

## Heritage – Summary of Key Outcomes

The heritage assessment describes the results of the data review, field survey and Aboriginal consultation program conducted for the Project. The assessment provides a significance assessment for the sites identified during the current survey. The Department of Environment, Climate Change and Water's (DECCW) *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* have been implemented for the Project. To date letters have been sent to the required groups/authorities, additional letters have been sent to groups identified by OEH, and a public notice has been placed in the Yass Tribune (14 May 2010).

The Dalton gas pipeline study area falls within the boundaries of the Onerwal Local Aboriginal Land Council (OLALC), based at Yass. The Land Council was contacted by phone, email and fax to invite a representative to participate in the field survey of the pipeline easement. However, no response was received from the OLALC.

The assessment addressed previously recorded sites and field surveys of the development footprint. No previously recorded Aboriginal or historical sites are located within the area of the power station footprint or the gas pipeline and access road study areas.

The assessment concluded the following:

- Six sites (Dalton 2, Dalton 3, Dalton 4, Dalton 5, Dalton 7 and DGP3), and two areas of potential archaeological deposits (DPAD1 and DPAD2) would be directly impacted by the plant footprint.
- Sites Dalton 1 and Dalton 6 would not be impacted by the Project.
- DGP4 and DGP5 is within the footprint of the gas pipeline and access road and would be directly impacted by the Project.
- DGP6 is within close proximity of the pipeline and access road footprint.

Where impacts cannot be avoided then the artifacts should be collected or relocated away from the area of impact. The following management strategies would be implemented:

- Disturbance to Aboriginal archaeological sites Dalton 2, Dalton 3, Dalton 4, Dalton 5, Dalton 7 and DGP3 should be avoided if possible. If impact is unavoidable, the artefacts would be collected or relocated away from the area of impact.
- If impact to Aboriginal site Dalton 5 and potential archaeological deposits DPAD1 and DPAD2 cannot be avoided, then a program of archaeological subsurface testing would be conducted to ascertain the presence, extent and integrity of cultural material that may be present in these areas. It is noted that the majority of the identified DPAD 2 area is located external to the Facility boundary, and detailed design will aim to avoid disturbance to the portion which has been identified within the boundary.
- The artefacts exposed at DGP5 should be collected and/or relocated away from the area of impact.

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- A limited program of salvage excavation should be conducted at sites DGP4 and DGP6 with the aim of recording and analysing a larger and more representative sample of artefacts

No further action is required for the DGP1, which is situated outside of the impact area.

The Dalton gas pipeline study area is located within a broad area included in an active Native Title Claim by the Gundungurra Tribal Council Aboriginal Corporation.

No European sites were located as occurring within either the power station footprint, or within the gas pipeline easement area.

## 15.1 Introduction

An assessment of the cultural heritage impacts of the Project was conducted by Navin Officer Heritage Consultants (Navin Officer).

This chapter provides a summary of the full assessments which are presented in **Appendix I**. The assessments addressed the local and regional archaeology and Aboriginal and European cultural heritage, and were prepared in accordance with the draft *Guidelines for Aboriginal Cultural Heritage Assessment and Community Consultation* (DECCW 2010).

## 15.2 Methodology

The cultural heritage assessments for both the power station footprint and for the gas pipeline and access road encompassed the following elements:

- *Literature and database review* to determine if known Aboriginal and historical sites were located within the area under investigation, to facilitate site prediction on the basis of known regional and local site patterns, and to place the area within an archaeological and heritage management context;
- *Fieldwork* involved inspection of all areas of ground surface visibility within the study area; and
- *Recording parameters* identifying material evidence of Aboriginal occupation as revealed by surface artefacts and areas of archaeological potential unassociated with surface artefacts.

Based on this methodology the following was provided:

- predictive statements for Aboriginal and European heritage places in the study area;
- results of the desktop analyses and field surveys of the subject site;
- statutory obligations relevant to cultural heritage of the site; and
- recommendations based on the results of the investigation and the impact of the proposed development on the known and potential archaeological resource.

The field survey of the Dalton study conducted in three stages. The first site visit was undertaken in April 2009 to survey the power station footprint, while further site visits were undertaken in March 2010 and January 2011 for the finalised gas pipeline and access road route option. Additional surveys were conducted in June 2011 to investigate a southern extension area of the proposed Facility footprint and communications tower infrastructure (including a proposed access track).

One Aboriginal stakeholder group has an interest in the Dalton study area, the Onerwal Local Aboriginal Land Council (LALC). Arrangements were made for a representative from the group to attend the field surveys. However a representative from the LALC did not attend.

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The Dalton gas pipeline study area falls within an active Native Title Claim by the Gundungurra Tribal Council Aboriginal Corporation (details: Gundungurra Tribal Council Aboriginal Corporation #6; Tribunal File No: NC97/7; Federal Court File No: NSD6060/980).

The claim covers a very large area of southeastern NSW from south of Katoomba to Goulburn (approximately 18675 km<sup>2</sup>) including the Upper Lachlan Shire.

A desktop review was also undertaken of historical heritage places in the vicinity of the power station footprint and within the vicinity of the gas pipeline easement, and the potential impacts on the heritage significance and visual elements of those places. No historical relics or features had previously been identified in the study area, and none were identified in either the assessment undertaken for the power station footprint, or for the gas pipeline.

### 15.3 Consultation

Consultation in relation to heritage matters included the following:

- Consultation with the Office of Environment and Heritage (OEH) to obtain information concerning previously recorded Aboriginal archaeological sites and completed archaeological studies.
- Consultation with representatives from the Onerwal Local Aboriginal Land Council.
- The Onerwal Local Aboriginal Land Council was provided with a copy of the draft of the power station assessment (2009) for comment on the cultural significance of the locality and any archaeological objects or areas recorded in the survey.

The Office of Environment and Heritage's (OEH) *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (DECCW, 2010) are being implemented for the Project. To date letters have been sent to the required groups/authorities, additional letters have been sent to groups identified by OEH, and a public notice has been placed in the Yass Tribune (14 May 2010).

Consultation would continue during detailed design with the Onerwal Local Aboriginal Land Council.

### 15.4 Environmental Context

#### 15.4.1 Landscape

Prior impacts within the study area range from moderate to high. The area as a whole has been subject to vegetation clearance, fencing, grazing and erosion. In particular, the spur crests and upper slopes display very shallow soil profiles that appear to be gravelly lag deposits left behind by erosion. Other impacts include formed roads, associated drainage channels, agricultural dams and services such as overhead power lines and subsurface cables.

## 15.5 Aboriginal Context

According to Tindale (1974) the Dalton study area is located within the tribal boundaries of the Ngunawal. A search of the AHIMS database revealed no previously recorded sites within the Dalton Power Project study area inclusive of both the facility footprint area and the pipeline corridor. Three sites, Mount Pleasant 1, 2 and 3 are the closest recorded sites to the study area. These sites are located to the north of the study area on the Lachlan River.

There are no previously recorded historical sites in or adjacent the study area, however previous studies modeling the site patterning for the Dalton area identify archaeological potential in the area.

The Aboriginal context of tribal boundaries, traditional groupings and local aboriginal history is discussed in more detail in **Appendix I**. Consultation with the Aboriginal community on cultural values is ongoing. As part of this consultation process, both heritage assessments have been forwarded to Onerwal Local Aboriginal Land Council for comment on the recommendations and any cultural issues relating to the development.

## 15.6 Historic Overview

The region was first explored by Europeans in 1820 and was then settled throughout the 1820s. John Macarthur settled Taralga in 1822, various Scots arrived in the Braidwood area in the 1830s, and almost 10,000 cattle and sheep were farmed in the open country around Goulburn in 1821. The 1830s saw the whole southern area of the bioregion occupied by squatting runs (NSW NPWS 2003).

The town of Dalton was settled in 1847. The study area is located in land owned in 1905 by John Mitchell and John Hallam. The parish map shows that the current road from Dalton is along the original alignment.

Dalton was part of Gunning Shire which was later amalgamated with Crookwell Shire and parts of Mulwaree, and Yass Shires to form the Upper Lachlan Shire.

There are no heritage listed items within the study area, however unrecorded historical sites and features of heritage significance may occur within the study area.

Structures of historical interest and heritage significance may be standing, ruined, buried, abandoned or still in use.

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## 15.7 Assessment of Potential Impacts

## 15.7.1 Aboriginal Sites

No Aboriginal sites or objects have been previously identified in the vicinity of the Dalton power plant area or the gas pipeline and access road study area.

*Facility Footprint Study Area*

Five Aboriginal sites comprising three isolated finds, one artefact scatter, one artefact scatter with potential archaeological deposit, and two areas of potential archaeological deposits (PAD) were located in or near the Dalton power plant study area during the power plant field survey undertaken in April 2009 and June 2011 to investigate a southern extension area of the proposed Facility footprint and communications tower infrastructure (and associated access track).

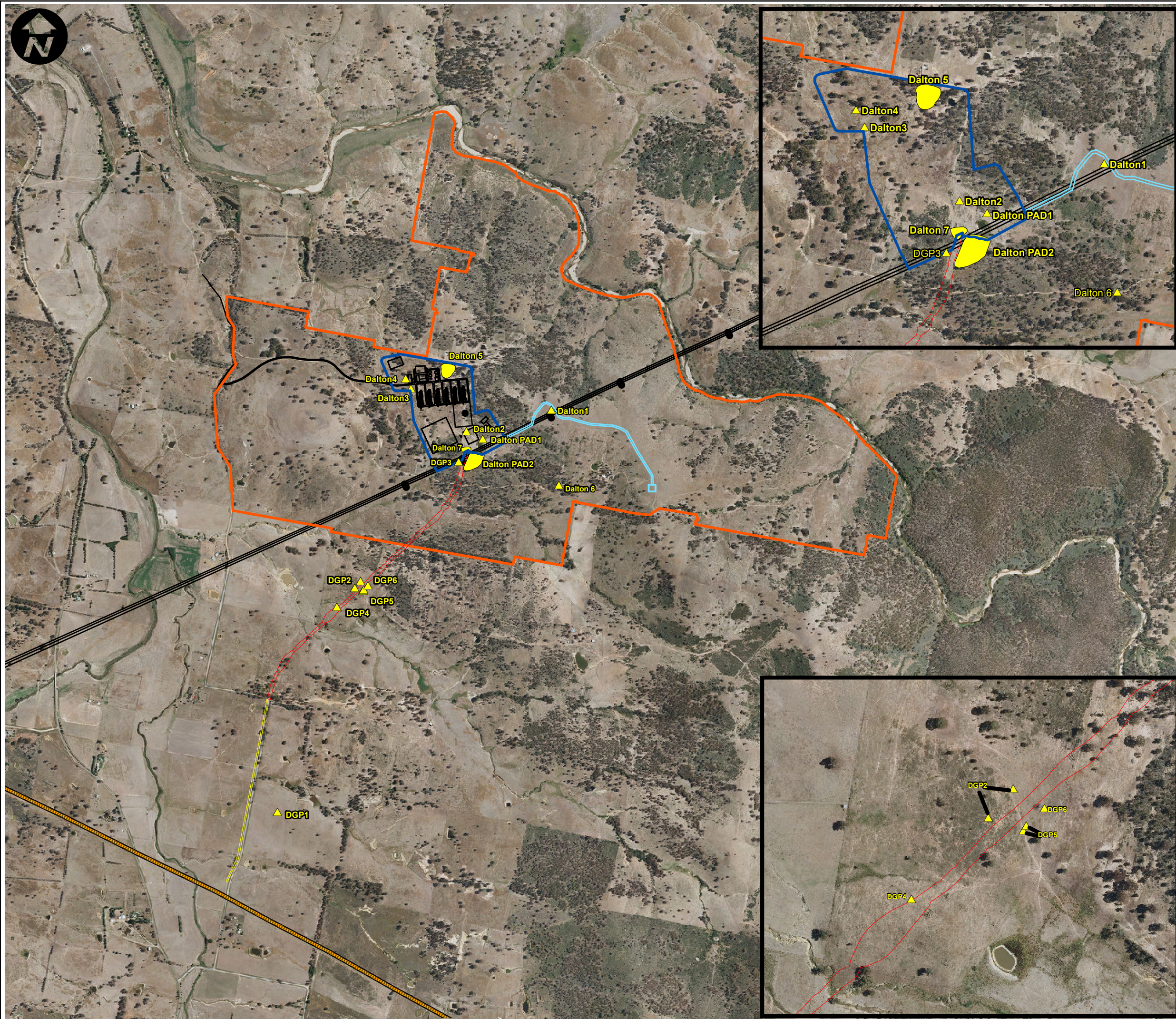
The artefacts found in the area (D1 – D4, D6 and D7) are common raw materials and have therefore been assessed as having low archaeological significance. D5 and the potential archaeological deposits (DPAD1 and DPAD2) have a moderate to high likelihood of containing further deposits however the significance of this site/deposit cannot be determined based on available data. These sites are detailed in **Table 15-1** and presented in **Figure 15-1**.

**Table 15-1 Site locations of relative to Facility Footprint**

Recording Code	Recording Type	Location Relative to Development
Dalton 1 (D1)	isolated find	Outside facility footprint area
Dalton 2 (D2)	artefact scatter	Directly impacted by facility footprint and potentially by gas pipeline and access road easement
Dalton 3 (D3)	isolated find	Directly impacted by facility footprint
Dalton 4 (D4)	isolated find	Directly impacted by facility footprint
Dalton 5 (D5)	artefact scatter and PAD	Directly impacted by facility footprint
Dalton 6 (D6)	artefact scatter	Outside facility footprint area
Dalton 7 (D7)	artefact scatter	Directly impacted by facility footprint
Dalton PAD1 (DPAD1)	potential archaeological deposit	Directly impacted by facility footprint
Dalton PAD2 (DPAD2)	potential archaeological deposit	Directly impacted (in part) by facility footprint



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**Legend**

- AGL Site Boundary
- Plant Footprint
- Gas Pipeline (northern) and Access Road
- Gas Pipeline (southern)
- Communications Tower and Hut Footprint
- Communications Tower Services and Access Track
- Moomba-Sydney Pipeline
- Transmission Line
- Aboriginal Sites
- Aboriginal Sites

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Kilometres

Source: Aerial Image from AGL

Drawn: AY/SB	Approved: KT	Date: 16/06/2010
Job No.: 43177661	File No.: 43177661.058.mxd	

Client

AGL POWER GENERATION (NSW)

Project

AGL DALTON POWER PROJECT

Title

ABORIGINAL SITES WITHIN STUDY AREA (FACILITY FOOTPRINT AND GAS PIPELINE EASEMENT)

Figure: 15-1



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**Gas Pipeline and Access Road Study Area**

Six Aboriginal sites comprising one isolated finds and five artefact scatters, and one area of potential archaeological deposit were located in or near the gas pipeline and access road easement. The artefacts within the proposed pipeline corridor have a moderate to low archaeological significance and are unlikely to lead to any further finds due to the level of exposure and erosion of the soil in the area.

The Sites of relevance to the pipeline and access road easement are detailed in **Table 15-2** and presented in **Figure 15-1**.

**Table 15-2 Site locations of relative to Gas Pipeline and Access Road Easement**

Recording Code	Recording Type	Location Relative to Development
Dalton 2 (D2)	artefact scatter	Directly impacted by power plant facility footprint and potentially by gas pipeline and access road easement
Dalton PAD1 (DPAD1)	potential archaeological deposit	Directly impacted by power plant facility footprint and potentially by gas pipeline and access road easement
Dalton Gas Pipeline 2 (DGP2)	artefact scatter	Outside pipeline and access road easement - no impact
Dalton Gas Pipeline 3 (DGP3)	isolated find	Outside pipeline and access road easement
Dalton Gas Pipeline 4 (DGP4)	artefact scatter	Directly impacted by gas pipeline footprint
Dalton Gas Pipeline 5 (DGP5)	artefact scatter	within close proximity of gas pipeline footprint
Dalton Gas Pipeline 6 (DGP6)	artefact scatter	Located on the south-eastern edge of proposed gas pipeline footprint; would potentially be impacted by construction of the pipeline.

Further definition of the nature of each of the above artefact scatters, isolated finds and potential archaeological deposits is provided in **Appendix I**. The locations of all Aboriginal Sites identified through heritage investigations carried out across the Dalton Power Project study areas are shown in **Figure 15-1**.

### 15.7.2 European Sites

No historical relics or features were identified within the study area of either the power station footprint or of the gas pipelines easement area during the field surveys.



## 15.8 Mitigation Measures

### 15.8.1 Aboriginal Heritage

The proposed construction of the Dalton Power Project would necessitate the substantial disturbance or removal of the current ground surface and associated upper soil profile within the footprint of the Facility, as well as in the gas pipeline and road easement area. This level of impact could destroy, damage or move any archaeological material potentially present within the affected sediments.

#### *Power Station Footprint*

Five sites (Dalton 2, Dalton 3, Dalton 4, Dalton 5 and Dalton 7) and areas of potential archaeological deposit (DPAD1 and DPAD2) would be directly impacted by the Project. It is noted that the majority of the identified DPAD 2 area is located external to the Facility boundary, and detailed design will aim to avoid disturbance to the portion which has been identified within the boundary.

Three sites (DGP4, DGP5 and DGP6) have been identified in, or adjacent to, the study area for the proposed pipeline in the context of the current study.

The potential of these sites to extend beyond their current recorded extent is probable, given the constraints of the low ground surface visibility within the study area, and the continuity of the micro-topographic landforms on which they are situated, to either side of the proposed development footprint. The likely subsurface presence of artefacts along these landforms, and their continuity outside of the proposed pipeline easement, means that avoiding impact to Aboriginal objects by minor adjustments to the easement may be problematic. Accordingly, the following mitigation measures are to be implemented:

- If impact to Aboriginal sites Dalton 2, Dalton 3, Dalton 4 Dalton 7 and DGP3 cannot be avoided then the artefacts should be collected or relocated away from the area of impact.
- If impact to Aboriginal site Dalton 5 and potential archaeological deposit DPAD1 and DPAD2 cannot be avoided, then a program of archaeological subsurface testing should be conducted to ascertain the presence, extent and integrity of cultural material that may be present in these areas.
- where practicable, disturbance to Aboriginal archaeological sites DGP4, DGP5 and DGP6 should be avoided;
- if avoidance of sites DGP4, DGP5 and DGP6 is not feasible, then the following management strategies are recommended:
  - a. the artefacts exposed at DGP5 should be collected and/or relocated away from the area of impact; and
  - b. a limited program of salvage excavation should be conducted at sites DGP4 and DGP6 with the aim of recording and analysing a larger and more representative sample of artefacts.

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- If during construction of the pipeline, Aboriginal objects are encountered outside of the DGP4, DGP5 and DGP6 site recordings, then the actions defined in the Unanticipated Discovery Protocol should be followed as described below and in greater detail within **Appendix I**.

A CEMP for the Project would detail management strategies to be followed to mitigate impacts on the identified Aboriginal items as listed above, together with strategies to be followed in the event that an Aboriginal object is uncovered during the construction of the Project.

In the event that an Aboriginal object is uncovered during the construction of the Project the following procedures are to be undertaken:

- 1) All works would cease in the immediate vicinity of the object.
- 2) A qualified archaeologist would assess the significance of the object.
- 3) If artefacts are discovered their location would be recorded using a hand held GPS and mapped, the artefacts would be collected, bagged and given a sequential location number.
- 4) If midden material is discovered its location would be recorded using a hand held GPS and mapped, a sample of the material is collected, bagged and given a sequential location number.
- 5) The collected material would be examined in detail by a suitably qualified lithic specialist and the midden material examined and recorded. A report is to be written detailing the findings of this examination.
- 6) Following completion of the analysis of the assemblage, all the lithic items would be lodged with the Australian Museum, or would be subject to a Care and Control Permit issued by the OEH.

Further detail on the management framework for the discovery of new sites or human skeletal remains during construction is provided in **Appendix I** and would be incorporated into a CEMP for the Project.

### 15.8.2 European Heritage

No historical relics or features were identified within the study area. However, the following management strategies would be followed and detailed in the CEMP for the Project, in the event that a substantial intact non-aboriginal archaeological relic is unexpectedly discovered:

- 1) All work would cease in the immediate vicinity of the object.
- 2) A qualified archaeologist would assess the significance of the relic.
- 3) The location of any relic would be recorded in accordance with best practices guidelines (as identified by the NSW Heritage Branch).
- 4) Based on (2) and (3) above, a report would be written by a heritage specialist detailing the outcomes of the assessment of the new discovery, including recommendations as to re-commencement of work in the affected area.

More detail on the management framework for the discovery of new sites or human skeletal remains during construction is provided in **Appendix I** and would be incorporated into a CEMP for the Project.



## 15.9 Mitigation Measures

Table 15-3 summarises the mitigation measures relating to the heritage assessment.

**Table 15-3 Summary of Heritage Mitigation Measures**

Mitigation measure	Implementation		
	Planning and design	Construction	Operation
<b>Aboriginal Heritage</b>			
Where practicable, disturbance to Aboriginal archaeological sites D2, D3, D4, D5, D7 and DGP3 should be avoided. If impact is unavoidable, the artefacts should be collected or relocated away from the area of impact.	✓	✓	
If impact to Aboriginal site D5 and potential archaeological deposits DPAD1 and DPAD2 cannot be avoided, then a program of archaeological subsurface testing should be conducted to ascertain the presence, extent and integrity of cultural material that may be present in these areas.	✓	✓	
Where practicable, disturbance to Aboriginal archaeological sites DGP4, DGP5 and DGP6 should be avoided.	✓	✓	
If sites DGP4, DGP5 and DGP6 are unavoidable, then the following management strategies are recommended: <ul style="list-style-type: none"> <li>the artefacts exposed at DGP5 would be collected and/or relocated away from the area of impact; and</li> <li>a limited program of salvage excavation should be conducted at sites DGP4 and DGP6 with the aim of recording and analysing a larger and more representative sample of artefacts.</li> </ul>		✓	
The CEMP would be developed and implemented addressing heritage issues. The CEMP would detail management strategies for identified Aboriginal sites together with strategies to be followed in the event that an Aboriginal object is uncovered during construction.		✓	
<b>European Heritage</b>			
The CEMP would be developed and implemented addressing heritage issues including strategies to be followed in the event that a non Aboriginal archaeological relic is uncovered during construction.		✓	