



# Appendix D

## Aboriginal Cultural Heritage Assessment



D

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Re: Minor pipeline corridor realignments – Aboriginal cultural heritage assessment

Dear Toni,

## 1 Introduction

### 1.1 Background

AGL Upstream Infrastructure Investments Pty Limited (AGL) has Commonwealth and State government approval to construct and operate the Gloucester Gas Project (GGP) in the Hunter region of NSW. One component of the GGP is an approximately 95 to 100 km long high pressure gas transmission pipeline from a central processing facility at Stratford to a gas delivery station at Hexham. The approved GGP is described and assessed in detail in the AECOM (2009a) *Gloucester Gas Project Environmental Assessment*, inclusive of a comprehensive Aboriginal cultural heritage assessment (ACHA) also prepared by AECOM (2009b).

AGL proposes to realign four sections of its proposed pipeline corridor and connect it into its Newcastle Gas Storage Facility (NGSF) at Tomago, rather than the Hexham Delivery Station (HDS). End of pipeline facilities are proposed within a compound at the NSGF connection point, referred to as the Tomago Receiving Station (TRS). The proposed TRS facilities are similar to those previously assessed and approved for the HDS. The minor realignments are to further minimise vegetation clearing and other environmental impacts, avoid recently-constructed utilities, achieve economic and efficiency benefits, and allow the connection to the NSGF.

EMGA Mitchell McLennan Pty Limited (EMM) has been engaged by AGL to prepare an Environmental Assessment (EA) of the proposed modification, including an ACHA. This assessment has been completed with consideration to the relevant Director-General's requirements (DGRs) previously issued for the GGP and in accordance with relevant NSW Office of Environment and Heritage (OEH) guidelines including the *Aboriginal Cultural Heritage: Standards & Guidelines Kit* (NPWS 1997) and the *Burra Charter* (Australia ICOMOS 1999). This report documents the assessment methodology and results, including comparison with results of the original AECOM (2009b) ACHA of the approved pipeline corridor alignment and HDS. It also identifies mitigation and management measures, including referencing commitments from the original AECOM (2009a) EA and approval conditions, which will also be applied to the modified elements where relevant.

## 1.2 Overview of the proposed modification

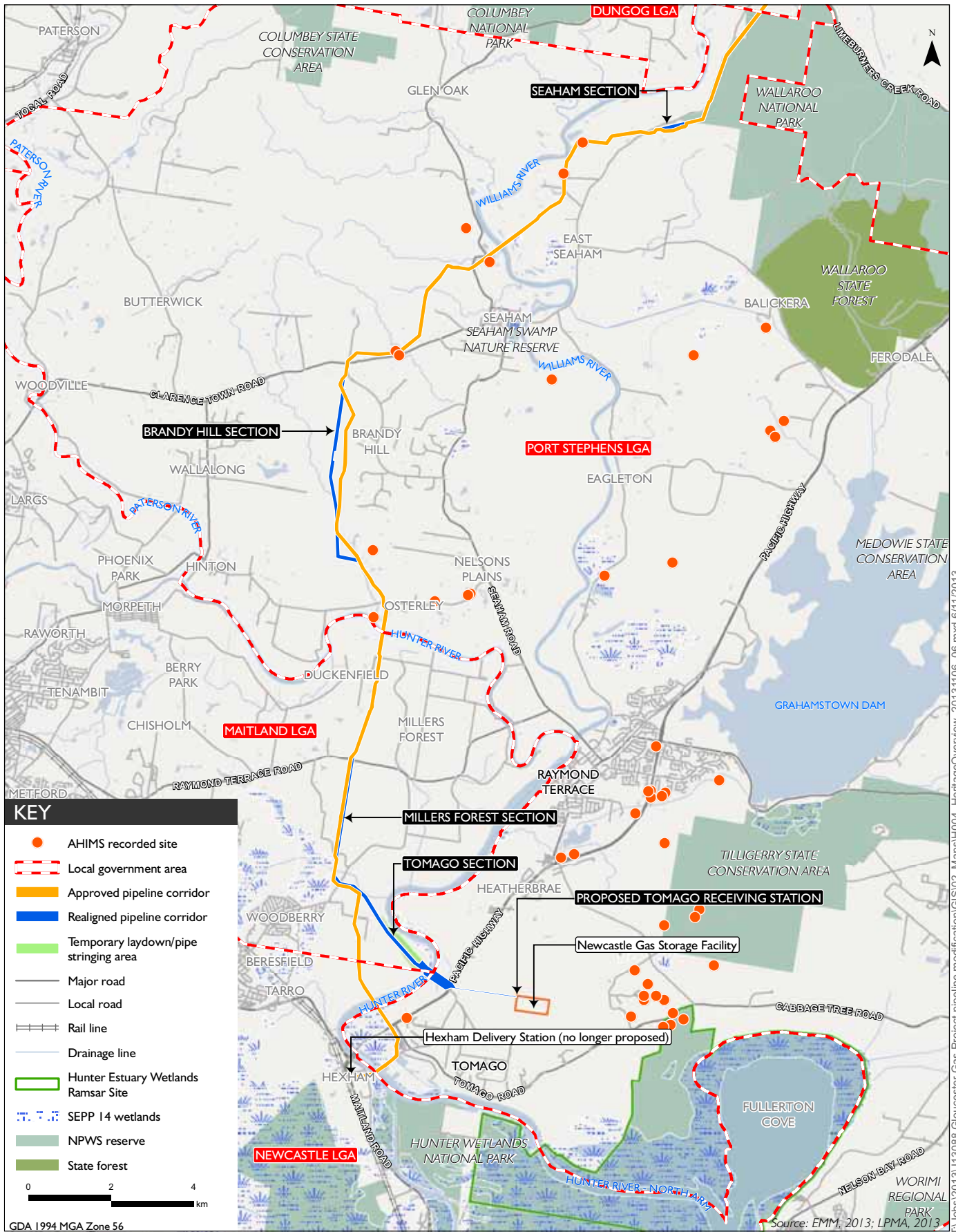
The proposed modification is for four minor pipeline corridor realignments and connection to the NGSF via the TRS. Figures 1 to 4 show the approved and proposed modified pipeline corridor alignments. The realigned sections are referred to as the Seaham, Brandy Hill, Millers Forest and Tomago sections as follows:

- Seaham section (Figures 1 and 2) – an approximately 0.65 kilometre (km) long section of pipeline corridor at East Seaham, proposed to be straightened and realigned up to 100 m north, to be mostly within cleared areas within and adjacent to a TransGrid transmission line easement.
- Brandy Hill section (Figures 1 and 3) – an approximately 5 km long section of pipeline corridor near Brandy Hill, proposed to be straightened and realigned generally up to 335 m west.
- Millers Forest section (Figure 1) – an approximately 2.5 km long section of pipeline corridor at Millers Forest, proposed to be realigned around 50 m east, to avoid the recently-constructed TransGrid electricity transmission line.
- Tomago section (Figures 1 and 4) – an approximately 6.5 km long section of the pipeline corridor's southern end, proposed to be realigned to connect with the NGSF at Tomago (rather than the HDS). The proposed realignment avoids a wetland area, reduces disturbance to acid sulphate soils and only involves one crossing of the Hunter River (rather than the two crossings approved). Consistent with the approved pipeline, the river crossing is proposed to be by horizontal directional drilling (HDD).

The realigned sections of pipeline corridor generally traverse rural and semi-rural landscapes that have been highly disturbed by clearing and agricultural activities and construction of access tracks, utilities and other infrastructure. Consistent with the approved project, it includes road, waterway and drainage line crossings. There are rural and semi-rural residences in the surrounding area however the realigned sections of pipeline corridor are further from most of the residences than the approved route. The pipeline culminates at the proposed TRS, at the NGSF, which is within an existing industrial area (Figure 4).

The proposed pipeline and TRS construction and operating activities are unchanged from those described in the AECOM (2009a) EA for the original (approved) pipeline route and the HDS. In summary, the pipeline will mostly be constructed by open trenching, though some sections will be by thrust boring or HDD. The Seaham section will include a main line valve (MLV) which will be the same as that approved and described in the AECOM (2009a) EA. While the AECOM (2009a) EA identified that an MLV would be required, anticipated to be approximately half way along the pipeline, and it was approved, further detail on its potential location was not available at that stage. The current preferred location has since been identified to be within the Seaham section, within the 100 m wide area assessed as part of this EA (Figure 2). It has been considered accordingly in this ACHA however the exact location and design will be confirmed during its detailed design.

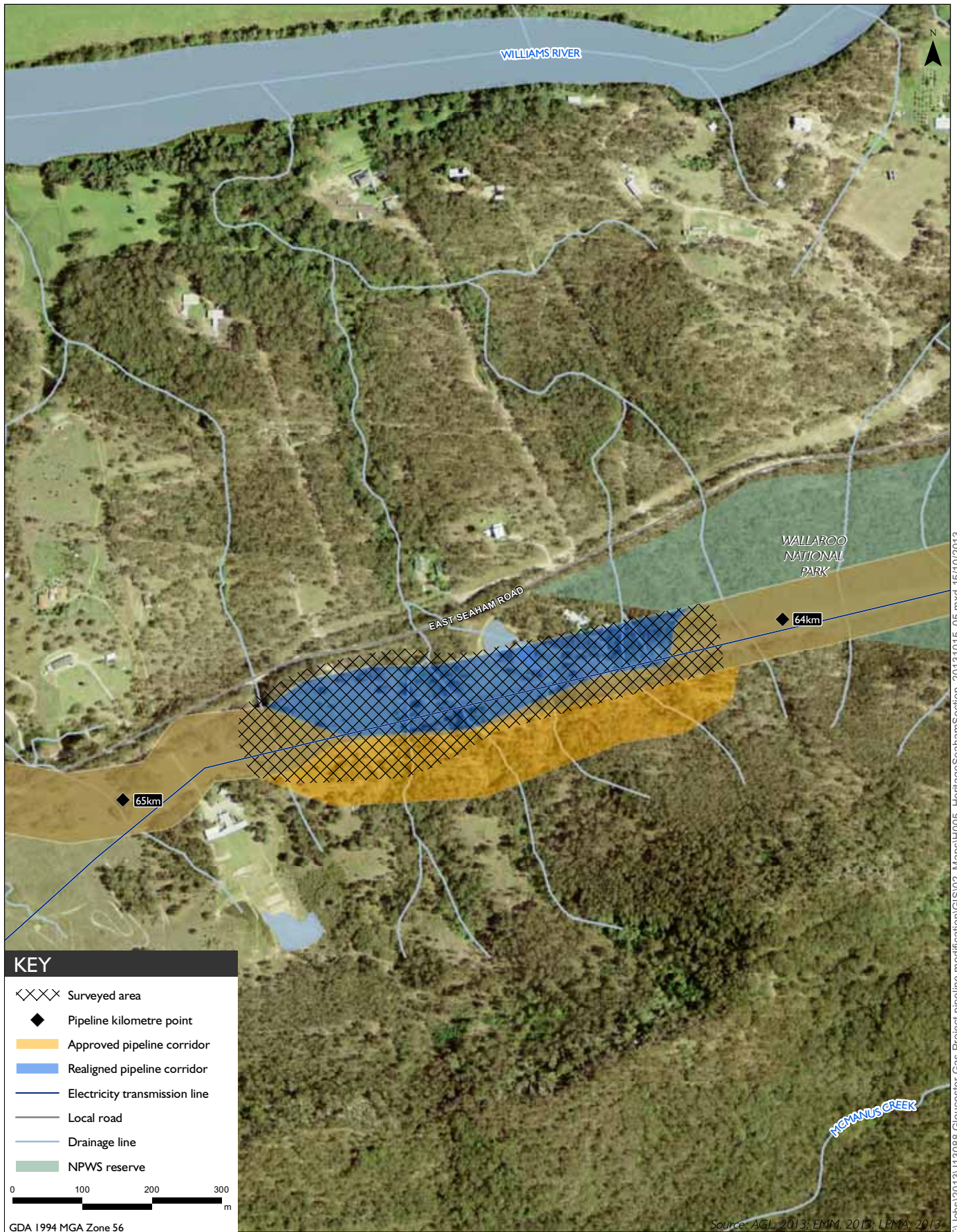
To allow flexibility in final siting and design of the pipeline, and consistent with the approach in the 2009 assessment for the approved project, this ACHA has generally considered a 100 m wide pipeline corridor. However, the disturbance footprint for pipeline construction will be within a right of way (ROW) up to around 30 m wide. It is noted that the HDD activities at the Hunter River and Pacific Highway will require a temporary laydown and pipe stringing area on disturbed farmland within and adjacent to the 100 m wide pipeline corridor at the Tomago section. No vegetation clearing is required within the laydown and pipe stringing area and ground disturbance will be minimal, likely to be limited to gravel access tracks. The anticipated maximum footprint for these activities is shown indicatively on Figure 4 and has been considered accordingly in this assessment. Disturbed areas will be rehabilitated consistent with the existing land use after construction, with ongoing maintenance activities limited to an approximately 10 m wide easement above the buried pipeline. Further details on the proposed modification are provided in the EA main report.



Locality plan showing the proposed modification  
 Minor pipeline corridor realignments EA - Aboriginal cultural heritage assessment

Figure 1



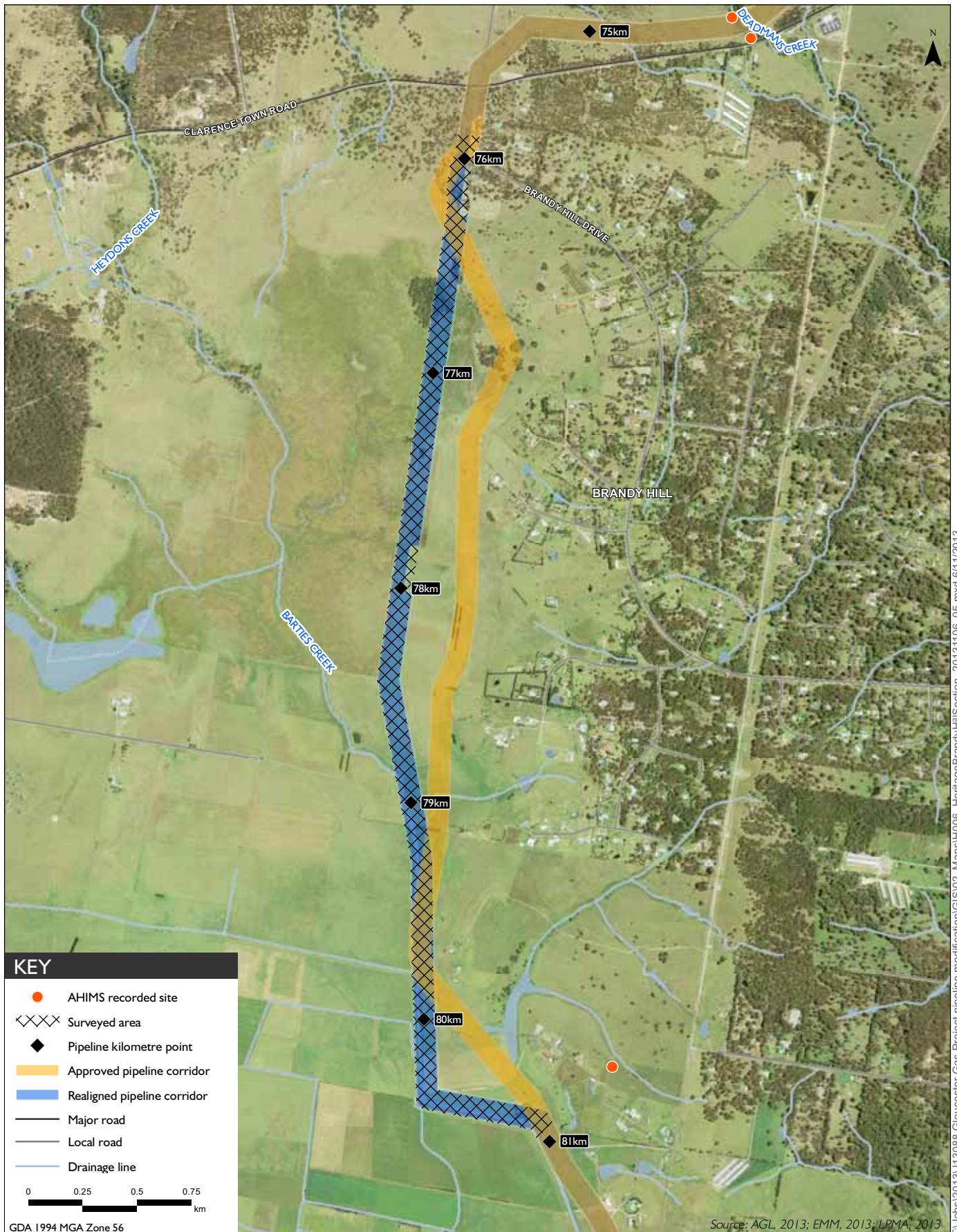


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Seaham section - AHIMS and survey locations  
 Minor pipeline corridor realignments EA - Aboriginal cultural heritage assessment

Figure 2

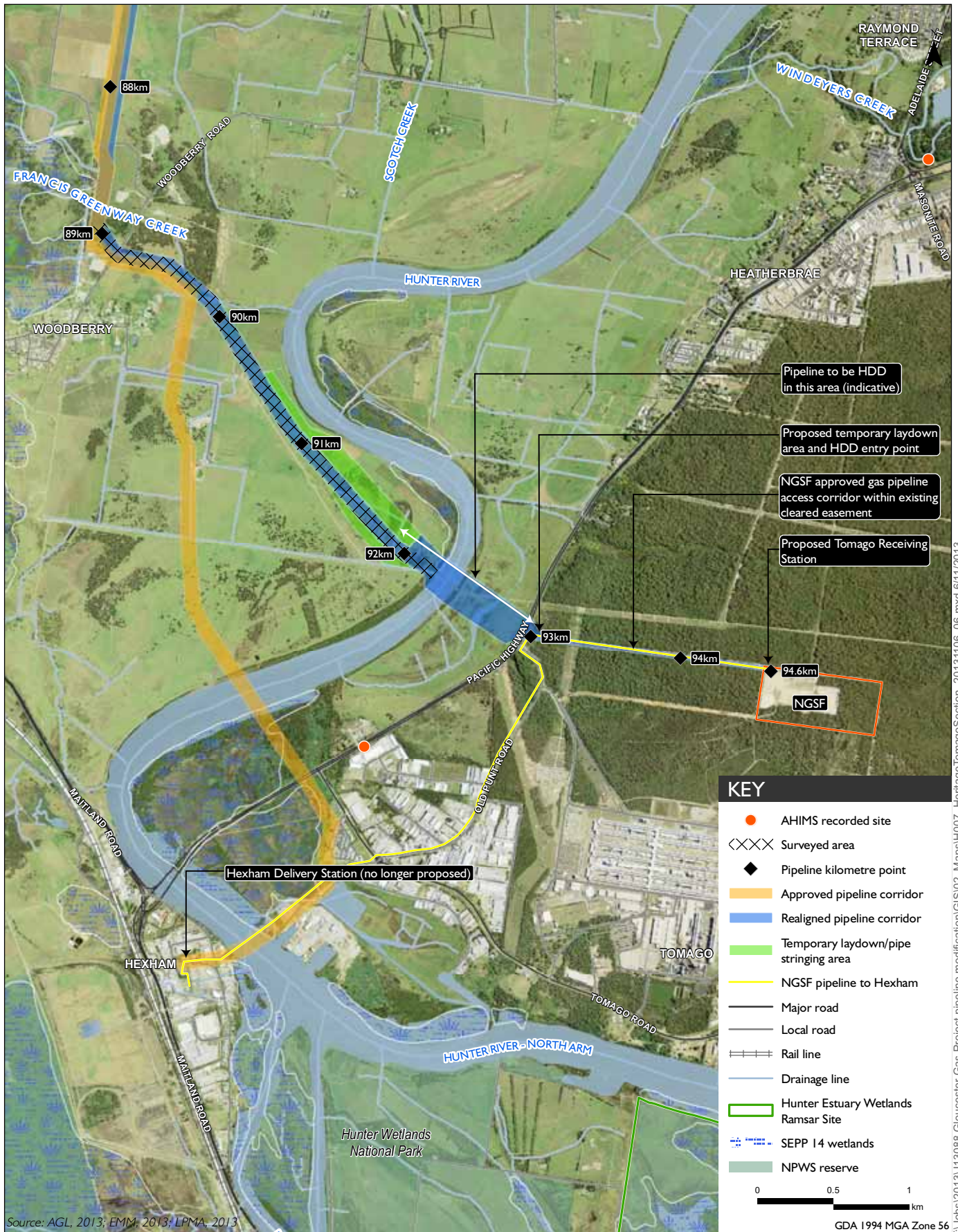


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**Brandy Hill section - AHIMS and survey locations**  
 Minor pipeline corridor realignments EA - Aboriginal cultural heritage assessment

Figure 3



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Tomago section - AHIMS and survey locations  
Minor pipeline corridor realignments EA - Aboriginal cultural heritage assessment

Figure 4



## 1.3 Methodology

The methods used to identify potential Aboriginal cultural heritage sites and/or values associated with the Seaham, Brandy Hill, Millers Forest and Tomago sections and the surrounding area comprised:

- reviewing the ACHA prepared by AECOM (2009b) as part of the original GGP EA;
- reviewing the Scarp Archaeology (2010) *Cultural Heritage Assessment and Test Pitting Program for a Proposed Transmission Line from Tomago to Stroud Road* prepared as part of the Review of Environmental Factors (REF) for this transmission line, and which covered the area of the Millers Forest section;
- reviewing landscape data and other previous Aboriginal heritage investigations in the local area;
- conducting an extensive search of the Aboriginal Heritage Information Management System (AHIMS) database to identify previously recorded Aboriginal sites near the modified pipeline corridor alignment; and
- archaeological survey of the Seaham, Brandy Hill and Tomago sections by EMM archaeologists in conjunction with Registered Aboriginal Parties (RAPs). It was not considered necessary to survey the Millers Forest section for the reasons outlined in Section 4.1.

## 2 Aboriginal consultation

### 2.1 Process

Detailed Aboriginal consultation occurred during the GGP ACHA completed in 2009. Consultation was based on the then Department of Environment and Conservation (DEC) (2004) *Interim Community Consultation Requirements for Applicants (ICCRs)* and the DEC (2005) *Draft Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation*.

Consistent with the 2009 ACHA of the GGP and the guidelines listed above, input from the RAPs was sought regarding the methodology of the field survey (prior to its commencement), participation in the field survey and during the review of the draft report. In addition, subsequent to issuing the draft report to the RAPs, the Millers Forest section was included in the proposed modification. A letter was sent to all the GGP RAPs, other than the Karuah Local Aboriginal Land Council who has declined to participate (refer Section 2.3). The letter provided notification of the proposed modification at Millers Forest and assessment approach for this section, and invited comments on this element of the proposed modification.

Following the submission of the EA to the DP&I for adequacy review all GGP RAPs (other than the Karuah Local Aboriginal Land Council (LALC), see Section 2.3) were sent a copy of the final report. Included in this correspondence was a letter providing an update on the submission of the EA for adequacy review, information on the additional laydown and pipe stringing area at Tomago and invited comments on this element of the proposed modification. Any further comments received on the report, including regarding the Tomago laydown area, will be addressed in the response to submissions report.

A record of consultation and correspondence with the RAPs for this ACHA for the proposed modification is provided in Appendix A.

### 2.2 Registered Aboriginal Parties

Seven Aboriginal groups registered for the GGP in 2009 as part of the original EA and project application process. All of these groups were contacted again and invited to participate in the field survey for the proposed modification. The RAPs for the GGP are shown in Table 1.

**Table 1 Registered Aboriginal Parties**

Organisation/party	Contact
Awabakal Descendants Traditional Owners Aboriginal Corporation	Shane Frost
Awabakal Local Aboriginal Land Council	Paul Morris
Awabakal Traditional Owners Aboriginal Corporation	Kerrie Brauer
Forster Local Aboriginal Land Council	Dan Rose
Karuah Local Aboriginal Land Council	Dave Feeney
Mindaribba Local Aboriginal Land Council	Tamara McDonald
Worimi Local Aboriginal Land Council	Andrew Smith and Jackie Henderson

## 2.3 Survey participation

When contacted, the Karuah LALC declined to participate further as the modified pipeline corridor alignments were outside its LALC boundaries. Representatives from the Awabakal Traditional Owners Aboriginal Corporation and Forster LALC did not attend the field survey but requested the opportunity to review and provide feedback on the draft ACHA report. The following representatives were present during the field survey:

- Peter Leven (Awabakal Descendants Traditional Owners Aboriginal Corporation) for the Tomago section only;
- Ricky-Jo Griffiths (Mindaribba LALC) for the Tomago section only;
- William Baker (Awabakal LALC); and
- Richard Kime (Worimi LALC).

The Awabakal Descendants Traditional Owners Aboriginal Corporation representative did not elect to survey the Seaham or Brandy Hill sections as these areas were outside of their traditional lands. Due to the difficult weather conditions on the day of survey, the Mindaribba LALC representative also elected to survey only the Tomago section.

## 2.4 Draft report review and feedback

The draft report was issued to all RAPs (other than the Karuah LALC who had declined to participate) and comment was sought, including on the proposed mitigation and management measures. Two of the RAPs provided written response to the draft report. Their responses are provided in Appendix A and summarised in Table 2 below. The other RAPs did not provide written comment on the draft report. However, a representative of the Worimi LALC contacted EMM by phone and noted objection to involvement of the Awabakal Descendants Traditional Owners Aboriginal Corporation and Awabakal Traditional Owners Aboriginal Corporation in the project.

**Table 2 Summary of matters raised on the draft report by RAPs and response to these matters**

RAP organisation and summary of comments	Addressed
<b>Awabakal Descendants Traditional Owners Aboriginal Corporation</b>	
Ground visibility during the surveys was minimal however cultural material may be present beneath vegetation or within the topsoil.	Assessment of potential archaeological deposit and a predictive model of site location was devised to address the issue of ground visibility (refer Section 3). The existing Project Approval conditions include response measures for if previously unidentified Aboriginal object(s) are encountered during works.

**Table 2 Summary of matters raised on the draft report by RAPs and response to these matters**

<b>RAP organisation and summary of comments</b>	<b>Addressed</b>
AHIMS searches do not give a true indication of what is present and all available information needs to be taken into account regarding potential Aboriginal sites.	A statement noting this issue with AHIMS has been included in Section 3.4 of this report.
All artefacts and cultural material are of great significance and importance as they provide a real and tangible link to the daily lives of Aboriginal ancestors. The Tomago section is close to the Hunter River and Hexham Swamp, which are known to be of great significance.	This information on cultural significance has been included in the significance assessment for the proposed modification in Section 5.
Requested that Aboriginal stakeholders be present to monitor excavations on the Hexham side of the Tomago section.	As required under the existing Project Approval conditions, the construction environmental management plan (CEMP) will include details of measures to monitor and manage Aboriginal heritage impacts, and will be developed in consultation with registered stakeholders. At this stage monitoring is not considered necessary within the Tomago section as it is considered to have low potential for Aboriginal objects or sites (refer Section 4.2.3).
<b>Awabakal Traditional Owners Aboriginal Corporation</b>	
The potential for Aboriginal artefacts to be present below vegetation and the topsoil subsurface needs to be taken into consideration.	Assessment of potential archaeological deposit and a predictive model of site location was devised to address this issue (refer Section 3). The existing Project Approval conditions include response measures for if previously unidentified Aboriginal object(s) are encountered during works.
The AHIMS is not a comprehensive list of all Aboriginal heritage in NSW and its use will have resulted in an incorrect predictive model.	A statement noting this issue with AHIMS has been included in Section 3.4 of this report.
Disagree with predictive modelling based on the 2009 predictive model as it does not take into consideration information from the last five years.	The 2009 predictive model was one information source used in the predictive modelling for this ACHA however it also takes into consideration other information, including other studies within the last five years (see Section 3.5).
Do not agree that 'the project area is unlikely to contain Aboriginal objects' as this statement is not based on empirical evidence nor mitigation ranking and mitigation, and therefore have no confidence that cultural and heritage values, landscape and features will be protected or conserved.	This statement has been noted. The conclusions in the report have been devised using a number of different types of evidence including previous reports, the information from AHIMS, predictive modelling, analysis of survey coverage and a survey. The development of the Aboriginal heritage management plan will cover management of both known and unknown Aboriginal heritage throughout the project.
Agree with the proposed development of a Aboriginal heritage management plan but believe it should cover the project area within the Awabakal and Guringai Registered Native Title Claimant area.	The Aboriginal heritage management plan for the GGP will cover all areas of the project. Information on native title lands will also be included where applicable.
Believe Condition 3.35 of the Project Approval needs further clarification as those involved in construction earthworks may not be able to identify Aboriginal objects.	As required under the existing Project Approval conditions, the CEMP will include Aboriginal cultural heritage induction processes for construction personnel, which will cover identification of Aboriginal objects.
Requested that Aboriginal representatives be present to monitor initial vegetation clearance.	As required under the existing Project Approval conditions, the CEMP will include details of measures to monitor and manage Aboriginal heritage impacts, and will be developed in consultation with registered stakeholders. At this stage monitoring is not considered necessary within the Seaham, Brandy Hill, Millers Forest or Tomago sections as they are considered to have low potential for Aboriginal objects or sites (refer Section 4).
The RPS (2001) archaeological investigation for the NGSF should be mentioned.	The report has been updated to include this information (refer Section 3.3).
The Awabakal people regard the Newcastle area as of high cultural significance as a part of the traditional Awabakal country. It is considered to be of great importance.	This information on cultural significance has been included in the significance assessment for the proposed modification in Section 5.

The Forster LALC and Awabakal Traditional Owners Aboriginal Corporation both provided email responses confirming that they had no comment on the proposed pipeline corridor realignment at Millers Forest, as it is outside of their cultural LALC boundaries.

## 3 Existing environment

### 3.1 Landscape context

Information on the landform in the study area provides valuable information on the expected spatial distribution and likelihood of archaeological material. Natural resources including the flora and fauna that may have provided food and material resources are linked to the hydrology, geology and soil types in a region. Given the minor changes proposed to the pipeline corridor alignment, the landscapes of the modified pipeline corridor alignment are generally consistent with those described by AECOM (2009b) for the approved alignment.

The entire approved pipeline route from Gloucester to Hexham traverses a number of major river valleys. From the north to south it includes the Avon River, Wards River, Karuah River, Williams River and Hunter River valleys. Numerous smaller order watercourses are also present. Consistent with the approved project, the modified pipeline corridor alignment includes some watercourse crossings. This includes the Hunter River, which is proposed to be crossed using HDD techniques, with no surface disturbance, including to its banks.

Geologically the area is part of the NSW North Coast region which principally consists of Devonian and Permian age bedrock. Generally the soils are sandy in areas of sedimentary and quartz rich geology and highly fertile loams occur over basalts. The main types of rock in the NSW North Coast region are slates, shales, quartzites, carboniferous mudstones, claystones and sandstone lithic to quartz (AHMS 2008 p.163). Common soil types include yellow podzolic, erosional and colluvial with alluvial plains. Topsoils range from loamy sand through to clay loam.

Land use in the area of the proposed modified pipeline corridor alignment includes cleared agricultural land, predominately grazing land, with scattered rural and semi-rural residences and utility and access track corridors. There are isolated pockets of regrowth and remnant vegetation in the Seaham, Brandy Hill and Tomago sections. There are also some relatively undisturbed areas of remnant vegetation in the surrounding areas, particularly on steeper slopes and along watercourses, including east and south of the Seaham section, in the Wallaroo National Park and AGL's biodiversity offset property for the GGP. The Millers Forest section is completely cleared, with no remnant vegetation. Land use becomes progressively more urbanised to the south, with the suburbs of Brandy Hill near the Brandy Hill section and Woodberry near the Millers Forest and Tomago sections. The proposed pipeline corridor culminates at the proposed TRS, which is within an industrial area. Further information on the land use in each of the proposed modified pipeline corridor alignments is provided in Section 4.

Further information on topography, hydrology and landforms is provided in Chapter 10 of the EA main report.

### 3.2 Ethno-historical context

This section summarises the main language groups of the entire approved pipeline route from Gloucester to Hexham, as detailed in the original ACHA for the GGP (AECOM 2009b p.8).

Prior to European settlement three Aboriginal language groups inhabited the area traversed by the approved pipeline corridor. In the far northern section, near Gloucester, the dominant language group was the Birpai (Tindale 1974). Their territory extended from the Manning River near Taree south to Cape Hawke (near Forster) on the coast, inland to the dividing ranges around Gloucester in the south-west and to the head of the Hastings River in the north-west (Tindale 1974). In the central portion of the approved pipeline corridor, and also covering the Seaham and Brandy Hill sections and part of the Tomago section, the dominant language group was the Worimi. The territory of the Worimi covered an area along the NSW coast extending from the Hunter River to Cape Hawke (near Forster), along the coast at Port Stephens, inland to near Gresford, Glendon Brook and Dungog, to the head of the Myall Creek and south to Maitland (Tindale 1974). In the southern section, around the end of the pipeline corridor, and including the Millers Forest section and part of the Tomago section, the dominant language group was the Awabakal. There is some difference of opinion on the boundary between the Worimi and Awabakal, however Tindale (1974) and Elkin (1932) reported it to coincide with the Hunter River.

The information available about the Birpai, Worimi and Awabakal groups suggest that these groups were similar to other coastal and hinterland Aboriginal groups with a reliance on seasonal resources, hunting and fishing. Tools were often lightweight and portable and made from stone, wood, shell, bone and skin (Kuskie 2004). Further detail is provided in the AECOM (2009a) EA and AECOM (2009b) ACHA.

### 3.3 Previous archaeological investigations

There have been relatively few Aboriginal archaeological assessments or investigations carried out around Gloucester and Stroud, at the northern end of the approved pipeline corridor (north of the proposed modification). Examples include Appleton (1993), Brayshaw (1981, 1984), Brayshaw and Byrne (1994) and Griffith (1992). From these studies, it is apparent that the most common Aboriginal site types in the region are low density open sites consisting of stone artefact scatters or isolated finds, most likely in association with ephemeral or permanent water sources.

Archaeological research has been more extensive to the south, in the lower Hunter Valley, associated with the higher density of development. The most frequently recorded site types in this region have been artefact scatters and isolated finds (Kuskie 2004). To a lesser degree axe-grinding grooves, middens, bora/ceremonial sites, burials, scarred trees, stone arrangements, rock shelters with art, fish traps and places of historic or traditional Aboriginal significance have been recorded in the lower Hunter Valley.

The RPS (2011) ACHA for the NGSF, which is adjacent to the Tomago section and the proposed TRS, identified undisturbed landforms within 300 m of watercourses to be archaeologically sensitive in the local area. Open stone artefact scatters and culturally sensitive landforms (Potential Archaeological Deposits or PADs) were identified as the most common Aboriginal site type. RPS (2011) noted that no grinding grooves, rock shelters, art or engravings were identified in the local area and attributed this to the lack of appropriate geological resources available. Recent salvage fieldwork within the NGSF site involved the collection of 66 Aboriginal stone artefacts between August 2012 and March 2013. All of these artefacts were identified following vegetation clearance and soil stripping for the NGSF's construction. The artefacts were located within a sand dune landform and the area had not experienced significant ground disturbance prior to the NGSF construction works.

The AECOM (2009b) ACHA identified six previously recorded Aboriginal sites within the approved pipeline corridor including two open campsites, an isolated stone artefact site and a bora ground. The field survey identified a further nine previously unrecorded Aboriginal sites and 14 areas of PAD. These included scarred trees, low density artefact scatters and isolated finds. Areas of PAD (PAD 12 and PAD 13) were identified approximately 2 km west of the Seaham section, however these transects were located close to the Williams River and in different landforms to the proposed modification. Two artefact scatters (LEA 8 and LEA 9) are located approximately 2 km north of the Brandy Hill section. None of these Aboriginal sites will be impacted by the proposed realignments. The existing Project Approval conditions include appropriate measures for their management.

The area of the Millers Forest section was surveyed by Scarp Archaeology (2010) as part of a REF for the TransGrid high voltage transmission line from Tomago to Stroud Road. The transmission line is within AGL's approved pipeline corridor and this is the reason why a minor realignment of the corridor to the east is required. Scarp Archaeology (2010) noted that AGL's proposed pipeline corridor and the transmission line traverse similar landforms and have overlapping study areas. The TransGrid transmission line route was divided into a number of transects for survey and the Millers Forest section is around 30 m east of survey transect T2. The entire route was inspected by vehicle on 25 February 2010 and a subsequent targeted field survey was completed in April 2010 (Scarp Archaeology 2010).

T2 was found to be mostly cleared land that included cultivated fields and areas covered in dense grass. Most of it was found to be subject to grazing and heavy flooding (Scarp Archaeology 2010, p.126). Significant amounts of disturbance were identified including building construction, existing powerline structures, artificial terraces and gravel roads (Scarp Archaeology 2010, p.126). The targeted field survey did not identify any Aboriginal sites or objects (Scarp Archaeology 2010, p.54). Due to the limited ground surface visibility a predictive model was developed to identify PADs in the landscape. No PADs were identified in this area (Scarp Archaeology 2010, p.54).

In summary, this research and the AHIMS records indicate that the main Aboriginal site types in the region are open stone artefact scatters and isolated finds, usually situated close to drainage lines. These are typically buried within the upper soil horizon and mostly manufactured from silcrete or mudstone. Past investigations also demonstrate that occupation was also focused along the margins of the wetlands. Lesser numbers of other site types such as axe grinding grooves, middens, scarred trees, ceremonial and burial sites are also present (AECOM 2009b p.14).

### 3.4 AHIMS search

A search of the AHIMS register was completed on 11 September 2013 (search number 111324). The search area encompassed 10 km by 10 km centred on the modified pipeline corridor sections. The search identified 50 registered Aboriginal sites, none of which occur in the Seaham, Brandy Hill, Millers Forest or Tomago sections (Figure 1). Of the 50 sites identified, 22 are open artefact sites. The next most common type was PAD sites (11). The AHIMS search results are summarised in Table 3 and provided in full in Appendix B. It is noted that, as raised in feedback from the Awabakal Descendants Traditional Owners Aboriginal Corporation and Awabakal Traditional Owners Aboriginal Corporation, the AHIMS is not a comprehensive list of all Aboriginal heritage in NSW, but only those sites recorded in the system. The AHIMS search results were one of several information gathering tools used in this assessment.

**Table 3 AHIMS search results**

Site type	Number	Percentage
Bora ground/ceremonial site	1	2%
Burial	2	4%
Midden	5	10%
Open site	22	44%
Potential Archaeological Deposit (PAD)	11	22%
Quarry	1	2%
Scarred tree	1	2%
Shelter with deposit	1	2%
Isolated find	6	12%
<b>Total</b>	<b>50</b>	<b>100%</b>

### 3.5 Predictive model of site location

This predictive model for Aboriginal site location has been made considering a range of available information. This includes the environmental context of the Seaham, Brandy Hill, Millers Forest and Tomago sections, available historic observations of Aboriginal people in the region, analysis of AHIMS data and archaeological studies including the AECOM (2009b) ACHA and the predictive model developed as part of that study, and the Scarp Archaeology (2010) ACHA. The resultant predictions on the potential for Aboriginal sites in the proposed modified pipeline corridor alignment are summarised as follows:

- Stone artefact sites (scatters and isolated finds) – are the most likely site types to occur in the vicinity of the modified pipeline corridor alignment. Research has indicated that most of these site types occur within 100 m of watercourses in areas that have not been previously disturbed by development or other ground impact activities. Stone artefacts are also likely to occur along gentle to very gentle gradient spurs, along ridge crests or along the simple slopes that characterise much of the study area. While all four sections are disturbed, there is considered to be some potential for stone artefact sites to occur within in the Seaham, Brandy Hill, Millers Forest and Tomago sections.
- Scarred trees – are commonly found in NSW and many have been recorded in the Lower Hunter region. They occur in many environmental contexts and their presence or absence cannot be reliably predicted. Most of the study area has been cleared of native trees and there are very few remnant mature trees. Scarred tree occurrence is unlikely but may be possible where mature trees exist, within the Brandy Hill Seaham and Tomago sections.
- Quarry sites – are only likely to exist where suitable raw material exists. Given the underlying geology, there is low potential for quarry sites to occur at or near the Seaham, Brandy Hill, Millers Forest or Tomago sections.
- Grinding grooves/engravings – are likely to exist in areas where suitable outcrops of bedrock are present. The underlying geology in the Seaham, Brandy Hill and Millers Forest sections suggests that there is some potential for these sites. There is a lack of suitable geological resources in the vicinity of the Tomago section which suggests that there is a low potential for these sites here.
- Stone arrangements – include mounds, circles and other patterns of stone arranged by Aboriginal people for cultural purposes. Hill tops, ridge crests and valley flats that contain outcrops of stone or surface stone and have been subject to minimal disturbance are the likely locations of these sites. The Seaham section has a low potential to contain this site type. The Tomago, Brandy Hill and Millers Forest sections have a low to nil potential to contain this site type.
- Bora grounds – are ceremonial in nature and very rare. One bora ground was identified along the approved pipeline corridor near the Washpool Bridge. There is however low potential for bora grounds to occur at or near the Seaham, Brandy Hill, Millers Forest and Tomago sections.
- Mythological/traditional sites – may occur anywhere in the landscape and may be located at natural landscape features. Consultation with the local Aboriginal community is required to identify whether these sites occur within the modified pipeline corridor alignment.
- Burials – were placed in hollow trees, caves and sand deposits. The potential for burial sites to occur at the Seaham, Brandy Hill, Millers Forest and/or Tomago sections is low, however cannot be discounted.
- Middens – are mounds or scatters of shell, possibly also containing artefacts or other cultural material. They are generally located on the coast near sand dunes but can also be found on the margins of lakes and rivers further inland. The potential for middens to occur at the Seaham, Brandy Hill, Millers Forest and/or Tomago sections is low.

- Rock shelters - are only found where suitable rock overhangs have been formed over time, usually sandstone or granite. Rock shelters can contain scatters of artefacts, midden material or artworks. The potential for rock shelters to occur at the Seaham, Brandy Hill, Millers Forest and/or Tomago sections is low.
- Fish traps – are structures built using stone or wood. The materials are placed within the channel of a stream or at the edge of a tidal lagoon intended to capture fish as they swim along with the current. Fish traps are located near streams or lagoons. The potential for fish traps to occur at the Seaham, Brandy Hill, Millers Forest and/or Tomago sections is low.

## 4 Field survey

### 4.1 Survey strategy

Field surveys were undertaken on 26 September 2013. The areas surveyed are shown in Figures 2 to 4 and comprised the following:

- Seaham section - the entire Seaham section was surveyed as well as a broader area at its western end, to accommodate potential locations for the MLV facility. It can now be confirmed that the current preferred location for the MLV facility is within the 100 m wide corridor shown on Figure 2.
- Brandy Hill section - the entire Brandy Hill section was surveyed.
- Tomago section - The Tomago section was surveyed as far east as the Hunter River. It was not considered necessary to survey that part of the Tomago section between the Hunter River and the NGSF as this area will either be under-bored using HDD techniques (ie no surface disturbance) or within an existing cleared and disturbed utility easement leading from the Pacific Highway to the NGSF.

The Seaham, Brandy Hill and Tomago sections being surveyed were each divided into transects and walked by EMM archaeologists (Rebecca Newell and Ryan Desic), RAPs (see Section 2) and AGL representative John Wood. Ecologists Alison Hunt and Katie Whiting were also present completing ecological surveys of the same sections for the EA. Survey involved a traverse over all areas of the pipeline corridor being assessed. The survey team was spaced approximately 20 m apart to cover the corridor. The survey was undertaken in hot and windy conditions. Further details on the survey transects are provided in Section 4.2.

It was not considered necessary to survey the Millers Forest section for the following reasons:

- The proposed realignment is relatively minor with around half of the modified pipeline corridor alignment overlapping with the approved corridor and the other half (area approximately 50 m wide) on the immediately adjacent farmland.
- Consistent with the approved route, the realigned Millers Forest section is on land that has been highly disturbed by clearing, agricultural activities and infrastructure construction, including Raymond Terrace Road, Turners Road, irrigation channels and TransGrid transmission lines. There is no remnant vegetation or other undisturbed areas at this location. Based on an environment and landscape analysis, this section is considered to have a low archaeological potential.



- The area has already been subject to detailed Aboriginal cultural heritage assessments by AECOM (2009) and Scarp Archaeology (2010) including both desktop analysis and archaeological field survey. The AECOM (2009b) assessment included a survey of a transect in the southern portion of the Millers Forest section (T56) and did not identify any Aboriginal sites or PADs. No further survey was considered warranted for this section due to the low potential for the area to contain Aboriginal objects. Scarp Archaeology (2010) surveyed the area by vehicle and on foot and found it to be highly disturbed. The 2010 study also did not identify any Aboriginal sites or PADs (refer Section 3.3).
- The recent AHIMS search did not identify any Aboriginal sites recorded in the vicinity.

## 4.2 Survey transects and results

### 4.2.1 Seaham transect

The Seaham transect was approximately 650 m long (Figure 2). No transects were completed in this area in the original ACHA as it was considered unlikely to contain Aboriginal objects based on the predictive model (AECOM 2009b). The topography of the Seaham transect consisted of gently undulating hills adjacent to the ridge lines of the Wallaroo National Park. Landforms in this transect included hill crest, low mid and upper slopes and depressions (Photograph 1). Vegetation mostly consisted of native and introduced grasses and weeds, with scattered Eucalypts (*Eucalyptus spp.*), including early regrowth. The area has been subject to grazing until recently and is traversed by a TransGrid transmission line easement. Small exposures were scattered along the transect (Photograph 2). As described in Section 4.1, a wider area than 100 m was surveyed at the western end of this transect to cover potential locations for the MLV. Disturbance was evident including gravel tracks that provide access to the electricity transmission line easement, a wooden bridge constructed over an ephemeral drainage line and disturbance from past grazing practices. Minor ephemeral drainage lines traverse the transect.

No Aboriginal objects or sites were identified in this transect. Archaeological potential is considered to be low and no PAD sites were identified. Few trees within the impact area were observed to be of a sufficient age to have been carved or scarred by past Aboriginal people. All trees of a mature age were inspected for scarring and carving but none showed evidence of this type of modification.



**Photograph 1** Seaham transect facing west along the proposed alignment



**Photograph 2** Seaham transect facing east along the proposed alignment

#### 4.2.2 Brandy Hill transect

The Brandy Hill transect was approximately 5.2 km long (Figure 3). Transects 52 and 54 were completed near the Brandy Hill section by AECOM (2009b), to the east and south-east respectively. The topography in this area consisted of low lying swamp margins with a small rise in the far northern section of the transect. The area was relatively flat, though further to the east rises were visible where residential development has occurred within Brandy Hill. Vegetation consisted of pasture grasses interspersed with some native grasses and isolated clumps of predominantly Swamp Oak and Eucalypt trees (Photograph 3). Landforms in this transect included floodplain, swamp, modified creek and low mid and upper simple slopes (Photograph 4). Information from the landholder indicated that this area is subject to frequent inundation. The area is currently used for cattle and horse grazing. Disturbance is evident in the form of tracks, fences, artificially modified creek banks and disturbance from grazing practices. The southern 2 km (approximate) of the Brandy Hill section is adjacent to Barties Creek, which drains to the Hunter River. At this location Barties Creek comprises an artificially canalised irrigation channel, with no riparian vegetation.

No Aboriginal objects or sites were identified in this transect. Archaeological potential is considered to be low and no PAD sites were identified. Few trees within the impact area were observed to be of a sufficient age to be carved or scarred by past Aboriginal people. All trees of a mature age were inspected for scarring and carving but none showed evidence of this type of modification.



**Photograph 3** Brandy Hill transect facing north along the proposed alignment



**Photograph 4** Brandy Hill transect facing south along the proposed alignment

#### 4.2.3 Tomago transect

The Tomago transect was approximately 2.5 km long (Figure 4) with the remaining 4 km not surveyed as it was either subject to an underbore or within an existing cleared and disturbed easement. One transect (T56) was completed immediately north of this area in the original ACHA (AECOM 2009b). No Aboriginal sites were noted in this survey.

The topography in this area consisted of low-lying floodplain adjacent to the Hunter River (Photograph 5). Vegetation consisted of thick pasture grasses, weeds and native grasses as well as some isolated patches of Swamp Oak Floodplain Forest. Exposures were very limited (Table 4) with some minor exposure along the creek banks and in cattle tracks in the paddocks (Photograph 6). Landforms in this transect included a drainage line (artificial drainage channel that discharges to Francis Greenway Creek) and floodplain. The area is currently used for grazing including by sheep, cattle and horses. Disturbance is evident in the form of gravel tracks to access paddocks and easements, levee banks and other drainage works, fences, electricity transmission lines and disturbance from livestock grazing and cultivation.

This area was found to be highly disturbed and no Aboriginal objects or sites were identified in this transect. Archaeological potential is considered to be low and no PAD sites were identified. Few trees within the impact area were observed to be of a sufficient age to be carved or scarred by past Aboriginal people. All trees of a mature age were inspected for scarring and carving but none showed evidence of this type of modification.



**Photograph 5** Tomago transect facing north along the proposed alignment



**Photograph 6 Tomago transect facing north-east along the proposed alignment**

#### 4.2.4 Effective survey coverage

Effective survey coverage provides an estimate of the surveyed area likely to reveal buried artefact deposits. It is calculated using the ground surface visibility along survey transects and the amount of exposures present.

Ground surface visibility along all three surveyed transects was low with high grass cover evident. Areas of ground exposure included patches of erosion, land adjacent to roads, cattle and vehicle tracks, and other unvegetated areas. The effective survey coverage results are provided in Table 4 below.

**Table 4 Effective survey coverage results**

Transect	Length (m)	Width (m)	Area (m <sup>2</sup> )	Exposure (%)	Visibility (%)	Effective coverage area (m <sup>2</sup> )	Effective coverage (%)
Seaham	650	100 - 200	93,000	20	10	5,000	5.4
Brandy Hill	5,200	100	520,000	8	5	2,000	0.4
Tomago	2,500	100	250,000	5	2	250	0.1

## 5 Significance assessment

As no Aboriginal objects, sites or PADs were discovered no scientific statement of significance is required. However, the concept of Aboriginal heritage encompasses more than material evidence and includes language, stories and ritual. To investigate the cultural heritage significance to the Aboriginal community the guidelines in the ICCRs were used.

No specific Aboriginal social or cultural values were identified in association with the Seaham, Brandy Hill, Millers Forest or Tomago sections. The original AECOM (2009b) ACHA also did not identify any specific areas of cultural significance to the Aboriginal community however noted that Aboriginal sites with archaeological evidence, including the sites identified during the 2009 surveys, are of value to the Aboriginal community as they represent a connection with pre-European settlement of the area (AECOM 2009b p.50, 53).

Research and consultation with the Aboriginal community was conducted to determine whether any socio-cultural heritage value relates specifically to the proposed realigned sections regardless of archaeological evidence. While it is accepted that the broader landscape is of significance to Aboriginal people, this study sought to identify whether the proposed realigned sections held specific values either in themselves, or as part of a specific local area of particular significance.

The Awabakal Descendants Traditional Owners Aboriginal Corporation in its response to the draft report noted that:

regardless, if it is a single artefact, scatter or other related Cultural material it is all of great significance and importance to us the Descendants of the Awabakal, as it provides us with a real and tangible link to the daily lives of our ancestors.

The Awabakal Traditional Owners Aboriginal Corporation in its response to the draft report noted that:

The Awabakal people regard the Newcastle region Culturally Significant and is part of our Traditional Awabakal Country and is considered by our People to be of great importance within our Cultural Heritage. This area has not just a physical presence within the Cultural Heritage of the Awabakal People, but it is part of our oral history and a place of spiritual significance. The landforms and resources of this locale fulfilled not just the basic needs that underpinned our Peoples subsistence but also satisfied the many other aspects that made up what can be described here as being part of the Cultural foundations of our People.

As already previously stated, this area is of high significance to our People and therefore it would be expected that after the many generations of our People that have walked the pathways of their Ancestors, it is obvious that there would be many areas that contain evidence of this connection, resulting from occupation on varying levels.

Research and consultation with the RAPs as part of this ACHA did not identify any other information on cultural significance.

In summary the study area has mixed values. No Aboriginal objects, sites or PADs were identified and as a result the Seaham, Brandy Hill, Millers Forest and Tomago sections have low scientific value. Archaeological potential of all surveyed areas and the Millers Forest section is considered to be low. The information received from the RAPs indicates that the Newcastle area and Hunter River (in the vicinity of the Tomago section) have socio-cultural value to the Awabakal people.

## 6 Impact assessment

Consistent with the approved pipeline and HDS, proposed activities within the modified pipeline corridor alignment and at the TRS include activities that will disturb the ground surface. This includes establishing access and maintenance tracks and clearing and grading a temporary construction corridor up to around 30 m wide along the entire pipeline route, including some vegetation clearing, impact to topsoil and trenching. No Aboriginal sites or objects were identified during the survey. As such the proposed modification (which reduces vegetation clearing and ground disturbance from that approved) is not expected to result in additional impacts to Aboriginal sites or objects beyond those identified in the original ACHA (AECOM 2009b) and approved. No carved or scarred trees occur in the vegetation subject to potential removal by the proposed modification. No areas of PAD were identified and the areas surveyed were considered to be of low archaeological potential.

## 7 Conclusion and recommendations

This ACHA has not identified any specific Aboriginal cultural heritage values, including heritage sites or objects, with potential to be impacted by the proposed modification. The areas surveyed were not considered to be archaeologically sensitive. Accordingly, no further Aboriginal heritage investigations are considered necessary and no management or monitoring measures are required in respect of Aboriginal heritage beyond the measures in the AECOM (2009a) EA and the existing Project Approval conditions.

This includes developing and implementing an Aboriginal Heritage Management Plan (AHMP) with procedures to manage any Aboriginal objects or sites which may be encountered during construction. Project Approval conditions relevant to the proposed modification include:

- Condition 3.35 – if during the course of construction the Proponent becomes aware of any previously unidentified Aboriginal object(s), all work likely to affect the object(s) shall cease immediately and the objects managed in accordance with the requirements of condition 7.2g)iv), in consultation with registered Aboriginal stakeholders.
- Condition 7.2g)iv) – the CEMP will include measures to monitor and manage Aboriginal heritage impacts in consultation with registered stakeholders and DECCW (now OEH) including:
  - (i) details of management measures to be carried out in relation to already recorded sites and potential Aboriginal deposits (including further archaeological investigations and/or salvage measures);
  - (ii) procedures for dealing with previously unidentified Aboriginal objects excluding human remains (including halting of works in the vicinity, assessment of the significance of the items(s) and determination of appropriate mitigation measures including when works can recommence by a qualified archaeologist in consultation with registered Aboriginal stakeholders, assessment of the consistency of any new Aboriginal heritage impacts against the approved impacts of the project, and registering of the new site in the DECCW (now OEH) AHIMS register);
  - (iii) procedures for dealing with human remains (including halting works in the vicinity and notification of the NSW Police, DECCW (now OEH) and registered Aboriginal stakeholders and not-recommencing any works in the area unless authorised by DECCW and/or the NSW Police); and
  - (iv) Aboriginal cultural heritage induction processes for construction personnel and procedures for ongoing Aboriginal consultation and involvement.

As outlined in the existing Project Approval, these Aboriginal cultural heritage commitments are to be developed in consultation with the RAPs. No additional measures are required for the proposed modification.

Yours sincerely



Rebecca Newell  
Archaeologist  
[rnewell@emgamm.com](mailto:rnewell@emgamm.com)

## References

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## Appendix A

### Aboriginal consultation documents

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**Stage 1 - Invitation to participate**

<b>Organisation</b>	<b>Contact type</b>	<b>Date</b>	<b>Comments</b>	<b>Further actions (if required)</b>
Forster Local Aboriginal Land Council	Letter and email	11-Sep-13		
Karuah Local Aboriginal Land Council	Letter and email	11-Sep-13		
Worimi Local Aboriginal Land Council	Letter and email	11-Sep-13		
Awabakal Local Aboriginal Land Council	Letter and email	11-Sep-13		
Mindaribba Local Aboriginal Land Council	Letter and email	11-Sep-13		
Awabakal Traditional Owners Aboriginal Corporation	Letter and email	11-Sep-13		
Awabakal Descendants Traditional Owners Aboriginal Corporation	Letter and email	11-Sep-13		

**Stage 2 - Invitation follow up**

<b>Organisation</b>	<b>Contact type</b>	<b>Date</b>	<b>Comments</b>	<b>Further actions (if required)</b>
Forster Local Aboriginal Land Council	Phone	16-Sep-13	Notified that the appropriate contact person is Dan Rose and a new letter needed to be emailed.	New letter of invitation emailed 16-Sep-13. Follow up call made on 17-Sept 13 no answer. Second follow up call made on 18-Sept-13 and it was noted by Dan Rose that FLALC does not have the appropriate insurances to send a fieldworker. Conversation on 20-Sept-13 it was noted that a fieldworker is not required as the modifications are outside the FLALC boundary but that the draft report will be sent through for comment.
Karuah Local Aboriginal Land Council	Phone	13-Sep-13	David Feeney called to confirm the receipt of the letter and to note that the modifications are not within the KLALC boundary and thus that KLALC will not be participating further.	
Worimi Local Aboriginal Land Council	Phone	13-Sep-13	Jackie Henderson confirmed receipt of the letter and that a field representative would be present for the survey.	
Awabakal Local Aboriginal Land Council	Phone	16-Sep-13	Spoke to reception to confirm the receipt of information and Paul Morris is acting CEO.	Contact details emailed in 16-Sep-13. Follow up call to CEO 17-Sep-13 and 18-Sep-13 to provide a representative.
Mindaribba Local Aboriginal Land Council	Phone	17-Sep-13	Called on 16-Sep-13 and left a message.	Followed up call on 17-Sept-13 and sent further information to acting CEO Tamara McDonald who noted that field representatives would be available
Awabakal Traditional Owners Aboriginal Corporation	Phone	17-Sep-13	ATDOC confirmed the receipt of the letter and that they were only interested in the Tomago section and will not be available for survey on the 26th. It was confirmed that they would receive the report for review.	
Awabakal Descendants Traditional Owners Aboriginal Corporation	Phone	17-Sep-13	ADTOAC confirmed the receipt of the letter and that they were only interested in the Tomago section and would be able to provide a representative for survey on 26th.	

**Stage 3 - Fieldwork**

<b>Organisation</b>	<b>Participant provided</b>
Forster Local Aboriginal Land Council	N/A
Karuah Local Aboriginal Land Council	N/A
Worimi Local Aboriginal Land Council	Y
Awabakal Local Aboriginal Land Council	Y
Mindaribba Local Aboriginal Land Council	Y
Awabakal Traditional Owners Aboriginal Corporation	N
Awabakal Descendants Traditional Owners Aboriginal Corporation	Y

**Stage 4 - Draft report review**

<b>Organisation</b>	<b>Contact type</b>	<b>Date</b>	<b>Comments received</b>	<b>Further actions (if required)</b>
Forster Local Aboriginal Land Council	Letter and email	10-Oct-13	N	Reminder call made 14/10/2013
Karuah Local Aboriginal Land Council	N/A		N/A	N/A
Worimi Local Aboriginal Land Council	Letter and email	10-Oct-13	Jackie called 29/10. Noted objection to involvement of the ADTOAC and ATOAC and asked if they were registered through the Registrar's office. It was noted that these comments can be included in the comments on the draft report.	Reminder call made 18/10/2013
Awabakal Local Aboriginal Land Council	Letter and email	10-Oct-13	N	Reminder call made 11/10/2013
Mindaribba Local Aboriginal Land Council	Letter and email	10-Oct-13	N	Reminder call made 11/10/2013
Awabakal Traditional Owners Aboriginal Corporation	Letter and email	10-Oct-13	Y 23/10/2013	
Awabakal Descendants Traditional Owners Aboriginal Corporation	Letter and email	10-Oct-13	Y 23/10/2013	

**Stage 5 Millers Forest letter**

<b>Organisation</b>	<b>Contact type</b>	<b>Date</b>	<b>Comments received</b>	<b>Further actions (if required)</b>
Forster Local Aboriginal Land Council	Letter and email	29-Oct-13	N	
Worimi Local Aboriginal Land Council	Letter and email	29-Oct-13	N	
Awabakal Local Aboriginal Land Council	Letter and email	29-Oct-13	N	
Mindaribba Local Aboriginal Land Council	Letter and email	29-Oct-13	N	
Awabakal Traditional Owners Aboriginal Corporation	Letter and email	29-Oct-13	N	
Awabakal Descendants Traditional Owners Aboriginal Corporation	Letter and email	29-Oct-13	N	

**Stage 6 Adequacy review update**

<b>Organisation</b>	<b>Contact type</b>	<b>Date</b>	<b>Comments received</b>	<b>Further actions (if required)</b>
Forster Local Aboriginal Land Council	Letter and email	22-Nov-13		
Worimi Local Aboriginal Land Council	Letter and email	22-Nov-13		
Awabakal Local Aboriginal Land Council	Letter and email	22-Nov-13		
Mindaribba Local Aboriginal Land Council	Letter and email	22-Nov-13		
Awabakal Traditional Owners Aboriginal Corporation	Letter and email	22-Nov-13		
Awabakal Descendants Traditional Owners Aboriginal Corporation	Letter and email	22-Nov-13		

11 September 2013

Re: Gloucester Gas Project: Minor pipeline realignment and connection to the NGSF - modification -  
Aboriginal heritage assessment

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Dear ,

## 1 Introduction

AGL Upstream Infrastructure Investments Pty Limited (AGL) proposes some minor adjustments to the pipeline route corridor component of its approved Gloucester Gas Project (the Project) prior to its construction. AGL has identified three small sections of pipeline that can be realigned to minimise ecological impacts identified by the previously prepared assessment; and also allow connection to AGL's Newcastle Gas Storage Facility (NGSF) at Tomago rather than the Hexham Delivery Station.

AGL has engaged EMGA Mitchell McLennan Pty Limited (EMM) to assess these three sections of realigned pipeline for Aboriginal heritage. The assessment will be incorporated into a modification application submitted to the NSW Department of Planning and Infrastructure for assessment and determination.

This letter presents details of the proposed minor modifications (Figure 1) and the Aboriginal heritage survey and impact assessment methodology required to assess the impacts of the proposed modification on Aboriginal heritage objects and values.

As a registered Aboriginal party (RAP) for the Project, we invite your organisation to be involved in the additional Aboriginal heritage tasks required for proposed modification. This letter also contains an invitation to participate in fieldwork for the proposed modification.

## 2 Proposed modification information

The Project involves the development of plant and infrastructure for the extraction and transport of natural coal seam gas from the Gloucester basin to markets in the Sydney and Newcastle regions. It received NSW Government approval in 2011 and then Commonwealth approval in 2013. The Project includes the approximately 90 to 100 km long high pressure gas pipeline from Gloucester to Hexham.

To minimise the ecological impacts of the project and maximise the efficiency of the Project (ie connection to the NGSF), modifications are proposed to the following sections of the pipeline:

- An approximately 0.65 km long section of the pipeline near Seaham adjacent to the Wallaroo National Park (Figure 2);
- An approximately 5 km long section of the pipeline near Brandy Hill (Figure 3); and

- the final approximately 6.5 km long section of the pipeline near Tomago (Figure 4).

## 3 Aboriginal heritage assessment

### 3.1 Overview

A previous Aboriginal heritage assessment was completed for the Project by AECOM in 2009 and included consultation and survey of the pipeline route corridor. Three small sections of the pipeline route corridor are proposed to be realigned and require an assessment of impacts. An Aboriginal heritage impact assessment will be prepared for the proposed modification and will include archaeological survey and information on the cultural significance of the area to the Aboriginal community.

### 3.2 Archaeological survey methodology

The survey methodology is consistent with that used in the previous assessment for the Project undertaken by AECOM in 2009.

An archaeological survey will cover all areas of the proposed modification within a 100 m wide corridor with the aim of identifying Aboriginal sites and areas of potential archaeological deposit. Only those areas with Aboriginal objects will be recorded and reported as Aboriginal sites. Other places or features of interest will be noted in the report.

The route of the proposed modification will be walked by a team of EMM archaeologists, an AGL representative and RAPs in a series of survey tracks, approximately 10 m apart. The survey tracks will be based on landform units within the project area.

### 3.3 Other Aboriginal heritage values

Aboriginal heritage incorporates a wide range of values such as stories, traditions and cultural practices and can include tangible and intangible heritage values. EMM is relying on the Aboriginal community for advice on non-archaeological Aboriginal heritage values for the realigned section of pipeline to connect to the NGSF (Figure 4) as the proposed realignments of the Seaham and Brandy Hill sections are close to the original alignment with Aboriginal heritage values for these sections assessed in the previous EA (AECOM 2009). We are happy to meet to discuss any information which you may be willing to share and will respect any confidentiality when requested. If you wish, please contact us via letter, fax, email (see contact details in Section 5 below) or in person during the survey.

## 4 Fieldwork arrangements

### 4.1 Participation

As noted above archaeological survey is required for the Aboriginal heritage assessment of the proposed realigned sections of the pipeline. RAPs are invited to nominate one person from their organisation to participate in fieldwork for the modification. Involvement in fieldwork is offered to RAPs who accept the terms of this letter.

Fieldwork is anticipated to take one day to complete and may be extended to two days if required. Fieldwork will be occurring on **Thursday 26 with any additional survey on Friday 27 September 2013**. Please confirm your attendance at the survey by **20 September 2013**.

If you are participating in the survey please meet at the junction of Nilands Lane and Oakfield Road Woodberry (shown in Plate 1 below).



### Plate 1 Meeting point

Please ensure that you bring:

- hat, walking boots, suitable clothing (such as long sleeved shirt) and sun block;
- water sufficient for the day;
- food sufficient for the day;
- pens, notebooks etc as required to satisfy your group's recording requirements; and
- a bag to carry your food water and equipment.

It is not anticipated that toilet facilities will be available during the day therefore each survey team member must be willing to use natural facilities if required as well as take their rubbish out with them.

The survey will be undertaken unless extreme weather is experienced and will continue through light rain. It is the responsibility of each survey member to bring adequate clothing in cases of inclement weather.

## 4.2 Working conduct

Persons involved in fieldwork must be fit to walk long distances over rough areas. Persons with medical conditions that hamper physical activity should not participate for safety reasons.

For the safety and comfort of everyone participating in the survey, inappropriate behaviour will not be tolerated from, or towards, survey team members, the public and land owners.

## 4.3 Insurance

Insurance coverage must be sighted for all RAPs. Workers Compensation insurance must be demonstrated where the representative is from an organisation. Public Liability insurance must be held by all RAPs involved in fieldwork. Documents containing this information should be provided to EMM (Rebecca Newell) prior to the first day of fieldwork.

## 4.4 Payment

Payment for fieldwork is \$600 ext GST per person per day. Payment will be made following receipt of a Tax Invoice form the formally registered Aboriginal stakeholder organisation. Payment will not be made separately to individual organisation members. Invoices should be formal tax invoices and include:

- the registered business name, address and ABN;
- specify persons and days involved;
- whether your invoice includes or excludes GST; and
- your electronic banking details.

One invoice should be issued for all of an organisations involvement. Invoices should be made out to AGL and submitted to:

AGL Upstream Infrastructure Investments Pty Limited  
c/o EMGA Mitchell McLennan  
ATN Rebecca Newell  
PO Box 21  
St Leonards NSW 1590  
Fax 02 9493 9599

## 5 Close

EMM looks forward to consulting with you during the Aboriginal heritage assessment. If you have any questions please feel free to raise them in your correspondence via the contact details below.

Yours sincerely



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28 October 2013

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Re: Minor pipeline corridor realignments – Millers Forest section

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Dear ,

## 1 Introduction

Thank you for your continued participation in the Gloucester Gas Project, including the recent field survey and draft report review for AGL Upstream Infrastructure Investments Pty Limited's (AGL's) proposed minor pipeline corridor realignments. Subsequent to the preparation of the draft report, AGL has identified an additional section proposed for minor realignment, the Millers Forest section. This letter presents details of the proposed Millers Forest realignment (Figure 1.5) and the previous Aboriginal heritage surveys and impact assessments completed in this area.

## 2 Millers Forest section

The Millers Forest section is located at Millers Forest, within the Maitland local government area (Figure 1). It is located within the boundaries of the Mindaribba Local Aboriginal Land Council (LALC). It is approximately 2 km long and is approximately 50 m east of the alignment previously assessed and approved. The proposed realignment of this section is required to avoid the recently constructed Transgrid transmission line. Consistent with the approved route, the realigned Millers Forest section traverses Raymond Terrace Road and low-lying grazing properties adjacent to the Transgrid easement and an irrigation channel. This land has been disturbed by clearing and agricultural activities and there is no remnant vegetation or other undisturbed areas remaining at this location. There are also some scattered rural residences in the vicinity.

### 2.1 Previous investigations

The general area of the Millers Forest section was included in AECOM's (2009) archaeological assessment for the approved Gloucester Gas Project pipeline route. AECOM's landscape and environmental assessment of this area did not identify any Aboriginal sites or objects in this section (AECOM 2009). The predictive model developed by AECOM also did not identify any potential archaeological deposits (PADs) in this area and survey was not considered warranted (AECOM 2009, p.19). As registered Aboriginal parties for the project your organisation participated in this assessment.



The area of the Millers Forest section was also recently surveyed by Scarp Archaeology (2010) as part of a Review of Environmental Factors for the Transgrid high voltage transmission line from Tomago to Stroud Road. Registered Aboriginal parties for that project included:

- Nur-Run-Gee PL;
- Mur-roo-ma Inc;
- Cacatua Culture Consultants;
- Giddawaa Walong Cultural Heritage Consultancy;
- Worimi LALC;
- Mindaribba LALC;
- Karuah LALC;
- Aboriginal Native Title Consultants;
- Lower Hunter Wonnarua Council Inc;
- Yarrawalk Aboriginal Corporation;
- Garigal Aboriginal Community Inc;
- Wonnarua Culture Heritage;
- Awabakal Traditional Owners Aboriginal Corporation; and
- Awabakal Descendants Traditional Owners Aboriginal Corporation.

The transmission line is within the approved AGL pipeline corridor and this is the reason why this minor realignment to the east is required. It was noted that AGL's pipeline and the transmission line traverse similar landforms and have overlapping study areas (Scarp Archaeology 2010, p.34). The transmission line was divided into a number of transects for survey and the proposed Millers Forest realignment is approximately 30 m to the east of survey transect T2. The entire route was inspected by vehicle on 25 February 2010 and a subsequent targeted field survey was completed in April 2010 (Scarp Archaeology 2010, p.52, 54).

T2 was found to be covered in dense grass, cultivated fields and the majority was subject to heavy flooding and was grazed and cleared (Scarp Archaeology 2010, p.126). Significant amounts of disturbance were identified including building construction, existing powerline structures, artificial terraces and gravel roads (Scarp Archaeology 2010, p.126). The targeted field survey did not identify any Aboriginal sites or objects (Scarp Archaeology 2010, p.54). Due to the limited ground surface visibility across the transmission line easement a predictive model was developed to identify PADs in the landscape. No PADs were identified in this area (Scarp Archaeology 2010, p.54).

An Aboriginal Heritage Information Management System (AHIMS) search was completed on 11 September 2013 for the modified sections of the pipeline and which included the Millers Forest section. It did not identify any Aboriginal sites or objects in the vicinity of the Millers Forest section.

## 2.2 Summary

Environment and landscape analysis of the Millers Forest section show that this section has a low potential for Aboriginal artefacts. The recent AHIMS search also did not identify any Aboriginal sites. The area has been subject to two detailed Aboriginal cultural heritage assessments (AECOM 2009 and Scarp Archaeology 2010) including both desktop analysis and archaeological field survey. AECOM's (2009) assessment of this area did not identify any PADs and no survey was considered warranted due to the low potential of the area to contain Aboriginal objects. Scarp Archaeology (2010) surveyed this area by vehicle and on foot. The transect surveyed by Scarp Archaeology (2010, p54) did not identify any Aboriginal sites or any PADs near the Millers Forest section. As such it is not proposed to completed additional survey on the Millers Forest section.

Survey of the Millers Forest section is not considered to be required for the following reasons:

- previous Aboriginal heritage assessments (including desktop analysis and field surveys) of the area have been completed by AECOM (2009) and Scarp Archaeology (2010) and neither identified any Aboriginal heritage items or potential for Aboriginal heritage items;
- there is a high level of disturbance as noted in the previous assessments and desktop analysis for the Millers Forest section characterised the area as of low archaeological potential; and
- analysis of the landscape has indicated the very low potential for Aboriginal objects in this area.

## 3 What's next?

This information will be included in the Aboriginal heritage assessment for AGL's proposed minor pipeline corridor realignments and an updated assessment report will be forwarded to your organisation on completion. The data from the AECOM (2009) assessment and the Scarp Archaeology (2010) assessment will be included in the report.

The environmental assessment for the proposed modification (including the Aboriginal heritage assessment) will be submitted to the Department of Planning and Infrastructure (DP&I) for adequacy review in the coming weeks. We will advise you as to the progress of the environmental assessment and any further comments or consultation requirements.

If you have any additional comments specifically relating to the Millers Forest section, beyond these provided for the other three sections where the pipeline corridor is proposed to be realigned, we invite you to provide comment to us in writing by 1 November 2013. This will ensure they are incorporated before the document is submitted to DP&I.

If you would like to discuss the proposed modifications further please do not hesitate to contact me. We look forward to continuing to consult with you on this project.

Yours sincerely



Rebecca Newell  
Archaeologist  
[rnewell@emgamm.com](mailto:rnewell@emgamm.com)

## Rebecca Newell

---

**From:** Jodi Kelehear  
**Sent:** Thursday, 10 October 2013 11:20 AM  
**To:** 'reception@worimi.org.au'  
**Cc:** Rebecca Newell  
**Subject:** AGL - Draft Aboriginal cultural heritage assessment for review and comment  
**Attachments:** J13088\_Ltr\_AHIA\_DRAFT sent to RAPs (Low Res).pdf

To the CEO,

Field surveys were carried out on 26 September 2013 for AGL's proposed modification to the approved Gloucester Gas Project. The modification is proposed to enable minor realignments of three sections of pipeline corridor and connection to the Newcastle Gas Storage Facility. Please find attached the draft Aboriginal cultural heritage assessment for your review and comment. We have also mailed you a copy of this report.

This report will be submitted as part of the Environmental Assessment for the proposed modification, for approval under the NSW *Environmental Planning and Assessment Act 1979*.

We are seeking your feedback on the draft report and will incorporate your comments into the final report. We are also interested in any further views on the cultural heritage value of the area from an Aboriginal perspective. If you are aware of any other form of Aboriginal heritage values (which might include archaeological sites or other types of values), please let us know so these values can be taken into account in the assessment. We welcome any statement that describes how the land might be significant.

Could you please provide written comments on the draft report and the cultural significance of the area as soon as possible and no later than **Wednesday 23 October 2013** to Jodi Kelehear at:

[jkelehear@emgamm.com](mailto:jkelehear@emgamm.com)

OR

Jodi Kelehear  
EMGA Mitchell McLennan  
Ground Floor, Suite 01  
20 Chandos Street  
St Leonards NSW 2065

Rebecca Newell, who attended the field surveys, will give you a call later today or tomorrow to discuss.

Regards,  
Jodi Kelehear  
Senior Environmental Scientist

*Sydney, Newcastle and Brisbane.*



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*Please consider the environment before printing my email.*



23 October 2013

Jodi Kelehear  
EMM | EMGA Mitchell McLennan  
Ground Floor, Suite 01  
20 Chandos Street  
St Leonards NSW 2065

Dear Jodi,

**Re: Review and Response Regarding the Draft Minor Pipeline Corridor Realignments Aboriginal Cultural Heritage Assessment Report for the Gloucester to Hexham Gas Project**

We have reviewed the document supplied to us by EMM regarding the Draft Minor Pipeline Corridor Realignments Aboriginal Cultural Heritage Assessment Report, and herein provide our response regarding our concerns.

We would also like to advise you that the Awabakal and Guringai People are now Registered Native Title Claimants over this project area and have therefore been recognised by the National Native Title Tribunal under the Federal Government as having Native Title rights and interests over an overall area of just under 4000 square kilometres (from Newcastle in the north to south of Broken Bay). The Traditional Owners are concerned for the protection and appropriate management of our Cultural Heritage.

**Our Comments Regarding the Contents of the Document are as follows:**

We are concerned that the Draft Report does not take into consideration that there is potential for Aboriginal Artefacts to be contained below the topsoil subsurface. And although *'No Aboriginal sites or objects were identified during the survey'*, this doesn't mean that Aboriginal artefacts are not contained below the topsoil subsurface.

Considering that on page 7 that Photograph 1 and 2 show a considerable amount of vegetated ground cover within the Seaham transects facing south and north along the proposed alignment, we believe that the statement that; *'No Aboriginal sites or objects were identified during the survey'*, is being based on assumption and not fact.

Consequently to rule out such a statement, one would have to provide evidence to verify that no artefacts are contained below the topsoil subsurface. We therefore believe that the precautionary perspective that there is potential for artefacts to be contained below the topsoil subsurface should be taken into consideration, which may influence aspects pertaining to the Recommendations for Aboriginal Heritage Mitigation.

With regard to the AHMS search on page 5, section 3.4, and Figure 1 which shows the AHMS search results, we are of the understanding that the OEH AHIMS Database Sites Register may not necessarily have “up-to-date” or current information due to many unreported or unfinished site assessments pertaining to projects within close proximity to the proposed Minor Pipeline Corridor Realignment for the Gloucester to Hexham project area.

The AHIMS is not a comprehensive list of all Aboriginal Heritage in NSW, rather it reflects information which has been *reported* to OEH. Also in addition site co-ordinates in the database vary in accuracy depending on the method used to record their location.

As is stated by the OEH themselves within their own document (see excerpt below), when an AHIMS Web Services (AWS) Search Result is produced it contains a statement that says in the following;

***‘Some parts of New South Wales have not been investigated in detail and there may be fewer records of Aboriginal sites in those areas. These areas may contain Aboriginal sites which are not recorded on AHIMS’.***

Therefore, the Predictive Model for Archaeology in the Project area within Sections 3.5 will result in an incorrect representation, and consequently an incorrect Predictive Model will also have a compounding impact on the proposed Recommendation and Impact Assessment & Mitigation Measures within the Draft Report, and strongly recommend that these sections will need to reflect this aspect.

With regard to the survey results outlined on page 6 within section 4.2.1, we disagree with this section as again it is being based on assumption not fact that; *‘it is considered unlikely to contain Aboriginal objects’*, that is being based on the 2009 predictive model which does not take into consideration any relevant information and/or current data over the last 5 years.

We also have concerns that the Draft Report has not taken into consideration the impact on unknown sites due to the observation and information gathering process which presented minimal visible evidence due to the vegetated ground surface. Therefore, it should not be assumed that Aboriginal objects do not exist within the proposed project area.

Therefore the Awabakal Traditional Owners are rejecting the statements that; *‘the project area is unlikely to contain Aboriginal objects’* within this Draft Report, for the reason that it is not based on empirical evidence nor mitigation ranking and mitigation, and therefore have no confidence that our cultural and heritage values, landscape and features will be protected or conserved within such an unknown assessment paradigm.

With regard to the Conclusion and Recommendations on page 11, Section 7 of the Draft Report, we believe that the AECOM 2009 recommendations are outdated and are not really relevant to the recent survey modifications for the Minor Pipeline Corridor Realignment Aboriginal Cultural Heritage Assessment within the Awabakal region.

We do agree that there is a need for the development of an Aboriginal Heritage Management Plan (AHMP), however we believe that this should not be limited to just the management of any Aboriginal objects and/or sites, but should cover the Project area within our Awabakal & Guringai Registered Native Title Claimant area.

We are concerned with the first dot point condition 3.35, as the Draft Report does not specify how this will be achieved by the Proponent during the course of the construction process. As it has been our experience that extensive impacts pertaining to the actual extent of the maximum impact areas including machinery impact earthworks being proposed are continually being underestimated.

It has also been our experience that it would be next to impossible for earth moving drivers to identify Aboriginal objects during construction earthworks. Therefore, we believe that this section may need further clarification with reference to the maximum impact area including the machinery impact earthworks of the proposed Pipeline works footprint.

Although the Draft Report has stipulated that the Aboriginal cultural heritage commitments are to be developed in consultation with the RAP's and no additional measures are required to be implemented for the purpose of the proposed modification, however we therefore highly suggest that monitoring the initial vegetation clearance by the Awabakal Traditional Owners is critical, as we believe that there is potential for Aboriginal objects to be concealed below the vegetated ground subsurface as a result of the general use of the area.

As stated in our responses to AECOM in 2009, we would like to reiterate our concerns stating that;

'As mentioned in our comments dated 6<sup>th</sup> April 2009, that many of our cultural heritage sites are being damaged, and believe that the structure and context of the landscape of the surrounding project area relates to distinctive factors that are associated to Aboriginal inhabitation. Therefore, we recommend monitoring is necessary to examine the possible survival and integrity of any Aboriginal sites that may be present within the Proposed Pipeline Project area'.

The persistent and constant destruction of our Cultural Heritage continues to distress our People 'the Awabakal', and therefore we seek OEH's (Office of Environment and Heritage) serious consideration of the legacy of cumulative and continued damage to our Cultural Heritage Values and examine intergeneration equity standards in determining approvals or non-approvals. Any approval and conditions must use best practice standards and intergenerational equity weighting in consideration in determining the future conservation of our cultural landscape.

We would also like to mention that there is no mention of the previous archaeological investigation by RPS in 2011 for the Newcastle Gas Storage Gas Facility, which we believe may also be relevant to this Draft Report.

The Awabakal people regard the Newcastle region Culturally Significant and is part of our Traditional Awabakal Country and is considered by our People to be of great importance within our Cultural Heritage.

This area has not just a physical presence within the Cultural Heritage of the Awabakal People, but it is part of our oral history and a place of spiritual significance. The landforms and resources of this locale fulfilled not just the basic needs that underpinned our Peoples subsistence but also satisfied the many other aspects that made up what can be described here as being part of the Cultural foundations of our People.

As already previously stated, this area is of high significance to our People and therefore it would be expected that after the many generations of our People that have walked the pathways of their Ancestors, it is obvious that there would be many areas that contain evidence of this connection, resulting from occupation on varying levels.

These physical reminders left by our Ancestors which provide us as Descendants of the Awabakal People an opportunity to make a physical connection through time with our Ancestors. These cultural reminders are not made overnight, and indicates significant habitation and continuing revisit within traditional boundary.

Therefore the Cultural Value and Significance remains high, which is attributed to our Cultural Heritage understanding of the connectivity and aspects of the regions holistic perspectives, thus emphasizing the importance of the whole, instead of a Scientific/Archaeological Value aspect of the independence of its site specific parts.

Our connection is one of those avenues that produce in us the sense of perception, appreciation, familiarity and recognition of who we are and where we belong as Awabakal People, which is our birthright.

We look forward to your reply and wish for these comments to be added in the format presented here and inserted into the Final Report.

Kind regards,  
Kerrie Brauer  
Director | Administration





PO BOX 86  
CLARENCE TOWN  
NSW 2321

Date: 22 October 2013

**Attention: Jodi Kelehear  
EMGA Mitchell McLennan  
Ground Floor Suite 01  
20 Chandos Street  
St Leonards NSW 2065**

**Re: Draft – AGL - minor pipeline corridor realignments - Aboriginal cultural heritage assessment.**

Hello Jodi,

This letter is in response to your correspondence requesting feedback/comments from the **Awabakal Descendants Traditional Owners Aboriginal Corporation** in regard to the **Draft AGL minor pipeline corridor realignments - Aboriginal Cultural Heritage Assessment**, received via email from EMGA on the 10<sup>th</sup> October 2013. We would like to take this opportunity to make some comments for your consideration in regards to the protection and preservation for our (Awabakal) Cultural Heritage. We must stress that we are only commenting on the works proposed for the Tomago section on the southern side of the Hunter River (Awabakal Land) within the Woodberry/Hexham area and have no right culturally to comment on what is to the north of the Hunter River, the Worimi Traditional Lands.

### **Ground Visibility, Surface Exposure**

- As stated in the draft report, ground visibility was minimal with no sites or artifacts located within the survey area on the day. The conclusion offered in the draft report is then shown as; **'No Aboriginal Heritage sites or objects identified during the survey and areas surveyed were not considered archeologically sensitive. No further Aboriginal Heritage investigations are considered necessary.'**
- Many Aboriginal Cultural Heritage assessments are subject to decisions arrived at following field inspections based on poor visibility. Unfortunately the visibility question can be misleading and it is a common practise to assume that if there are no visible evidence/signs of Aboriginal Cultural Heritage, then it is Ok to assume there is none or only a small amount present.
- Below we have included a statement from OEH/DECCW that explains the problems associated with making assumptions based on lack of visibility;
- **'Visibility is the amount of bare ground on the exposures which may reveal artefacts or other cultural materials, or visibility refers to 'what conceals'. Visibility is hampered by vegetation, plant or leaf litter, loose sand, stony ground or introduced materials (such as rubbish) On its own, visibility is not a reliable factor in determining the detectability of subsurface cultural materials (DECCW 2010/783:39).'**
- Another point stated in the draft report under the heading 'Impact Assessment' **'The proposed modification involves activities that will disturb the ground surface. No Aboriginal sites or objects were identified during the survey. As such there will be no additional impacts to Aboriginal sites or objects beyond those identified in the original ACHA (AECOM 2009) as a result of the modification. No carved or scarred trees occur on the vegetation subject to potential removal by the proposed modification. No areas of PAD were identified and the areas surveyed were considered to be of low archaeological potential.'**
- As stated, ground visibility was minimal but to conclude that because there were no visible signs of Aboriginal Cultural Heritage, that there will be no additional impacts to Aboriginal sites or objects , does not take into consideration any cultural materials obscured from view beneath vegetation or concealed within the topsoil horizons of the proposed modification area. We acknowledge the recommendations outlined in the draft but wish to stress that **regardless, if it is a single artefact, scatter or other related Cultural material it is all of great significance and importance to us**

**the Descendants of the Awabakal, as it provides us with a real and tangible link to the daily lives of our ancestors.**

An example, quoted here, to demonstrate what could be disturbed during the proposed modification and excavations is a source that states;

***'Once discarded on the ground surface, artefacts are often readily incorporated into the topsoil horizons through the process of bioturbation. Most commonly, dense artefact deposits exist hidden beneath the upper surface, unobservable by the casual observer.'***  
***(c.f.Wandsnider and Camilli 1992; Fanning and Holdaway 2001).<sup>1</sup>***

- Understanding that most of the survey area is now predominantly rural grazing land and has undergone modifications to parts of the landscape does not negate the fact that our people have occupied this area for thousands of years prior to European settlement. The Hexham side of the Tomago section and the surrounding land has been used by our Awabakal people for a variety of purposes from procurement of resources to more complex uses of the landscape within and outside the pipeline realignment area. This area has the Hunter River and the Hexham Swamp in close proximity, areas known to be of great significance to our people. In addition to this Thornton to the west and Fletcher to the South, both have significant recorded sites containing thousands of recovered artefacts.

### **AHIMS Information**

- It must be remembered that an AHIMS search is not an absolute indication of what is present and is summarised below in that;
  - a) The lack of information or recorded evidence of Cultural Heritage sites reported on the AHIMS Database does not in reality give a true indication of what is present.
  - b) The AHIMS register is only useful in determining the location of Cultural Heritage sites that have already been recorded. As is stated by the OEH themselves within their own document (see excerpt below), when an AHIMS Web Services (AWS) Search Result is produced it contains a statement that says in the following;  
  
***'Some parts of New South Wales have not been investigated in detail and there may be fewer records of Aboriginal sites in those areas. These areas may contain Aboriginal sites which are not recorded on AHIMS.'***<sup>2</sup>
  - c) Therefore, this information needs to be accessed appropriately and all facets of the available information (including the possibility of sites that have not been recorded previously and that remain undetected) need to be taken into account regarding the location of this proposed pipeline corridor realignments.

### **Conclusion**

- The Awabakal Descendants Traditional Owners Aboriginal Corporation believe that it would be of great benefit to the ongoing protection of our Culture and Heritage given the points raised above, if the Aboriginal Stakeholders were afforded the opportunity to have visitation of the site for monitoring of the excavations works within the proposed project area on the Hexham side of the Tomago Section. (until satisfied there is no Aboriginal Cultural Heritage being disturbed or damaged)

We thank you Jodi for the opportunity to provide our comments for this draft report. If you require any further information please contact us on the details provided below.

Regards,

Peter Leven: Assistant Manager-Awabakal Descendants Traditional Owners Aboriginal Corporation  
Email: [peterleven@y7mail.com](mailto:peterleven@y7mail.com) Phone: 0261608000 Mobile: 0405149684

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## Appendix B

### AHIMS results

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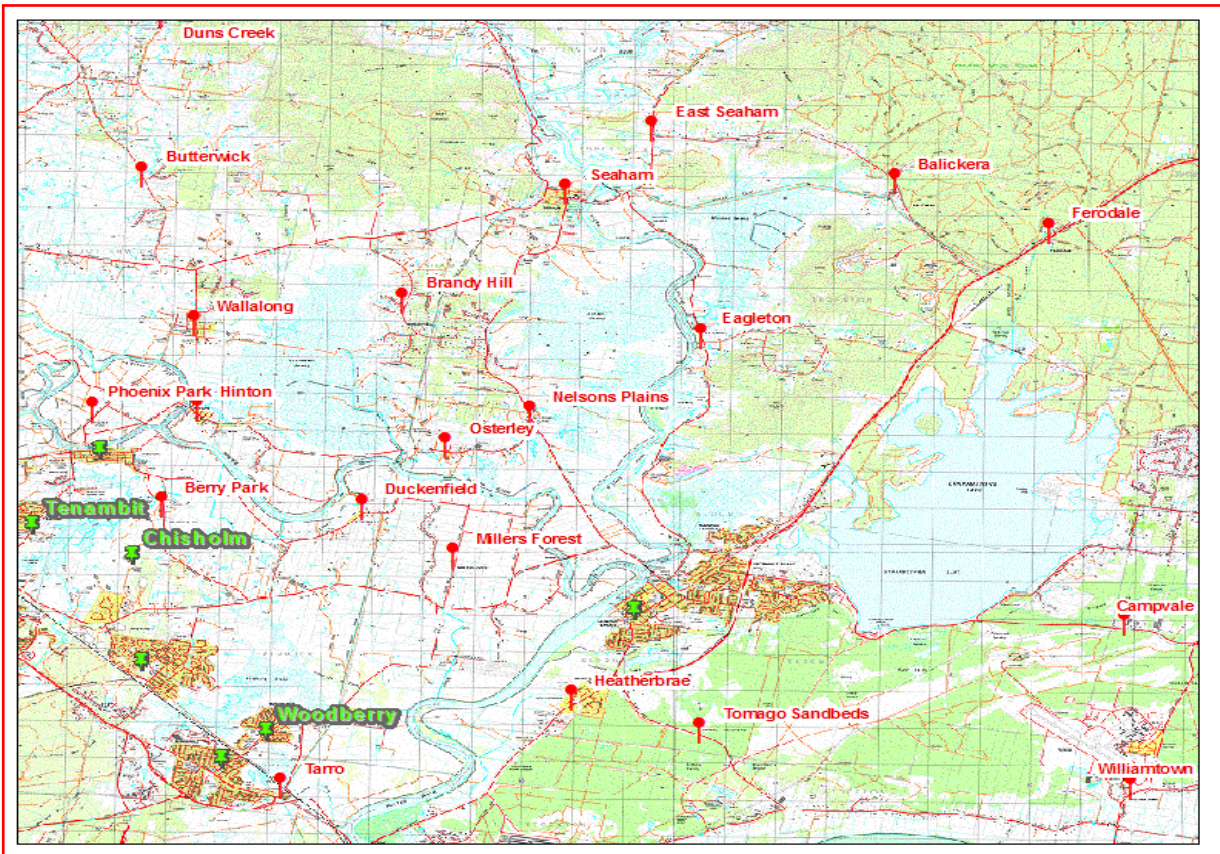
EMGAMM-St Leonards (previously EMGA)  
 Ground Floor, Suite 01 20 Chandos Street  
 St Leonards New South Wales 2065  
 Attention: Rebecca Newell  
 Email: rnewell@emgamm.com

Date: 11 September 2013

Dear Sir or Madam:

**AHIMS Web Service search for the following area at Datum :AGD, Zone : 56, Eastings : 376600 - 386600, Northings : 6369000 - 6389000 with a Buffer of 1000 meters. Additional Info : Aboriginal archaeological assessment, conducted by Rebecca Newell on 11 September 2013.**

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:

<b>50</b>	<b>Aboriginal sites are recorded in or near the above location.</b>
<b>0</b>	<b>Aboriginal places have been declared in or near the above location. *</b>

### **If your search shows Aboriginal sites or places what should you do?**

- You must do an extensive search if AHIMS has shown that there are Aboriginal sites or places recorded in the search area.
- If you are checking AHIMS as a part of your due diligence, refer to the next steps of the Due Diligence Code of practice.
- You can get further information about Aboriginal places by looking at the gazettal notice that declared it. Aboriginal places gazetted after 2001 are available on the [NSW Government Gazette \(http://www.nsw.gov.au/gazette\)](http://www.nsw.gov.au/gazette) website. Gazettal notices published prior to 2001 can be obtained from Office of Environment and Heritage's Aboriginal Heritage Information Unit upon request

### **Important information about your AHIMS search**

- The information derived from the AHIMS search is only to be used for the purpose for which it was requested. It is not be made available to the public.
- AHIMS records information about Aboriginal sites that have been provided to Office of Environment and Heritage and Aboriginal places that have been declared by the Minister;
- Information recorded on AHIMS may vary in its accuracy and may not be up to date .Location details are recorded as grid references and it is important to note that there may be errors or omissions in these recordings,
- Some parts of New South Wales have not been investigated in detail and there may be fewer records of Aboriginal sites in those areas. These areas may contain Aboriginal sites which are not recorded on AHIMS.
- Aboriginal objects are protected under the National Parks and Wildlife Act 1974 even if they are not recorded as a site on AHIMS.
- This search can form part of your due diligence and remains valid for 12 months.

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
38-4-0148	Kanwarry;	AGD	56	377350	6379580	Open site	Valid	Artefact : -	Open Camp Site	1333
	<a href="#">Contact</a>	<a href="#">Recorders</a>	Warren Bluff					<a href="#">Permits</a>		
38-4-0149	Kitty's Hollow;	AGD	56	379710	6378530	Open site	Valid	Burial : -	Burial/s	1333
	<a href="#">Contact</a>	<a href="#">Recorders</a>	Warren Bluff					<a href="#">Permits</a>		
38-4-0150	Hinton;	AGD	56	378850	6378360	Open site	Valid	Ceremonial Ring (Stone or Earth) : -	Bora/Ceremonial	1333
	<a href="#">Contact</a>	<a href="#">Recorders</a>	Warren Bluff					<a href="#">Permits</a>		
38-4-0151	Green Rocks,;	AGD	56	377370	6377970	Open site	Valid	Shell : -, Artefact : -	Midden	1333
	<a href="#">Contact</a>	<a href="#">Recorders</a>	Warren Bluff					<a href="#">Permits</a>		
38-4-0237	RT 2;	AGD	56	383700	6373210	Open site	Valid	Artefact : -	Open Camp Site	1916,1983,219 9,102116
	<a href="#">Contact</a>	<a href="#">Recorders</a>	Doctor.Jo McDonald,Elizabeth Rich					<a href="#">Permits</a>		
38-4-0238	RT 3;	AGD	56	381900	6372150	Open site	Valid	Artefact : -	Open Camp Site	1916,1983,219 9,102116
	<a href="#">Contact</a>	<a href="#">Recorders</a>	Doctor.Jo McDonald,Elizabeth Rich					<a href="#">Permits</a>		
38-4-0239	RT 4;	AGD	56	384200	6374850	Open site	Valid	Modified Tree (Carved or Scarred) : -	Scarred Tree	1916,1983,219 9,102116
	<a href="#">Contact</a>	<a href="#">Recorders</a>	Doctor.Jo McDonald,Elizabeth Rich					<a href="#">Permits</a>	487	
38-4-0240	RT 1;	AGD	56	384080	6373770	Open site	Valid	Artefact : -	Open Camp Site	1916,1983,219 9,102116
	<a href="#">Contact</a>	<a href="#">Recorders</a>	Doctor.Jo McDonald,Elizabeth Rich					<a href="#">Permits</a>	275,486	
38-4-0242	T 1;	AGD	56	383600	6368300	Open site	Valid	Artefact : -	Open Camp Site	1845,102116
	<a href="#">Contact</a>	<a href="#">Recorders</a>	Helen Clemens,Andrew Ross,Pam Dean-Jones					<a href="#">Permits</a>		
38-4-0243	T 2;	AGD	56	384400	6368700	Open site	Valid	Artefact : -	Open Camp Site	1845,102116
	<a href="#">Contact</a>	<a href="#">Recorders</a>	Helen Clemens,Andrew Ross,Pam Dean-Jones					<a href="#">Permits</a>		
38-4-0244	T 3;	AGD	56	383900	6368700	Open site	Valid	Artefact : -	Open Camp Site	1845,102116
	<a href="#">Contact</a>	<a href="#">Recorders</a>	Helen Clemens,Andrew Ross,Pam Dean-Jones					<a href="#">Permits</a>	3335	
38-4-0245	T 4;	AGD	56	384200	6368800	Open site	Valid	Artefact : -	Open Camp Site	1845,102116
	<a href="#">Contact</a>	<a href="#">Recorders</a>	Helen Clemens,Andrew Ross,Pam Dean-Jones					<a href="#">Permits</a>	3335	
38-4-0246	T 5;Tomago	AGD	56	384005	6369089	Open site	Valid	Artefact : 1	Open Camp Site	1845,100499,1 02116
	<a href="#">Contact</a>	<a href="#">Recorders</a>	Helen Clemens,Andrew Ross,Pam Dean-Jones					<a href="#">Permits</a>	3335	
38-4-0247	T 6;	AGD	56	383900	6368800	Open site	Valid	Artefact : -	Open Camp Site	1845,102116
	<a href="#">Contact</a>	<a href="#">Recorders</a>	Helen Clemens,Andrew Ross,Pam Dean-Jones					<a href="#">Permits</a>	3335	
38-4-0320	RT 5;	AGD	56	382220	6372230	Open site	Valid	Artefact : -	Open Camp Site	1983,102116
	<a href="#">Contact</a>	<a href="#">Recorders</a>	Doctor.Jo McDonald					<a href="#">Permits</a>		

Report generated by AHIMS Web Service on 11/09/2013 for Rebecca Newell for the following area at Datum :AGD, Zone : 56, Eastings : 376600 - 386600, Northings : 6369000 - 6389000 with a Buffer of 1000 meters. Additional Info : Aboriginal archaeological assessment. Number of Aboriginal sites and Aboriginal objects found is 50

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

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
38-4-0414	Masonite Road; <b>Contact</b>	AGD	56	385250	6370900	Open site	Valid	Artefact : - <b>Permits</b>	Open Camp Site	102116
38-4-0114	Kitty's Hollow; Nelsons Plains; <b>Contact</b>	AGD	56	379650	6378500	Open site	Valid	Burial : - <b>Permits</b>	Burial/s	823
38-3-0037	Tomago 1;TK1; <b>Contact</b>	AGD	56	385600	6369540	Open site	Valid	Artefact : - <b>Permits</b>	Open Camp Site	1339,102116,102420
38-4-0044	Seaham;W.bank of Williams River; <b>Contact</b>	AGD	56	381676	6383708	Open site	Valid	Artefact : - <b>Permits</b>	Open Camp Site	
38-4-0047	Nelson's Plain <b>Contact</b>	AGD	56	382954	6378978	Open site	Valid	Stone Quarry : - , Artefact : - <b>Permits</b>	Quarry	
38-4-0049	Nelson's Plains;Kings Hill; <b>Contact</b>	AGD	56	384594	6379283	Closed site	Valid	Artefact : - <b>Permits</b>	Shelter with Deposit	
38-4-0647	A1 - Tomaree/Tomago <b>Contact</b>	AGD	56	384559	6368108	Open site	Partially Destroyed	Shell : 2, Artefact : 2 <b>Permits</b>		10,102116,102652
38-4-0648	A2 - Tomaree/Tomago <b>Contact</b>	AGD	56	384377	6368060	Open site	Valid	Artefact : 1 <b>Permits</b>		1797,3382
38-4-0679	PAD 1: Tomaree to Tomago <b>Contact</b>	AGD	56	384605	6368389	Open site	Partially Destroyed	Potential Archaeological Deposit (PAD) : 0, Artefact : 1, Shell : 1 <b>Permits</b>		98386,98387,102116,102652
38-4-0681	PAD 3: Tomaree to Tomago <b>Contact</b>	AGD	56	384400	6370500	Open site	Valid	Potential Archaeological Deposit (PAD) : 0 <b>Permits</b>		1807,3382
38-4-0682	PAD 4:Tomaree to Tomago <b>Contact</b>	AGD	56	384405	6372500	Open site	Valid	Potential Archaeological Deposit (PAD) : 0 <b>Permits</b>		1882,1883,1886
38-4-0676	Tomaree/Tomago A10 <b>Contact</b>	AGD	56	384867	6368228	Open site	Valid	Artefact : 9, Non-Human Bone and Organic Material :- <b>Permits</b>		98386,98387,102116
38-4-0694	Raymond Terrace 1 (RT1) <b>Contact</b>	AGD	56	384071	6373602	Open site	Valid	Artefact : 1 <b>Permits</b>		1882,1883,1886

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SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
38-4-0695	Raymond Terrace PAD 1	AGD	56	384010	6373750	Open site	Valid	Potential Archaeological Deposit (PAD) : 1	Permits 1975	98594,102116
38-4-0964	Tomago 4 (T4)	AGD	56	383419	6367848	Open site	Destroyed	Artefact : 2, Shell : -	Permits 1763	100057,10211 6,102403
38-4-0965	Tomago 5 (T5)	AGD	56	383419	6367848	Open site	Destroyed	Artefact : 1, Shell : -	Permits	100057,10211 6,102403
38-4-0966	Tomago 8 (T8)	AGD	56	383428	6367863	Open site	Valid	Artefact : 13	Permits	100057,10211 6,102403
38-4-0967	Tomago 7 (T7)	AGD	56	383428	6367863	Open site	Valid	Artefact : 47	Permits 2504	100057,10211 6,102403
38-4-1158	Mount Hall Road 1 (MHR1)	AGD	56	384432	6373729	Open site	Valid	Artefact : 1	Permits 2504	
38-4-1140	Masonite Rd (Tomago)	GDA	56	385250	6370900	Open site	Valid	Artefact : -	Permits 3241,3272	3572,102116
38-4-1190	Balickera PAD 1	GDA	56	386965	6385160	Open site	Valid	Potential Archaeological Deposit (PAD) : 1, Artefact : 1	Permits 3260,3344	
38-4-1191	Balickera PAD 2	GDA	56	385215	6384491	Open site	Valid	Potential Archaeological Deposit (PAD) : 1	Permits 3260,3344	102125
38-4-1198	LEA8	GDA	56	378005	6384593	Open site	Valid	Artefact : 2	Permits	
38-4-1199	LEA9	GDA	56	378093	6384498	Open site	Valid	Artefact : 2	Permits	
38-4-1201	PAD12 (Maitland)	GDA	56	382530	6389641	Open site	Valid	Potential Archaeological Deposit (PAD) : 1	Permits	

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SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
38-4-1202	PAD13 (Maitland)	GDA	56	382073	6388896	Open site	Valid	Potential Archaeological Deposit (PAD) : 1		
	<b>Contact</b>									<b>Permits</b>
38-4-1203	PAD14 (Maitland)	GDA	56	380274	6386745	Open site	Valid	Potential Archaeological Deposit (PAD) : 1		
	<b>Contact</b>									<b>Permits</b>
38-4-1204	Mount Hall Road KF 1 (MHR KF1)	GDA	56	384445	6373835	Open site	Valid	Artefact : 59, Potential Archaeological Deposit (PAD) : 0		
	<b>Contact</b>									<b>Permits</b> 3240,3269,3272
38-4-1221	Grahamstown WTP 5/A	GDA	56	383783	6369610	Open site	Valid	Artefact : 2		
	<b>Contact</b>									<b>Permits</b> 3335
38-4-1291	RPS PHWY AS2	GDA	56	378274	6368460	Open site	Valid	Artefact : 8		
	<b>Contact</b>									<b>Permits</b>
38-4-1585	BQ1	AGD	56	386967	6382480	Open site	Valid	Artefact : 1		
	<b>Contact</b>									<b>Permits</b>
38-4-1586	BQ PAD1	AGD	56	387300	6382720	Open site	Valid	Potential Archaeological Deposit (PAD) : 1		
	<b>Contact</b>									<b>Permits</b>
38-4-1584	BQ PAD 2	GDA	56	387185	6382520	Open site	Valid	Potential Archaeological Deposit (PAD) : 1		
	<b>Contact</b>									<b>Permits</b>
38-4-1529	SEAHAN-01	GDA	56	379710	6387561	Open site	Valid	Artefact : 1		
	<b>Contact</b>									<b>Permits</b>
38-4-1476	NBR3/1 Shell Midden	AGD	56	385726	6374016	Open site	Valid	Artefact : -, Shell : -		
	<b>Contact</b>									<b>Permits</b> 3564

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