



TYAGARAH AIRSTRIP  
95 YARUN RD, TYAGARAH NSW  
ABORIGINAL CULTURAL HERITAGE ASSESSMENT

PREPARED FOR BYRON SHIRE COUNCIL

EVERICK HERITAGE CONSULTANTS  
SEPTEMBER 2016





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## EXECUTIVE SUMMARY

The following report details a Cultural Heritage Assessment for a Planning Proposal by Byron Shire Council at Tyagarah Airfield, 95 Yarun Road Tyagarah NSW (the 'Project'). The land subject to assessment is within the existing Airfield made up of the following lots: Lot 1 DP 713023, Lot 2 DP 749581, Lot 4 and 5 DP 805678, Lot 6 DP 836887, Lots 8 and 9 DP 858632 and Lot 49 DP 881232 in the Byron Shire LGA, illustrated in Figure 1 & Figure 2. The Project Area is partly zoned RU2 Rural Landscape under the BLEP 2014.

The intent of this cultural heritage assessment is to assess potential impacts to Aboriginal and non-Aboriginal (historic) heritage within the Project Area, that may result from either the Planning Proposal or any subsequent developments permitted within the relevant zone. The report aims to outline appropriate impact mitigation measures should Aboriginal or non-Aboriginal (historic) heritage items be identified.

The Planning Proposal will facilitate the future inclusion of a heliport at the airfield and allow the subdivision of the land to rectify lots that were previously created for lease purposes but not registered, formalise the existing internal roadway, and create additional lots to utilise operational Crown land to ensure the airport is economically sustainable. Council is considering a proposed subdivision of the Council-owned land to create a total of around 14-15 lots (excluding existing lots) including the provision of a new public road, generally along the alignment of the existing internal access road (BSC Planning Proposal 2016: 1-2).

Everick Heritage Consultants (the 'Consultant') was commissioned by Byron Shire Council (the 'Proponent') to undertake a cultural heritage assessment for the Project. The brief for this Project was to undertake a cultural heritage due diligence assessment of a suitable standard to be submitted in support of the Project. In accordance with the relevant administrative and legislative standards for New South Wales (see Section 2 below) the methods employed in this assessment included:

- a) a search of relevant heritage registers;
- b) a review of environmental resources for the region;
- c) a review of relevant archaeological and ethnographic studies for the region;
- d) review of historic aerial photographs;
- e) a site inspection conducted with representatives of the Arakwal Aboriginal Corporation Byron Bay (AAC);
- f) an assessment of archaeological and cultural heritage significance and impacts; and
- g) report on findings and recommend management strategies.



The methods used for this assessment are in compliance with the OEH *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (2010) and all relevant legislation as described in Section 2 of this Report. The report also references the accepted methodology for undertaking a Due Diligence Assessment under the *National Parks and Wildlife Act 1974* ('NPW Act').

A search was conducted 15 August 2016 of the OEH AHIMS (service number 238872) for centring on the Project Area with a 1000m buffer (**Figure 4**). The search identified three registered Aboriginal site within the search area. Site features consist of shell, artefacts and a Potential Archaeological Deposit No Aboriginal sites are registered within the Project Area. Searches of *Oher Heritage Registers* found no items of Indigenous or European cultural heritage.

The Project Area is within the area administered for Aboriginal cultural heritage purposes by the Arakwal Aboriginal Corporation. A field inspection for Aboriginal cultural heritage was undertaken by Brian Kelly, (Sites Officer of the AAC) and Adrian Piper of Everick Heritage Consultants, on 11 August 2016. Comments in regard to the heritage values of the Project Area and the adequacy of this assessment will be incorporated as it is received.

The existing Lots containing structures on filled pads were excluded from investigation although they were photographed to provide context as to land uses. They were not inspected for Aboriginal cultural heritage as they are located on imported fill pads and no change is proposed by the Planning Proposal for their use. Lots 1-4 and 11-14 are the Lots to be created, additional to Lots for existing purposes. Lots 1-4 and 11-14 were investigated for potential Aboriginal heritage.

### *Results: Aboriginal Cultural Heritage Assessment*

As a result of the desktop study and field inspection the following conclusions were established with Brian Kelly of the AAC Byron Bay.

- From discussion with Brian Kelly of the AAC there are no culturally significant sites or Areas affected by the proposed subdivision and further cultural heritage investigation is not warranted.
- No Indigenous archaeological sites or relics were identified within Lots 1-4 and Lots 11-14 of the Project Area.
- No areas were identified considered to have potential for archaeological deposits of significant Aboriginal cultural heritage.
- The Project Area has been disturbed in a manner which constitutes 'disturbance' within the meaning of the Due Diligence Code and is consistent with the Due Diligence Code.



### *Results: Historic Cultural Heritage Assessment*

As a result of the desktop study and field inspection, no historic items were recorded.

### *Recommendations Aboriginal Cultural Heritage:*

In regard to the planning proposal to rezone Lots 1-4 and Lots 11-14 and associated works at the Tyagarah Airfield by Byron Shire Council and having regard to the low Aboriginal cultural heritage potential of the Project Area, the following recommendations are cautionary in nature and considered sufficient for application in both planning proposal and development application stages.

#### *Recommendation 1: Aboriginal Objects Find Procedure*

It is recommended that if it is suspected that Aboriginal material has been uncovered as a result of development activities within the Project Area:

- a) work in the surrounding area is to stop immediately;
- b) a temporary fence is to be erected around the site, with a buffer zone of at least 10 metres around the known edge of the site;
- c) an appropriately qualified archaeological consultant is to be engaged to identify the material;
- d) the Arakwal Aboriginal Corporation is to be notified; and
- e) if the material is found to be of Aboriginal origin, the Aboriginal community is to be consulted in a manner as outlined in the OEH guidelines: *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (2010).

#### *Recommendation 2: Aboriginal Human Remains*

Although it is unlikely that Human Remains will be located at any stage during earthworks within the Project Area, should this event arise it is recommended that all works must halt in the immediate area to prevent any further impacts to the remains. The site should be cordoned off and the remains themselves should be left untouched. The nearest police station, the AAC and the OEH Regional Office (Coffs Harbour) are all to be notified as soon as possible. If the remains are found to be of Aboriginal origin and the police do not wish to investigate the Site for criminal activities, the Aboriginal community and the OEH should be consulted as to how the remains should be dealt with. Work may only resume after agreement is reached between all notified parties, provided it is in accordance with all parties' statutory obligations.



It is also recommended that in all dealings with Aboriginal Human Remains, the Proponent should use respectful language, bearing in mind that they are the remains of Aboriginal people rather than scientific specimens.

### *Recommendation 3: Notifying the OEH*

It is recommended that if Aboriginal cultural materials are uncovered as a result of development activities within the Project Area, they are to be registered as Sites in the Aboriginal Heritage Information Management System (AHIMS) managed by the OEH. Any management outcomes for the site will be included in the information provided to the AHIMS.

### *Recommendation 4: Conservation Principles*

It is recommended that all effort must be taken to avoid any impacts on Aboriginal Cultural Heritage values at all stages during the development works. If impacts are unavoidable, mitigation measures should be negotiated between the Proponent, OEH and the Aboriginal community.

### *Recommendations: Historic Cultural Heritage*

There are no items of historic heritage therefore no recommendations are warranted.



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# CONTENTS

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EXECUTIVE SUMMARY .....	2
<i>Recommendations Aboriginal Cultural Heritage:</i> .....	4
1. INTRODUCTION .....	9
1.1 Purpose of the Cultural Heritage Assessment .....	9
1.2 Description of the Rezoning Proposal .....	9
1.3 Proponent, Project Brief & Methodology .....	9
1.4 Report Authorship .....	10
2. LEGISLATIVE AND PLANNING CONTEXT .....	13
2.1 The National Parks and Wildlife Act 1974 (NSW) .....	13
2.2 Due Diligence Code of Practice for the Protection of Aboriginal Objects (2010) .....	15
2.3 The ACHCRP (2010) .....	15
2.4 The Byron Local Environmental Plan 2014 .....	16
3. ABORIGINAL COMMUNITY CONSULTATION .....	18
3.1 Traditional Owner Knowledge .....	18
3.2 Aboriginal Consultation .....	18
4. DESKTOP ASSESSMENT: ABORIGINAL CULTURAL HERITAGE .....	19
4.1 Tyagarah Locality and Landscape Context .....	19
4.2 Heritage Register Searches .....	19
4.2.1 OEH Aboriginal Heritage Information Management System .....	19
4.2.2 Other Heritage Registers: Indigenous & Historic Cultural Heritage .....	20
4.3 Land Use and Disturbance History .....	23
5. SELECTED ARCHAEOLOGICAL SYNTHESIS AND PREDICTIONS .....	26
5.1 Ethno-historical Summary .....	26
5.2 'Tyagarah Grass'-Aboriginal and European Settlement .....	27
5.3 Previous Archaeological/Cultural Heritage Studies .....	28
5.3.1 Tyagarah to Brunswick Heads .....	28
5.4 Predictive Modelling: Aboriginal Sites and Features (Range and Nature) .....	30
6. FIELD SURVEY: ABORIGINAL CULTURAL HERITAGE .....	32
6.1 Survey Team .....	32
6.2 Assessment Recording Methods .....	32
6.3 Constraints to Site Detection .....	33
6.4 Survey Coverage .....	35
7. RESULTS .....	41
7.1 Aboriginal Heritage .....	41
7.2 Historic Heritage .....	41
8. DUE DILIGENCE ASSESSMENT: ABORIGINAL CULTURAL HERITAGE .....	42



8.1	Step 1: Will the activity disturb the ground surface?	42
8.2	Step 2a: Search of AHIMS Database	42
8.2.1	OEH Aboriginal Heritage Information Management System	42
8.3	Step 2b: Is the activity in an area where landscape features indicate the presence of Aboriginal cultural heritage?	42
8.4	Step 2c: Is there evidence of past ground disturbance?	43
9.	RECOMMENDATIONS	44
9.1	ABORIGINAL CULTURAL HERITAGE	44
9.2	Historic Cultural Heritage	45
10.	REFERENCES	46
	APPENDIX A: CORRESPONDENCE WITH THE ARAKWAL ABORIGINAL CORPORATION BYRON BAY	48
	APPENDIX B: AHIMS SEARCH RESULTS	49

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## TABLES AND FIGURES

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Table 1: Summary of Environment and Ground Disturbance	34
Table 2: Survey Coverage	36
Figure 1: Regional Locality and Project Area Plan	11
Figure 2: Subdivision Plan	12
Figure 3: Soil Landscape	21
Figure 4: AHIMS Sites	22
Figure 5: 1958 Historical Aerial	24
Figure 6: 1979 Historical Aerial	24
Figure 7: 1991 Historical Aerial	25
Figure 8: 2004 Historical Aerial	25
Figure 9: 1922 Parish Map	27
Figure 10: Lots 1 and 2. Cleared closed grassland, view north	37
Figure 11: Lot 3. Paperbark forest, view south	37
Figure 12: Lot 4. Isolated stand of regrowth swamp sclerophyll forest	38
Figure 13: Lot 11. Paperbark forest and cleared closed grassland over fill	38
Figure 14: Lot 12. Cleared closed grassland over imported fill	39
Figure 15: Lot 13. Open woodland	39
Figure 16: Lot 14. Paperbark forest, view north	40





## DEFINITIONS

**AAC** means the Arakwal Aboriginal Corporation Byron Bay.

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

**Aboriginal Place** means any place declared to be an Aboriginal place (under s. 84 of the NPW Act) by the Minister administering the NPW Act, by order published in the NSW Government Gazette, 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.

**ACHCRP Guidelines** means the *OEH Aboriginal Cultural Heritage Consultation Requirements for Proponents (2010)*.

**AHIP** means *Aboriginal Heritage Impact Permit*.

**Archaeological Code of Practice** means the *OEH Code of Practice for Archaeological Conduct in New South Wales (2010)*.

**BLEP** means Byron Local Environmental Plan 2014.

**BSC** means Byron Shire Council.

**Due Diligence Code** means the *OEH Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales (2010)*.

**LALC** means Local Aboriginal Land Council

**LEP** means the Local Environment Plan

**NPW Act** means the *National Parks and Wildlife Act 1974* (NSW).

**NPW Regulations** means the *National Parks and Wildlife Regulations 2009* (NSW).

**OEH** means the New South Wales Office of Environment and Heritage.

**Project Area/PA** means the land subject to this assessment at the Tyagarah Airfield in the Byron Shire LGA.

**Proposed Works/The Project** means all activities associated with the planning proposal including all construction and landscaping within the Project Area (including activities undertaken by subsequent landholders).

**Proponent** means Byron Shire Council and all associated employees and contractors and subcontractors of the same.

**The Consultant** means qualified archaeological staff and/or contractors of Everick Heritage Consultants Pty Ltd.



## 1. INTRODUCTION

### 1.1 Purpose of the Cultural Heritage Assessment

The following report details a Cultural Heritage Assessment for a Planning Proposal by Byron Shire Council at the Tyagarah Airfield at 95 Yarun Road Tyagarah NSW (the 'Project'). The land subject to assessment is within the existing Airfield made up of the following lots: Lot 1 DP 713023, Lot 2 DP 749581, Lot 4 and 5 DP 805678, Lot 6 DP 836887, Lots 8 and 9 DP 858632 and Lot 49 DP 881232 in the Byron Shire LGA, illustrated in Figure 1 & Figure 2. The Project Area is partly zoned RU2 Rural Landscape under the BLEP 2014.

The intent of this cultural heritage assessment is to assess potential impacts to Aboriginal and non-Aboriginal (historic) heritage within the Project Area, that may result from either the Planning Proposal or any subsequent developments permitted within the relevant zone. The report aims to outline appropriate impact mitigation measures should Aboriginal or non-Aboriginal (historic) heritage items be identified.

### 1.2 Description of the Rezoning Proposal

The Planning Proposal will facilitate the future inclusion of a heliport at the Airfield and allow the subdivision of the land to rectify lots that were previously created for lease purposes but not registered, formalise the existing internal roadway, and create additional lots to utilise operational Crown land to ensure the airport is economically sustainable. Council is considering a proposed subdivision of the Council-owned land to create a total of around 14-15 lots (excluding existing lots) including the provision of a new public road, generally along the alignment of the existing internal access road (BSC Planning Proposal 2016: 1-2).

### 1.3 Proponent, Project Brief & Methodology

Everick Heritage Consultants (the 'Consultant') was commissioned by Byron Shire Council (the 'Proponent') to undertake a cultural heritage assessment for the Project. The brief for this Project was to undertake a cultural heritage due diligence assessment of a suitable standard to be submitted in support of the Project. In accordance with the relevant administrative and legislative standards for New South Wales (see Section 2 below) the methods employed in this assessment included:

- a) a search of relevant heritage registers;
- b) a review of environmental resources for the region;
- c) a review of relevant archaeological and ethnographic studies for the region;

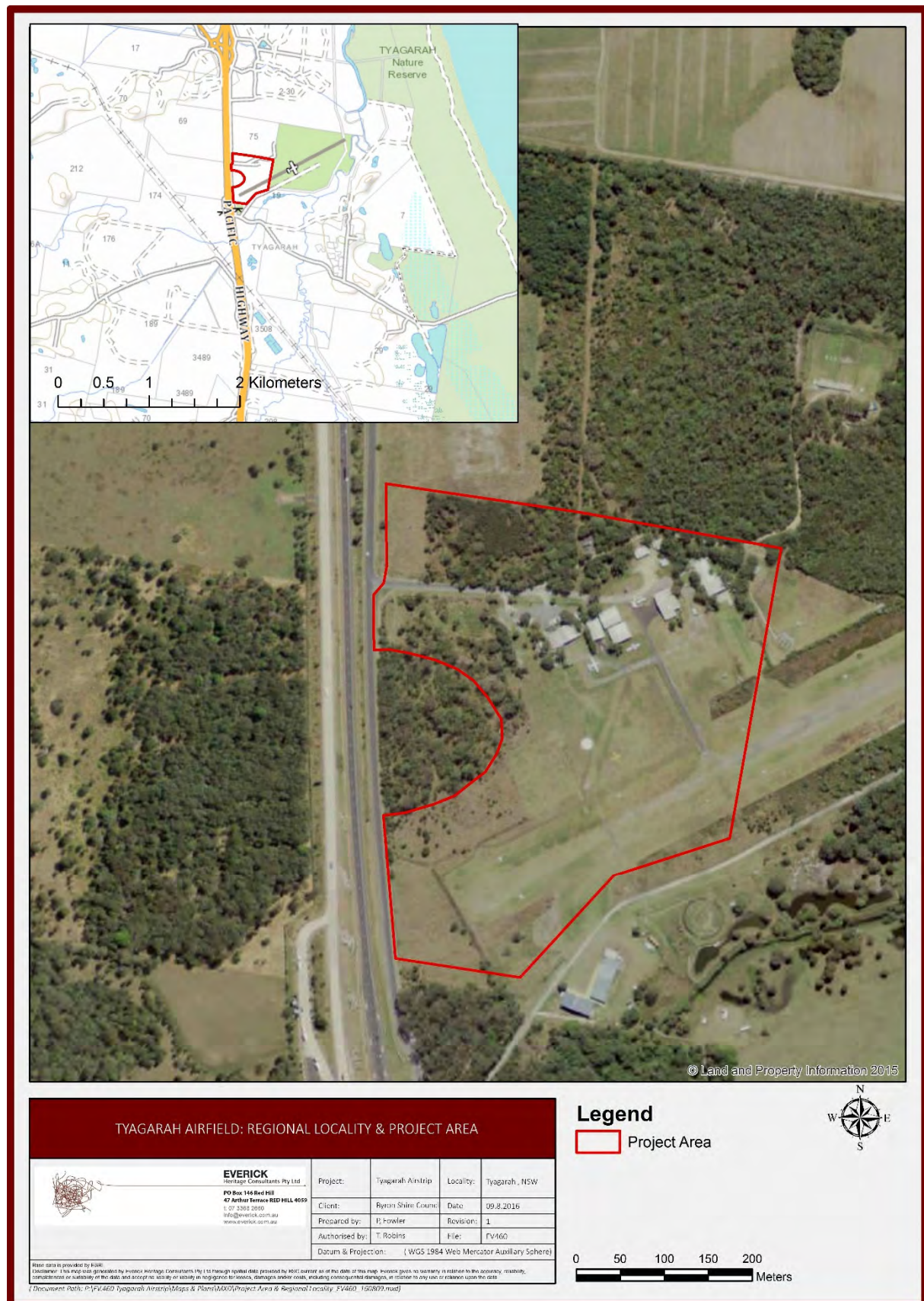


- d) review of historic aerial photographs;
- e) a site inspection conducted with representatives of the Arakwal Aboriginal Corporation Byron Bay (AAC);
- f) an assessment of archaeological and cultural heritage significance and impacts; and
- g) report on findings and recommend management strategies.

The methods used for this assessment are in compliance with the OEH *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (2010) and all relevant legislation as described in Section 2 of this Report. The report also references the accepted methodology for undertaking a Due Diligence Assessment under the *National Parks and Wildlife Act 1974* ('NPW Act').

## 1.4 Report Authorship

The desktop study was undertaken by Everick Archaeologists Adrian Piper and Pauline Fowler. The field inspection was conducted by Senior Archaeologist Adrian Piper. This report was written by Adrian Piper and Pauline Fowler. Technical review was completed by Everick Director Tim Robins. Aboriginal community consultation was conducted by Adrian Piper.



**Figure 1: Regional Locality and Project Area Plan.**



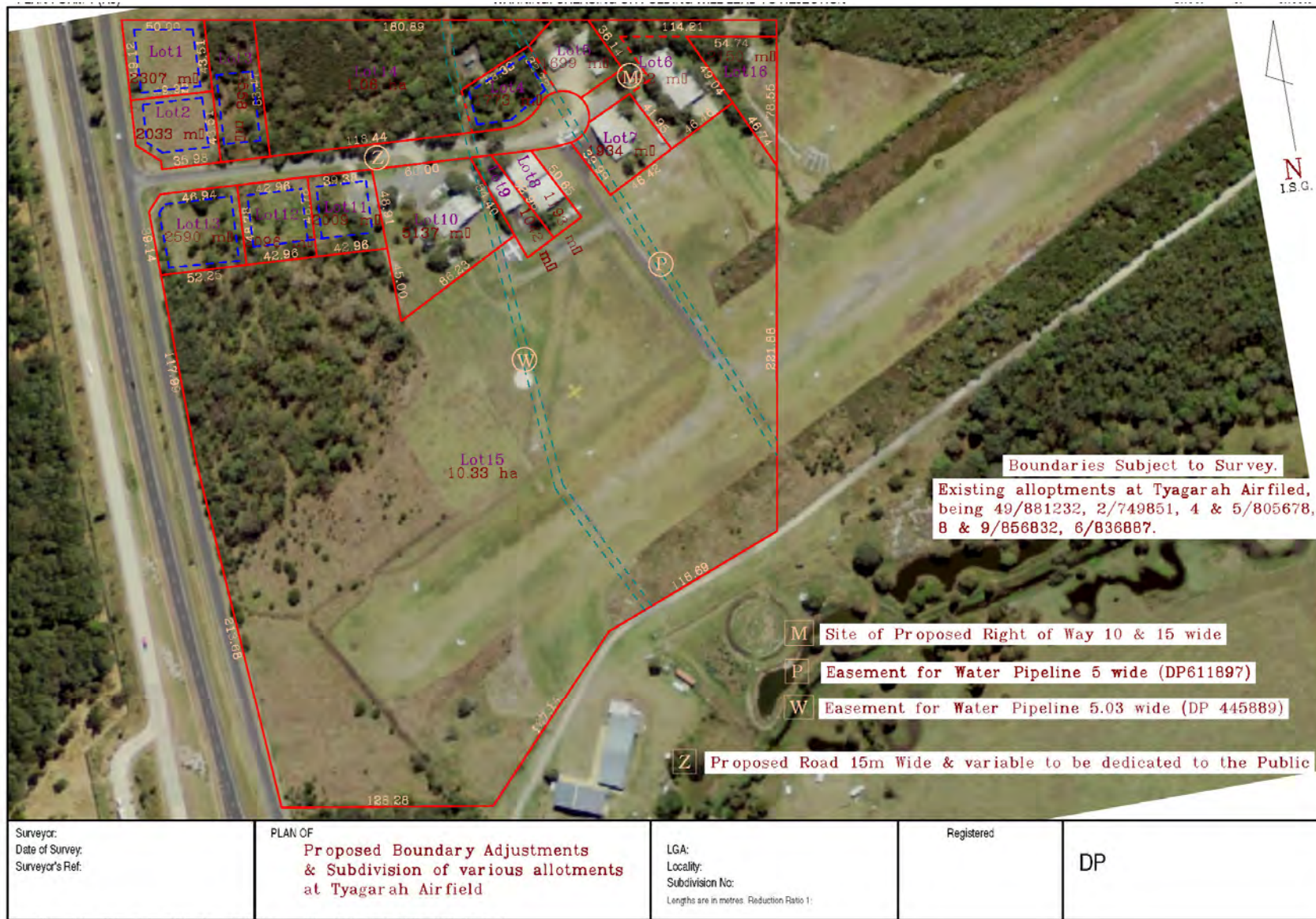


Figure 2: Subdivision Plan.





## 2. LEGISLATIVE AND PLANNING CONTEXT

The primary State legislation concerning cultural heritage in New South Wales are the NPW Act 1974 (NSW) and the Council Local Environment Plans and Development Control Plans. The Commonwealth also has a role in the protection of nationally significant cultural heritage through the *Environmental Protection and Biodiversity Conservation Act 1999* (Cth), *The Protection of Movable Cultural Heritage Act 1986* (Cth) and the *Historic Shipwrecks Act 1976* (Cth).

For the purposes of this assessment the State and local legislation are most relevant. The consent authorities will be the Byron Shire Council and, where a referral agency is required, the OEH. Approval from the OEH will also be required should the Project impact on identified Aboriginal Objects. The information below lists the legislative and policy framework within which this assessment is set.

### 2.1 The National Parks and Wildlife Act 1974 (NSW)

The *National Parks and Wildlife Act 1974* (NSW) (NPW Act) is the primary legislation concerning the identification and protection of Aboriginal cultural heritage. It provides for the management of both Aboriginal Objects and Aboriginal Places. Under the NPW Act, an Aboriginal Object is any deposit, object or material evidence (not being a handicraft made for sale) relating to the Aboriginal habitation of the area, regardless of whether the evidence of habitation occurred before or after non-Aboriginal settlement of the land. This means that every Aboriginal Object, regardless of its size or seeming isolation from other Objects, is protected under the Act.

An Aboriginal Place is an area of particular significance to Aboriginal people which has been *declared* an Aboriginal Place by the Minister. The drafting of this legislation reflects the traditional focus on Objects, rather than on areas of significance such as story places and ceremonial grounds. However, a gradual shift in cultural heritage management practices is occurring towards recognising the value of identifying the significance of areas to Indigenous peoples beyond their physical attributes. With the introduction of the *National Parks and Wildlife Amendment Act 2010* (NSW) the former offence provisions under Section 86 of ‘disturbing’, ‘moving’, ‘removing’ or ‘taking possession’ of Aboriginal Objects or Places have been replaced by the new offence of ‘harming or desecrating’. The definition of ‘harm’ is ‘destroying, defacing or damaging an Object’. Importantly, in the context of the management recommendations in this assessment, harm to an Object that is ‘trivial or negligible’ will not constitute an offence.



The new amendments also significantly strengthen the penalty provisions. The issue of intent to harm Aboriginal cultural heritage has been formally addressed by separating it from inadvertent harm. The penalty for individuals who inadvertently harm Aboriginal Objects has been set at up to \$55,000, while for corporations it is \$220,000. Also introduced is the concept of '*circumstances of aggravation*' which allows for harsher penalties (up to \$110,000) for individuals who inadvertently harm Aboriginal heritage in the course of undertaking a commercial activity or have a record for committing similar offences. For those who knowingly harm Aboriginal cultural heritage, the penalty will rise substantially. The maximum penalty will be set at \$275,000 or one year imprisonment for individuals, while for corporations it will rise to \$1,100,000.

Where a land user has or is likely to undertake activities that will harm Aboriginal Objects, the Director General (OEH) has a range of enforcement powers, including stop work orders, interim protection orders and remediation orders. The amended regulations also allow for a number of penalties in support of these provisions. The NPW Act also now includes a range of defense provisions for unintentionally harming Aboriginal Objects:

- a) Undertaking activities that are prescribed as 'Low Impact'.
- b) Acting in accordance with the new Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales (2010).
- c) Using a consulting archaeologist who correctly applies the OEH *Code of Practice for Archaeological Conduct in New South Wales* (2010) ('Archaeological Code of Practice').
- d) Acting in accordance with an Aboriginal Heritage Impact Permit ('AHIP').

The new regulations allow for a range of low impact activities to be undertaken without the need to consult the OEH or a consulting archaeologist. Generally, those who undertake activities of this nature will not be committing an offence, even if they inadvertently harm Aboriginal Objects. These activities include:

- a) Maintenance – For example on existing roads and tracks, or on existing utilities such as underground power cables and sewage lines.
- b) Farming and Land Management – for land previously disturbed, activities such as cropping, grazing, bores, fencing, erosions control etc. \*
- c) Removal of dead or dying vegetation - only if there is minimal ground disturbance.
- d) Environmental rehabilitation – weed removal, bush regeneration.
- e) Development in accordance with a Development Certificate issued under the EPA Act 1979 (provided the land is previously disturbed). \*
- f) Downhole logging, sampling and coring using hand held equipment.



- g) Geochemical surveying, seismic surveying, costeaning or drilling. \*

\* This defense is only available where the land has been disturbed by previous activity. Disturbance is defined as a clear and observable change to the land's surface, including but not limited to land disturbed by the following: soil ploughing; urban development; rural infrastructure (such as dams and fences); roads, trails and walking tracks; pipelines, transmission lines; and storm water drainage and other similar infrastructure.

## 2.2 Due Diligence Code of Practice for the Protection of Aboriginal Objects (2010)

The Due Diligence Code has been applied in Section 9 of this assessment. It operates by posing a series of questions for land users before they commence development. These questions are based around assessing previous ground disturbance. An activity will generally be unlikely to harm Aboriginal Objects where it:

- a) will cause no additional ground disturbance; or
- b) is in a developed area; or
- c) in a significantly disturbed area.

Where these criteria are not fulfilled, further assessment for Aboriginal cultural heritage will typically be required prior to commencing the activity.

## 2.3 The ACHCRP (2010)

The *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (2010) ('ACHCRP') provide an acceptable framework for conducting Aboriginal community consultation in preparation for impacts to Aboriginal cultural heritage. Proponents are required to follow them where a Project is likely to impact on cultural heritage and where required by Council. It is recommended by the OEH that all cultural heritage assessments involve this level of consultation, although it is not strictly a requirement unless it meets the above criteria.

The ACHCRP Guidelines typically take a minimum of 90 days to complete. However, in complicated Projects this period may need to be extended by several months. The Guidelines require public notice of the assessment, preparation of a proposed methodology, undertaking site meetings and excavations where required, the production of a draft report, which is distributed to the registered Aboriginal groups and the production of a final report.



Although not strictly required, a thorough consultation process will treat the ACHCRP Guidelines as a minimum standard of community consultation. Generally, consultants must go to further effort to identify the significance of a given site to the Aboriginal community. This will likely include undertaking additional site inspections if requested by Aboriginal stakeholders, fully resourcing the community by providing copies of past archaeological and environmental assessments in the region and meeting with community members to seek their opinions of the site.

## 2.4 The Byron Local Environmental Plan 2014

The Byron LEP 2014 provides statutory protection for items already listed as being of heritage significance. It ensures that essential best practice components of the heritage decision-making process are followed. A listed environmental heritage item is an item that is either:

- a) designated as an item of environmental heritage in Schedule 5 of the Byron LEP 2014; or
- b) designated as an item of environmental heritage by the Byron DCP 2010 and the Draft Byron DCP 2014 (Section 2.5).

For listed heritage items, a person must have the consent of the Council for:

- a) demolishing or moving any of the following or altering the exterior of any of the following (including, in the case of a building, making changes to its detail, fabric, finish or appearance):
  - a. a heritage item;
  - b. an Aboriginal object; and
  - c. a building, work, relic or tree within a heritage conservation area;
- c) altering a heritage item that is a building by making structural changes to its interior or by making changes to anything inside the item that is specified in Schedule 5 in relation to the item;
- d) disturbing or excavating an archaeological site while knowing, or having reasonable cause to suspect, that the disturbance or excavation will or is likely to result in a relic being discovered, exposed, moved, damaged or destroyed;
- e) disturbing or excavating an Aboriginal place of heritage significance;
- f) erecting a building on land:
  - a. on which a heritage item is located or that is within a heritage conservation area, or
  - b. on which an Aboriginal object is located or that is within an Aboriginal place of heritage significance; and



g) subdividing land:

- a. on which a heritage item is located or that is within a heritage conservation area, or
- b. on which an Aboriginal object is located or that is within an Aboriginal place of heritage significance.

Consent should only be given once the Council considers the effect of the proposed development on the heritage significance of the area. The Council may also require a heritage management document to be prepared. This document must assess the extent to which the carrying out of the proposed development would affect the heritage significance of the area concerned. After this the Council may also require a heritage conservation management plan for the heritage that was assessed.

If the proposed development will require the demolition of a nominated State Heritage item then the Council must notify the Heritage Council of the application and consider any responses received within 28 days. Similarly, if the development is on an archaeological site, the Council must notify the Heritage Council of intentions to grant consent and consider any responses received within 28 days.

Should the development be on an Aboriginal place of heritage significance, the Council must notify the local Aboriginal communities about the application and consider any responses received, within 28 days. Additionally, the Council must consider the effect that the development would have on the heritage significance of the Aboriginal place and any Aboriginal objects that are known or likely to be within the development. This must be done by means of an adequate investigation and assessment.

The Council may also grant consent for a development on a heritage item, land, or Aboriginal place that would not otherwise be allowed in this Plan, if the Council is satisfied that:

- a) the conservation of the heritage item or Aboriginal place of heritage significance is facilitated by the granting of consent;
- b) the proposed development is in accordance with a heritage management document that has been approved by the consent authority;
- c) the consent to the proposed development would require that all necessary conservation work identified in the heritage management document is carried out;
- d) the proposed development would not adversely affect the heritage significance of the heritage item, including its setting, or the heritage significance of the Aboriginal place of heritage significance;
- e) the proposed development would not have any significant adverse effect on the amenity of the surrounding area; and





- a) The Byron Development Control Plan take into consideration any response received within 28 days after the notice is sent.

### 3. ABORIGINAL COMMUNITY CONSULTATION

The Aboriginal community consultation for the Project has been guided by the OEH Due Diligence Code. Although it is not a strict requirement of the Due Diligence Code to undertake consultation with the Aboriginal community unless Aboriginal heritage is being impacted by the Project, it is recommended in many instances.

#### 3.1 Traditional Owner Knowledge

The Aboriginal community are the primary determinants of the significance of their cultural heritage. Members of the Aboriginal community have been consulted, and will continue to be consulted, with regard to their concerns not only about known archaeological sites in the region, but also about cultural values such as areas with historic and spiritual significance, and other values relating to flora and fauna of the area. We recognise that there is Traditional Owner knowledge associated with the region that may have to be treated in a confidential manner. We will seek advice from Aboriginal stakeholders as to the appropriate protocols to be adopted in regard to such knowledge.

#### 3.2 Aboriginal Consultation

The site inspection was undertaken on August 11 2016 by Everick Heritage Senior Archaeologist Adrian Piper, Brian Kelly Sites Officer of the ACC. Comments by the AAC in regard to the heritage values of the Project Area and the adequacy of this assessment will be incorporated as it is received.

A copy of this assessment was provided to the Arakwal Aboriginal Corporation for comment. A response to the assessment was received on 07 September 2016 stating that the AAC concurred with the contents and recommendations contained within the Assessment (Appendix C). All written feedback will be provided to the Proponent, Ballina City Council and (if required) the OEH upon receipt.



## 4. DESKTOP ASSESSMENT: ABORIGINAL CULTURAL HERITAGE

### 4.1 Tyagarah Locality and Landscape Context

The Project Area is at the Tyagarah Airfield accessible at Yarun Road from the M1 at Tyagarah. The Project Area can be broadly described as modified coastal plain of paperbark forest, swamp sclerophyll forest, heath and introduced fill to create elevated pads for its present ancillary uses.

Morand describes Tyagarah as an Aeolian/Estuarine soil landscape composed of sediment basins of mixed estuarine/aeolian origin within the inland margins of the Tweed Byron coast, characterised by alluvium overlain or mixed with wind driven beach sands and high water tables. Vegetation is extensively cleared open and closed-forest swamp communities (Morand 1994:160).

Aerial photography indicates extensive clearing of the Airfield prior to 1958, construction of the airstrip in 1971 and a steady process of filling as various commercial and community functions e.g. a Gun Club, acquired leases to operate to the north of the airstrip.

### 4.2 Heritage Register Searches

#### 4.2.1 *OEH Aboriginal Heritage Information Management System*

A search was conducted 15 August 2016 of the OE H AHIMS (service number 238872) for centring on the Project Area with a 1000m buffer (See Appendix 2). The search identified three registered Aboriginal sites within the search area. Site features consist of shell, artefacts and a Potential Archaeological Deposit (PAD). None of these sites were recorded within the Project Area (**Figure 4**). The site TL 2 (#4-5-0150) is a midden site exposed by Pacific Highway associated works, at the intersection of the old Highway and Gray's Lane. More detail of this site is provided in Section 5.3.1 p: 30, Hughes 1998 and Section 5.2.

Site TBR1 (# 4-5-0223) is an artefact scatter located to the north of the Project Area on flats adjoining a stream on the Blues and Roots property, to the east of the Tyagarah Service Station. The PAD (#4-5-253) is associated with the TBR 1 site. More detail of this site is provided in Section 5.3.1 p: 30, Everick Heritage 2008.

Care should be taken when using the AHIMS database to reach conclusions about site prevalence or distribution. For example, a lack of sites in a given area should not be seen as evidence that the area was not occupied by Aboriginal people. It may simply be an indication that it has not been inspected for Aboriginal heritage or that



the field assessment was undertaken in areas or at times of poor ground surface visibility. Further, care needs to be taken when reviewing the classification of sites. For example, the decision to classify a site an artefact scatter containing shell rather than a midden can be a highly subjective exercise, the threshold for which may vary between archaeologists. There are also errors with the data as to site locations.

#### 4.2.2 *Other Heritage Registers: Indigenous & Historic Cultural Heritage*

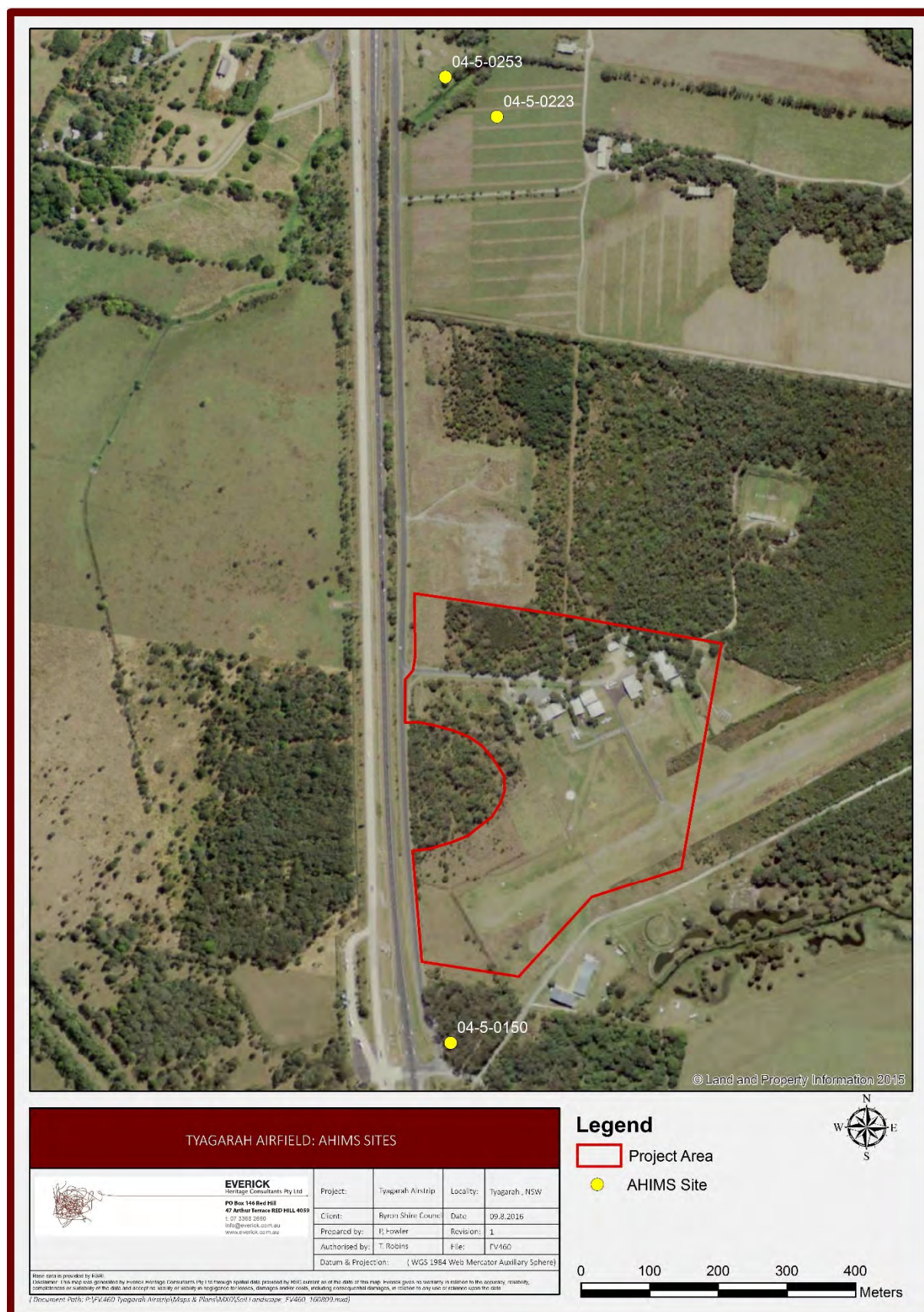
The following heritage registers were accessed on 15 August 2016 for Indigenous and historic places within the Byron LGA:

- **The World Heritage List:** Contains no places within close proximity to the Project Area.
- **Commonwealth Heritage List** (Australian Heritage Council): Contains no places within close proximity to the Project Area.
- **The National Heritage List** (Australian Heritage Council): Contains no places within close proximity to the Project Area.
- **Register of the National Estate** (Australian Heritage Council): Contains no places within close proximity to the Project Area.
- **The State Heritage Register** (NSW Heritage Office): Contains no places within close proximity to the Project Area.
- **Byron Local Environment Plan 2014:** Contains no areas of Indigenous or historic heritage significance or cultural sensitivity in close proximity to the Project Area.



**Figure 3: Soil Landscape.**





**Figure 4: AHIMS Sites.**





### 4.3 Land Use and Disturbance History

Historic aerial photographs of the Project Area were reviewed to assist in ascertaining the extent and types of ground disturbance and therefore potential destructive impacts to Aboriginal sites. Aerial photographs from 1958, 1979, 1991, and 2004 were reviewed. (Figure 5 to Figure 11).

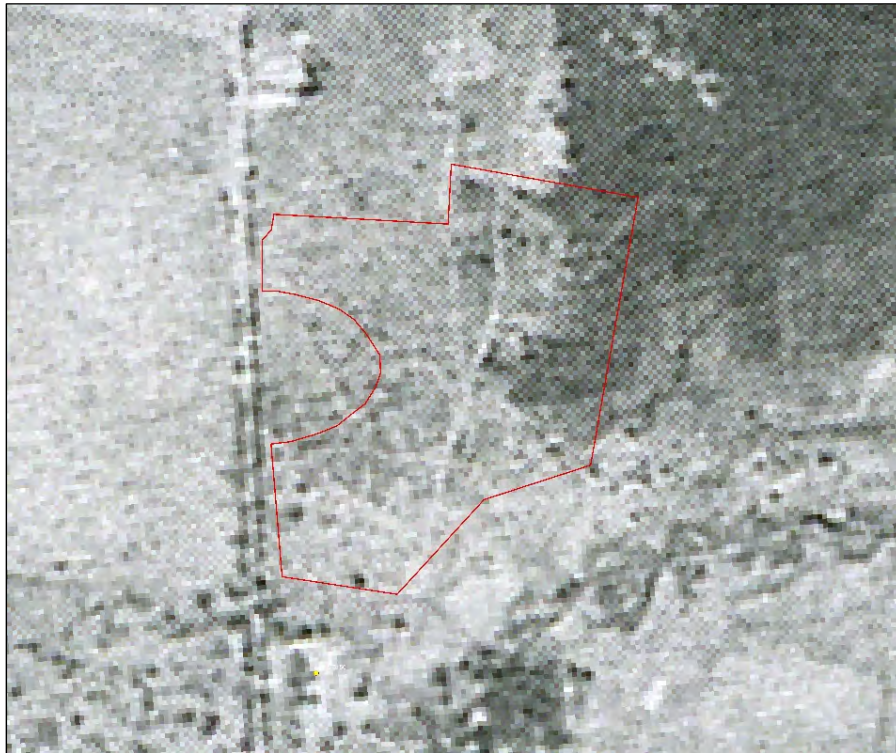
**1958.** The image indicates prior extensive clearing from the Pacific Highway east toward a probable swamp sclerophyll forest. Open grassland crossed by tracks presumably for grazing purposes is the main land use.

**1979.** Construction of the airfield by mechanical methods began in 1971. Sand exposures delineate the airstrip, access road and development of ancillary functions and local amenities such as the Gun Club. Regrowth forest appears to be recolonising the southern areas of Lots 11-13.

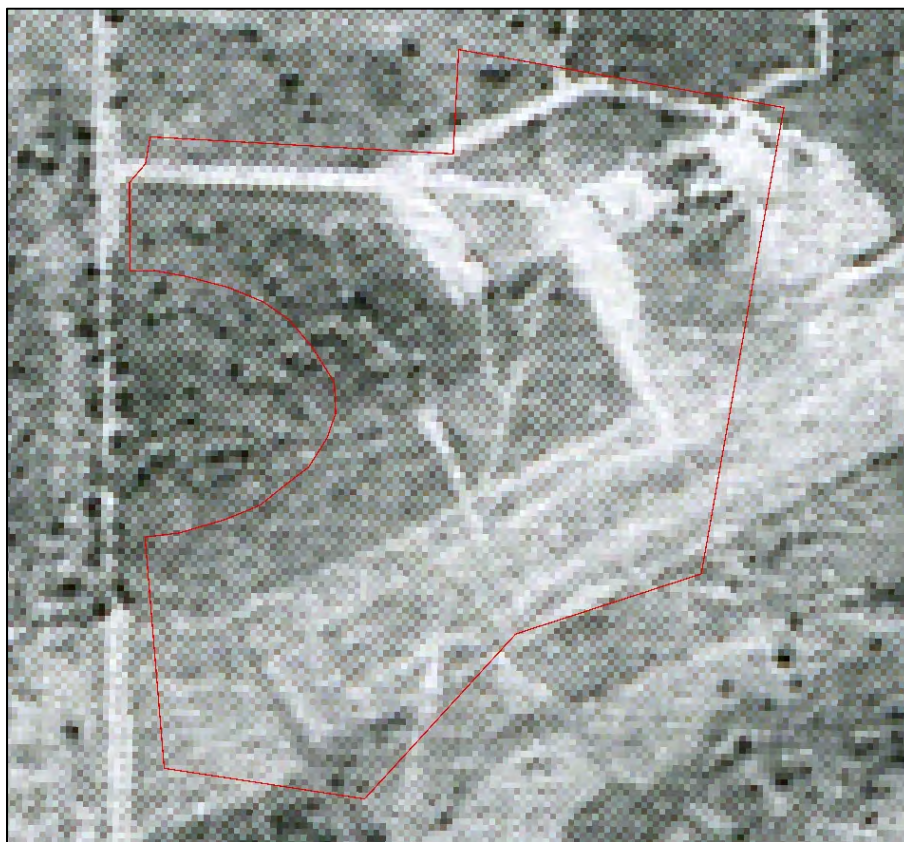
**1991.** Airfield facilities can be clearly seen. The lots under cultural heritage investigation show a clear resurgence of paperbark forest and sclerophyll swamp forest.

**2004.** The major change is the complete encroachment of paperbark forest over Lots 3 and 14. Lots 1, 2 and 13 remain clear of forest regrowth no doubt due to power line fire prevention methods. The frontage to the access road of Lots 11-13 remain essentially grass land. It is unclear from the image if the fill that now exists along this frontage was in place.

In summary there is clear evidence of moderate to high levels of ground disturbance to the airfield precinct as a whole. Prior to 1958 the majority of the Project Area had been cleared creating grasslands. The rapid resurgence of paperbark forest and swamp sclerophyll forest suggests that in its original state it was low lying, partially inundated for the most part and totally during heavy rain events.



**Figure 5: 1958 Historical Aerial.**



**Figure 6: 1979 Historical Aerial.**





**Figure 7: 1991 Historical Aerial.**



**Figure 8: 2004 Historical Aerial.**



## 5. SELECTED ARCHAEOLOGICAL SYNTHESIS AND PREDICTIONS

### 5.1 Ethno-historical Summary

There is considerable conjecture as to the names of dialect groups, land holding clan groups and their associations to form tribes. The following is not a definitive selection of sources. The Aboriginal people of the coastal Tweed-Brunswick Rivers were part of a larger linguistic group, the Bundjalung, which spoke a range of about twenty linked dialects between the Upper Clarence extending west to Tenterfield, Warwick and Beaudesert joining the coast at about Beenleigh. The concentration of northern Bundjalung dialects, compared to the fewer dialect groups of the adjoining southern Kumbainggiri, led Crowley to suggest that the Bundjalung areas may have been colonised earlier than the Kumbainggiri, thus allowing a greater number of dialects to develop. Crowley also suggested that coastal Bundjalung dialects varied significantly from inland Bundjalung dialects (Crowley 1978). Linguistically Sharpe suggests "...a time depth for the cultural differences of less than 500 years..." (Sharpe 1985:103-104).

The coastal Brunswick River valley is within the territory of the Minjungbal people, with the Kalibal/Widjabal to the west and the Arakwal to the south (Tindale 1974; Crowley 1978). The Minjungbal occupied the coastal plain and river valleys from a short distance north of Byron Bay to Southport and west to the coastal ranges. Keats (1988) and Crowley (1978) differ from Tindales' interpretation in that they generally agree on the northern boundary of the Arakwal but place the southern boundary of the Minyanbal on Cudgera Creek at Hastings Point (Keats 1988:30). Bray writing of his personal observations of the disbursement of the Tweed 'tribes' in the 1860s states that a probable coastal horde group the Coodjingburra '... had the part along the coast between the Tweed and Brunswick Rivers, about ten miles back from the coast...' (Bray 1901:9). Keats and Crowley for unstated reasons cut the southern boundary of the Coodjingburra on Cudgera Creek at Hastings Point (Keats 1988:15, 30).





## 5.2 'Tyagarah Grass'-Aboriginal and European Settlement

The earliest reference to Tyagarah derives from the descriptive term 'Tyagarah Grass' one of many natural clearings of foxtail or kangaroo grasses surrounded by grassless closed forest of the Big Scrub, where early timber getters and travellers could feed and water stock. The Aboriginal and European occupation and origins of these north eastern NSW grasses used by Aboriginal and European travellers, for occupation and ceremonial purposes, is documented by Stubbs 2001. The location of the Tyagarah Grass can be seen in the Parish Map of 1922, at the crossing of the old Pacific Highway and North Coast Railway line where a Travelling Stock Crown Reserve is indicated, adjacent to the south western tip of Lot 15 of the Project Area (Figure 9). Tyagarah Grass served European timber getters as a terminus for a track from Lismore descending the Alstonville Plateau escarpment at Coopers Shoot then crossing the short distance to a loading point for timber via a branch of Simpsons Creek and then to Brunswick Heads (Ian Fox pers, comm., 15.08.2016).

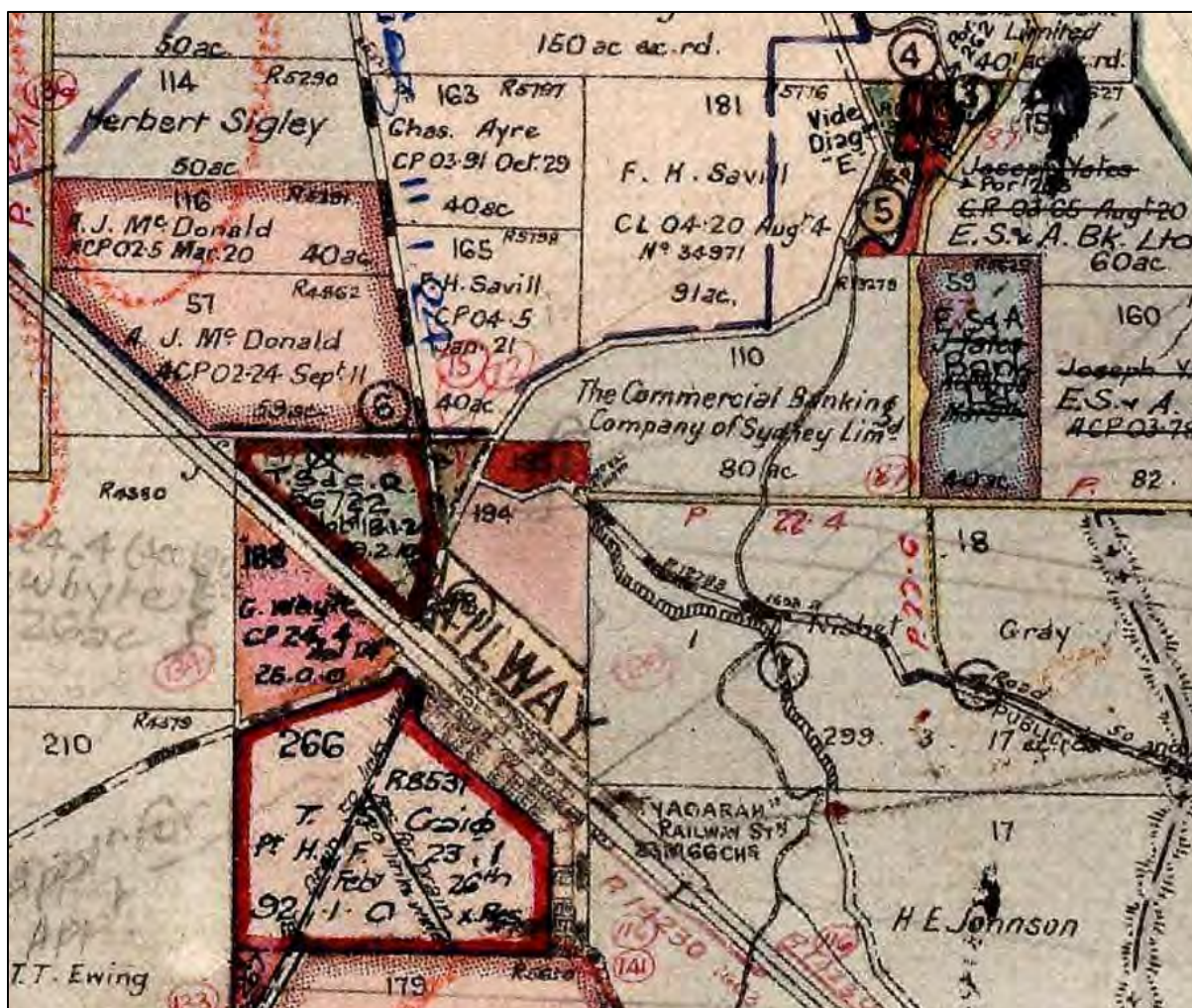


Figure 9: 1922 Parish Map.





Goodwin provides a specific account of the Arakwal at Tyagarah. “...There were big camps of blacks in the early days at Ballina, Tyagarah and Tweed, and later at Broken Head. The camp at Tyagarah was just off the State Highway at Gray’s Road....The shell remains can still be seen at Tyagarah. Byron Bay and Mullumbimby bowling greens were top-dressed a few years ago with soil from the Tyagarah camp.....The blacks always camped near where oysters and pippies could be obtained, and in addition lived on fish, opossums and native bears until the whites came, when they adopted the food of the whites. There were plenty of turkeys around Tyagarah and the gins would raid their nests for eggs...” (Goodwin undated: 23).

## 5.3 Previous Archaeological/Cultural Heritage Studies

### 5.3.1 Tyagarah to Brunswick Heads

**Collins 1991** conducted an Aboriginal heritage study of the Byron Shire in which eight parcels of land were selected, to reflect the major landform units and assess their potential to contain Aboriginal sites. The nearest of these sample areas was a parcel of low hills and flats in the Saddle Road/Andersons Hill area c 4.0km north west of the Project Area. An artefact scatter (AHIMS#04-05-0102) containing two stone artefacts was identified in the Saddle Road unit. The study also investigated the status of a reported stone arrangement (AHIMS#04-5-0041) located on river flats between the Brunswick River and the Pacific Highway. The stone arrangement appeared to be associated with a series of earth/rock mounds (AHIMS#04-5-0111). Doubts as to the authenticity of an Aboriginal origin for the stone arrangement and the mounds were expressed by archaeologist Professor Isobel McBryde in 1964 and Collins 1991. Collins concluded that “...while it is possible that the stones located on the top of the mound have been placed there by Aboriginal people, the fact that similar stones were noted within the excavated mound portion indicates they too are likely to be natural occurrences...” (Collins 1991:23). The site or sites were recommended for removal from the DECC AHIMS, however they remain on the register.

A number of archaeological assessments have assessed sections of the Pacific Highway corridor prior to the construction of the Brunswick Heads bypass north and south of the Brunswick River. **Lomax 1995** identified low density artefact scatters (#04-5-0136, 04-4-0081) at the junction of The Saddle Road and the Pacific Highway. Sub surface testing of one site indicated a low density of artefacts in shallow top soil and an absence of stratigraphy or discrete spatial patterning to the deposits (Lomax 1995:19). **Mills 1998** investigated the route covered by Lomax as well as the proposed route north of the Brunswick River to Billinudgel. One non Indigenous scarred tree, two isolated artefacts and seven areas of potential archaeological deposit (PADS) were identified north of the Brunswick River (Mills 1998:26). A subsequent sub surface testing program of PADS on four spur lines terminating at wetlands found one artefact (Mills 1998:9).



**Collins 1996** conducted an archaeological assessment between Ewingsdale and Tyagarah in relation to the proposed dual carriageway corridor. No sites were identified however four areas of potential archaeological sensitivity, were identified on low hills at Ewingsdale. These areas were not considered to warrant sub surface investigation but monitoring was advised over initial earthworks in these areas. The review of Aboriginal sites in the vicinity of the dual carriageway reported a Bora/ceremonial ground (AHIMS # 04-05-0063) 2 km east of the corridor on an inner barrier sand ridge edging Belongill Swamp. A Bora/ceremonial ground was reported to have been destroyed by sand mining at Tyagarah, its location not given by the original source, Brokenshire (1988). Collins recorded a burial area used initially as a quarry on a low knoll surrounded by swampland at Ewingsdale. The burials were believed to be still intact (Collins 1996:15).

**Curran 1997** conducted a pit testing programme of those areas recommended for monitoring by Collins 1996. No archaeological materials were found.

**Hughes 1998** conducted an archaeological assessment over the Tyagarah section of the Pacific Highway Upgrade. A shell midden (see also Section 5.2) was reported, located on a sand ridge at the corner of Gray's Lane and the old Pacific Highway. The location adjoins the south western boundary of the Project Area in a former rest area on the eastern side of the old Pacific Highway. The following information is summarised from the AHIMS site report for the site. In 1982 RTA construction works exposed an area of a considerable amount of pipi shell and cobble stones. The area of raised sand was flattened and the shell completely destroyed and dispersed. Hughes found that a shell midden consisting of pipi shells occurred on an isolated sand ridge which rose slightly above the surrounding featureless plain. The midden may have contained stone artefacts or cobbles of rock carried onto the site (referred to as munuports). It is possible that archaeological material occurred more widely across the sand ridge about 90 m x 90 m in area (Hughes 1998: DECC AHIMS site card #04-5-0150).

The Aboriginal Community Database (Bundjalung Mapping Project) has records for Tyagarah of both anecdotal sources of Aboriginal cultural heritage information as well as the data derived from the DECC AHIMS. A midden site (#04-5-0150) the same as investigated by Hughes above, originally known as Tyagarah Grass, has both traditional and historical heritage associations. The area was a 'permitted' campsite for Aborigines until their removal by authorities.

**Everick 2008** conducted a cultural heritage assessment over 114.39 ha of coastal plain and inner barrier dune east of the Pacific Highway at Tyagarah 1.0km north of the Project Area. The lands included level floodplain extending east to low dunes on Simpsons Creek. No archaeological materials were identified from the field inspections.



However an artefact collection gathered between 1992-1995, from an area adjacent to a waterhole and fresh water stream was made known to the consultants and representatives of the AAC, Tweed Byron Local Aboriginal Land Council and the DECC. The artefacts were collected at various times following clearing and cultivation. The collection included: edge ground axes (#2), bevelled pounders, stone slabs with possible grinding wear, pebbles with use wear and pitting and chert pieces. Materials associated with the preparation of ochre included an ochre piece with a ground edge, ochre pebble (red), ochre piece (red) and haematite blocks. The materials were removed to the care and custodianship of the AAC.

Everick was informed that large numbers of stone artefacts collected in the Prestons Lane area, to the south east of Tyagarah, are in private hands. A stone arrangement consisting of two serpentine (coiled) arrangements of stones was collected from the Tyagarah area during the sand mining period. The original site of this spiritual/mythological site is restricted information. Artefact scatters are reported on low knolls/slopes adjacent to the floodplain to the east of the Pacific Highway in private property (Everick 2008).

**Everick 2009 and 2016** investigated ca 35ha of coastal plain 4-4.5 km north of the current Project Area on the southern margins of Brunswick Heads residential area. The landscapes were largely unmodified except for the clearing of land zoned residential. The Coastal Habitat zone was heavily vegetated with poor visibility conditions. No Aboriginal cultural heritage was found.

In summary, there is considerable evidence of Aboriginal occupation of the hills and slopes between Ewingsdale and the Brunswick River although some anecdotal observations are yet to be confirmed and have not been recorded on the AHIMS register (Everick 2008: 28). There have been to date only two Aboriginal sites found on the actual floodplain in conditions similar to the Project Area these are the site referred to by Hughes 1998 and the site and artefact collection referred to by Everick Heritage 2008.

## 5.4 Predictive Modelling: Aboriginal Sites and Features (Range and Nature)

Archaeological predictive models of Aboriginal sites in this locality, tend to favour elevated sand dune conditions, ridge lines and the lower coastal slopes as opposed to the coastal alluvial plain, as the primary focus of Aboriginal occupation. To a large extent this view is borne out by the results of previous field assessments and sub-surface investigations. Hughes made the following observations in 1998 for Tyagarah that are still pertinent to an Aboriginal sites distribution model today. *"...In contrast to ridges of low hills, on extensive low-lying coastal plains, artefacts occur infrequently and usually in the form of 'back ground scatter' of isolated artefacts rather than clusters of artefacts that can be called sites. This is because there are no obvious landscape features that would have provided a focus for Aboriginal exploitation and /or occupation. Sites may occur along river and creek banks and around the margins of swamps, but again usually only where there is elevated*



ground...” (Hughes 1998: 4-1). Hughes is also correct when he states “...a major problem with alluvial plains is that any archaeological materials which may occur (albeit sparsely) are likely to be buried beneath aeolian sands and flood alluvium...” (Hughes 1998: 4.1-4.2).

Hughes was of the view that stone artefact scatters were most likely on the ridge crest in hilly terrain particularly Andersons Ridge to the north of the Project Area however a test pitting investigation found no Aboriginal heritage. Stone artefact scatters are less likely to occur on the coastal plain (unless in any areas of slightly elevated ground) and these are likely to have low densities of artefacts compared with those on the adjacent ridge crests. Open sites with shell midden material as well as stone artefacts may occur close to Simpsons Creek, especially on any areas of elevated ground.

More recent field work in the coastal plain suggests that where elevated sand conditions existed be it less than one metre and close to fresh water Aboriginal sites occurred, which appears to be the case for the Tyagarah/Gray's Lane site. By contrast the Tyagarah/Wreckers Corner site appears to have been on alluvium near the banks of a large waterhole. The cultivation of tea tree may have levelled the ground profile (Everick 2008).

None of the conditions referred to above appear applicable to the Project Area although the sites they refer to are only short distances away. The additional Lots to be created under the current proposed for rezoning are small areas of essentially regrowth paperbark swamp normally inundated to same degree. It is unlikely that Aboriginal sites would be situated here with the exception of scarred trees if trees of sufficient age survived. On the basis of the desktop review and predictive model the following types of Aboriginal sites or their remnants, have a low/moderate potential to occur in the Project Area: middens, scarred trees, artefact scatters and isolated artefacts.

**Middens.** Midden sites in the coastal zone are invariably found on elevated ground adjacent to the source of the shellfish. The sources are open beaches, rock platforms, tidal mud flats, rocks and mangrove roots. Middens in this area are mainly composed of five edible species pipi, cartrut, cockle, whelk and oyster. The sites may reflect only one source of gathering or a combination of sources. Middens may contain faunal remains, stone artefacts and cooking hearths. Human burials have been associated with a high proportion of NSW North Coast middens.

**Scarred/Carved Trees.** Aboriginal Scarred trees result from cut toe holds, the removal of bark for use as covering, shields, containers and canoes. There may also be carved trees where the bark has been removed and geometric patterns incised on the tap wood. Aboriginal scarred tree sites are rare due to the extent of tree clearing and the natural aging and collapse of such trees. There may be old growth trees on the subject Lots therefore a potential for scarred trees exists. Scarring can also be the result of European activities such as



boundary markers, survey points, spring-board cuts, ring barking and machine damage. Natural events may also cause tree scarring.

**Artefact scatters** consist of scatters of stone artefacts and possibly bone and remnants of hearths. Their exposure to the elements means that evidence of food resources used on the site (with the exception of shellfish) is usually lacking. In the Brunswick Heads/Byron Bay area artefact scatters have been mainly found in elevated positions on dunes, low hills and slopes bordering the coastal plain. To a lesser extent they are found within the coastal plain or floodplains. They invariably consist of low or high density scatters of flakes in addition to the types of artefacts found as isolated finds. An artefact scatter containing a large component of shell refuse may be described as a midden.

**Isolated artefacts** will consist of single stone artefacts, which may have been randomly discarded or lost. They may occur in almost any environmental context exploited by Aboriginal people. They are commonly stone axes, single cores, hammer stones, bevelled pounders, pebbles and flakes. Their presence may indicate that more extensive scatters of stone artefacts exist or existed nearby, perhaps obscured by vegetation or dispersed by mechanical means.

## 6. FIELD SURVEY: ABORIGINAL CULTURAL HERITAGE

### 6.1 Survey Team

The Project Area is within the area administered for Aboriginal cultural heritage purposes by the AAC. A field inspection for Aboriginal cultural heritage was undertaken by Brian Kelly, (Sites Officer of the AAC) and Adrian Piper of Everick Heritage Consultants, on 11 August 2016.

### 6.2 Assessment Recording Methods

The assessment was carried out under the OEH *Code of Practice for Archaeological Conduct in New South Wales (2010)*. The field methods aimed to inspect exposed ground surfaces as conditions would allow; to record any archaeological material found and assess its significance; and assess the potential for concealed Aboriginal archaeological sites. The assessment also aims to establish if there are sites or areas of a non-archaeological nature significant to the Aboriginal community. At this stage of the assessment this is through consultation with the AAC Byron Bay.





Archaeological features may include evidence of stone artefacts scatters or individual artefacts, traces of bone (human and animal), shell deposits, scarred trees and ash-stained earth that might indicate fireplaces. When artefacts are found their location was recorded with a GPS (using WSG84 datum), photographed and generally described. A note is made of artefact types and their numbers. General characteristics of the artefacts are noted including raw material type and condition including the degree of weathering and heat cracking. The length, width and thickness of a number of artefacts are recorded. Woodland areas with 'old growth' trees would be inspected for evidence of Aboriginal scarring or modification due to bark removal or holes/notches cut into bark and tap wood. The details would be logged on standard OEH Site Recording Forms for registration with the OEH AHIMS.

Photographs were taken as a record of general features and conditions and to document the degree of surface visibility. Notes were made of the degree of surface visibility, the area of visibility, ground cover, land uses and any other relevant features. DGPS (WSG 84 datum) was used to record the extent of survey coverage. Mapping and plans used in this assessment were provided by and represent the level of information provided to the consultants by Planners North Pty Ltd.

To support the assessment of the cultural heritage potential of the Project Area, the survey aimed to confirm the interpretation of the nature and degree of ground disturbance observed in historical aerial photographs and satellite imagery.

### 6.3 Constraints to Site Detection

An assessment of the constraints to site detection is made to assist in formulating a view as to the effectiveness of the field inspection to find Aboriginal sites and cultural materials. Constraints assessment also assists in the forming of a view of the likelihood of concealed sites, or in this case potential areas with intact surfaces that may contain Aboriginal Objects.

The constraints to site detection in this landscape are almost always most influenced by post European settlement land uses and seldom by natural erosion processes. The area of surface exposure and the degree of surface visibility within exposed surfaces are usually the product of 'recent' land uses e.g. land clearing, ploughing, road construction, natural erosion and accelerated (manmade) erosion (McDonald et al. 1990:92). In the Project Area recent land uses have involved clearing of original forest vegetation, discreet areas of imported filling to support structures from flooding and spill over filled areas from the above activity or associated with PHU works.



For the purpose of description the Project Area is divided survey units based on the total number of Lots excluding Lot 15. The existing Lots containing structures on filled pads were excluded from investigation although they were photographed to provide context as to land uses. They were not inspected for Aboriginal cultural heritage as they appear to be located on imported fill pads and no change is proposed by Byron Shire for their use. Lots 1-4 and 11-14 are the Lots to be created additional to Lots for existing purposes. Lots 1-4 and 11-14 were investigated for potential Aboriginal heritage.

**Table 1: Summary of Environment and Ground Disturbance for Survey Units**

<i>Survey Unit/Lot</i>	<i>Environmental Description</i>	<i>Ground Disturbance Description</i>
<i>Lot 1 and 2</i>	Low lying grass land	Moderate disturbance can be anticipated due to clearing, modified by drainage works and old Pacific Highway. Overhead Power line crosses north/south.
<i>Lot 3</i>	Melaleuca swamp forest	Moderate disturbance can be anticipated, contains partially inundated swamp.
<i>Lot 14</i>	Melaleuca swamp forest	Moderate disturbance can be anticipated, contains partially inundated swamp, cleared and filled sewage and water easement, a power plant on filled pad.
<i>Lot 4 and P Easement for water</i>	Regrowth	A small Lot isolated by access tracks, probably highly disturbed. The easement carries a sewage main and other services.
<i>Lot 5</i>	Existing Lot and structures Filled pads	Contains Tyagarah Community Hall (1904), Lapidary Club (1966) and Toilets. Not assessed for Aboriginal Heritage
<i>Lot 6</i>	Existing Lot and structures Filled pads	Contains dwelling and sheds. Not assessed for Aboriginal Heritage
<i>Lot 16</i>	Existing Lot and structures Filled pads	Contains Clay Pigeon Club a raised pathway and mound.



<i>Survey Unit/Lot</i>	<i>Environmental Description</i>	<i>Ground Disturbance Description</i>
		Not assessed for Aboriginal Heritage
<i>Lot 7</i>	Existing Lot and structures Filled pad	Contains the Tyagarah Flying and Recreational Centre. Not assessed for Aboriginal Heritage
<i>Lot 8</i>	Existing Lot and structures Filled pad	Contains Aircraft Hangers Not assessed for Aboriginal Heritage
<i>Lot 9</i>	Existing Lot and structure	Contains a large shed/hangar. Not assessed for Aboriginal Heritage
<i>Lot 10</i>	Existing Lot and structures	Contains Skydive Byron Bay/Australia. Not assessed for Aboriginal Heritage
<i>Lots 11-13</i>	Mainly grassland and exotics over land fill.	Moderate disturbance can be anticipated due to clearing, modified by drainage works on old Pacific Highway. Heavy grass cover over fill adjoining the frontage to the access road for most of Lots 11 to 12.

## 6.4 Survey Coverage

To achieve as thorough and effective an archaeological assessment as possible a systematic ground survey of ground surfaces is the best method to achieve effective coverage. This was impossible in this case as surface visibility conditions are closed by either heavy grass, shrubs, inundation and or wet dead fall.



The Lots investigated for Aboriginal cultural heritage are Lots 1-4 and Lots 11-14. A summary of general environmental conditions can be seen in Table 1. Areas of exposed ground where surface visibility is possible, range between nil and 2% of total area. Surface visibility across each of the nominated Lots is similarly very low at 10 to 20%. Each of the Lots under investigation are at least moderately disturbed through prior clearing. Lots 11 and 12 are largely composed of imported fill. While an Aboriginal cultural heritage inspection will always use the predictive model as a guide as to what might be expected, in this case conditions dictated that Aboriginal scarred trees be it unlikely, would be the only type of visible site.

Table 2 presents information on the extent to which survey data provides sufficient evidence for an evaluation of the distribution of archaeological materials across the Project Area. The evaluation of survey coverage provides a measure of the potential for the survey unit to reveal archaeological evidence. The calculations in Table 2 do not provide exact percentages, but reasonable estimates.

**Table 2: Survey Coverage.**

Unit/ Landform	Area (Sqm)	Exposure %	Area of Exposure (Sq m)	Visibility %	Area for Site Detection (Sqm)	% of Lf for Site Detection	Sites Found
Lot 1	2307	1	23	10	2.3	0.09	0
Lot 2	2033	1	20	10	2.0	0.09	0
Lot 3	2668	5	133	20	26.0	0.9	0
Lot 4	1773	1	17	10	1.7	0.09	0
Lot 14	10060	5	2515	20	503.0	5.0	0
Lot 11	2009	1	20	10	2.0	0.09	0
Lot 12	2096	1	20	10	2.0	0.09	0
Lot 13	2590	1	25	10	2.5	0.09	0

The conditions for inspection of the nominated Lots are uniform throughout namely, very limited areas of ground exposure in proportion to total area of each Lot, where it is possible to inspect the surface and very low levels of surface visibility. Therefore the percentage of each Lot with a potential for Aboriginal site detection are similarly very low. The effectiveness of the inspection was severely hampered by closed ground covers, partial inundation and imported fill. However the inspection team were of the opinion that the Lots in question were low lying swamp lands in the past as they are in the present. There is no evidence that low inner barrier dunes with raised sand areas that might have afforded terrain suitable for Aboriginal campsites existed in the Project Area.





**Figure 10: Lots 1 and 2. Cleared closed grassland, view north.**



**Figure 11: Lot 3. Paperbark forest, view south.**





**Figure 12: Lot 4. Isolated stand of regrowth swamp sclerophyll forest.**



**Figure 13: Lot 11. Paperbark forest and cleared closed grassland over fill.**





**Figure 14: Lot 12. Cleared closed grassland over imported fill.**



**Figure 15: Lot 13. Open woodland.**





**Figure 16: Lot 14. Paperbark forest, view north.**





## 7. RESULTS

### 7.1 Aboriginal Heritage

As a result of the desktop study and field inspection the following conclusions were established with Brian Kelly of the AAC Byron Bay.

- From discussion with Brian Kelly of the AAC there are no culturally significant sites or Areas affected by the proposed subdivision and further cultural heritage investigation is not warranted.
- No Indigenous archaeological sites or relics were identified within Lots 1-4 and Lots 11-14 of the Project Area.
- No areas were identified considered to have potential for archaeological deposits of significant Aboriginal cultural heritage.
- The Project Area has been disturbed in a manner which constitutes 'disturbance' within the meaning of the Due Diligence Code and is consistent with the Due Diligence Code.

### 7.2 Historic Heritage

As a result of the desktop study and field inspection, no historic items were recorded.



## 8. DUE DILIGENCE ASSESSMENT: ABORIGINAL CULTURAL HERITAGE

The purpose of the Due Diligence Assessment in this report is to demonstrate the reasonableness of the assessment conclusions, consistent with the intent of the NPW Act and associated regulations and policies. The analysis can also be used as a defence against allegations of harm to cultural heritage in appropriate instances, provided the recommendations in this report are followed and the Proponent does not have reason to suspect their works will result in harm to any Aboriginal Objects.

As discussed in Section 2, the Due Diligence Code recommends a staged analysis of cultural and archaeological factors. The information below documents the analysis of the Project Area when compared against these guidelines.

### 8.1 Step 1: Will the activity disturb the ground surface?

No more than previous clearing and drainage works. The Lots proposed under the sub-division proposal will require filling to bring elevations to required flood mitigation requirements. Lots 11-13 are substantially filled with imported materials at present. As it is concluded from this report that significant Aboriginal cultural heritage is not within the Project Area filling of the Lots for purpose of a heliport will not destructively impact any significant Aboriginal heritage.

### 8.2 Step 2a: Search of AHIMS Database

#### 8.2.1 *OEH Aboriginal Heritage Information Management System*

A search was conducted 15 August 2016 of the OEH AHIMS (service number 238872) for centring on the Project Area with a 1000m buffer (**Figure 4**). The search identified three registered Aboriginal site within the search area. Site features consist of shell, artefacts and a Potential Archaeological Deposit. **See Section 4.2.1. None are within the Project Area.**

### 8.3 Step 2b: Is the activity in an area where landscape features indicate the presence of Aboriginal cultural heritage?

Having regard to:

- a) the nature of Aboriginal occupation in the region;



- b) the Project Area's proximity to resources; and
- c) the Project Area's original vegetation, soils and topography.

Yes, (See Sections 5.2, 5.3 and 5.4). The banks of estuarine foreshores are considered to be focus areas for traditional food and resource gathering. In addition the ridge lines and low slopes bordering the coastal plains are also considered to be focus areas for Aboriginal occupation. In regard to the sand plain between the immediate estuarine landscape and the coastal slopes and hills of this locality, occupation sites that contain accumulations of shell and stone artefacts are only found where there are elevations (albeit low) and close access to fresh water. As far as the Lots under investigation are concerned there is no evidence that these conditions exist or existed therefore significant Aboriginal sites are unlikely.

#### 8.4 Step 2c: Is there evidence of past ground disturbance?

Yes. It can be reasonably assumed the Lots have been cleared in the past. The generally small girth of tree cover suggests the Lots are largely regrowth although isolated older remnants remain, largely melaleuca. These were inspected for Aboriginal tree scarring or carving. It is unknown if clearing was carried out by mechanical means. In sand conditions it is probable an Aboriginal site such as a midden or artefact scatter within the first 0.5m would have been exposed and scattered if mechanical means were used. There is no evidence that it was the case, unlike the anecdotal evidence of midden destruction by Highway works to Hughes 1998 (Section 5.3.1 p: 30) at the former Greys Lane rest area.

#### Additional Steps Aboriginal Heritage

Lots 1-4 and Lots 11-14 of the proposed rezoning have undergone land uses constituting 'disturbance' within the meaning of the Due Diligence Code. Applying the Due Diligence Code, it is clear the landscape is disturbed, although evidence of cultural materials may be restricted to what archaeologists commonly refer to as 'background' scatter, of which as the term implies, there is no means of recovering by other than fortuitous circumstances. As such, no further cultural heritage investigations are warranted for the purposes of rezoning or future Development Application. The Consultant is of the opinion, that given the unsuitability of the terrain of the Project Area for Aboriginal occupation sites and disturbances over the same, the rezoning proposal will not result in Harm to Aboriginal heritage.



## 9. RECOMMENDATIONS

### 9.1 ABORIGINAL CULTURAL HERITAGE

In regard to the planning proposal by Byron Shire Council to rezone Lots 1-4 and Lots 11-14 and associated works at the Tyagarah Airfield and having regard to the low Aboriginal cultural heritage potential of the Project Area, the following recommendations are cautionary in nature and considered sufficient for application in both the planning proposal and development application stages.

#### *Recommendation 1: Aboriginal Objects Find Procedure*

It is recommended that if it is suspected that Aboriginal material has been uncovered as a result of development activities within the Project Area:

- a) work in the surrounding area is to stop immediately;
- b) a temporary fence is to be erected around the site, with a buffer zone of at least 10 metres around the known edge of the site;
- c) an appropriately qualified archaeological consultant is to be engaged to identify the material;
- d) the Arakwal Aboriginal Corporation is to be notified; and
- e) if the material is found to be of Aboriginal origin, the Aboriginal community is to be consulted in a manner as outlined in the OEH guidelines: *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (2010).

#### *Recommendation 2: Aboriginal Human Remains*

Although it is unlikely that Human Remains will be located at any stage during earthworks within the Project Area, should this event arise it is recommended that all works must halt in the immediate area to prevent any further impacts to the remains. The site should be cordoned off and the remains themselves should be left untouched. The nearest police station, the AAC and the OEH Regional Office (Coffs Harbour) are all to be notified as soon as possible. If the remains are found to be of Aboriginal origin and the police do not wish to investigate the Site for criminal activities, the Aboriginal community and the OEH should be consulted as to how the remains should be dealt with. Work may only resume after agreement is reached between all notified parties, provided it is in accordance with all parties' statutory obligations.





It is also recommended that in all dealings with Aboriginal Human Remains, the Proponent should use respectful language, bearing in mind that they are the remains of Aboriginal people rather than scientific specimens.

### Recommendation 3: Notifying the OEH

It is recommended that if Aboriginal cultural materials are uncovered as a result of development activities within the Project Area, they are to be registered as Sites in the Aboriginal Heritage Information Management System (AHIMS) managed by the OEH. Any management outcomes for the site will be included in the information provided to the AHIMS.

### Recommendation 4: Conservation Principles

It is recommended that all effort must be taken to avoid any impacts on Aboriginal Cultural Heritage values at all stages during the development works. If impacts are unavoidable, mitigation measures should be negotiated between the Proponent, OEH and the Aboriginal community.

## 9.2 Historic Cultural Heritage

### Recommendations: Historic Cultural Heritage

There are no items of historic heritage therefore no recommendations are warranted.



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## APPENDIX A: CORRESPONDENCE WITH THE ARAKWAL ABORIGINAL CORPORATION BYRON BAY



BUNDJALUNG OF BYRON BAY ABORIGINAL CORPORATION (ARAKWAL) ICN: 2663  
Po Box 1555, Byron Bay NSW, 2481,  
Phone: 0266 858746 Fax: 0266 858726  
ABN: 99 508 925 629

Pauline Fowler  
Consultant Archaeologist  
Everick Heritage Consultants Pty Ltd  
PO Box 146  
Red Hill, QLD 4059

7<sup>th</sup> September 2016

Dear Pauline,

I confirm that Mr Brian Kelly attended, as a representative of the Bundjalung of Byron Bay Aboriginal Corporation (Arakwal) for the Aboriginal Cultural Heritage assessment conducted by Everick Heritage Consultants on the 11<sup>th</sup> August 2016 at the Tyagarah Airfield, Yarun Lane Tyagarah, NSW.

We have since perused the draft report and concur with the findings and the executive recommendations contained in the report.

This Tyagarah area historically does have high cultural significance to the Bundjalung of Byron Bay Arakwal people and should there be any items unearthed at any stage in the future then we request to be immediately notified for further assessment.

I am contactable on the above listed number should you require further correspondence.

Yours Sincerely,

Gavin Brown  
General Manager  
Bundjalung of Byron Bay Aboriginal Corporation (Arakwal)





## APPENDIX B: AHIMS SEARCH RESULTS



Office of  
Environment  
& Heritage

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

Your Ref/PO Number : EV460 Tyagarah Airstrip

Client Service ID : 238872

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
04-5-0150	TL 2	AGD	56	553250	6836180	Open site	Valid	Shell :-, Artefact :-	Midden	97692
	<u>Contact</u>									
	<u>Recorders</u>									
04-5-0223	TER.1.	GDA	56	553420	6837550	Open site	Valid	Artefact :-		97692.102407
	<u>Contact</u>									
	<u>Recorders</u>									
04-5-0253	TYAGARAH SERVICE STATION	GDA	56	553354	6837601	Open site	Valid	Potential Archaeological Deposit (PAD) :-		97692.102277
	<u>Contact</u>									
	<u>Recorders</u>									

Report generated by AHIMS Web Service on 15/06/2016 for Pauline Fowler for the following area at Lat, Long From : -28.5985, 153.5429 - Lat, Long To : -28.593, 153.5518 with a Buffer of 1000 meters. Additional Info : Mapping Number of Aboriginal sites and Aboriginal objects found is 3

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

Page 1 of 1