ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT

New Town Location

Brimbin, NSW

July 2013

Local Government Area: Greater Taree

Consultant Name: Niche Environment and Heritage Pty Ltd

Authors: Maria Cotter, Jamie Reeves, Renée Regal and Clare Anderson

Proponent: Roche Group Pty Ltd

Document Controls

Project No.	10-072		
Document Description	Aboriginal Cultural Heritage Assessment for the proposed New Town at Brimbin		
	Name	Signed	Date
Niche Project Manager(s)	Jamie Reeves		15 July 2013
Document Manager	Jamie Reeves		
Authors	Maria Cotter, Jamie Reeves, Renée Regal and Clare Anderson		
External Review	Mr Wes Van der Gardner Roche Group Pty Ltd		
Document Status	FINAL		
Date	15 July 2013		
Prepared for:	Roche Group Pty Ltd		

Sydney Office
PO Box 231, Concord NSW 2137
Mobile: 0488 224 888
Fax: 02 4017 0071
jreeves@niche-eh.com

Central Coast/Hunter Office
PO Box 3104, Umina Beach, NSW 2257 Mobile: 0488 224 999
Fax: 02 4017 0071
rharrington@niche-eh.com

Illawarra/Southern NSW Office
PO Box 12, Macarthur Square, NSW 2560
Mobile: 0488 224 777
Fax: 02 4017 0071
mrichardson@niche-eh.com

Table of Contents

List of Tables

List of Figures

List of Appendices

List of Abbreviations

ACHCRs	Aboriginal cultural heritage consultation requirements for proponents 2010 (DECCW, 2010).
AHD	Australian Height Datum
AHIMS	Aboriginal Heritage Information Management System
AHIP	Aboriginal Heritage Impact Permit
DA	Development Application
DECCW	Department of Environment, Climate Change and Water
DP	Deposit Plan
EP&A Act	Environmental Planning & Assessment Act (NSW, 1979)
GTCC	Greater Taree City Council
LEP	Local Environmental Plan
LGA	Local Government Area
NP&W Act	National Park and Wildlife Act (NSW, 1974)
NPWS	NSW National Parks & Wildlife Service
OEH	Office of Environment and Heritage (formerly DECCW)
PAD	Potential Archaeological Deposit

***All measurements are abbreviated as per standard metric notation**

Summary

Introduction
This document reports the results of an Aboriginal cultural heritage assessment of an approximately 3763 hectare parcel of land near Brimbin on the Mid North Coast of New South Wales upon which the Roche Group Pty Ltd propose to develop a new town. The assessment was conducted by Niche Environment and Heritage with the primary objective to identify and categorise the Aboriginal cultural heritage resource of this Subject Area in order to inform the *Brimbin Development Strategy and Structure Plan*; and facilitate the preparation of the land use re-zoning application required for the development to proceed.

Methods
The Aboriginal cultural heritage assessment involved a desktop review of the environmental, cultural and archaeological contexts of the development area; Aboriginal community consultation as per expected consultation requirements; and a targeted archaeological survey of the Subject Area conducted in accord with current Codes of Practice for such investigations. The archaeological survey was designed to ensure strategic coverage of the Subject Area and its landforms and to allow categorisation of the archaeological record in areas likely to be impacted by the development. Combined with the results of previous surveys in the immediate area, the archaeological survey was deemed to be of sufficient effectiveness to characterise the nature of the archaeological record, and the heritage values inherent in it.

Results
A total of 14 Aboriginal archaeological sites were identified as a result of the targeted survey including 9 isolated finds, 3 scarred trees and two artefact scatters. With the exception of Site Brimbin 13 all sites were considered of low to moderate archaeological significance. Brimbin 13, an artefact scatter with a locally diverse assemblage with potential to contain subsurface deposits was determined to be of high archaeological significance and worthy of further investigation and/or conservation.

The Aboriginal cultural significance of the subject area is yet to be fully determined. Discussions with Aboriginal survey participants point to the view that stone artefacts wherever deposited represent the *in situ* use of that landscape by ancestral Aboriginals at some-time in the past. However indications from the Aboriginal community that sites of ceremonial and/or mythological importance may exist within the Subject Area are yet to be confirmed or verified.

Recommendations
The following preliminary recommendations are provided with respect to the known and potential Aboriginal cultural heritage resource within the Subject Area:

- Where possible all current conservation zones should be retained and an Aboriginal Cultural Heritage Management Plan (ACHMP) should be prepared for the Subject Area to ensure the adequate protection and conservation of the Aboriginal cultural values identified within it. This ACHMP should address/include the following further recommendations:

    1. For archaeological resources that are identified within/adjacent to the riparian conservation zones consideration should be given to the following conservation management option:

        - To reduce the public's ongoing risk of causing harm to Aboriginal objects, all objects in/adjacent to these riparian corridors should - under the terms of an Aboriginal Heritage Impact Permit - be collected and placed either in the Care and Control of the Local Aboriginal community and or into an in perpetuity conservation zone such as the nearby Brimbin Nature Reserve. If this option is pursued then interpretative signage is recommended for those riparian corridors

that had retained Aboriginal object to acknowledge the importance of these zones to the Biripi people.

2. To protect the archaeologically sensitive site Brimbin 13 consideration should be given to its *in situ* preservation within an archaeological conservation area. The nature and size of this conservation area should be determined at the subdivision stage of the development when the likely impacts to Aboriginal objects are more precisely known.

3. If at the design and subdivision stage of the development it is determined that the conservation of Brimbin 13 is not feasible and/or practicable then a detailed survey and salvage excavation of this archaeologically sensitive site should be undertaken. This may require the proponent to seek a s90 Aboriginal Heritage Impact Permit to allow for the authorised harm to Aboriginal objects.

- Consideration should be given to the undertaking of a small oral history project focusing on the subject area, and Aboriginal elders who have knowledge of it. The purpose of an oral history project would be to ensure the Aboriginal cultural values of the subject area, which are likely to be local in nature, are clarified and appropriately defined.

- With implementation of the above recommendations the proposed development of the subject area should be considered without Aboriginal cultural heritage constraint.

1 Introduction

1.1 Background

Niche Environment and Heritage has been commissioned by Roche Group Pty Ltd, the proponent, to complete an Aboriginal cultural heritage (ACH) assessment of a large contiguous land holding - centred about the locality of Brimbin on the mid-north coast of NSW - upon which a new town is proposed to be developed. The ACH assessment of the proposed new town area is expected to inform the Brimbin Development Strategy and Structure Plan and facilitate the preparation of the land use re-zoning application required for the development to proceed. In turn, upon planning approval the Brimbin Development Strategy and Structure Plan is expected to guide and inform future development applications under Part 4 of the *Environmental Planning & Assessment Act* 1979, and may therefore result in future applications for Aboriginal Heritage Impact Permits (AHIPS) under Part 6 of the recently amended *National Parks and Wildlife Act* 1974.

The Aboriginal heritage values of an approximately 900 hectare portion of the Subject Area have previously been assessed for their cultural heritage values by Ms Jacqueline Collins (Collins 2003, 2004). Since this assessment the proponent has acquired the land and the overall holdings available for development have substantially increased. In addition substantial changes to guidelines, policy, and legislation pertaining to the assessment and regulation of Aboriginal cultural objects in NSW have occurred. As a consequence of these changes the Office of Environment and Heritage (OEH, formerly the NSW Department of Environment, Climate Change and Water (DECCW)) recommended:

- A review of the recommendations made by Collins in 2003 for the area previously assessed;
- Archaeological and cultural heritage assessment of those areas yet to be assessed;
- Further consultation with Registered Aboriginal Parties;
- Areas of high heritage significance within the structure plan be set aside as parkland or conservation areas.

1.2 Project Brief and Objectives

Niche's brief and the objective of this Aboriginal cultural heritage assessment is to provide information that aids the development of the Brimbin Development Strategy and Structure Plan. The information provided is framed so as to meet the requirements of the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales: Part 6 National Parks and Wildlife Act 1974* (DECCW 2010a) and will be specifically targeted to:

- Address the matters raised by OEH above;
- Provide a review of previous archaeological work;
- Provide a review of the landscape context;

- Provide a summary and discussion of local and regional Aboriginal land-use and its material traces;
- Provide a prediction of the nature and distribution of evidence;
- Develop survey methods and undertake a survey of areas likely to be impacted by the development but not assessed by Collins in 2003/4;
- Identify any items and areas of Aboriginal cultural heritage and archaeological value; and
- Develop conservation strategies and impact amelioration measures for items and areas of value.

1.3 Subject Area

The Subject Area is an approximately 3,763 hectare, broadly rectilinear, contiguous parcel of land located 8 km to the north-east of Taree, NSW (Figure 1). It is situated on the low coastal hills and floodplains associated with the lower Manning River and its tributaries. At its western margin it is bounded by the Dawson River and to the east its margin abuts the Lansdowne River and/or associated floodplain. The locality of Melinga and surrounding farmland lie at its northern margins, whilst to the south and southwest it is bounded by properties with frontage to Kundle Kundle Road and/or Brimbin Road. The subject Area has a maximum east-west axis of about 6 km and a maxim north-south axis of about 4 km, which is achieved in its western portion. The North Coast Railway line and Lansdowne Road loosely bisect the Subject Area in its central portion.

The Subject Area lands are currently zoned RU 1- Primary Production, RU 4- Rural Small Holdings and E2- Environmental Conservation pursuant to the *Greater Taree Local Environmental Plan 2010* (GTCC, 2010a). In accord with this, existing land use in the area is primarily agricultural with most of the eastern and northern sections of the subject area being managed pasture used for grazing of cattle. Significant areas of unimproved native vegetation also occur mostly in the west, south-west and south-eastern portions of the Subject Area.

2 Investigator and Contributors

This investigation was led by Jamie Reeves (BA (Hons) 12 years experience) with field work assistance from Renee Regal (BA (Hons) years experience) and with research, report writing and review assistance from Clare Anderson (BA (Hons) 3 years experience) and Dr Maria Cotter (BA, PhD 15 years experience). A summary of the contributors to the project is listed in Table 1.

Contributor	Affiliation	Role
Jamie Reeves	Niche	Project Manager, Survey Participant, Report Author
Renee Regal	Niche	Survey Participant
Clare Anderson	Niche	Researcher and Author
Maria Cotter	Niche	Report Author
Glen Rennie	Purfleet-Taree LALC	Advisor
Vienna Maslin	Purfleet-Taree LALC	Survey Participant, Advisor
Richard Donovan	Purfleet-Taree LALC	Survey Participant, Advisor
Warner Saunders	Guiwan Cultural Enterprise	Survey Participant, Advisor
Harold "Mick" Saunders	Guiwan Cultural Enterprise	Survey Participant, Advisor
Dean Saunders	Guiwan Cultural Enterprise	Survey Participant, Advisor
Lincoln Wright	Guiwan Cultural Enterprise	Survey Participant, Advisor
Garry Ridgeway	Guiwan Cultural Enterprise	Survey Participant, Advisor
Timothy Wray	Guiwan Cultural Enterprise	Survey Participant
Garry Wray	Guiwan Cultural Enterprise	Survey Participant
Mick Leon	Doowakee	Advisor
Barry Bungy	Doowakee	Survey Participant, Advisor
Anthony Marr	Doowakee	Survey Participant, Advisor
Diana Banjanin	Roche Group	Reviewer
Wes van der Gardner	Roche Group	Reviewer

Table 1. Contributors to this Aboriginal cultural heritage assessment report

3 Description of Development Proposal

3.1 Proposal Rationale

In the *Mid North Coast Regional Strategy* (DoP, 2009) the Subject Area is identified as a future urban release area and employment lands. In accord with this Regional Strategy, Roche Group Pty Ltd proposes to develop a new town at Brimbin and expects the development to:

- ❒ compliment and reinforce the role of Taree as a major regional centre;
- ❒ provide sustainable growth for the Greater Taree Local Government area; and
- ❒ take development pressure away from the coastal towns and sensitive coastal environments.

3.2 The proposal

The new town of Brimbin is envisaged to be "a mixture of living and working areas that will lead to a healthy lifestyle for residents, workers and visitors" (Roche, 2010). Brimbin will ultimately accommodate a population of 22,000 people housed in approximately 8,000 dwellings to be developed over the next 30 years. It will also have a significant employment area. The current Draft Brimbin Structure Plan May 2013 (Figure 2) for the Brimbin new community includes:

- ❒ Residential land split between rural residential, low density, and medium density dwellings as well as seniors living in order to provide a range of allotment sizes to facilitate a range of dwelling types to accommodate a mix of age and socio-economic groups.
- ❒ Employment land allocated for bulky goods retailing, warehouse and distribution, industrial, commercial offices and local business. Additional land has also been set aside for primary production and future employment lands should it be required.
- ❒ A substantial portion of land is dedicated to achieving regional environmental conservation outcomes, in particular providing a key habitat corridor linking the Dawson River and the Brimbin Nature Reserve in the west with the Lansdowne River, Lansdowne Forest and Cattai wetlands to the east of the site will be provided.
- ❒ Horticulture area for the intensive growing of plants (including protected cropping structures) to serve local and regional markets.
- ❒ Retail centre providing opportunities for local business, general retailing and community facilities.
- ❒ Recreation lake (existing lake to be augmented) providing public access to reserve and conservation areas.
- ❒ Recreational areas providing sporting fields, netball and tennis courts, health club, bowling greens, local club and hotel accommodation.
- ❒ Open space in the form of a high quality golf course, playing fields, neighbourhood parks and linear parks for passive recreation.

- ❒ Community and social infrastructure comprising of schools, government business centre, library, and emergency services.
- ❒ Efficient and accessible network of roads including investigation of a new link to northern Taree.

3.3 Likely development impacts

Significant landscape modification of the Subject Area will occur if development is to proceed in the manner described in the Brimbin Development Strategy and Structure Plan. By necessity this landscape modification will be staged and continue over the life of the Project. Initial infrastructure development will require vegetation removal, land –levelling and filling, as well as sub-surface excavation for the insertion of road, stormwater, in-ground utility and sewerage services. More particularised development impacts will occur across the Subject Area as community-based health and education facilities; and residential, commercial, and industrial building stock are installed. During the initial infrastructure development Aboriginal objects such as scarred trees, stone artefacts and/or associated deposits that occur within areas subject to tree clearance and/or excavation are likely to be subject to harm (as defined in the NP&W Act, 1974) to the limits of that clearing and/or excavation. Later, activities focused on the establishment of individual residential, commercial and industrial premises including the installation of driveways, car parks, building foundations and landscaping all have the potential to cause harm to Aboriginal objects. At the house site scale these impacts can be perceived as being low-grade, often relating to the harm caused to a single Aboriginal object. However the impact to (and loss of) Aboriginal objects that may occur as each individual building is erected across a residential and/or commercial precinct, can be cumulative and ongoing and hence requires careful management and mitigation.

4 Landscape Context

Understanding the past and present environmental contexts of a study area is requisite in any Aboriginal archaeological investigation (DECCW, 2010a). Environmental characteristics - including the availability of water, the abundance and type of plant and animal food resources, the nature and type of stone and ochre resources; and the access and the availability of shade and shelter - play an influential role in determining the type and nature of material culture remains that will have been distributed across the landscape by Aboriginal people in the past (Ozark, 2011a). In addition natural geomorphic processes of erosion and/or deposition; as well as humanly activated landscape processes - especially those associated with European occupation of Australia - influence the degree to which these material culture remains are retained in the landscape as archaeological sites; and the degree to which they are preserved, revealed and/or conserved in present environmental settings (Ozark, 2011a).

The following section provides details of the fundamental environmental characteristics of the Subject Area. The section concludes by briefly examining the probable controls on Aboriginal archaeological site location metered by the environmental character of the Subject Area.

4.1 Topography and Climate

The Subject Area forms part of the estuarine floodplain and adjoining low hills that lie westward of the lower Manning River and which are much dissected by its tributary creeks and streams including both the Dawson and Landsdowne Rivers. The maximum elevation of the study area is about 110 m AHD which is encountered in the northwest, near Brimbin Hill (Collins, 2004). The topographic low of < 1 m AHD occurs at the eastern margins of the property where coastal wetlands and swamps of the lower Lansdowne and Manning River floodplains predominate. For the purposes of this assessment the following four landforms are recognised for the Subject Area (Figure 3):

- **Coastal/ floodplain** (slopes of <1%, elevation between 0-2 m AHD): This landform primarily occurs in the eastern portion of the Subject Area adjacent to the Lansdowne River.It is flood-prone land;
- **Low Rises** (slopes ≤ 5%, elevation between 2 and 35 m AHD): This landform occurs in the central and southwestern portions of the subject area;
- **Rolling Hills** (slopes of ≥ 5% ≤20%, elevation between 35 and 60 m AHD): This landform occurs in the western portion of the subject area and includes the slopes, crest and ridgelines that flank Pontobark and New Yard Creeks; and those that flank the un-named creek that rises near Brimbin Hill in the North and flows south-westward into the Dawson River. It also includes the elevated alluvial terraces adjoining the eastern banks of the Dawson River.

- **Steep slopes** (slopes of ≥20%, elevation between 35 and 80 m AHD). This landform comprises the steepest, most elevated hills and/or ridgelines that lie in the western sector of the study area.

In biogeographical terms the Subject Area is situated in the coastally influenced Macleay-Manning sub-region of the north coast bioregion (Dunn & Sahukar, 2004). The climate of this sub-region is subtropical with hot humid conditions prevailing, especially in the summer months (Stern & de Hoedt, 2000). January is considered to be the hottest month of the year with a mean maximum monthly temperature of 29°C whilst July is the coldest month with a mean minimum monthly temperature of 5.9°C (CBOM, 2011). The 139 year continuous rainfall record for Taree indicates that on average 1179 mm of rainfall occurs in the district each year with the wettest month being March (CBOM, 2011).

4.2 Geology, Soils and Geomorphic activity

The underlying geology of the Subject Area is comprised of Devonian to Carboniferous sedimentary rocks of the Tamworth Belt (Hashimoto and Troedson, 2008) These sedimentary units are dominated by siltstone, mudstone conglomerate and sandstone, although some localised occurrences of chert, quartz, quartzite and jasper are known (Brunker et al, 1970; Irish, 2006; Stewart, 1955).

Overlying these Palaeozoic sediments is a variously thick mantle of Quaternary alluvium (Hashimoto and Troedson, 2008). The last major depositional phase of Quaternary alluvium is considered to have occurred at about 6,000 years ago or in the Mid-Holocene. During this period sea-level is presumed to have been at least 1m higher than present and fluvial sediments deposited at or before this time, upon being subject to inundation by seawater have, through a complex series of biologically influenced chemical reactions, become sulphidic (Cotter, 1996). Upon exposure these sediments are most susceptible to becoming actual acid sulphate soils.

Interrogation of the NSW natural resource atlas[1] and the acid sulphate soil risk assessment mapping appended to the GTCC LEP, 2010 (GTCC, 2010a) indicates that in the low-lying flood-prone lands of the eastern portion of the Subject Area, there is a high probable risk of occurrence of acid sulphate soils. Land in this section of the study area, particularly where it abuts the Lansdowne River, is mapped as containing Class 2a and/or 2b acid sulphate soil lands (Figure 4). Clause 7.1 (2) of the GTCC LEP indicates that for such classes of soil sub-surface works other than ploughing below the natural ground surface (for 2a lands) and or sub-surface works proceeding more than 1 m below the ground surface (for 2b lands) are restricted. This is in order to ensure that development does not disturb, expose or drain potential acid-sulphate soils. Other areas of potential acid sulphate soils occur beyond the south of the site along the lower reaches of the Dawson River. A small area of low risk soils also occurs immediately

[1] Accessed on line March 2011 at www.nratlas.nsw.gov.au.

adjacent to the Dawson River with a small strip of low risk soils following the river northwards towards Kate Kelly's Crossing.

Despite the above noted occurrence of acid-sulphate soils, the majority of the Subject Area is in fact classed as having no risk of occurrence of acid sulphate soils. For the western and central portions of the study area soil profile reports derived from auger samples obtained by officers of the former Department of Natural Resources (Table 2) indicate that the soils are typically fine sandy clay loams that are the *in-situ* weathering products of Palaeozoic mudstones.

Soil Profile ID	MGA Grid Reference	Site Description	Profile Description
Soil Profile 11 **December 1995**	454804E 6478589 N	Hammond – Melinga: mid-slope on hill slope under grassland	Layer 1 A 0-20 cm: Fine sandy Clay Loam Layer 2 B1 20-55cm depth: fine sandy clay loam Layer 3 B2 Horizon 55-95 cm medium clay Layer 4: C horizon 95-97cm strongly weathered parent material, rounded tabular sub-angular platy gravel (6-20mm), coarse gravel (20-60mm and Cobbles (60-200mm).
Soil Profile 30 **April 24 1998**	454142 E 6479352N	Crest on hill crest, used for improved pasture	Layer 1: 0: 15cm Dark brown clay loam toposil Layer 2: 15 -25mm greyish brown gravelly sandy clay loam Layer 3 25-45mm greyish gravelly medium clay medium sandy clau Layer 4: Greyish mottled yellow gravelly sandy ,medium heavy clay between shattered mudstone.
Soil Profile 386 **May 24, 2001**	453431 E 6476080 N	Lansdowne Road 20m north railway crossing	Layer 1: A1 Horizon 0-12 mm Grey/brown Fine sandy clay Loam Layer 2 AB horizon 12-65mm Medium silty clay

Source: NSW Soil and Land Information system, soil profile report obtained from the NSW natural Resource Atlas @www.nratlas.nsw.gov.au March 2011

Table 2. Soil Profiles in the vicinity of the hill-slopes of the western portion of the Subject area

There are at least two main geomorphic processes that influence the Subject Area. The first of these is depositional and relates to the proximity of the Subject Area to the Manning River Floodplain. Episodic flooding is a historically well-documented occurrence for the lower Manning River and the lower reaches of its tributaries such as the Dawson and Lansdowne River (Department of Public Works, NSW, 1981). Such flooding may result in the gouging out of weakened stream banks but, more frequently, if the riverbank is over-topped overbank

deposition and sedimentation results. Consequently the low lying flood-prone section in the east is considered to be an aggrading landform. Similarly the alluvial terrace landforms associated with the Dawson River in the western portion of the subject area are considered to be subject to episodic deposition. Additionally for minor streams such as Pontobark and New Yard Creek that arise in the steep hills of this western portion of the subject area, it is expected that loci of deposition occur downstream, as the gradient of the stream bed reduces, particularly in the south-central portion of the study area.

The second geomorphic influence on the study site is erosional. Although many of the low hills in the central and western portions of the Subject Area have broad crests, hill slopes of 10-20% occur and frequent bedrock exposure suggests the colluvial movement of sediment downslope in these areas of relatively steep terrain. The construction of a detail contour bank system in this part of the Subject Area highlights the downslope erodibility of these landforms, an erodbility that is presumed to have increased as a result of the widespread clearance of native vegetation in this area. Bed rock exposures are also observed in the upstream sections of the creek beds suggesting that these are degrading landform elements, probably subject to infrequent but intense periods of fluvial erosion during high rainfall events.

4.3 Vegetation

Of the approximately 3,763 hectares of land that comprise the Subject Area, 1486 hectares - or about 39.5% - are covered with cleared exotic pasture. This cleared exotic pasture predominates in the northwest, central and central eastern portions of the Subject Area. A further 1,455 hectares (38.7%) are covered with native vegetation and/or regrowth native vegetation (Figure 4). This is variously distributed across the Subject Area but substantial tracts are found in the eastern and south-western portions of the Subject Area. The native vegetation has recently been shown to be comprised of 13 vegetation types including sclerophyll forest, woodland, swamps and herbfields (Figure 5) (Niche 2011a). Within six of these broad vegetation types four endangered ecological communities (EECs) have been identified. These EECs comprise approximately one third of the total area of native vegetation (997 hectares) and include:

- Subtropical Coastal Floodplain Forest (424 hectares),
- Swamp oak floodplain forest (68 hectares),
- Freshwater wetlands on coastal floodplains (73 hectares), and
- Swamp sclerophyll forest on coastal floodplains (433 hectares).

In the ethnographic literature (see section 5.2) it is this mosaic vegetation pattern that has been shown to provide an abundance of exploitable plant resources for traditional Aboriginal communities. Of the forest and woodland tree species identified across the study area it is only the paperbark species that are regarded as ones that were commonly scarred by Aboriginal people in the coast and hinterland areas of New South Wales (Long:2005), and this was usually for the specialised purposes of shelter provision.

4.4 Past and present European land use

4.4.1 19th century land use

> "The Cundle and Molto plains embrace an area of upwards of ten thousand acres of the richest alluvial soil. These plains are elevated from four to ten feet above high-water mark in the surrounding rivers, but along the margin of these rivers there is a bank of from six to thirteen feet in height, preventing the free egress of the water from the plains, and causing them to be in parts swampy.' The plains may thus be likened to an immense plate, the river - bank corresponding to- the rim. Large drains are now being opened by the Company, through the banks at all available places, and corresponding drains are being dug throughout the length and breadth of the plains. If all goes well, a very few years will exhibit wheat and corn growing over this vast area of alluvial soil, which will present a prospect of fertility almost unequalled in any part of the world. The navvies at work here are a superior class, and behave themselves well. They live in tents on the plains near their work, and only visit the township to make markets on Saturday evenings"(Sydney Morning Herald, Tues. 5 February, 1856, p3).

In 1856, as the above extract from the *Sydney Morning Herald* highlights, the alluvial terraces of the lower Manning River floodplain were being subject to significant modification in order to secure the land for agricultural practices. The eastern, low lying margins of the Subject Area now comprise part of the "Cundle and Molto Plains" referred to in the above extract. It is therefore likely that these areas were subject to and/or were affected by the drainage works that took place across this plain during the 1850s.

It was only 29 years prior to this (in 1827) that a Mr Jon Guilding was given permission to take up the first land grant on the north bank of the Manning River. The southern bank of the Manning River had previously been established as the limit of occupation when, in 1824, it became the northern boundary of the one million acre land grant give to the Australian Agricultural Company (Ramsland, 1987; Bairstow, 2003). Mr Guilding named his property 'Mooto' (later Molto) and it had frontage to Dickensons Creek. Immediately to the west of this land grant, Mr Guilding ran cattle on a run he named "Boondabah". In the census of 1828 it was reported that Guilding had cleared 500 acres of land, had 40 acres under cultivation and was grazing 400 head of cattle on the estate using the services of two free persons and eight assigned convicts (Birrell, 1987). However by October 1829 Mr Guilding was in debt and surrendered his land grant to repay it, leaving a stockman to oversee his neighbouring cattle run. In 1841 land encompassing this Boondabah run was granted to a Mr Lewis at which time it was referred to as Durhambah (Connors, 1985; Birrell, 1987). Some of the northern portion of the current Subject Area lies within the former Durhambah pastoral run (Collins, 2003).

By 1830 Major A.C. Innes of Port Macquarie had occupied land to the west of Durhambah, adjoining the Dawson River, and established the "Braynbyn" cattle run (Birrell, 1987). The run

was stocked with cattle that were brought overland from Innes' more substantial holdings at Port Macquarie (Connors, 1985). This overland route was first surveyed/blazed by Henry Dangar during his surveying efforts for the Australian Agricultural Company, and it came to be part of the route linking the Company lands at Gloucester and Stroud with the Port Macquarie penal settlement (Connors, 1985; Birrell, 1987; NPWS, 2005).

Major Innes' early 'occupancy' of land on the Dawson River had no legal status. In 1836 however Innes became the first person to legally purchase land in the Manning River when he bought the 960 acres of "Braynbyn" (later known as Brimbin) (Birrell, 1987; Connors, 1985). In the 1841 colonial census nine settlers and two assigned servants were recorded as occupying the locality of 'Brymbyne' (Birrell, 1987: 75). These were employed clearing land, fencing and husbanding livestock (Connors, 1985). However as Connors reports:

> "By 1850 attempts at clearing the ever increasing regrowth of brush including wattle, paper bark and swamp oak, in conjunction with bad seasons of drought on the poor shallow soils that covered most of Brimbin, Durambah and adjoining land led to the almost complete desertion of the area. This allowed for the regrowth and establishment of a Eucalyptis forest that steadily became denser and taller than that which existed earlier" (Connors, 1985:41).

One settler did however persist in the area about Brimbin for sometime into the 1850s. Miss Isabella Mary Kelly, an independent settler of some means first leased and then purchased 43 acres of land on Brimbin Creek near where the colonial track from Stroud to Port Macquarie crossed the Dawson River, which she called "Waterview" (Birrell. 1987). Miss Kelly built a substantial house on "Waterview" and solid stockyards that reportedly stood for more than a century (Connors, 1985). At the time of her purchase "Waterview" was wild uncleared land and there were no settlers close by. Reportedly, Miss Kelly allowed her stock to roam freely beyond the boundaries of her 43 acres particularly into the disused partly cleared areas of Brimbin and Durambah to the west. Her property at Brimbin featured in a court case of some notoriety in the late 1850s and later as result Miss Kelly abandoned her selections in the Manning River (Connors, 1985).

4.4.2 20th century land use

The land use in the area about Brimbin in the late 19th and early 20th century is not well documented. It is likely that as elsewhere on the Manning (including the property Durambah to the west), dairying came to have a role in the exploitation of the area (Birrell, 1987), although little change in land cover is expected, with the exception that as described above, regrowth of vegetation over areas cleared in the colonial period is likely. Interpretation of a series of historical aerial photographs obtained from the NSW Land and Property Management Authority (Figures 6 and 7) indicates that sometime in the late 1950s or early 1960s land clearing was renewed in the western sector of the Subject area, and that this increased substantially in the 1970s such that by 1979 much of the current plough, contour and dam features that are extant in 2011 were in place.

4.5 Environmental controls on the archaeological record

The examination of the environmental contexts of the Subject Area points to the following controls on the nature and type of archaeological record to be found within it:

- ❒ Lying in the water shed of the Dawson and Lansdowne River and being dissected by numerous permanent streams water is not considered to be a limiting factor to Aboriginal exploitation of the area;
- ❒ The vegetation mosaic described for the Subject Area suggests that a diverse range of exploitable plant resources were available providing numerous habitat opportunities for a range of potential animal foods;
- ❒ Aquatic habitat and low lying wetland areas suggest an abundance of exploitable fish and bird resources were seasonally available for exploitation;
- ❒ The basement geology does not support the presence of rock shelters, or overhangs and hence rock engravings, painted art and shelter deposits are precluded site types within the study area.
- ❒ The basement geology does not generally support the presence of stone resources of such superior knapping quality that they are likely to have been preferentially quarried for the manufacture of stone artefacts. There is little likelihood therefore of stone quarries being found within the Subject Area. The expedient use of lesser quality stone resources such as the locally available mudstone and siltstone is likely and hence it is these rock types that are likely to dominate artefact assemblages.
- ❒ The clay loam soils of the hill slopes and ridge crests in the western portion of the study area are generally shallow (between 0-75 to 1 m) and rest upon coarse fragments of mudstone and siltstone parent materials. Sub-surface archaeological deposits if they are to occur in these areas are therefore also likely to be shallow.
- ❒ Intensive agricultural activities such as ploughing, ripping, scarifying and/or contour bank forming in the clay loam soils of the Subject Area is expected to have limited the possibility of finding surface Aboriginal objects in their original depositional contexts.
- ❒ Past land use disturbances, particularly vegetation clearance, ploughing and intensive contour farming limits the potential for sub-surface Aboriginal Objects to occur in *in-situ* depositional contexts, particularly in the shallow clay loam soils of the central and western portions of the study area.
- ❒ Colluvial slope wash as a result of high intensity rainfall events on steep hill slopes reduces the likelihood of finding Aboriginal objects on the ridges, crests and upper hill slopes of the Subject Area.
- ❒ Alluvial terrace landforms adjoining the Dawson River and other of the permanent streams in the western portion of the Subject Area are locations of active episodic deposition and hence have potential to yield sub-surface Aboriginal objects.

- Soils in the eastern portion of the study area with any acid sulphate potential are expected to be of low pH. The durability of shell middens in sub-surface contexts within such low pH soils is not expected.

5 Aboriginal Cultural Heritage Contexts

5.1 Legislative contexts

The National Parks & Wildlife Act 1974 (NP& W Act) is administered by OEH and its Officers are supported to do so by a number of policy and guideline documents (e.g. DECCW, 2009a, 2009b, 2010). The Part 6 provisions of the NP& W Act are focused on the protection and regulation of Aboriginal cultural heritage, and in particular on the protection of **Aboriginal objects** and **places**. The protection provided applies irrespective of the level of significance of the Aboriginal objects or places and irrespective of the land tenure upon or in which they occur. For the purposes of the Act an Aboriginal object is defined as:

> "any deposit, object or material evidence (not being a handicraft for sale) relating to the Aboriginal habitation of the area that comprises NSW, being habitation before or concurrent with (or both) the occupation of that area of persons of non – Aboriginal extraction, and includes Aboriginal remains (s.5 NP&W Act).

Likewise an Aboriginal place is a statutory term that means:

> "any place declared to be an Aboriginal place (under s84 of the NP&W Act) by the Minister administering the NP&W Act…because the Minister is of the opinion that the place is or was of special significance with respect to Aboriginal culture. It may or may not contain Aboriginal objects" (DECCW 2010b, v.).

5.1.1 Legislative changes

On 25 February 2010 The NSW National Parks & Wildlife Amendment Bill 2010 was introduced into the NSW State Parliament. This Bill which was assented to on the 15 June 2010; brought into effect the first changes to the Aboriginal cultural heritage provisions of the NP& W Act since its inception in 1974. It is not the purpose of this report to detail these legislative changes[2] but it is pertinent to note that the amendments to Part 6 of the NP&W Act combined with the supporting regulatory provisions described in Part 8 the National Parks & Wildlife Regulation 2009 (herein "The NP&W Reg) establishes:

- ❒ Two new Aboriginal cultural heritage offences (including a strict liability offence) relating to acts of harm and/or desecration of Aboriginal objects and places [i.e. NP& W Act, s86 (1), (2) & (4)].

[2] A series of fact sheets providing further information relating to these changes can be downloaded from the DECCW website: www.environment.nsw.gov.au/licences/achregulation.htm

- A due diligence defence for any act of harm to an Aboriginal object that is supported by either a generic and/or one of several industry/activity specific Due Diligence Codes of Practice [i.e. NP& W Act: s87(2); NP&W Reg: s80A];

- *A Code of Practice for Archaeological Investigation of Aboriginal objects in NSW* (DECCW 2010c) that allows for a legal defence for any act of harm to an Aboriginal object that results from the conduct of an archaeological text excavation without an AHIP (NP&W Reg: Clause 3A).

The amended legislation also collapses the two-tiered Aboriginal Heritage Impact Permit (AHIP) system with the removal of the need to obtain an AHIP for the purposes of discovering an Aboriginal object. It remains the case however that knowing harm to an Aboriginal object is permitted (and is defensible) when authorised via an AHIP. Finally, there are significant increases in the financial penalty/or penal sentence for acts that result in harm to Aboriginal objects irrespective of whether an individual was aware or not that his/her actions would result in harm to Aboriginal objects.

5.1.2 Due diligence

With respect to Aboriginal objects due diligence means 'taking reasonable and practical steps to determine whether a person's actions will harm an Aboriginal object and, if so what measures can be taken to avoid harm' (DECCW, 2010a: 18). In essence due diligence obliges people whose actions may affect Aboriginal cultural heritage to take reasonable steps (precautions) to consider if Aboriginal objects may be present and avoid harm to that heritage.

Section 80A of the NP&W Regulation establishes that: compliance with the generic *Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW* (DECCW 2010b) (herein "The Code") constitutes due diligence. This essentially means that if a proponent has exercised due diligence with respect to his/her proposed activity through compliance with "The Code" then he/she has a defence against prosecution if subsequent harm is unknowingly caused to an Aboriginal object. The Code outlines the steps that must be followed, the actions that must be taken, the site/activity specific conditions that must be satisfied; and the documentary support requirements needed to show due diligence in the consideration of potential harm to Aboriginal objects "The Code" further maintains that 'an environmental impact assessment which meets all of the requirements of this code will satisfy the due diligence test' (DECCW, 2010a:3). In so far as it has been practicable, "the Code" has been used as the basis for the assessment of the Aboriginal cultural heritage values of the subject land.

5.2 Aboriginal cultural contexts

Brimbin lies within the traditional land of the Biripi people (Maslin & Leon, 2003a; Tindale, 1974). Traditionally, the Biripi language/tribal group was comprised of several distinct but

interrelated clan groups each associated with a separate geographical area. These clans shared economic resources, trade and ceremonial occasions and spoke a mutually intelligible language (Collins, 2003). Ethnographic reports indicate that this form of social organisation required extensive extra-territorial movement in order to satisfy social and ceremonial obligations (Belshaw, 1978). Archaeological and ethnographic records indicate that the coastal fringe of northern New South Wales was resource rich (e.g. Belshaw, 1978; Bundock, 1898; Campbell, 1978; Fitzpatrick, 1914, 1925; Sullivan, 1976, 1978). This allowed Aboriginal groups, such as the Biripi to take advantage of a wide variety of food resources including shellfish, fish, wallabies, padymelons, possums and other small mammals particularly flying foxes (Fitzpatrick, 1914; McBryde, 1974, 1982; Sullivan, 1978; Piper, 1997). For the Manning River and its tributaries, a frequent observation in the ethnographic record is the exploitation and use of the river by Biripi in bark canoes as they navigated along the river valley and between the islands in the lower estuary (Fitzpatrick, 1914; Byrne & Nugent, 2004). For the Dawson River, Collins (2003:6) reports that

> "a well-known natural fish trap occurs in the bed of the Dawson River at Kate Kelly's Crossing [downstream of the Subject Area] and fish and cobra are regularly caught along the estuarine reach of the river, ensuring that the river remains a highly valued part of the local aboriginal cultural identity"

In addition to the abundant edible animal food resources, the mosaic of vegetation types that occur across the region - including paperbark swamps, coastal heathland, wet sclerophyll forest, and subtropical rainforest - were all exploited by ancestral Biripi to obtain various essential items for everyday living. Byrne and Nugent (2004:30) note that:

> "the pre-contact hunter gather economy of the Biripi had depended on having free access to a wide range of wild food that were spread right across their country from the mountains to the river and beaches"

Staple carbohydrates from edible fern and vegetable roots, herbal remedies, seasonally available fruits, nuts and berries; and materials for making such things as shelters, wooden implements and intricate basketry were all obtained from the native vegetation. Collins (2003, 2004) notes that the native vegetation encountered within the Brimbin Nature Reserve, to the west of the Subject Area is an important source of medicinal and bush tucker plant resources valued by contemporary Biripi people.

The post-colonial history of the Biripi peoples, as elsewhere for Aboriginal groups throughout Australia, is one of significant social dislocation, marginalisation and dispossession from tribal lands (Connors, 1985; Birrell, 1987; Byrne and Nugent, 2004). Nevertheless, as Byrne and Nugent (2004) have comprehensively documented there is a broad geographic domain or cultural landscape to which the Aboriginal community of the region demonstrates a continuing attachment and cultural connection. In relative proximity to the Subject Area for example is the Kundle Kundle camp, a historical place used by Aboriginal people in the nineteenth century, and where an Aboriginal massacre is suspected to have taken place in 1838. Indeed a range of Aboriginal historical sites including first contact sites, ceremonial sites, burials,

warfare and massacre sites, reserves, institutions, places of employment, resource places and occupation sites have been identified; to which many current Biripi remain associated (Rich, 1990; Byrne & Nugent, 2004).

5.3 Regional archaeological context

In 1991, an Aboriginal Heritage Study was completed for the Greater Taree area (Klaver & Heffernan 1991). The study provided a review of registered Aboriginal sites, literary sources, and archaeological survey reports, and provided a generalised model of site sensitivity for broad landform categories. This model was subsequently revised and updated in the Aboriginal Cultural Heritage Management Plan for the Greater Taree City Council (Gay 2000). This model predicts that:

- Areas with the highest environmental productivity such as; margins of riverine and woodland vegetation communities adjacent rivers and major creeks or protected bays and beaches adjacent to estuaries, rock platforms and swamps would have been the primary focus of domestic occupation;
- Primary focuses of domestic occupation would be reflected in the archaeological record through the presence of large artefact assemblages with some areas of high density and more complex assemblages in those areas;
- Low hills, hills and mountains away from major water sources would have been occupied on a less intensive basis. Occupation would have been associated with group movement, hunting parties and short-term camps that related to the gathering of particular resources such as stone or medicines for transport to larger camps;
- Narrow and steep sided sections of river and creek valleys would not have been used for extended occupation or avoided;
- Ridgelines would have been used by Aboriginal people as travel routes between river valleys, plateau, lookouts and peaks;
- Level sections of broad valley would have been preferred camping places (Gay, 2000: 25).

In addition to these regional reviews/studies a number of targeted archaeological surveys have been undertaken within the region, that are of relevance to this study. These include:

- **Archaeological Survey of a Proposed Transmission Line between Taree and Kempsey/Port Macquarie** Brayshaw (1977) undertook a survey of a proposed 67 km long transmission line easement between Taree and Port Macquarie that is of relevance as it represents one of the earliest archaeological surveys to intersect a portion of the current Subject Area. The proposed easement was predominately sampled by vehicle traverse with suitable exposures being further investigated by foot. Brayshaw noted a general difficulty in surveying the route as it was heavily forested with low archaeological visibility. To compensate for this environmental limitation the 67km of easement was crossed approximately 50 times during the survey. No Aboriginal sites were identified during this

survey and it was concluded that there was a low likelihood of finding surface sites along the easement due to the fact that they were rare within the region. Today this transmission line easement trends in a northeast-southwest direction as it passes through the western portion of the current Subject Area.

- **Local Environmental Study Brimbin**: A targeted archaeological survey was conducted over a 900 ha portion of the current Subject Area as part of an earlier local environmental study prepared in consideration of the development of a new town at Brimbin (Collins, 2003, 2004). A total of seven archaeological sites including two isolated artefacts, three artefact scatters and a single scarred tree in poor condition were recorded during the study. Collins (2004) concluded from these findings that the sites identified were similar to those found elsewhere in the mid-north coast hinterlands as they occurred on level crests in close proximity to well-drained water sources. She also made the following observations relating to the archaeological potential of the wider study area:
    - Due to a paucity of locally-available raw stone materials artefact discard rates are likely to have been low resulting in isolated stone artefacts and low density artefact scatters being the most common site types to be distributed through the study area;
    - Alluvial terraces along the permanent streams are archaeologically sensitive landforms with the potential to contain undetected sites including minimally disturbed sub-surface campsites;
    - The majority of the study areas ridge, spur and crests have limited potential to contain significant undetected sites;
    - Hillsopes and valley flats have a low level of archaeological sensitivity and are unlikely to contain significant undetected sites.
- **Cundletown Airport Hotel**: Niche (2011b) recorded a low density artefact scatter in a disturbed context on the mid-slope of an alluvial terrace of the Dawson River adjacent to the Airport Hotel at Cundletown about 2.5 km southeast of the study area.
- **Pacific Highway**: Early surveys of proposed options for the Pacific Highway Bypass of Taree identified several Aboriginal sites (Rich 1990b). Site types included historic sites such as the Purfleet Cemetery (AHIMS Site #30-5-0010), artefact scatters or campsites (AHIMS Site #30-5-0015, 18, 19, 21, 22, not registered) , scarred trees (AHIMS site #30-5-0016, 17, 19, 20, 23), a corroboree ground (AHIMS site #30-5-0018) and waterholes (#30-5-0016). Artefact sites were generally located on ridges, footslopes, low spurs and creekbanks in proximity to water sources with artefact frequencies ranging from one to 25 or more. Raw material types for artefacts included unidentified fine grained siliceous, silcrete, chert, quartz and mudstone.

  Collins (1998) undertook a survey over a 12.3ha area adjacent the Taree Bypass about 10 km south of the current subject area. Two isolated stone artefacts were located within the survey area on upper slope landforms, one previously identified by Rich

(1990b). Collins argued that the survey results reflected those of Rich's survey with Aboriginal occupation of the area most likely reflecting low and itinerant levels of past use of the ridge system. Though the area had the potential for low density distribution of isolated artefacts the artefacts were most likely displaced and dispersed from road construction.

An isolated Aboriginal artefact was identified in a disturbed context on the footslopes of a ridge to the west of a low spur separating two tributaries of Halls Creek, approximately 8.7km south-west of the subject area (Irish 2006). The site was assessed to be of low potential due to the high levels of disturbance and inferred Aboriginal land use and was considered to provide support for the archaeological model outlined in the Cultural Heritage Management Plan for the Greater Taree City Council (Gay 2000). Outcropping of chert, jasper, quartz and volcanic materials were noted in the sediments above Halls Creek (Irish 2006, p.17).

- **Taree Sewerage Augmentation Dawson River Works:** A proposed 4.4km pipeline and bore, two pumping stations and a treatment works were surveyed approximately 1.8 km south west of the current subject area (Sinclair Knight and Partners Pty Ltd 1980). The survey contained area of gently undulating plains with creeks, rivers and swamps and was heavily modified. No Aboriginal sites were identified;

- **Wingham Bush Reserve:** A stone arrangement was identified in the Wingham Bush Reserve immediately north of the Mannning River, about 8 km west of the current subject area (Klaver & Heffernan 1991).

- **Taree and Wingham Effluent Management Scheme**: Approximately 8 km west of the current subject area, two artefacts were located on a level, flood-scoured terrace of the Manning River at Wingham during an archaeological survey of a proposed sewerage corridor (Collins 2000). The artefacts were made from greywacke and orange quartz. A survey was also carried out on proposed sewerage corridors and a wet weather storage site in close proximity to the subject area. Sections of floodplain, hills and ridges were surveyed. No archaeological sites were identified. The areas surveyed were found to be highly disturbed. Collins (2000, p.35) argues that the survey supports an overall low level of archaeological sensitivity for the Manning floodplain but notes that the low visibility reduced the probability of detecting sites.

- **Archaeological Assessment - Optic Cable between Taree and Wingham (Kuskie, 1994)**: Areas of simple slopes, basal slopes, low spurs, small gullies and watercourses were surveyed along a stretch of disturbed road reserve between Taree and Wingham for a proposed fibre optic cable (Kuskie 1994. No archaeological sites were identified.

- **Proposed Peg Leg Creek Dam Site**: Collins (2001) surveyed a 210ha area approximately 14km south-west of the current subject area. The landscape was described as heavily dissected country with ridge crests, spurs, hillslopes and valley flats. Thirty-four artefacts were identified over nine Aboriginal sites, with artefact frequencies no greater than 10 artefacts per site. Sites were located on ridge crests and spur crests around 150-1000m

from water. The distribution of artefact sites is linked to limited Aboriginal land use associated with transitory movement through the landscape via ridgelines (Collins 2001, p.25).

- **Buckets Way, South Taree**: Two artefact scatters and two scarred trees were identified by Purfleet-Taree Local Aboriginal Land Council approximately 7.5km south-west of the current subject area (Oregon 2007).
- **Old Bar**: Approximately 12 km south-east of the current subject area, Purfleet Local Aboriginal Land Council completed a survey for a Local Environmental Study of proposed Precincts 1 and 2A of the Old Bar (Leon et al. 2004; Maslin & Leon 2003). The area surveyed comprised of swamp margins, river terraces and sand dunes and river banks. Several artefact scatters were reported and possible use of oyster shells. The sites are not recorded in AHIMS.
- **Coocumbac Island**: Coocumbac Island, approximately 6 km south-south west of the current subject area, has been noted as an area of past Aboriginal land use. An Aboriginal site is reported to be present, but is not registered in AHIMS or been subject to archaeological assessment (NSW National Parks and Wildlife Service 2003)
- **Cattai Wetlands**: Thirteen kilometres north-east of the subject area, Purfleet-Taree Local Aboriginal Land Council identified 15 stone artefacts within the Cattai Wetlands (Ridgeway et al. 2005). These sites are currently not registered in AHIMS.

Finally, Greater Taree City Council provided a tabulated summary (see Table 2) of known Aboriginal sites within its boundaries in its most recent State of the Environment Report (GTCC, 2010). This reveals a total of 316 Aboriginal sites were known for the Greater Taree City Council area at 30 June 2009, 149 (47%) of which were comprised of stone artefacts.

Site Features	Number
Aboriginal Ceremony and Dreaming	7
Art (pigment or engraved)	1
Artefact	149
Burial	6
Ceremonial Ring (stone or earth)	7
Earth Mound	55
Potential Archaeological Deposit (PAD)	3
Shell	57
Stone Arrangement	5
Modified Tree (carved or scarred)	24
Water Hole	2
TOTAL	**316**

Table 3. Number of Aboriginal sites in the Greater Taree LGA as of 30 June 2009

5.4 Local archaeological context

5.4.1 OEH Aboriginal Heritage Information Management System

A total of 116 Aboriginal sites and two Aboriginal places are registered on the OEH Aboriginal Heritage Information Management System (AHIMS) within an approximately 28 km^2 area that includes the Subject Area (Table 3 & Figure 8). Seven of these registered sites occur within the western portion of the Subject Area (Table 4 and Figure 9). These all derive from the recent archaeological surveys conducted by Collins (2003, 2004) as part of the Brimbin Local Environmental Study. Collins (2004) noted that at the time of her study only four registered Aboriginal sites occurred within a five km radius of the western portion of the study area. These sites featured a post-contact burial (AHIMS site # 30-5-13) and nearby scarred tree (AHIMS site #30-5-50) close to Cedar Party Road some 4 km west of the Dawson River; and two stone artefact scatters (AHIMS site #s: 30-5-33 & 30-5-34) in Yarrat State Forest some 3 to 4 km west-northwest of the Subject Area. There are no previously recorded Aboriginal archaeological or cultural sites in the eastern portion of the Brimbin area (Figure 9).

Site Features	Count	Frequency
Artefact Site (Isolated Finds, Artefact Scatters)	57	49 %
Midden	30	26 %
Culturally Modified Tree (Carved, Scarred)	16	14 %
Burial	3	3 %
Stone Arrangement	2	2 %
Waterhole/Well	2	2 %
Shelter with Deposit	2	2 %
Natural Mythological (Ritual)	1	1 %
Contact, Mission, Burial	1	1 %
Artefact Site and Scarred Tree	1	1 %
Bora/Ceremonial, Carved Tree	1	1 %
TOTAL	116	100

Table 4. Results of an AHIMS Basic Search [ID #32327, 5 October 2010] for a 28km^2 area that included the Subject Area.

	Site ID	Site Features
Brimbin 1	30-5-0054	Artefacts
Brimbin 2	30-5-0055	Artefacts
Brimbin 3	30-5-0056	Artefacts
Brimbin 4	30-5-0057	Scarred Tree
Brimbin 5	30-5-0167	Artefacts
Brimbin 6	30-5-0061	Artefacts
Brimbin 7	30-5-0062	Artefacts

Table 5. Registered Aboriginal sites within the Subject Area as obtained from AHIMS Extensive Search ID # #32327 conducted on 7 October 2010.

5.4.2 Other heritage registers

Online searches of local, state and national heritage databases conducted by Claire Anderson for Niche on 18 November 2010 revealed that:

- ❒ No heritage items or heritage conservations areas were listed for the subject area within the Greater Taree Local Environmental Plan 2010;
- ❒ No heritage items were listed within or immediately adjacent to the Subject area on the NSW Heritage Register. (This search was conducted using the search parameter "Greater Taree" and included a review of records pertaining to: Interim Heritage Orders; areas protected under section 136 of the *NSW Heritage Act* ; and gazetted items listed by Local Government and State agencies); and
- ❒ No heritage items were listed within or immediately adjacent to the subject on the Australian Heritage Register, including the Register of the National Estate.

5.4.3 Unregistered sites

In her examination of the archaeological context of the western portion of the Subject Area Collins (2004) noted that two unregistered Aboriginal sites were reported to occur within and/or adjoining the immediate study locality. The first of these sites is a natural stone fish trap on the bed of the Dawson River at Kate Kelly's Crossing. This stone fish trap and its use in the harvesting of mullet is well known to the local Aboriginal community. The second site was a scatter of stone artefacts at the confluence of the Dawson River and Tommy Owens Creek opposite the western boundary of the Study Area. Additionally a bora ground reportedly extant in 1925 when relocated by an Aboriginal man in the company of a party of men from Wingham (Fitzpatrick, 1925), is believed to have been situated some 4 km - 5km west-southwest of the Subject Area.

5.5 Potential Archaeological Site Types

The environmental and archaeological contexts of the Subject Area suggest that in general it is a location with moderate potential to yield Aboriginal archaeological materials. This is particularly the case if the concept of cultural landscape is used to inform the predictive process. Consideration of the spatial and temporal links within and between Aboriginal archaeological 'sites' and the wider local environment - particularly exploitable resource zones - enables an appreciation of the patterning and movement of Aboriginal people in such a landscape in the past (Cotter, 1996, 2009; Cotter & Boyd, 2001).

With reference to the Aboriginal archaeological record known to the Greater Taree City Council (Table 2) and recorded on the OEH Aboriginal Site Register (AHIMS database) (Table 3), the Aboriginal archaeological site types most likely to be found within the Subject Area are described below. These descriptions are made with reference to some useful general texts, (*i.e.* Burke & Smith, 2004; DoP, 1989; Long, 1985; McBryde, 1974,1978; Mulvaney & Kamminga, 1999; NPWS, 1986) and relevant research articles (*e.g.* Attenbrow, 1999; Bowdler,1983, 2001; Byrne, 1989; Gollan, 1990; Hall & Lomax. 1996; Satterthwait & Heather, 1987). For each a

summary discussion of the probability of Aboriginal objects attributable to these sites types being located via field survey in the Subject Area is provided.

- **Stone artefact scatters**: This type of site may range in size from a single artefact to an extensive scatter of a wide range of artefact types. When comprised of a single artefact this site type may represent either the remnant of a dispersed open campsite or the simple loss or random discard of artefacts. The most commonly reported isolated artefacts are edge ground stone axes, unifacially and/or bifacially flaked river pebbles, hammerstones or individual stone tool cores from which flakes have been removed. Greater concentrations of artefacts may provide evidence of a knapping floor resulting from stone being worked in a particular place or a general scatter of many and varied artefact types and raw material types. Six of the seven Aboriginal archaeological sites identified by Collins (2003, 2004) in the western portion of the Subject Area are isolated artefacts or small low density artefact scatters. It is therefore likely that further stone artefacts may occur within the study area, particularly in areas not previously surveyed. Nevertheless, historical disturbances including timber-getting and subsequent land clearing for agricultural practices are presumed to limit the likelihood of such objects being located *in situ* across the Subject Area.

- **Stone quarries**: As the raw material source for stone artefacts, quarries are usually found where significant outcrops of suitable stone occur. Favourable rock types for the manufacture of stone artefacts include siliceous rocks such as chert and silcrete or igneous rocks such as rhyolite or basalt. Where such favourable rock types do not occur locally available raw materials such as mudstone, quartz stone may be utilised and therefore predominate stone tool assemblages within close proximity. Whilst mudstone is observable as bedrock outcrop in some locations Collins (2004) notes a general paucity of raw stone materials suitable for artefacts manufacture within the study area. No quarry sites have been identified within the immediate Subject Area; and none were itemised as a result of either the Basic or Extensive AHIMS searches conducted for the site.

- **Scarred and carved trees**: Scarred trees are trees from which the bark has been removed for a variety of purposes *e.g.* making shields, containers, canoes *etc*. Provided that mature trees are still extant, scarred trees may be found anywhere across the landscape. Within the Greater Taree City Council LGA scarred trees comprise 7% of all known Aboriginal sites (see Table 2). Collins, (2004) identified a single scarred tree, in poor condition within a portion of native vegetation in the southwest of the Subject Area. Carved trees are associated either with burials and/or "bora grounds" (see description below) (Etheridge, 1918; Mathews, 1917). The carved designs are usually in the form of linear or geometric patterns including zigzags, concentric diamonds, spirals and circles. For the north coast region it is apparent that the bark rather than the wood of the tree was carved. McCarthy (1940) reported that as many as 120 carved trees might be associated with a "bora ground" these trees being situated both around the edge of the two raised earthen rings, and on either side of the track connecting these rings. A bora ground is reported to have existed about 4 km west of the study area (Ramsland, 1987). It

is unlikely for further bora grounds to be within such close proximity (see Satterthwait & Heather, 1987). It is therefore not expected that carved trees will be identified within the Subject Area. Further, given the widespread vegetation clearance that has occurred subsequent to the mid-1950s it is unlikely that trees of sufficient age and girth to have been scarred / carved by ancestral Aboriginals are retained within the Subject Area.

- **Shell middens**: Middens are the accumulated remains of the Aboriginal exploitation of shellfish such as oyster, pipi and mud ark. They are the most commonly identified Aboriginal material cultural remains along the coastline of southeastern Australia with over 300 separate middens being recorded for the coastal strip between Taree and the Queensland Border. The size of a midden deposit is dependent on two main variables. Firstly it is dependent upon the nature of the Aboriginal occupation and resource exploitation of the area, (for example whether people returned to the same place repeatedly to eat shellfish, or whether only a single or a few meals were eaten at a location *i.e.* a 'dinner time' camp). Secondly it frequently depends on post depositional impacts that may be environmental *e.g.* coastal erosion but that also may be humanly induced such as the historic impacts associated with sand mining and lime burning. Several middens have been recorded in the coastal beach ridge systems that lie in the vicinity of Farquhar Inlet about 12 km southeast of the Subject Area. Middens have also been located within the coastal floodplain adjoining the estuarine reaches of the lower Manning River, and hence it is possible that similar sites may survive along the estuarine reaches of the Dawson River. However as episodic flooding is a historically well-documented occurrence for the lower Manning River and its tributaries (Department of Public Works, NSW, 1981) it is most probable that midden material deposited by ancestral Aboriginals will be buried under several metres of flood deposited alluvial sediments.

- **Bora grounds/earthen circles**: Bora ground is a specific term used to refer to a place where male initiation ceremonies were conducted. Earthen circles incorporate places which may have been used for male initiation (*i.e.* bora grounds) but which may have also been used for other ceremonial or secular activities. Usually bora grounds consisted of two earthen rings one larger than the other, joined by a pathway. These sites are exclusive to southeastern Australia and the greatest concentration of them occurs within northern New South Wales and southeastern Queensland where they have been linked to large social gatherings of up to 1000 people supported by seasonal resource abundances. Their durability in the landscape is less than other artefact types being vulnerable to natural effects such as erosion, and to historical impacts, often being completely destroyed as a result of land clearing activities.

- **Burials**: Aboriginal burials spanning both the Pre- and- Post European Contact periods have been documented for the broad coastal zone of northern NSW. These burials range from single interments to multiple interments of up to 30 individuals. Such burials are frequently found in well-drained lowland situations, often in coastal dunes, and sometimes within shell middens. For the contact period, inhumation appears to have been the primary mode of burial and this typically involved placing the body into the ground in an upright

but tightly crouching or sitting position. Bodies were also often wrapped in bark prior to burial. Although graves are sometimes marked by earth or stone mounds, most have been discovered eroding out of sand dunes and creek banks, or by being disturbed during earthworks associated with drain and road construction, and sand mining activities. These places are of significant cultural importance to Aboriginal people, an importance that involves spiritual values and a respect for the dead in which time elapsed since burial is of no relevance. Burials are recorded at Wingham and Happy Valley several kilometres to the west and south west of the study area.

- **Natural Mythological sites**: Natural mythological sites are natural features of the landscape which have not been modified by Aboriginal people but which have spiritual significance to living Aborigines and remain and integral part of their culture. Landscape features that hold particular significance for Aboriginal groups today include: waterfalls, trees, mountains, rocks, rivers and lakes, especially where these are connected to creation events or the activities of totemic spirits. The identification of mythological sites can only be achieved in consultation with Aboriginal people.

5.6 Prediction of Aboriginal site location within the subject area

In light of the assessed environmental controls on Aboriginal site location (section 4.5), the review of the local and regional ethnographic and archaeological contexts (sections 5.1, 5.2 & 5.3) and the above assessment of Aboriginal site types and their likelihood to occur within the Subject Area, the following predictions are made with regard to the likely location in which Aboriginal objects might be found within the Subject Area:

- Limited material evidence of Aboriginal occupation will be present in surface contexts due to the high levels of ground disturbance caused by past vegetation clearance and ongoing agricultural activities including ploughing and contour bank installation and maintenance.

- Due to active fluvial sedimentation processes alluvial terraces – such as those adjacent to the Dawson River and other permanent streams that dissect the western portion of the Subject Area including Pontobark Creek and New yard creeks - have the highest likelihood of any landform element with the study area to contain Aboriginal objects.

- The eastern portion of the subject area being low lying and subject to frequent inundation is considered to have a low potential to contain *in situ* Aboriginal objects. Swamp margins may have been occupied but evidence suggests that this occupation has been confined to areas to the south of the Subject Area including at KundleKundle.

- In accord with regional trends, the most likely Aboriginal object type to be detected across the study area will be stone artefacts. For other Aboriginal object types it is concluded that:

    - There is a limited likelihood of ancestral Aboriginal scarred and/or carved trees remaining extant due to the long-term and widespread occurrence of timber harvesting and vegetation clearance activities across the Subject Area

- The physical evidence for bora grounds and/or ceremonial stone arrangements will have been likely obliterated by the combination of the following activities: vegetation clearance, ground surface preparation including rock and stick picking, ploughing, contour bank installation and maintenance, and sowing of pastures.
- A paucity of raw material within the study area precludes quarry sites being identified and reduces both the likelihood of discard and the likelihood of complex artefact assemblages being detected across the Subject area. The regional geology suggests that the most likely raw materials for stone artefact material will be locally available mudstones and siltstones with minor occurrence of chert, quartz and quartzite also possible.

❒ Where stone artefacts are found within the landscape they are expected to be distributed either as single artefacts or low-density artefact scatters (<1 artefact/m2 of less than 10 artefacts). Stone artefact manufacture is expected to be characterised by non-specific knapping technologies non-specific knapping technologies, though backed, bipolar and axe artefacts may be present.

6 Aboriginal Community Consultation and Participation

In administering its statutory functions under Part 6 of the NP&W Act, OEH requires that proponents consult with Aboriginal people about the Aboriginal cultural heritage values (cultural significance) of Aboriginal objects and/or places within any given development area (DECCW 2010c). DECCW maintains that the objective of consultation with Aboriginal communities about the cultural heritage values of Aboriginal objects and places is to ensure that Aboriginal people have the opportunity to improve Aboriginal cultural heritage assessment outcomes by:

- Providing relevant information about the cultural significance and values of Aboriginal objects and/or places;
- Influencing the design of the method to assess cultural and scientific significance of Aboriginal objects and/or places;
- Actively contributing to the development of cultural heritage management options and recommendations for any Aboriginal objects and/or places within the proposed project area; and
- Commenting on draft assessment reports before they are submitted by the proponent to OEH.

To assist proponents through the required consultation process OEH (DECCW 2010c), has prepared a guidance document titled *Aboriginal cultural heritage consultation requirements for proponents 2010* (ACHCRs). Consultation in the form outlined in the document is a formal requirement where a proponent is aware that his/her development activity has the potential to harm Aboriginal objects or places and it has been determined that an application for an Aboriginal Heritage Impact Permit (AHIP) is required before the development/activity can proceed. OEH also recommends that these requirements be used when the certainty of harm is not yet established but a proponent has, through some formal development mechanism, been required to undertake a cultural heritage assessment to establish the potential harm their proposal may have on Aboriginal objects and places. With Aboriginal objects having already been identified within the Subject Area (i.e. Collins, 2003 and 2004), the use of these formal consultation requirements in this current assessment is considered prudent.

The ACHCRs outline a four stage consultation process that includes detailed step-wise guidance as to the aim of the stage, how it is to proceed and what actions are necessary for it to be successfully completed. The four stages are:

- Stage 1 – Notification of project proposal and registration of interest;
- Stage 2- Presentation of information about the proposed project;
- Stage 3- Gathering information about the cultural significance
- Stage 4 – Review of draft cultural heritage assessment report

The document also outlines the roles and responsibilities of OEH, Aboriginal Parties including Local and State Aboriginal Land Councils, and proponents throughout the consultation process. To meet the requirements of consultation it is expected that proponents will:

- ❒ Bring the registered Aboriginal parties or their nominated representatives together and be responsible for ensuring appropriate administration and management of the consultation process;
- ❒ Consider the cultural perspectives, views, knowledge and advice of the registered Aboriginal parties involves in the consultation process in assessing cultural significance and developing any heritage management outcomes for Aboriginal objects(s) and/or places(s);
- ❒ Provide evidence to OEH of consultation by including information relevant to the cultural perspectives, views, knowledge and advice provided by the registered Aboriginal parties;
- ❒ Accurately record and clearly articulate all consultation findings in the final cultural heritage assessment report;
- ❒ Provide copies of their cultural heritage assessment report to the registered Aboriginal parties who have been consulted; and [if required]
- ❒ Submit an application to OEH for an AHIP in a timely manner and with all required information.

The following outlines the process and results of the consultation conducted during this assessment to ascertain and reflect the Aboriginal cultural heritage values of the Subject Area.

6.1 The consultation process

6.1.1 Stage 1 - Notifications

In accordance with Section 4.1.2 of the ACHRs project notifications were sent on 11 October 2010, to:

- ❒ NSW OEH
- ❒ Purfleet-Taree Local Aboriginal Land Council (Purfleet-Taree LALC)
- ❒ The Register of Aboriginal Owners (ORALRA)
- ❒ National Native Title Tribunal
- ❒ NTSCORP
- ❒ Greater Taree City Council
- ❒ Lower North Coast Catchment Management Authority

The purpose of the project notification is to identify potential cultural knowledge holders for the subject area. Responses were received from most groups contacted, with the exception of NTSCORP and the Catchment Management Authority.

No Native Title Holders, Native Title Claimants or registered Aboriginal Owners exist for the subject area.

A list of potential cultural knowledge holders was compiled from the information collected above and on 29 October 2010 these were invited to register an interest in the project by mail. An advertisement was published in the Manning River Times on 29 October 2010 in accordance with Sections 4.12 - 4.13 of the consultation requirements, inviting Aboriginal parties to register an interest in the project.

As a result of the above consultation, the following persons have become Registered Aboriginal Parties to the project for the purposes of the *Aboriginal cultural heritage consultation requirements for proponents 2010:*

- Purfleet-Taree LALC (P-T LALC)
- Guiwan Cultural Enterprise (GCE)
- Doo-wa-kee Culture & Heritage Surveys (DCH)
- Ghinni Ghinni Youth and Cultural Aboriginal Corporation (GGYCAC).[3]

6.1.2 Stages 2 & 3 – Presentation of Project Information & gathering Information about cultural significance

The following information was provided to the registered Aboriginal stakeholders:

- A summary of the project information; including information regarding the method and processes to be adopted to achieve a comprehensive Aboriginal cultural heritage assessment (Appendix A) and
- A summary of the proposed survey design and sampling strategy to be employed during the archaeological survey of the study area (Appendix A).

In addition members of the three Aboriginal groups who have maintained involvement in this cultural heritage assessment have:

- Participated in an on-site meeting and reconnaissance inspection of the subject Area on 4 February 2010; and
- Participated in the archaeological survey conducted in the period 02 to 09 March 2011.

The findings of this survey are included in this report.

A draft version of this report and a request that it be reviewed and comment be provided was supplied to: Purfleet-Taree LALC; Guiwan Cultural Enterprise; and Doo-wa-kee Culture & Heritage Surveys (DCH) via e-mail and post on 31 May 2011.

[3] Subsequent to registration, no further contact has been able to be directly achievd with the Ghinni Ghinni Youth and Cultural Aboriginal Corporation. Advice from the CEO of the Taree-Purfleet LALC is that this corporation is happy to have its interests represented by the LALC, this has however not been confirmed with representatives from the GGYCAC

A follow up meeting to discuss the report and project in general was held on 23 September 2011 at Greater Taree City Council. The meeting was attended by the following people:

- Glen Rennie (P-TLALC)
- Warner Saunders (GCE)
- Garry Wray (GCE)
- Andrew Lister (GTCC)
- Jamie Reeves (Niche)

Mick Leon, Barry Bungy and Tony Marr of Doowakee were unable to attend the meeting.

The meeting minutes were distributed to all attendees and stakeholders for comment, and are reproduced with the request for comment on the draft report in Appendix B.

6.1.3 Issues discussed during the meeting

Pertinent issues discussed in the meeting of 23 September are described below.

Site and Aboriginal object management: Generally there was agreement that if Aboriginal objects are to be disturbed or moved during the later phases of the Brimbin project then the objects should preferably be placed on in perpetuity conservation lands, preferably these lands would be under Aboriginal ownership.

Site management: this report recommends signage as a potential option for acknowledging past Aboriginal use and custodianship of the Brimbin lands. There was a concern that such signification of archaeological or cultural sites may attract vandalism, and hence it needed ot be thought through careful before implementation in the proposed ACHMP.

Site Brimbin 13: there was concern that this site had not informed the zoning plan. This was noted, however the most appropriate scale at which to manage this site is likely to be during the planning and subdivision stage of any future development.

Cultural trails / the Circle of Life: it was noted that the interconnectedness of the sites within the landscape was important to the traditional owners, and that, on balance the Circle of Life trail had not been given an appropriate level of treatment and consideration in the draft report (see responses to submissions below).

6.1.4 Written submissions and responses to matters raised therein

To date submissions regarding this cultural heritage assessment have been received from Doowakee (providing comment regarding the meeting minutes and matters discussed during the meeting). Guiwan Cultural Enterprise have provided information and written advice regarding the project area, and the Biripi Elders (represented by Guiwan for a portion of the project) have provided a separate written response. The written submissions received to date are reproduced in Appendix C.

The submissions raise several issues relevant to the heritage assessment and ongoing management of the Brimbin lands:

Guiwan Cultural Enterprise – *the richness of the landscape and depth of Aboriginal Cultural Heritage within and around the Roche Group Pty Limited landscape*

While there is no doubt the Brimbin lands and general vicinity contain cultural materials including archaeological sites and historical sites and contain remembrances of travel routes, such as at Kate Kelly's Crossing, the conclusion of this assessment and the assessment of Collins in 2005 does not support the Guiwan position of extraordinary cultural richness.

Guiwan Cultural Enterprise – *travel routes / trails / story line / habitat corridor and the "Circle of Life"*

There has been no evidence found to support the existence of a significant travel route running through the Brimbin property. Further, the suggested "Circle of Life" is also not currently reliably documented adjacent to (or beyond) the Brimbin lands. The existence of the trail was not raised as an issue during Collins previous assessment (2003) and is not known by other stakeholders (see Doowakee submission of 11 October). In 2004 the Office of Environment and Heritage (then the Department of Environment and Conservation) published oral histories for the Taree area (Byrne and Nugent 2004). At no time in these oral histories is Brimbin mentioned as a significant cultural area.

As discussed in Section 9.3 of this report, there are remembrances of travel routes in the area, associated with Kate Kelly's Crossing, and these appear to relate to the later colonial routes of movement as well. Whilst this is a noteworthy aspect of the shared Aboriginal and colonial history of the lands, it is not evidence of a highly significant cultural feature such as is being claimed by Guiwan Cultural Enterprise (*cf*. McCardle 2011).

Biripi Elders – *That all Aboriginal artefacts be collected*

Artefacts may be collected prior to the development of the Brimbin lands. The exact nature and timing of any collection will be dependant on the final plan and scheduling of the development, which will be several years in the future. Collection of artefacts may be undertaken at this stage, subject to the necessary impact and collection permits being obtained.

Biripi Elders – *That Brimbin 13 be preserved in a buffer zone or if this is not possible a salvage excavation must be undertaken*

This recommendation is supported by the recommendations in this report.

Biripi Elders – *Than an anthropological assessment be conducted to include the Biripi Elders concerns about a Bora and Initiation Grounds*

This recommendation is supported by the recommendations in this report. In the first instance, prior to anthropological assessment, this report recommends an oral history project focusing on the Brimbin area be conducted. The purpose of an oral history project would be to ensure the Aboriginal cultural values of the subject area, which are likely to be local in nature, are clarified and appropriately defined. Subsequent to this a decision on further assessment or treatment of these cultural heritage items can be considered. Currently it is

understood that the areas potentially containing the Bora and Initiation Grounds are within areas to be preserved for environmental protection.

Biripi Elders – *That Aboriginal Sites Officers are on location at the commencement and during development of the New Town of Brimbin project to assist with any unearthing of other Aboriginal artefacts*

The findings of the archaeological surveys to date (Collins 2005; this report) do not support a requirement for observation of all earth works that may be conducted during future development. However, it may be appropriate to observe some areas where there are known artefacts or areas of sensitivity and collection may take place. Observation of earth works may be a suitable mitigation for cultural impact in some circumstances, however, such circumstances have not been identified in this assessment. As noted above, artefacts may be collected prior to the development of the Brimbin lands. The exact nature and timing of any collection will be dependant on the final plan and scheduling of the development, which will be several years in the future. Collection of artefacts may be undertaken at this stage, subject to the necessary impact and collection permits being obtained.

Biripi Elders – *That the New Town of Brimbin area be recorded as a place of cultural significance to the Biripi people as a place that represents a 'culture maker' of their ancestral heritage e.g. signage indicating Biripi country*

Biripi Elders – *That a meeting be held between Warner Saunders, Jamie Reeves and Roche Group Pty Ltd before any further development is conducted to discuss the above recommendations*

These recommendations are supported by the recommendations made in this report, principally thorugh the mechanism of the development of an Aboriginal Cultural Heritage Management Plan (ACHMP). The Biripi Elders and Roche Group are encouraged to continue consulting as the project progresses, and to consider as part of this consultation how the cultural significance of the area may be identified, interpreted and acknowledged in the development of the Brimbin community.

PTLALC – *Point 1 Whilst site officers are confident that the transects were assessed in detail they are also of the opinion that the proponents reduction in assessment resources (time and officers) impacted on the quality of the assessment on the total subject land.*

The assessment of the Brimbin lands is considered to be adequate for the purposes of the development of the Structure Plan. Combined with the results of Collins (2005) previous surveys, the current assessment provides an adequate characterisation of the archaeological and cultural heritage values of the area proposed for development. Table 6, Table 7 and Figure 12 document and summarise the survey coverage of the current project. Overall the survey provided for an effective coverage of the survey area of approximately 10%, and an effective coverage of the Brimbin lands as a whole of 0.6%. Notably the landforms of expected higher sensitivity had an effective survey coverage of approximately 1% (Table 7).

Aboriginal community consultation and assessment for the project will be ongoing. Depending on the final plan and scheduling of the development, which will be several years in the future, further information may need to be gathered to inform any Aboriginal Heritage Impact Permits and specific site management activities. If appropriate this may include additional site inspections or surveys.

PTLALC – Point 2 the report highlights the fact that Brimbin in the majority has been exposed to extensive agricultural activities over many years and states that isolated finds would be unlikely to yield further undisturbed artefacts due to the repeated ploughings, it needs to be recognised that historic ploughing does not diminish the likely hood of further finds. Previous experience as evidenced by the Ainsworth report (Old Bar precinct 3) suggests that ground disturbing activity can unearth subsurface artefacts buried through historic farming.

It is identified by the report that a number of the scattered artefacts are not separated by significant distances this combined with the historic ground disturbing activities associated with farming could indicate a site which through farming disturbance may hold further evidence of historic cultural activity yet to be recognised-subsurface

This recommendation is supported in part by the recommendations in this report, which include the option for the possible excavation and collection from the site Brimbin 13. Generally the Brimbin area was concluded by this report to have a relatively low likelihood of containing sub-surface archaeological deposits due to the generally shallow soils, which have been heavily disturbed by agricultural development. It is also noted that several artefact areas will be preserved in conservation areas (see Table 9), this will include preservation of any sub-surface potential these sites may contain.

PTLALC – *Point 3 Clarification of contributors*

These clarifications and amendments have been made in the final version of this report.

PTLALC – *Point 4 PTLALC would stress that if an AHIP is sought that it needs to be involved in the management of any identified artefacts.*

As a recognised statutory body for the area, and as a current Registered Aboriginal Party, Purfleet-Taree LALC will be consulted with and involved in any future management activities on the Brimbin lands, including any application for an Aboriginal Heritage Impact Permit (AHIP).

As noted above, artefacts may be collected prior to the development of the Brimbin lands. The exact nature and timing of any collection will be dependant on the final plan and scheduling of the development, which will be several years in the future. Collection of artefacts may be undertaken at this stage, subject to the necessary impact and collection permits being obtained.

PTLALC – *Point 5 Areas where artefacts are currently identified that will be subject to an AHIP when ground disturbing activities/development take affect should have the ground disturbance activities supervised by PTLALC site officers*

As described above, it may be appropriate to observe some areas where there are known artefacts or areas of sensitivity. Observation of earth works may be a suitable mitigation for cultural impact in some circumstances, however, such circumstances have not been identified in this assessment. As noted above, artefacts may be collected prior to the development of the Brimbin lands. The exact nature and timing of any collection will be dependant on the final plan and scheduling of the development, which will be several years in the future. Collection of artefacts may be undertaken at this stage, subject to the necessary impact and collection permits being obtained.

PTLALC – *Point 6 The report as has been conducted is in the opinion of the PTLALC a detailed report and was conducted with integrity yet it due to the reduction of its scope by the proponent cannot be considered conclusive. There are sufficient significant sites (Cundle Cundle camp and cultural fish traps) within close proximity to the subject area and ample anecdotal evidence that the Brimbin area was significant to the Biripi ancestors to suggest that Brimbin was an area frequented by Aboriginal ancestors, in the least it was a place that provided ample native foods. Moreover, it is highly likely that throughout the development of the site that further culturally significant finds will be made.*

PTLALC looks forward to working closely with the proponent throughout the development of the site as to ensure the security of any yet un-identified finds are appropriately dealt with.

As noted above there is no doubt the Brimbin lands and general vicinity contain cultural materials including archaeological sites and historical sites and contain remembrances of travel routes, such as at Kate Kelly's Crossing, indicating the cultural significance of the area to the local Aboriginal community.

Consultation with the Registered Aboriginal Parties will continue throughout the life of the project. Management options for Aboriginal artefacts and on site activities involving the Aboriginal community have been outlined in responses above.

7 Archaeological Survey Design and Sampling Strategy

The archaeological survey of the Brimbin new community area was designed with reference to the following current and possible future influences on the Aboriginal cultural heritage resource of the area:

- The current projected land-use within the Brimbin Structure Plan. The area within the north west portion of the Brimbin development area proposed as future residential (inclusive of the related local and neighbourhood centres); the area to the southwest proposed to be large lot residential; and the areas in the central north of the proposed as future employment zones are considered to be priority areas for survey. These areas are those to be most subject to landscape transformation by the development;
- The known archaeological record for Brimbin including its topographic context (see Figures 8 and 9);
- Described predictive models for the distribution of archaeological materials within the local and regional landscape;
- The historic and current land-use patterning of the development area. For example within the proposed residential area, contour banks have been installed to reduce erosion. These provide barriers to downslope movement of Aboriginal objects, and if colluvial movement of objects is expected, these are likely sites of artefact accumulation
- The landscape features of the development area including drainage, elevation, slope and extant native vegetation (see Figures 3, 4, 5, 7 and 10).

In developing the survey design, aerial photograph interpretation, GIS analysis and limited visual inspection were employed to ensure strategic coverage of the Subject Area and its landforms and to allow characterisation of the archaeological record in areas likely to be impacted by the development. Some attention was also placed on the characterisation of the Aboriginal archaeological record within areas proposed for long-term conservation. This was expected to allow for some contextualisation of the overall impact of the development on the local and regional Aboriginal cultural heritage resource and enable preliminary consideration of its potential cumulative impacts. From this analysis the following five survey zones (see Figure 11) were identified:

Zone 1: This survey unit lies in the central portion of the Subject Area where it includes the eastern sectors of the proposed residential area. It is comprised of a system of undulating low hills (with a maximum elevation of 66 m AHD) that rise to the north, east and west of the southerly draining Pontobark Creek. A small patch of native vegetation occurs in the central portion of this zone, near and to the south of a small dam within the Pontobark Creek. To the east of the creek much of the cleared grazing land is contoured to reduce erosion.

Zone 2: This survey unit is in the central portion of the Brimbin Development area and incorporates the proposed employment and the combined primary production/future employment zone. The southern portion of this zone contains some native vegetation.

Zone 3: This survey unit covers the area proposed as large lot rural residential in the Brimbin Structure Plan. For the most part this area contains undisturbed native vegetation although there is evidence of some clearance on the southern margins.

Zone 4: This survey unit lies at the western margin of the main residential area proposed for Brimbin and is specifically allocated for conservation of the riparian zone adjacent to the Dawson River. With close proximity to this water course it has some potential to yield Aboriginal cultural materials.

Zone 5: This survey unit lies in the western portion of the proposed residential area. It is an area dominated by hill slopes and ridgelines and is covered by native vegetation, much of which is considered regrowth.

In addition to these five survey zones, as field conditions and time permitted investigation of additional/broader areas adjoining these survey zones was undertaken to ensure effective coverage of landforms (see below).

8 Field Methods

The field survey principally consisted of targeted foot traverse of the five previously identified survey zones.

The Subject Area consists of well grassed pasture, with remanent trees and other areas of regrown or remnant vegetation. Apart from patchy areas of high exposure that would be typically found in rural environments (tracks and dams for example) the Subject Area is otherwise a low archaeological visibility and low archaeological exposure environment. The survey strategy for the Brimbin Subject Area was to walk meandering transects of at least 6 survey personnel (= 30 m wide transects) across areas of interest, closely inspecting areas of exposure where they occurred. In some cases areas of anticipated higher exposure conditions were specifically targeted, such as the large dams present within the Subject Area. Exposure and visibility were estimated in accordance with the Requirement 9 of the Archaeological Code of Practice (DECCW 2010).

Survey units/transects and finds were recorded using a Trimble Nomad GPS with a specifically designed data dictionary. All positional recording used Map Grid of Australia (MGA) coordinates based on the Geocentric Datum of Australia (GDA).The GPS unit directly logs positions for features including transects, archaeological features and site areas. Recording in this way is compliant with Requirements 5, 7 and 8 of the Archaeological Code of Practice (DECCW 2010).

As per Requirement 9 of the Archaeological Code of Practice (DECCW 2010) sites were defined based on the spatial extent of visible objects, which in all cases were present on the ground surface. In addition to the recording of site coordinates using the Trimble Nomad GPS a paper record was made of all sites using standard recording forms. This was to ensure that all elements of the information needed to both undertake a significance assessment and to complete the mandatory OEH AHIMS Aboriginal site recording forms, was recorded. Stone artefacts were analysed and recorded in the field using a standard recording form. Attributes

were recorded for each artefact individually, with each artefact being replaced to its original location once recorded.

A 12 mega pixel resolution compact digital camera was used for all photography.

The survey was conducted on the following dates:

- 3 and 4 March 2011 – one survey team;
- 7, 8, 9 and 10 March 2011 – two survey teams.

The survey participants are listed in Table 1. With the exception of minor absences the survey team(s) was the same for each day.

9 Survey Results

9.1 Survey Coverage

The survey covered a large area, focusing on those areas described in Section 7 and shown in Figure 12. The survey comprised 48 transects, all surveyed on foot, with a total length of approximately 72 km. The width of the transects was at least 30 m in all cases with at least 6 personnel traversing each transect with spacings of 5 m between each surveyor. Table 6 presents the survey details for each transect, showing that the estimated total land surface area observed during the survey was 2,166,322 m2. Survey transect effectiveness data was estimated and recorded as per Requirement 9 of the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (DECCW 2010). Applying this data to the survey results suggests that the estimated effective coverage of the survey was 221,725 m^2, or approximately 10% of the observed ground-surface area. The effectiveness of the survey is discussed with regard to the landforms present further below.

TransectID	Landform	Area (sq.m)	Visibility	Exposure	Effective Cov Area (sq.m)	Effective Cov %
1	Rolling Hills	97,578	20	70	13,661	14.00
2	Rolling Hills	40,227	70	70	19,711	49.00
3	Rolling Hills	71,475	90	70	45,029	63.00
4	Rolling Hills	42,804	5	5	107	0.25
5	Rolling Hills	12,862	5	5	32	0.25
6	Low Rises	92,613	10	10	926	1.00
7	Steep Slopes	33,669	50	60	10,101	30.00
8	Steep Slopes	33,779	5	5	84	0.25
9	Rolling Hills	30,902	5	5	77	0.25
10	Rolling Hills	30,203	60	70	12,685	42.00
11	Rolling Hills	62,834	70	70	30,789	49.00
12	Rolling Hills	72,641	10	20	1,453	2.00
13	Rolling Hills	66,709	10	20	1,334	2.00
14	Low Rises	24,951	40	50	4,990	20.00
15	Low Rises	111,882	5	5	280	0.25
16	Low Rises	29,664	30	50	4,450	15.00
17	Low Rises	74,653	10	15	1,120	1.50
18	Rolling Hills	45,708	10	20	914	2.00
19	Rolling Hills	9,027	40	60	2,167	24.00
20	Rolling Hills	29,873	60	70	12,547	42.00
21	Rolling Hills	37,110	5	5	93	0.25
22	Rolling Hills	35,100	20	20	1,404	4.00
23	Rolling Hills	56,771	10	10	568	1.00
24	Rolling Hills	15,826	80	90	11,395	72.00
25	Rolling Hills	44,638	40	60	10,713	24.00
26	Rolling Hills	34,380	5	5	86	0.25
27	Rolling Hills	64,038	5	5	160	0.25
28	Low Rises	94,927	10	10	949	1.00

Continued over

TransectID	Landform	Area (sq.m)	Visibility	Exposure	Effective Cov Area (sq.m)	Effective Cov %
29	Low Rises	18,932	20	80	3,029	16.00
30	Rolling Hills	15,863	70	70	7,773	49.00
31	Rolling Hills	42,489	10	10	425	1.00
32	Rolling Hills	42,817	40	50	8,563	20.00
33	Low Rises	49,645	5	5	124	0.25
34	Low Rises	61,244	5	5	153	0.25
35	Steep Slopes	41,102	10	10	411	1.00
36	Rolling Hills	38,453	10	10	385	1.00
37	Rolling Hills	28,239	5	5	71	0.25
38	Rolling Hills	48,060	5	5	120	0.25
39	Rolling Hills	79,389	5	5	198	0.25
40	Low Rises	84,432	10	10	844	1.00
41	Rolling Hills	43,148	5	5	108	0.25
42	Steep Slopes	11,972	5	5	30	0.25
43	Steep Slopes	18,961	40	60	4,551	24.00
44	Steep Slopes	14,676	60	70	6,164	42.00
45	Rolling Hills	54,945	10	10	549	1.00
46	Steep Slopes	28,811	10	10	288	1.00
47	Rolling Hills	20,174	5	5	50	0.25
48	Rolling Hills	25,126	5	5	63	0.25
		2,165,322			**221,725**	**10.24**

Table 6. Survey coverage data

For the Subject Area four landforms were defined based on topographic characteristics (Section 4.1 and Figure 3) and then refined based on observations made during the fieldwork These are fully described below and summarised in Table 7.

Coastal Plain

This landform is comprised of flat, low lying, flood prone land in the eastern part of the Subject Area. Vegetation in the area is a mix of remnant and regrown swamp mahogany forest and paperbark thicket. This area was not included in the archaeological survey because it was deemed unlikely to have been an area of past Aboriginal land use, and because the entire area is zoned for conservation, so there is no threat of harm to any traces of past Aboriginal land use that may be present in this landform.

Low Rises

The low rises landform occurs in the central (between New Yard Creek and the Plain landform) and south-western part of the Subject Area. The landform has broad, low hills and depressions. Approximately half the area has been cleared for pasture, including intensive ploughing for pasture improvement and the establishment of a large dam. The remaining half of the area contains remnant and regrown forest. For the most part the landform has poorly developed drainage lines, with the exception of New Yard Creek in south-west of the landform.

Both cleared and forested areas of this landform were surveyed. The area is geomorphologically stable, and archaeological visibility and exposure were both usually low. In

the pastures thick grass was present, and exposures with the potential to reveal Aboriginal objects were limited to stock pads, small scalds and gullies around the dam. In the forest the exposures were limited to vehicle tracks/clearings along boundaries and bare ground patches between vegetation and leaf litter.

This landform was not intensively surveyed as much of it is to be conserved. Nevertheless there were five archaeological sites recorded in this landform, being three isolated stone artefacts on a rise above the head of a tributary of New Yard Creek, and two scarred trees.

Plate 1. The Low Rises landform in the vicinity of the large dam

Rolling Hills

This landform occurs in the western part of the subject area, and comprises most of the land to the west of New Yard Creek. The Rolling Hills Landform has hills with moderately sloped inclines, simple slopes and rounded crests and depressions. The southern and northern margins of the area contain remnant and some regrown forest, however the majority of this landform has been cleared for pasture. Pasture improvements include decades of intensive ploughing (see Plate 4 in Collins 2004) and extensive contour banking constructed in the 1960s and 1970s. Pontobark Creek, one of two large drainage lines in this landform, has been dammed. The other large drainage line is a short but well incised west flowing tributary of the Dawson River.

The archaeological survey focused on the cleared areas of this landform, but also took in some areas of regrown forest and remnant forest. The pasture areas were generally covered in thick grass affording only glimpses of the ground surface, which showed evidence of recent ploughing in the form of a rutted surface. Exposures in both the pasture and forest areas included erosion and bare earth in the contour banks, stock pads, vehicle tracks, small scalded areas, small land slips and areas with no vegetation due to heavy ground disturbance, such as the corners of paddocks.

A large part of this landform is proposed as a residential area, and therefore it was intensively surveyed. The survey discovered 7 archaeological sites in this landform, being 6 isolated stone artefact sites and a single scarred tree. The 6 stone artefact sites and single scarred tree recorded by Collins (2004) were all located on this landscape, giving a total of 14 of the 21 sites recorded for the subject area located in the Rolling Hills landform.

Plate 2. The Rolling Hills landform, looking south over the catchment for Pontobark Creek.

Steep Slopes

The Steep Slopes landform occurs as areas of greater relief and slope gradient within the Rolling Hills, in the north-west corner of the subject area. This landform accounts for only a small portion of the land of the subject area. The landform is characterised by steep simple slopes and narrow crests. Rock outcrop is frequent, especially on crests, being angular to rounded sedimentary rocks from the Carboniferous aged Byabbara beds. Most of this landform has also been cleared for improved pasture, although regrown stands ("cattle camps") are very common.

The archaeological survey sampled the Steep Slopes landform relatively intensively, which is partly due to the Steep Slopes accounting for only a small part of the overall land surface area, and relatively good visibility and exposure in some of the sampled areas. Most the Steep Slopes will be zoned as conservation areas. The surface conditions for archaeological survey were generally poor, with thick grass obscuring visibility and areas of exposure being infrequent. The types of exposure in the area included stock pads, vehicle tracks, small land slips and the contour banks.

There were 2 stone artefact sites discovered on the Steep Slopes. One site contained 3 artefacts, whilst the other (Brimbin 13) contained 21 artefacts, including flaked stone and a stone axe head distributed over a small area on the crest of a rocky ridge. In terms of numbers of artefacts present on the ground surface this is the largest site recorded in the subject area, and is notable on a local level for the same reason.

Plate 3. The Steep Slopes landform in the north-west of the subject area.

Landform	Sum of Area (sq.m)	Sum of Effective Cov erage Area (sq.m)	% of landform effectively surveyed	Sites	Feature Count	
					Artefacts	Scarred Trees
Low Rises	11,559,889.00	16,865.36	0.15	5	3	2
Rolling Hills	17,077,770.22	183,230.41	1.07	8	7	1
Steep Slopes	1,510,738.71	21,628.92	1.43	2	24	0
Plain	7,608,071.37	0.00	0.00	0	0	0
Total	***37,756,469.29***	***221,724.69***	***0.59***	*15*	*34*	*3*

Table 7. Landform summary – sampled areas

Table 7 summarises the survey effectiveness by landform, as per Requirement 10 of the Archaeological Code of Practice (DECCW 2010). Thick pasture grass, the result of a particularly good recent season and relatively light stocking, and patchy exposure presented a constraint to the survey of the cleared areas. In the forested areas ground cover and a general lack of exposure also presented a constraint to the survey. Nevertheless, as with most archaeological surveys in similar contexts, exposures such as stock pads, scalds, vehicle tracks, creek banks were targeted during the survey where possible. Most transects afforded some level of archaeological exposure. The overall survey effectiveness was 0.59% of the subject area was effectively surveyed. Survey effectiveness of around 1% for the Rolling Hills and Steep Slopes landforms is considered good when the constraints of thick grass cover for much of the area is taken into account. When combined with Collins (2004) survey effort the current results mean that the Brimbin area has been well surveyed, and that the general nature and distribution of past traces of Aboriginal land use can be effectively described to inform management decisions for the rezoning.

9.2 Archaeological site descriptions

The archaeological survey recorded 14 archaeological sites, consisting of 11 stone artefact sites and 3 scarred trees. The site nomenclature used by Collins (2004) was continued for the current survey: the sites are listed in Table 8 by survey unit and landform, and are briefly described below.

Name	Features	Survey Unit	landform
Brimbin8	Artefact	1	Rolling Hills
Brimbin9	Artefact	1	Rolling Hills
Brimbin10	Artefact	3	Rolling Hills
Brimbin11	Artefact	3	Rolling Hills
Brimbin12	Artefact	7	Steep Slopes
Brimbin13	Artefact	35	Steep Slopes
Brimbin14	Artefact	11	Rolling Hills
Brimbin15	Artefact	11	Rolling Hills
Brimbin16	Scarred Tree	11	Rolling Hills
Brimbin17	Artefact	33	Low Rises
Brimbin18	Artefact	14	Low Rises
Brimbin19	Artefact	14	Low Rises
Brimbin20	Scarred Tree	15	Low Rises
Brimbin21	Scarred Tree	28	Low Rises
Brimbin22	Artefact	37	Rolling Hills

Table 8. Archaeological sites recorded during the survey

Brimbin 8

A single flake in an exposure next to the dam on Pontobark Creek, near the bottom of a simple slope. The area has been intensively ploughed, and there is no potential for sub-surface artefacts to be present in an undisturbed context.

Plate 4. Location of Brimbin 8

Plate 5. Brimbin 8 flake dorsal surface.

Brimbin 9

A single grindstone fragment located on the ground surface in a grassed paddock, on the western margin of the dam on Pontobark Creek, at the base of a broad simple slope. The area has been intensively ploughed, and there is no potential for sub-surface artefacts to be present in an undisturbed context.

Plate 6. Location of Brimbin 9, looking south

Plate 7. Brimbin 9 – grinder fragment

Brimbin 10

A single mudstone flake with cobble cortex. Located on a vehicle track, about midslope on a simple slope on the eastern side of Pontobark Creek. Located about 145 m from artefact Brimbin 11. Located in the general area of Collins (2004) Brimbin 1. The area has been intensively ploughed, the track is heavily eroded and there is no potential for sub-surface artefacts to be present in an undisturbed context.

Plate 8. Brimbin 10 location – looking east

Plate 9. Brimbin 10 artefact – dorsal surface

Brimbin 11

A single mudstone flake located on a vehicle track, on the basal part of a simple slope on the eastern side of Pontobark Creek. Located about 40 m from the current creek channel, and 145 m from artefact Brimbin 10. Located in the general area of Collins (2004) Brimbin 1. The area has been intensively ploughed, the track is heavily eroded and there is no potential for sub-surface artefacts to be present in an undisturbed context.

Plate 10. Brimbin 11 location – looking east

Plate 11. Brimbin 11 artefact – ventral surface

Brimbin 12

Three black volcanic flakes with cobble cortex located on a flat step, midslope on a steep slope. The rea has been cleared and now has casuarina regrowth. The artefacts were located on a vehicle track, along with 9 other small pebbles of similar raw material. The track has not been dressed and exposed rock on the track is sedimentary. The flakes all had evidence of bipolar reduction. The shallow soils and good exposure indicate there is no potential for sub-surface artefacts to be present in an undisturbed context. Located in the general area of Collins (2004) Brimbin 5, Brimbin 6 and Brimbin 7.

Plate 12. Brimbin 12 location – looking south

Plate 13. Brimbin 12 artefacts – ventral surface

Brimbin 13

This site is a concentration of stone artefacts on a small rocky ridge, in the steep slopes landform, in the north-west of the subject area. A concentration of 17 flaked stone artefacts was recorded in an area 30 m x 20 m just off the crest of the ridge. Approximately 40 m south of this artefact concentration were 3 more artefacts in very close proximity to each other, including an axe head and a hammerstone. The ridge is covered with pasture and angular rock, much of which has plough damage indicating the area has been ploughed in the past, although not as intensively as some areas – probably owing to the relative steepness of this area. There is virtually no exposure on the ridge, with all artefacts being located on the ground surface, and visible between patches of grass. The raw material of all the flaked stone artefacts was mudstone, and the assemblage was unusual in that it contained a range of artefact sizes and categories, from large to small pieces, including flakes and cores. In these respects the assemblage is similar to quarry debitage, although the site is not a stone source. Possibly the assemblage represents one flaking episode of one or several pieces of the same raw material. There is some potential for sub-surface artefacts to be present here. If flaking did take place at the site, the smaller flakes and fragments would be incorporated into the soil matrix, below the ground surface.

Plate 14. Ridge (centre) on which Brimbin 13 is located – looking north

Plate 15. Brimbin 13 - axe

Plate 16. Brimbin 13 – flaked artefacts

Brimbin 14

A single grindstone fragment located on the ground surface of basal slope, on the edge of the riparian corridor and a grassed paddock, approximately 50 m east of the Dawson River. Located approximately 25 m from artefact Brimbin 15, and 150 m from scarred tree Brimbin 16. The area has been intensively ploughed, and there is no potential for sub-surface artefacts to be present in an undisturbed context in the paddock.

Plate 17. Location of Brimbin 14 and 15 – looking south-west

Plate 18. Brimbin 14 artefact

Brimbin 15

A single grindstone fragment located on the ground surface of basal slope, in a grassed paddock, approximately 75 m east of the Dawson River. Located approximately 25 m from artefact Brimbin 14, and 150 m from scarred tree Brimbin 16. The artefact has scarring from plough damage on one surface. The area has been intensively ploughed, and there is no potential for sub-surface artefacts to be present in an undisturbed context in the paddock.

Plate 19. Brimbin 15 – artefact

Brimbin 16

A scarred tree located in the forested riparian margin of the Dawson River. The tree is a Turpentine, probably *Syncarpia glomulifera*. The scar is elongate with zig-zag tool marks from a metal wood cutting axe at the top, and horizontal tool marks at the base. The size of the scar and tool marks indicate the scar is most likely a bark slab removal for use in a shelter, done in the post-contact period. The area appears to have been cleared or thinned of vegetation previously, with several sawn stumps present, and areas of mounded dirt and voids. The scarred tree is located immediately above the bank of the Dawson River and 150 m from the artefacts Brimbin 14 and Brimbin 15.

Plate 20. Brimbin 16 – looking east

Plate 21. Brimbin 16 – detail showing tool marks

Brimbin 17

A single chert flake located on the ground surface in a grassed paddock, which has been cleared and ploughed. The artefact is located 160 m from artefact Brimbin 18 and 125 m from artefact Brimbin 19. The landform is a low rise above the head of a poorly defined south running tributary of New Yard Creek. The area has been intensively ploughed, as evidenced by furrows remaining on the ground surface, and there is no potential for sub-surface artefacts to be present in an undisturbed context.

Plate 22. Location of Brimbin 17, 18 and 19 – looking north-west

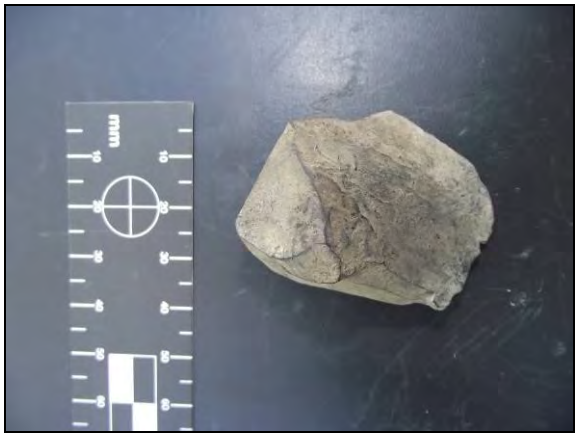


Plate 23. Brimbin 17 artefact – ventral surface

Brimbin 18

A single core located on the ground surface in a grassed paddock, which has been cleared and ploughed and has some small regrown eucalypts. The artefact is located 160 m from artefact Brimbin 17 and 80 m from artefact Brimbin 19. The landform is a low rise above the head of a poorly defined south running tributary of New Yard Creek. The area has been intensively ploughed, as evidenced by furrows remaining on the ground surface, and there is no potential for sub-surface artefacts to be present in an undisturbed context.

Plate 24. Brimbin 18 artefact - core

Brimbin 19

A single grinder fragment located on the ground surface in a grassed paddock, which has been cleared and ploughed and has some small regrown eucalypts The artefact is located 125 m from artefact Brimbin 17 and 80 m from artefact Brimbin 18. The landform is a low rise above the head of a poorly defined south running tributary of New Yard Creek. The area has been intensively ploughed, as evidenced by furrows remaining on the ground surface, and there is no potential for sub-surface artefacts to be present in an undisturbed context.

Plate 25. Brimbin 19 artefact – grindstone fragment

Brimbin 20

A scarred tree located in the Ironbark-Paperbark forest on the lowland to the north of New Yard Creek. The tree is a living Bloodwood. The scar is regular and elongate, with irregular overgrowth giving the scar a twisted appearance. There are no tool marks. The scar is likely to be of the post-contact period, its size and shape suggesting a shelter slab removal.

Plate 26. Brimbin 20 – scarred tree

Brimbin 21

A scarred tree located in the Ironbark-Paperbark forest on the low rises in the south-western part of the subject area, in very close proximity to the railway line. The tree also contained a native bee hive, a resource often mentioned by Aboriginal representatives during the survey. The tree was alive and was tentatively identified as an ironbark. The scar is difficult to interpret: the scar appears natural as it is long and irregular, however at the base it is square, and there is a horizontal line of tool marks in the sap wood. Possibly the tool marks are from the removal of inner bark or cambium subsequent to the tree being naturally scarred.

Plate 27. Brimbin 21 – scarred tree / resource and gathering site (native bees/honey)

Plate 28. Brimbin 21 detail showing tool marks and square base of scar

Brimbin 22

A single core located on the ground surface on a vehicle track, which has been cleared and ploughed and has some small regrown eucalypts. The artefact is located approximately 270 m from the artefacts at the Brimbin 13 site. The landform is a shallow saddle in the rolling hills in the north-west of the subject area. The area has been cleared and ploughed, and there is no potential for sub-surface artefacts to be present in an undisturbed context.

Plate 29. Exposure containing Brimbin 22

Plate 30. Brimbin 22 artefact - core

9.3 Cultural heritage – sites and other information

This section documents sites and other information collected during the archaeological surveys that is relevant to an assessment of cultural heritage significance for the subject area.

Sites of cultural significance

Warner Saunders indicated that in the general terrain about the Dawson River he had been taken to view a ceremonial/bora ground in the 1950s, by his uncle Frank. During the survey Warner showed the male members of the survey team a site which he called a "marker site", which he had visited at the same time as the bora ground. This site was, according to Warner, a site associated with the bora ceremony. There were two collections of naturally occurring rocks (large cobbles) at the site, one of which Warner was previously aware of. It could not be determined whether or not the collections of rocks were features constructed before or after

land clearing, however the area had been ploughed. While at the site Warner mentioned that another place we had previously traversed in the survey was an initiation site, also associated with the marker site and bora site. Neither the marker site or initiation site are shown on figures in this report, however the location of both was recorded and overlaid with the structure plan in a GIS. This showed that both the marker site and initiation site are situated in areas zoned for conservation. To date, Warner has not advised the authors of the details of the location of the bora ground he believes to be in the subject area. He has advised that he believes the site is very sacred, and that it is a difficult burden to decide whether or not to reveal the site's locality, or risk the site being impacted by the development if it is not identified and avoided.

During the survey a constant theme of discussion was with regard to a former Aboriginal travel route that ran from Isabella Mary (Kate) Kelly's crossing, eastward to the coast. This route appears to be more or less the same as the former Wingham to Port Macquarie road, and it is not unlikely that this road was based on an existing Aboriginal route. In addition, submissions subsequent to the survey have made claims for a "Circle of Life" trail running through the southern part of the Brimbin lands. The authors were shown several trees in the western part of the subject area which were said to be markers of the Circle of Life. The trees had all experienced bark removal or had distinctive features such as boles, however none of the bark removals displayed evidence of being culturally scarred. While they are not tangible sites, the inferred presence of travel routes is an important aspect of the social value of the subject area, and a noteworthy aspect of the shared history between the Aboriginal and colonial populations. As discussed in Section 6.1.4 this assessment, and the assessment conducted by Collins in 2004 found no evidence on the Brimbin lands to support the presence of a highly significant cultural feature such as is being claimed for the "Circle of Life".

In their written response to the project the Purfleet-Taree Local Aboriginal Land Council have noted that:

> *There are sufficient significant sites (Cundle Cundle camp and cultural fish traps) within close proximity to the subject area and ample anecdotal evidence that the Brimbin area was significant to the Biripi ancestors to suggest that Brimbin was an area frequented by Aboriginal ancestors, in the least it was a place that provided ample native foods.*

These comments also reflect the values of the Brimbin lands as being significant to the local Aboriginal community, but not being significant at a level such that has been implied for the "Circle of Life".

10 Scientific Values and Significance Assessment

10.1 The Burra Charter

The Burra Charter (Australia ICOMOS 1999) defines the basic principles and procedures to be observed in the conservation of important heritage places. It provides a primary and 'best-practice framework within which decisions about the management of heritage sites in Australia should be made. The Burra Charter defines cultural significance as being derived from the following four values:

- **Aesthetic value**: This value includes aspects of sensory perception for which criteria can and should be stated. Such criteria may include consideration of the form, scale, colour, texture and material of the fabric; the smells and sounds associated with the place and its use.
- **Historic value:** This value encompasses the history of aesthetics, science and society, and therefore to a large extent underlies all of the terms set out in this section. A place may have historic value because it has influenced, or has been influenced by, an historic figure, event, phase or activity. It may also have historic value as the site of an important event. For any given place the significance will be greater where evidence of the association or event survives in situ, or where the settings are substantially intact, than where it has been changed or evidence does not survive. However, some events or associations may be so important that the place retains significance regardless of subsequent treatment.
- **Scientific value***:* The scientific or research value of a place will depend upon the importance of the data involved, on its rarity, quality or representativeness, and on the degree to which the place may contribute further substantial information.
- **Social value:** This value embraces the qualities for which a place has become a focus of spiritual, political, national or other cultural sentiment to a majority or minority group.

10.2 Significance assessment of Aboriginal archaeological sites

The NSW Aboriginal cultural heritage regulatory framework supports the significance assessment of Aboriginal archaeological sites and provides guidelines for this assessment within the *Aboriginal Cultural Heritage Standards and Guidelines Kit (NPWS 1997)*. "The Kit" outlines two main themes in the overall Aboriginal cultural heritage significance assessment process: the identification of the cultural/social significance of Aboriginal objects and/or places to Aboriginal people and the identification of the scientific (archaeological) significance to the scientific/research community. These themes encapsulate those aspects of the Burra Charter that are of particular relevance to Aboriginal objects and places. The guidelines specify the following criteria for archaeological significance, as paraphrased below:

- **Research Potential:** It is the potential to elucidate past behaviour which gives significance under this criterion rather than the potential to yield collections of artefacts. Matters considered under this criterion include – the intactness of a site, the potential for the site to build a chronology and the connectedness of the site to other sites in the archaeological landscape.

- **Representativeness:** As a criterion, representativeness is only meaningful in relation to a conservation objective. Presumably all sites are representative of those in their class or they would not be in that class. What is at issue is the extent to which a class of sites is conserved and whether the particular site being assessed should be conserved in order to ensure that we retain a representative sample of the archaeological record as a whole. The conservation objective which underwrites the 'representativeness' criteria is that such a sample should be conserved.

- **Rarity:** This criterion cannot easily be separated from that of representativeness. If a site is 'distinctive' then by definition, it will be part of the variability which a representative sample would represent. The criteria might best be approached as one which exists within the criteria of representativeness, giving a particular weighting to certain classes of site. The main requirement for being able to assess rarity is to determine what is common and what is unusual in the archaeological record: but also the way that archaeology confers prestige on certain sites because of their ability to provide certain information. The criterion of rarity may be assessed at a range of levels: local, regional, state, national, global.

- **Educational Potential:** This criterion relates to the ability of the cultural heritage item or place to inform and/or educate people about one or other aspects of the past. It incorporates notions of intactness, relevance, interpretative value and accessibility. Where archaeologists or others carrying out cultural heritage assessments are promoting/advocating the educational value of a cultural heritage item or place it is imperative that public input and support for this value is achieved and sought. Without public input and support the educative value of the items/places is likely to not ever be fully realised.

- **Aesthetics:** In relation to heritage places, aesthetic significance is generally taken to mean the visual beauty of the place. Aesthetic value is not inherent in a place but arises in the sensory response people have to it. OEH guidelines provide no expectation for archaeologists to consider *aesthetic values* it is often the case that the aesthetics including the physical setting of an archaeological site or a landscape contributes to its cultural heritage significance. Examples of archaeological sites that may have high aesthetic values include rock art sites, or sites located in environments that evoke strong sensory responses – such as might be associated with the coast and estuaries of the Manning River valley.

10.3 Assessed significance of the recorded sites: An overview.

10.3.1 Cultural significance

The cultural significance of the Aboriginal objects identified during this study to the Local Aboriginal community has not been fully determined. Discussions with Aboriginal survey participants point to the view that stone artefacts wherever deposited represent the *in situ* use of that landscape by ancestral Aboriginals at some-time in the past. As previously identified for the 900 hectare portion of the Subject Area examined by Collins (2003, 2004) there was no clear evidence provided by Aboriginal field participants that the site contained sites or places of mythological, ceremonial or otherwise sacred significance. Mr Warner Saunders indicated that in the general terrain about the Dawson River he had been taken to view a ceremonial/bora ground in the 1950s. He did not provide any details of where this ceremonial ground might have been situated, and evidence of a bora ground was not found during this survey. It is possible that the bora ground Warner refers to is that described as being re-located in 1926 by Tommy Boomer "a full blooded" Biripi man born on Dingo creek in 1864/1865 in the company of a party of men from Wingham (Ramsland, 1987). This bora ground is described as being located between the Dawson River and the road to Cedar Party near Woolla, and suggests its location to be about 4 km west of the western boundary of the Subject Area.[4] Importantly, as the archaeological evidence suggests that bora grounds were not usually placed in close proximity to each other (Satterthwait and Heather, 1987), the existence of a bora ground adjacent to the eastern margins of the Dawson River is likely precluded.

There are well documented stories and remembrances of travel routes through the area, in particular these are associated with Kate Kelly's Crossing. It is believed by the majority of the local community that these Aboriginal travel routes were utilised by colonial Europeans, and became common pathways through the region, eventually becoming roads (such as the colonial Wingham to Port Macquarie Road which ran through the Brimbin lands) or less tangible features such as bullocky tracks. This shared history of tracks and trails has some cultural value. However, this assessment found no evidence in or adjacent to the Brimbin lands of the presence of a highly significant cultural feature such as the claimed "Circle of Life".

10.3.2 Archaeological significance

The scientific or archaeological significance of the Aboriginal archaeological materials recorded within the Subject Area - with the exception of the archaeologically sensitive Site Brimbin 13 (see section 10.4.1 below) –is considered to be low to moderate. The majority of Aboriginal sites identified are non-complex isolated stone artefacts and/or low density stone

[4] The archaeological evidence suggests that bora grounds were not usually placed in close proximity to each other (Satterthwait and Heather, 1987) hence the existence of a bora ground adjacent to the western margins of the study area is not archaeologically supported.

artefact scatters. These Aboriginal object types are common in local and regional contexts. Likewise, as is also common in local and regional landscape contexts, the majority of the identified isolated finds/artefact scatters were found in close proximity to ephemeral channels. Moreover, the raw materials used to manufacture these artefacts (quartz, silcrete and chert) are commonly used within the local region, and the artefact types identified do not represent a complex and locally or regionally significant artefact assemblage. Finally, the generally degraded nature of the landscape in which the artefacts are situated implies that they are no longer within their original depositional context. This means (a) that there is very little likelihood of them being associated with intact stratigraphic deposits and/or (b) of them yielding information that can inform us of the nature, extent and patterning of past Aboriginal occupation of the study area.

10.3.3 Public significance

The public significance and/or educative value of the Aboriginal archaeological materials recorded within the study area is considered to be low to moderate. In their current context they will remain subject to the vagaries of geomorphic processes such that wind and/or water effects may cause the objects to be non-discernible in a short period of time. In addition, the relative low density and low complexity of the artefact assemblage provides little inducement for an interested public to travel to see. Alternatively the salvage and transfer of these Aboriginal objects to the Local Aboriginal Land Council offers some opportunity that the objects can be used to reinforce Aboriginal cultural traditions and their association and linkages to the landscape about Brimbin. This is especially the case if the salvaged objects are accompanied by a report detailing the landscape context from which they have been retrieved.

10.4 Significance assessment of Aboriginal archaeological sites identified during survey

10.4.1 Assessment of archaeological significance – recorded Aboriginal archaeological sites

An Assessment of the specific archaeological significance of each Aboriginal site recorded within the Subject Area during this survey is presented below. A statement of significance for the associated cultural landscape is also presented. This final statement of significance attempts to draw together both the archaeological (scientific) and cultural values.

Brimbin 8
Archaeological Significance: ***LOW***
Considerations against values criteria:
Research Potential
A single flaked stone artefact - the site has no or very low research potential beyond its

recording in the landscape because it is a single artefact in a disturbed context. The area where the artefact was found is of low archaeological potential.

Representativeness

The site/artefact is an unexceptional example of the class of sites to which it belongs. It has no value under this criterion.

Rarity

Sites containing small numbers stone artefacts are not locally or regionally rare. The site has no value under this criterion.

Aesthetic

The site is located in a disturbed and modified environmental context. It has low aesthetic value

Brimbin 9

Archaeological Significance: ***LOW***

Considerations against values criteria:

Research Potential

A single grinder fragment - the site has no or very low research potential beyond its current recording because it is a single artefact in a disturbed context. The area where the artefact was found was of low archaeological potential.

Representativeness

The site/artefact is an unexceptional example of the class of sites to which it belongs. It has no value under this criterion.

Rarity

Sites containing small numbers stone artefacts are not locally or regionally rare. The site has no value under this criterion.

Aesthetic

The site is located in a disturbed and modified environmental context. It has low aesthetic value

Brimbin 10

Archaeological Significance: ***LOW***

Considerations against values criteria:
Research Potential
A single flaked stone artefact - the site has no or very low research potential beyond its current recording because it is a single artefact in a disturbed context. The area where the artefact was found was of low archaeological potential.
Representativeness
The site/artefact is an unexceptional example of the class of sites to which it belongs. It has no value under this criterion.
Rarity
Sites containing small numbers stone artefacts are not locally or regionally rare. The site has no value under this criterion.
Aesthetic
The site is located in a disturbed and modified environmental context and is situated on a vehicle track. It has low aesthetic value

Brimbin 11
Archaeological Significance: ***LOW***
Considerations against values criteria:
Research Potential
A single flaked stone artefact - the site has no or very low research potential beyond its current recording because it is a single artefact in a disturbed context. The area where the artefact was found was of low archaeological potential.
Representativeness
The site/artefact is an unexceptional example of the class of sites to which it belongs. It has no value under this criterion.
Rarity
Sites containing small numbers stone artefacts are not locally or regionally rare. The site has no value under this criterion.
Aesthetic
The site is located in a disturbed and modified environmental context, on a vehicle track. It has low aesthetic value

Brimbin 12
Archaeological Significance: ***LOW***
Considerations against values criteria:
Research Potential
A single flaked stone artefact - the site has no or very low research potential beyond its current recording because it is a single artefact in a disturbed context. The area where the artefact was found was of low archaeological potential.
Representativeness
The site/artefact is an unexceptional example of the class of sites to which it belongs. It has no value under this criterion.
Rarity
Sites containing small numbers stone artefacts are not locally or regionally rare. The site has no value under this criterion.
Aesthetic
The site is located in a disturbed and modified environmental context. It has low aesthetic value

Brimbin 13
Archaeological Significance: ***HIGH***
Considerations against values criteria:
Research Potential
19 artefacts including a locally large assemblage of flaked stone, which has unusual "quarry like" characteristics, and grinding and ground edge artefacts. The site has high research potential in a local context as it has a large, diverse assemblage of artefacts and the potential for sub-surface artefacts.
Representativeness
The site and artefacts are notable example of the class of sites to which it belongs. It has high value under this criterion.
Rarity
The site is the largest artefact site within the subject area, and the local surrounds. As such it has value as being a rare example of a larger site, containing many more artefacts than other sites in the area.

Aesthetic
The site is located in a disturbed and modified environment. The site's location on the top of a distinct ridge provides some aesthetic value.

Brimbin 14
Archaeological Significance: ***LOW***
Considerations against values criteria:
Research Potential
A single grinder fragment - the site has no or very low research potential beyond its current recording because it is a single artefact in a disturbed context. The area where the artefact was found was of low archaeological potential.
Representativeness
The site/artefact is an unexceptional example of the class of sites to which it belongs. It has no value under this criterion.
Rarity
Sites containing small numbers stone artefacts are not locally or regionally rare. The site has no value under this criterion.
Aesthetic
The site is located in a disturbed and modified environmental context. It has low aesthetic value

Brimbin 15
Archaeological Significance: ***LOW***
Considerations against values criteria:
Research Potential
A single grinder fragment - the site has no or very low research potential beyond its current recording because it is a single artefact in a disturbed context. The area where the artefact was found was of low archaeological potential.
Representativeness
The site/artefact is an unexceptional example of the class of sites to which it belongs. It has no value under this criterion.
Rarity

Sites containing small numbers stone artefacts are not locally or regionally rare. The site has no value under this criterion.

Aesthetic

The site is located in a disturbed and modified environmental context. It has low aesthetic value

Brimbin 16

Archaeological Significance: ***MODERATE***

Considerations against values criteria:

Research Potential

A living scarred tree from a shelter slab removal in the post contact period. The scar retains distinctive zig-zag tool marks from a steel wood cutting axe. The tree has little research potential beyond its recording in the landscape, and the recording of its notable features – the tool marks. The tree is a remnant of an important time in the Manning Valley and Brimbin area, for both the Aboriginal and colonial populations.

Representativeness

The tree is an exceptional and well preserved example of the class of sites to which it belongs. It has high value under this criterion.

Rarity

Scarred trees with such well preserved tool marks are rare locally, and regionally. The site has value under this criterion.

Aesthetic

The site is located in the riparian margin of Dawson River. It is situated in a context of other historical landscape impacts – sawn stumps, and a small excavated pond – and as such has some aesthetic value.

Brimbin 17

Archaeological Significance: ***LOW***

Considerations against values criteria:

Research Potential

A single flake - the site has no or very low research potential beyond its current recording because it is a single artefact in a disturbed context. The area where the artefact was found was of low archaeological potential.

Representativeness
The site/artefact is an unexceptional example of the class of sites to which it belongs. It has no value under this criterion.
Rarity
Sites containing small numbers stone artefacts are not locally or regionally rare. The site has no value under this criterion.
Aesthetic
The site is located in a disturbed and modified environmental context. It has low aesthetic value

Brimbin 18
Archaeological Significance: ***LOW***
Considerations against values criteria:
Research Potential
A single core - the site has no or very low research potential beyond its current recording because it is a single artefact in a disturbed context. The area where the artefact was found was of low archaeological potential.
Representativeness
The site/artefact is an unexceptional example of the class of sites to which it belongs. It has no value under this criterion.
Rarity
Sites containing small numbers stone artefacts are not locally or regionally rare. The site has no value under this criterion.
Aesthetic
The site is located in a disturbed and modified environmental context. It has low aesthetic value

Brimbin 19
Archaeological Significance: ***LOW***
Considerations against values criteria:
Research Potential
A single grinder fragment - the site has no or very low research potential beyond its current

recording because it is a single artefact in a disturbed context. The area where the artefact was found was of low archaeological potential.

Representativeness

The site/artefact is an unexceptional example of the class of sites to which it belongs. It has no value under this criterion.

Rarity

Sites containing small numbers stone artefacts are not locally or regionally rare. The site has no value under this criterion.

Aesthetic

The site is located in a disturbed and modified environmental context. It has low aesthetic value

Brimbin 21

Archaeological Significance: ***LOW***

Considerations against values criteria:

Research Potential

A scarred tree with a rectangular based scar and poorly preserved horizontal tool marks. The scar is difficult to interpret, as it appears to be overlaid on natural scarring. It probably dates to the post contact period. The tree also contains a native bee hive, which is an important traditional resource for the Aboriginal community. The tree has little research potential beyond its current recording in the landscape.

Representativeness

The scarred tree is an interesting example of the class of sites to which it belongs. However, its poor preservation and difficulty of interpretation gives it low value under this criterion.

Rarity

Scarred trees are not locally or regionally rare. The site has interesting features however, giving it low value under this criterion.

Aesthetic

The site is located in a disturbed and modified environmental context, next to a vehicle track and railway line. It has no aesthetic value

Brimbin 20

Archaeological Significance: ***LOW***

Considerations against values criteria:

Research Potential

A scarred tree in the ironbark – paperbark forest with a large, irregular scar with no tool marks. The scar likely dates to the post-contact period as a shelter/slab removal. Beyond its current recording the site has no research potential.

Representativeness

This scarred tree is an unexceptional example of the class of sites to which it belongs. It has no value under this criterion.

Rarity

Scarred trees are not locally or regionally rare. The site has no value under this criterion.

Aesthetic

The site is located in an extant riparian forest, which probably mirrors conditions from an earlier time; as such it has some aesthetic value.

Brimbin 22

Archaeological Significance: ***LOW***

Considerations against values criteria:

Research Potential

A single core - the site has no or very low research potential beyond its current recording because it is a single artefact in a disturbed context. The area where the artefact was found was of low archaeological potential.

Representativeness

The site/artefact is an unexceptional example of the class of sites to which it belongs. It has no value under this criterion.

Rarity

Sites containing small numbers stone artefacts are not locally or regionally rare. The site has no value under this criterion.

Aesthetic

The site is located in a disturbed and modified environmental context, on a vehicle track. It has low aesthetic value

Assessment of Significance – the Cultural Landscape

An assessment of the significance of the cultural landscape considers the landscape as a contiguous geographic area (DEC 2005c: 174), within which the relationships between locations and features in the landscape provide a holistic and dynamic historical record (Moylan *et al*. 2009, Guilfoyle 2006). The dominant character of the assessment area today is that of a rural agricultural property, being largely cleared, modified, enclosed and fragmented, with pockets and fringing areas of remnant vegetation.

The assessment area has some cultural landscape significance. The significance derives from values associated with the archaeological record of stone artefact sites and scarred trees, which presents a connectedness between these sites in the landscape and a connectedness with other landscapes which are close by and have a quite different cultural record. In addition, the archaeological sites provide a tangible link with the past for the contemporary Aboriginal custodians. The significance also derives from values of historical association with some of the earliest interactions between Aboriginal people and Europeans in this part of Australia. The topography and remnant/regrown vegetation provide cohesiveness despite the extensive agricultural modifications and additions to the landscape. On the whole though, the cultural landscape values are tempered by the high levels of landscape modification in the assessment area.

11 Impact Assessment

An assessment of the impact to the archaeological values of the subject area is presented in Table 9 below. The impact assessment considers the likely harm to Aboriginal objects of the development across the project area. A number of sites including Brimbin 8, 9, 11, 12, 14, 15, 16 and 10 are considered to be little affected by the proposed development due to them being within designated conservation zones (Figure 13). The archaeologically sensitive site Brimbin 13 is recommended for *in situ* preservation and if this was to be achieved it would also be little affected by the development.

Name	Type of harm (Direct / Indirect / None)	Degree of harm (Total / Partial / None)	Consequence of harm (Total loss of value / Partial loss of value / No loss of value)
Brimbin8	None – in conservation area	None – in conservation area	No loss of value
Brimbin9	None – in conservation area	None – in conservation area	No loss of value
Brimbin10	Likely direct – zoned residential	Likely total or partial	Likely total or partial loss of value
Brimbin11	None – in conservation area	None – in conservation area	No loss of value
Brimbin12	None – in conservation area	None – in conservation area	No loss of value
Brimbin13	None – recommended to be in conservation area	None – in conservation area	No loss of value
Brimbin14	None – in conservation area	None – in conservation area	No loss of value
Brimbin15	None – in conservation area	None – in conservation area	No loss of value
Brimbin16	None – in conservation area	None – in conservation area	No loss of value
Brimbin17	Likely indirect – depends on land use	Cannot be determined at this stage	Cannot be determined at this stage
Brimbin18	Likely indirect – depends on land use	Cannot be determined at this stage	Cannot be determined at this stage
Brimbin19	Likely indirect – depends on land use	Cannot be determined at this stage	Cannot be determined at this stage
Brimbin20	None – in conservation area	None – in conservation area	No loss of value
Brimbin21	Likely none	Likely partial or none	No loss of value
Brimbin22	None – recommended to be in conservation area	None – in conservation area	No loss of value

Table 9: Summary of Impact Assessment

12 Recommendations

The following preliminary recommendations are provided with respect to the known and potential Aboriginal cultural heritage resource within the subject area:

- Where possible all current conservation zones should be retained and an Aboriginal Cultural Heritage Management Plan should be prepared for the Subject Area to ensure the adequate protection and conservation of the Aboriginal cultural values identified within it. This ACHMP should address/include the following further recommendations:

    1. For archaeological resources that are identified within/adjacent to the riparian conservation zones consideration should be given to the following conservation management option:

        - To reduce the public's ongoing risk of causing harm to Aboriginal objects, all objects in/adjacent to these riparian corridors should - under the terms of An Aboriginal Heritage Impact Permit - be collected and placed either in the Care and Control of the Local Aboriginal community and or into an in perpetuity conservation zone such as the nearby Brimbin Nature Reserve. If this option is pursued then interpretative signage is recommended for those riparian corridors that had retained Aboriginal object to acknowledge the importance of these zones to the Biripi people.

    2. To protect the archaeologically sensitive site Brimbin 13 consideration should be given to its *in situ* preservation within an archaeological conservation area. The nature and size of this conservation area should be determined at the subdivision stage of the development when the likely impacts to Aboriginal objects are more precisely known

    3. If at the design and subdivision stage of the development it is determined that the conservation of Brimbin 13 is not feasible and/or practicable then a detailed survey and salvage excavation of this archaeologically sensitive site should be undertaken. This may require the proponent to seek a s90 Aboriginal Heritage Impact Permit to allow for the authorised harm to Aboriginal objects.

- Consideration should be given to the undertaking of a small oral history project focusing on the subject area, and Aboriginal elders who have knowledge of it. The purpose of an oral history project would be to ensure the Aboriginal cultural values of the subject area, which are likely to be local in nature, are clarified and appropriately defined.

- With implementation of the above recommendations the proposed development of the subject area should be considered without Aboriginal cultural heritage constraint.

13 References

Attenbrow, V. 1999. Archaeological research in coastal southeastern Australia: A review. In Hall, J & McNiven, I.J. (eds), *Australian Coastal Archaeology*, Research Papers in Archaeology & Natural History, 31, ANH Publications, Department of Archaeology & Natural History, RSPAS, ANU, Canberra, pp. 195-210.

Australia ICOMOS, 1999. *The Burra Charter*. Australia ICOMOS, Burwood.

Bairstow, D. 2003. *A million pounds, a million acres: The pioneer settlement of the Australian Agricultural Company*, self published, Cremorne NSW.

Belshaw, J. 1978. Population distribution and the pattern of seasonal movement in northern New South Wales. In McBryde, I. (ed.), *Records of times past: ethnohistorical essays on the culture and ecology of the New England tribes*. Australian Institute of Aboriginal Studies, Canberra, pp.65-81.

Birrell, W.K. 1987. *The Manning valley: Landscape and settlement 1824-1900*, Jacaranda Press, Milton Qld.

Bowdler, S. 1983. Aboriginal Sites on the Crown-timber lands of New South Wales. A report to the Forestry Commission of New South Wales. Forest Commission of New South Wales, Sydney, NSW.

Bowdler, S. 2001. The management of Indigenous ceremonial ("bora") sites as components of cultural landscapes. In Cotter, M.M., Boyd, B & Gardiner, J (eds) 2001. *Heritage landscapes: Understanding Place and Communities*, Southern Cross University Press, Lismore NSW.

Brayshaw, H., 1977. Report on the archaeological survey of the route of a proposed transmission line between Taree and Kempsey performed May 10, 11, 12, 1977.

Brunker, R.L., Offenberg, A.C. & Cameron, R.G. 1970, Hastings 1: 250,000 geological Sheet SH/56-14 1st Edition. Geological Survey of NSW, Sydney.

Bundock, M. 1898. Notes on the Richmond River Blacks. Unpublished manuscript in the Mitchell Library, Sydney. Reproduced in, McBryde, I. 1978, *Records of Times Past: Ethnohistorical essays on the culture and ecology of the New England tribes*. Australian Institute of Aboriginal Studies, Canberra, pp. 261- 266.

Byrne, D. 1989. Cultural Resource Overview: Aboriginal Sites in the Northern Region NSW. Unpublished Report to National Parks & Wildlife Service, NSW, pp.140.

Burke, H. & Smith, C. 2004. *The archaeologists field handbook*. Allen & Unwin, Crows Nest, NSW.

Campbell, V. 1978. Ethnohistorical evidence on the diet and economy of the Aborigines of the Macleay River Valley. In McBryde, I. 1978, *Records of Times Past: Ethnohistorical essays on the culture and ecology of the New England tribes*. Australian Institute of Aboriginal Studies, Canberra, pp. 83-100.

CBOM, 2011. (Commonwealth Bureau of Meteorology 2011)). Climate Statistics for Australian Locations: Summary Statistics Taree (Robertson Street). Accessed on line at: http://www.bom.gov.au/climate/averages/tables/cw_060030.shtml.

Coleman, J. 1982. A new look at the north coast: fish traps & villages. In Bowdler, S. (ed.), In Bowdler, S. (ed), *Coastal Archaeology in Eastern Australia: Proceedings of the 1980 Valley Conference on Australian Prehistory.*, pp 1-10. Research School of Pacific Studies, The Australian National University, Occasional Papers in Prehistory, No. 11.

Collins, J., 1998. Pacific Highway: Proposed Fill Material Quarry on the Cut Batters of the Taree Bypass: Archaeological Survey for Aboriginal Sites.

Collins, J., 2000. Taree and Wingham effluent management scheme. Aboriginal archaeological assessment of preferred and alternative effluent main alignment and wet weather storage sites.

Collins, J., 2001. Proposed Peg Leg Creek Dam Site, Compartment 44, Kiwarrak State Forest: Preliminary Aboriginal Archaeological Assessment.

Collins, J., 2003. Local Environmental Study Brimbin. NSW Mid North Coast: Aboriginal Heritage Assessment. Prepared on Behalf of Connell Wagner, Callaghan, NSW, December 2003.

Collins, J. 2004. Local Environmental Study Brimbin, NSW Mid-North Coast: Aboriginal Heritage Assessment. Prepared on behalf of Connell Wagner, Callaghan, NSW, August 2004.

Connors, W.F. 1985. Pioneering Days around Taree: A factual history of Exploration and Earliest settlement of the Manning River Valley, with a detailed account of the life and

family of Benjamin Saville, First settler of Lansdowne.

Cotter, M.M. 1996. Holocene environmental change in Deception Bay, southeast Queensland: A paleogeographical contribution to MRAP Stage II, *Tempus 6: 193-205*.

Cotter, M.M. 2009. Landscapes of Deception: A multi-modal exploration of the Indigenous cultural landscape of Deception Bay Southeast Queensland. Unpublished PhD thesis, School of Environmental Science and Management, Southern Cross University, Lismore NSW, Australia.

Cotter, M.M., Boyd, B & Gardiner, J. (eds) 2001. *Heritage landscapes: Understanding Place and Communities*, Southern Cross University Press, Lismore NSW.

DECCW 2009a (Department Environment, Climate Change and Water NSW, 2009a). *Operational Policy: protecting Aboriginal cultural heritage*. Department of Environment, Climate Change & Water, Goulbourn Street, Sydney, NSW.

DECCW 2009b (Department of Environment, Climate Change and Water NSW, 2009b). *Guide to determining and issuing Aboriginal Heritage Impact Permits*. Department of Environment, Climate Change & Water, Goulbourn Street, Sydney, NSW.

DECCW 2010a (Department of Environment, Climate Change and Water NSW, 2010a). *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales: Part 6 National Parks and Wildlife Act 1974*, Department of Environment, Climate Change and Water, Goulbourn Street Sydney NSW.

DECCW 2010b (Department of Environment, Climate Change and Water NSW, 2010b). *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales*, Department of Environment, Climate Change and Water, Goulbourn Street, Sydney NSW.

DECCW 2010c (Department of Environment, Climate Change and Water NSW, 2010c). *Aboriginal cultural heritage requirements for proponents 2010*: *Part 6 National Parks & wildlife Act 1974* Department of Environment, Climate Change and Water, Goulbourn Street, Sydney NSW.

DoP 1989 (Department of Planning, NSW 1989). *Aboriginal Heritage on the North Coast*: *A Discussion paper prepared by the Department of Planning & the National Parks & Wildlife Service*, Department of Planning Grafton, NSW.

DoP 2009 (Department of Planning, NSW 2009). *Mid North Coast Regional Strategy*. Department of Planning, Bridge Street, Sydney.

Dunn, I & Sahukar, R. 2004. The Bioregions of NSW - their biodiversity, conservation and history. Department of Environment and Conservation (NSW), Sydney.

ENSR Australia Pty Ltd, 2008. Aboriginal and Historic Heritage Assessment - Pitt Street Waterfront Development, Chatham, Taree.

Etheridge, R. 1918. *The Dendroglyphs, or "Carved Trees" of New South Wales*, Memoirs of the Geological Survey of New South Wales Ethnological Series No. 3. William Applegate Gullick Government Printer, Sydney.

Fitzpatrick, F.A. 1914. *Peeps into the Past: Reminiscences of the Blacks. Pioneering days on the Manning. Men and women who blazed the track and prepared the way for present day prosperity. Cumberland Argus, Parramatta.*

Fitzpatrick, F.A. 1925. *History relating to the Magnificent Manning and Municipality of Wingham: reminiscences of days gone by and the blacks*, Wingham, NSW.

Gay, L., 2000. Greater Taree Local Government Area: Aboriginal Cultural Heritage Management Plan: Draft Final.

Godwin, L. & Creamer, H. 1984. Ethnography and archaeology on the north coast of New South Wales. *Queensland Archaeological Research*, 1: 103-16.

Gollan, K. 1990. Aboriginal sites in the sand body systems of northern new South Wales and southern Queensland. Unpublished Report, Australian Heritage Commission, Canberra.

GTCC 2010a (Greater Taree City Council 2010a) Greater Taree City Council Local Environmental Plan, 2010, Taree City Council, Taree, NSW.

GTCC 2010b (Greater Taree City Council, 2010b) State of the Environment report 2009-2010, Greater Taree City Council, Taree NSW.

Guilfoyle, D. 2006. Aboriginal Cultural Heritage Regional Studies: An Illustrative Approach. NSW Department of Environment and Conservation, Sydney.

Hall, R. & Lomax, K. 1996. A regional landscape approach to the management of stone artefact sites in forested uplands in Eastern Australia. *Australian Archaeology*, 42: 35-38.

Irish, P., 2006. Aboriginal Heritage Impact Assessment Report: Proposed Highway Service Centre, Pacific Highway Taree, NSW.

Klaver, K. & Heffernan, K., 1991. Greater Taree Aboriginal Heritage Study.

Kuskie, P., 1994. An Archaeological Assessment of the Proposed Route of Optus Communications' Fibre Optic Cable between Taree and Wingham, NSW.

Leon, M., Maslin, V. & Donovan, G., 2004. Purfleet-Taree Local Aboriginal Land Council Cultural & Heritage Section. Aboriginal Sites Investigation on Tuesday 23rd March, 2004 of Old Bar Precinct 1.

Long, A. 2005. *Aboriginal Scarred Trees in New South Wales: A Field Manual*. NSW Department of Environment and Conservation, Hurstville NSW.

Maslin, V. & Leon, M., 2003a. Purfleet-Taree Local Aboriginal Land Council Culture & Heritage Section. Aboriginal Sites Inspection for Old Bar Precinct 2A. 8th May 2003.

Maslin, V. & Leon, M. 2003b. Purfleet-Taree Local Aboriginal Land Council Culture & Heritage Section. Aboriginal Sites Investigation of Brimbin Local Environmental Study, 11 December, 2003.

Mathews, R.H. 1917. Description of two bora grounds of the Kamilaroi tribe. *Journal of the Royal Society of New South Wales*, 28:99-129.

McBryde, I. 1974. *Aboriginal Prehistory in New England: An archaeological survey of northeastern New South Wales*, Sydney University Press.

McBryde, I. 1978. *Records of Times Past: Ethnohistorical essays on the culture and ecology of the New England tribes*. Australian Institute of Aboriginal Studies, Canberra.

McBryde, I. 1982. Investigation of Archaeological sites at Schnapper Point, Evans Head, New South Wales. In, McBryde, I. *Coast and Estuary: Archaeological investigations on the north coast of New South Wales at Wombah and Snapper Point*. Australian Institute of Aboriginal Studies, Canberra, ACT, pp. 51-77.

McCarthy, F.D. 1940. The carved trees of New South walses. *Australian Museum Magazine*, Vol.7 (5): 161-166.

McCardle, P. 2011. North Precinct 2B Old Bar Rezoning LGA: Great Taree Indigenous Archaeological Due Diligence Assessment. Report for Old Bar Residential Unit Trust Pty Ltd.

Moylan E, Brown, S and Kelly, C. 2009. Toward a Cultural Landscape Atlas: Representing all the Landscape as Cultural. *International Journal of Heritage Studies*, Vol. 15, No. 5, pp: 447-466.

Mulvaney, J. & Kamminga, J. 1999. *Prehistory of Australia*. Allen & Unwin, St Leonards, NSW.

Niche, 2011a. (Niche Environment & Heritage, 2011a). Flora & Fauna Assessment, Brimbin. Unpublished final report prepared on behalf of Roche Group Pty Ltd, March 2011.

Niche, 2011b. (Niche Environment & Heritage, 2011b) Archaeological Report Proposed Caravan Park Lot 50, DP113050, Cundletown NSW. Unpublished draft report prepared for Roche Group Pty Ltd, March 2011.

NPWS 1986 (NSW National Parks & Wildlife Service, 1986). *For Planners & Developers: Aboriginal Sites in N.S.W.* NSW National Parks & Wildlife Service, Sydney.

NPWS 1997. (NSW National Parks & Wildlife Service, 1997) *Aboriginal Cultural Heritage Standards and Guidelines Kit*. NSW National Parks and Wildlife Service, Hurstville.

NPWS 2003a (NSW National Parks and Wildlife Service, 2003a). Coocumbac Island Nature Reserve. Plan of Management. Hurstville, NSW.

NPWS 2003b (NSW National Parks and Wildlife Service, 2003b). Brimbin Nature Reserve, Draft Plan of Management. Hurstville, NSW.

NPWS 2005 (NSW National Parks and Wildlife Service, 2005). Brimbin Nature Reserve Plan of Management. Hurstville, NSW.

Oregon, 2007. Environmental Assessment Rural Residential Subdivision. Lots 53 & 54 DP 836998 and lot 156 DP 753202, The Bucketts Way, Tinonee. Volume 1.

Pierce, R. 1978. The evidence of J. Ainsworth on the diet and economy of the Ballina Horde. In McBryde, I. 1978, *Records of Times Past: Ethnohistorical essays on the culture and ecology of the New England tribes*. Australian Institute of Aboriginal Studies, Canberra, pp. 116-121.

Public Works Department New South Wales, 1981. Manning River Flood History 1831-1979. Report no P.W.D. 81019

Ramsland, J. 1987. The struggle against isolation: A history of the Manning valley. Library of Australian History in association with Grater Taree City Council.

Rich, E., 1990a. Aboriginal Historic Sites in North East NSW: Management Study.

Rich, E., 1990b. Pacific Highway S.H. No.10 - Taree Traffic Relief Route: archaeological survey for Aboriginal sites.

Ridgeway, T., Maslin, V. & Clarke, D., 2005. Purfleet-Taree Local Aboriginal land Council, Culture & Heritage Section. Aboriginal Sites Investigation of Cattai Wetlands, Proposed Subdivision Lot 1 DP 180721 78, 98 & PT 61 DP 754415: 2nd, 8th, 12th March 2004 & 17th February 2005.

Roche Group, 2010. (Roche Group Pty Ltd in association with Edge Land Planning, 2010) *Brimbin Development Strategy & Structure Plan*. Unpublished Plan submitted to Greater Taree City Council December, 2010. Roche Group Pty Ltd with Edge Land Planning.

Satterthwait, L. & Heather, A. 1987. Determinants of earth circle site location in the Moreton region, southeast Queensland, *Queensland Archaeological Research*, 4: 5-53.

Sinclair Knight and Partners Pty Ltd, 1980. Taree Sewerage Augmentation Dawson River Works: Review of Environmental Factors.

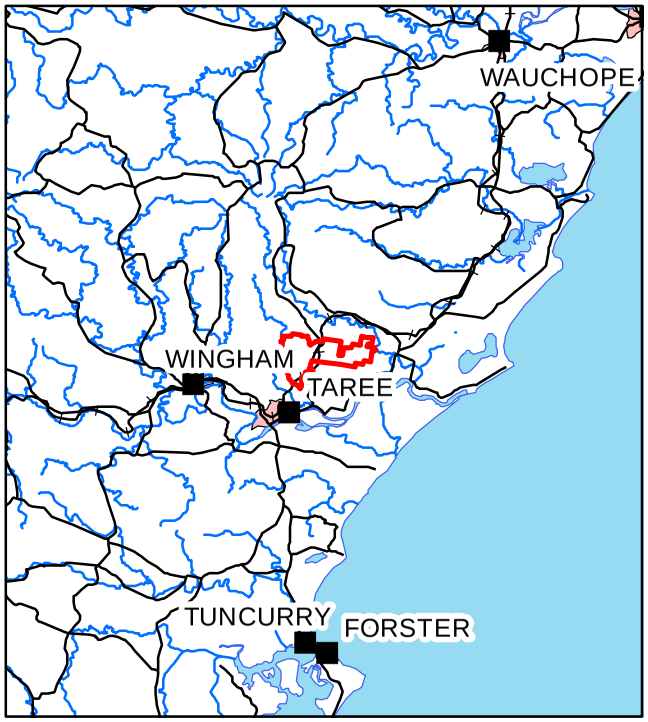
Stern, H & de Hoedt, G. 2000. Objective classification of Australian Climates. *Australian Meterorological Magazine,* 49: 87-96.

Sullivan, S. 1976. The Material culture of the Aborigines of the Richmond and Tweed Rivers of Northern New South Wales at the time of First White Settlement. Unpublished B.A (Hons.) Thesis Department of History, University of New England, Armidale.

Sullivan, S. 1978. Aboriginal diet and food gathering methods in the Richmond and Tweed River valleys, as seen in early settler records. In McBryde, I. 1978, *Records of times past: Ethnohistorical essays on the culture and ecology of the New England tribes*. Australian Institute of Aboriginal Studies, Canberra, pp. 100-115.

Tindale, N.B. 1974 *Aboriginal Tribes of Australia: their terrain, environmental controls, distribution, limits and proper names*. University Of California Press, Berkley.

14 Maps and Figures



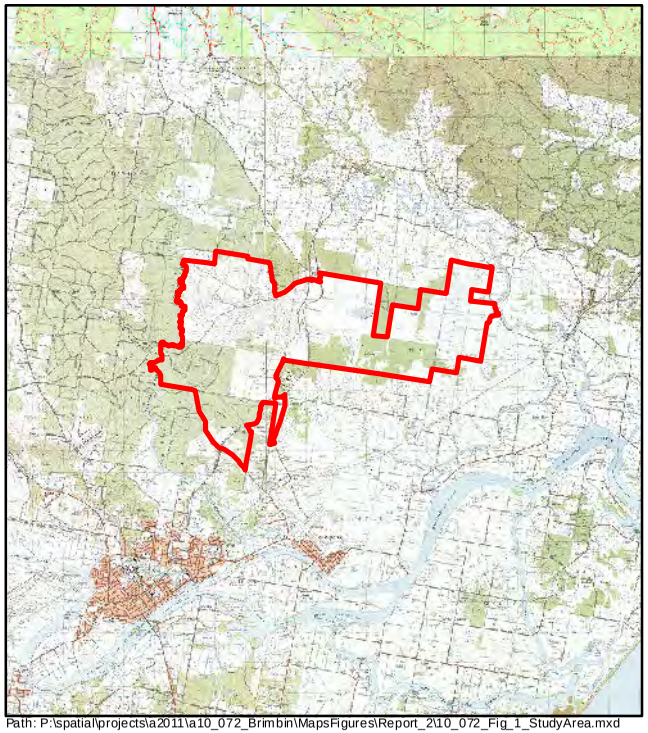


Figure 1: Location of the Subject Area

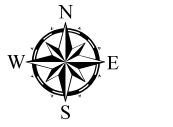
10-072 Brimbin Archaeological

Drawn by: RJ

Project Mgr: JR

Date: 24/05/2013

Subject Area



km

0 1 2 4 6 8

niche Environment and Heritage

Horizontal Datum:
GDA 1994 MGA Zone 56

Path: P:\spatial\projects\a2011\a10_072_Brimbin\MapsFigures\Report_2\10_072_Fig_1_StudyArea.mxd

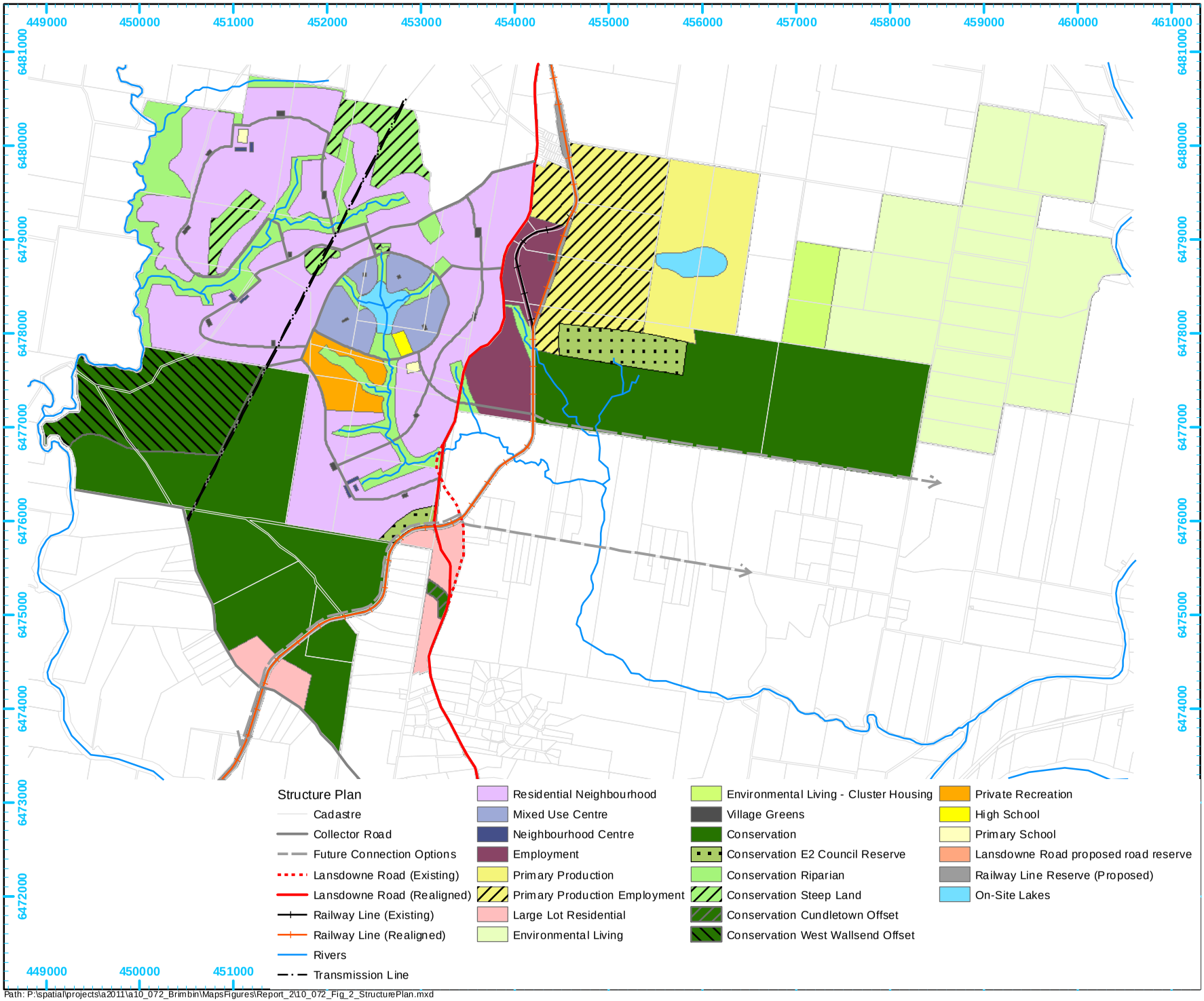


Figure 2: Draft Brimbin Structure Plan 22 may 2013

10-072 Brimbin Archaeology

Drawn by: RJ

Project Mgr: JR

Date: 15/07/2013

N

W E

S

Metres

0 250 500 1,000 1,500 2,000

niche Environment and Heritage

Horizontal Datum:
GDA 1994 MGA Zone 56

Path: P:\spatial\projects\a2011\a10_072_Brimbin\MapsFigures\Report_2\10_072_Fig_2_StructurePlan.mxd

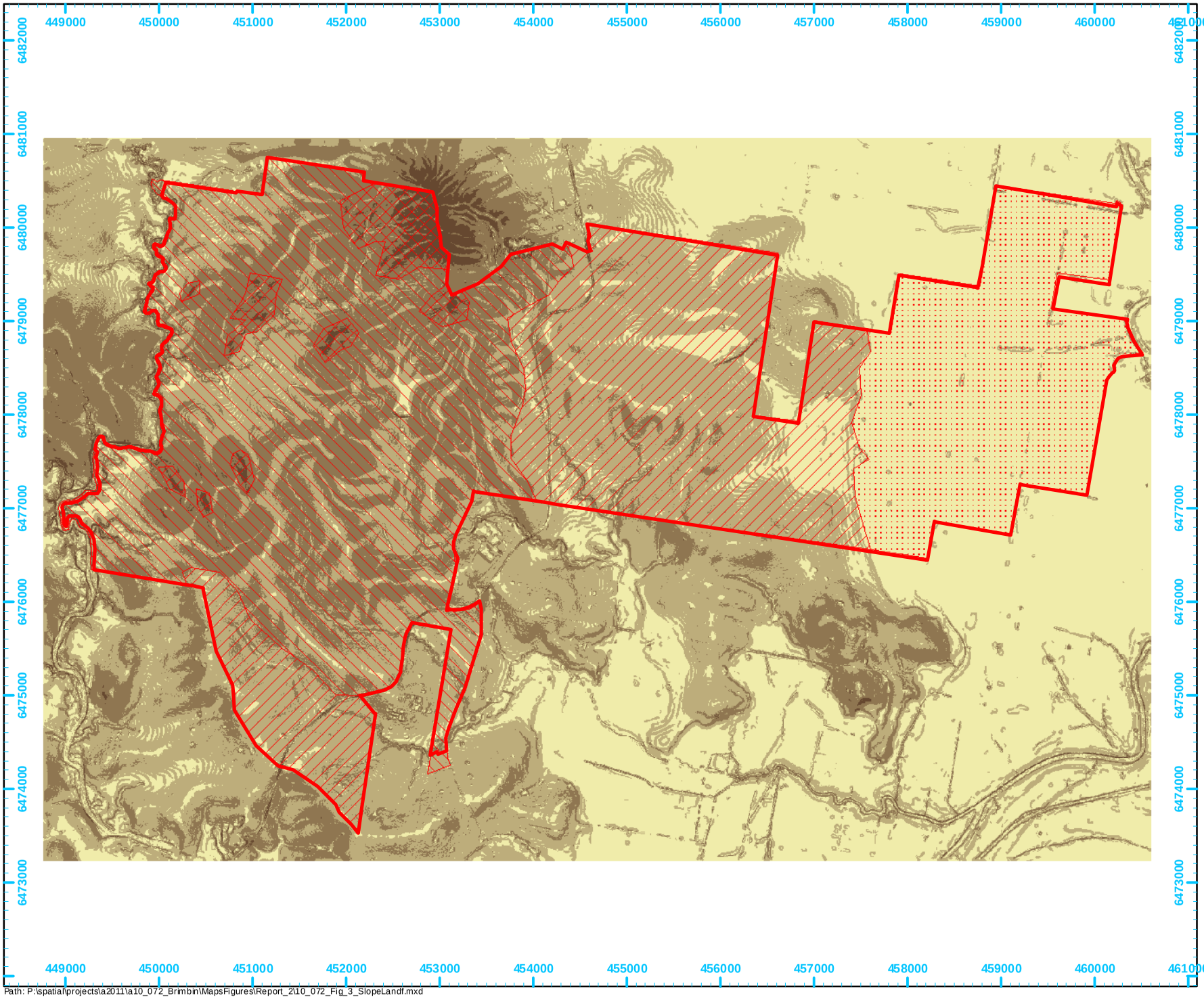


Figure 3: Slope and Landform Characterisation of the Subject Area

10-072 Brimbin Archaeology

Drawn by: RJ

Project Mgr: JR

Date: 24/05/2013

Subject Area

Landform

- Plain
- Low rises
- Rolling hills
- Steep slopes

Slope (%)

- 0 - 1
- 1 - 5
- 5 - 20
- > 20

N

W E

S

Metres

0 250 500 1,000 1,500 2,000

niche Environment and Heritage

Horizontal Datum:
GDA 1994 MGA Zone 56

Path: P:\spatial\projects\a2011\a10_072_Brimbin\MapsFigures\Report_2\10_072_Fig_3_SlopeLandf.mxd

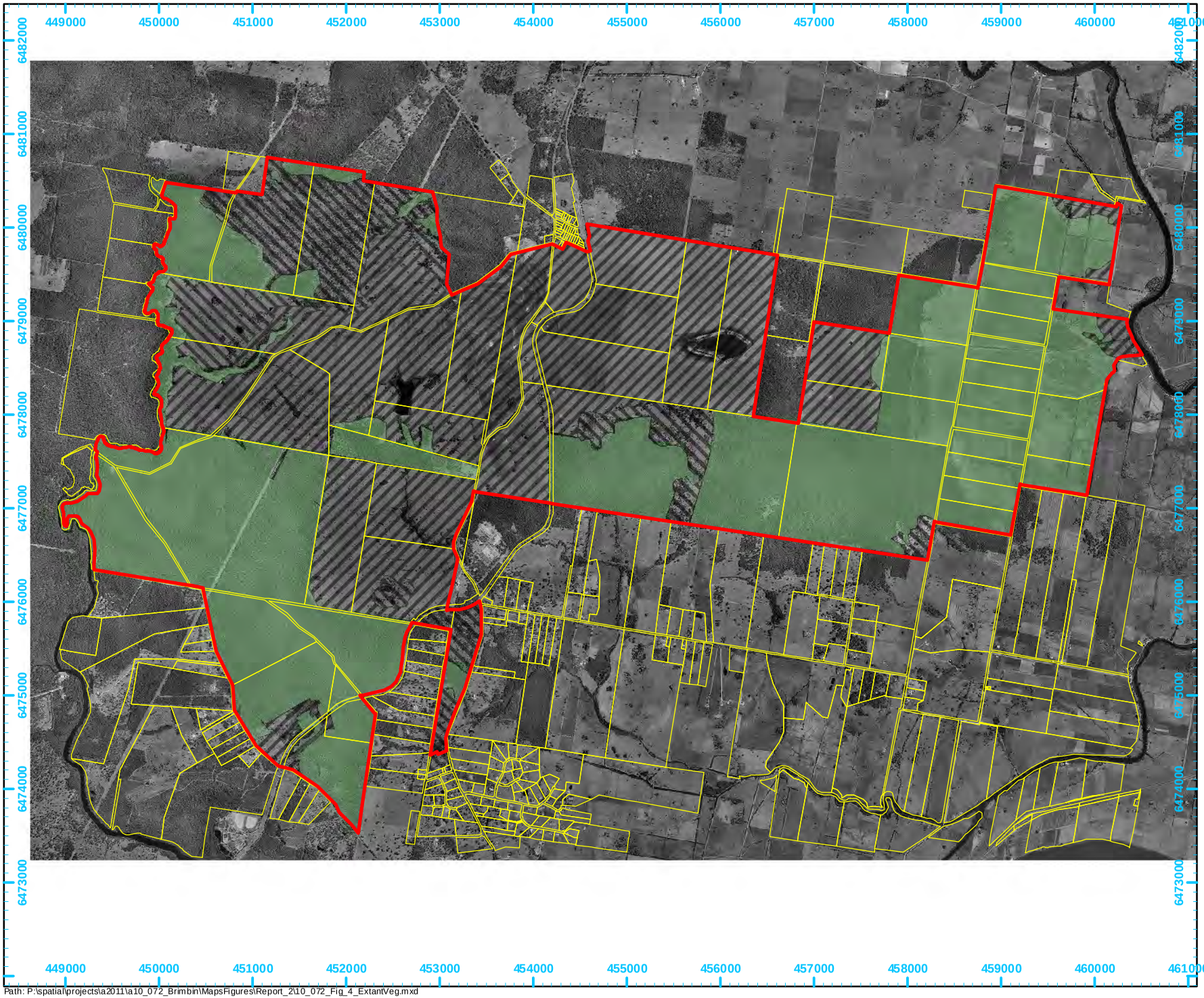


Figure 4: Total Extant Native Vegetation within the Subject Area

10-072 Brimbin Archaeology

Drawn by: RJ

Project Mgr: JR

Date: 24/05/2013

Subject Area

Cadastre

Vegetation

Native vegetation

Regrowth

Cleared

N

W E

S

Metres

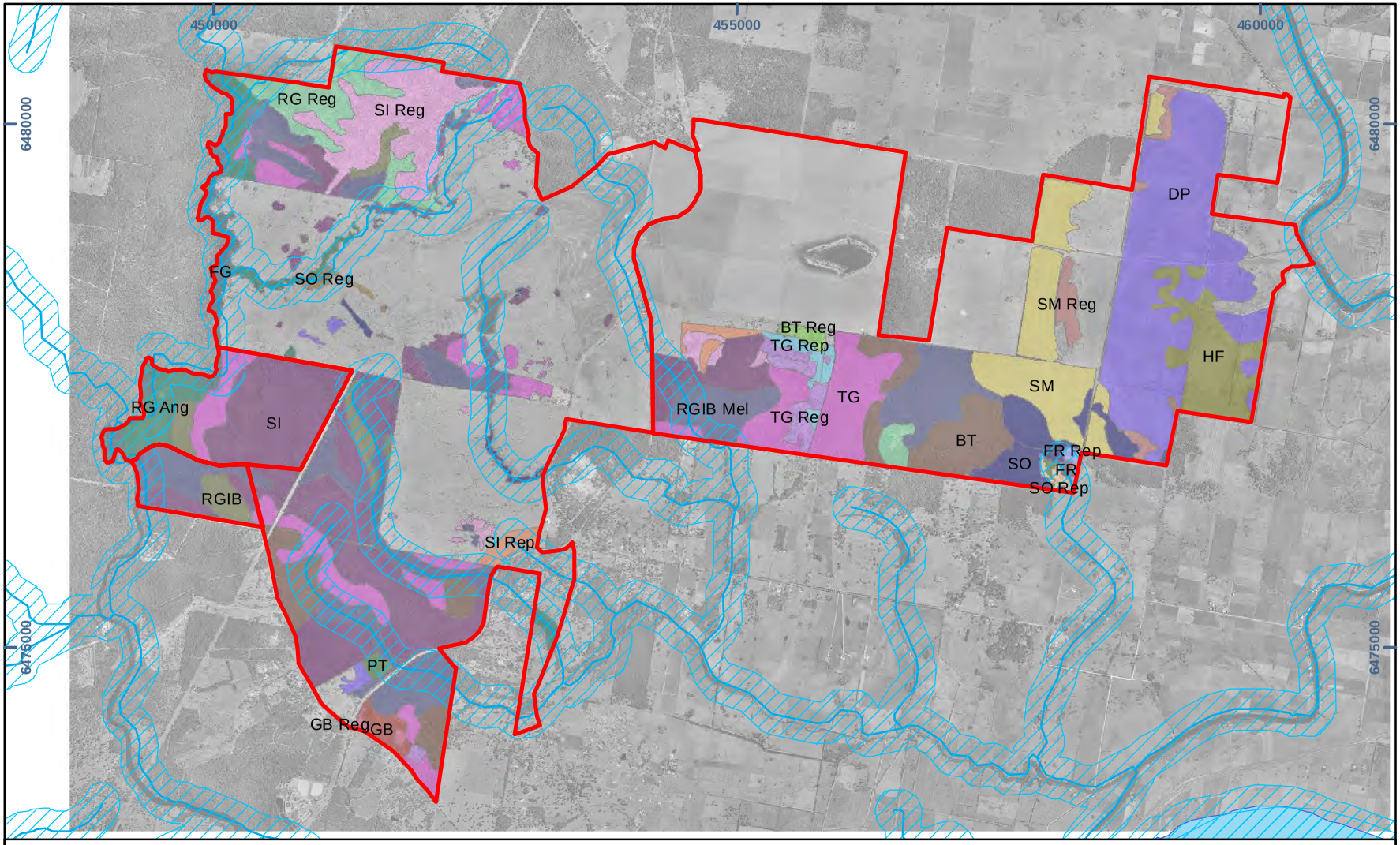
0 250 500 1,000 1,500 2,000

niche Environment and Heritage

Horizontal Datum:
GDA 1994 MGA Zone 56

Imagery:
(c) 2009 LPMA

Path: P:\spatial\projects\a2011\a10_072_Brimbin\MapsFigures\Report_2\10_072_Fig_4_ExtantVeg.mxd



Subject Area

Watercourse 200m Buffer

Vegetation

- BT Reg, Blackbutt Tallowwood Regrowth
- BT, Blackbutt Tallowwood Tall Open Forest
- DP, Derived Swamp Paperbark Thicket
- FG, Flooded Gum Brush Box Tall Forest
- FR Rep, Forest Redgum Regplanting
- FR, Forest Redgum Regrowth
- GB Reg, Grey Box Red Gum Grey Ironbark Regrowth
- GB, Grey Box Red Gum Grey Ironbark Woodland
- HF, Herbfield
- PT, Swamp Paperbark Thicket
- RG Ang, Red Gum Angophora Mahogany Woodland
- RG Reg, Red Gum Grey Ironbark Paperbark Regrowth
- RGIB Mel, Red Gum Grey Ironbark Paperbark Forest
- RGIB, Narrow-leaved Red Gum Ironbark Woodland
- SI Reg, Spotted Gum Ironbark Regrowth
- SI Rep, Spotted Gum Ironbark Replanting
- SI, Spotted Gum Ironbark Forest
- SM Reg, Swamp Mahogany Regrowth
- SM, Swamp Mahogany Forest
- SO Reg, Swamp Oak Forest Regrowth
- SO Rep, Swamp Oak Replanting
- SO, Swamp Oak Forest
- TG Reg, Grey Gum Stringybark Tallowwood Regrowth
- TG Rep, Grey Gum Stringybark Tallowwood Replanting
- TG, Grey Gum Stringybark Tallowwood Tall Open Forest

Figure 5: Drainage and Native Vegetation types within the Subject Area

10-072 Brimbin Archaeology

Drawn by: RJ

Project Mgr: JR

Date: 24/05/2013

N

W E

S

Metres

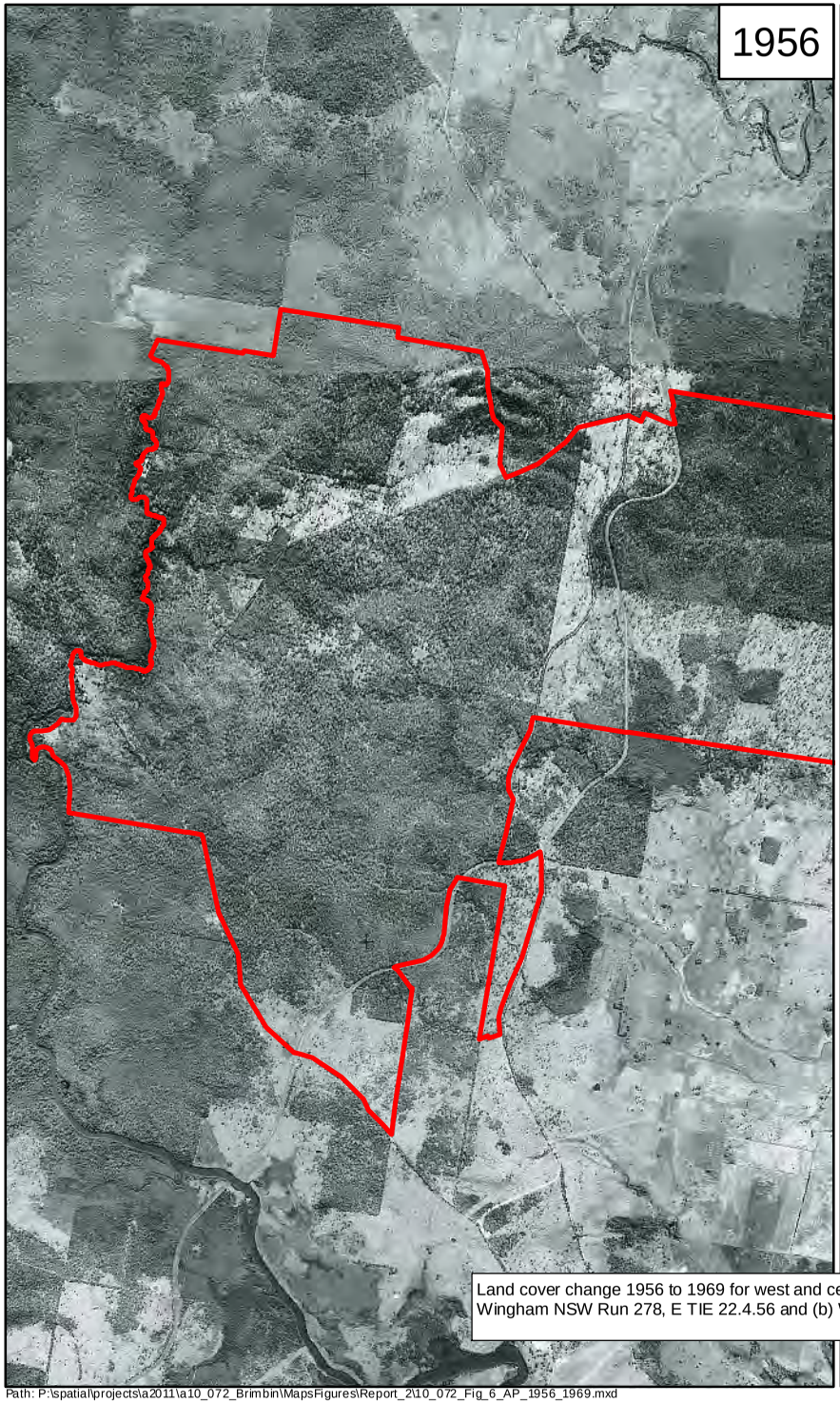
0 250 500 1,000 1,500 2,000

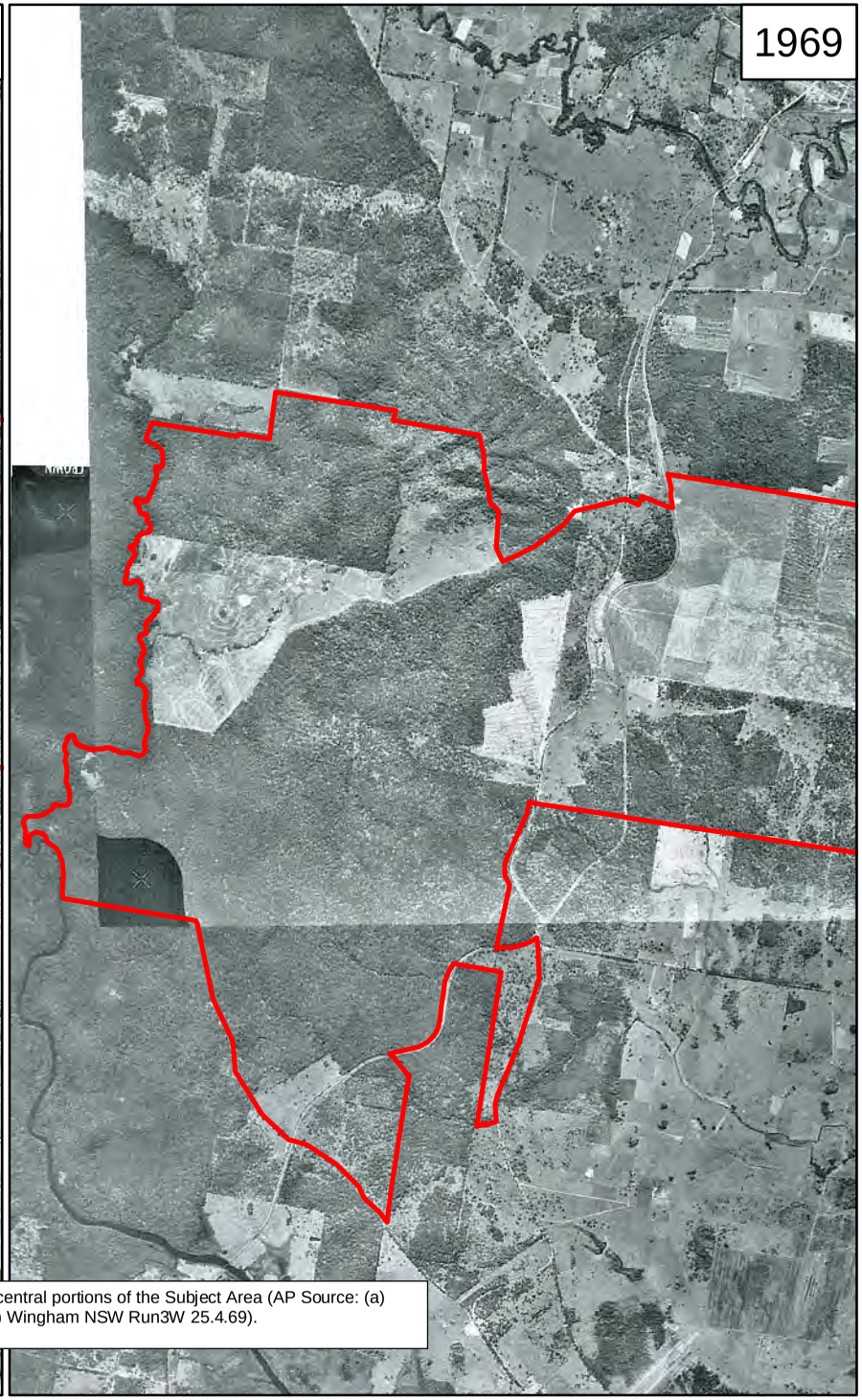
niche Environment and Heritage

Horizontal Datum:
GDA 1994 MGA Zone 56

Imagery:
(c) 2009 LPMA

Path: P:\spatial\projects\a2011\a10_072_Brimbin\MapsFigures\Report_2\10_072_Fig_5_Vegetation.mxd





Land cover change 1956 to 1969 for west and central portions of the Subject Area (AP Source: (a) Wingham NSW Run 278, E TIE 22.4.56 and (b) Wingham NSW Run3W 25.4.69).

Figure 6: Historical Airphoto Interpretation - A

10-072 Brimbin Archaeology

Drawn by: RJ

Project Mgr: JR

Date: 24/05/2013

Subject Area

N

W E

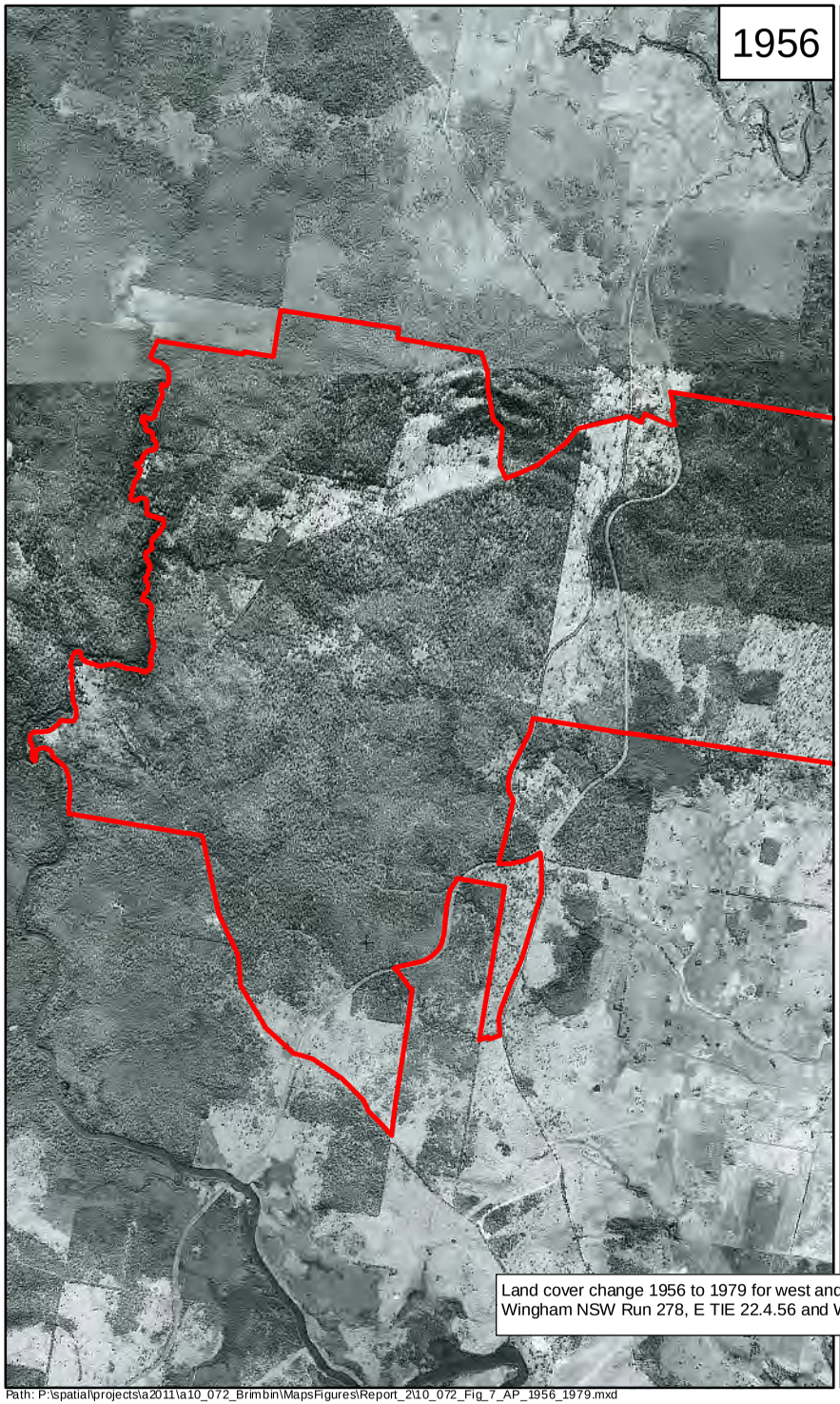
S

Metres

0 250500 1,000 1,500 2,000 2,500

niche Environment and Heritage

Path: P:\spatial\projects\a2011\a10_072_Brimbin\MapsFigures\Report_2\10_072_Fig_6_AP_1956_1969.mxd



Land cover change 1956 to 1979 for west and central portions of the Subject Area. (AP source: Wingham NSW Run 278, E TIE 22.4.56 and Wingham NSW RUN 3s 28.11.79).

Figure 7: Historical Airphoto Interpretation - B

10-072 Brimbin Archaeology

Drawn by: RJ

Project Mgr: JR

Date: 24/05/2013

Subject Area

N

W E

S

Metres

0 250500 1,000 1,500 2,000 2,500

niche Environment and Heritage

Path: P:\spatial\projects\a2011\a10_072_Brimbin\MapsFigures\Report_2\10_072_Fig_7_AP_1956_1979.mxd

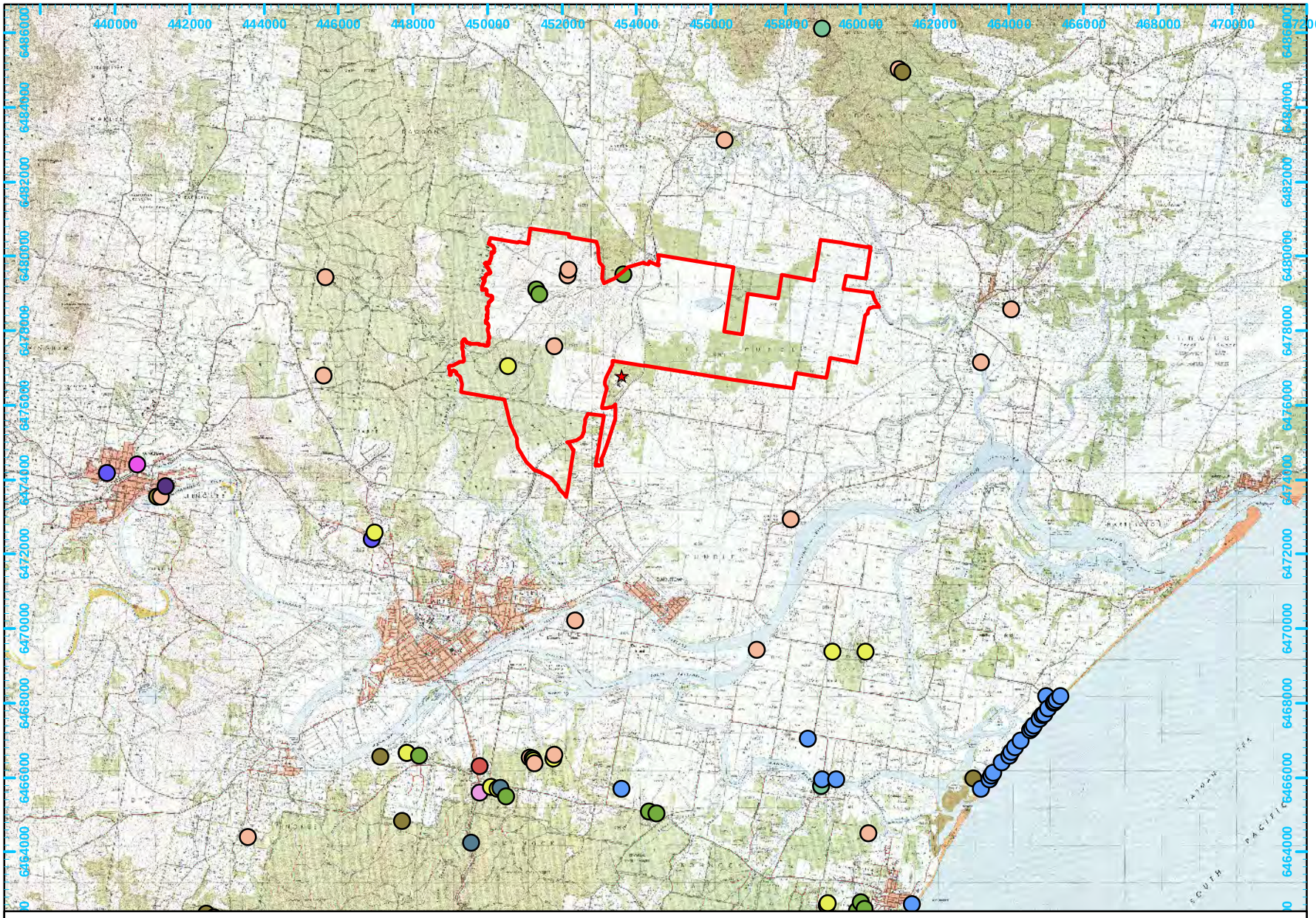


Figure 8: AHIMS Search Results for the Subject Area and Surrounds

10-072 Brimbin Archaeology

Drawn by: RJ

Project Mgr: JR

Date: 24/05/2013

N

W E

S

km

0 0.5 1 2 3 4 5 6

niche Environment and Heritage

Horizontal Datum:
GDA 1994 MGA Zone 56

Path: P:\spatial\projects\a2011\a10_072_Brimbin\MapsFigures\Report_2\10_072_Fig_8_AHIMS_Region.mxd

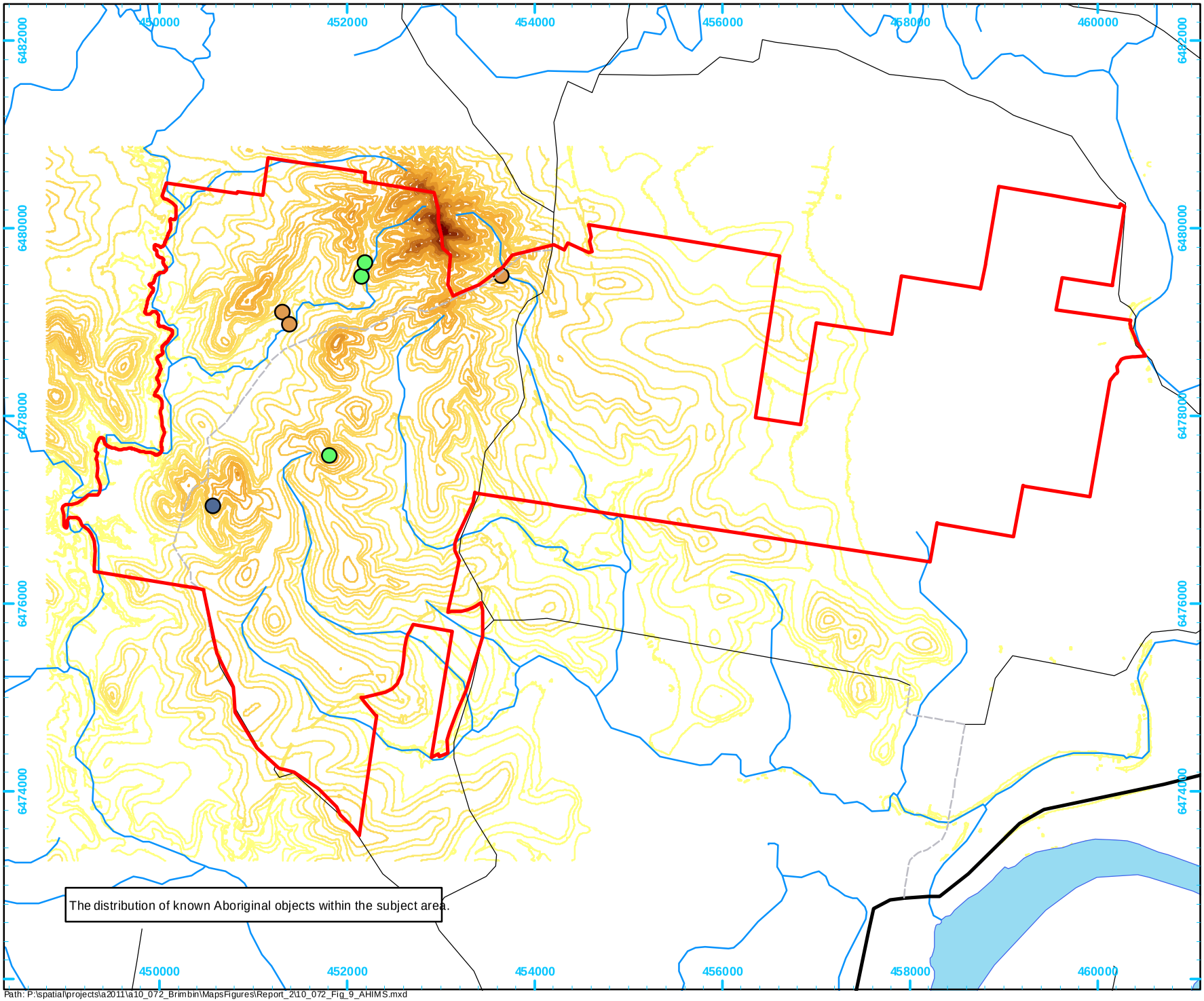


Figure 9: Cultural Heritage and Topography

10-072 Brimbin Archaeology

Drawn by: RJ

Project Mgr: JR

Date: 24/05/2013

- Subject Area
- Principal Road
- Secondary Road
- Minor Road
- Track

AHIMS

- Isolated Find
- Open Campsite
- Scarred Tree

N

W E

S

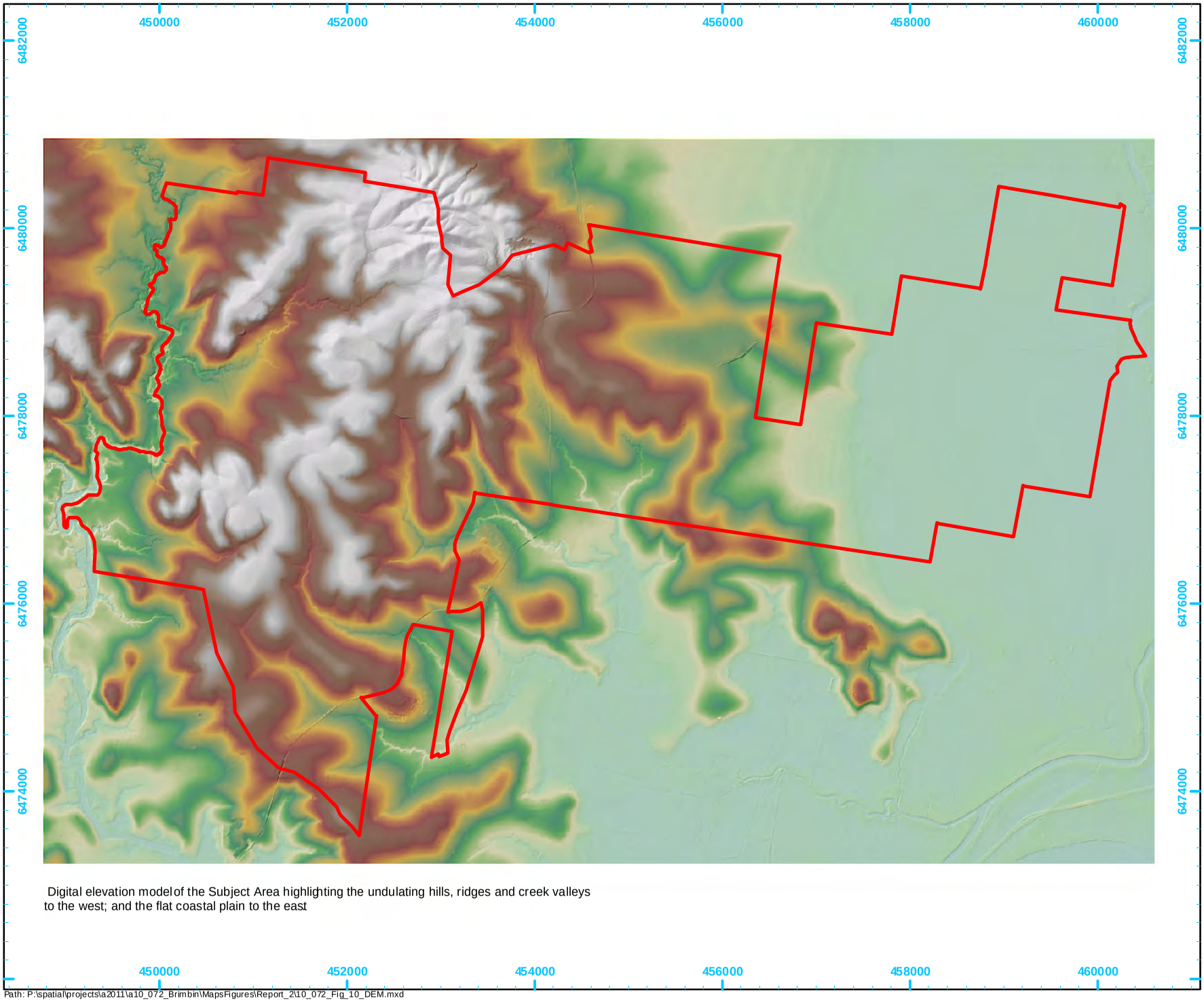
km

0 0.5 1 2

niche Environment and Heritage

Horizontal Datum:
GDA 1994 MGA Zone 56

Path: P:\spatial\projects\a2011\a10_072_Brimbin\MapsFigures\Report_2\10_072_Fig_9_AHIMS.mxd



Digital elevation model of the Subject Area highlighting the undulating hills, ridges and creek valleys to the west; and the flat coastal plain to the east

Figure 10: Shaded Digital Elevation Model

10-072 Brimbin Archaeology

Drawn by: RJ

Project Mgr: JR

Date: 24/05/2013

Subject Area

Elevation (m)

120

0

N

W

E

S

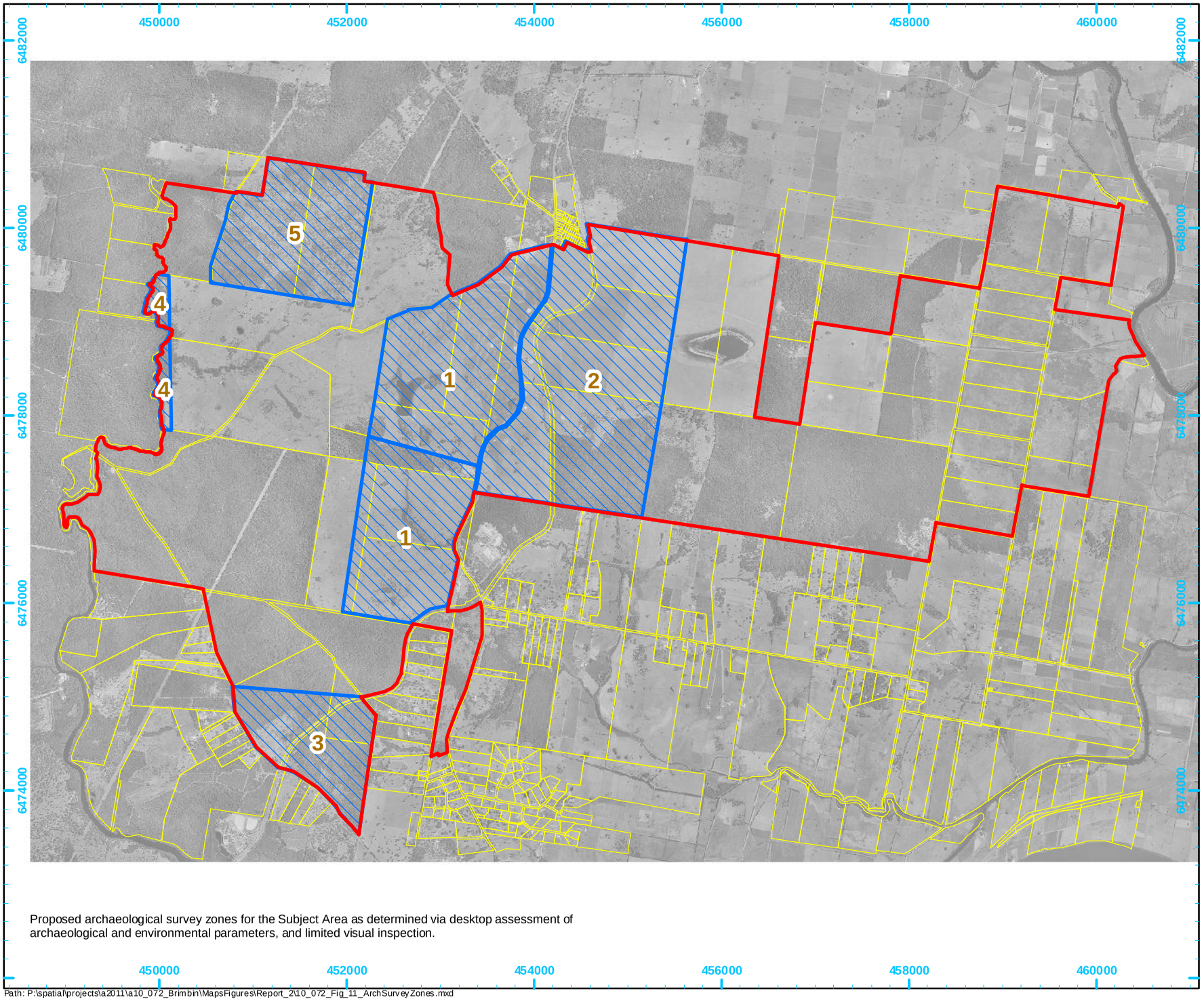
km

0 0.5 1 2

niche Environment and Heritage

Horizontal Datum:
GDA 1994 MGA Zone 56

Path: P:\spatial\projects\a2011\a10_072_Brimbin\MapsFigures\Report_2\10_072_Fig_10_DEM.mxd



Proposed archaeological survey zones for the Subject Area as determined via desktop assessment of archaeological and environmental parameters, and limited visual inspection.

Figure 11: Archaeological Zones

10-072 Brimbin Archaeology

Drawn by: RJ

Project Mgr: JR

Date: 24/05/2013

Subject Area

Archaeo Survey Zones

Cadastre

N

W E

S

km

0 0.5 1 2

niche Environment and Heritage

Horizontal Datum:
GDA 1994 MGA Zone 56

Imagery:
(c) 2009 LPMA

Path: P:\spatial\projects\a2011\a10_072_Brimbin\MapsFigures\Report_2\10_072_Fig_11_ArchSurveyZones.mxd

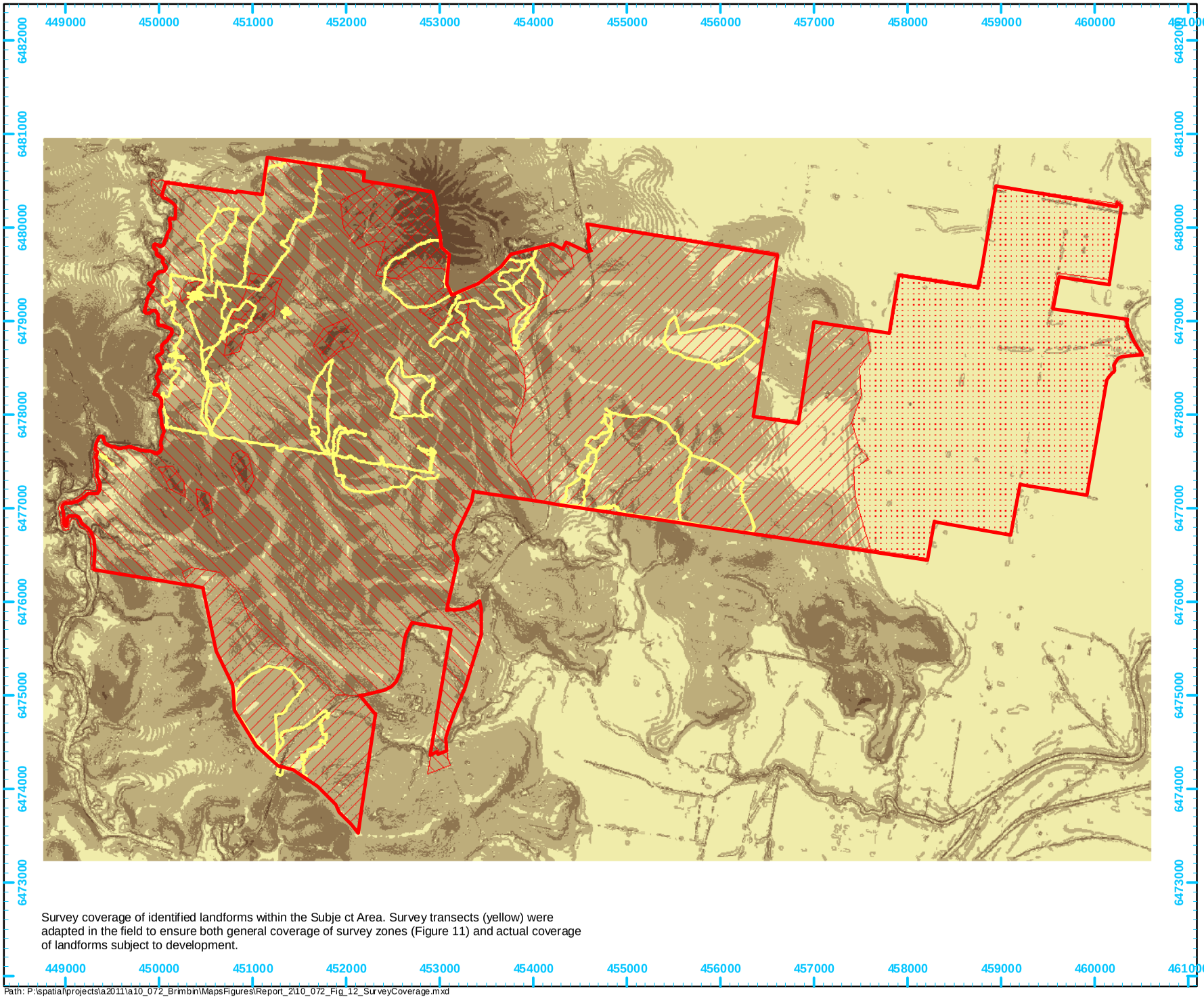


Figure 12: Survey Coverage

10-072 Brimbin Archaeology

Drawn by: RJ

Project Mgr: JR

Date: 24/05/2013

- Subject Area
- Survey Transects 30m

Landform

- Plain
- Low rises
- Rolling hills
- Steep slopes

Slope (%)

- 0 - 1
- 1 - 5
- 5 - 20
- > 20

N

W E

S

Metres

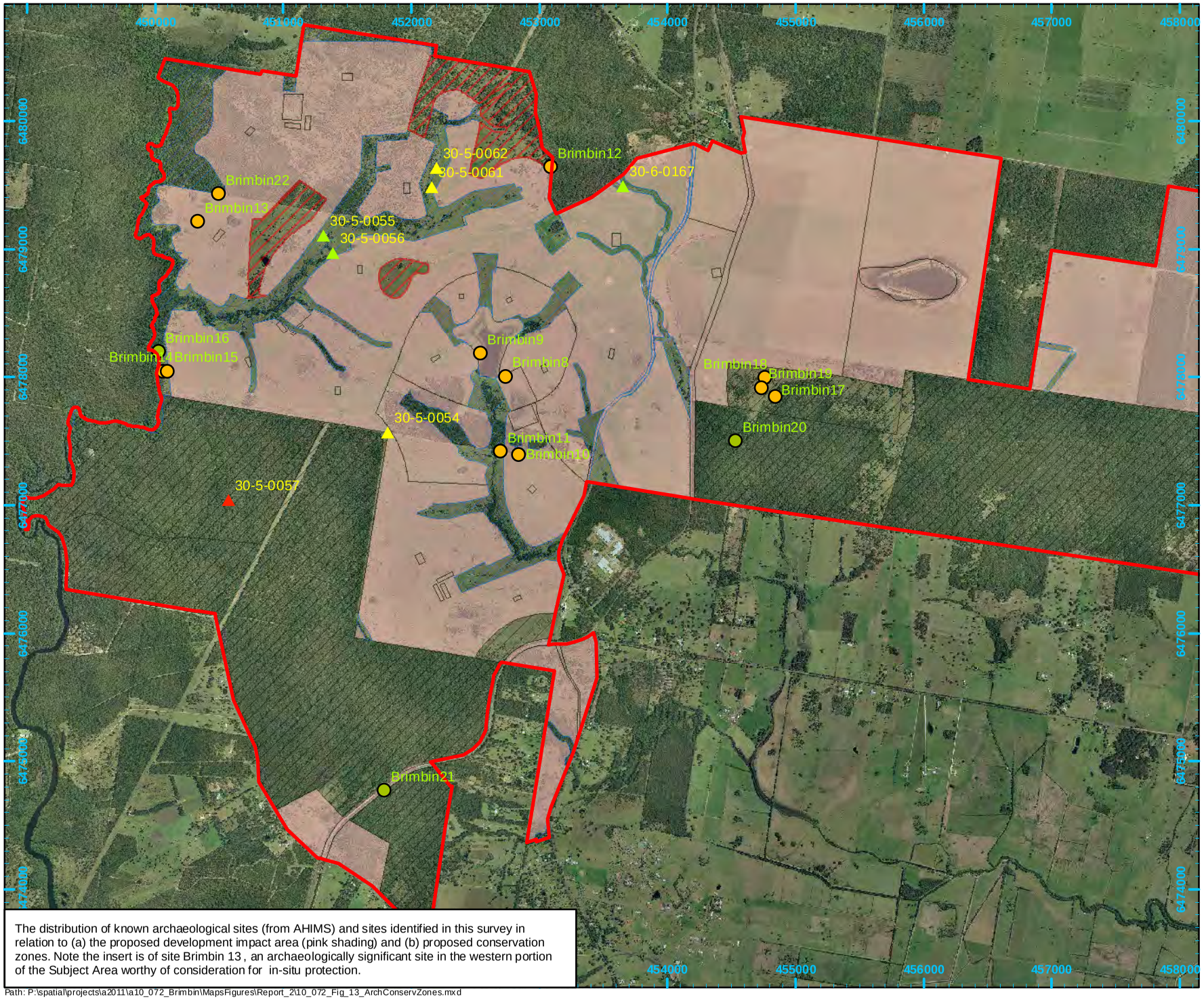
0 250 500 1,000 1,500 2,000

niche Environment and Heritage

Horizontal Datum:
GDA 1994 MGA Zone 56

Survey coverage of identified landforms within the Subje ct Area. Survey transects (yellow) were adapted in the field to ensure both general coverage of survey zones (Figure 11) and actual coverage of landforms subject to development.

Path: P:\spatial\projects\a2011\a10_072_Brimbin\MapsFigures\Report_2\10_072_Fig_12_SurveyCoverage.mxd



The distribution of known archaeological sites (from AHIMS) and sites identified in this survey in relation to (a) the proposed development impact area (pink shading) and (b) proposed conservation zones. Note the insert is of site Brimbin 13 , an archaeologically significant site in the western portion of the Subject Area worthy of consideration for in-situ protection.

Path: P:\spatial\projects\a2011\a10_072_Brimbin\MapsFigures\Report_2\10_072_Fig_13_ArchConservZones.mxd

Figure 13: Archaeology and Conservation Zones

10-072 Brimbin Archaeology

Drawn by: RJ

Project Mgr: JR

Date: 24/05/2013

Archaeological Sites

- Artefact
- Scarred Tree

AHIMS Sites

- Isolated Find
- Open Campsite
- Scarred Tree
- Conservation
- Conservation Riparian
- Steep Land
- Development Area

N
W E
S

Metres

0 250 500 1,000 1,500

niche Environment and Heritage

Horizontal Datum:
GDA 1994 MGA Zone 56

Imagery:
(c) 2009 LPMA

Appendix A

Project Information

and

Project Survey Design and Sampling Strategy

Aerial view of Brimbin looking east (Image Courtesy Roche Group)

PROJECT INFORMATION FOR PRELIMINARY ARCHAEOLOGICAL SURVEY

A COMPONENT OF THE ABORIGINAL CULTURAL HERITAGE ASSESSMENT

Brimbin New Community

FEBRUARY 2011

Statement of Document Purpose

The purpose of this document is to outline the proposed archaeological field survey design and assessment methodology Niche intends to adopt in achieving the archaeological component of an Aboriginal Cultural Assessment of the Brimbin new community area. The document supplements information provided in the document titled "Project Information for Aboriginal Cultural Assessment; Brimbin New Community" (Niche, 2011) provided to registered Aboriginal stakeholders on January 2011.

Table of Contents

List of Tables

List of Figures

1 Introduction

Roche Group has contracted Niche Environment and Heritage to conduct an Aboriginal cultural heritage impact assessment to inform the Brimbin Structure Plan. The Aboriginal cultural heritage assessment will follow the guidelines set out in the:

- *Aboriginal cultural heritage consultation requirements for proponents 2010*, and the
- *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales*.

As part of this assessment Niche intends to conduct an Aboriginal archaeological survey and assessment of the proposed Brimbin new community area. A portion of this area has previously been assessed for archaeological values by Jacqueline Collins in 2003. Since this assessment, the proposed area of development has increased in size and several amendments to cultural heritage legislation have been made. The NSW Department of Environment, Climate Change and Water (DECCW) has therefore recommended:

- A review of the recommendations made in 2003 for the area previously assessed;
- Archaeological and cultural heritage assessment of those areas yet to be assessed;
- Further consultation with Registered Aboriginal Parties;
- Areas of high heritage significance within the structure plan be set aside as parkland or conservation areas.

2 Archaeological survey objectives

The underlying objective of the Archaeological survey and resultant assessment report will be to provide information that assists in the further development and refinement of the proposed structure plan. Supporting objectives of the archaeological survey include providing data that informs the broader Aboriginal Cultural Heritage Assessment; and gathering and presenting this data in a form that meets the requirements of the *Code of Practice for Archaeological Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales: Part 6 National Parks and Wildlife Act 1974* (Department Environment, Climate Change and Water NSW 2010a). Both these underlying and supporting objectives will be met by:

- Addressing the matters raised by DECCW above;
- Providing a review of previous archaeological work;
- Providing a review of the landscape context;
- Providing a summary and discussion of local and regional Aboriginal land-use and its material traces;
- Providing a prediction of the nature and distribution of evidence;

- ❒ Developing survey methods and undertaking a surveys of areas not assessed by Collins in 2003;
- ❒ Identifying any items and areas of Aboriginal cultural heritage and archaeological value, and
- ❒ Developing conservation strategies and impact amelioration measures for items and areas of value.

3 Brimbin: summary information

Where is Brimbin?

Brimbin is located 8 kilometres to the north of Taree on Lansdowne Road within the Greater Taree Local Government Area (LGA). It covers an area of 3,763 hectares and is one contiguous land holding. Existing land use in the area is primarily rural in nature with the cleared sections of the site currently used for cattle grazing. It also has some significant areas of native vegetation comprised of forested areas, estuarine wetlands and riparian vegetation mainly in the west and south-western part of the site adjacent to the Dawson River.

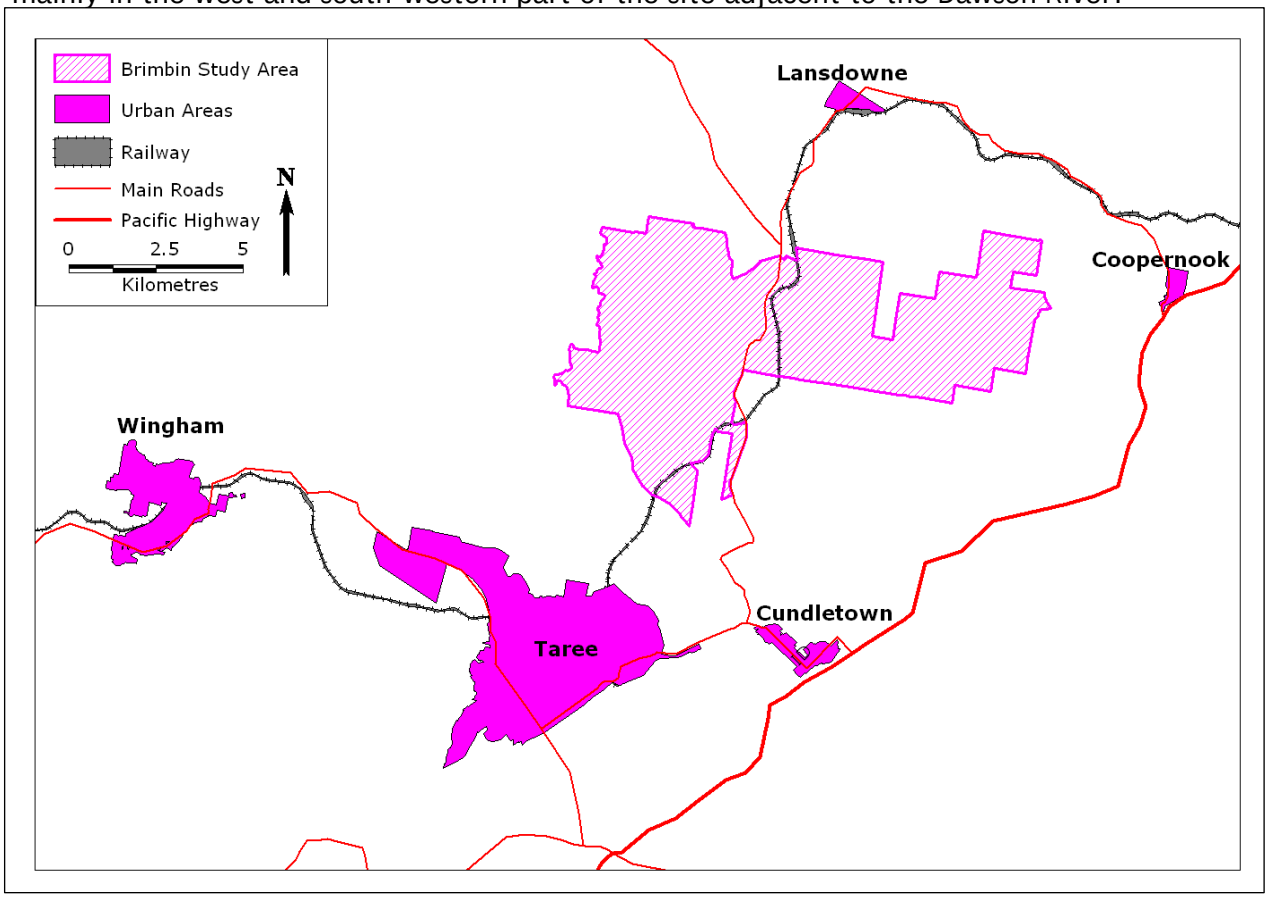


Figure 1. Location of proposed Brimbin new community.

Why develop Brimbin?

The land at Brimbin has been identified in the New South Wales State Government's *Mid North Coast Regional Strategy* (2009) as a future urban release area and employment lands. Urban release areas identified in the Strategy, such as land at Brimbin, will be developed to function as new communities with service provision to match the future population of the area.

The Brimbin new community will compliment and reinforce the role of Taree as a Major Regional Centre providing sustainable growth of the Greater Taree Local Government area whilst also taking development pressure away from the coastal towns and sensitive coastal environments.

What is proposed for the Brimbin new community development area?

The proposed Brimbin community is envisaged to be "a mixture of living and working areas that will lead to a healthy lifestyle for residents, workers and visitors". Brimbin will ultimately accommodate a population of 22,000 people housed in approximately 8,000 dwellings to be developed over the next 30 years. It will also have a significant employment area. The current Structure Plan (Figure 2) for the Brimbin new community includes:

- Approximately 885 hectares of residential land split between rural residential, low density, and medium density dwellings as well as seniors living in order to provide a range of allotment sizes to facilitate a range of dwelling types to accommodate a mix of age and socio-economic groups.
- Approximately 155 hectares of employment land allocated for bulky goods retailing, warehouse and distribution, industrial, commercial offices and local business. An additional 225 ha has been set aside for primary production and future employment lands should it be required.
- A substantial portion of land (1,661 hectares) dedicated to achieving regional environmental conservation outcomes, in particular providing a key habitat corridor linking the Dawson River and the Brimbin Nature Reserve in the west with the Lansdowne River, Lansdowne Forest and Cattai wetlands to the east of the site will be provided.
- Horticulture area for the intensive growing of plants (including protected cropping structures) to serve the local and State markets.
- Retail centre providing opportunities for local business, general retailing and community facilities.
- Recreation lake (existing lake to be augmented) providing public access to reserve and conservation areas.
- Recreational areas providing sporting fields, netball and tennis courts, health club, bowling greens, local club and hotel accommodation.
- Open space in the form of a high quality golf course, playing fields, neighbourhood parks and linear parks for passive recreation.
- Community and social infrastructure comprising of schools, government business centre, library, and emergency services.
- Efficient and accessible network of roads including investigation of a new link to northern Taree.

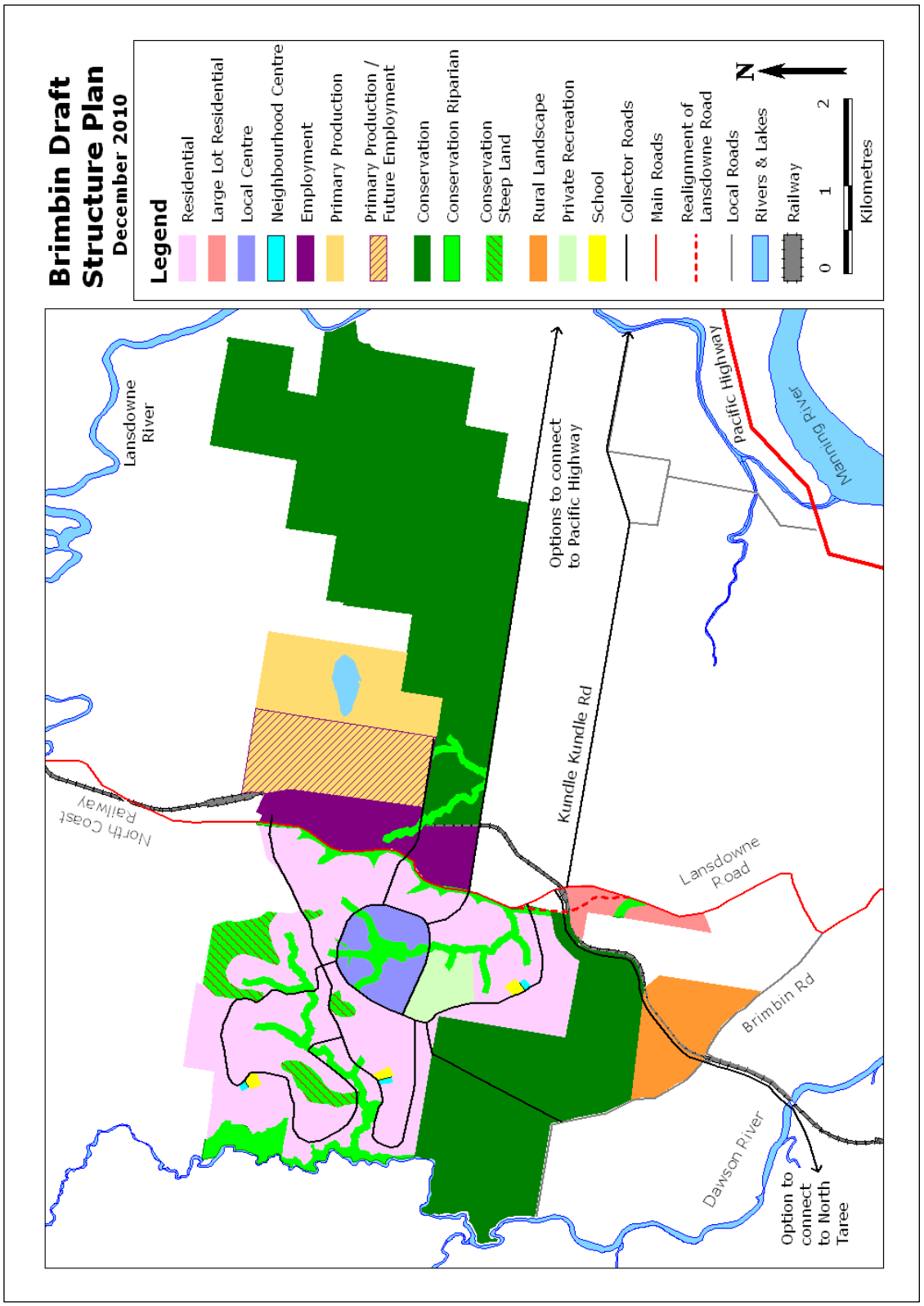


Figure 2. Draft Structure Plan for Brimbin.

4 Aboriginal cultural heritage context

Contemporary, historic and ethnographic attachment

The Brimbin area is the traditional land of the Biripi people. Byrne and Nugent (2004) have prepared extensive background research on the cultural landscape around Taree, documenting the continuing attachments and cultural connections for the Aboriginal community of the region. In close proximity to the Brimbin area they note the Kundle Kundle camp, a historical place used by Aboriginal people in the nineteenth century, and where a massacre is suspected to have taken place in 1838. Collins (2003) documented that the Dawson River is of cultural significance to the local Aboriginal community.

Rich (1990) conducted a synthesis of ethnographic sources for the mid north coast. The study identified a range of Aboriginal historical sites including first contact sites, ceremonial sites, burials, warfare and massacre sites, reserves, institutions, places of employment, resource places and occupation sites.

Aboriginal Heritage Information Management System (AHIMS)

Searches of the AHIMS covering an area of approximately 28 km x 28 km, including the Brimbin area were conducted. The search identified 116 Aboriginal Sites and two Aboriginal Places (

). Seven recorded Aboriginal sites or places were located in the western portion of the subject area. There are no previously recorded Aboriginal archaeological or cultural sites in the eastern portion of the Brimbin area (Table 2) and (Figure 3).

Table 1 Aboriginal sites in the area surrounding Brimbin

Site Features	Frequency
Aboriginal Ceremony And Dreaming	1
Aboriginal Ceremony And Dreaming; Burial	1
Artefacts	57
Artefacts; Scarred Tree	1
Artefacts; Earth Mound; Shell Midden	30
Artefacts; Shell Midden	2
Burial	3
Ceremonial Ring; Scarred Tree	1
Stone Arrangement	2
Scarred Tree	16
Water Feature	2
Total	*116*

Table 2: Known Aboriginal sites within the Subject Area

	Site ID	Site Features
Brimbin 1	30-5-0054	Artefacts
Brimbin 2	30-5-0055	Artefacts
Brimbin 3	30-5-0056	Artefacts
Brimbin 4	30-5-0057	Scarred Tree
Brimbin 5	30-5-0167	Artefacts
Brimbin 6	30-5-0061	Artefacts
Brimbin 7	30-5-0062	Artefacts

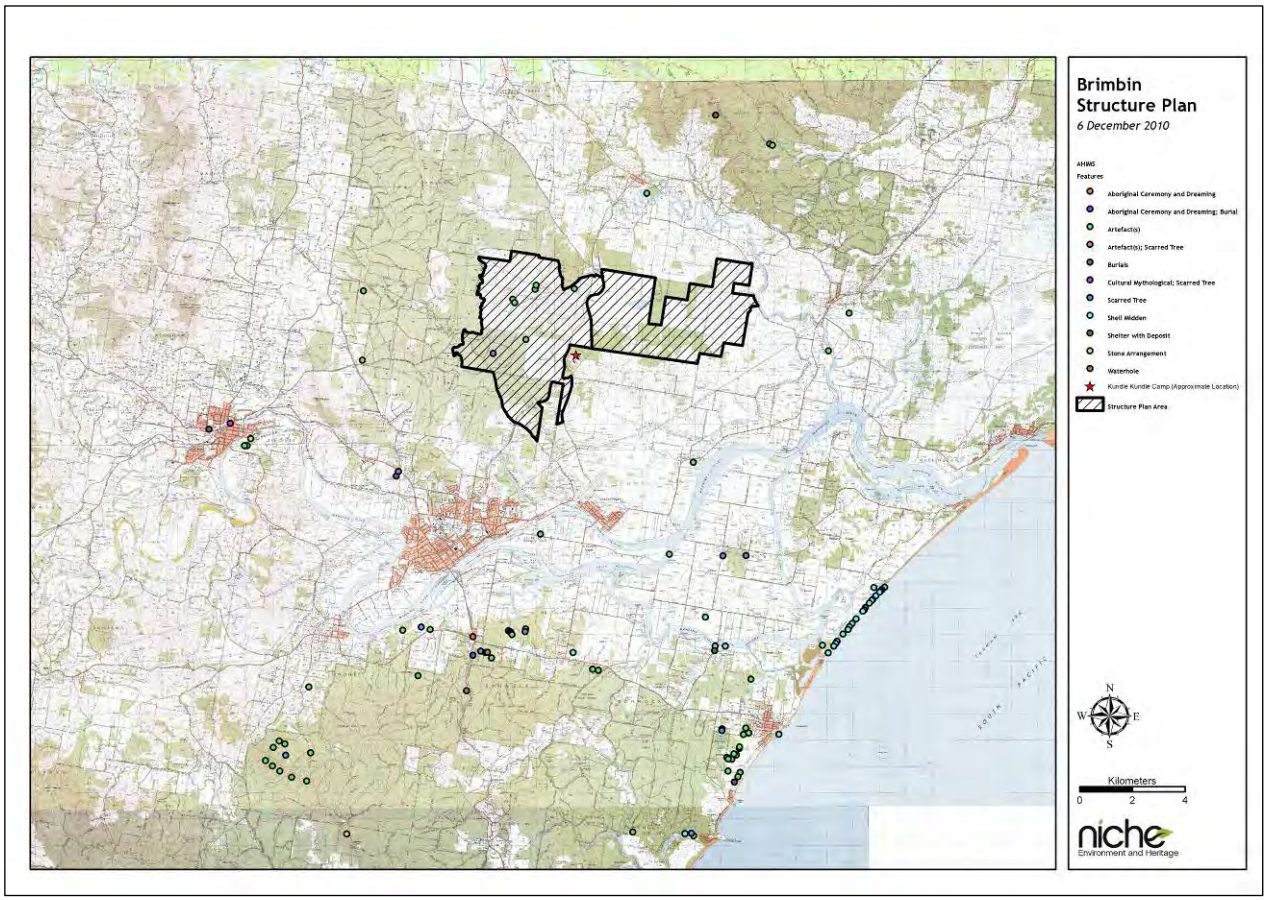


Figure 3. AHIMS search results for the Brimbin area and surrounds

Previous Aboriginal Archaeological Studies

In 1991, an Aboriginal Heritage Study was completed for the Greater Taree area (Klaver & Heffernan 1991). The study provided a review of registered Aboriginal sites, literary sources, and archaeological survey reports, and provided a generalised model of site sensitivity for broad landform categories. This model was subsequently revised and updated in the Aboriginal

Cultural Heritage Management Plan for the Greater Taree City Council (Gay 2000). This model (Gay, 2000: 25) predicts that:

- Areas with the highest environmental productivity such as margins of riverine and woodland vegetation communities adjacent to rivers and major creeks, or protected bays and beaches adjacent to estuaries, rock platforms and swamps would have been the primary focus of domestic Aboriginal occupation in the past;
- Primary focuses of domestic occupation would be reflected in the archaeological record through the presence of large artefact assemblages with localities of high density and more complex assemblages in those areas;
- Low hills, hills and mountains away from major water sources would have been occupied on a less intensive basis. Occupation would have been associated with group movement, hunting parties and short-term camps that related to the gathering of particular resources such as stone or medicines for transport to larger camps;
- Narrow and steep sided sections of river and creek valleys would not have been used for extended occupation or avoided altogether;
- Ridgelines would have been used by Aboriginal people as travel routes between river valleys, plateaux, lookouts and peaks;
- Level sections of broad valleys would have been preferred camping places.

As already noted, in 2003 Jacqueline Collins prepared an Aboriginal Heritage Assessment report as part of a local environmental study for the western part of the Brimbin area (Collins 2003). The report concluded that:

- The sites conformed to elsewhere in the mid-north coast hinterlands, occurring on level crests and well-drained water sources;
- Artefact discard would be low in the study area due to the lack of suitable raw materials;
- Alluvial terraces along permanent streams were likely to have a high level of archaeological sensitivity;
- Prominent crests may be more conducive to archaeological remains than ridge, spurs and hillcrests;
- Hill slopes have a low level of archaeological sensitivity.

5 Natural heritage context

Plants

The Brimbin area covers 3,763 hectares of land. 1,985 hectares of which is native vegetation. This native vegetation is comprised of 13 vegetation types. Within six of these vegetation

types four endangered ecological communities (EECs) have been identified. These EECs comprise approximately one third of the total area of native vegetation (1,006 hectares) and include:

- Subtropical Coastal Floodplain Forest (434 hectares),
- Swamp oak floodplain forest (66 hectares),
- Freshwater wetlands on coastal floodplains (73 hectares), and
- Swamp sclerophyll forest on coastal floodplains (432 hectares),

Animals

During recent ecological field surveys conducted by Niche 107 animal species were recorded including 84 native birds, 13 native mammals, 6 introduced mammals and 4 frog species. Of these 20 threatened animal species have been recorded from the study area including: Glossy Black-cockatoo, Varied Sittella, Little Lorikeet, Scarlet Robin, Square-tailed Kite, Powerful Owl, Masked Owl, Black-necked Stork, Comb-crested Jacana, Koala, Squirrel Glider, Brush-tailed Phascogale, Grey-headed Flying-fox, Little Bentwing-bat, Eastern Bentwing-bat, Yellow-bellied Sheath-tailed Bat, East-coast Freetail Bat, Eastern False Pipistrelle, Greater Broad-nosed Bat and Large-footed Myotis.

Conservation

Within the proposed Brimbin Structure Plan (Refer to Figure 2) there are three types of designated conservation zones which are as follows:

- Conservation- This includes the large areas of existing native vegetation in the west and south west as well as the land to the eastern part of the site which has a combination of vegetation and flood prone land
- Riparian land- This includes land along significant creek lines which also has endangered ecological communities located within it. Land up to the 1% AEP flood line is also included as the riparian landand a 50 m setback to creek line has been delineated as agreed with DECCW.
- Steep land, being land that has a slope of 20% (1 in 5) or more. This land is too steep to be developed.

It is likely that several plant and animal species have Aboriginal cultural value, and these values, if identified should be incorporated, wherever possible into conservation management strategies within the Structure Plan.

6 Aboriginal archaeological survey design and methodology.

Understanding the past and present environmental contexts of a study area is requisite in any Aboriginal archaeological investigation (DECCW, 2010a). It is a particularly important consideration in the development and implementation of survey strategies for the detection of archaeological sites. Environmental characteristics - including the availability of water, the abundance and type of plant and animal food resources, the nature and type of stone and

ochre resources; and the access and the availability of shade and shelter - play an influential role in determining the type and nature of material culture remains that will have been distributed across the landscape by Aboriginal people in the past (Ozark, 2011a. In addition natural geomorphic processes of erosion and/or deposition; as well as humanly activated landscape processes - especially those associated with European occupation of Australia - influence the degree to which these material culture remains are retained in the landscape as archaeological sites; and the degree to which they are preserved, revealed and/or conserved in present environmental settings (Ozark, 2011a).

The archaeological survey of the Brimbin new community area has been designed with reference to the following current and possible future influences on the Aboriginal cultural heritage resource of the area:

- The current projected land-use within the Brimbin Structure Plan. The area within the north west portion of the Brimbin development area proposed as future residential (inclusive of the related local and neighbourhood centres); the area to the southwest proposed to be large lot residential; and the areas in the central north of the proposed as future employment zones are considered to be priority areas for survey. These areas are those to be most subject to landscape transformation by the development;
- The known archaeological record for Brimbin including its topographic context (see (Figure 4);
- Described predictive models for the distribution of archaeological materials within the local and regional landscape;
- The historic and current land-use patterning of the development area. For example within the proposed residential area, contour banks have been installed to reduce erosion. These provide barriers to downslope movement of Aboriginal objects, and if colluvial movement of objects is expected, these are likely sites of artefact accumulation
- The landscape features of the development area including drainage, elevation, slope and extant native vegetation (see Figures 5-7).

In developing the survey design, aerial photograph interpretation, GIS analysis and limited visual inspection have been employed to ensure strategic coverage of the study area and its landforms and to allow characterisation of the archaeological record in areas likely to be impacted by the development. Some attention has also been placed on the characterisation of the Aboriginal archaeological record within areas proposed for long-term conservation. This should allow for some contextualisation of the overall impact of the development on the local and regional Aboriginal cultural heritage resource and enable preliminary consideration of its potential cumulative impacts.

Methods

The survey will be conducted over five days commencing 2 March 2011. It will be carried out by two survey teams with up to 6 people in each team. Each survey team will be lead by a Niche archaeologist and will variously incorporate survey participants from each of the 3 Registered Aboriginal Stakeholder Groups with interests in the Brimbin area namely, the Purfleet-Taree LALC, Guiwan Cultural Enterprise and Do-wa-kee Culture and Heritage Surveys.

Standard archaeological field survey and recording methods (e.g. Burke & Smith, 2004) will be employed; and principally will consist of targeted foot traverse of the following 5 identified survey zones (see Figure 8):

Zone 1: This survey unit covers the eastern portion of the proposed residential area, in the northwest of the study area and is comprised of a system of undulating low hills (with a maximum elevation of 66 m AHD) that rise to the north, east and west of the southerly draining Pontobark Creek. A small patch of native vegetation occurs in the central portion of this zone, near and to the south of a small dam within the Pontobark Creek. To the east of the creek much of the cleared grazing land is contoured to reduce erosion.

Zone 2: This survey unit is in the central portion of the Brimbin Development area and incorporates the proposed employment and the combined primary production/future employment zone. The southern portion of this zone contains some native vegetation.

Zone 3: This survey unit covers the area proposed as large lot rural residential in the Brimbin Structure Plan. For the most part this area contains undisturbed native vegetation although there is evidence of some clearance on the southern margins.

Zone 4: This survey unit lies at the western margin of the main residential area proposed for Brimbin and is specifically allocated for conservation of the riparian zone adjacent to the Dawson River. With close proximity to this water course it has some potential to yield Aboriginal cultural materials.

Zone 5: This survey unit lies in the upper western portion of the proposed residential area. It is an area dominated by hill slopes and ridgelines and is covered by native vegetation much of which is considered regrowth.

In addition to these five survey zones - if field conditions and timing permits - investigation of additional areas will also be conducted.

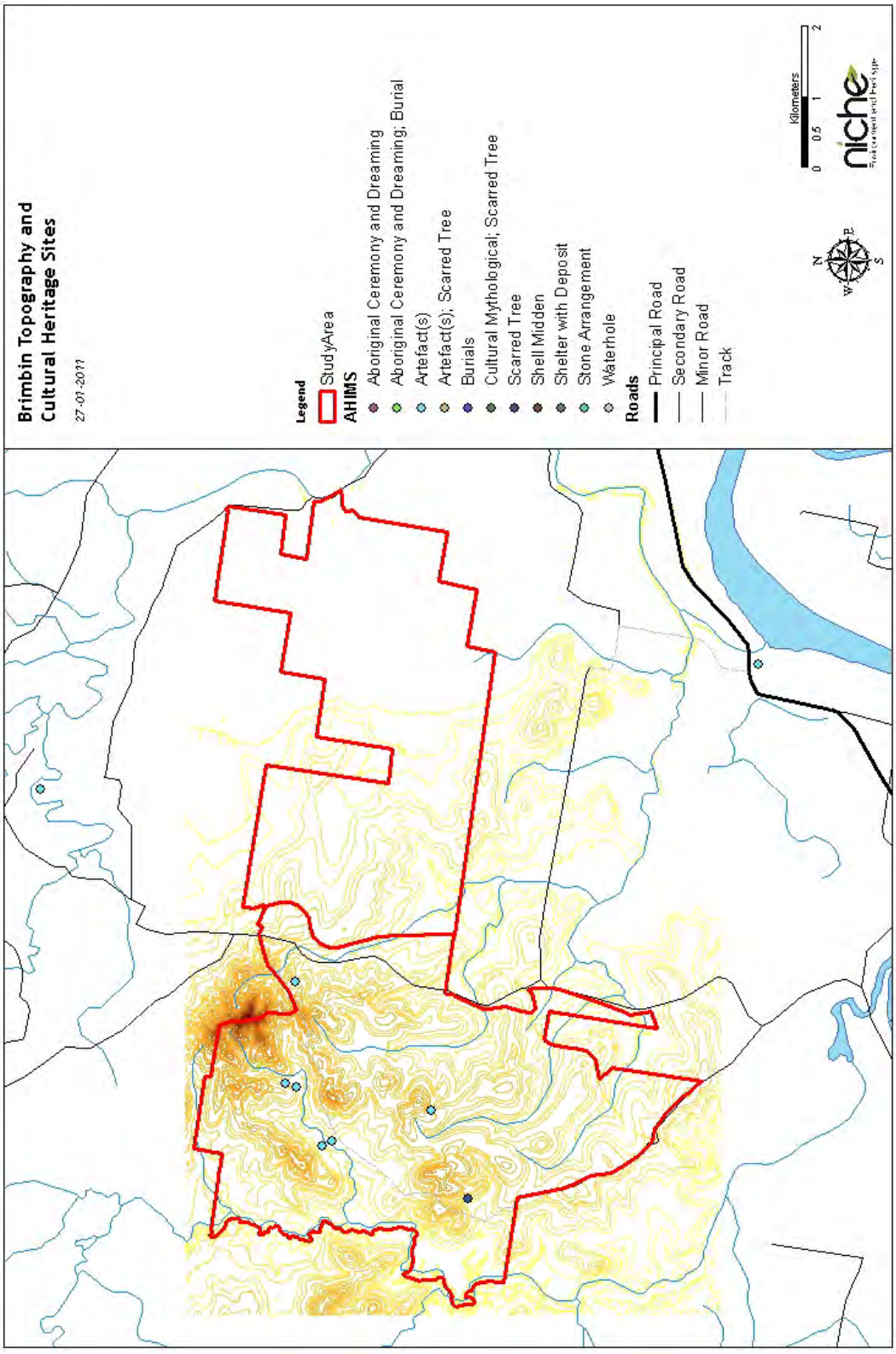


Figure 4. Brimbin topography and known Aboriginal cultural heritage

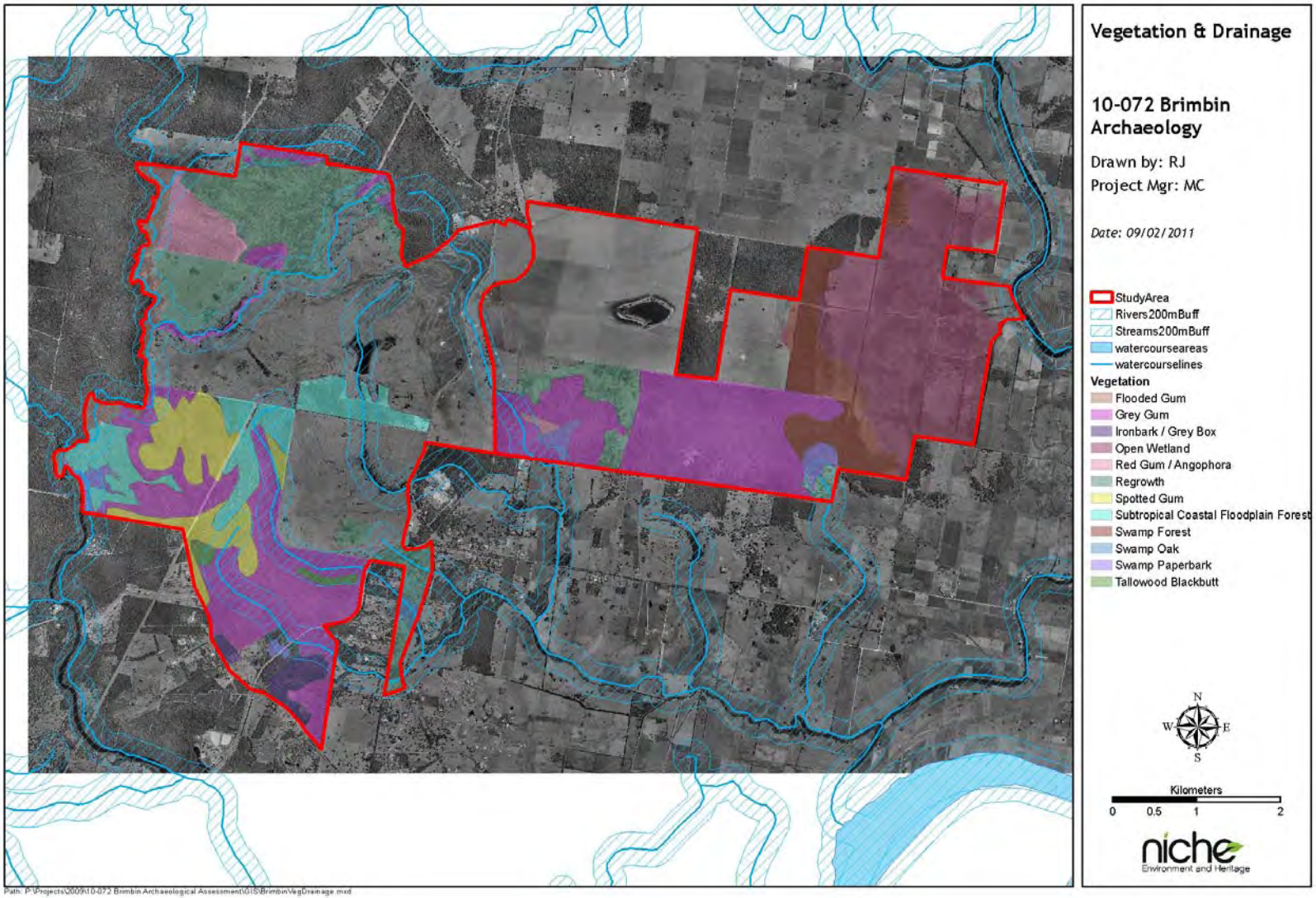


Figure 5. Drainage and native vegetation types within the Brimbin new community area

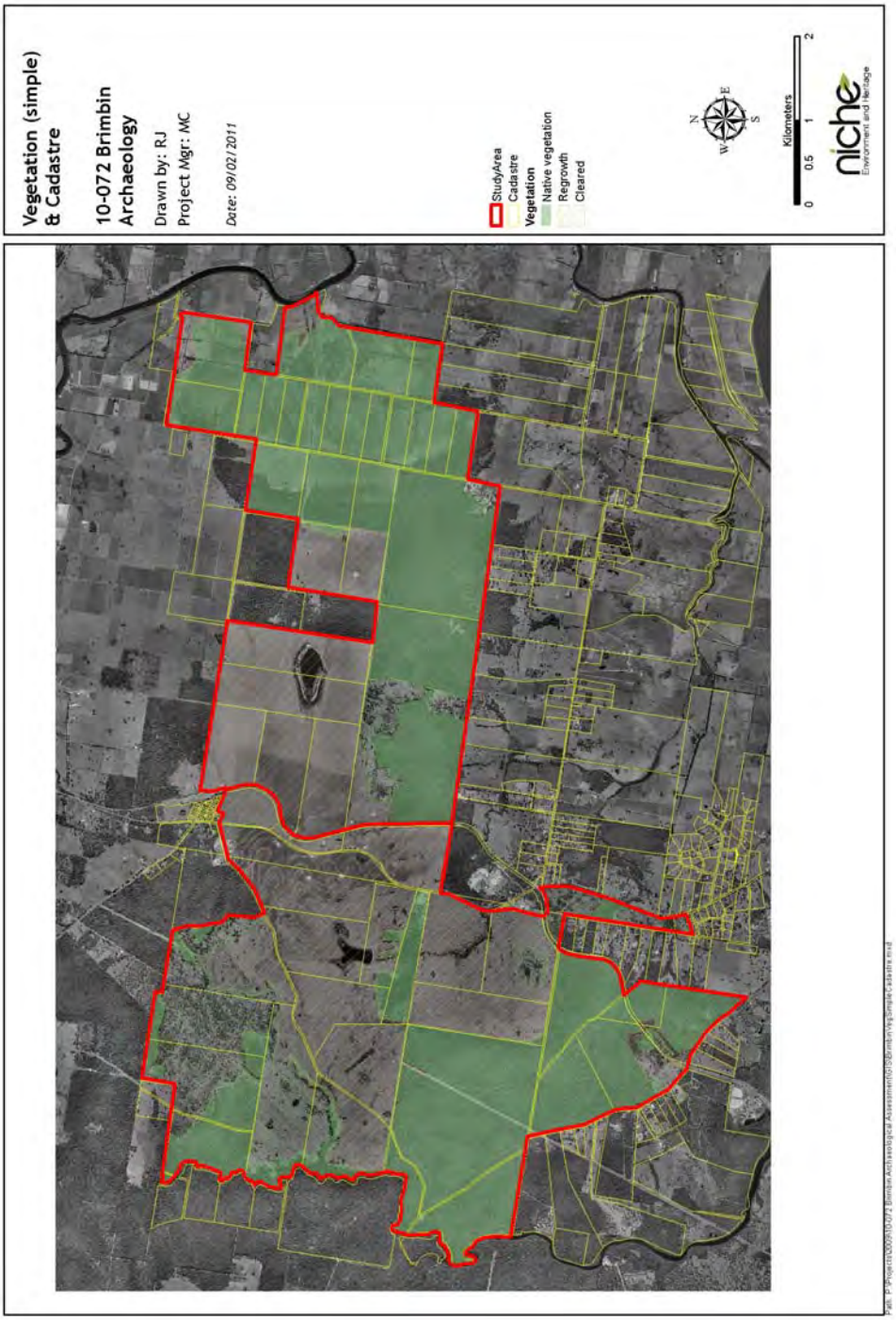


Figure 6. Total extant native vegetation within the Brimbin new community area

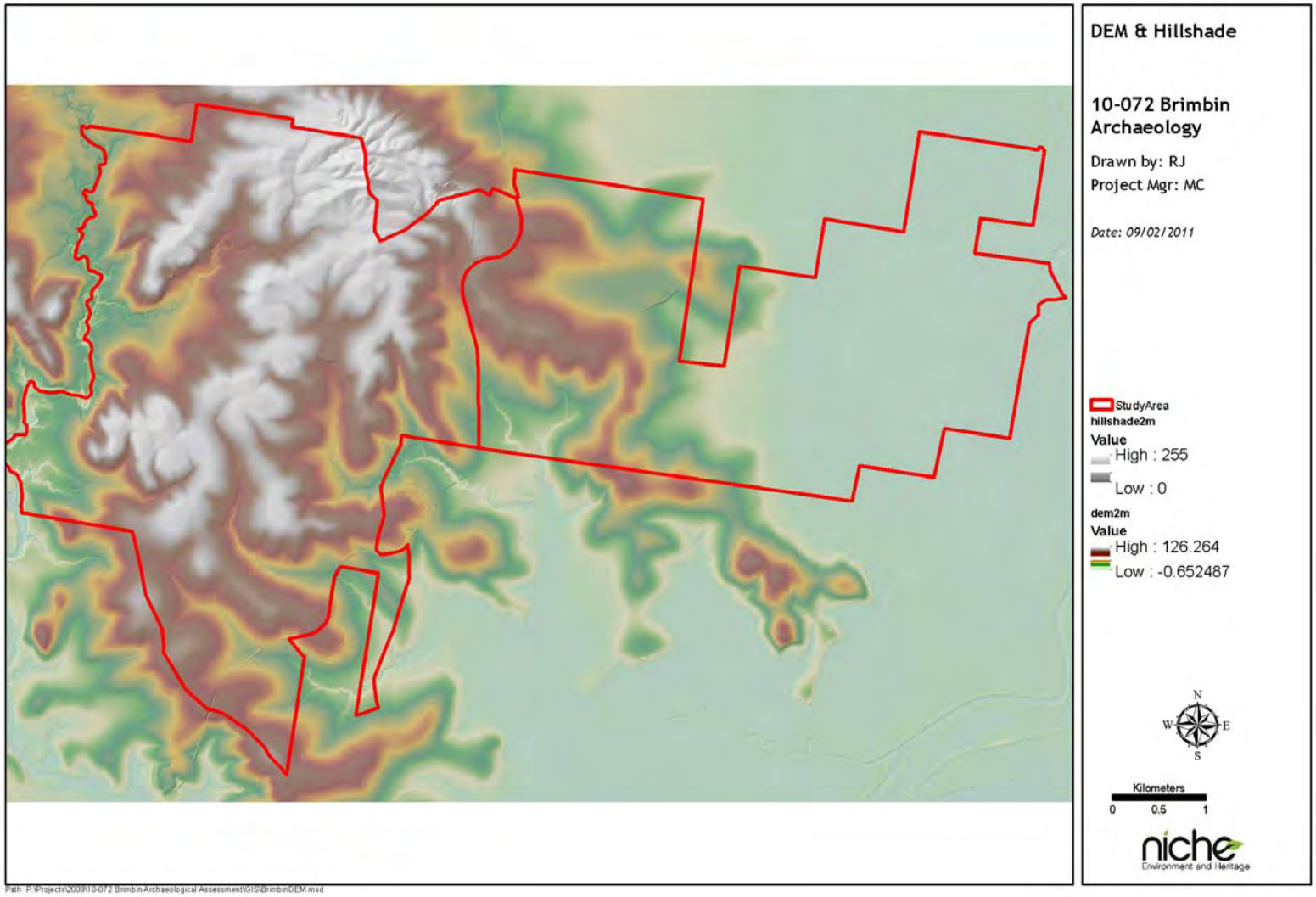


Figure 7. Digital elevation model, highlighting the undulating hill, ridges and creek valleys of the Brimbin study area to the west; and the flat coastal plain to the east.

Figure 8. Proposed archaeological survey zones

7 References

Byrne, D and M. Nugent 2004. *Mapping Attachment: A spatial approach to Aboriginal post-contact heritage*. NSW Department of Environment and Conservation, Hurstville.

Bourke, H. and C. Smith 2004. *The archeologists field handbook*, Allen & Unwin, Sydney

Collins, J. 2003. *Aboriginal Heritage Assessment Brimbin, NSW Mid-North Coast.* Unpublished report prepared for Connell Wagner.

DECCW 2010. *Aboriginal cultural heritage consultation requirements for proponents 2010: Part 6 National Parks and Wildlife Act 1974,* Department of Environment, Climate Change and Water NSW.

Gay, L. 2000. *Greater Taree Local Government Area Aboriginal Cultural Heritage Management Plan.* Unpublished report prepared for the Greater Taree City Council.

Klaver, J. and K. J. Heffernan. 1991. *Greater Taree Aboriginal Heritage Study*. Unpublished report prepared for the Greater Taree City Council.

Ozark, 2011a. Aboriginal archaeological assessment, proposed Solar Power Station in Broken Hill. Unpublished report to AGL.

Rich, E. 1990. *Pacific Highway S.H. No.10 Taree Relief Traffic Route: Archaeological survey for Aboriginal sites*. Unpublished report to Gutteridge Haskins and Davey.

Appendix B

Minutes of Stakeholder meeting

Meeting minutes

Proposed New Community of Brimbin Stakeholder Meeting

Date: 23 September 2011

Location: Greater Taree City Council

Present: Warner Saunders, Garry Wray (Guiwan)
Glen Rennie (Purfleet-Taree LALC)
Andrew Lister (Greater Taree City Council)
Jamie Reeves (Niche)

Apologies: Mick Leon, Barry Bungy, Tony Marr

Minutes:

1. As Biripai elder Warner Saunders welcomed everyone to Biripai land
2. Garry Wray produced an image of a eucalypt tree, which he and Warner believe is scarred but was not included in the Niche report (an image of this tree is attached). Jamie Reeves explained that he did not think the tree was scarred, and that is why it was not recorded. Garry Wray suggested it was one of the most important sites on the land, as it marks the trail of the Circle of Life.
3. Garry Wray produced a report by McCardle Cultural Heritage. The report deals with land at Old Bar, and maps another part of the Circle of Life trail, and assess the trail to be Nationally Significant.
4. Garry Wray noted that the Circle of Life trail was not highlighted enough in the Niche report. Jamie Reeves explained that the reason for this was that Niche were being careful about what information Warner had provided was suitable to include in the report, and that the purpose of the meeting was to determine this as far as possible.
5. Warner Saunders confirmed that he was happy to have the trail mapped in the Niche report. Jamie Reeves advised the group that Niche doesn't have enough detail or information to provide detailed assessment and recommendations at this stage, and hence an anthropological assessment had been recommended in the draft report.
6. It was confirmed that all matters regarding the Circle of Life trail were appropriate for inclusion in the report.
7. Garry Wray noted that the elders feel the interconnectivity of sites and places in the landscape is very important.
8. Andrew Lister asked if the Circle of life trail was documented elsewhere.
9. Glen Rennie advised that the trails appear to exist on the 8m contour at Old Bar, and this had been documented in a recent heritage study report by Ainsworth cultural heritage consultants.
10. Jamie Reeves advised that he was seeking agreement on the Circle of Life trail location and management. Jamie Reeves marked an approximate area on a map dated today (reproduced and attached). Garry Wray and Warner Saunders believe the appropriate management strategy is to conserve this corridor, as at least a 100m wide conservation area. It was unclear whether the Circle of Life was actually a 100m wide corridor or whether this was

merely an approximation for management purposes. It was unclear where the trail went to the east of the Brimbin lands. This will be clarified through submissions.

11. It was noted that the Kundle Kundle camp site, whilst not on the Brimbin lands was possibly related to the Circle of Life trail.
12. In regards to future management of Aboriginal objects on the Brimbin lands Garry Wray advised that the objects must be moved onto Aboriginal owned land (which in the course of events would be the 100 m wide corridor of the Trail of Life)
13. There was some agreement that even if it was National Parks and Wildlife Service Estate this was still not suitable tenure to ensure protection of Aboriginal objects. Garry Wray advised this was Guiwan's position, and Glen Rennie noted that LALC members generally have no confidence in NPWS in regards to site management and protection
14. Andrew Lister queried where land management funding would come from for any Aboriginal owned land. This was not clarified, but a range of sources was implied.

Stakeholders were invited to provide a summary of important issues:

Summary

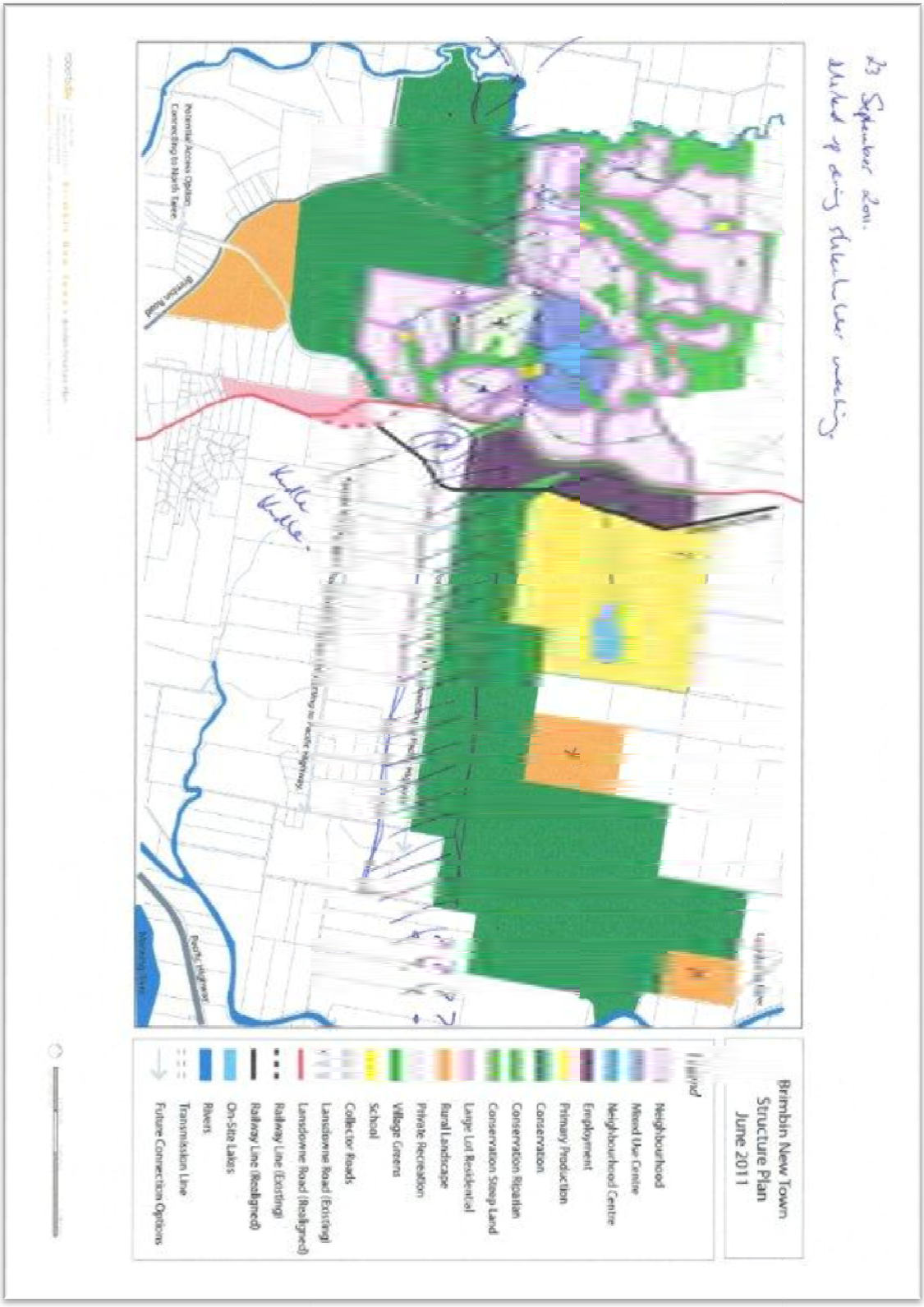
15. Site management - Garry Wray advised that objects must be moved onto Aboriginal owned land, adjacent to the development or on the development. Glen Rennie advised that the LALC position is that objects should be protected, if movement onto Aboriginal land is only way to achieve that then the position is supported.
16. Site management Garry Wray advised that he was concerned with signage relating to cultural heritage matters – would be okay, as long as it doesn't attract vandalism. A possible solution for the current project/report is to observe that signage should be explored in any Aboriginal Cultural Heritage Management Plan (ACHMP) that would be developed.
17. Glen Rennie advised that for unexpected objects there needs to be a process of assessment to kick in, and that this needs to be appropriately written into the ACHMP
18. Glen Rennie noted that the site Brimbin 13 had not informed the current zoning. Jamie Reeves suggested that this position would be reviewed, although the current plan was to have a smaller conservation area for the site, within the zoning structure.
19. Garry Wray and Glen Rennie advised that their needed to be more information regarding the Circle of Life trail (including a map) in the report.
20. There will be charges for preparing submissions – Jamie Reeves to advise Roche Group of this.

ACTIONS

- Garry Wray and Glen Rennie to send rates for submission and cost estimate.
- Map of site cards to be prepared for Guiwan – Jamie Reeves to prepare
- "Big" poster-sized map of structure plan and sites and also AHIMS sites for Guiwan – Jamie Reeves to prepare
- These minutes to be distributed – Jamie Reeves

Attachments:

Eucalypt tree discussed in Point 2



Sketch made during the meeting by Jamie Reeves of possible location of Circle of Life Trail and relationship to Brimbin lands.

Appendix C

Submissions received

Jamie Reeves
Niche Environment and Heritage
PO Box 231
Concord NSW 2137

Warner Saunders
Biripi Elder
9 Russell Lane
Purfleet NSW 2340
M: 0487 660 726

We the undersigned are Aboriginal descendance of the Biripi nation and have been consulted by Niche Environment and Heritage on behalf of Roche Group Pty Ltd for the proposed development of New Town at Brimbin.

Name	Date	Signature
Warner Saunders Biripi Elder	15-11-2011	W. B. Saunders
Harold Saunders Biripi Elder	"	Harold Saunders
Dean Saunders	"	D L Saunders
Garry Ridgeway	"	Garry Ridgeway
Lincoln Wright		
Richard Davis	"	Richard Davis

We would like to make the following recommendations in relation to the Aboriginal Cultural Heritage Provisions of the NSW National Parks & Wildlife Act 1974.

RECOMMENDATIONS

As a result of the report prepared by Niche Environment and Heritage, the following recommendations are made:

- That all Aboriginal artefacts be collected, tagged and bagged and placed in the possession of Warner Saunders for safe keeping or relocation to a place of safety.
- That Brimbin 13 is preserved by inclusion into a buffer zone or if this is not possible a salvage excavation must be undertaken.
- That an anthropological assessment be conducted to include the Biripi Elders concerns about a Bora and Initiation Grounds.
- That Aboriginal Sites Officers are on location at the commencement and during development of the New Town Brimbin project to assist with any unearthing of other Aboriginal artefacts.
- That the New Town Brimbin area be recorded as a place of cultural significance to the Biripi people as a place that represents a 'culture maker' of their ancestral heritage e.g. signage indicating Biripi country.
- **That a meeting is held between Warner Saunders, Jamie Reeves and Roche Group Pty Ltd before any further development is conducted to discuss the above recommendations.**

- Once all of the above recommendations have been addressed, we would then recommend that the New Town at Brimbin project proceed as planned.

Yours sincerely,

W. B. Saunders

Warner Saunders
Biripi Elder.

PURFLEET-TAREE LOCAL ABORIGINAL LAND COUNCIL

PO BOX 346, Taree, NSW 2430
Phone: (02) 6552 4106 Fax: (02) 6551 0847
E-mail: grennie@ptlalc.com.au
ABN: 46 544 549 175

Niche Environmental and PTY LTD
Att. Jamie Reeves
P.O. Box 231
Concord NSW 2137

20 November 2011

RE: ABORIGINAL CUTURAL HERITAGE ASSESSMENT REPORT- New Town Location Brimbin NSW (May 2011)

Dear Jamie

PTLALC thanks Niche for the opportunity to participate in the assessment process of the Roche property and makes the following comments to the Draft Report date May 2011.

1. Project Brief and Objective: Initially it was proposed to utilise a greater number of site officers from each of the involved Aboriginal parties and for the duration of the cultural assessment to be greater; a more detailed assessment of the site. PTLALC was made aware that the proponent requested the original plans of assessment be amended so as to reduce the associated cost to the proponent thus restricting the assessment quality and reducing the detail of work performed on the subject area.

   PTLALC provided two site officers for the term of the assessment; 10 days, it was understood that the assessment would be carried out on a predictory model; assessment of areas deemed to be more likely to contain evidence of ancestral indications. Whilst site officers are confident that the transects were assessed in detail they are also of the opinion that the proponents reduction in assessment resources (time and officers) impacted on the quality of the assessment on the total subject land.

2. Results: The report lists a number of “sites” (14) many of which are isolated artefacts as defined in the report. Furthermore the report highlights the fact that Brimbin in the majority has been exposed to extensive agricultural activities over many years and states that isolated finds would be unlikely to yield further undisturbed artefacts due to the repeated ploughings, it needs to be recognised that historic ploughing does not diminish the likely hood of further finds. Previous experience as evidenced by the Ainsworth report (Old Bar precinct 3) suggests that ground disturbing activity can unearth subsurface artefacts buried through historic farming.

   It is identified by the report that a number of the scattered artefacts are not separated by significant distances this combined with the historic ground disturbing activities associated with

farming could indicate a site which through farming disturbance may hold further evidence of historic cultural activity yet to be recognised-subsurface.

3. Under “contributors” page 10 the report incorrectly identifies “Richard Davis” of PTLALC it should read Richard Donovan, the report also list a “Richard” for Guiwan; I assume “Richard” is the same as for PTLALC as I don’t believe Guiwan had a Richard engaged.

4. PTLALC would stress that if an AHIP is sought that it needs to be involved in the management of any identified artefacts.

5. Areas where artefacts are currently identified that will be subject to an AHIP when ground disturbing activities/development take affect should have the ground disturbance activities supervised by PTLALC site officers

6. Conclusion/recommendation

   The report as has been conducted is in the opinion of the PTLALC a detailed report and was conducted with integrity yet it due to the reduction of its scope by the proponent cannot be considered conclusive. There are sufficient significant sites (Cundle Cundle camp and cultural fish traps) within close proximity to the subject area and ample anecdotal evidence that the Brimbin area was significant to the Biripi ancestors to suggest that Brimbin was an area frequented by Aboriginal ancestors, in the least it was a place that provided ample native foods. Moreover, it is highly likely that throughout the development of the site that further culturally significant finds will be made.

   PTLALC looks forward to working closely with the proponent throughout the development of the site as to ensure the security of any yet un-identified finds are appropriately dealt with.

   Yours sincerely

Glen Rennie
Chief Executive Officer
Purfleet Taree Local Aboriginal Land Council
0265524106
0408654537

Glen Rennie
Chief Executive Officer
Purfleet Taree Local Aboriginal Land Council
02 6552 4106 0408654537

Doowakee

82 Victoria Street

Taree NSW 2430

Tuesday, 11 October 2011

Attention: Jamie Reeves (NICHE Pty Ltd)

Jamie, upon reviewing the interim meeting 'notes' held on 23/09/11 at Greater Taree City Council, there are a number of matters which need to be addressed before the ACHMP or any POM is initiated with Roche Group (the proponent).

- The interim Aboriginal Cultural Heritage Assessment for Brimbin was based on comments received from Gary Wray, Glen Rennie and Warner Saunders.
- At NO time was DOOWAKEE requested or instructed to provide reporting or comments into future management of verified Aboriginal Cultural Heritage, this was informed to be obtained from Gary Wray.
- Using 'Tony' is disrespectful towards a highly significant Traditional Aboriginal family of the BIRIPI Aboriginal tribal nation. Tony Marr is a direct descendant of Uncle Bert Marr (Dec), Traditional Aboriginal Elder.
- The photograph provided is NOT within the context of representing a 'typical' Aboriginal scarred tree.
- At no time was any 'Circle of Life trail' concept known to DOOWAKEE staff.
- There is NO 80 meter (ASL) contour projection within the Old Bar vicinity.
- The McCardle Aboriginal Cultural Heritage study for Old Bar North was inconclusive, as it did not relocate objects identified/ recorded by Ms Trina Ridgeway and Ms Vienna Maslin (Bungie) in 2002.
- Any process of ACHMP for OEH registered objects is already accommodated within the GTC ACHMP. Furthermore, unexpected objects are facilitated via the following processes that Local Aboriginal Land Council's, incorporated Aboriginal Groups and individual Aboriginal persons are bounded by:

NSW Aboriginal Land Council

The NSW Aboriginal Land Rights Act 1983 establishes the NSW Aboriginal Land Council (NSWALC) and Local Aboriginal Land Councils (LALCs). The Act requires these bodies to:

- take action to protect the culture and heritage of Aboriginal persons in the council's area, subject to any other law,

- promote awareness in the community of the culture and heritage of Aboriginal persons in the council's area.
- Local Aboriginal Land Councils are responsible for enhancing, improving and protecting the best interests of all Aboriginal persons within the council's area as well as any other Aboriginal people who may be members of the council.

Opportunities for LALCs to be involved in the Aboriginal cultural heritage consultation requirements LALCs can:

● assist a proponent to identify Aboriginal people who may have an interest in the proposed project area through step 4.1.2 of the Aboriginal cultural heritage consultation requirements for proponents 2010 (the OEH/DECCW consultation requirements).

- Where the LALC has cultural knowledge relevant to determining the signifcance of Aboriginal objects and places in the proposed project area, register an interest to be involved in the consultation process through step 4.1.6 of the OEH/ DECCW consultation requirements.
- In the case where LALCs have not registered an interest in becoming involved in the consultation process through step 4.1.6 of the OEH/ DECCW consultation requirements, LALCs with the necessary skills and experience may be commissioned by a proponent to provide any of the following services:
- administration, such as organising meetings and arranging venues, transport etc
- facilitating aspects of the consultation on behalf of the proponent, especially stage 2 – presentation of information about the proposed project;
- assisting registered Aboriginal parties to contribute to the consultation process, e.g. assisting in writing submissions.

NSW OFFICE OF ENVIRONMENT & HERITAGE

Part 5 Activities -

Development consent is not required for certain activities, such as for the construction of roads or electricity infrastructure. This only applies if there is a public authority carrying out the activity or a public authority approving the activity under other legislation. These activities are assessed under Part 5 of the EP&A Act.

The Minister or public authority responsible for deciding whether to proceed with an activity is called the 'determining authority'. There may be more than one determining authority. If an AHIP is required, DECCW will be a determining authority.

Where Part 5 applies, there is a two-step assessment process. First, the determining authority must take into account to the fullest extent possible all matters affecting or likely to affect the environment by reason of the activity. This is usually referred to as the review of environmental factors (REF). If the determining authority fnds that the activity is likely to significantly affect the environment, an environmental impact statement EIS must be prepared and publicly exhibited.

The Environmental Planning and Assessment Act 1975 (EP&A Act) provides planning controls and requirements for environmental assessment in the development approval process. It also establishes the framework for Aboriginal heritage values to be formally assessed in land-use planning and development consent processes.
Under this Act, the definition of 'environment' is broad and could include cultural heritage.

The EP&A Act is administered by the NSW Department of Planning. This info sheet summarises the EP&A Act as it relates to Aboriginal cultural heritage. Further information on the EP&A Act can be found at;
www.planning.nsw.gov.au/PlanningSystem/Legislationandplanninginstrumen ts/tabid/67/Default.aspx.

- Part 3 Environmental planning instruments
- Part 3 of the EP&A Act establishes two types of environmental planning instruments:
- State environmental planning policies (SEPPs) (Division 2)
- Local environmental plans (LEPs) (Division 4).
- The provisions of these instruments are legally binding on the government and developers. They provide an overall plan and vision for development into the future.
- State environmental planning policies
- State environmental planning policies (SEPPs) deal with issues significant to the state and people of NSW. They are made by the NSW Governor. There are currently no SEPPs that relate specifically to the protection of Aboriginal cultural heritage.

Local environmental plans
Local environmental plans (LEPs) are prepared by local councils and approved by the Minister for Planning. LEPs may relate to the whole or part of the local government area. LEPs divide the local area they cover into 'zones' (such as residential, industrial, commercial etc) to help guide planning decisions.

Councils preparing a draft LEP that affects an Aboriginal object or place must include provisions to facilitate conservation of that object or place (see current s.117 direction no. 2.3 Heritage Conservation, which replaced s.117 direction no. 9 – Conservation and Management of Environmental and Indigenous
Heritage, 2005).

Non-conformity to all or part of these regulations could mean a substantial fine.

Mick Leon

GUIWAN CULTURAL ELDERS
ABORIGINAL ASSOCIATION INCORPORATED

Garry Wray
Project Co-ordinator

garrywray@hotmail.com

PO Box 95
Old Bar Beach
NSW 2430
Ph/Fax: 02 6553 6533
Mob: 0457 409 317

14 April 2011

Mr Wes Vander Gardner
Roche Group Pty Ltd
PO Box 2617
Strawberry Hills NSW 2012

Dear Wes,

RE: THE PROPOSAL OF A POSSIBLE JOINT VENTURE (M.O.U.) WITH NATIONAL PARKS & WILIFE SERVICE and the GUIWAN ELDERS

On the 3763 hectare property owned by the Roche Group Pty Limited, a portion of land is projected to be dedicated (1761 hectares), to achieving regional environmental conservation outcomes, in particular providing a key habitat corridor linking the Dawson River and the Brimbin Nature Reserve in the west, with the Lansdowne River, Lansdowne Forest and Cattai Wetlands to the east of the Roche Pty Limited site.

This Association request at this stage to be involved with any negotiations regarding offsetting of land tenure between the Roche Group and National Parks & Wildlife.

A Joint Venture or Memorandum of Understanding between the Guiwan Elders and the National Parks & Wildlife would be a worthwhile consideration to be pursued.

The Guiwan Elders are in the process of a preliminary Aboriginal Heritage Impact Survey, Project Assessment, Methology and Initial Foot Traverse with Jamie Reeves/Archaeologist of Niche Environment & Heritage, contracted for the Roche Group Pty Limited proposal.

The Elders, Sites Keeper, Story Teller and Chairperson together with Site and Safety Officers are already discussing in great depth the richness of the landscape and depth of the Aboriginal Cultural Heritage Within and around the Roche Group Pty Limited landscape.

The archaeological remnants already found and documented confirm that the Brimbin New Community proposal landscape may be possible to deliver a balanced package between development and conservation.

If good planning avoids impacting Aboriginal Heritage it will compliment the whole planning approval and construction process, thus saving time and costs.

Real efforts must be taken, to seek and to develop effective avoidance measures in all initial planning. **If avoidance is not sufficiently applied initially, right through until development, from the planning stage, DECCW will not approve.**

The Aboriginal Elders and Sites Keeper will provide DECCW with a management methology plan, from now until eternity, to mitigate impact on sites and objects.

One **storyline/trails/habitat corridor** which links sites, starting at Diamond Head, heading towards the Cattai Lakes wetland system, onwards through the Roche Group Pty Limited proposal, as a link to Kate Kelly's Crossing at the junction of the Dawson River, east to Farquhar inlet by canoe , south to Saltwater National Park and westward to Hanging Rock and beyond.

The **section of the storyline/trails/habitat corridor** that is still marked today and passes through the Roche Group property, is **mostly within** Conservation Zones offered to the National Parks & Wildlife Service as **"offsets"** to allow another development, Roche Group owns, to be cleared and developed.

These **forested offsets** which have been offered to National Parks & Wildlife are in two separate portions and are divided by industrial, residential, private recreation and Brimbin New Community township centre. (Ref: Fig2 Draft Structure Plan for Brimbin within the Project Information for Aboriginal Cultural Heritage Assessment/Page 6).

The section of the **storyline/trails/habitat** corridor which passes through the industrial, residential, private recreation and Brimbin New Community township centre, (Ref: Fig2 Draft Structure Plan for Brimbin within the Project Information for Aboriginal Cultural Heritage Assessment/Page 6) **cannot happen.**

The draft DECCW Mid North Coast Regional Conservation Plan **summary,** quote "identifies areas where offsets, should they be required, may best be placed strategically in the landscape to facilitate this outcome". Quote "the principle of avoiding impacts, as far as is possible, equally applies to Aboriginal Cultural Heritage". Quote "Aboriginal Cultural Heritage is irreplaceable. Where development and Aboriginal Heritage values coincide, innovative and respectful solutions **must** be found". The Guiwan Elders and the Biripi Sites Keeper would be so grateful to be involved in the planning and the assistance to deliver a balance package between development and conservation with the Roche Group Pty Limited and the National Parks & Wildlife Service.

The 1761 hectares (approximately) of "offsets" with cash is on offer, this is much less an area of forested land, than the total forested area contained within the Roche Group Pty Limited project area, which contains many, many Aboriginal Artifacts, sites, storylines, animals and plants.

The initial Foot Traverse survey of the property, has proven the property is of a high Cultural value and very significant to the Biripi people.

No doubt work on development will impact Aboriginal Cultural Heritage. Assessment of the property will lead to DECCW issuing a "Care Agreement". This Care Agreement will eventually be granted to the Guiwan Elders and Biripi Sites Keeper.

As long as the DECCW consultation procedure is followed, and **avoidance** is applied initially. a balanced package between development and conservation can be achieved, following the **principles of the DECCW Mid North Regional Conservation Plan** thus reflecting the important Aboriginal Heritage Values of the past and present relationships within the landscape **where development and Aboriginal Heritage values coincide, innovative and respectful solutions must be found.**

With respect

GUIWAN CULTURAL ELDERS ABORIGINAL ASSOCIATION INCORPORATED
COMMON SEAL
INC 9893755

Warners Saunders
Guiwan Elder/Biripi Sites Keeper

Lincoln Wright
Guiwan-Anawain Elder/Chairperson

Harold Saunders
Guiwan Elder/Biripi Story Teller

GUIWAN CULTURAL ELDERS
ABORIGINAL ASSOCIATION INCORPORATED

Garry Wray
Project Co-ordinator

garrywray@hotmail.com

P.O. Box 95
Old Bar Beach
NSW 2430
Ph/Fax: 02 6553 6533
Mob: 0457 409 317

INTRODUCTION

THE STORY

AND
APPROVALS

Since 1983 cultural powers were driving Guiwan Elder/Biripi Sites Keeper, Mr Warner Boyce Saunders (DOB 24 November 1937), to preserve the Culture and areas of cultural and environmental significance to his people, the "Biripi Nation" (see letter dated 25th November, 1998).

The late Mr Manul Ritchie, ATSIC Caretaker, supported the **"Dreams and Visions"** that Warner had shared with Manul (see letter dated 3rd November 1998).

- To construct a "**Learning Centre**" on freehold land in conjunction with a **"Cultural Centre"** owned by the Guiwan Cultural Elders Aboriginal Association.

- To have **Multicultural** membership in their Association.

- To address the **recording and documentation** of the "Biripi" Culture, Mythological, Customs, and Lores in conjunction with the Guiwan Cultural Elders Aboriginal Association.

- To **record and register** with DECCW a great circular aboriginal community walk (travel route).

  "The Circle of Life" (from birth through to death)
  From the Mountains to the Sea, that links the Biripi cultural places from Saltwater, north to the Wilson River, west to Apsley Falls, south-west near Hanging Rock and south-east onwards to the northern bank of the Wallamba River, east to Tuncurry and north back to Saltwater.

Around 1998 approximately 50 landowners in the Old Bar area entered into contracts to have their land re-zoned and allow a minimum width 100metre habitat corridor and community trails to pass through to form a continuous link from Mud Bishops (Farquhar Inlet) to Saltwater Reserve following the Aboriginal travel route.

Greater Taree City Council has zoned the corridor appropriately and is allowing the corridor (trail) to be dedicated to The Guiwan Cultural Elders Aboriginal Association, constructed, managed and maintained within the guidelines of a "Plan of Management". This work is to be undertaken by trainees from the Guiwan Cultural Enterprise Training and Healing Grounds Association .

This community trails network, once construction has commenced, will benefit all the community.

Suggestions and information gathered over thirty five years, are to be used to write up a Prospectus, so as Guiwan can obtain funds to construct and manage this travel route.

The Aboriginal travel route "The Circle of Life" from the Mountains to the Sea, will provide the World with a Cultural/Tourism destination of international standard, encompassing the Manning River Valley.

A FINAL PLAN OF MANAGEMENT, BUSINESS PLAN OR PROSPECTUS IS REQUIRED TO OBTAIN FUNDS FOR THE ABOVE PROJECT.

THE GUIWAN ELDERS AND MEMBERS OF THE GUIWAN ASSOCIATIONS ARE IN THE MEAN TIME, DOING WHATEVER IT TAKES TO KEEP POSITIVE AND FINANCIALLY VIABLE VIA SITE SURVEY WORK AND THE CUTTING OF FIREWOOD FOR SALE.