspections and may extend to test excavations of areas of archaeological interest if required
- an assessment of significance for Aboriginal cultural heritage values in the study area (with input from the registered Aboriginal stakeholders)
- where required, an impact assessment of how the project will affect Aboriginal cultural heritage values in the study area
- development of management recommendations based on the results of the assessment and input from registered Aboriginal stakeholders during the consultation process and particularly from the draft ACHA review period.

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4.2 Archaeological survey

Archaeological field survey of the project study area will be undertaken to identify any extant Aboriginal objects or sites and cultural values present. Field survey will be attempted along the entire project study area, and focus on those landforms that have the highest potential for cultural materials (e.g., major creek lines).

Surface investigation will consist of the survey team evenly spaced (10-20 m apart) walking transects across accessible parts of the study area. At this stage, a team of 5 people are proposed and providing a survey inspection transect up to some 100m in width. The aim of the field survey is to survey 100% of the project study area.

The focus of the archaeological field survey will be to both investigate soil exposures for extant Aboriginal objects and identify landforms that have potential for cultural material to be present (either in surface or subsurface deposits). All Aboriginal objects and/or landforms of interest would be mapped and documented using hand-held GPS, photographs, sketches and/or written description.

Where possible, a significant focus of the survey will be to discuss intangible values associated with the project study area, such as connection to other cultural places, stories, view-lines, contemporary values, etc. This will be further explored as part of the cultural values mapping investigations (see below).

The archaeological field survey will be undertaken in accordance with Requirements 5 to 10 of the Code of Practice. In summary, the Code of Practice requires the following general methodology:

- pedestrian survey of the project study area
- recording of beginning and end points of transects or the boundaries of survey units, and the spacing between survey personnel
- recording of landform, soil information, land surface, vegetation conditions, visibility and exposure, and survey coverage
- recording of any identified Aboriginal sites identified according to Requirements 6-8, and recording of any
 identified Aboriginal objects in accordance with Requirements 18-24 of the Code of Practice. This would
 include the spatial location, photographs and sketches, and written description of any identified sites,
 such as rockshelters, culturally modified trees, grinding grooves, artefact sites, etc
- if any Aboriginal objects and/or sites are identified in the course of the survey, site cards will be completed and submitted to the AHIMS registrar
- in the event of Aboriginal heritage being identified within the project footprint, undertake discussions on site as to the potential further investigation and/or management of these finds. Where sites are considered of high archaeological and/or cultural value (such as rock shelters, middens or post contact sites), further characterisation (if needed), consideration of avoidance and re-design would be explored with the registered Aboriginal parties. Appropriate mitigation measures would be developed in consultation with the Registered Aboriginal Parties and Heritage NSW for any potential unavoidable impacts.

4.3 Test excavations

The requirement for test excavations would be decided following the results of the survey investigation. If Test excavations were to be undertaken, they would focus on environments where ground disturbance activities, operational infrastructure and/or other defined ancillary infrastructure and construction activities are proposed. As the field survey progresses, and areas confirmed as having Aboriginal archaeological potential are refined and a more robust model of the locations and environments within which cultural materials may occur

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(i.e., a specific distance from a creek line) is developed, test excavations would progress in a more targeted or sub-sample approach.

At each proposed ground disturbance location identified for test excavations, a grid of test pits would be established within the potential impact footprint, typically between 4 and 6 in number on a 10-20 m spacing, to provide an initial indication of the buried cultural deposits (if any). The depth of excavations would be dictated by the location of culturally-bearing cultural deposits, geological substrate and/or 1.5 m which is the maximum depth achievable using the techniques we are required to adopt. Additional in-filling of this initial grid of test pits and/or the expansion of test pits may be undertaken to further resolve any uncertainties about the cultural deposits.

All test excavations would adopt the Heritage NSW Code of Practice methods, and include the following:

- all test excavation pits would be spatially located using a differential GPS device, which would also provide elevation data
- manual excavation of 0.25m² (50 x 50 cm) test pits in a systematic grid across areas of archaeological interest within the impact footprint. The spatial resolution of the grid would be dependent on on-ground conditions, but would typically have test pits between 10-20 m apart
- excavation would use hand tools. Excavation of the first unit would be in 5 cm spits, with subsequent excavation allowed in 10 cm spits or according to stratigraphy (whichever is smallest) depending on the results of the first unit. Manual excavation would continue to either: i) the base of the cultural deposits; ii) to the depth of the underlying geology; or iii) to the maximum depth possible via hand excavation
- sieving of all manually excavated material through a 5 mm sieve
- reduced levels of the top and bottom of the test pit would be documented using a dumpy level against a known elevation. Other levels may be taken as required
- soil profiles would be recorded in accordance with the Code of Practice, including scaled drawings, photographs, and written descriptions
- soil samples may be collected for description, sedimentological and chronological analysis where such analysis is considered likely to contribute significant information; and excavation procedures and protocols may be modified at the discretion of the Excavation Director, in consultation with the Aboriginal stakeholders and the proponent as the conditions in the field and nature of the excavations develop. This includes the movement of test pits to avoid existing built structures, buried services and disturbances not identified during the desktop phase.

EMM will periodically provide the RAPs a summary of the results in relation to the proposed ground disturbance locations nominally identified for test excavations identified locales and how many will be progressed; as well as identify any other areas or minor changes that require consideration. A period time will be provided for review of this documentation, and then the works would progress.

4.4 Timeframes

The following indicative timeframes would apply:

- Distribution of this document to registered Aboriginal stakeholders: Early September 2023
- Field survey of the study area: early October 2023
- Test excavations of the study area (if required): late October 2023

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- Distribution of the draft ACHA report for RAP review and comment: Late November 2023
- Input into recommendations and review of draft report by RAPs: Late December 2023
- Report finalisation: early January 2024

5 What we need from you

In addition to the archaeological evidence described above, Aboriginal heritage incorporates a wide range of values such as stories, traditions and cultural practices. EMM welcomes advice from the Aboriginal community about cultural values (which might include archaeological sites or other types of values) relevant to the study area and its surrounds. EMM is relying on the Aboriginal community for advice on nonarchaeological and intangible Aboriginal values for the study area. We are happy to discuss any information which you are willing to share and will respect confidentiality where requested.

EMM would appreciate your feedback on the above methodology proposed for the investigation and assessment of the study area. In responding, please also consider the following questions:

- Are there any other knowledge-holders or traditional owner groups we should be contacting to obtain cultural information on this area?
- Are there any protocols in relation to community interaction and/or cultural heritage that you would like adopted during the project?
- Are you aware of any Aboriginal objects, places, sites or stories of cultural significance and/or importance
 that you are aware of within the study area? If so, please advise us how you wish them to be dealt with
 during the project.
- Are you aware of any past or current fishing and hunting activities within the project study area? Do you have any views on how these should be managed into the future?
- Is the information you are providing sensitive, gender specific, etc? If so, how would you like the information you provide to EMM to be managed? Noting that some documentation for the ACHA process will be required.
- Do you require any further information prior to EMM proceeding with the ACHA investigations?
- In your response, can you please also clearly identify who you would like EMM to talk to within your organisation, and provide contact details for these individuals. Please also ensure your preferred method of communication (e.g., telephone call, e-mail, letter etc) is highlighted for subsequent stages of the project.

6 Closing

We look forward to receiving any response your organisation wishes to make about the proposed method by **6 October 2023**. Your response will be documented and considered in the assessment. Most importantly, your cultural information is also welcome within this timeframe; but it can also be submitted up until the completion of the draft ACHA.

Please feel free to contact me with any questions.

Yours sincerely

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Dr Alan WilliamsTechnical Lead, Aboriginal Heritage
awilliams@emmconsulting.com.au

E230186 | RP#1 | v1 11

Amber Morgan

From: Amber Morgan <amorgan@emmconsulting.com.au>

Sent: Monday, 25 September 2023 1:11 PM

To: Megan Sheppard Brennand

Cc: Alan Williams; Megan Sheppard Brennand

Subject: UNE Tamworth ACHA - methodology supplementary

Attachments: G003_ProposedTestPits_20230918_01.pdf

Hi All,

Thank you all for your involvement so far in the ACHA for Tamworth UNE. Following on from the methodology sent out on 8th September 2023, this is a supplementary email with some more detail on the proposed test excavations.

I have attached a map with the proposed test pit locations of up to 17 test pits laid out on a grid across the study area. We propose for these test pits to be 1 x 1 m and to be placed in the areas of least disturbance. These numbers may be refined following the site survey (to take place in early/mid October) and findings throughout the test excavation, such as number of artefacts recovered, and depth of test pits.

Please let us know if you have any questions or comments regarding the placement or number of these test pits and let us know by the **6**th **October 2023**.

Thanks,

Amber Morgan

Graduate Archaeologist | Ecology & Heritage



T 02 9493 9500

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Amber Morgan

From: Aaron Talbott <ngurrugu74@outlook.com>
Sent: Monday, 11 September 2023 6:57 AM

To: Alan Williams
Subject: Tamworth UNE

CAUTION: This email originated outside of the Organisation.

Yaama Alan

Thanks for the Methodology for UNE project proposal in Tamworth. You are correct Alan that there have been very limited assessments in Tamworth itself but a highly occupied area. Obvious reasons include intensive habitation and development in the area as you are aware.

The Traditional name for the peel river was Callalla. Goonoo is place of black/Mudstone soil landscape. First white record was 1819?!!! when Mitchell discovered Walamoul and gaining a native guide, Mr Brown, from Tamworth to discover west along the Peelriver all the way to Leard State Forest before he turned back because he said "Mogo" Mogo and took off in fear.

The Project site is on the North side and high side of the river ???where there is limited flooding I believe. It could be a medium to high significance area. I believe a subsurface test program will determine that occupation was heavy. The survey of course will determine PADs but I am confident in my knowledge of area that there will sites found.

We shall find out in due course.

Yaluu

Aaron Talbott & Natalene Mercy M 0477 239 021 E ngurrugu74@outlook.com

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Megan Sheppard Brennand

From: lilly carroll <didgengunawalclan@yahoo.com.au>

Sent:Monday, 25 September 2023 1:35 PMTo:Amber Morgan; Megan Sheppard BrennandCc:Alan Williams; Megan Sheppard Brennand

Subject: Re: UNE Tamworth ACHA - methodology supplementary

Follow Up Flag: Follow up Flag Status: Flagged

CAUTION: This email originated outside of the Organisation.

Thanks for the info Amber

Hope to work with you

Sent from Yahoo Mail for iPhone

On Monday, September 25, 2023, 1:11 pm, Amber Morgan <a morgan@emmconsulting.com.au> wrote:

Hi All,

Thank you all for your involvement so far in the ACHA for Tamworth UNE. Following on from the methodology sent out on 8th September 2023, this is a supplementary email with some more detail on the proposed test excavations.

I have attached a map with the proposed test pit locations of up to 17 test pits laid out on a grid across the study area. We propose for these test pits to be $1 \times 1 \text{ m}$ and to be placed in the areas of least disturbance. These numbers may be refined following the site survey (to take place in early/mid October) and findings throughout the test excavation, such as number of artefacts recovered, and depth of test pits.

Please let us know if you have any questions or comments regarding the placement or number of these test pits and let us know by the **6th October 2023**.

Thanks,

Amber Morgan

Graduate Archaeologist | Ecology & Heritage



T 02 9493 9500

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Amber Morgan

From: Amber Morgan <amorgan@emmconsulting.com.au>

Sent: Thursday, 28 September 2023 1:09 PM

To: OEH HD Heritage Mailbox

Cc: Alan Williams; Megan Sheppard Brennand

Subject: Notice of intention to undertake archaeological test excavation - Prince of Wales

Park, Tamworth

Attachments: E230186_Methodology_v1.0.pdf; G003_ProposedTestPits_20230918_01.pdf

Dear Heritage NSW - ACH Team,

In accordance with Requirement 15 of the *Code of Practice for Archaeological Investigations of Aboriginal Objects in NSW*, we wish to advise that EMM Consulting Pty Ltd is proposing to undertake Aboriginal archaeological test excavations for the site located at the Prince of Wales Park, Tamworth between the **16th and 20th October 2023**.

Further details of these excavations are included in the attached documentation – provided to the RAPs on 8 October 2023

Kind regards,

Amber Morgan

Graduate Archaeologist | Ecology & Heritage



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Please consider the environment before printing my email.

Amber Morgan

From: Amber Morgan <amorgan@emmconsulting.com.au>

Sent: Wednesday, 25 October 2023 3:10 PM

To: Heritagemailbox

Cc: Megan Sheppard Brennand; Alan Williams

Subject: Notice of completion of archaeological test excavation - Prince of Wales Park,

Tamworth

Dear Heritage NSW - ACH Team,

In accordance with Requirement 15 of the *Code of Practice for Archaeological Investigations of Aboriginal Objects in NSW*, we wish to advise that EMM Consulting Pty Ltd completed the Aboriginal archaeological test excavations for the site located at the Prince of Wales Park, Tamworth between the **16th and 18th October 2023**.

Kind regards,

Amber Morgan

Graduate Archaeologist | Ecology & Heritage



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B.6 Stage 4 – Aboriginal feedback of the draft ACHA

RAP feedback from draft ACHA report.

E230186 | RP1 | v1

Megan Sheppard Brennand

From: Amber Morgan

Sent: Wednesday, 15 November 2023 4:01 PM

To: Megan Sheppard Brennand

Cc: Megan Sheppard Brennand; Alan Williams

Subject: UNE Tamworth Central Project - ACHA - for review input and comment

Hi all,

Thank you all for your ongoing involvement in the Aboriginal cultural heritage assessment for the UNE Tamworth Central Project, located in Tamworth NSW. It is with great pleasure that we can now provide you with a copy of the draft ACHA, for your review. The file is too large for our servers to send through, so the draft report can be downloaded from the following link:

E230186 UNE Tamworth Central ACHA DRAFT 1.pdf

We are seeking your feedback on the draft ACHA document. The ACHA has been developed based on consultation and on-site works with you and your organisations, and so hopefully aligns with our discussions and your expectations.

In accordance with Heritage NSW guidelines, we provide 28 days for the comment on the ACHA. If you wish to provide input or comments, please can you do so by this date: **Wednesday 13th December 2023.** We are happy to send out a hard copy if that's preferred, please just let us know and provide an up-to-date postal address and we will get it printed and posted to you.

Kind regards,

Amber Morgan

Graduate Archaeologist | Ecology & Heritage



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Our offices will be closed from Friday 22 December 2023 and will reopen on Wednesday 3 January 2024.



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Megan Sheppard Brennand

From: Amber Morgan

Sent: Tuesday, 19 December 2023 5:10 PM

To: Megan Sheppard Brennand

Subject: Fwd: UNE Tamworth Central Project - ACHA - for review input and comment

Attachments: Outlook-https__do.png

Amber Morgan

Graduate Archaeologist | Ecology & Heritage



T 02 9493 9500

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From: David Horton <daveyhorton69@gmail.com> Sent: Wednesday, November 15, 2023 4:14 pm

To: Amber Morgan <amorgan@emmconsulting.com.au>

Subject: Re: UNE Tamworth Central Project - ACHA - for review input and comment

CAUTION: This email originated outside of the Organisation.

My home address is 22 cabernet st muswellbrook nsw Australia 2333

On Wed, 15 Nov. 2023, 4:00 pm Amber Morgan, amorgan@emmconsulting.com.au wrote: Hi all,

Thank you all for your ongoing involvement in the Aboriginal cultural heritage assessment for the UNE Tamworth Central Project, located in Tamworth NSW. It is with great pleasure that we can now provide you with a copy of the draft ACHA, for your review. The file is too large for our servers to send through, so the draft report can be downloaded from the following link:

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hard copy if that's preferred, please just let us know and provide an up-to-date postal address and we will get it printed and posted to you.

Kind regards,

Amber Morgan

Graduate Archaeologist | Ecology & Heritage



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Megan Sheppard Brennand

From: Amber Morgan

Sent: Tuesday, 19 December 2023 5:10 PM

To: Megan Sheppard Brennand

Subject: Fwd: UNE Tamworth Central Project - ACHA - for review input and comment

Amber Morgan

Graduate Archaeologist | Ecology & Heritage



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From: Amber Morgan <amorgan@emmconsulting.com.au>

Sent: Thursday, December 7, 2023 10:35 am

To: Megan Sheppard Brennand <msheppardbrennand@emmconsulting.com.au> **Cc:** Alan Williams awilliams@emmconsulting.com.au; Megan Sheppard Brennand

<msheppardbrennand@emmconsulting.com.au>

Subject: Re: UNE Tamworth Central Project - ACHA - for review input and comment

Hi all,

This is just a friendly reminder that the review period for the UNE Tamworth Central Project – ACHA ends next week on **Wednesday 16 December 2023.** If you wish to provide any comments or input please do so by this date.

Thanks again, Amber

Amber Morgan

Graduate Archaeologist

02 9493 9500

M 0417 876 189

www.emmconsulting.com.au

From: Amber Morgan

Sent: Wednesday, 15 November 2023 4:00 PM

To: Megan Sheppard Brennand <msheppardbrennand@emmconsulting.com.au>

Cc: Megan Sheppard Brennand <msheppardbrennand@emmconsulting.com.au>; Alan Williams

<awilliams@emmconsulting.com.au>

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Kind regards,

Amber Morgan

Graduate Archaeologist | Ecology & Heritage



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Megan Sheppard Brennand

From: Robert Young <konanggo_consultancy@hotmail.com>

Sent: Thursday, 7 December 2023 3:38 PM

To: Amber Morgan; Megan Sheppard Brennand

Cc: Alan Williams

Subject: Re: UNE Tamworth Central Project - ACHA - for review input and comment

Follow Up Flag: Follow up Flag Status: Flagged

CAUTION: This email originated outside of the Organisation.

Dear Amber,

I have reviewed the ACHA and it was very informative, I have no other recommendations to submit

Yours In Culture,

Robert Young

Konanggo Aboriginal Cultural Heritage Services 2/42 Crawford Road, Brighton Le Sands 2216 NSW

Email: konanggo_consultancy@hotmail.com

Phone: 0450497270

From: Amber Morgan <amorgan@emmconsulting.com.au>

Sent: Thursday, 7 December 2023 10:35 AM

To: Megan Sheppard Brennand <msheppardbrennand@emmconsulting.com.au> **Cc:** Alan Williams <a williams@emmconsulting.com.au>; Megan Sheppard Brennand

<msheppardbrennand@emmconsulting.com.au>

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Thanks again, Amber

Amber Morgan

Graduate Archaeologist

02 9493 9500

M 0417 876 189

www.emmconsulting.com.au

From: Amber Morgan

Sent: Wednesday, 15 November 2023 4:00 PM

To: Megan Sheppard Brennand <msheppardbrennand@emmconsulting.com.au>

Cc: Megan Sheppard Brennand <msheppardbrennand@emmconsulting.com.au>; Alan Williams

<awilliams@emmconsulting.com.au>

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Kind regards,

Amber Morgan

Graduate Archaeologist | Ecology & Heritage



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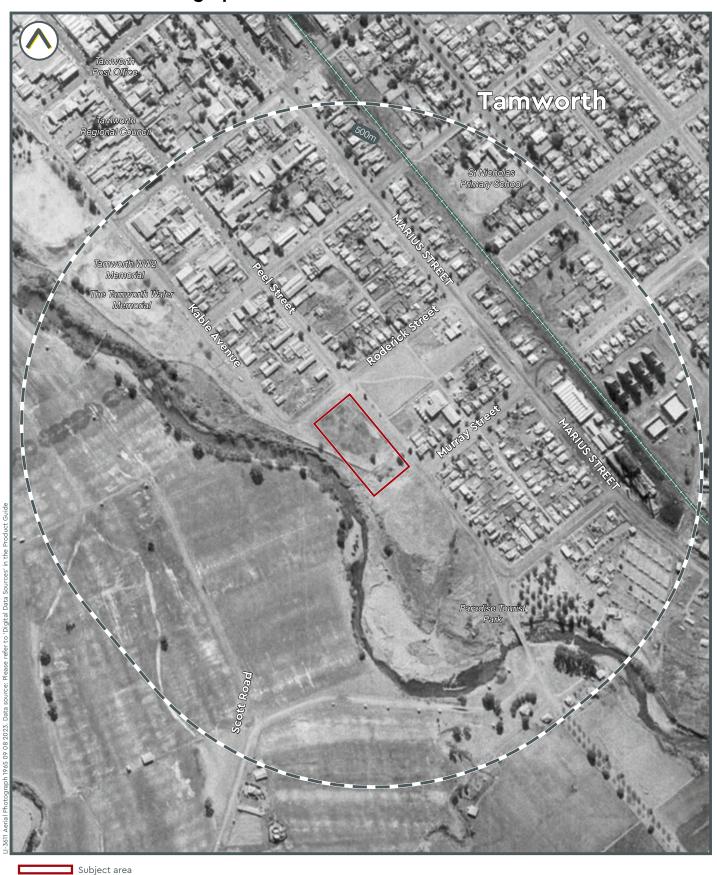
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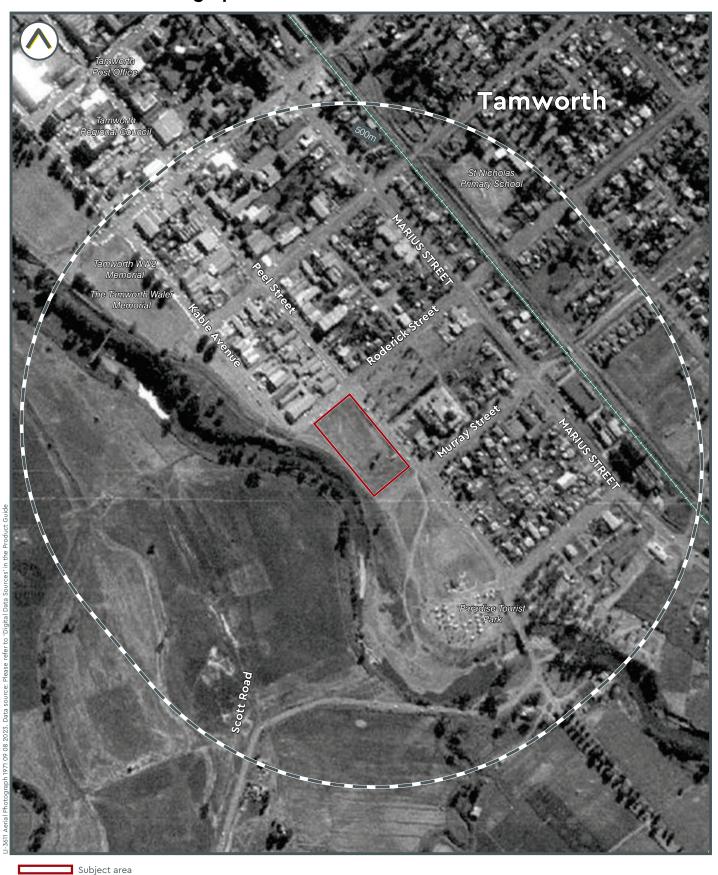
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Appendix C Historical aerials

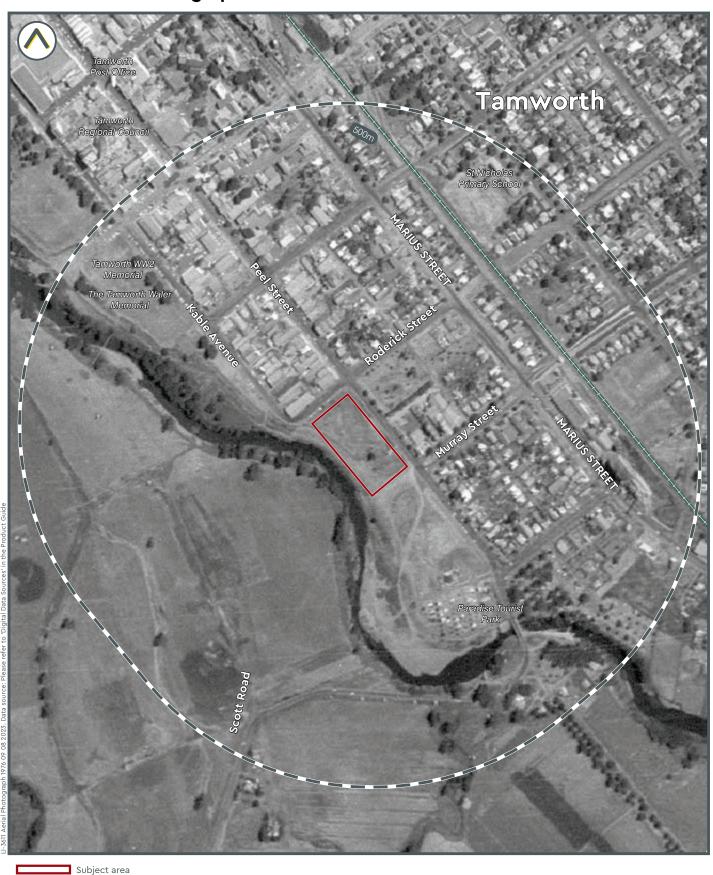




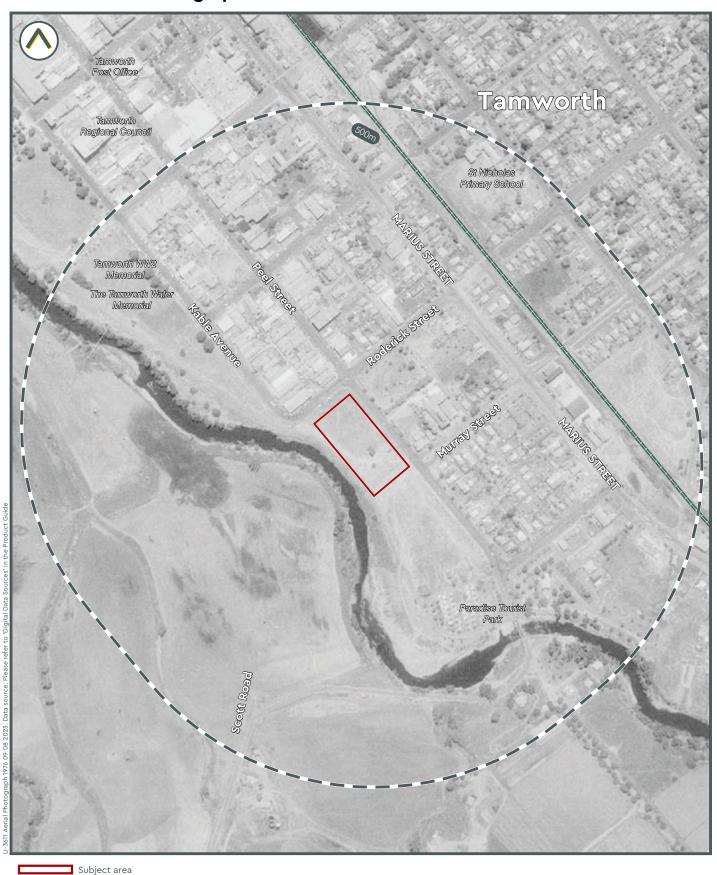














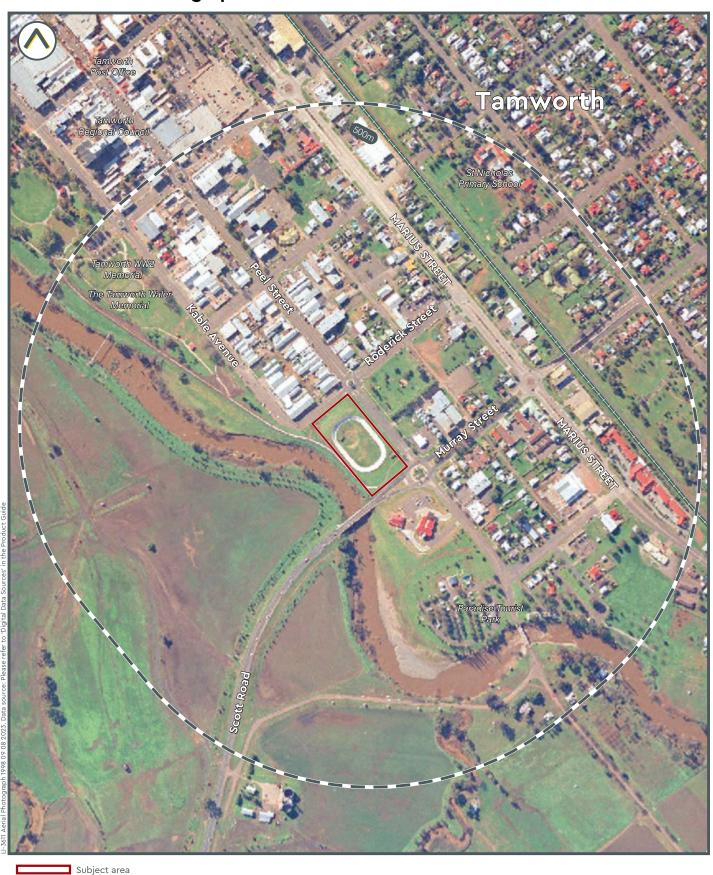




































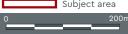














Appendix D

Archaeological background



D.1 Site definitions and recording methods used for this assessment

D.1.1 Aboriginal sites

In the AHIMS database, Aboriginal sites are defined in several ways. At the simplest level, sites are recorded as 'closed' or 'open'. Closed sites are associated with rockshelters and include other evidence of Aboriginal occupation that may be present, such as areas where subsurface Aboriginal objects may occur within the shelter ('potential archaeological deposit' (PAD)), faunal remains, and art on the shelter walls (paintings/engravings). Open sites are broadly defined and encompass all other types of Aboriginal site features that are located in areas where there is no rockshelter. The most common open site features found generally include artefacts, grinding grooves, art, culturally modified trees, and shell deposits (middens) (OEH 2012). The presence or absence of stone artefacts is often a defining factor in site identification, with almost every site likely to have at least some associated artefacts, as discard or loss of this most ubiquitous and practically indestructible marker of past Aboriginal visitation.

Any one site (or group of linked sites described as a 'complex') can contain several different site features. For example, a shelter may have art on the walls, artefacts on the floor surface or outside the shelter, and be predicted to contain faunal remains and further artefacts in the accumulated deposit inside.

A description of terms used to describe different site features known to occur in the vicinity of the study area is provided in Table D.1 and use definitions provided by OEH and those adopted by EMM in their field investigations to ensure consistency in recording. Similarly, there may be places of contemporary significance to Aboriginal people in the region and that will require consultation with this community to identify.

Table D.1 Site definitions and recording

Site feature	Definition and recording methods
Aboriginal ceremony and Dreaming	Previously referred to as mythological sites these are spiritual/story places where no physical evidence of previous use of the place may occur; e.g. natural unmodified landscape features, ceremonial or spiritual areas, men's/women's sites, dreaming (creation) tracks, marriage places etc.
Artefact site (open stone artefact site)	Objects such as stone tools, and associated flaked material, spears, manuports, grindstones, discarded stone flakes, modified glass or shell demonstrating evidence of use of the area by Aboriginal people.
	Open stone artefact sites were defined by the presence of one (isolated find) or more (artefact scatter) stone artefacts visible on the ground surface. The boundaries of a site are limited to the spatial extent of the visible stone artefacts. The mapped site points and/or 'site areas' do not represent the areas of potential archaeological deposit (PAD) that also apply to some sites (refer to the term 'PAD' below).
	Open stone artefact sites were recorded by marking each artefact location or each cluster of artefacts within a 5 m radius as a separate waypoint in the GPS. Site boundaries were allocated by drawing a line around the cluster waypoints for each site using ArcGIS software. Stone artefacts more than 50 m apart were recorded as separate sites. EMM acknowledges that the 50 m rule applied here is an arbitrary distinction for site boundaries and is used mainly for efficiencies in site management and to establish consistency in site recording methods
Burials	A traditional or contemporary (post-contact) burial of an Aboriginal person, which may occur outside designated cemeteries and may not be marked; e.g. in caves, marked by stone cairns, in sand areas, along creek banks, etc.
Fish trap	A modified area on watercourses where fish were trapped for short-term storage and gathering.
Grinding grooves	Grinding grooves were defined as an area of outcropping bedrock containing evidence of one or more grinding grooves where ground-stone hatchets or other grinding practices (i.e. seed grinding) were implemented.

E230186 | RP1 | v1 D.1

Table D.1 Site definitions and recording

Site feature	Definition and recording methods
Habitation structure	Structures constructed by Aboriginal people for short or long term shelter. More temporary structures are commonly preserved away from the NSW coastline, may include historic camps of contemporary significance. Smaller structures may make use of natural materials such as branches, logs and bark sheets or manufactured materials such as corrugated iron to form shelters. Archaeological remains of a former structure such as chimney/fireplace, raised earth building platform, excavated pits, rubble mounds, etc.
Modified tree (carved or scarred)	Trees which show the marks of modification as a result of cutting of bark from the trunk for use in the production of shields, canoes, boomerangs, burials shrouds, for medicinal purposes, foot holds etc., or alternately intentional carving of the heartwood of the tree to form a permanent marker to indicate ceremonial use/significance of a nearby area, again these carvings may also act as territorial or burial markers.
	Modified trees (either carved or scarred) can be difficult to identify. Scars commonly occur on trees through natural processes such a branch tears, insect damage, storm and fire damage and faunal damage. Scars can also occur from mechanical damage from vehicles or farming equipment.
	The attributes of potential scarred trees were discussed during the survey amongst archaeologists and RAPs before it was decided if a scar would be recorded or not. A precautionary approach was adopted, whereby some of the more ambiguous examples were recorded anyway. The assessment of scar trees was made from the experience of the survey team and the guideline <i>Aboriginal scarred trees in New South Wales: a field manual</i> (DEC 2005). In some of the more ambiguous examples, it cannot be verified whether some scars recorded during the survey are of natural or Aboriginal origin. In such instances, an expert evaluation by a scar tree expert (arborist or other) would be required to determine the status of certain trees.

E230186 | RP1 | v1 D.2

Table D.1 Site definitions and recording

Site feature	Definition and recording methods
Potential archaeological deposit (PAD)	An area where Aboriginal objects may occur below the ground surface. The term 'potential archaeological deposit' was first applied in Sydney regional archaeology in the 1980s, and referred to rockshelters that were large enough and contained enough accumulated deposit to allow archaeologists to predict that subsurface cultural material was likely to be present. Since then the term has come to include open sites where the same prediction can be made.
	EMM has defined PADs as the predicted extent of concentrated subsurface Aboriginal objects in a particular area. PADs are not technically Aboriginal sites until, and if, subsurface Aboriginal objects are identified, which is typically established through archaeological test excavation. PAD areas have been assigned to landforms that are distinguishable from the surrounding landscape (e.g. elevated areas with good outlook overlooking watercourses) as being likely to retain higher artefact densities than the assumed 'background scatter' of archaeological material in the broader landscape.
	The identification of PADs associated with Aboriginal open camp sites was partly based on observations in the field and discussions with RAPs, but also related to the predictive model. Although PAD was attributed to areas for a variety of reasons, the main qualifiers were:
	The presence of surface artefacts or other Aboriginal objects. Ground surface visibility as part of the archaeological survey effort was typically considered high enough in each PAD area to identify at least one or more surface artefacts thereby indicating likelihood of subsurface potential. Notwithstanding, finding no visible surface artefacts in an area would not disqualify an area from being attributed with PAD.
	Level to gently inclined ground (<10%) indicating suitable camping or activity areas.
	Contours that distinguish the landforms with PAD from the surrounding landscape (e.g. spur crest, hill crest or knoll). Landform boundaries were also interpreted through observations in the field. Notably, rocky crest landforms that were protected from intensive cultivation were often attributed with PAD.
	Proximity to water: typically up to 100 m from 1st and 2nd order streams and up to 200 m from 3rd order streams and above. Elevated landforms at the confluence of higher order streams were also more likely to be attributed with PAD.
	EMM acknowledges that all PAD areas have been historically cleared of native vegetation and some have been subject to pasture improvements such as ploughing. As such, the term PAD does not assume high subsurface integrity; instead it is a prediction of potential subsurface artefact concentrations.
	All stone quarry sites are predicted to have PAD. The assumption is that in most cases the visible surface material at quarries is represented by larger artefacts (such as cores) and that smaller material (e.g. flakes) is likely to be buried.
Restricted	Site information contained in the Aboriginal Heritage Information Management System is available only to certain authorised groups of people, as requested by the Aboriginal community. Detailed information may not be available in search reports.
Shell	An accumulation or deposit of shellfish from beach, estuarine, lacustrine or riverine species resulting from Aboriginal gathering or consumption. Usually found in deposits previously referred to as shell middens. Must be found in association with other objects like stone tools, fish bones, charcoal, fireplaces/hearths, and burials. Will vary greatly in size and composition.
Stone quarry	Usually a source of good quality stone which is quarried and used for the production of stone tools. Stone quarries represent where Aboriginal people gathered raw stone materials for stone tools and/or manufactured stone tools from the adjacent source material. Quarry sites are found at rock outcrops where the material was of suitable quality to have been used to manufacture stone tools. Stone quarries were defined by the presence of outcropping stone material with nearby evidence of the same material type used in the stone tool manufacture process. This was most commonly indicated by large stone cores or stone flakes distributed amongst the same naturally outcropping material. EMM acknowledges that the 'open stone artefact' site type shares some of the same characteristics as 'stone quarries', such as the presence of stone artefacts. However, they have been distinguished from each other because quarries can not only represent open camping activities, but also a fixed location where Aboriginal people needed to visit to extract a resource. In contrast, the location of typical open camp sites were not fixed, but chosen by Aboriginal people for their favourable conditions.

E230186 | RP1 | v1 D.3

D.2 AHIMS search results

E230186 | RP1 | v1 D.4



Extensive search - Site list report

Your Ref/PO Number: E230186 - Tamworth UNE

Client Service ID: 807752

<u>SiteID</u>	<u>SiteName</u>	<u>Datum</u>	Zone	Easting	Northing	<u>Context</u>	Site Status **	<u>SiteFeatures</u>	<u>SiteTypes</u>	Reports
29-2-0103	Hills Plain 6	AGD	56	303030	6561150	Open site	Valid	Artefact : -	Open Camp Site	
	Contact	<u>Recorders</u>	Janic	e Wilson,Lei	la McAdam,Iva	n Johnson		<u>Permits</u>	2313,2356	
29-2-0094	DTG/ST1 - Timbumduri Creek	AGD	56	298140	6556700	Open site	Valid	Modified Tree (Carved or Scarred):	Scarred Tree	
	<u>Contact</u>	Recorders	Mr.M	Iark Rawson				<u>Permits</u>		
20-2-0008	Red Hill 1	AGD	56	306950	6561550	Open site	Valid	Artefact : -	Open Camp Site	
	Contact	Recorders	Bill A	Allen,Janice V	Vilson			Permits		
29-2-0078	Marsupial Park Endevour Drive Marsupial Park	AGD	56	304550	6559400	Open site	Valid	Artefact : -	Open Camp Site	102239
	Contact	Recorders	Joan	na Newby				<u>Permits</u>		
29-2-0012	Tamworth Oxley Lookout	AGD	56	304400	6559500	Open site	Valid	Artefact : -	Open Camp Site	102239
	<u>Contact</u>	Recorders	Euge	ne Stockton				<u>Permits</u>		
29-2-0026	Fox Gully_(Nemingha) Mt Falcon duplicate of 29-2-0279	AGD	56	306200	6557500	Open site	Valid	Artefact : -	Open Camp Site	2124,102239
	Contact	Recorders	Anne	Lloyd				<u>Permits</u>		
29-2-0060	Marengo 3	AGD	56	303750	6561700	Open site	Valid	Artefact : -	Isolated Find	
	Contact	Recorders	I.M V	Vilson.Archa	eological Surv	evs & Salvage		<u>Permits</u>		
29-2-0062	Marengo 5	AGD		304320	6561800	Open site	Valid	Artefact : -	Isolated Find	
	Contact	Recorders	J.M V	Vilson,Archa	eological Surv	evs & Salvage		Permits		
29-2-0068	Marengo 5.	AGD	•	304320	6561800	Open site	Valid	Artefact : -	Isolated Find	
	Contact	Recorders	I.M V	Vilson.Archa	eological Surv	evs & Salvage		<u>Permits</u>		
29-2-0070	Marengo 3.	AGD		303950	6561700	Open site	Valid	Artefact : -	Isolated Find	
	Contact	Recorders	I.M V	Vilson.Archa	eological Surv	evs & Salvage		<u>Permits</u>		
29-2-0071	Marengo 2	AGD	•	303750	6561500	Open site	Valid	Stone Quarry : -, Artefact : -	Quarry	
	Contact	<u>Recorders</u>	J.M V	Vilson,Archa	eological Surv	eys & Salvage		<u>Permits</u>		
29-2-0073	Garawul Gurar	AGD	56	304300	6559750	Open site	Valid	Artefact : -	Open Camp Site	3487,102239
	Contact	Recorders	Arch	aeological Sı	ırveys & Salva	ge		<u>Permits</u>	1129,1645	
29-2-0059	Marengo 2;	AGD	56	303750	6561500	Open site	Valid	Stone Quarry : -, Artefact : -	Quarry	
	Contact	Recorders	J.M V	Vilson,Archa	eological Surv	eys & Salvage		<u>Permits</u>		
29-2-0001	Tamworth;West Tamworth;	AGD	56	298600	6555800	Open site	Not a Site	Artefact : -	Not an Aboriginal Site	1474
	<u>Contact</u>	Recorders	Harr	y Creamer,D	avies Heritage	Consultants Pty Ltd		<u>Permits</u>		
29-2-0110	Figtree Gully (Nemingha) duplicate of 29-2-0278	AGD	56	306200	6557800	Open site	Deleted	Artefact : -		102239
	Contact	Recorders		Lloyd				<u>Permits</u>		
29-2-0128	Kamilaroi Walking Track 4	AGD	56	305475	6558880	Open site	Valid	Artefact : 22		102239
	Contact	Recorders	Janic	e Wilson,Lei	la McAdam,Iva	n Johnson		<u>Permits</u>		
29-2-0134	Spring Creek 1 (SC 1)	AGD	56	302227	6561696	Open site	Valid	Artefact: 355		



Extensive search - Site list report

Your Ref/PO Number: E230186 - Tamworth UNE

Client Service ID: 807752

<u>SiteID</u>	<u>SiteName</u>	<u>Datum</u>	Zone	Easting	Northing	Context	Site Status **	SiteFeatures	<u>SiteTypes</u>	<u>Reports</u>
	Contact	Recorders	Janic	e Wilson				<u>Permits</u>		
29-2-0135	Spring Creek 2 (SC 2)	AGD	56	302819	6561506	Open site	Valid	Artefact : 1		
	Contact	Recorders	Janic	e Wilson				<u>Permits</u>		
29-2-0136	Spring Creek 3 (SC 3)	AGD	56	303075	6561229	Open site	Valid	Artefact: 16		
	Contact	Recorders	Janic	e Wilson				<u>Permits</u>		
29-2-0137	Spring Creek 4 (SC 4)	AGD	56	302224	6561500	Open site	Valid	Artefact: 9		
	Contact	Recorders	Janic	e Wilson				<u>Permits</u>		
29-2-0125	Kamilaroi Walking Track 2	AGD	56	304797	6558769	Open site	Valid	Artefact: 4		102239
	Contact	Recorders	Janic	e Wilson,Lei	la McAdam,Iva	n Johnson		<u>Permits</u>		
29-2-0126	Kamilaroi Walking Track 1	AGD	56	304418	6558883	Open site	Valid	Artefact: 7		102239
	Contact	Recorders	Janic	e Wilson,Lei	la McAdam,Iva	n Johnson		<u>Permits</u>		
29-2-0127	Kamilaroi Walking Track 3	AGD	56	305061	6559050	Open site	Valid	Artefact : 4		102239
	Contact	Recorders	Janic	e Wilson,Lei	la McAdam,Iva	n Johnson		<u>Permits</u>		
29-2-0138	Spring Creek 5 (SC 5)	AGD	56	302395	6561151	Open site	Valid	Artefact : 1		
	Contact	Recorders	Janic	e Wilson				<u>Permits</u>		
29-2-0139	Spring Creek 6-Tamworth	AGD	56	302634	6560739	Open site	Valid	Artefact: 5		
	Contact	Recorders	Janic	e Wilson				<u>Permits</u>		
29-2-0296	Wallamore Road ST1	GDA	56	304132	6559906	Open site	Destroyed	Modified Tree (Carved or Scarred) : -		104815
	Contact	Recorders	Ivan]	ohnson,Mr.	Patrick Gaynor			<u>Permits</u>	3146,3152	
29-2-0297	Restriction applied. Please contact ahims@environment.nsw.gov.au.					Open site	Destroyed			104815
	Contact	Recorders	Ivan]	ohnson,Mr.	Patrick Gaynor			<u>Permits</u>	3146,3152	
29-2-0298	Wallamore Road ST 3	GDA	56	304140	6559835	Open site	Destroyed	Modified Tree (Carved or Scarred) : -		104815
	Contact	Recorders	Mr.Pa	atrick Gayno	r				3146,3152	
29-2-0299	Wallamore Road ST 4	GDA	56	304140	6559839	Open site	Valid	Modified Tree (Carved or Scarred) : -		104815
	Contact	Recorders	P.J Ga	ynor Consu	tant Archaeol	ogist,Ivan Johnson		<u>Permits</u>	3146,3152	
29-2-0300	Wallamore Road ST 5	GDA	56	304140	6559833	Open site	Destroyed	Modified Tree (Carved or Scarred) : -		104815
	Contact	Recorders	P.J Ga	ynor Consu	tant Archaeolo	ogist		<u>Permits</u>	3146,3152	
29-2-0148	Garrieties Gully 1	AGD	56	304217	6558077	Open site	Valid	Artefact : 1		
	Contact	Recorders	Janic	e Wilson				<u>Permits</u>		
		AGD		304489	6558108	Open site	Valid	Artefact : 4		102239



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<u>SiteID</u>	<u>SiteName</u>	<u>Datum</u>	Zone	Easting	Northing	<u>Context</u>	Site Status **	<u>SiteFeatures</u>	<u>SiteTypes</u>	<u>Reports</u>
	Contact	Recorders	Janio	e Wilson				<u>Permits</u>		
29-2-0140	Spring Creek 7 - Tamworth	AGD	56	302181	6560958	Open site	Valid	Artefact: 7		
	Contact	Recorders	Janio	e Wilson				<u>Permits</u>		
29-2-0141	Spring Creek ST2	AGD	56	302622	6560484	Open site	Valid	Modified Tree		
								(Carved or Scarred) :		
	Contact	Recorders	Ionia	e Wilson				1 Permits		
29-2-0142	Armidale Road 1	AGD	,	304936	6556365	Open site	Valid	Artefact : 2		97360,102239
27 2 0112	Contact	Recorders		e Wilson	000000	open site	vana	Permits		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
29-2-0143	Garawul Gurar 2	AGD		304650	6559354	Open site	Valid	Artefact: 600		102239
27 2 0110	Contact	Recorders		e Wilson	0007001	open site	vana	Permits		102257
29-2-0144	Garawul Gurar 3	AGD	,	305329	6559553	Open site	Valid	Artefact : 17		102239
., . 0111	Contact	Recorders		e Wilson	0007000	open site	Varia	Permits		102207
29-2-0145	Garawul Gurar 4	AGD		304482	6559324	Open site	Valid	Art (Pigment or		102239
-, - 0110		1102		501102	000,021	open site	, and	Engraved): 16		102207
	Contact	Recorders	Janio	e Wilson				<u>Permits</u>		
9-2-0146	Garawul Gurar 5	AGD	56	304166	6559439	Open site	Valid	Artefact: 22		102239
	Contact	Recorders	Janio	e Wilson				<u>Permits</u>		
29-2-0147	Garawul Gurar 6	AGD	56	303934	6559492	Open site	Valid	Artefact : 1		102239
	Contact	Recorders	Janio	e Wilson				<u>Permits</u>		
29-2-0160	Timbumburi Creek Coledale	AGD	56	298575	6556000	Open site	Valid	Artefact: 34		
	Contact	Recorders	Janio	e Wilson				<u>Permits</u>		
9-2-0150	Garrieties Gully 3	AGD	56	304489	6558108	Open site	Valid	Artefact : -		102239
	Contact	Recorders	Janio	e Wilson				<u>Permits</u>		
29-2-0151	MacPherson Hill 1	AGD	56	304324	6557729	Open site	Valid	Artefact: 8		102239
	Contact	Recorders	Janio	e Wilson				<u>Permits</u>		
9-2-0152	MacPherson Hill 2	AGD	56	304476	6557795	Open site	Valid	Artefact : 1		102239
	Contact	Recorders	Janio	e Wilson				<u>Permits</u>		
29-2-0153	MacPherson Hill 3	AGD	56	304426	6557602	Open site	Valid	Artefact: 33		102239
	Contact	Recorders	Janio	e Wilson				<u>Permits</u>		
29-2-0157	Moore Creek Road 4	AGD	56	301194	6561158	Open site	Valid	Artefact : 1		
	Contact	Recorders	Janio	e Wilson				<u>Permits</u>		
29-2-0158	Moore Creek Road 5	AGD	56	301343	6560990	Open site	Valid	Artefact: 2		
	Contact	Recorders	Janio	e Wilson				<u>Permits</u>		
29-2-0159	Moore Creek Road 6	AGD	56	301332	6561335	Open site	Valid	Artefact : 1		
	<u>Contact</u>	Recorders	Janio	e Wilson				<u>Permits</u>		
29-2-0178	Barnes Gully IP/1	AGD	56	301256	6558659	Open site	Valid	Artefact: 1		99292



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GOVERNMENT											
<u>iteID</u>	<u>SiteName</u>	<u>Datum</u>	<u>Z</u> (one <u>Eas</u>	ting	Northing	Context	Site Status **	<u>SiteFeatures</u>	SiteTypes	<u>Reports</u>
	<u>Contact</u> T Russell	Recorders	<u>rs</u>	Archaeolo	gical Su	ırveys & Salvaş	ge		<u>Permits</u>		
9-2-0277	DTG/ST 1-Timbumburi Ck	GDA		56 2981	.40	6556700	Open site	Valid	Artefact : -		
	<u>Contact</u>	Recorders	<u>rs</u>	Stephanie	Garling	g			<u>Permits</u>		
9-2-0278	Figtree Gully 1 duplicate of 29-2-0110	AGD		56 3062	200	6557800	Open site	Valid	Artefact : -		
	Contact	Recorders	rs	Anne Lloy	d				<u>Permits</u>		
9-2-0279	Fox Gully 1 (Nemingha) duplicate of 29-2-0026	AGD		56 3062	200	6557500	Open site	Valid	Artefact : -		
	Contact	Recorders	r <u>s</u>	Anne Lloy	d				<u>Permits</u>		
9-2-0280	Garawul Gurar 1	GDA		56 3043	00	6559750	Open site	Valid	Artefact : -		
	Contact	Recorders	rs	Janice Wils	son				<u>Permits</u>		
9-2-0282	Spring Creek ST 2	GDA		56 3026	522	6560484	Open site	Valid	Modified Tree		
									(Carved or Scarred) :		
	Contact	Recorders	r <u>s</u>	Janice Wils	on,Lei	la McAdam			<u>Permits</u>		
9-2-0285	WAB ST 1 (Wallamore Anabranch Scarred Tree 1)	GDA		56 3001	.43	6559413	Open site	Valid	Modified Tree		
									(Carved or Scarred) :		
	Contact	Recorders	rc	Ianico Wile	on Loil	la McAdam			- Permits		
5-2-0008	Heather Brae Scarred Tree	AGD	<u> </u>	56 2964		6559903	Open site	Valid	Modified Tree		
3 2 0000	nedule: Blue scarred free	nab		30 270	.00	0007700	open site	vana	(Carved or Scarred) :		
	Contact	Recorders	r <u>s</u>	Ms.Suzann	e Huds	on			<u>Permits</u>		
5-2-0006	Redbank IP/1	GDA		56 3053	320	6553886	Open site	Valid	Artefact : 5		102239
	Contact	Recorders	rs	Archaeolo	gical Su	ırveys & Salvaş	ge		<u>Permits</u>		
9-2-0288	Garrieties Gully Historic Site	GDA		56 3046	37	6558345	Open site	Valid	Artefact : -		102239
	Contact	Recorders	r <u>s</u>	Janice Wils	on,Leil	la McAdam			<u>Permits</u>		
9-2-0303	Calala Creek IP/1	AGD		56 3037	′53	6555292	Open site	Valid	Artefact : -		102239
	Contact	Recorders	rs	Ivan Johns	on,Mr.l	Patrick Gaynor			<u>Permits</u>	3351,3360	
9-2-0304	Calala Creek IP/2	AGD		56 3034		6555394	Open site	Valid	Artefact : 2		102239
	Contact	Recorders	rs.	Mr.Patrick	Gayno	r			<u>Pe</u> rmits	3351,3360	
9-2-0308	Oxley Park Scarred Tree 2	AGD	_	56 3053		6558946	Open site	Valid	Modified Tree	,	
							•		(Carved or Scarred):		
	Contact Mr.Brian Allan	Recorders	r <u>s</u>	Barry Cain					<u>Permits</u>		
9-2-0307	Oxley Park Scarred Tree 1	AGD		56 3054	16	6558943	Open site	Valid	Modified Tree (Carved or Scarred) :		
									3		



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<u>SiteID</u>	SiteName	<u>Datum</u>	Zone	Easting	Northing	<u>Context</u>	Site Status **	<u>SiteFeatures</u>	<u>SiteTypes</u>	<u>Reports</u>
29-2-0306	Tamworth Botanical Gardens Cultural Artefact Area & Scarred Tree Sections 1 & 2 $$	GDA	56	304130	6559908	Open site	Valid	Artefact : 200, Modified Tree (Carved or Scarred) : 6		
	Contact Mr.Brian Allan	Recorders	Barr	y Cain				<u>Permits</u>		
29-2-0330	Spring Creek Bridge Site 1	AGD	56	302279	6561066	Open site	Valid	Artefact : -		
	Contact Tamworth LALC	Recorders	Mr.P	atrick Gayno	or			<u>Permits</u>		
29-2-0325	GG05	GDA	56	302372	6553905	Open site	Valid	Artefact : 1		
	Contact	Recorders	Mr.T	im Robins				<u>Permits</u>		
29-2-0326	GG06	GDA	56	302437	6553821	Open site	Valid	Artefact : 1		
	<u>Contact</u>	Recorders		im Robins				<u>Permits</u>		
29-2-0328	GG03	GDA	56	302390	6554565	Open site	Valid	Artefact : 1		
	Contact	Recorders		im Robins				<u>Permits</u>		
29-2-0329	GG01	GDA	56	302063	6554587	Open site	Valid	Artefact : 1		
	<u>Contact</u>	Recorders	Mr.T	im Robins				<u>Permits</u>		
29-2-0309	Restriction applied. Please contact ahims@environment.nsw.gov.au.					Open site	Valid			103085,10308 6
	Contact	Recorders	Barr	y Cain,Mr.Rı	ıssell Reid			<u>Permits</u>		
29-2-0314	DR05	GDA	56	299361	6553823	Open site	Valid	Artefact : 1		
	Contact	Recorders	Mr.T	im Robins				<u>Permits</u>		
29-2-0315	DR06	GDA	56	299223	6554130	Open site	Valid	Artefact : 1		
	Contact	<u>Recorders</u>	Mr.T	im Robins				<u>Permits</u>		
29-2-0316	DR07	GDA	56	299053	6554428	Open site	Valid	Artefact : 1		
	Contact	Recorders	Mr.T	im Robins				<u>Permits</u>		
29-2-0317	DR08	GDA	56	299161	6554386	Open site	Valid	Artefact : 1		
	Contact	Recorders		im Robins				<u>Permits</u>		
29-2-0318	DR09	GDA	56	299201	6554255	Open site	Valid	Artefact : 1		
	Contact	Recorders	Mr.T	im Robins				<u>Permits</u>		
29-2-0319	DR10-1	GDA	56	299249	6554138	Open site	Valid	Artefact : 1		
	Contact	Recorders		im Robins				<u>Permits</u>		
29-2-0320	DR11-1	GDA	56	299312	6554072	Open site	Valid	Artefact : 1		
	<u>Contact</u>	Recorders		im Robins				<u>Permits</u>		
29-2-0321	DR12-1	GDA	56	298176	6553878	Open site	Valid	Artefact : 1, Modified Tree (Carved or Scarred) : 1		
	Contact	Recorders	Mr.T	im Robins				<u>Permits</u>		



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<u>SiteID</u>	<u>SiteName</u>	<u>Datum</u>	Zone	Easting	Northing	<u>Context</u>	Site Status **	SiteFeatures		<u>SiteTypes</u>	<u>Reports</u>
29-2-0322	DR13-1	GDA	56	298252	6553818	Open site	Valid	Artefact : 1, Mo			
								Tree (Carved or	r		
	Contact	Recorders	Mr Ti	m Robins				Scarred): 1	rmits		
29-2-0323	DR14-1	GDA		298142	6553755	Open site	Valid	Artefact : 1	11111115		
L) L 0020	Contact	Recorders		m Robins	0000700	open site	Vuila		rmits		
25-2-0009	Marsupial Park 2	GDA		304648	6559347	Open site	Valid	Artefact : -	<u>i iiits</u>		
23-2-0009	•					•	vanu			2700	
29-2-0336	Contact Heather brea 3	Recorders GDA		ynor (consu 297071	ltant),Mr.Patri 6559146	Open site	Valid	Artefact : -	<u>rmits</u>	3798	
29-2-0330					0337140	Open site	vanu		:		
29-2-0337	Contact RPS COMMON EAST 1	Recorders GDA		drian Piper 302362	6561938	Onen site	Valid	Artefact : 1	<u>rmits</u>		
29-2-0337						Open site					
29-2-0338	Contact DDC COMMON FACT 2	Recorders				amilton,Ms.Laraine l			<u>rmits</u>		
29-2-0338	RPS COMMON EAST 2	GDA		302463	6561926	Open site	Valid	Artefact : 1			
00.0.0000	Contact	Recorders				amilton,Ms.Laraine l			<u>rmits</u>		
29-2-0339	RPS COMMON EAST 3	GDA		302540	6561926	Open site	Valid	Artefact : 1			
20.0.0046	Contact	Recorders			0	amilton,Ms.Laraine l			<u>rmits</u>		40444040440
29-2-0346	VICTORIA PARK SITE 1	GDA	56	303994	6559895	Open site	Valid	Artefact : 1			104419,10442 7
	<u>Contact</u>	Recorders	Tamy	worth LALC.	Mr.Donnie (Ch	ris) Fermor		Pei	rmits	4378	/
29-2-0347	Victoria Park 2	GDA		303676	6557653	Open site	Valid	Artefact : 1			
	Contact	Recorders	Tamy	worth LALC.	Mr.Donnie (Cł	ris) Fermor		Pei	rmits		
29-2-0361	Potential Scarred Tree TQS-ST1	GDA	-	297096	6556251	Open site	Valid	Modified Tree			
	·					•		(Carved or Scar	rred) :		
								1			
20.2.22	Contact	Recorders				ompany) Lillis,Virtu			<u>rmits</u>		
29-2-0360	Victoria Park 3	GDA			6559077	Open site	Valid	Artefact : -			
	Contact	Recorders	,		ltant),Mr.Patri	-			<u>rmits</u>	4635	
29-2-0411	WSF-001	GDA	56	296694	6554752	Open site	Valid	Artefact : 1			
	Contact	Recorders				y Ltd - Pottsville			<u>rmits</u>	4911	
29-2-0363	Global Gateway drainage (GGD) CMT 02	GDA	56	296470	6559268	Open site	Valid	Modified Tree	10		
								(Carved or Scar	rred):		
	<u>Contact</u>	Recorders	ARFA	Fnvironme	ntal & Heritag	e - Dubbo,Mrs.Anna	Darby	- Pei	rmits		
29-2-0364	Global Gateway Drainage Isolated Find E (GGD IF E)	GDA		297114	6559339	Open site	Valid	Artefact : -	<u> </u>		
	Contact	Recorders				e - Dubbo,Mrs.Anna			rmits		
29-2-0365	Global Gateway Drainage Isolated Find D (GGD IF D)	GDA		296973	6559105	Open site	Valid	Artefact : -			
0000	Contact	Recorders				e - Dubbo,Mrs.Anna			rmits		
29-2-0366	Global Gateway Drainage Isolated Find A (GGD IF A)	GDA		298927	6555496	Open site	Valid	Artefact : -	1111115		
49-4-USUU	diobai dateway brailiage isolated filld A (ddb if A)	ανn	30	∠ ∃0∃ ∠ /	0333470	open site	v anu	Alteract:			



Extensive search - Site list report

Your Ref/PO Number: E230186 - Tamworth UNE

Client Service ID: 807752

<u>SiteID</u>	SiteName	<u>Datum</u>	Zone	Easting	Northing	Context	Site Status **	<u>SiteFeatur</u>	<u>es</u>	<u>SiteTypes</u>	Reports
	Contact	Recorders	AREA	Environme	ntal & Heritag	e - Dubbo,Mrs.Anna	Darby		Permits		
9-2-0370	Tamworth Intermodal OS1	GDA		296594	6559533		Valid	Artefact : -			
	Contact	Recorders	Mr.N	icholas Jame	s Harrop				Permits	4750	
9-2-0412	Barnes Gully 1	GDA	56	302158	6554634	Open site	Valid	Artefact : -			
	Contact	Recorders	Everi	ck Heritage l	Pty Ltd,Mr.Ma	thew Finlayson			Permits		
29-2-0424	Hillvue Public School	GDA	56	299699	6555709	Open site	Valid	Artefact : -			
	Contact	Recorders	AMA	C Group P/L,	Mr.Benjamin S	Streat			<u>Permits</u>		
9-2-0428	GG AFT05	GDA	56	302253	6554605	Open site	Valid	Artefact : -			
	Contact	Recorders	Everi	ck Heritage l	Pty Ltd,Mr.Ma	tt Finlayson			Permits		
9-2-0429	GG AFT04	GDA	56	302735	6554311	Open site	Valid	Artefact : -			
	Contact	Recorders	Everi	ck Heritage	Pty Ltd,Mr.Ma	tt Finlayson			Permits		
9-2-0421	GG-AFT01	GDA	56	302629	6554117	Open site	Valid	Artefact : -			
	Contact	Recorders	Everi	ck Heritage	Pty Ltd,Everic	k Heritage Pty Ltd,M	r.Matt Finlayson,M	r.Matt Finlay	Permits		
9-2-0423	GG-AFT03	GDA	56	302706	6554216	Open site	Valid	Artefact : -			
	Contact	Recorders	Everi	ck Heritage l	Pty Ltd,Mr.Ma	tt Finlayson			Permits		
9-2-0430	GG-AS01	GDA	56	302668	6554010	Open site	Valid	Artefact : -			
	Contact	Recorders	Everi	ck Heritage l	Pty Ltd,Mr.Ma	tt Finlayson			Permits		
9-2-0431	Arcadia IF05	GDA	56	299848	6554458	Open site	Valid	Artefact : -			
	<u>Contact</u>	Recorders	AREA	Environme	ntal & Heritag	e - Dubbo,Mrs.Anna	Darby		Permits		
9-2-0432	Arcadia IF06	GDA	56	299198	6554500	Open site	Valid	Artefact : -			
	<u>Contact</u>	Recorders	AREA	Environme	ntal & Heritag	e - Dubbo,Mrs.Anna	Darby		<u>Permits</u>		
9-2-0433	Arcadia IF07	GDA	56	299485	6554213	Open site	Valid	Artefact : -			
	Contact	Recorders	AREA	Environme	ntal & Heritag	e - Dubbo,Mrs.Anna	Darby		Permits		
9-2-0435	Arcadia AS04	GDA	56	299378	6554018	Open site	Valid	Artefact : -			
	Contact	Recorders	AREA	Environme	ntal & Heritag	e - Dubbo,Mrs.Anna	Darby		<u>Permits</u>		
9-2-0436	Arcadia AS05	GDA	56	299344	6553882	Open site	Valid	Artefact : -			
	<u>Contact</u>	Recorders	AREA	Environme	ntal & Heritag	e - Dubbo,Mrs.Anna	Darby		<u>Permits</u>		
9-2-0439	Arcadia IF03	GDA	56	299253	6553976	Open site	Valid	Artefact : -			
	<u>Contact</u>	Recorders	AREA	Environme	ntal & Heritag	e - Dubbo,Mrs.Anna	Darby		<u>Permits</u>		
9-2-0440	Arcadia IF02	GDA	56	299282	6553938	Open site	Valid	Artefact : -			
	Contact	Recorders	AREA	Environme	ntal & Heritag	e - Dubbo,Mrs.Anna	Darby		<u>Permits</u>		
9-2-0441	Arcadia AS07	GDA	56	299113	6554515	Open site	Valid	Artefact : -			
	Contact	Recorders	AREA	Environme	ntal & Heritag	e - Dubbo,Mrs.Anna	•		<u>Permits</u>		
9-2-0442	Arcadia AS03	GDA	56	299430	6553857	Open site	Valid	Artefact : -			
	Contact	Recorders	AREA	Environme	ntal & Heritag	e - Dubbo,Mrs.Anna	Darby		Permits		



Extensive search - Site list report

Your Ref/PO Number: E230186 - Tamworth UNE

Client Service ID: 807752

<u>SiteID</u> <u>SiteName</u> <u>Datum</u> <u>Zone</u> <u>Easting</u> <u>Northing</u> <u>Context</u> <u>Site Status **</u> <u>SiteFeatures</u> <u>SiteTypes</u> <u>Reports</u>

** Site Status

Valid - The site has been recorded and accepted onto the system as valid

Destroyed - The site has been completely impacted or harmed usually as consequence of permit activity but sometimes also after natural events. There is nothing left of the site on the ground but proponents should proceed with caution.

Partially Destroyed - The site has been only partially impacted or harmed usually as consequence of permit activity but sometimes also after natural events. There might be parts or sections of the original site still present on the ground

Not a site - The site has been originally entered and accepted onto AHIMS as a valid site but after further investigations it was decided it is NOT an aboriginal site. Impact of this type of site does not require permit but Heritage NSW should be notified

Appendix E Field investigation



E.1 Test pit data

Table E.1 Test pits excavated as part of the ACHA investigations

Test pit #	Max spit #	Artefacts recovered (n)
1	2	0
2	2	0
3	3	0
4	3	0
5	5	0
6	3	0
7	6	0
8	1	0
Total	-	0
Average		-

E230186 | RP1 | v1 E.3

E.2 Photographic catalogue for test excavation



Context, north Base of pit, north North section





East section South section West section



Context, north Base of pit, north North section













West section

East section South section



Context, north Base of pit, north North section













East section South section

West section



Context, north Base of pit, north North section













East section South section

West section



Context, north Base of pit, north North section





West section







East section South section



Context, north Base of pit, north North section













East section South section

West section



Context, north Base of pit, north North section

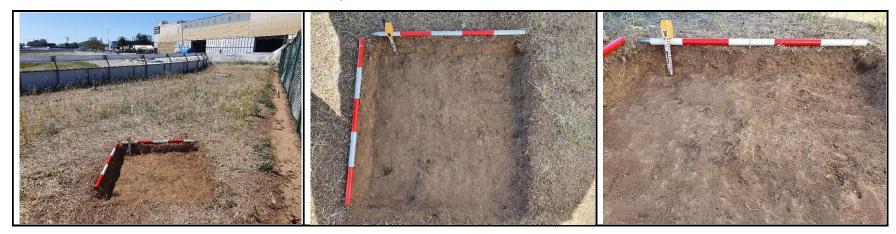




East section South section West section West section



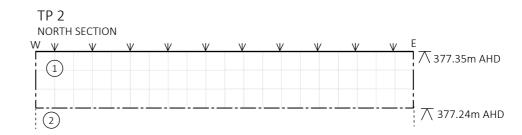
Context, north Base of pit, north North section

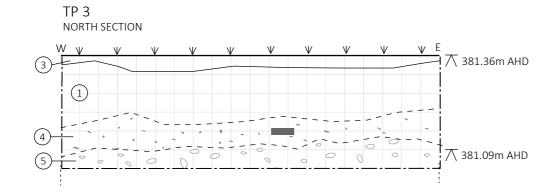


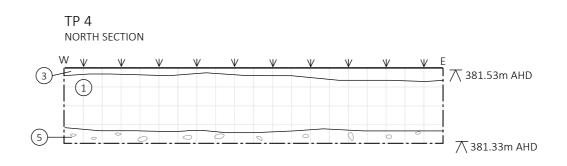


East section South section West section West section

E.3 Scale drawings of excavated test pits







- 1 BROWNISH GREY CLAY LOAM WITH IRREGULAR, POORLY SORTED GRAVEL INCLUSIONS
- (2) GREYISH BROWN HARDENED CLAY
- (3) DARK BROWN SILTY LOAM
- (4) HEAVY CLAY LOAM WITH FREQUENT GRAVEL INCLUSIONS

- (5) YELLOWISH-BROWN CLAY WITH ABUNDANT SHALE AND GRAVEL INCLUSIONS
- 6 ORANGE-RED PLASTIC CLAY
- (7) HEAVY RED BROWN CLAY
- (8) DARK BROWN CLAY LOAM BECOMMING CLAYEY WITH DEPTH



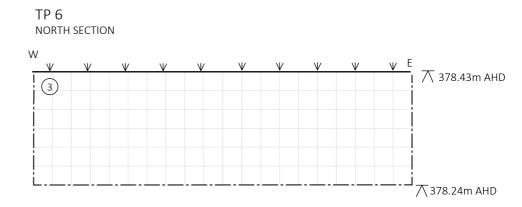
EMM CONSULTANTS PTY LTD	VERSION	DESCRIPTION	DATE	LEGEND	
Ground floor, 20 Chandos Street	1.0	FINAL	13/11/2023	—	PIT BOUNDARY
St Leonards NSW 2065					SOIL PROFILE BOUNDARY
T 02 9493 9500					DIFFUSE SOIL PROFILE BOUNDARY
E info@emmconsulting.com.au					BRICK
www.emmconsulting.com.au				385	GRAVEL INCLUSIONS
				389	SHALE INCLUSIONS
	I				

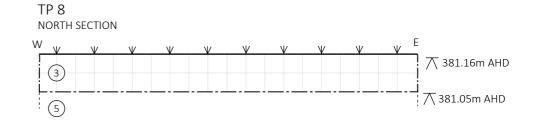
CLIENT UNIVERISTY OF NEW ENGLAND PROJECT
UNE TAMWORTH CENTRAL PROJECT

TITLE
TEST PIT SECTION DRAWINGS

TP SEC	CTION DRAV	VINGS
SCALE	DRAWN/CHECK	DRAWING NO.
1:10	AM/MSB	004
PROJECT NO.	VERSION	001
E230186	1.0	

TP 5 NORTH SECTION √379.89m AHD (3) → 379.50m AHD TP 7 NORTH SECTION 378.44m AHD (3) **⊼** 377.87m AHD





- 1 BROWNISH GREY CLAY LOAM WITH IRREGULAR, POORLY SORTED GRAVEL INCLUSIONS
- (2) GREYISH BROWN HARDENED CLAY
- (3) DARK BROWN SILTY LOAM
- (4) HEAVY CLAY LOAM WITH FREQUENT GRAVEL INCLUSIONS

- (5) YELLOWISH-BROWN CLAY WITH ABUNDANT SHALE AND GRAVEL INCLUSIONS
- (6) ORANGE-RED PLASTIC CLAY
- (7) HEAVY RED BROWN CLAY
- (8) DARK BROWN CLAY LOAM BECOMMING CLAYEY WITH DEPTH



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Ground floor, 20 Chandos Street	1
St Leonards NSW 2065	L
T 02 9493 9500	
E info@emmconsulting.com.au	
www.emmconsulting.com.au	

VERSION	DESCRIPTION	DATE	LEGEND	
1.0	FINAL	13/11/2023		PIT BOUNDARY
				SOIL PROFILE BOUNDARY
				DIFFUSE SOIL PROFILE BOUNDARY
				BRICK
			389	GRAVEL INCLUSIONS
			389	SHALE INCLUSIONS



PROJECT
UNE TAMWORTH CENTRAL PROJECT

TITLE
TEST PIT SECTION DRAWINGS

TP SEC	VINGS	
SCALE	DRAWN/CHECK	DRAWING NO.
1:10	AM/MSB	000
PROJECT NO.	VERSION	002
E230186	1.0	

Australia

SYDNEY

Ground floor 20 Chandos Street St Leonards NSW 2065 T 02 9493 9500

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MELBOURNE

Suite 8.03 Level 8 454 Collins Street Melbourne VIC 3000 T 03 9993 1900

PERTH

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