

Aboriginal and European Cultural Heritage

Kooyong Park Sustainable Development - Stage 2 Local Environment Plan Rezoning (LEP amendment under the “gateway system” of DoP)

Moama East

NSW

Prepared for
Perpetual Green Developments Pty Ltd
October 2011

Advanced Environmental Systems

Creating a Sustainable Future

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433 High Street Echuca VIC 3564

Tel: (03) 5482 5882 Fax: (03) 5480 2982

Email: aes@echuca.net.au

Web: www.environmentalsystems.com.au

CONSULTANT DETAILS

Company	Advanced Environmental Systems
Nominated Individual	Mr Peter Clinnick (B. Ag. Sci. Hons. RPF.) Ms Monique Aarts (M.Sc. B. Ed.)
Date of Assessment Commencement	15 th October 2011
Phone Number	(03) 5482 5882

OWNER-SITE DETAILS

Name of Site	Kooyong Park Sustainable Development
Address of Site	Moama Street, Moama, NSW 2731
Client:	Perpetual Green Developments Pty Ltd
Name of Project Manager	Mr. Matthew O'Farrell
Phone Number	0407 347 768
County	Cadell
Parish	Moama
Title details	Lot 1 DP 1098204 and Lots 1 & 2 DP1078090
Development Application No	Addendum to the LES

DISCLAIMER

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Aboriginal and European Cultural Heritage Assessment " Kooyong Park" Sustainable Development

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Aboriginal and European Cultural Heritage Assessment

" Kooyong Park Sustainable Development"

Executive Summary

This report has been provided as an addendum to a Local Environment Study (LES) provided by Coombe's Consulting in 2008 and forms part of the Department of Planning "Gateway Planning Process" for a rezoning of cleared agricultural land (~47 ha) bordered by Moama Street, Holmes Street and parts of Old Deniliquin Road, approximately 1.5 km east of central Moama. While the rezoning encompasses the entire property (47 ha) the proposed development area would exclude the 6.68 ha "home block" at the present time.

The report provides information on Aboriginal and European cultural heritage and recommendations to address relevant issues at the site of the proposed Kooyong Park Sustainable Development Stage 2, located 1.5 km east of the Moama township centre. Council approval for Stage 1 (15 Lots 4.63 ha) on Part of Lot 1 DP 1098204 was provided in 2010.

An archaeological survey of the proposed rezoning area ~47 ha (total area) of Lot 1 DP 1098204 (17.8ha) and Lots 1 and 2 DP1078090 (~29.4 ha) was undertaken on March 19th 2010 and again on 15th October 2011 to determine the potential impact of the proposed land development and related development in relation to Aboriginal and European cultural heritage.

The key objectives of the archaeological survey were to:

1. Locate and record any Aboriginal and European archaeological and cultural heritage sites in the area proposed for development and surrounding lands;
2. Find measures to mitigate any possible damage to potential archaeological deposits or cultural heritage sites;
3. Consult representatives of the local Aboriginal community to ascertain their concerns in relation to any site heritage issues relating to the proposed development.

The report was prepared following field investigations and database research relating to the site. The site is divided into two discrete areas these being:

1. The farm area (~ 47 ha);
2. Roadside Reserve areas, adjacent the farm area.

Preparation of this report involved collation of relevant archaeological and environmental information and the use of aerial imagery and topographic maps to identify areas with archaeological potential. Fieldwork was undertaken with a representative (Mr Phillip Hudson) of the Moama Local Aboriginal Land Council and Mr Peter Clinnick from AES.

The key findings are:

1. The field assessment of the site "did not reveal any Aboriginal artefacts or other items of cultural importance" (Appendix I);
2. That the archaeological potential of the Moama development site is low; and

Accordingly, there are no specific appropriate management strategies required for this site and no impediment to the proposed development.

Aboriginal and European Cultural Heritage Assessment "Kooyong Park Sustainable Development, Stage 2"

Introduction

This report has been prepared as an addendum to an earlier Local Environment Study (LES; Coomes Consulting Group 2008) and is submitted as part of the Department of Planning "Gateway Planning Process" for consideration of rezoning of the site by Murray Shire Council and incorporation in their Local Environment Plan (LEP).

Specifically, this report provides information on Aboriginal and European cultural heritage and recommendations to address relevant issues at the site of the proposed Kooyong Park Sustainable Development Stage 2 located 1.5 km east of the Moama township centre. Council approval for Stage 1 (15 Lots 4.63 ha) on Part of Lot 1 DP 1098204 was provided in 2010.

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The key objectives of the archaeological survey were to:

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5. Find measures to mitigate any possible damage to potential archaeological deposits or cultural heritage sites;
6. Consult representatives of the local Aboriginal community to ascertain their concerns in relation to any site heritage issues relating to the proposed development.

The report was prepared following field investigations and database research relating to the site. The site is divided into two discrete areas these being:

3. The farm area (~ 47 ha);
4. Roadside Reserve areas, adjacent the farm area.

If approval for rezoning were to be granted the area (Figure 1) where development is to be concentrated is on part of Lot 1 DP 1098204 and 2 DP1078090. Lot 1 DP 1078090(~6.7 ha, Figure 2) will most likely remain as is and not subject to development at this time.

This report on relating to Aboriginal and European cultural heritage has been prepared in order to satisfy the requirements of the NSW State National Parks and Wildlife Act 1974, National Parks and Wildlife Amendment

Act 2001 and Environmental Planning and Assessment Act 1979 and the Commonwealth Aboriginal and Torres Strait Islander Heritage Protection Act 1984.

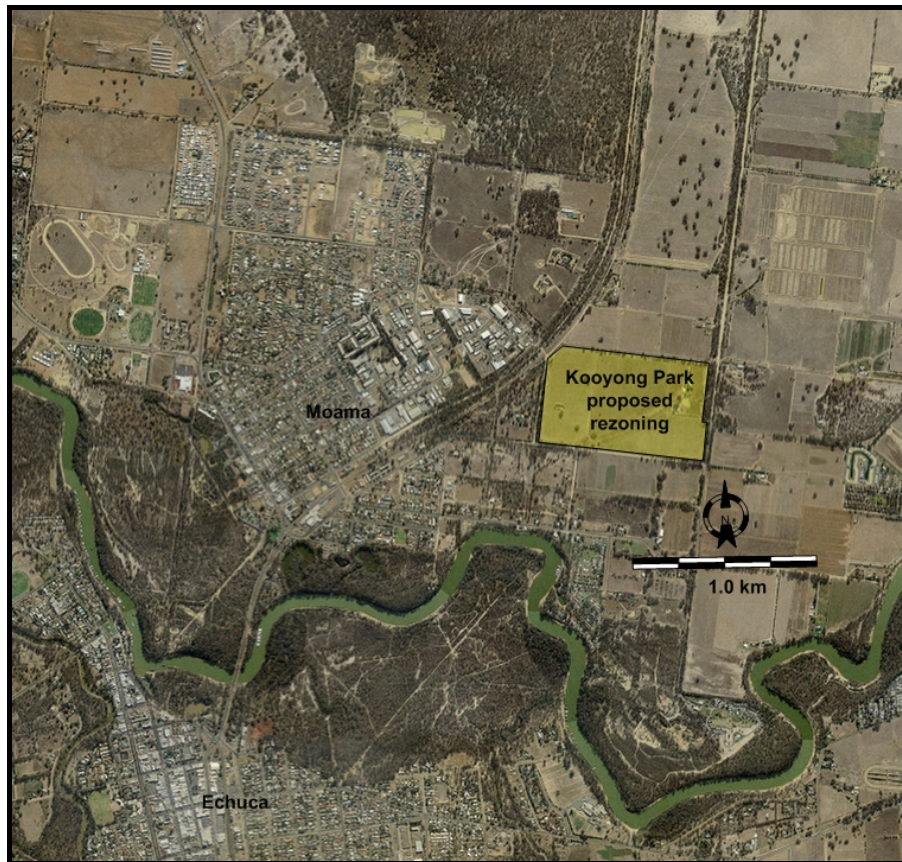


Figure 1. Location of development site

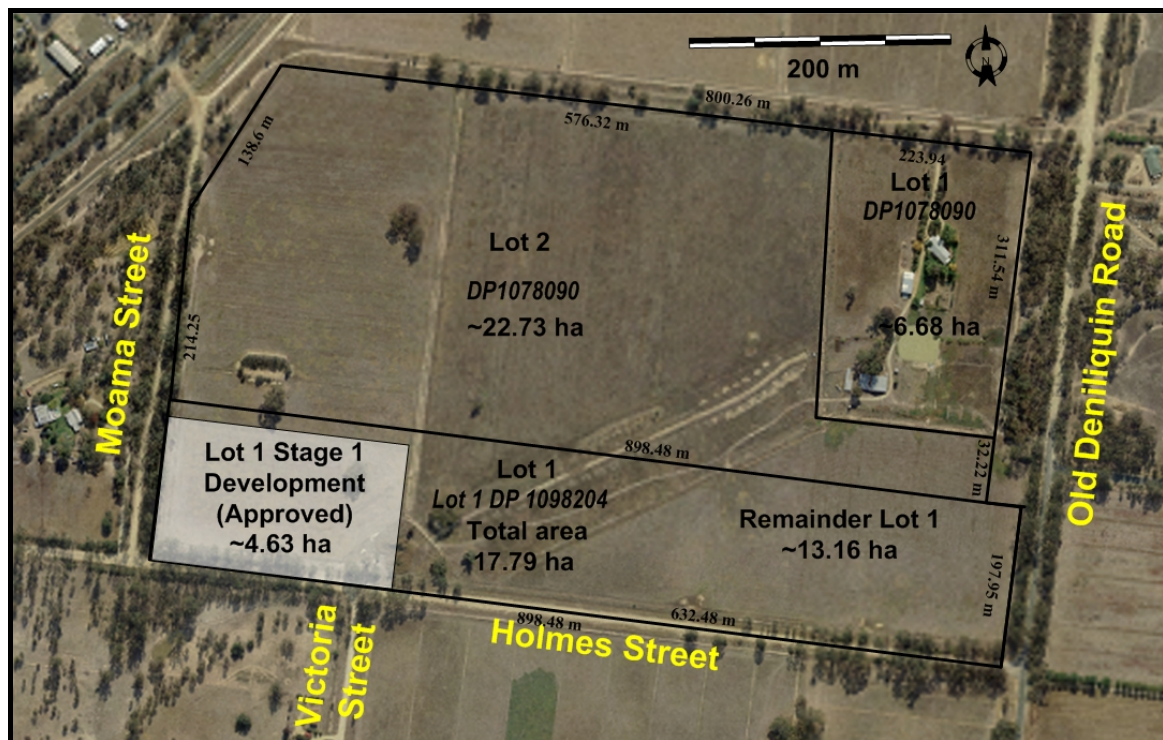


Figure 2. Proposed rezoning site and surrounding survey area

Landuse and Geomorphology

The site topography of the proposed development area is flat and since having been cleared in the 1870's the land has been used for dryland cereal cropping and irrigated pasture. The property is surrounded by well vegetated road reserves. Abutting land use includes hobby farming with grazing and some cropping on larger holdings.

The " Kooyong Park Sustainable Development Stage 2" is located at Moama within the Murray Basin close (~500 m) to the southern most extremity of the Murray River as it traverses the inland floodplain. The Murray Basin formed following uplift of the Eastern Australian Highlands, some 60 million years ago (Mackay and Eastburn, 1990). The stratigraphy of the Murray Basin is known from boreholes sunk throughout the region (Macumber, 1991). The uppermost unit beneath the proposed development is the Shepparton Formation. This unit is represented by 30 m of fluvio-lacustrine clayey sediments, which have been accumulating since the Pliocene.

Uplift of the Cadell Fault some 50,000 years ago played a key role in enhancing the wetlands in the area. The earthquake dammed and diverted the Murray River to give rise to the Barmah forest. The earthquake, or series of earthquakes, responsible for this faulting must have been very large, possibly above magnitude 7. Interestingly, the quakes and the natural wetland system thus created were at around the time the first people arrived in the land¹.

1. *Methodology*

Preparation of this report involved collation of relevant archaeological and environmental information and the use of aerial imagery and topographic maps to identify areas with archaeological potential. Recent fieldwork was undertaken by Mr Peter Clinnick (AES) together with Mr Phillip Hudson representing the Moama Local Aboriginal Land Council on 15th October 2011.

Survey Strategy

The survey was designed to achieve two main results. Firstly, to inspect anywhere in the proposed development area with the potential to contain stone artefacts or skeletal remains and secondly to locate any older trees, which may show evidence of Aboriginal scarring.

Conditions of ground surface visibility will affect the ease with which sites are located. Visibility may also skew the results of a survey. If, for example, conditions of ground surface visibility vary dramatically between environmental zones, then this in turn will be reflected in the numbers of sites reported for each zone. The zone

¹ M Sandiford. (2010) Australia, the geologically safest place for nuclear waste?
<http://jaeger.earthsci.unimelb.edu.au/msandifo/Policy/nuclear.html>.

with the best visibility may be reported as having the most sites (because they are visible on the ground) while another zone with less visibility but perhaps more sites will be reported as having very little occupation. It is important therefore to consider the nature of ground surface visibility as part of any archaeological investigation. For this study conditions of ground surface visibility were moderate being on average about 10 %. These moderate conditions of visibility were mainly due to grass cover.

The proposed development area and surrounding land was surveyed by walking along a number of transects. These were distributed evenly over the proposed development area and around the perimeter. Within the survey area there has been considerable site disruption from grazing, cropping and irrigation development together with flood levee construction. The survey team walked approximately 5 m apart to optimise any sighting opportunities. Special attention was paid to disturbed areas, such as dam sites and channel bank excavations. In addition, all areas of very high ground surface visibility and vehicle tracks were surveyed. Groups of trees were also inspected. Aerial photography was assessed for any patterns or signs of historical evidence of occupation or site activities relating to Aboriginal and European heritage.

Recording Methods

Aboriginal sites are defined in this investigation as any culturally sensitive location with, or without, Aboriginal cultural material. When an Aboriginal site or European occupation site, was located the following variables were recorded:

Site designation: Sites were allocated names according to the property that they were located in i.e. KP 1.

Site type: Potential archaeological deposits (PADs) and scarred trees are recorded.

Grid co-ordinates: Information was derived from a hand-held Global Positioning System (GPS). GDA was the grid reference system used in recording sites.

Environmental setting: This describes the sites environmental context, including such features as geomorphology, vegetation and local hydrology.

Aspect: Direction at which the site faces. Aspect is often thought to be a key determinant of site location.

Site size: Refers to the dimensions of the culturally sensitive areas.

Visibility: A measurement of the conditions of ground surface visibility in the survey area. Ground visibility conditions will affect whether sites are detected and whether their full extent has been recorded.

Site contents: This is a description of the archaeological traces at the site. With scarred trees, the features recorded would include the size and shape of the scar and its position on the trunk of the tree.

Site condition: Describes the condition of the site in terms of factors which may have disturbed it (such as rabbits) or which have the potential to disturb.

Management considerations: This details the potential threat to the site specifically in terms of the planned development. In addition, specific ameliorative measures are recommended if warranted. In some cases the

recommendation is simply that no active management is necessary apart from avoiding the site during the course of the development.

2. Policy and Planning Instruments

Statutory Protection and the Burra Charter

All registered and unregistered Aboriginal archaeological sites in New South Wales are protected by State National Parks and Wildlife Act 1974, National Parks and Wildlife Amendment Act 2001 and Environmental Planning and Assessment Act 1979 and the Commonwealth Aboriginal and Torres Strait Islander Heritage Protection Act 1984. All historical sites in New South Wales are protected by the NSW Heritage Act 1977 and the Environmental Planning and Assessment Act 1979. These Acts prohibit the wilful destruction or disturbance of any cultural heritage site, place or object, whether on private or public land. These places are considered to have significance according to the guidelines of the Australian ICOMOS Charter for the Conservation of Places of Cultural Significance (the Burra Charter).

The Departments of Environment and Conservation (Cultural Heritage Branch, Environmental Protection Authority) and Infrastructure and Planning (NSW Heritage Office) are the NSW State Government agencies that administer these Acts.

National Parks and Wildlife Act 1974 and the National Parks and Wildlife Amendment Act 2001. In NSW, the National Parks and Wildlife Act 1974 and the National Parks and Wildlife Amendment Act 2001 provide legislative protection for all Aboriginal (and historic) cultural heritage sites, places and objects. Section 90 of the National Parks and Wildlife Amendment Act 2001 states:

A person must not destroy, deface, damage or desecrate, or cause or permit the destruction, defacement, damage or desecration of, an Aboriginal object or Aboriginal place.

Section 87 of the National Parks and Wildlife Act 1974 refers to permits to research, excavate or collect Aboriginal objects or places.

Environmental Planning and Assessment Act 1979. The Environmental Planning and Assessment Act 1979 also recognizes the need to protect the cultural and natural heritage of New South Wales. It compliments the National Parks and Wildlife Act 1974 in that it provides for planning before development and it obliges the developer to consult persons with relevant expertise or experience (Bowler 1983:14). The heritage scope of this legislation is wider than that of the National Parks and Wildlife Act 1974 and there is no doubt that sites of significance to contemporary communities are included.

Aboriginal and Torres Strait Islander Heritage Protection Act 1984. This Commonwealth Act provides for the blanket protection of all Australian Aboriginal and Torres Strait Islander archaeological sites, places and objects whether privately or publicly owned. Whereas the State provides legislative protection for all physical evidence of past Aboriginal occupation, the Commonwealth Act also protects Aboriginal cultural property in the wider sense

so as to include contemporary and ancient traditions and folklore. Importantly, this Act recognises that the Aboriginal people of NSW are the prior occupants of this State and the owners of their heritage and heritage sites regardless of public or private land ownership.

Heritage Act 1977. Historical sites in NSW are protected by the Heritage Act 1977. The act is designed to conserve places or items of historic, scientific, cultural, archaeological, natural or aesthetic significance to local communities or to the State. Items of particular importance are listed on the State Heritage Register. The Heritage Council of NSW is responsible for ensuring that listed sites are protected. Major changes to a heritage site require the approval of the Heritage Council.

The Burra Charter. The Australian Burra Charter was adopted at a conference at the historic mining town of Burra, South Australia, in 1979. This charter defines the procedures and basic principles to be followed in the preservation of all types of sites. For example, Aboriginal shell middens, ancient campsites represented by stone artefact scatters, or historic mining shafts. These places are considered to have cultural significance either to Aboriginal people or to Australians in general. Cultural significance is a term used to encompass all the meanings and values that a particular place may have to people, beyond its utilitarian value. It refers to 'aesthetic, historical, scientific or social value for past or present generations, or for its likely value to future generations' (Marquis-Kyle and Walker 1992:73).

Under the guidelines of The Burra Charter any Aboriginal sites found in the area will have social value. According to the charter, social value is defined as:

... the qualities for which a place has become a focus of spiritual, political, national, or other cultural sentiment to a majority or minority group (Marquis-Kyle and Walker 1992:73).

Some sites in the area may also have scientific value. This is assessed according to each particular site's research or scientific potential to provide information about past Aboriginal culture, the environment, or human behaviour generally. According to the Burra Charter:

The scientific or research value of a place will depend upon the importance of the data involved or its rarity, quality or representativeness and on the degree to which the place may contribute further substantial information (Marquis-Kyle and Walker 199 2:73).

While the scientific or research value of a place may vary, the Moama Local Aboriginal Land Council considers all Aboriginal archaeological sites to be significant. The Aboriginal people of the area have a very ancient and unique traditional culture and these sites are important to them because they are a link to their ancestral lands and help to keep their traditional culture alive.

3. *Aboriginal and European Heritage*

An archaeological survey of the proposed area (~47 ha total area) of Lots 1 DP 1098204 and Lots 1 & 2 DP1078090 was undertaken on October 15th 2011 to determine the potential impact on of the proposed land development and related development in relation to Aboriginal and European cultural heritage. Much of the following background information has been supplied by Dr T. Stone (Pers. Comm).

Aboriginal setting

The Bangerang Nation covered country from near Shepparton across to Echuca, up to Deniliquin (N.S.W.) back across to Finley, down to Katandra and finished back near Shepparton. The Yorta Yorta, Bangerang and Yabula Yabula group of languages are spoken by various groups whose ancestral homelands radiated from the junction of the Murray and the Goulburn extending into New South Wales. The Yorta Yorta Native Title Claim in the 1990s related to the lands of the entire group. The tribes within the Bangerang Nation consisted of the Moirathban, Toolinyagan, Wolithiga, Kailthban, Ngarrimowro, Angootheraban and the Pikkolatpan.

The Yorta Yorta/Bangerang group is comprised of indigenous persons biologically descended from the original occupiers or adopted into and/or otherwise accepted as part of this group. The name 'Yorta Yorta' is preferred by most of the descendants of the original Aboriginal occupiers of the area today, although some prefer to use the word 'Bangerang'. The two names refer to descendants of one and the same group.

Aboriginal concerns

Aboriginal people living in southern NSW are concerned about any development that might impact upon Aboriginal sites in the region. Phillip Hudson of the Local Aboriginal Land Council based in Moama met with the survey co-ordinator and inspect the proposed development area and adjacent property areas.

The Aboriginal representatives have no objections to the proposed development of the area.

Background Archaeology

An understanding of the Aboriginal archaeology of southern NSW has begun to emerge from studies of the Barmah Forest (Bonhomme, 1990). Aboriginal burial sites along the Murray River are described by Webb (1984) and Pardoe (1988).

Bonhomme's (1990) study of the Aboriginal archaeology of the Barmah Forest provides a detailed account of the regional ethnohistorical record and the different types of Aboriginal site present along the Murray River. Her survey located 182 sites of which 88 were scarred trees, 86 were mounds, five were shell middens, two were stone artefact scatters and one was a burial site. These were distributed across a range of environments with most of the habitation sites closely associated with water sources such as streams and swamps. Most of the scarred trees recorded by Bonhomme were box (78%) with the remainder River Red Gums.

According to the NSW Department of Environment and Conservation (DEC) Aboriginal Heritage Information Management System (AHIMS), no Aboriginal sites have been recorded previously in the proposed development area or along nearby roads.

Types of Sites

The types of archaeological site which have been recorded previously in southern NSW, which might therefore be expected to occur in the Moama area are described below.

Open campsites

Open campsites are one of the most commonly occurring types of archaeological site in the region. These sites are represented by scatters of stone artefacts lying on the ground surface. The remains of fire hearths may also be associated with the artefacts. In rare instances, open campsites which were used over a long period of time may have accumulated sediments and become stratified. That is, there may be several layers of occupation buried one on top of another.

The open campsites are almost invariably located near permanent or semi-permanent water sources. Local topography is also important in that campsites tend to occur on level, well-drained ground elevated above the local water source. In the Moama area they are most likely to be located on river terraces and along creeks and also around the margins of lakes and wetlands.

Freshwater shell middens

Shell middens are deposits of shell and other food remains accumulated by Aboriginal people as food refuse. In inland SE Australia these middens typically comprise shells of the freshwater mussel (*Velesunio ambiguus*), or the river mussel (*Alathyria jacksoni*). Freshwater middens are most frequently found as thin layers or small patches of shell and often contain stone or bone artefacts and evidence of cooking. Such sites are relatively common along the Murray River and its tributaries.

Earth mounds

Earth mounds may have been used by Aboriginal people as cooking ovens or as campsites. They are common along the Murray River and in the Wakool District further to the north. Originally they appear to have ranged from 3 to 35 metres in diameter and from 0.5 to 2 metres in height. Today, however, they may be difficult to recognise because of the effects of ploughing, grazing and burrowing rabbits. Earth oven material, stone artefacts, food refuse and the remains of hut foundations have been exposed in some excavated earth mounds.

Quarry sites

These are locations where Aboriginal people obtained ochre for their art and decoration. Materials commonly used for making flaked stone tools include chert, silcrete, quartz and quartzite were not freely available in the area and were obtained by trade.

Carved trees

These are trees on which Aboriginal people have cut designs through the bark onto the wood beneath. They are thought to have once had a wide distribution in SE Australia, but because of age and widespread tree clearance few remain today. Ethnohistoric records indicate that some carved trees were associated with burials whilst others may have been sacred or totemic sites.

Scarred trees

Slabs of bark were cut from trees by Aboriginal people and used for a variety of purposes including roofing shelters and constructing canoes, shields and containers. Scars also resulted from the cutting of toe holds for climbing trees to obtain honey or to capture animals such as possums. The classification of scarred trees as natural, European or Aboriginal is often problematic; however, if the scar is Aboriginal the tree must now be more than 150 years old.

Burial grounds

Aboriginal burial grounds may consist of a single interment or a suite of burials. In the drier parts of western NSW skeletal material is regularly found in eroding sand deposits, but near the slopes of the Great Dividing Range burial sites are rare because conditions for the preservation of bone are usually poor.

Historic sites

Historic sites in the Moama area relate mostly to the arrival of European agriculturalists and associated industries last century and the development of maritime transport routes along the Murray River. Old homesteads and associated structures such as work sheds, barns and wells are examples. Small bridges made from wood or stone and old railway sidings may also be encountered. Less conspicuous sites include historic mileage markers and navigation markers which are also of historical interest.

Results and Discussion

Water courses would have been the foci of Aboriginal occupation in the local area. The property site location is remote from the Murray River and having no permanent water body means that it would not have attracted Aboriginal occupation but may have been part of a hunting and gathering area. Furthermore the site being situated on uniformly compacted medium clays has little or no potential for stratified cultural material at depth. These materials were deposited long before Aboriginal people arrived in Australia (~45,000 years ago). Consequently, any archaeological potential is limited to the surface.

The walls and floors of excavations for dams along Holmes Street did not contain any Aboriginal or European cultural or heritage material. These exposed sites provide a representative sample of a large part of the area. Despite this extensive exposure in paddocks and along tracks across the site, no stone artefacts or pieces of bone were recorded.

The only evidence of early European occupation, found in the the 2010 survey is on the south west corner of the block near the intersection of Moama Street and Holmes Street. About 10 m from the corner gateway a few broken remnants of kiln fired bricks were found and close by a White cedar (*Melia Azadarach*) tree about 30-40 years of age. Information supplied by Mrs Judith O'Farrell indicated that in a consolidation of roads and titles dating back to 1932 the area was referred to as 'suburban lands' town of Moama and when she first moved there in 1982 there was the remnants of a fence enclosing the aforementioned tree.

There were no historic sites located in the proposed development area, which is not surprising, as it is not located near any historical centre of activity, such as was the case closer to the river at Maidens Punt and the site of the old Moama Telegraph Office.

Despite there being numerous old and substantial Grey box (*Eucllyptus microcarpa*) and red gum (*E. camaldulensis*) trees scattered across the survey area there were none that showed scars attributable to human activity.

In summary, the archaeological potential of the Moama development site is low, largely because the site location is remote from permanent fresh water (i.e. the Murray River). Accordingly, there are no specific appropriate management strategies required for this site.

Conclusion (Mitigation measures)

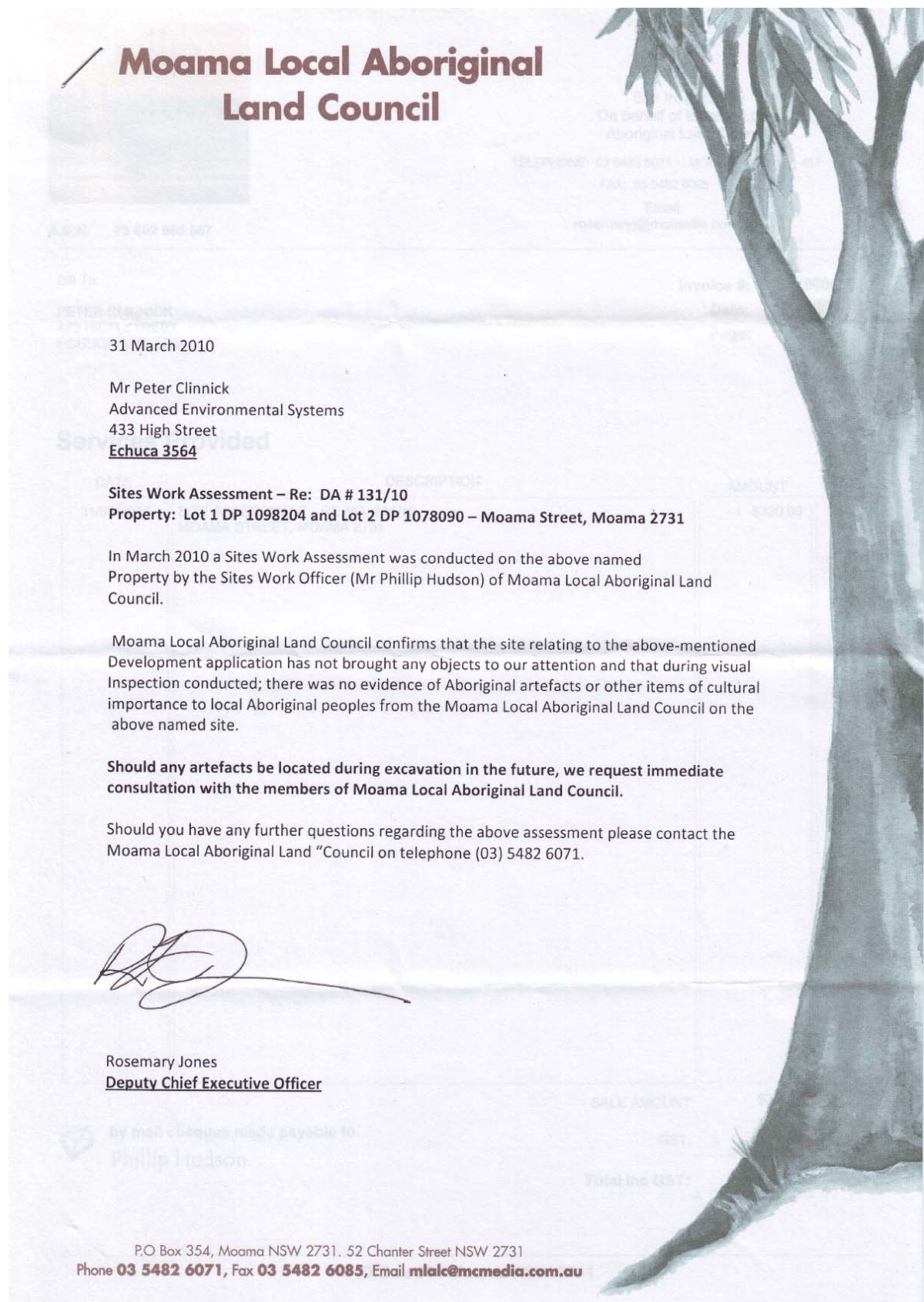
Based on the results of this investigation and consultation with the Moama Local Aboriginal Land Council it is recommended that:

1. Development be allowed to proceed at " Kooyong Park Sustainable Development Stage 2" without further archaeological investigation.
2. The property owners should keep the Moama Land Council apprised of any artefacts unearthed during development and ensure that Aboriginal people have open access to any cultural heritage sites should they be uncovered during the course of development.

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Appendix 1. Moama Local Aboriginal Land Council Letters





15 October 2011

Mr Peter Clinnick
433 High Street
Echuca 3564

Sites Work Assessment – Re: No.131/10
Property : MOAMA STREET, MOAMA 2731

In October 2011 a Sites Work Assessment was conducted on the above named Property by the Sites Work Officer (Mr Phil Hudson) of Moama Local Aboriginal Land Council.

Moama Local Aboriginal Land Council confirms that the site relating to the above-mentioned Development application has not brought any objects to our attention and that during visual inspection conducted; there was no evidence of Aboriginal artefacts or other items of cultural importance to local Aboriginal peoples from the Moama Local Aboriginal Land Council on the above named site.

Should any artefacts be located during excavation in the future, we request immediate consultation with the members of Moama Local Aboriginal Land Council.

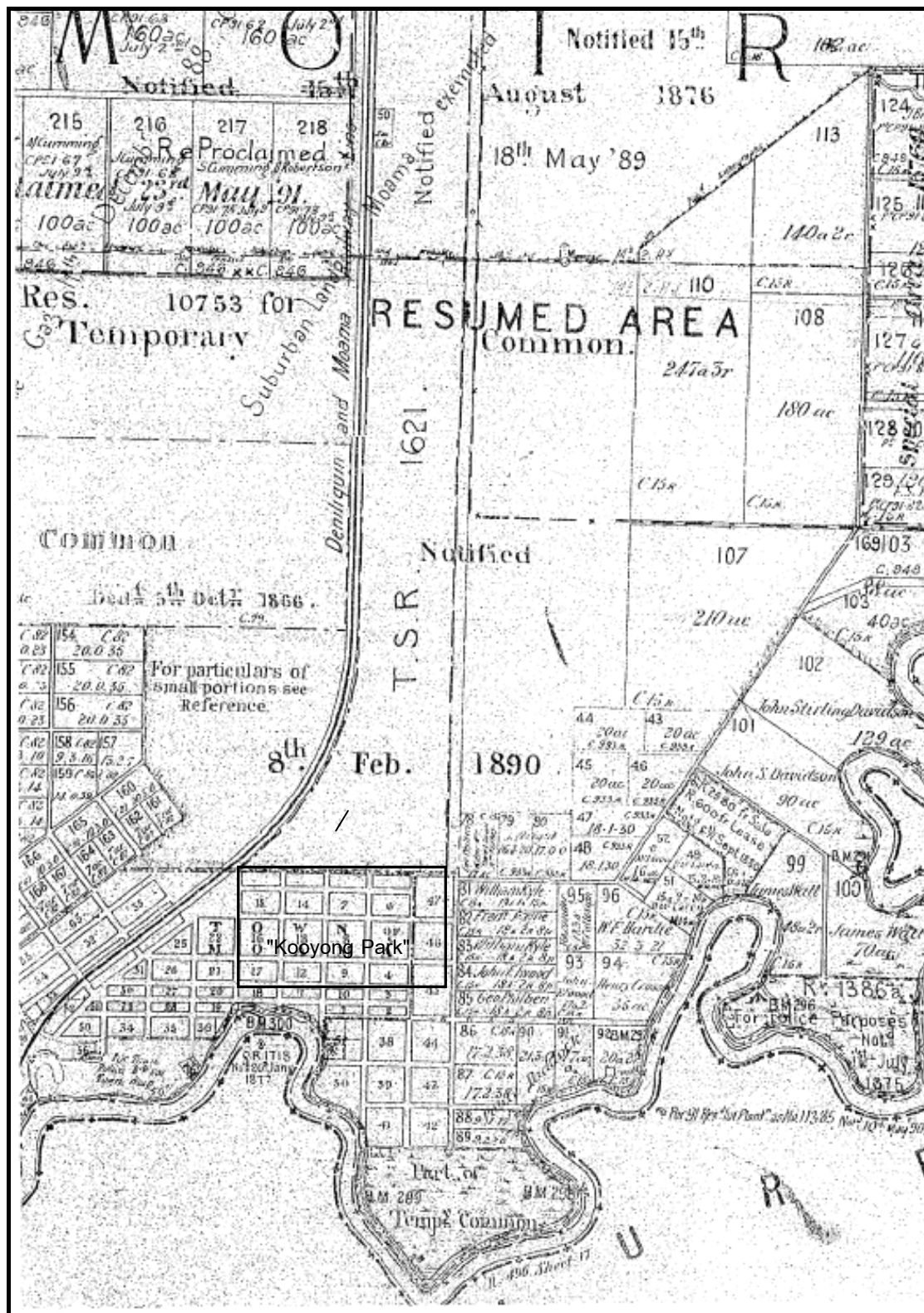
Should you have any further questions regarding the above assessment please contact the Moama Local Aboriginal Land Council on telephone (03) 5482 6071.

A handwritten signature in dark ink, appearing to be "Rosemary Jones", with a long horizontal line extending to the right.

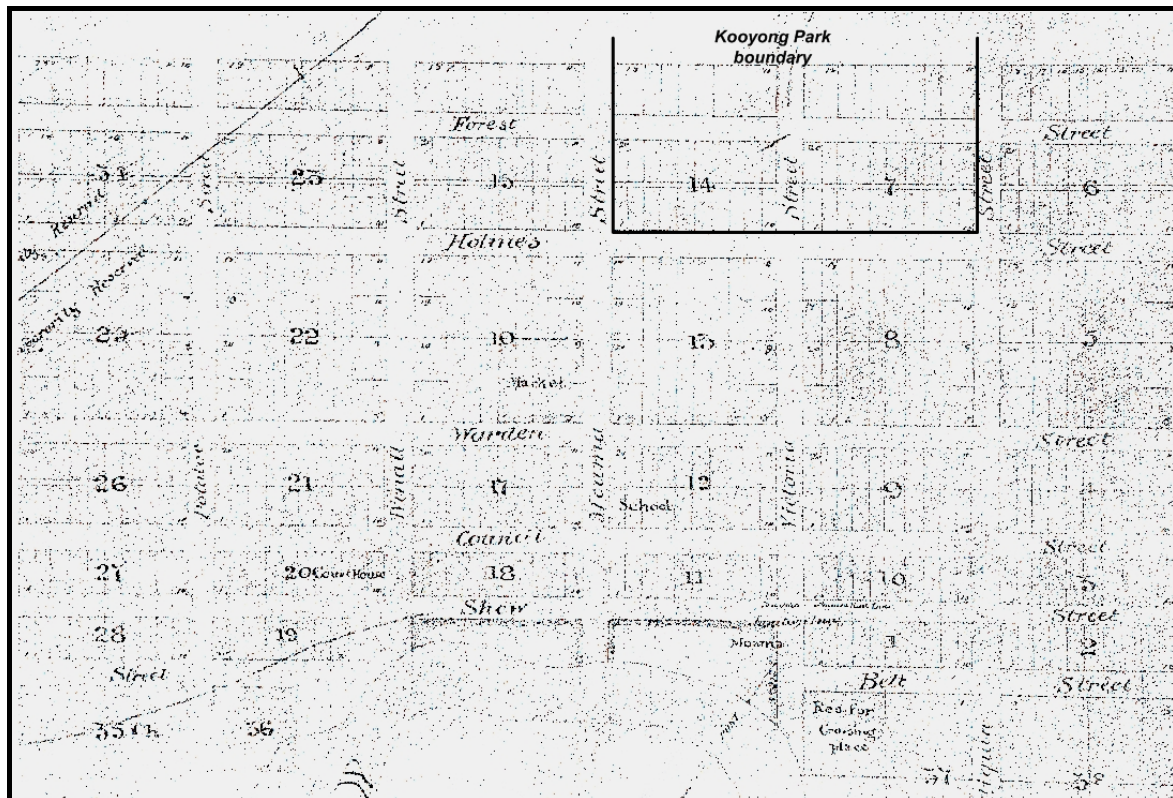
Rosemary Jones (Ms)
Deputy Chief Executive Officer

52 Charter St., Moama N.S.W. 2731. P.O. Box 354, Moama N.S.W. 2731
Tel.: (03) 5482 6071. Fax: (03) 5482 6085
Email: mlalc@mcmedia.com.au

Appendix 2. Historic Plans and Photographs



Moama town plan 1890



1890 Moama Urban block detail



1950 Site photo. Holmes - Victoria Street intersection in centre

(Note absence of vegetation on Holmes Street)