



ENDEAVOUR DRIVE BELLINGEN: ABORIGINAL CULTURAL HERITAGE ASSESSMENT



EVERICK HERITAGE CONSULTANTS
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EXECUTIVE SUMMARY

This report provides the results of an Aboriginal Cultural Heritage Assessment for the proposed rezoning of land from rural to residential, and the proposed subsequent subdivision of land at Endeavour Drive, Bellingen, NSW (the 'Project'). The land subject to assessment includes Lot 456 DP755557 and is approximately 24.35 hectares in area. The intent of the archaeological investigation is to identify Aboriginal and historical archaeological or cultural heritage constraints for the Project, and if found, establish ways in which any impacts could be mitigated or avoided.

Everick Heritage Consultants (the 'Consultant') was commissioned by Keiley Hunter on behalf of Mr Steve Smith of Nobles Lane Bellingen NSW (the 'Proponent') to undertake this assessment. It is understood that this assessment will be used in support of a Planning Proposal and a Rezoning Application to the Bellingen Shire Council ('BSC').

The brief for this Project was to undertake an Aboriginal and European heritage assessment of suitable standard to accompany the Development Application. 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 site inspection undertaken by Senior Archaeologists Tim Hill and Morgan Disspain on 20 December 2017;
- c) a review of the archaeological and cultural heritage assessments pertinent to the potential heritage values associated with the Project Area; and
- d) assessment of the potential for the Project Area to contain significant Aboriginal heritage and the impact on the Project may have on said heritage.

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 current proposal is to rezone the Project Area from RU2 (Rural Landscape) to R2 (Low Density Residential) for the purpose of developing the land into a residential subdivision. The land is located on the southern edge of the town of Bellingen, in NSW. The proposed average lot size will be approximately 600m² and the Proposed Works include the construction of houses, connection of all utilities, and construction of roads, paths, and landscaping.



There is a large amount of high conservation value regrowth on the land, most of which will be conserved under a Biodiversity Conservation Stewardship Agreement. The study area for the archaeological assessment does not include the areas of conservation land but focusses on the extent of the land that has been selected for the proposed development.

A pedestrian survey for cultural heritage of the Project Area was undertaken by CHDLALC Senior Aboriginal Sites Officer, Ian Brown, and Aboriginal Sites Officer, Luana Ferguson, and Everick Senior Archaeologists, Tim Hill and Morgan Disspain, on 20 December 2017.

As a result of the desktop study, field inspections, Aboriginal community consultation and archaeological investigation of the Project Area, the following was found.

- No artefacts were observed on the fire trail which crossed all ridge crests within the Project Area, which was identified as having the potential to contain Aboriginal sites.
- Having consideration for the low potential of the upper and steep slopes to contain artefacts, these landforms were not included within the archaeological survey. This sampling strategy was agreed to by sites officers from Coffs Harbour and District LALC.
- There is very little topsoil material on the upper slope; it is considered unlikely that the surrounding soils would contain Aboriginal objects, and as such the ridge crest was not identified as a Potential Archaeological Deposit.
- In consideration of the potential of the ridge crest to contain Aboriginal sites, it was noted that the foot slopes of the ridgeline to the north would have provided better access to resources along the river and floodplain, including swamps. The ridge crest which comprises the Project Area was not considered to be a 'pathway' as there was no obvious landscape feature which was identifiable as a destination to the south of Bellingen.

No items or relics of European heritage were identified during the assessment.

Based on the results and discussed above, the following management recommendations are provided:

Recommendation 1: Cultural Heritage Induction

It is recommended that a cultural heritage induction is provided to all contractors who are engaged as site supervisors or act in senior operational roles. The purpose of the cultural heritage induction is to:

- make staff aware of the survey effort to date and potential for the Project Area to contain Aboriginal sites;



- provide sufficient training for staff to identify Aboriginal objects should they be impacted during construction works; and
- ensure that staff are aware of response procedures in the event of any harm to Aboriginal sites during construction works.

It is recommended that the cultural heritage induction is provided by a suitably experienced member of the Aboriginal community or a qualified archaeologist.

Recommendation 2: Find Procedure.

The following 'Find Procedure' should be put in place as a minimum response in the event of the identification of artefacts within the Development 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) in consultation with the RAPS for the project, an appropriately qualified archaeological consultant is to be engaged to identify the material; and
- d) should the material be confirmed as an Aboriginal object or archaeological site a salvage program put in place (below).

Recommendation 3: 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 (Bellingen), the Coffs Harbour Local Aboriginal Land Council, 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 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.



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DEFINITIONS

The following definitions apply to the terms used in this report:

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

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

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

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

OEH means the Office of Environment and Heritage.

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 means the proposed future development of the Project Area as a residential subdivision.

Project Area means the land subject to this assessment being Lot 456 DP755557, Nobles Lane, Bellingen NSW.

Proposed Works means all activities associated with proposed future ground disturbance within the Development Area, including activities undertaken by subsequent landholders.

Proponent means Mr Steve Smith of Nobles Lane, Bellingen NSW 2454, and all associated employees and contractors and subcontractors of the same.



1. INTRODUCTION

1.1 Purpose of the Cultural Heritage Assessment

This report provides the results of an Aboriginal Cultural Heritage Assessment for the proposed rezoning of land from rural to residential, and the proposed subsequent subdivision of land at Endeavour Drive, Bellingen, NSW (the 'Project'). The land subject to assessment includes Lot 456 DP755557 and is approximately 24.35 hectares in area (Figure 1).

The intent of the archaeological investigation is to identify Aboriginal and historical archaeological or cultural heritage constraints for the Project, and if found, establish ways in which any impacts could be mitigated or avoided.

1.2 Proponent, Project Brief & Methodology

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- a) a search of relevant heritage registers;
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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.

1.3 Description of Proposal

The current proposal is to rezone the Project Area from RU2 (Rural Landscape) to R2 (Low Density Residential) for the purpose of developing the land into a residential subdivision. The land is located on the southern edge of the town of Bellingen, in NSW. The proposed average lot size will be approximately 600m² and the Proposed Works include the construction of houses, connection of all utilities, and construction of roads, paths, and landscaping.

There is a large amount of high conservation value regrowth on the land, most of which will be conserved under a Biodiversity Conservation Stewardship Agreement. The study area for the archaeological assessment does not include the areas of conservation land but focusses on the extent of the land that has been selected for the proposed development (Figure 2).

1.4 Report Authorship

The desktop study was undertaken by Senior Archaeologists Tim Hill and Morgan Disspain, assisted by Archaeologist Pauline Fowler. The field inspection was conducted by Senior Archaeologist Tim Hill and Morgan Disspain. This report was written by Tim Hill and Morgan Disspain.

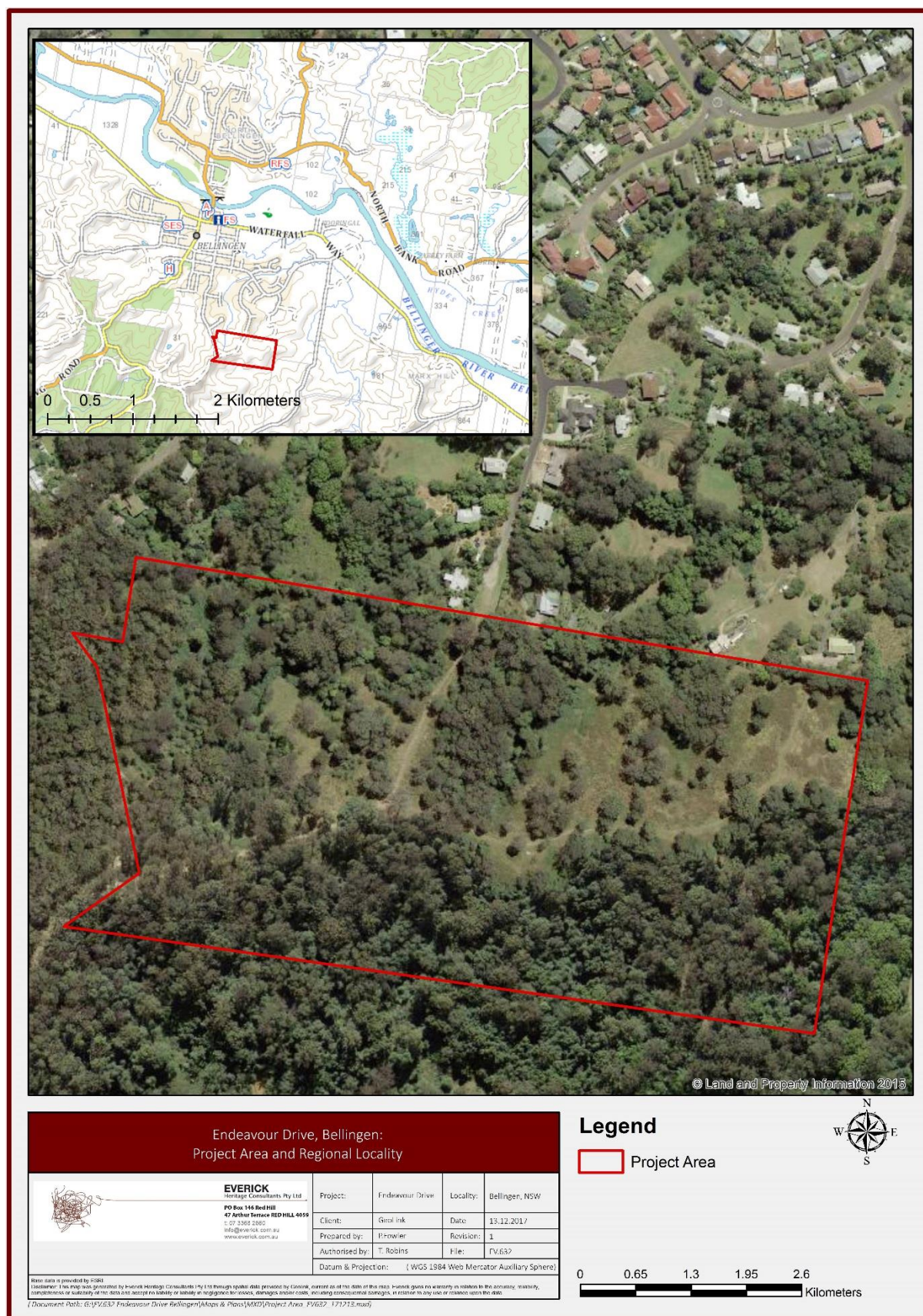


Figure 1: Regional Locality of the Project Area.



Site Analysis

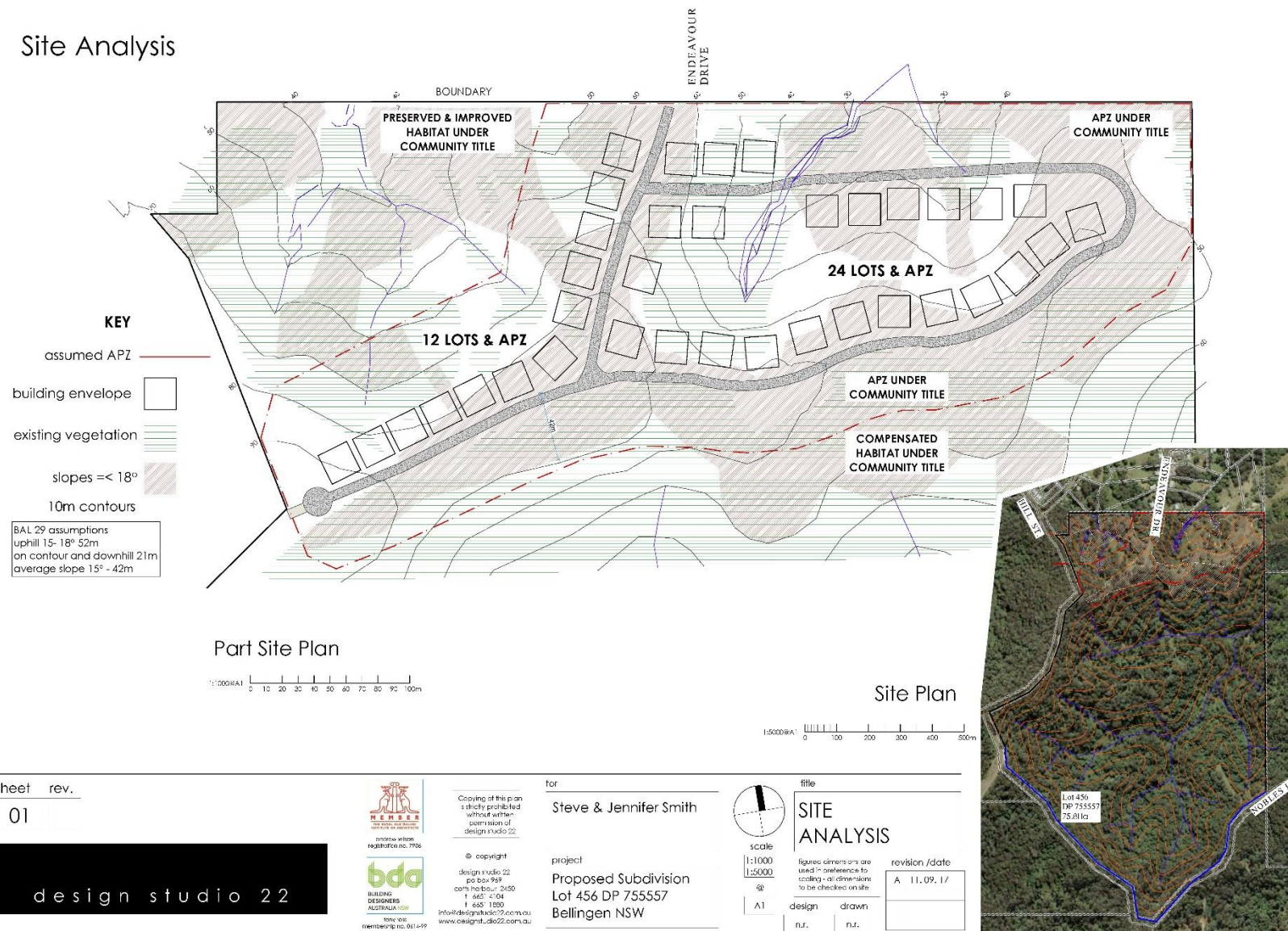


Figure 2: Concept Plan.



2. LEGISLATIVE AND PLANNING CONTEXT

The following legislation provides the context for cultural heritage in NSW: The *National Parks and Wildlife Act 1974* (NSW) ('NPW Act'), the *Environmental Planning and Assessment Act 1979* (NSW) ('EP&A Act') and the *Heritage Act 1977* (NSW). 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 it is the state and local legislation that is relevant. The consent authorities will be the CHCC and, where a referral agency is required to be reported to, the OEHL. Approval from the OEHL will be required should the Project propose to 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) and the National Parks and Wildlife Regulations 2009 (NSW)

The 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 *NPW 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 addresses by separating it from inadvertent harm. The penalty for individuals who inadvertently harm Aboriginal Objects is 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 is 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 NPW Act also includes a range of defence 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) ('Due Diligence Code');
- c) Using a consulting archaeologist who correctly applies the OEH Code of Practice for Archaeological Conduct in New South Wales (2010); and
- d) Acting in accordance with an Aboriginal Heritage Impact Permit (AHIP).

2.1.1 '*Low Impact Activities*'

The NPW 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 such as 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 and erosion control;
- c) removal of dead or dying vegetation (only if there is minimal ground disturbance);
- d) environmental rehabilitation such as 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; and
- g) geochemical surveying, seismic surveying, costeaming or drilling. *

*This defence 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

The Due Diligence Code has been applied in Section 10 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;
- b) is in a developed area; or
- c) is 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.

Given the low archaeological potential of the current Project Area, it has been concluded that following the ACHCRP Guidelines is not warranted for this assessment.

2.4 Bellingen Local Environmental Plan (2010)

Local Environmental Plans (LEPs) are made under the *Environmental Planning and Assessment Act 1979* (NSW) to guide planning decisions by local councils, such as development applications. In relation to heritage, the LEPs general objectives are to conserve the heritage of the respective LGAs through the protection of the significance of heritage items, conservation areas, archaeological sites and Aboriginal objects and Aboriginal places of heritage significance.

Part 5 Section 5.10 of the Bellingen LEP 2010 deals with heritage conservation within the area covered by the LEP. The objectives of this section are as follows:

- a) to conserve the environmental heritage of Bellingen Shire;
- b) to conserve the heritage significance of heritage items and heritage conservation areas, including associated fabric, settings and views;
- c) to conserve archaeological sites, and
- d) to conserve Aboriginal objects and Aboriginal places of heritage significance.

Development consent is required for any of the following:

- 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):
 - i. a heritage item,
 - ii. an Aboriginal object,
 - iii. a building, work, relic or tree within a heritage conservation area,
- b) 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,



- c) 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,
- d) disturbing or excavating an Aboriginal place of heritage significance,
- e) erecting a building on land:
 - i. on which a heritage item is located or that is within a heritage conservation area, or
 - ii. on which an Aboriginal object is located or that is within an Aboriginal place of heritage significance,
- f) subdividing land:
 - i. on which a heritage item is located or that is within a heritage conservation area, or
 - ii. on which an Aboriginal object is located or that is within an Aboriginal place of heritage significance.

However, development consent under this clause is not required if:

- a) the applicant has notified the consent authority of the proposed development and the consent authority has advised the applicant in writing before any work is carried out that it is satisfied that the proposed development:
 - i. is of a minor nature or is for the maintenance of the heritage item, Aboriginal object, Aboriginal place of heritage significance or archaeological site or a building, work, relic, tree or place within the heritage conservation area, and
 - ii. would not adversely affect the heritage significance of the heritage item, Aboriginal object, Aboriginal place, archaeological site or heritage conservation area, or
- b) the development is in a cemetery or burial ground and the proposed development:
 - i. is the creation of a new grave or monument, or excavation or disturbance of land for conserving or repairing monuments or grave markers; and
 - ii. would not cause disturbance to human remains, relics, Aboriginal objects in the form of grave goods, or to an Aboriginal place of heritage significance, or
- c) the development is limited to the removal of a tree or other vegetation that the Council is satisfied is a risk to human life or property, or
- d) the development is exempt development.



The consent authority must, before granting consent under this clause in respect of a heritage item or heritage conservation area, consider the effect of the proposed development on the heritage significance of the item or area concerned. This subclause applies regardless of whether a heritage management document is prepared under subclause (5) or a heritage conservation management plan is submitted under subclause (6).

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3. ABORIGINAL COMMUNITY CONSULTATION

3.1 Traditional Owner Knowledge

The Aboriginal community are the primary determinants of the significance of their cultural heritage. Members of the Aboriginal community will be consulted, and will continue to be consulted, regarding 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. Everick Heritage recognises that there is Traditional Owner knowledge associated with the region that may have to be treated in a confidential manner. Where there is potential for impacts upon Aboriginal heritage because of future development proposals, consultation under ACHCRP (2010) would apply.

3.2 Consultation with the Coffs Harbour and District LALC

Project information was provided to the Coffs Harbour and District (CHD) LALC on 8 December 2017 via a phone call and email correspondence.

An onsite meeting was held for Mr Ian Brown and Ms Luana Ferguson of Coffs Harbour and District LALC on 20 December 2017. This meeting outlined the scope of the rezoning proposal and considerations of proximity to water and the adjacent ridge crest, the history of disturbance, and the area available for archaeological inspection. The ridge crests were noted as the most likely location of Aboriginal sites, but the distance from water (1.5 km north to the Bellinger River) and the steep access to the ridge crests meant that past use of the Project Area was likely confined to passing through, and not permanent/semipermanent campsites. It was noted that a 'Find Procedure' would be an appropriate management response in the event of an archaeological find.



4. CULTURAL HERITAGE DESKTOP REVIEW

4.1 The OEH Aboriginal Heritage Information Management System (AHIMS)

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 surveyed for cultural heritage, or that the surveys were undertaken in areas of poor surface visibility. Further to this, care needs to be taken when looking at 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.

A basic search was conducted on 13 December 2017 of the OEH AHIMS for the Project Area with a 1000 metre buffer (ID: 317746) which returned no Aboriginal site listings (Appendix A).

4.2 Other Heritage Registers

The following heritage registers were accessed on 22 December 2017:

- **The National Heritage List** (Australian Heritage Council): Contains no heritage listings within or within close proximity to the Project Area.
- **Commonwealth Heritage List** (Australian Heritage Council): Contains no heritage listings within or within close proximity to the Project Area.
- **Register of the National Estate** (Australian Heritage Council): Contains no heritage listings within or within close proximity to the Project Area.
- **The State Heritage Register** (NSW Heritage Office): Contains no heritage listings under Section 1 (Aboriginal Places listed under the NPW Act) within or within close proximity to the Project Area;
- **The Register of the National Trust of Australia:** Contains no listings within or within close proximity to the Project Area.
- **Bellingen Local Environment Plan 2010 ('LEP'):** Contains no listings within or within close proximity to the Project Area (Figure 3).

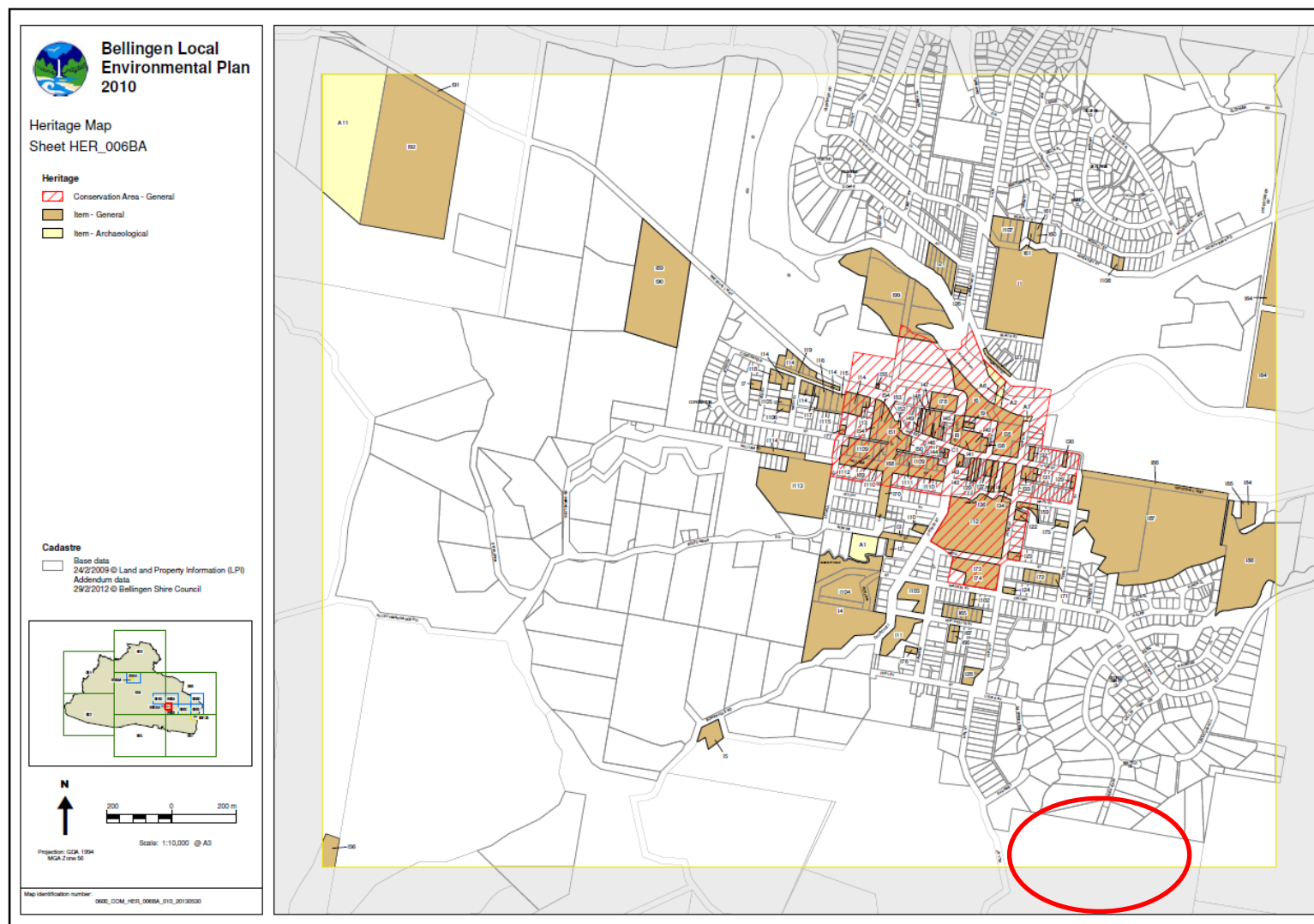


Figure 3: BSC LEP Heritage Map. Project area circled



5. LANDSCAPE CONTEXT

5.1 Environment Locality

5.1.1 Topography

Topography of the Project Area can generally be described as steep slopes and ridges. Elevation of the site varies from approximately RL 30m AHD, to around RL 100 m AHD. Surface slope is relatively moderate to steep, typically around 10-20%, with isolated areas as steep as 25% and as flat as 1%. The Project Area is typically north facing and includes an east-west running ridge crest which forms the main topographic feature of the residential subdivision.

5.1.2 Soil Landscape Mapping (Milford 1999)

The majority of the Project Area was mapped by Milford (1999:114-117) as being part of the Pine Creek soil landscape, being:

“rolling low hills to hills on Permian metasediments in the Gleniffer Hills, and as lower slopes in valleys draining the Horseshoe Ranges. Local relief up to 130 m, slopes 10–33%, elevation 10–140 m in the hills around and to the east of Bellingen, and 20–300 m in the Horseshoe Ranges”.

The Pine Creek soil landscape typically contains;

moderately well-drained structured Brown Earths (Gn3.21) and Yellow Earths (Gn3.71) on crests and slopes, with deep (>150 cm), moderately well-drained Brown Podzolic Soils (Db1.11) and Yellow Podzolic Soils (Dy2.11) on steeper slopes.

5.1.3 Vegetation Model (Milford 1999)

Milford (1999:106) proposes the following vegetation model for the Pine Creek soil landscape:

Partially cleared tall open-forest grading to tall closed forest in more sheltered positions. Blackbutt (*Eucalyptus pilularis*) [Forest Types 36 and 37] dominates the ridges, with narrow-leaved white mahogany (*E. acmenoides*), red mahogany (*E. resinifera*), grey ironbark (*E. paniculata*) and grey gum (*E. propinqua*) [Forest Type 60] on the more exposed north-facing ridges and upper slopes. Downslope, tallowwood (*E. microcorys*) and Sydney blue gum (*E. saligna*) [Forest Types 46 and 47] dominate a tall closed forest (wet sclerophyll forest), with flooded gum (*E. grandis*) [Forest Type 48] occupying a lower slope position along the valleys. In the more sheltered valley floors are found patches of vine scrub [Forest Type 26], which has often been extensively colonised by exotic weeds such as lantana (*Lantana camara*).



6. ARCHAEOLOGICAL SYNTHESIS AND PREDICTIONS

6.1 European History of Bellinger

The following historic timeline provides a historical context for the assessment of Aboriginal and non-Aboriginal settlement of the Bellinger Valley.

<i>Date</i>	<i>Location</i>	<i>Activity</i>
1821	Port Macquarie	Establishment of Penal Colony at Port Macquarie on the Hastings River
1830's	Kempsey	Establishment of Kempsey as a primarily forestry settlement and centre of European settlement on the North Coast.
1840	Bellinger	Exploration of the Bellinger Valley by William Myles
1841	Bellinger	Exploration and mapping of the Bellinger Valley by Clement Hodgkinson
1842	Bellinger Heads (Urunga)	Establishment of a cedar cutting camp at the head of the Bellinger and Kalang Rivers.
1843	Bellinger	First cargo of Red Cedar from the Bellinger Valley sent by ship to Sydney. Up to 20 pit sawers working in the Valley by the end of the year. Logging was estimated at 2 million feet of cedar by 1849.
1864	Bellinger	The village of Bellinger was gazetted, and allotments auctioned at the West Kempsey Courthouse in 1870.
1900's	Bellinger	Dairying and agriculture replace forestry as the main industry in the Bellinger Valley. Bellinger became a support centre for this new industry.



6.2 Aboriginal History

The study area is located within the Gumbayngirr Nation/Language Area which is broadly known to include the lands north of Nambucca Heads, south of the Clarence River, and west up to the Great Dividing Range (Thomas 2013). The name Bellingen dates to August 1840, when the Commissioner of Lands for the Hastings District, Henry Oakes, recorded in his diary as he crossed the River as a derivation of the word Baliijin (which may come from Baaliijin meaning quoll or native cat).

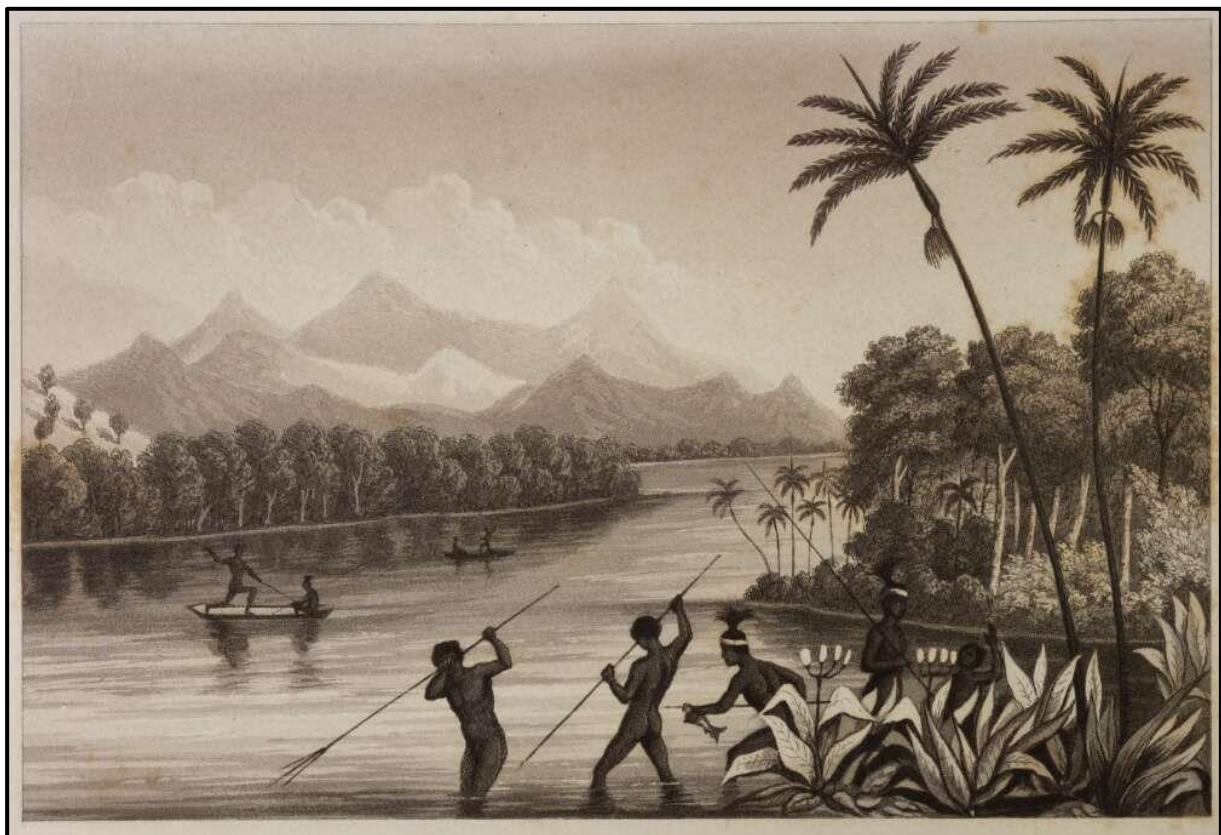


Figure 4: 'Aboriginals' spearing fish on the Bellinger (Hodgkinson 1845)

Radcliffe Brown (in Lane 1970: V.8) concludes for the coastal areas that population densities would be in the order of 'one person to every three-square miles'. Estimates of tribal groups in the order of 200 individuals are relatively common amongst ethno-historic and anthropological literature (i.e. see Lane (1970) for the Nambucca River district immediately south). An additional element to this discussion of population density is the differentiation between the coastal and the escarpment areas where it is generally accepted had lower and much more mobile Aboriginal populations. For the larger River systems (Nambucca, Clarence and Macleay) the concept of more intensive use of the coast as compared to the up-river and escarpment is generally accepted (i.e. McBryde 1974, Godwin 1990). Given the problematic nature of pre-European Aboriginal population estimates, the latter and more 'general' observations of Mathews (1898) for the broader Northern NSW coastline are more relevant:



In the well-watered coastal districts of New South Wales, where fish and game are abundant, their hunting grounds would be comparatively small (Mathews 1898:66).

The Bellinger Valley Historical Study (Ashton and McPherson 1992:10) proposed that; “in the Bellinger Valley, the Gumbayngirr population fell from an estimate nine hundred in 1836 to four hundred and five in 1881. Most of the deaths were from disease and infanticide”.

The Yellow Rock Aboriginal Reserve was established in the late 1800’s and was developed as a ‘farm’ by the Kelly Family. This reserve and farm would become a focus for Aboriginal occupation of the Bellinger Valley through the 1900’s.

6.3 Archaeological and Cultural Heritage Assessments

6.3.1 *Coffs Harbour- Urunga Forestry Management Areas (Davies and Stewart Zerba 1995).*

The Coffs Harbour- Urunga Forestry Management study provides the most comprehensive regional assessment of the archaeological values and potential of the Coffs Coast hinterland. Whilst it is acknowledged that the sub-coastal zone which comprises the Project Area is not included within the Davies study, some of its findings have practical application as the study was structured around ‘land systems’ (Davies and Stewart Zerba 2005). Overall the sampling strategy employed by the study was biased towards the location of open campsites, stone artefact scatters and isolated finds. However, the study found a strong correlation between archaeological sites; the degree of slope and the sandiness of soils and concluded that most archaeological sites occurred on the crests of spurs in areas which would have been dry sclerophyll or open forest. Regionally, most archaeological sites in the study area were associated with the dissected escarpment and ranges with relatively few sites found on near coastal low hills and rises. However, the study found that whilst ‘site density’ was greater in the escarpment area the number of artefacts per site was much lower when compared to coastal and sub-coastal sites. This finding supports a model of greater mobility through the escarpment and a relative absence of permanent camps when compared resource rich marine and estuarine areas of the coastline.

6.3.2 *Urunga Heights (McArdle 2013)*

Penny McArdle was commissioned to undertake a cultural heritage assessment of the proposed Urunga Heights residential development south of Urunga. The assessment included:

- a) consultation in accordance with the OEH Aboriginal Cultural Heritage Consultation Requirements for Proponents (2010);



- b) an archaeological survey of the Project Area; and
- c) production of an archaeological assessment report (April 2013).

The archaeological assessment included surface inspection of eroded trails, clearings and creek lines with a focus on ridge crests and spurs. The report identified a single Aboriginal Site (SU1) within the assessment area which was described as a 'core' located on Antinomy Trail. The study did not recommend additional investigations or map additional Potential Archaeological Deposits ('PADs'). The SU1 site was not registered on AHIMS by the author.

6.3.3 *Pacific Highway Upgrade: Warrell Creek to Urunga (SKM 2010)*

Warrell Creek to Urunga Pacific Highway Upgrade is a major infrastructure development which terminates to the east of the Project Area, however traverses a number of landforms similar in topography and vegetation to the Project Area. The study included;

- Consultation with Aboriginal stakeholders through Focus Groups;
- Collation of environmental and cultural information;
- Anthropological survey;
- Archaeological survey; and
- Archaeological test excavations.

This study proposed a model whereby landscapes analogous to the Project Area (gently sloping crests and spur lines with slope <10%) were predicted as having the highest potential to contain Aboriginal sites. However, the model noted that this potential reduced significantly with distance from water (SKM 2010:353).

The Warrell Creek to Urunga survey identified 8 archaeological sites and mapped an additional 29 Potential Archaeological deposits ('PADs'). The location of these sites typically supported the model for use of spur lines and ridge crests. A major site was located on the 'Kalang Spur' comprising;

...76 surface artefacts located on the crest of north-east to south-west trending spur. The spur led towards the Kalang River in the north-east. The artefacts consist of fine, medium and coarse-grained sandstone flaked artefacts, with a small amount of other materials such as chert. The artefacts were scattered along an access track in a forested area on private property. During subsurface testing, a further 19 artefacts were discovered on the crest and upper slope of the spur, this included some ochre and artefacts with ochre residue.



Of note is that the archaeological testing program samples 25 of a total 34 identified PADs, of which only five contained Aboriginal objects. All the five PADs where artefacts were recorded were already known to contain Aboriginal sites (SKM 2010:353-355).

6.3.4 *Repton to Bayldon Pacific Highway Upgrade (Officer and Navin 1998)*

Officer and Navin completed an archaeological assessment for the duplication of the Pacific Highway between Repton and Lyons Road Sawtell (Officer and Navin 1998). This alignment included numerous landscapes analogous with the Project Area, however is typically much closer to the coastline. The study identified a single artefact on a spur line at Reedy Creek (BH1) which was described as a river pebble.

6.4 Potential Site Types: Aboriginal Archaeological Sites in the Coffs Harbour Region

The most comprehensive 'regional' model for the area is provided by Godwin (1990) in a major review of the earlier archaeological research of Isabelle McBryde. Godwin's model specifically investigates patterns of movement between the coastal, sub-coastal and tablelands (escarpment) areas. However, the applicability of this model to the Coffs Harbour area is problematic as the tablelands/escarpment intrude so far into the coastal zone. For the purposes of understanding the archaeological record the study area is considered to fall into the 'coastal' area.

Amongst coastal groups proper there was no movement from the coast back into the sub-coastal river valleys and foothills. These people were semi-sedentary and lived close to the coast the whole year round. Movement associated with the subsistence round involved travelling only short distances away from the littoral. There were instances of long distance travel associated with ceremonial gatherings. However, such movement was generally parallel to the coast (i.e. north-south along the coast rather than east-west from coast to hinterland) (Godwin 1990: 122,123).

Collins (2007:27-28) study of the Sapphire to Woolgoolga Highway upgrade to the north of the Project Area proposed a model of archaeological sensitivity based on 'landform' and 'land systems'. This study identifies three broad land systems- being Coastal Alluvial Plains, Coastal Ramp, and Escarpment Foothills. The Project Area is considered to fall within the Escarpment foothills of which the study proposes:

Predictions developed based on existing site information indicate that landform elements of highest archaeological sensitivity are level to gently-inclined ridge and spur crests, especially dry forested crests with open or east to north-east aspects.



Landscapes of lowest archaeological sensitivity are those featuring dissected terrain, comprising hillslopes (particularly slopes above 10 degrees with southerly aspects), gullies and small streams. Irrespective of its topographic context, intensively disturbed land (e.g. road and services easements, banana plantations) will also have a low level of archaeological sensitivity. Most likely site types are isolated stone artefacts and small low-density scatters of stone artefacts. Some large artefact scatters and small stone extraction sites (quarries) may also occur. Scarred trees may occur anywhere mature trees survive. (Collins 2007:28)

Based on the review of previous archaeological and cultural heritage assessments in Bellinger Valley and the broader region it is reasonable to propose that specific environment contexts including lowland hills, estuarine creek banks and coastal dunes are more likely to contain evidence of Aboriginal occupation. The review of previous studies indicates that archaeological sites are rarely found on in the steeper hills of the valleys which are not associated to estuarine environments. However, the following site types and potential types have been identified in the above contexts.

6.4.1 Isolated Artefacts

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

There is a low potential for isolated artefacts to be located within the Project Area. Should these occur they are likely related to peripheral use of larger campsites on the foot slopes of ridges nearby to the Bellinger River.

6.4.2 Open Campsites/Artefact Scatters

Open campsites/artefact scatters generally consist of scatters of stone artefacts and possibly bone and hearth features. Their exposure to the elements means that evidence of food resources used on the site (except for shellfish) is usually lacking. An open campsite containing a large component of shell refuse may be described as a midden. They invariably consist of low or high-density scatters of primary and secondary flakes in addition to the types of artefacts found as isolated finds. Open campsites may also contain burials when located on sand strata. Few open campsites are found on kraznozem and podzolic soils, possibly due to the destructive impacts of land clearing and the heavy vegetation cover. Detection is usually unlikely unless a high degrees of surface visibility is present.



There is a low potential for artefacts scatters to be located within the Project Area. It is likely that larger open campsites will be located on ridge crests to the north of the Project Area nearby to the Bellinger River.

6.4.3 Quarry Sites

A stone quarry may occur where a source of opaline silica exists or other siliceous types of stone occur (e.g. chert, chalcedony and silcrete). The area can be identified by a number of different types of stone tools in various stages of production as well as refuse flakes.

Given that lack of visible suitable bedded rock outcrops or known sources of siliceous material, it is reasonable to expect that no quarry sites will be located within the Project Area.

6.4.4 Scarred Trees

Scarred trees result from the removal of bark for use as covering, shields, containers or canoes. No doubt, as an outcome of widespread intensive land clearing and natural causes very few have survived.

As the Project Area is understood to have been heavily logged in the historic period and subsequently cleared for dairy farming, it is reasonable to assume that no scarred trees will be located. Scarred trees may exist within the riparian zone however would not be affected by the rezoning proposal.

6.4.5 Burials

Human burials are typically individual or small group internments which can be found in sandy soil substrates, such as creek lines or within small rock crevices. Most of the known burials have been located by accidental means through mechanical disturbance or natural erosion.

Given that the underlying soil is not sandy, there is a low potential to locate burials within the Project Area.

6.4.6 Ceremonial Sites

Ceremonial grounds are typically places identified by Aboriginal groups as places of importance which were visited by groups to mark or commemorate rites or other occasions. One such example is Bora grounds; earthen mounds crafted in a circular formation which were used for the purposes of ceremonial practices.

No ceremonial sites are known to occur on within the Project Area.



6.4.7 *Mythological Sites*

These sites are natural features, which derive their significance from an association with stories of the creation and mythological heroes.

No mythological sites are known to occur within the Project Area.



7. FIELD SURVEY: ABORIGINAL CULTURAL HERITAGE

7.1 Survey Team

A pedestrian survey for cultural heritage of the Project Area was undertaken by Everick Senior Archaeologists Tim Hill and Morgan Disspain, and CHDLALC Senior Aboriginal Sites Officer Ian Brown and Aboriginal Sites Officer Luana Ferguson on 20 December 2017.

7.2 Assessment Methods

The field methods aimed to inspect exposed ground surfaces as conditions would allow, to record any archaeological material found and undertake a preliminary assessment of its significance. The potential of the Project Area to contain sub-surface deposits (PADs) was also assessed through observation of soil profiles in any disturbed areas.

Photographs were taken as a record of general features and to document past disturbance. Notes were made of the degree of disturbance and the archaeological potential. A Garmin GPSMAP64 (GDA 94 datum) was used to record the extent of survey coverage. Mapping and plans used in this assessment were provided by Keiley Hunter Town Planning and represent the level of information provided to the consultant.

In addition to assessing 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 satellite imagery (Figure 1).

7.3 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 heritage materials. It also assists in the forming of a view of the likelihood of concealed sites (PADs), keeping in mind a site-specific knowledge of the disturbance impacts that European land uses, and natural processes may have had on the 'survivability' of Aboriginal sites in a Project Area.

The constraints to site detection 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 this case the major 'manmade' constraints to Aboriginal site survivability and detection are due to the clearing of original forest and the subsequent impacts of grazing, which through taphonomic processes, can have the effect of accelerating movement of artefacts such as stone downward through soft soils. Detection of Aboriginal archaeological sites in the Project Area is severely limited by the presence of improved pastures. Vegetation has been cleared in the past. Based on the observations taken during the survey it is reasonable to conclude that it is unlikely that any soils in the upper 300mm contain original surfaces (Figure 5, Figure 6 and Figure 7; Table 1). **Error! Reference source not found.**



Figure 5: Typical vegetation cover across vehicle track along ridge crest (north).



Figure 6: Survey of ridge crest at intersection of survey units.



Figure 7: Survey of the fire trail up ridge 1



Table 1: Summary of Environment and Ground Disturbance for Survey Unit.

<i>Survey Unit</i>	<i>Environmental Description</i>	<i>Ground Disturbance Summary</i>
Ridge crests	Open sparse grassland with some sparse native and introduced trees. Vehicle tracks occur along the spine of all ridge crests.	Land clearing.
Slopes	Mixed forest and pastured grassland. There is no evidence of terracing or intensive horticulture (e.g., banana).	Land clearing/ regrowth.

7.4 Survey Coverage

To achieve as thorough and effective an archaeological assessment as possible a pedestrian ground survey of a sample of the Project Area was undertaken (Table 2 and Table 3). The following summarises the broad conditions for the survey of each identified unit within the Project Area:

- Ridge crests. Cleared open grassland with some regrowth of native trees and introduced pines. The understory was typically dense comprising bladed grass and weeds.
- Slopes. Cleared grassland with large patches of regrowth forest including native and introduced trees. The understory was typically dense comprising bladed grass and weeds.

Table 2 and Table 3 present 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 to identify archaeological evidence. The calculations in Table 2 and Table 3 do not provide exact percentages, but reasonable estimates.

Table 2: Survey Coverage.

Survey Unit	Landform	Survey Area (m²)	Visibility (%)	Exposure (%)	Effective Coverage Area (m²)	Effective Coverage (%)	Sites Found
Ridge 1 (North ridge)	Ridgecrest	3900	20	30	240	6	0
Ridge 2 (West Ridge)	Ridgecrest	2400	20	30	144	6	0
Ridge 3 (East Ridge)	Ridgecrest	13200	20	40	1056	8	0



Table 3: Landform summary- sampled areas

Landform	Landform Area (m ²)	Area Effectively surveyed (m ²)	% of Landform effectively surveyed	Number of sites	Number of artefacts
Ridge Crest	19500	1440	7.38	0	0
Upper Slope	75500	0	0	0	0

The following should be considered when reviewing the effectiveness of the survey and the survey results:

- a) The target total survey area for pedestrian transects was 5% of the ridge crest provided by the vehicle trail. The remaining narrow ridge crest was not included in the survey due to 0% ground visibility.
- a) The overall low predicted likelihood of identifying sites within the Project Area.
- b) The potential that stone artefacts have moved downward through the soil profile because of clearing, trampling and topsoil disturbance
- c) Having consideration for the low potential of the upper and steep slopes to contain artefacts, this landform was not included within the archaeological survey. This sampling strategy was agreed to by sites officers from Coffs Harbour and District LALC.



8. RESULTS

8.1 Results

As a result of the desktop study, field inspections, Aboriginal community consultation and archaeological investigation of the Project Area, the following was found.

- No artefacts were observed on the fire trail which crossed all ridge crests within the Project Area identified as having the potential to contain Aboriginal sites.
- Having consideration for the low potential of the upper and steep slopes to contain artefacts, this landform was not included within the archaeological survey. This sampling strategy was agreed to by sites officers from Coffs Harbour and District LALC.
- There is very little topsoil material on the upper slope. It is considered unlikely that the surrounding soils would contain Aboriginal objects, and as such the Ridge crest was not identified as a Potential Archaeological Deposit.
- In consideration of the potential of the ridge crest to contain Aboriginal sites, it was noted that the foot slopes of the ridgeline to the north would have provided better access to resources along the river and floodplain, including swamps and wetlands. The ridge crest which comprises the Project Area was not considered to be a 'pathway' as there was no obvious landscape feature which was identifiable as a destination to the south of Bellingen.

No items or relics of European heritage were identified during the assessment.

8.2 Additional Research

It is not considered that additional archaeological research, in the form of test pit excavations, will significantly inform the management response for sites within the Project Area. This conclusion is based on the following considerations:

- the absence of large scale stone artefact scatters identified during the archaeological survey;
- the absence of known ceremonial or intangible sites in the Project Area and surrounds;
- the nature and extent of known archaeological sites in the surrounding areas; and
- the absence of deep and undisturbed topsoil deposits.



It is considered unlikely that an archaeological excavation program over the PAD areas will identify a stone artefact scatter with either high or moderate conservation value. Stone artefact scatters, should they occur, are likely to be disturbed, have low artefact densities, and are unlikely to contain locally unique artefacts. As such it is reasonable to conclude that these sites, should they exist, will be of low conservation value. As with the known Isolated Finds, salvage with repatriation on site is considered to be an appropriate management response for archaeological sites on PAD areas.



9. CONCLUSIONS AND RECOMMENDATIONS

On the basis of the results and discussed above, the following management recommendations are provided:

Recommendation 1: Cultural Heritage Induction

It is recommended that a cultural heritage induction is provided to all contractors who are engaged as site supervisors or act in senior operational roles. The purpose of the cultural heritage induction is to:

- make staff aware of the survey effort to date and potential for the Project Area to contain Aboriginal sites;
- provide sufficient training for staff to identify Aboriginal objects should they be impacted during construction works; and
- ensure that staff are aware of response procedures in the event of any harm to Aboriginal sites during construction works.

It is recommended that the cultural heritage induction is provided by a suitably experienced member of the Aboriginal community or a qualified archaeologist.

Recommendation 2: Find Procedure.

The following 'Find Procedure' should be put in place as a minimum response in the event of the identification of artefacts within the Development 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) in consultation with the RAPS for the project, an appropriately qualified archaeological consultant is to be engaged to identify the material; and
- d) should the material be confirmed as an Aboriginal object or archaeological site a salvage program put in place (below).

Recommendation 3: 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 (Bellingen), the Coffs Harbour Local Aboriginal Land Council, 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 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.



REFERENCES

Ashton, P and A. McPherson

1991. Bellingen Shire Heritage Study. Unpublished report for Bellingen Shire Council.

Collins, J.

2007. Pacific Highway Upgrade Sapphire to Woolgoolga Working Paper Aboriginal Heritage Assessment. Unpublished report to Connell Wagner Pty Ltd.

Davies, S. & A. Stewart-Zerba.

1995. An Archaeological Assessment of State Forests of New South Wales' Coffs Harbour – Urunga Management Areas. A report to Gutteridge Haskins and Davey Pty. Ltd.

Godwin, L.

1990. *Inside Information: Settlement and Alliance in the Late Holocene of North Eastern New South Wales*. Unpublished PhD thesis, University of New England.

Hodgkinson, Clement.

1845. Natives spearing fish on the Bellengen [i.e. Bellinger] River Retrieved January 10, 2018, from <http://nla.gov.au/nla.obj-136124532>

Mathews, R.H.

1898. "Australian Divisional Systems" *J.P.R.S.N.S.W. Vol. XXXII*

McBryde, I.

1974. *The Prehistory of New England*. Sydney University Press, Sydney.

McArdle, P.

2013 Bellingen Catholic Parish Proposed Secondary School & Residential Subdivision at South Urunga: Aboriginal Heritage Impact Permit. Unpublished report for GeoLINK Coffs Harbour.

McDonald, R.C., Isbell, R., Speight, J.G., Walker, J., & M.S. Hopkins

1990 Australian soil and land survey field handbook, second edition, Inkata Press, Sydney.

Milford, H.B

1999. Soil Landscapes of the Coffs Harbour 1:100 000 Sheet. Department of Land and Water Conservation, Sydney.

Officer, K & Navin, K.

1998. Pacific Highway Bonville Deviation Environmental Impact Statement Aboriginal Archaeological Component. Report to Rust PPK.

SKM

2010 Aboriginal Heritage. Environmental Impact Assessment: Warrell Creek to Urunga Upgrading the Pacific Highway.

Thomas, L.

2012. *Aboriginal history of the Coffs Harbour region*. Coffs Harbour City Library, Coffs Harbour.



APPENDIX A: AHIMS SEARCH RESULTS



Office of
Environment
& Heritage

AHIMS Web Services (AWS) Search Result

Purchase Order/Reference : EV632 Endeavour

Client Service ID : 317746

Everick Heritage Consultants Pty Ltd

Date: 13 December 2017

47 Arthur Tce

Red Hill Queensland 4059

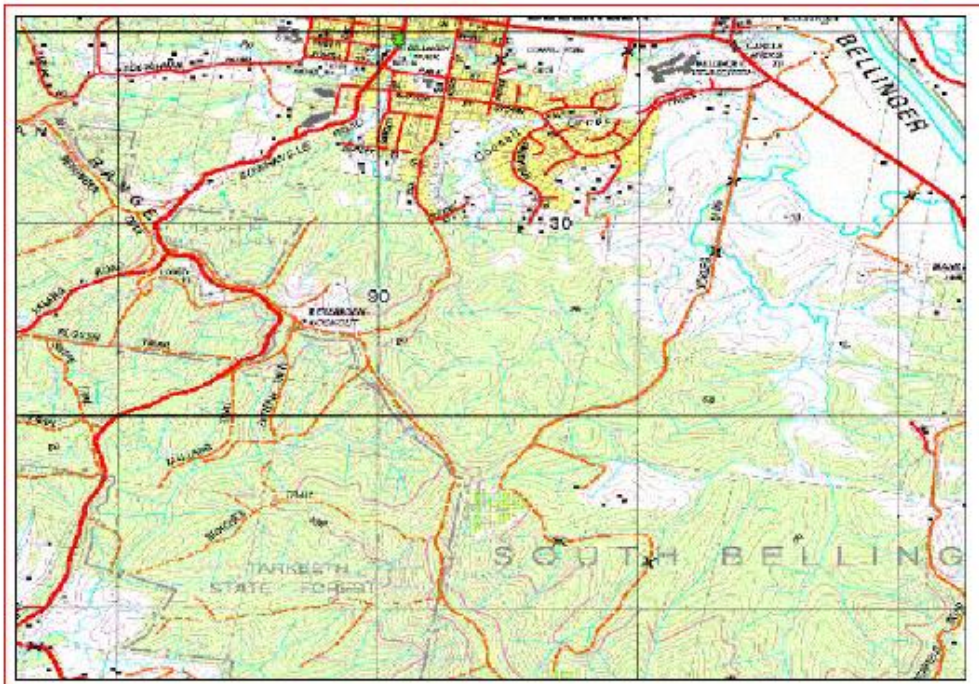
Attention: Pauline Fowler

Email: p.fowler@everick.com.au

Dear Sir or Madam:

AHIMS Web Service search for the following area at Lot : 456, DP:DP755557 with a Buffer of 1000 meters, conducted by Pauline Fowler on 13 December 2017.

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



A search of the Office of the Environment and Heritage AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

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