

# Camden Gas Project

## Aboriginal Cultural Heritage Management Plan

Report for AGL Gas Production (Camden) Pty Limited

August 2008

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## 1.0 INTRODUCTION

This Aboriginal Cultural Heritage Management Plan (ACHMP) describes the process for the ongoing management of Aboriginal cultural heritage sites and places located within the Camden Gas Project area ('the project' or 'CGP') and has been prepared to supplement the Environment Management Plan (EMP) for the project. Along with the EMP, this and other sub plans form part of the Environmental Management System of the Camden Gas Project.

The Plan has been developed based on requirements of the previously prepared and approved Aboriginal Cultural Heritage Management Plans, Environment Health and Safety Management Plans and the AGL Energy Life Guard system and more information is available in the EMP.

It describes the process for the ongoing management of recorded Aboriginal archaeological sites, and identified areas of Potential Archaeological Deposit (PAD), to guide the design, location and implementation of future works within the Camden Gas Project.

Through ongoing consultation, the ACHMP will also detail the inclusion of relevant Aboriginal stakeholders in the management of their cultural heritage, including archaeological sites and Aboriginal resources.

The ACHMP has been developed in consultation with the Tharawal Local Aboriginal Land Council (TLALC) and the Cubbitch Barta Native Title Claimants Aboriginal Corporation (CBNTCAC), and the Department of Environment and Climate Change (DECC).

### 1.1 Project Background

The Camden Gas Project activities can be summarised as the construction, operation, maintenance and rehabilitation of well sites, the gas gathering systems and access tracks, and the operation and maintenance of the Rosalind Park Gas Plant (RPGP) and the sales gas pipeline. More specific information on the project, the activities and overall environmental management is available in the EMP.

The project is located across the Camden, Campbelltown and Wollondilly Local Government Areas.

Aboriginal cultural heritage is assessed as part of all development applications in consultation with representatives of the local Aboriginal groups and to date 32 assessments have been carried out in support of the activities of the project.

This plan describes the rationale and methodology for the ongoing management and mitigation strategies for all Aboriginal archaeological sites and areas of Aboriginal archaeological potential for the project.

Specific Aboriginal cultural heritage management measures for the different gas fields are included in the Appendix to this Plan (as required).

## 2.0 RATIONALE FOR THE ACHMP

This Aboriginal Cultural Heritage Management Plan is intended to facilitate the implementation of the mitigation and conservation strategies by clearly setting out a process for the management of Aboriginal cultural heritage prior to, during and subsequent to the construction stages of the Camden Gas Project. To this end, the ACHMP will be incorporated into the Environmental Management System for the project.

The ACHMP is designed to be a foundation for management of Aboriginal cultural heritage that ongoing site specific consultation can build upon. Therefore when this sub plan is finalised in consultation with the Aboriginal groups to the satisfaction of the Director General of the Department of Planning, the agreed management measures for individual cultural heritage sites for parts of the project can be appended to become a part of this sub plan. This will provide an overall process for the Camden Gas Project that will avoid the duplication of general methodologies and mitigation measures, and allow a streamlined consultation process for the Aboriginal groups and AGL.

This ACHMP seeks to implement best practice heritage management. In the first instance, this would involve the avoidance and conservation of Aboriginal archaeological sites. This includes:

- consideration of aboriginal cultural heritage during the project design phase of new gas field proposals to ensure that wells and other infrastructure are sited to avoid significant heritage sites where possible;
- the possible relocation, removal or redesign of infrastructure before the proposal is submitted for approval; and
- consideration of aboriginal cultural heritage during the project design phase of future works within existing gas fields to ensure that the works and infrastructure are sited to remain within existing and/ or previously disturbed areas where possible.

Where heritage sites cannot be avoided, impact would be minimised by:

- development of management and mitigation measures developed in consultation with Aboriginal stakeholders and using the results of the cultural and archaeological assessments relevant to individual sites. This may include onsite monitoring, salvage and relocation of cultural material.
- ensuring the direct involvement of the relevant Aboriginal stakeholder groups in the development and implementation of this ACHMP, in accordance with the DECC's *National Parks and Wildlife Act 1974: Part 6 Approvals Interim Community Consultation requirements for Applicants*.
- promoting conservation of Aboriginal archaeological sites and cultural heritage at all times.

The ACHMP seeks to allow AGL to meet its commercial goals, its obligations to operate the project in an economic and efficient way whilst working in partnership with the Tharawal LALC and Cubbitch Barta NTCAC to manage and promote the Aboriginal cultural heritage values of the area.

### 3.0 LEGISLATIVE AND REGULATORY FRAMEWORK

The Camden Gas Project operates pursuant to the *Petroleum (Onshore) Act 1991* (POA) and the *NSW Environmental Planning and Assessment Act 1979* (EPA Act).

The EP&A Act requires that environmental impacts are considered in land-use planning and decision making. The definition of ‘environmental impacts’ includes impacts on the cultural heritage of the project area. The Act has three relevant parts: Part 3, which governs the preparation of planning instruments; Part 4, which relates to development where consent is required under an environmental planning instrument (EPI); and Part 5, which relates to activity where development consent is not required but some other government approval assessments are needed.

Project approval under **Part 4** of the EP&A Act requires compliance with Section 87 or 90 Permits and Consents to damage, destroy or remove any Aboriginal ‘places’ or ‘objects’ from DECC under the NPWS Act.

The most recent development applications for the Camden Gas Project have been approved under **Part 3A** of the EP&A Act. Under this part of the Act, the project does not have to comply with requirements under Part 6 of the NPWS Act. Instead, conditions outlined by the Director-General on approval of the Development Consent will require commitments regarding cultural heritage, including consideration of DECC and NPW Act guidelines and processes for the purposes of ‘best practice’ heritage management.

#### 3.1 Key Licence/ Development Consent Requirements

**Table 1:** Approval Conditions relating to Aboriginal Heritage for the Camden Gas Project.

APPROVAL REFERENCE & FIELD	APPROVAL CONDITION / REQUIREMENT
<p><b>DA 15-1-2002-i</b>  <b>Sch 3, condition 70-1</b>  <b>Field – RPTP, Apap, Joe Stanley, Johndilo, Loganbrae, Lipscombe, Mahon</b></p>	<p><b>70.</b> Prior to the commencement of site preparation works for the three (3) additional wellheads and the associated gas gathering system, the Applicant shall clearly indicate the locations of known aboriginal relics on the site, and ensure that all employees and contractors are aware of these locations, to prevent the known relics being impacted upon during site preparation and construction.</p> <p><b>71.</b> If, during the site preparation and/or drilling phases of the development, an unexpected archaeological relic is uncovered, excavation shall cease and an excavation permit under the Heritage Act 1977, shall be obtained from the NSW Heritage Office.</p> <p>Note: a relic is defined under the Heritage Act as any deposit, object or material evidence:</p> <p>(a) which relates to the settlement of the area that comprises NSW, not being Aboriginal settlement; and</p> <p>(b) which are more than 50 years old.</p>
<p><b>DA 282-6-2003i</b>  <b>Sch 4 conditions 87-8</b>  <b>Fields - RPGP, Rosalind Park, Wandinong, EMAI (EM01-20, 38-40), Glenlee (GL05, 07-10, 14-17)</b></p>	<p><b>87.</b> Prior to the commencement of site preparation works for the gas wells, gas gathering system and the Gas Treatment Plant Site, the Applicant shall clearly indicate the locations of known aboriginal relics on the site, and ensure that all employees and contractors are aware of these locations, to prevent the known relics being impacted upon during site preparation and construction.</p> <p><b>88.</b> The Applicant shall provide a report of the Indigenous Heritage Monitoring undertaken for the Stage II project to DECC and the Director-General within two months of the Heritage Monitoring being completed.</p> <p>Note: Under Section 86 of the National Parks and Wildlife Act 1974, it is an offence to disturb or</p>

	<p>excavate any land with the purpose of discovering an Aboriginal object without first obtaining a Section 87 Permit.</p> <p><b>Aboriginal Heritage – EM38</b></p> <p><b>88A.</b> The Applicant shall ensure that development of EM38 and upgrade of the gas gathering lines are undertaken in accordance with the recommendations in the reports titled “<i>Aboriginal Cultural Heritage Survey and Assessment Report – Camden Gas Joint Venture Project – Proposed Gas Well Location and Gas Gathering System Modifications, Camden, NSW</i>” dated February 2007, and “<i>Aboriginal Heritage Assessment – Sugarloaf Twin Gathering Line, Rosalind Park</i>” dated 8 September 2006.</p> <p><b>Aboriginal Heritage – EM39 and GL17</b></p> <p><b>88B.</b> The Applicant shall ensure that development of EM39 and GL17 and upgrade of the gas gathering lines are undertaken in accordance with the recommendations outlined in the cultural heritage assessment carried out by Biosis Research Pty Ltd in Appendix B of the Statement of Environmental Effects titled “<i>Camden Gas Project Joint Venture – EM39 and GL17 Modification Project</i>”.</p>
<p><b>DA 75-4-2005</b> <b>Sch 2, conditions 47-8</b> <b>Field - Sugarloaf</b></p>	<p><b>47.</b> The Applicant must ensure that should any Aboriginal objects be uncovered, excavation or disturbance of the area is to stop immediately and the DECC is to be informed in accordance with section 91 of the <i>National Parks and Wildlife Act 1974</i>.</p> <p><b>48.</b> Prior to the commencement of construction, the Applicant shall clearly mark the locations of known Aboriginal relics on the site (using flags, fencing or other appropriate method) and ensure that all employees and contractors are aware of these locations, to prevent the known relics being impacted or disturbed during site preparation and construction.</p>
<p><b>DA 171-7-2005</b> <b>Sch 3 conditions 40-43</b> <b>Field - El Bethel</b></p> <p><b>NB Not commenced.</b></p>	<p><b>40.</b> The Applicant must not excavate for drill sites or for other plant and equipment in connection to the development within the alluvial terraces bordering the Nepean River.</p> <p>Note: The alluvial terraces are those referred to in section 3.2 of the Aboriginal Archaeological Survey and Assessment report dated June 2005 and shown in “Approved Sand/Alluvial Mining” area on map reference M240449R15 titled “El Bethel Pty Ltd Well Locations, Access and Gathering” dated 23 September 2005.</p> <p><b>41.</b> At least one month prior to construction commencing, the applicant shall prepare and submit a Cultural Heritage Management Protocol to DEC. The Protocol must include, but is not limited to:</p> <ul style="list-style-type: none"> <li>(a) Details of local Aboriginal community consultation undertaken to develop this Protocol;</li> <li>(b) Details of the procedures that adequately record previously recorded Aboriginal sites;</li> <li>(c) Details of construction times;</li> <li>(d) A list of 24-hour site contact person covering all construction and operation activities;</li> <li>(e) Details of the protective barriers and site markings to be used and dedicated to Aboriginal Cultural Heritage matters;</li> <li>(f) Details of the programs that will adequately monitor, maintain and remove protective barriers and site markings to be used and dedicated to Aboriginal Cultural Heritage matters throughout construction, rehabilitation and operation;</li> <li>(g) Details of the procedure that will ensure all employees and contractors are informed of the requirements for the management and protection of Aboriginal sites and the specific protocols in place;</li> <li>(h) Details of a complaints handling monitoring system that relate to any Aboriginal Cultural Heritage matters;</li> <li>(i) Details to follow up complaints that relate to Aboriginal Cultural Heritage matters; and</li> <li>(j) Details of the procedures that adequately consult and notify the Aboriginal community throughout construction and operation.</li> </ul> <p><b>42.</b> All activities in connection to the construction and rehabilitation of the development must cease within a 50 m radii of a previously unrecorded Aboriginal site at all times prior to the implementation of the measures detailed in the Cultural Heritage Management Protocol submitted in accordance with condition 41.</p> <p><b>43.</b> The Applicant must effectively record and manage previously unrecorded Aboriginal sites. For the purposes of this condition “effectively record and manage” includes the procedures and programs set up in the Cultural Heritage Management Protocol.</p>

	<p>Notes</p> <ul style="list-style-type: none"> <li>• For the purposes of Condition 41, previously unrecorded Aboriginal sites may be uncovered during the duration of construction, rehabilitation and maintenance activities.</li> <li>• For the purposes of Condition 41, previously unrecorded Aboriginal sites mean sites that have not been in a study that was published prior to the submission of this application.</li> <li>• All monitoring for Aboriginal objects must be undertaken under a section 87 of the <i>National Parks and Wildlife Act 1974</i>.</li> <li>• The Applicant must ensure that appropriate section 87 and section 90 of the <i>National Parks and Wildlife Act 1974</i> consents are in place where appropriate.</li> </ul>
<p><b>PA 06_0137</b> <b>Sch 3, condition 13</b> <b>Field - Razorback</b></p>	<p>The Proponent shall prepare and implement an Aboriginal Heritage Management Plan for the project, in consultation with the DEC and relevant Aboriginal communities, and to the satisfaction of the Director-General. The plan shall be submitted to the Director-General prior to commencing construction (unless otherwise agreed with the Director-General) and shall include:</p> <p>(a) a description of the measures that would be implemented for the test pit excavation, mapping and salvage or relocation of the archaeological relics on RB5 IF 1, RB5 Site 1, and RB11 IF 2;</p> <p>(b) a description of the measures that would be implemented if any new Aboriginal objects are discovered during the project; and</p> <p>(c) a protocol for the ongoing consultation and involvement of the Aboriginal communities in the conservation and management of Aboriginal cultural heritage on the site.</p> <p><i>Note: The archaeological site references in conditions 13 are the same as those in the "Aboriginal Archaeological Survey and Assessment Report for Twelve Proposed Gas Production Well Sites, Gathering Systems &amp; Access Routes The Razor Back Property" prepared by Dominic Steele Consulting Archaeology, and dated July 2005.</i></p>
<p><b>PA 06_0138</b> <b>Sch 3, condition 15</b> <b>Field - EMAI (EM23-37)</b></p>	<p>The Proponent shall prepare and implement an Aboriginal Heritage Management Plan for the project, in consultation with the DEC and relevant Aboriginal communities, and to the satisfaction of the Director-General. The plan shall be submitted to the Director-General prior to commencing construction (or as otherwise agreed by the Director-General) and shall include:</p> <p>(a) a description of the measures that would be implemented for the mapping, and salvage or relocation of the archaeological relics on EMAI Sites 1, 2 4, 5, 6, and 7; CPOS 3; and IF 1 and IF 2;</p> <p>(b) a description of the measures that would be implemented if any new Aboriginal objects are discovered during the project; and</p> <p>(c) a protocol for the ongoing consultation and involvement of the Aboriginal communities in the conservation and management of Aboriginal cultural heritage on the site.</p> <p><i>Note: The archaeological site references in condition 15 are the same as those in the "Aboriginal Cultural Heritage Survey and Assessment Report for Fifteen New Proposed Gas Production Well Sites, Gathering Systems &amp; Access Routes Camden Gas Project Stage 2 The Elizabeth Macarthur Agricultural Institute Property" prepared by Dominic Steele Consulting Archaeology, and dated December 2005.</i></p>
<p><b>PA 06_0291</b> <b>Sch 3, condition 20</b> <b>Fields - Spring Farm, Menangle Park</b></p>	<p>The Proponent shall prepare and implement an Aboriginal Heritage Management Plan for each well surface location, in consultation with the DECC and relevant Aboriginal communities, and to the satisfaction of the Director-General. The plan shall be submitted to the Director-General prior to construction commencing at each such location (or as otherwise agreed by the Director General) and shall include:</p> <p>(a) a description of the measures that would be implemented for the mapping, and salvage or relocation of archaeological relics;</p> <p>(b) a description of the measures that would be implemented if any new Aboriginal objects are discovered during the project; and</p> <p>(c) a protocol for the ongoing consultation and involvement of the Aboriginal communities in the conservation and management of Aboriginal cultural heritage on the site.</p>
<p><b>PEL 2</b> <b>sch 2 condition 15</b></p>	<p>The licence holder must not knowingly destroy, deface or damage any Aboriginal object or Aboriginal place within the licence area except in accordance with an authority issued under the</p>

	National Parks and Wildlife Act, 1974, and must take every precaution in drilling, excavating or disturbing the land against any such destruction, defacement or damage.
<b>PPL 1, 2 condition 12 Fields – Apap, EMAI (part), Johndilo, Joe Stanley, Kay Park, Loganbrae, Lipscombe, Mahon</b>	The leaseholder must not destroy, deface or damage any aboriginal place or relic within the subject area except in accordance with an authority issued under the National Parks and Wildlife Act, 1974, and must take every precaution in drilling, excavating or disturbing the land against any such destruction, defacement or damage.

## 4.0 CONSULTATION

### 4.1 Overview of Aboriginal Community Consultation

Aboriginal community liaison for the Camden Gas Project, including this proposal, was initiated by AGL's joint venture partner, *Sydney Gas Operations Pty Limited* (SGL) at an early stage of the planning process (February 2005). The initial Aboriginal community consultation program included a process of public notification and liaison that was completed according to the requirements of the DECC *Interim Community Consultation Requirements for Applicants* guidelines introduced in January 2005.

The Tharawal LALC and Cubbitch Barta NTCAC registered an interest in being involved in the consultation/assessment process of the subject land at that time, and no additional notification from any other Aboriginal community organisation has been received by AGL or its joint venture partner since.

Consultation for all archaeological and cultural heritage assessments for the Camden Gas Project has been undertaken with only the Tharawal LALC and Cubbitch Barta NTCAC. Both groups have been involved in archaeological and cultural heritage assessments completed as part of this project.

Consultation for this ACHMP document has been undertaken with the following Aboriginal stakeholders:

- Donna Whillock, Cliff Foley and Charlie Mundine (Tharawal Local Aboriginal Land Council)
- Glenda Chalker (Cubbitch Barta Native Title Claimants Aboriginal Corporation)

A copy of written correspondence with the Aboriginal stakeholder groups has been provided in Appendix 2.

### 4.2 ACHMP Consultation Framework

As part of the Aboriginal Cultural Heritage Management Plan, consultation with identified Aboriginal stakeholders with regard to managing archaeological sites and cultural heritage values for the project will be ongoing. AGL will continue consultation in respect to the following:

- Identified Aboriginal community stakeholder groups to be consulted include the Tharawal LALC and the Cubbitch Barta NTCAC.
- Representatives of the Aboriginal community groups will be invited to participate in any active management of archaeological sites and objects, including consultation, survey, monitoring, excavation, salvage, relocation etc.
- Representatives of the Aboriginal community groups will be invited to participate in any active management of other materials of traditional significance.
- Aboriginal community groups will be consulted regarding maintaining cultural values of the landscape. This might include use of indigenous plants and in particular, plants of cultural value

for Aboriginal people, in rehabilitation and general revegetation works at well surface locations and along gas gathering lines.

- Systematic review of this Aboriginal Cultural Heritage Management Plan will be performed with the Aboriginal communities/stakeholder groups in line with the review requirements of the EMP.

## 5.0 ABORIGINAL ARCHAEOLOGICAL CONTEXT

### 5.1 Previous Archaeological Survey

The following Table summarises the archaeological studies that have been undertaken as part of the Camden Gas Project area (Table 2). These assessments have involved targeted archaeological survey of proposed exploration holes and production well sites, and associated gas gathering lines and access tracks. This work has resulted in the identification of 88 Aboriginal archaeological sites and the re-assessment of a number of previously recorded sites.

**Table 2:** Previously completed archaeological assessments for the Camden Gas Project Area.

Author	Year	Findings	Gas Field (s)
Dibden, J.	2000	No Aboriginal archaeological site or areas of potential were identified.	Loganbrae, Treatment Plant
Dibden, J.	2001a	Identification of <b>13</b> Aboriginal sites within project area	Kay Park, Loganbrae, Johndilo
Dibden, J.	2001b	No Aboriginal archaeological site or areas of potential were identified.	Kay Park, Loganbrae, Johndilo
Dibden, J.	2002a	Identification of <b>1</b> Aboriginal site within the project area	Glenlee
Dibden, J.	2002b	No Aboriginal archaeological site or areas of potential were identified.	Glenlee
Dibden, J.	2002c	No Aboriginal archaeological site or areas of potential were identified.	Glenlee Stage 2
Dibden, J.	2002d	Identification of <b>2</b> Aboriginal archaeological sites within project area	Kay Park
Dibden, J.	2002e		
Dibden, J.	2002f	No Aboriginal archaeological site or areas of potential were identified.	EMAI Stage 1
Dibden, J.	2003a	Identification of <b>20</b> Aboriginal archaeological sites within project area	EMAI Stage 1, Mt Taurus, Wandinong, Glenlee, Rosalind Park, Menangle Park,
Dibden, J.	2003b	No Aboriginal archaeological site or areas of potential were identified.	Menangle Park Stage 1
Dibden, J.	2003c	No Aboriginal archaeological site or areas of potential were identified.	EMAI Stage 1 and Glenlee
Dibden, J.	2004a	Identification of <b>1</b> Aboriginal archaeological site	Mt Taurus
Dibden, J.	2004b	No Aboriginal archaeological sites were identified, however, <b>2</b> Aboriginal PAD areas were identified MT3 and MT6.	Mt Taurus
Dibden, J.	2004c	Excavation of Aboriginal archaeological PAD Areas MT3 and MT6 – cultural material recovered – each PAD is now a registered Aboriginal archaeological site.	Mt Taurus
Dibden, J.	2004d	No Aboriginal archaeological site or areas of potential were identified.	EMAI Stage 1
Dibden, J.	2004e	No Aboriginal archaeological site or areas of potential were identified.	EMAI Stage 1
Dibden, J.	2006	Salvage excavation of Aboriginal archaeological sites EMAI2 and EMAI 3	EMAI Stage 1

Steele, D.	2005a	No Aboriginal archaeological site or areas of potential were identified.	El Bethel
Steele, D.	2005b	Identification of <b>10</b> Aboriginal archaeological sites within the project area	Razorback
Steele, D.	2005c	Identification of <b>15</b> Aboriginal archaeological sites	EMAI Stage 2
Steele, D.	2006	No Aboriginal archaeological site or areas of potential were identified.	Rosalind Park Gas Plant Access Road
Steele, D.	2007a	Aboriginal Cultural Heritage Management Plan including previously recorded Aboriginal archaeological sites	EMAI (EM23-37) Stage 2
Steele, D.	2007b	Aboriginal Cultural Heritage Management Plan including previously recorded Aboriginal archaeological sites	Razorback
Steele, D.	2007c	No new Aboriginal archaeological site or areas of potential were identified.	EMAI Stage1, EMAI Stage 2 and Glenlee
Steele, D.	2007d	No new Aboriginal archaeological site or areas of potential were identified.	Spring Farm and Menangle Park
Steele, D.	2007e	Identification of <b>2</b> Aboriginal artefacts within EMAI project area	EMAI Stage 1, Sugarloaf, Rosalind Park, Menangle Park, Glenlee, Kay Park, Apap
HLA- ENSR Pty Ltd	2007	Identification of <b>21</b> Aboriginal sites within project area	Spring Farm and Menangle Park
Biosis Research	2007a	No Aboriginal cultural material recovered from sub-surface investigations	EMAI Stage 1
Biosis Research	2007b	Aboriginal cultural material collected – to be relocated at the completion of the gas well site	EMAI Stage 2
Biosis Research	2008a	No archaeological issues identified at either of these previously disturbed gas well locations	EMAI Stage 1
Biosis Research	2008b	Identification of <b>1</b> Aboriginal archaeological site within project area	Exploration ED02
Biosis Research	2008c	No archaeological sites identified, and no areas of archaeological potential located at this site	Exploration RB02
Biosis Research	2008d	Avoided <b>2</b> Aboriginal archaeological sites No new archaeological sites identified	Kay Park and Loganbrae
Biosis Research	2008e	The extent of recorded site Elderslie GWS1 was accurately defined based on the results of the sub-surface investigations.	Exploration ED02

### 5.1.1 Aboriginal Archaeological Sites

A total of 108 Aboriginal archaeological sites are identified within the overall Camden Gas Project Area. Most of these sites have already been considered and managed as part of currently operating gas fields, and a significant number fall beyond areas of impact. These Aboriginal sites are not considered further in this ACHMP.

## 6.0 HERITAGE MANAGEMENT PRINCIPLES

Cultural heritage and archaeological site management often involves mitigation through the salvage of features or artefacts and retrieval of information through excavation or collection, and interpretation. There are three basic levels of management options available for the Aboriginal archaeological sites that will be impacted. In order of preference these are:

- Conservation through avoidance, and
- Preservation through ongoing management such as relocation;
- Destruction mitigated by salvage and interpretation

All management strategies have been formulated in consultation with the Tharawal LALC and Cubbitch Barta NTCAC.

From the outset AGL have attempted to avoid impacts to Aboriginal archaeological sites, where practicable, through changes at the project design stage to gas well locations or changes to the alignment of gas gathering lines and access tracks.

However, in some instances, avoiding or minimising impacts to archaeological sites is not possible, due to other land uses, such as the future development of roads and housing within the Spring Farm and Menangle Park areas. This means that some well surface locations, gas gathering lines and access tracks cannot deviate or be moved from their identified locations.

Site specific management options are provided below for Aboriginal archaeological sites located within the Spring Farm and Menangle Park Fields in Appendix.

### 6.1.1 General Recommendations

Avoidance of sites through design changes, such as relocation of well surface locations and alignment changes to gas gathering lines should be undertaken where sites can be avoided, and where there is no risk of impact to other cultural material from the infrastructure relocation.

Implementation of appropriate mitigation measures if required, including procedures for detailed site recording, collection of cultural material, excavation of cultural deposits, monitoring of initial ground disturbance works, relocation of cultural material and detailed documentation of sites prior to the commencement of any proposed impacts are described in Appendix 1. This work would be undertaken in conjunction with an archaeologist and the relevant Aboriginal stakeholder groups.

## 7.0 PROCESS REVIEW AND DOCUMENTATION

This ACHMP will be reviewed:

- In conjunction with the Environmental Management Plan;
- At anytime with the mutual agreement of the Tharawal LALC, Cubbitch Barta and AGL.

## REFERENCES

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## FIGURES

Figure 1: Camden Gas Project in a Regional Context

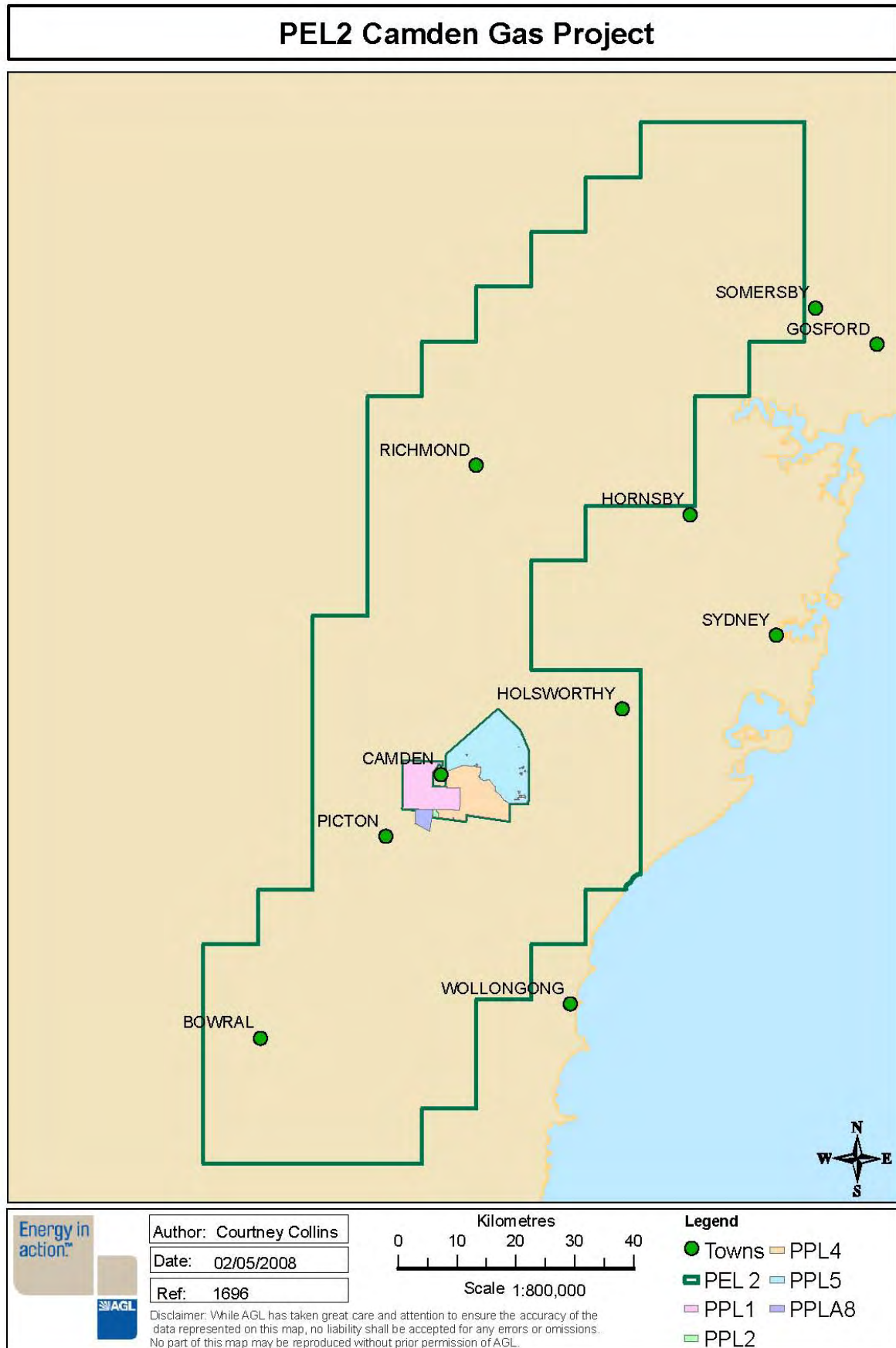


Figure 2: Location of Camden Gas Project Gas Fields

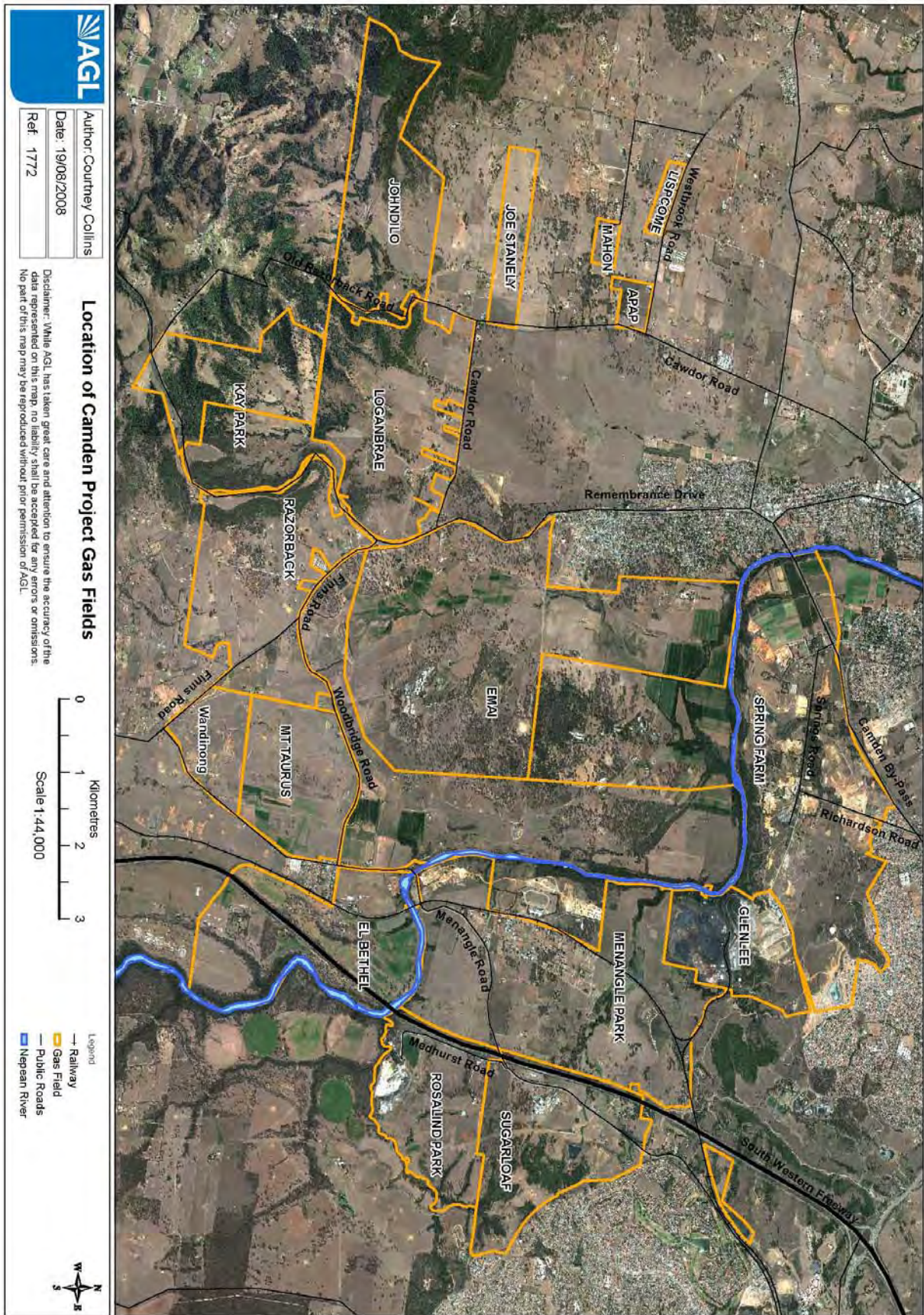
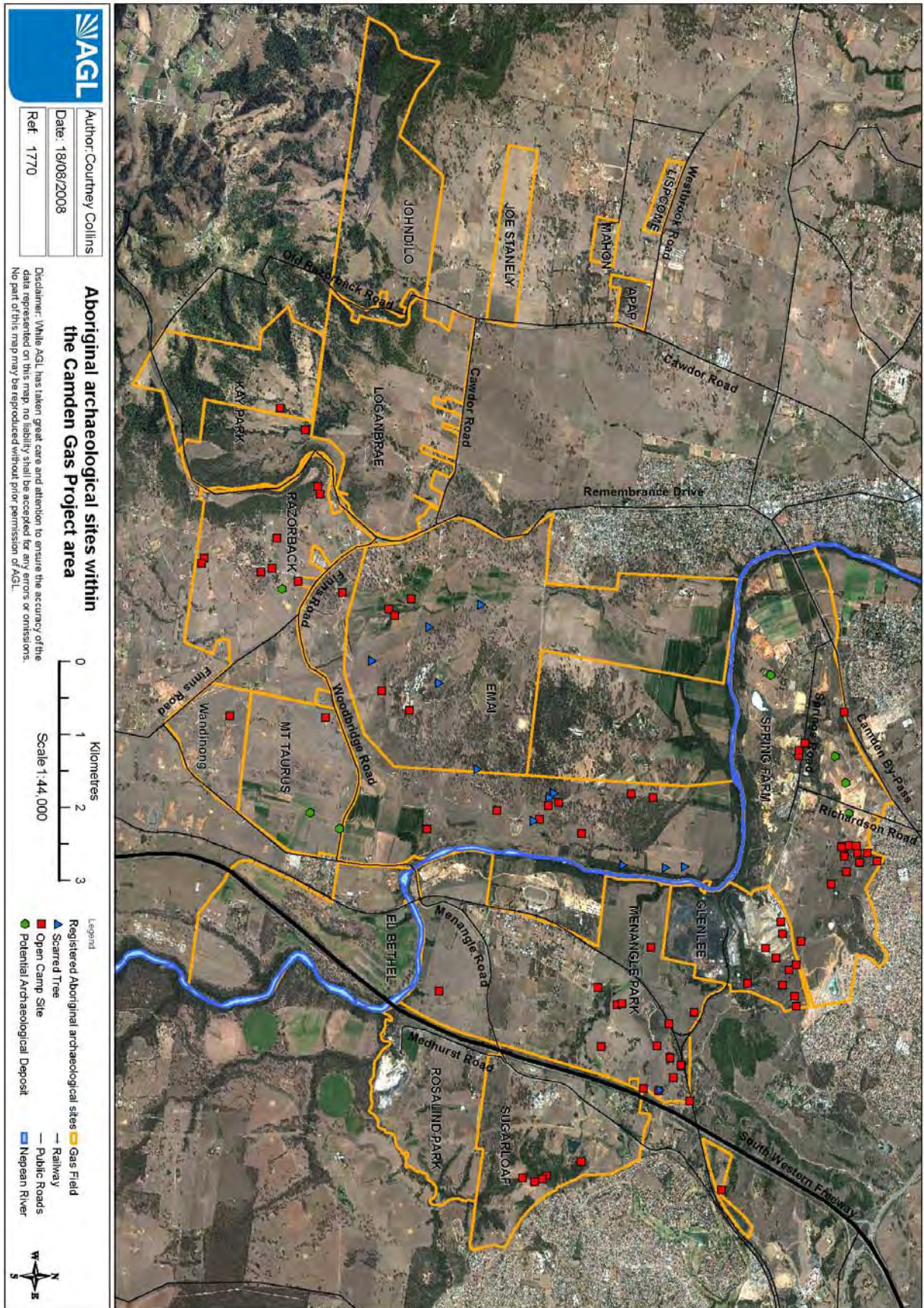


Figure 3: Registered Aboriginal archaeological sites within the Camden Gas Project Area



## APPENDICIES

## APPENDIX 1

### Typical Archaeological Methodology

## Archaeological Methods

The archaeological methodology proposed below has been devised in light of the landform attributes, the results of the archaeological survey, and other archaeological excavations that have been undertaken within the region. This has been undertaken in consultation with the relevant Aboriginal stakeholders. The methodologies described are not designed to be exhaustive or to limit changes, so that an alternative methodology can be agreed provided it is in consultation with the relevant Aboriginal stakeholders. The methodologies will be determined on a site by site basis.

### Collection and Relocation of Identified Aboriginal Objects

The objective of collection and relocation of Aboriginal objects is to avoid unmitigated impact to the objects and rather have controlled impact through: identification; recording of objects; relocation of objects; documentation of the relocation.

The Aboriginal Objects shall be collected using the following methodology:

- each site will be photographed, its location recorded using GPS and additional information recorded as appropriate;
- the Archaeologist and relevant Aboriginal stakeholders will collect the surface Aboriginal Objects from each site to be impacted;
- the collected Aboriginal Objects will be bagged and temporarily stored in a locked cabinet located at Biosis Research offices in Wollongong;
- upon completion of archaeological works under this ACHMP, the Archaeologist will analyse (see methodology outlined below) the Aboriginal Objects as part of the requirements for this ACHMP;
- following completion of the reporting requirements, collected Aboriginal Objects will be relocated adjacent to their former location on-site. If this cannot be achieved, an alternative for all collected cultural material must be agreed upon by the identified Aboriginal Stakeholder Groups, such as a common 'keeping place'.

### Excavation of Sites and Potential Archaeological Deposits

The objective of archaeological excavation is to: accurately determine site contents and values prior to impact; and mitigate impact through the retrieval, salvage and recording of artefacts.

Archaeological testing through the excavation of archaeological sites and areas of Potential Archaeological Deposit (PAD) should be limited to the areas that will experience sub-surface impacts associated with construction works where appropriate in line with archaeological conservation principles. Site specific conditions will be considered and if required changes will be made to the standard methodology by agreement between the Tharawal LALC, Cubbitch Barta NTCAC and AGL. The excavation of these archaeological sites and PADs will involve two methods. These are outlined below:

### **Shovel Probe Holes**

This technique will be employed to determine the presence of Aboriginal Objects and to identify the nature of the underlying soil stratigraphy. The shovel probe holes will be completed along agreed, predetermined transects running in line with the proposed gas gathering lines and access tracks. Each probe hole is approximately 25 cm x 25 cm in size, and will be up to 40 cm deep, depending on the depths of the underlying deposits. Probe holes will be dug at regular intervals suitable for specific site conditions.

### **Test Pits**

The controlled excavation of test pits will be completed to determine the presence, extent and character of Aboriginal Objects. It will involve the excavation of 1 m x 1 m test squares in a grid pattern across the identified areas of interest.

### **Excavation Methods**

The following excavation methods will be used for both probe holes and test pits:

- Each probe hole / test pit will be excavated using a long handle shovel, spades and trowels following the identified stratigraphy.
- The soil from each stratigraphic layer will be dry sieved in nested 10 mm and 5 mm sieves and all artefacts collected, bagged and clearly labelled.
- For each probe hole / test pit that is excavated, the following documentation will be made:
  - Unique probe hole / test pit identification number;
  - Soil colour and texture;
  - Amount and location of artefacts within deposit;
  - Nature of disturbance if present;
  - Stratigraphy;
  - Archaeological features (if present);
  - Photographic records; and
  - Spit records.

For safety reasons all probe holes / test pits will be backfilled with sieved spoil at the end of the excavation to ensure a level surface within the study area.

If artefact density exceeds 10 artefacts in a single probe hole / test pit, or if distinct archaeological features are present, adjacent probe holes / test pits will be placed to better determine and define artefact density and extent of occurrence.

#### On-site Monitoring at the commencement of ground disturbance works

The purpose of on-site monitoring is to implement a mitigation strategy in cases where archaeological excavation is not warranted but there is agreement between the Tharawal LALC, Cubbitch Barta NTCAC and AGL that a residual risk of artefacts being present remains. The mitigation of the monitoring would be the salvage, retrieval, recording and relocation of artefacts, rather than the unmitigated impact of the artefacts.

The on-site monitoring for the presence of artefacts would be conducted by a representative from the Aboriginal Groups and an archaeologist. The standard monitoring method would involve the removal of controlled depth and area scrapes of top-soil, and the inspection of the resultant exposed areas and spoil. The monitoring would take place only during the top-soil removal phase of construction, and would circumvent the *procedure for previously undiscovered Aboriginal Objects*.

If artefacts are identified during monitoring then these will be recorded, collected and relocated as agreed. The use of this methodology requires agreement on the objectives for the monitoring on a case by case basis depending on the residual archaeological potential, level of previous disturbance, nature of construction and other issues relevant to the site. In all cases the monitoring will be designed to fit with the relevant operational and construction requirements of the site.

#### Procedure for previously undiscovered Aboriginal Objects

If in the course of construction of Gas Gathering Lines, Access Tracks or Well Surface Locations an Aboriginal Object is discovered, the following will occur:

- all works within the immediate vicinity should cease until the Aboriginal Object(s) can be assessed and recorded by a qualified archaeologist;
- the extent and significance of the Aboriginal Object(s) will be determined;
- the Aboriginal Object(s) will be recorded and collected, and later relocated to an appropriate location at the completion of works (refer to **Collection and Relocation of identified Aboriginal Object** above). Immediately after collection, construction may then continue;

Should any of these Aboriginal Object(s) be deemed culturally significant, then further investigation with a qualified archaeologist should be undertaken to determine the need for further archaeological investigation. If the Aboriginal Object(s) are not regarded to be significant, these will be collected for analysis, and relocation.

## Discovery of Human Remains

If during the course of construction works Human Remains are uncovered, the following procedure should be followed:

- inform AGL of the find and cease all works within the vicinity of the remains. Do not further disturb or remove any of the remains.
- inform the Local Police and DECC.
- if the remains are determined to be Aboriginal then the Aboriginal stakeholders, following DECC advice should be informed of their discovery. The handling of the remains will be dealt with following the development of a management strategy in which the Aboriginal stakeholder groups will be involved.
- depending on the nature of the remains, the area may require total conservation, altering the proposed works or the Aboriginal stakeholders may deem it necessary to remove the burial from this site and repatriate the remains.

## Analysis of Aboriginal Objects

Any artefacts recovered from the procedures described above will be collected and analysed. The analysis will be designed to describe stone tool technology and typology. A comparison of findings with other archaeological findings in the area will be undertaken if assemblages are appropriate for this task. Dependent on assemblage size the analysis will also attempt to expand and refine regional descriptions and predictive modelling. This will also naturally allow the analysis to provide information on the types of activities undertaken in the past within the study area. The analysis will include details of stone type, manufacturing techniques and varieties of tool types. As there has previously been only limited archaeological work in the region, this will enable a baseline reference for comparison against future excavations in the region.

Consultation with Aboriginal groups is currently being undertaken to determine an appropriate Care Agreement for relocation or storage of any artefacts recovered after the completion of the works.

## Interpretive Signage

Where appropriate, interpretive signage may be placed at some operational infrastructure locations to identify and acknowledge the significance and cultural values of a site to the local Aboriginal people. The interpretive signage may include information about Aboriginal plant uses, prehistory, land use, stone tool manufacture and use. All interpretive signage would be developed in consultation with Aboriginal stakeholder groups. Any information used on the interpretive signage must have prior permission from the Aboriginal stakeholders.

## APPENDIX 2

### Aboriginal Community Comments

Cubbitch Barta Native Title Claimants  
Aboriginal Corporation.  
55 Nightingale Road.  
PHEASANST NEST. N.S.W. 2574.  
23rd August, 2008.

Biois Research Pty Ltd.  
8 Tate Street,  
WOLLONGONG. N.S.W. 2500.

Dear Melanie,

RE; CAMDEN GAS PROJECT.

Thank you for the opportunity of commenting on the Draft Aboriginal Cultural Heritage Management Plan, following from the meeting held on the 7th August, 2008 at the Menangle Park office.

There are still a few issues in regards to the ACHMP, and they are as follows;

A. MPO2 The Plan states to avoid the site and a revised location and/or location to be found. I am in agreeance to the recommendation, however wish to note that at this date, there has been no alternate site found within the assessed area.

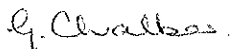
B. SF10, the plan is to avoid all sites in the eastern portion, however I am still concerned that this may not be possible, due to the location and close proximity of several other sites that have not been located on the provided maps. These sites are within the Gundungurra Reserve and I feel that we need to revisit this particular site also for confirmation of the location of the proposed gas well.

C. MP11 to MP19, the area should be fenced off to avoid any accidental damage to the sites, and should be placed with the assistance of members of CBNTCAC & TLALC.

D. SF17 to SF20, there is no mention in this Plan about an alternative that was proposed in the meeting. The alternative was to bore under this site in order to avoid it, what is stated now in the Plan may not be applicable. The preferred option is the alternative of boring under which was offered in the meeting of 7th August, 2008

I am in agreeance of all the other recommendations in the Plan, but cannot emphasise enough the importance of strictly sticking to the recommendations, particularly from MP11 to MP19 and SF17. At all times a member of Cubbitch Barta and Tharawal should be present

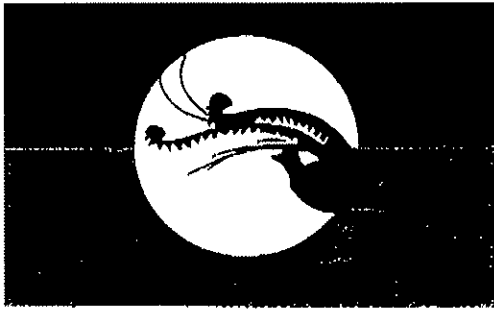
Yours faithfully,



Glenda Chalker

Hon. Chairperson

Phone/ Fax 02 46841129 Mobile 0427218425



# **THARAWAL LOCAL ABORIGINAL LAND COUNCIL**

Biosis Research  
Att: Melanie Thompson

## **RE: Camden Gas Project**

Dear Mel,

Although I wasn't at the meeting dated 7<sup>th</sup> August 08 as I had prior work commitments, Cliff Foley was in attendance on behalf of TLALC. And I would like to thank both Biosis and AGL for the chance to comment on the Draft report for the Management Plan.

There still needs to be an alternate site found for MPO2. SF10 needs further queries as still unsure of gas well proximity to sites.

MP11 through to MP19 completely fenced to avoid future damage to sites and artefacts. With TLALC and CBNTCAC cult heritage reps in attendance for guidance.

SF17 – SF20. In the meeting there was a recommendation made of boring water under this site to avoid impact.??? What is the outcome. I am happy to recommend all of your other recommendations. And we would like to encourage this positive partnership between Biosis, AGL, CBNTCAC and Tharawal. And would recommend a representative of both CBNTCAC and TLALC to be present on all future work.

Yours in Indigenous Unity

Donna Whillock

**P.O. BOX 20, BUXTON NSW 2571  
220 WEST PARADE COURIDJAH NSW 2571  
TELEPHONE: (02) 4681 0059 • (02) 4681 0799 • FAX: (02) 4683 1375  
tharawal@ideal.net.au**

## Appendix 3

## Spring Farm and Menangle Park

## Management and Mitigation Measures

There are 24 Aboriginal archaeological sites currently identified within the Spring Farm and Menangle Park Project areas that will require some level of management. The following recommendations and mitigation measures are based on the findings of previous archaeological assessments, the assessment of impacts from proposed works associated with well surface locations, gas gathering lines (GGL) and access tracks and through consultation with the relevant Aboriginal groups (see Table 3 below).

**Table 3:** Summary of recommendations and mitigation measures for Aboriginal archaeological sites within the Spring Farm and Menangle Park gas fields.

Well / GGL / Access	Heritage Site / No.	Management Recommendations and Mitigation Measures
<b>Menangle Park</b>		
MP02	52-2-2277 M8	<ul style="list-style-type: none"> <li>▪ AGL is to avoid this site and a revised location and/or alternatives for the MP02 surface location within the assessed area are to be determined in consultation with the Aboriginal Groups</li> </ul>
Access to MP02 from Gilchrist Drive	No Sites	<ul style="list-style-type: none"> <li>▪ No issues or recommendations for this access</li> </ul>
GGL and Access MP02 to MP03	M6 M7	<ul style="list-style-type: none"> <li>▪ The cultural material associated with the site should be collected and relocated prior to the commencement of construction works and works should remain on existing, previously disturbed tracks</li> </ul>
	M5	<ul style="list-style-type: none"> <li>▪ AGL will avoid the site by flagging and/ or fencing for identification prior to development</li> </ul>
MP03	No Sites	<ul style="list-style-type: none"> <li>▪ No issues or recommendations for this well surface location</li> </ul>
GGL MP03 to MP04	No Sites	<ul style="list-style-type: none"> <li>▪ No issues or recommendations for any of the options for this section of gas gathering line</li> </ul>
GGL MP04 to MP05	IF 1 and 2	<ul style="list-style-type: none"> <li>▪ Avoid the site by flagging and/ or fencing for identification prior to development</li> <li>▪ Consultation with the landowner is required given unknown landowner actions</li> </ul>
Access to MP04 from Glenlee Road	52-2-2274	<ul style="list-style-type: none"> <li>▪ Avoid the site by flagging and/ or fencing for identification prior to proposed development</li> <li>▪ The proposed works should remain on existing, previously disturbed tracks</li> <li>▪ Consultation with the landowner is required</li> </ul>
	52-2-2281	<ul style="list-style-type: none"> <li>▪ Avoid the site by flagging and/ or fencing for identification prior to proposed development</li> <li>▪ Vehicle access should remain on existing, previously disturbed tracks</li> </ul>
MP06 GGL and Access from MP05 and MP06	MPRP 1	<ul style="list-style-type: none"> <li>▪ Unlikely to be impacted by the MP06 well surface location</li> <li>▪ GGL works should remain on the existing track</li> <li>▪ Avoid the site by flagging and/ or fencing for identification prior to development</li> </ul>
GGL and Access	MPRP 11	<ul style="list-style-type: none"> <li>▪ Avoid the sites by flagging for identification prior to development AND</li> </ul>

from MP11 to MP19	M2	<ul style="list-style-type: none"> <li>Move the GGL AND access track to the north beyond the break of slope within the surveyed 25 m corridor</li> <li>Avoid the sites by flagging for identification prior to development</li> </ul>
	M3	
	M4	
GGL and Access from Menangle Road between MP02, MP03, MP05 and MP19	No Sites	<ul style="list-style-type: none"> <li>No issues or recommendations for these sections of gas gathering line or associated access tracks</li> </ul>
GGL and Access from Cummins Road between MP19, MP21, MP22 and MP23	No Sites	<ul style="list-style-type: none"> <li>No issues or recommendations for these sections of gas gathering line or associated access tracks</li> </ul>
GGL and Access to MP24	No Sites	<ul style="list-style-type: none"> <li>No issues or recommendations for this well surface location, GGL or access</li> </ul>
GGL and Access to MP33	52-2-4597	<ul style="list-style-type: none"> <li>Avoid the sites by flagging for identification prior to development</li> </ul>
MP04, MP05, MP11, MP19, MP21, MP22, MP23, MP24 and MP33	No Sites	<ul style="list-style-type: none"> <li>No issues or recommendations for these well surface locations</li> </ul>
<b>Spring Farm</b>		
SF10	S1	<ul style="list-style-type: none"> <li>Avoid all sites within 200m of SF10 by flagging and/ or fencing each site for identification prior to development.</li> <li>This should be undertaken in consultation with the Aboriginal groups.</li> </ul>
	S2	
	S3	
	S4	
	S5	
	S6	
	S7	
	52-2-3256	
	52-2-3257	
	52-2-3258	
	52-2-3260	
52-2-3262		
GGL and access track from SF10 to SF20	S7	<ul style="list-style-type: none"> <li>Unlikely to be impacted by the gas gathering line and access track</li> <li>Avoid the site by flagging and/ or fencing each site for identification prior to development</li> </ul>
SF20	S2	<ul style="list-style-type: none"> <li>Unlikely to be impacted by the SF20 well surface location</li> <li>Flag and/ or fence sites in the vicinity for identification prior to development – these sites will be dealt with in the SF10 recommendations.</li> </ul>
	S4	
	S5	
	S6	
	S7	
	S8	

	52-2-3238	
	52-2-3260	
GGL and access from SF17 to SF20	S8	<ul style="list-style-type: none"> <li>▪ Avoid the sites by flagging and/ or fencing for identification prior to GGL construction</li> <li>▪ The cultural material associated with the site should be collected and relocated prior to the commencement of construction works</li> <li>▪ At the commencement of ground disturbance works, the Aboriginal stakeholder groups will be give the opportunity to inspect the ground surface for any Aboriginal additional Aboriginal cultural material</li> <li>▪ All works should remain on existing, previously disturbed tracks</li> <li>▪ Remove direct access road (east-west) between SF20 and SF17</li> </ul>
	S9	
	S10	
SF17	No Sites	<ul style="list-style-type: none"> <li>▪ During the first day of construction of the well surface location, the area should be carefully stripped of all topsoil. The topsoil should be stockpiled to the side and replaced back across the site at the completion of the works</li> <li>▪ The Aboriginal stakeholders groups should be given the opportunity on the first day of construction to inspect the stripped area, to determine the presence of any cultural material on this ridge</li> <li>▪ Any recovered cultural material will be recorded in detail by a qualified archaeologist and collected until the completion of works – the material will then be relocated on site at the time of topsoil spreading</li> <li>▪ Interpretative signage will be placed at the site to recognize the cultural values of this place to Aboriginal people. This will be developed in consultation with the Aboriginal stakeholder groups.</li> </ul>
GGL and access from SF17 to existing GL02/12	S11	<ul style="list-style-type: none"> <li>▪ Unlikely to be impacted by the gas gathering line and access track</li> <li>▪ Avoid the sites by flagging and/ or fencing for identification prior to development</li> </ul>
Access track to SF20 and SF17 from Jacks Gully Management Facility Road	52-2-3238	<ul style="list-style-type: none"> <li>▪ Avoid the sites where possible by flagging and/ or fencing for identification prior to development</li> </ul>
	S12	
	S13	
SF04 and SF04A GGL from existing GL06 to SF04 and SF04A Access from Springs Road	No Sites	<ul style="list-style-type: none"> <li>▪ No issues or recommendations for these well surface locations</li> </ul>

Figure 4a: Overview of Spring Farm Gas Well Locations, Gas Gathering Lines and Access Tracks

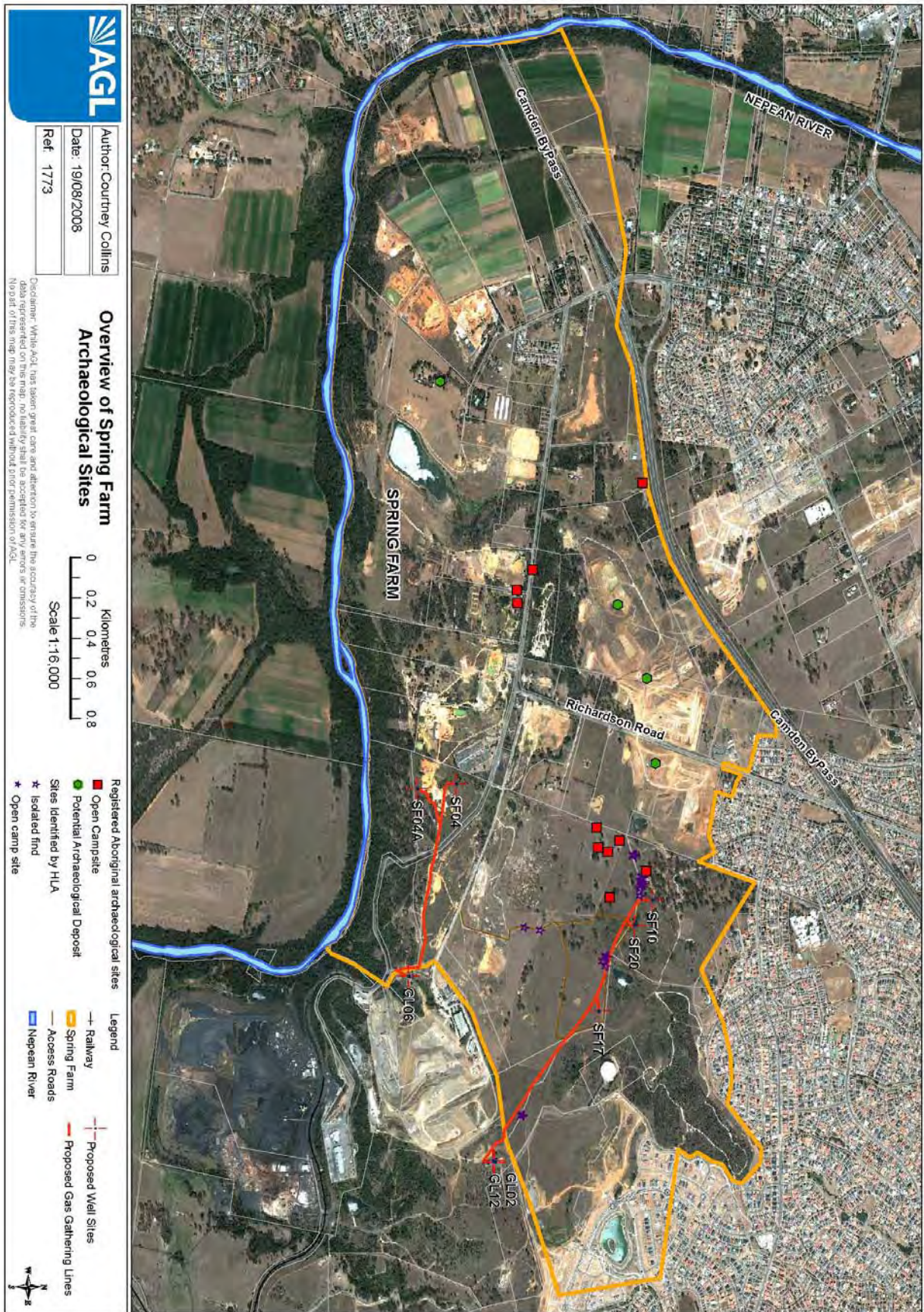


Figure 4b: Close view Spring Farm Gas Well Locations, Gas Gathering Lines and Access Tracks

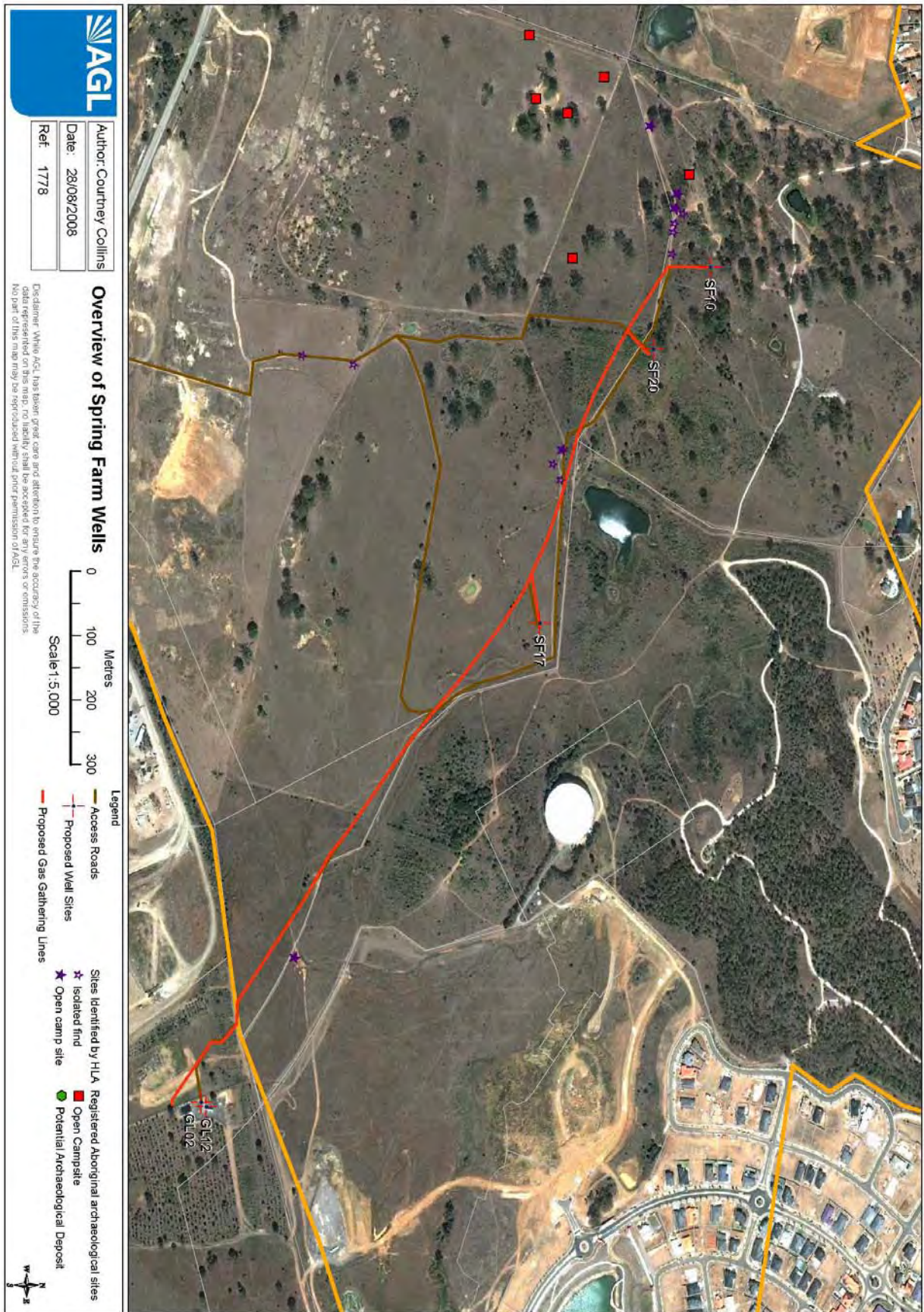


Figure 5: Overview of Menangle Park Gas Well Locations, Gas Gathering Lines and Access Tracks

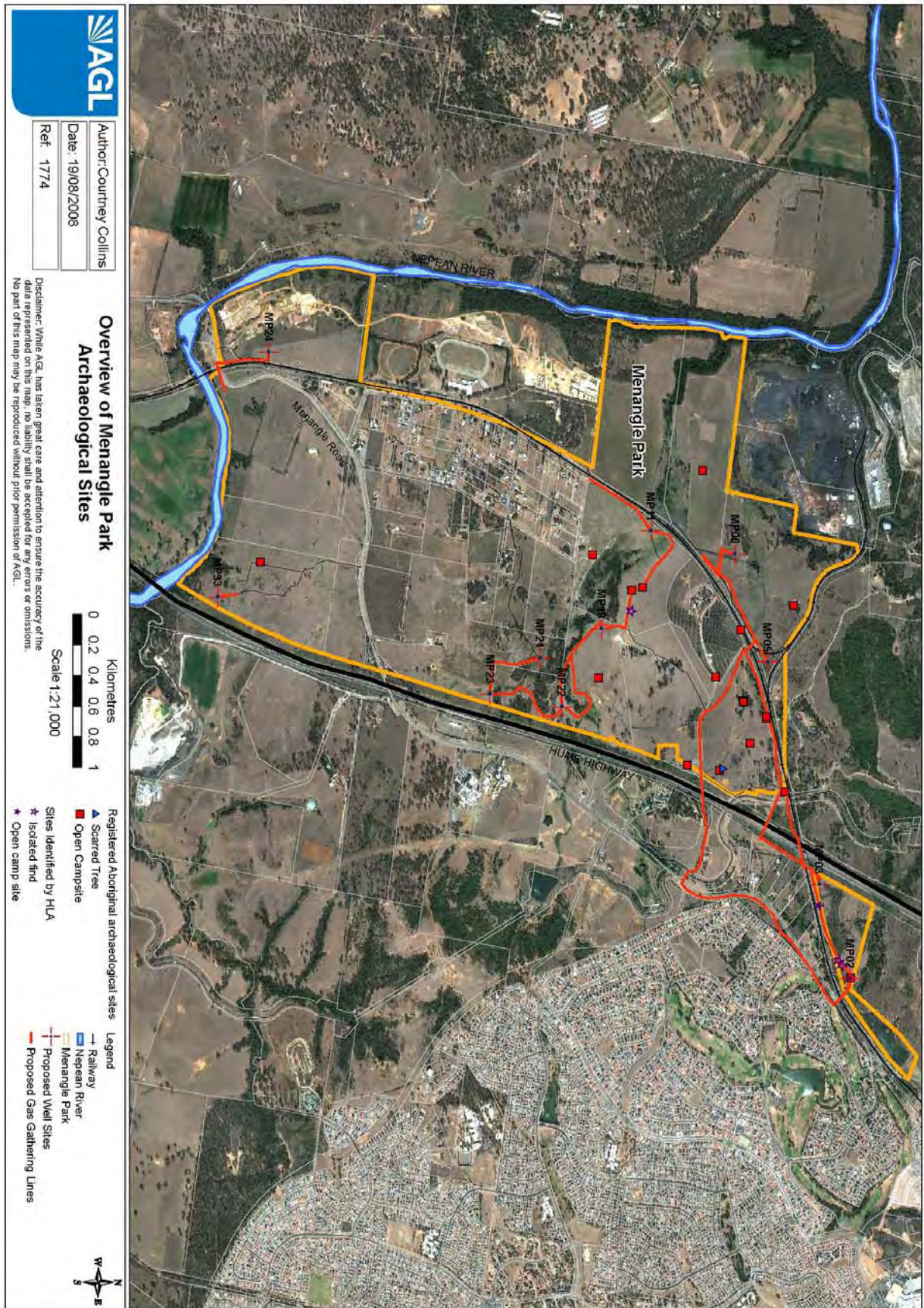


Figure 5a: Close view of Menangle Park Gas Well Locations, Gas Gathering Lines and Access Tracks



Figure 5b: Close view of Menangle Park Gas Well Locations, Gas Gathering Lines and Access Tracks

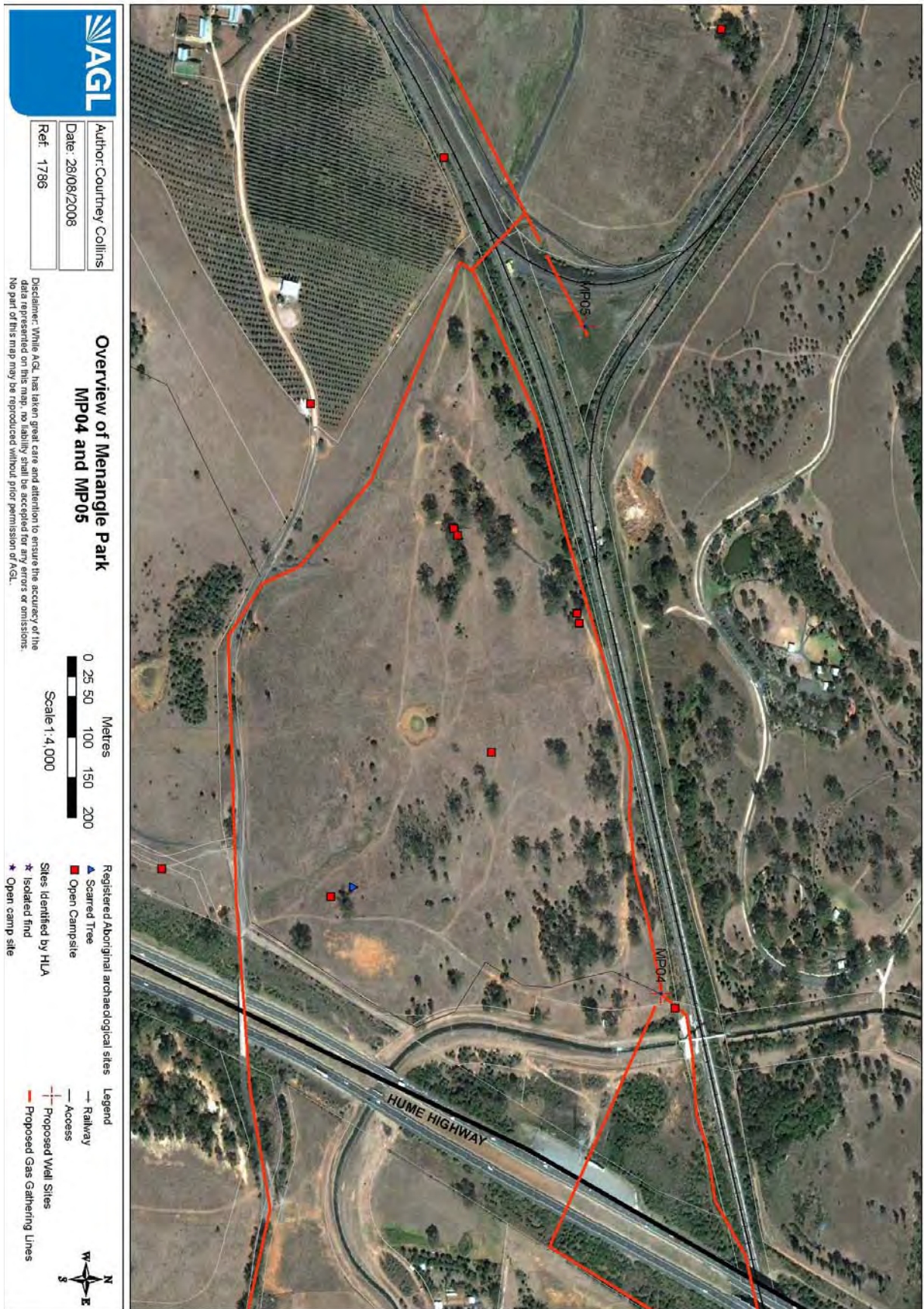


Figure 5c: Close view of Menangle Park Gas Well Locations, Gas Gathering Lines and Access Tracks

