8. Heritage Issues

For the purpose of this EA, heritage has been addressed under two headings:

- Aboriginal Heritage (traditional indigenous land use and cultural values) (Sections 8.1-8.7)
- Non-Aboriginal heritage (recent settlement history, last 200 years) (Section 8.8)

8.1 Overview of Aboriginal Heritage Assessment

This section of the EA summarises the findings of an Aboriginal Heritage Assessment Appendix E undertaken for the project by Austral Archaeology. The assessment addressed:

- the regional context for Aboriginal Heritage,
- the Aboriginal archaeological and cultural heritage values of the project area and its surrounds,
- the potential impacts of the project on potential or identified sites and relics or cultural values, and
- the measures to be incorporated in the project to mitigate its impacts.

The assessment of the Aboriginal Heritage of the Capital Wind Farm site was undertaken by Austral Archaeology in conjunction with Pejar Local Aboriginal Land Council (PLALC), Gundungurra Tribal Council Aboriginal Corporation (GTCAC) and Buru Ngunawal Aboriginal Corporation (BNAC).

A search of the Native Title Tribunal Claims Register in June 2005 identified a single active native title claim covering the project area. The claim was filed on 29th April 1997 by Gundungurra Tribal Council Aboriginal Corporation #6 (Tribal file no. NC97/7 and Federal Court file no. NSD6060/98). Consultation with the relevant stakeholders will be continued through the planning of the Section 87 investigations and will include their involvement in any subsequent stages of planning and development of mitigation measures.

The reports of Austral Archaeology (Austral, 2005) and BNAC (Bell, 2005) are attached as Appendix E and key findings are summarised in this section. The assessment was undertaken in two stages and initially covered a larger area than is currently proposed by the project. The second stage focused on the current layout and in particular any new areas not assessed during Stage 1.

8.2 Summary of Findings and Recommendations of the Archaeological Assessment

Five Aboriginal archaeological surface sites were located during the surveys. These included two small artefact scatters and three isolated finds. In addition to these sites, six areas of potential archaeological deposit have been identified. One of these areas is associated with a recorded surface site and four others have been identified based on topographic features, location and their estimated research potential. Some of the identified sites and a large part of the potentially sensitive areas will not be impacted by the development.

The recommendations of the archaeological consultant include the following:

- Areas of archaeological/cultural sensitivity that could be impacted by the project should be subject to test excavation by a qualified archaeologist under a Section 87 Permit issued under the National Park and Wildlife Act.
- Where possible, access tracks and trenching for cables follow existing tracks and as far as possible cabling should be contained within the access roads.
- Works required for creek crossings should be designed for minimal impact on the banks of the creeks.
- Siting of cable routes and transmission poles to avoid areas of archaeological sensitivity.
- All investigative work be completed prior to construction works commencing.

In addition to the above, Renewable Power Ventures will need to seek a "whole of development" Section 90 Heritage Impact permit (with salvage) for any Aboriginal objects that may be impacted by the development. All further investigations and development of mitigation measures associated with the wind farm planning will include consultation with relevant Aboriginal stakeholders and the Department of Environment and Conservation (DEC).

8.3 Background Details

The following sections provide a summary of the site context relative to the Aboriginal heritage assessment.

8.3.1 Historical Changes and Site Disturbance

Prior to clearing, the region was made up of three main vegetation communities (after Witter 1980:2-3):

- Savannah grasslands (mainly associated with fine Quaternary soils on flat lands and valley bottoms)
- Savannah woodlands (open with grassy floor) mainly associated with stony soils & sloping hilly land.
- Dry sclerophyll forest. This vegetation community would have dominated the higher hills in the region

Edible faunal species present in the local area are likely to have included several species of duck, brown quail, possums, macropods, kangaroos, wallabys and lizards.

The area has been cleared extensively from as long ago as the 1820s for grazing sheep and cattle and raising crops. Relatively little of the study area occurs as 'lightly disturbed' lands. Ridges, hill-slopes and creek flats have been moderately and/or heavily disturbed with significant erosion evident in some areas. The development is targeting cleared grazing land, none of which is in undisturbed 'original' condition.

Over the last 150 years the study area has also been affected by the development of roads, tracks, railways, powerlines, sand mining, pine plantations, rural settlement and the construction of associated sheds and yards. There were also several operational metalliferous mines in the area that are now closed. The largest of these is the Woodlawn Mine. Minerals exploration activities and infrastructure development associated with the mines will also have been widespread throughout the study area.

Erosion may also have displaced some artefacts from more elevated areas such as ridges and slopes and they may have been deposited on lower slopes.

Aboriginal sites present within the study area will have been affected to varying degrees by the above mentioned land disturbance. Impacts of the disturbance may include loss of many scarred trees as well as local sub-surface disturbance.

8.3.2 Southern Tablelands Archaeological Context

Archaeological investigations undertaken in the Southern Tablelands indicate that the region has been occupied at least for the last 4,000 years and that most sites tend to cluster along waterways in valley bottoms and slopes and less frequently on rolling hills and ridges.

Occupation in the region is most typically evidenced in the form of open camp sites. Other site types within the broader region include isolated artefacts, quarries, grinding grooves, scarred trees, bora grounds and burials. Scarred trees, bora grounds and burials are rare site types in the region. Historically most burials and ceremonial sites have been recorded on hill tops, well away from

occupation sites. Burials were placed in hollow trees and rock shelters. They are found rarely due to decay, land clearing and fire.

8.3.3 Local Archaeological Context

A search of National, State and local heritage databases was undertaken to establish the archaeological context of the study area.

A search of the New South Wales Aboriginal Heritage Information Management System (AHIMS) maintained by the DEC found 6 registered sites within a 340 km² radius of the study area. Five were open camp sites and one was an isolated find. The majority (83%) of sites in the local area are open camp sites.

Table 8.1 – Summary of Aboriginal Sites Database in the Vicinity of the Study Area

Site Type	Number	% Frequency
Open camp site	5	83
Isolated find	1	17
Total	**29**	**100**

Reference: Summary of results of DEC AHIMS Search (Austral 2005).

Searches of the Australian Heritage Places Inventory (AHPI), the Register of the National Estate (RNE) and the NSW Heritage Office State Heritage Register (SHR) websites did not identify any recorded Aboriginal Objects or Places in or around the study area.

8.3.4 Previous archaeological Investigations in Vicinity of the Study Area.

A range of investigations have been undertaken in the project locality since the early 1980s. These are described in Appendix E and the individual investigations are summarised in Table 8.2 below.

Table 8.2 – Summary of Previous Studies

Study name	Summary of location and/or findings
Flood, 1980 • Lake George sand deposits	elevated sand deposits with a flat level surface, close to water source are likely zones for Aboriginal camping places
Lance, 1985	All outside project area
• Lake George site	38 artefacts, 34 quartz, 4 silcrete
• Nardoo site	Nth of Hammonds Hill, west of Taylors Creek, large numbers of stone artefacts including backed blades
• Butmaroo site	5 to 6 km south east of substation site, mainly quartz artefacts on sandsheet (1-100/m^2)
Hughes et. al.,1984 • Lake George shoreline	South west of project site, assemblage of quartz artefacts – no backed blades
Packard,1987 • Ellenden	Open camp site – south west of the proposed development & 300 m from Lake edge
• Lakelands	Open camp site - north west of the proposed development (flaked artefacts 5-10/m^2)
Navin Officer, 1998 • Woodlawn Mine rehabilitation	8 km north-east of the project site. Four sites, One isolated find and three artefact scatters
Bowen, 2000 Ondyong Point	A sand quarry, north of the project site. One site with two quartz artefacts
Biosis, 2004	15 Aboriginal archaeological sites identified.

Study name	Summary of location and/or findings
• Woodlawn Wind Farm	13 were assessed as having low archaeological significance. 2 of moderate significance.

On the basis of the database searches and previous studies open campsites and isolated artefacts are likely to be the most common site types in the project area.

Table 8.3 - Description of Likely Archaeological Site Types

Site Type	Description (further details in Appendix E)
Open Camp Site	Surface scatter of stone (and sometimes other artefacts such as bone and shell, and features, such as hearths and stone knapping floors). Types of raw materials often reflect proximity to sources.
Isolated Artefact	Single Aboriginal artefact made from stone, bone, shell or other material.

8.3.5 Predictive Statement

On the basis of registered archaeological sites in the region, the results of past local and regional archaeological investigations and the Austral Archaeology assessment, the following predictions were made about site types and their likely locations in the study area:

Description of Predictive Element

- Open camp sites (artefact scatters) and isolated artefacts are the most likely site types to be encountered
- The surrounds of Lake George and creek confluences are known as prime site locations for Aboriginal occupation
- Sites will be concentrated close to reliable water within the alluvial flats and low slopes surrounding creeklines
- Smaller open sites of decreasing artefact density may also be located throughout the landscape further away from creeklines
- Open sites are likely to contain stone artefacts of fine grained siliceous material, silcrete quartz and quartzite, and may also yield charcoal and faunal remains, depending on the acidity of the local soils
- Single artefacts are commonly found across the landscape which have no associated archaeological context
- The extent of clearing has reduced the potential for finding scarred trees
- The potential for intact surface and subsurface Aboriginal cultural remains is predicted to be higher in undisturbed areas on gentle topography with easy access to fresh water.
- The extent of any associated subsurface potential archaeological deposits (PAD) remains dependant on local land use patterns which may have disturbed the original archaeological context of a site or removed archaeological material completely, and
- In-situ sub-surface deposits are predicted to occur within the study area even in areas where surface artefacts are not detected and where land clearance and ploughing has occurred

8.4 Survey Details

The surveys covered the whole project area and targeted areas proposed as turbines sites, the substation site, routes for access tracks, cable routes and overhead transmission line. The first stage of the survey in December 2004 aimed to cover all representative landforms focusing on areas of high to moderate potential archaeological sensitivity where, based on the predictive model, archaeological sites are most likely to occur, and areas of greatest ground surface visibility. The second stage undertaken in October

2005 addressed changes to the project design and new areas affected by the project. The GTCAC was also involved in the second stage, which included revisiting of locations covered by the first stage and still within the current scope, to ensure that the GTCAC representative had an appreciation of the full project.

The surveys were conducted on foot across much of the area with several areas of low surface visibility on high, rocky ridgelines covered by car. Where the survey was conducted on foot, four or five members of the survey team would traverse the landscape approximately 10 to 15 metres apart where possible. Areas with good ground surface exposure were subject to more detailed inspection. The survey team included two archaeologists from Austral Archaeology, two to three Aboriginal stakeholder representatives and was accompanied by a representative from Connell Wagner PPI.

Ten survey units were identified as detailed in Appendix E, summarised below and shown on Figure 8.1. Survey unit 3 is on the edge of the project area and will be mostly unaffected by the project.

8.4.1 Ground Surface visibility and effective survey coverage

For the ten survey units within the project area the ground surface visibility, effective survey coverage and archaeological potential are summarised in Table 8.4 (details in Appendix E).

Table 8.4 – Summary of Ground Surface Visibility and Archaeological Potential

Unit	Survey Unit Location	Est. Ground Surface Visibility %	Effective survey coverage %	Summary of Archaeological Potential/Assessment
1	Groses Hill, western section, access track	25	25	Low to Mod High for turbines 1-3
2	Taylors Creek Road, site office and turbines 35-41	5	5	Low, no issues
3	East of Hammonds Hill	5	5	Low, no issues
4	West of Hammonds/Big Hill ridge	10	10	Low, no issues
5	Substation site, near Dry Creek	25	25	Mod to High
6	Red Hill area	20	20	Mod to High
7	Groses Hill – southern end of main ridge	15	15	Low, no issues
8	Groses Hill , northern end of main ridge	< 5	<5	Low, no issues
9	Hammonds Hill, central part	15	24	Mod
10	Track crossing Wrights Creek	20	20	High

8.4.2 Survey Results

The surveys within the general project area located two sites (HH1 & WC1) (the DEC defines a site as comprising 2 artefacts within 50 metres of each other) and three isolated artefacts (HH 2 to 4). In addition, the post survey assessment identified six locations as having potential cultural significance (PAD 1 to 6). The locations of these archaeological and cultural sites are shown on Figure 8.1 and descriptions are provided in Table 8.5. Further details are provided in Appendix E.

Table 8.5 - Listing of Identified Aboriginal Heritage Sensitive Areas

Site No.	Site Type	Land Form	Description	Potential Sensitivity
HH 1	Artefact scatter	Gully on slope	Three artefacts comprising two quartz and one chert flakes in erosion gully west of the main ridgeline	Low
HH 2	Isolated find	Lower slopes	Broken quartz flake. Found near erosion gully east of Dry Creek	Moderate to High
HH 3	Isolated find	Lower slopes	Quartz flake. On low slope, east of Dry Creek	Moderate to High
HH 4	Isolated find	Ridge	Grey flake on ridgeline near Turbine 48	Low
WC 1	Artefact scatter	Creek	Seven artefacts comprising flakes and flaked pieces of grey fine grained siliceous material and silcrete, also ground edge axe. (Some material may have been imported with road base material)	High
PAD No.	**Areas of potential archaeological or cultural sensitivity (PAD)**			
1	Potential cultural site	Hill top	Turbines 1-3, Groses Hill	Moderate to high
2	Potential cultural site	Hill top	Red Hill, overlooking Lake George and in close proximity (500m) to shoreline. Turbines 18-21.	Moderate to high
3	Potential cultural site	Ridgeline	On ridgeline overlooking Lake George, near Turbine 29 and close to small saddle in ridgeline.	Moderate
4	Camp site?	Creek	At existing crossing of Wrights Creek. Artefacts found in creek bank and on track.	High
5	Potential cultural site	Drainage line	Access route along drainage line located between Turbines 52 and 53.	Moderate
6	Potential cultural site	Adjacent creek	Substation location with potential cultural sensitivity	Moderate to high

The site, Hammonds Hill no. 1 was located near to a former access route to Hammonds Hill Group but the access is no longer required and the site is over one kilometre from the nearest area to be impacted by the project.

Hammonds Hill no. 2 and 3 sites were both located on the eastern side of Dry Creek and were assessed as being part of a sensitive zone. This area was close to the proposed site of the substation, which has now been relocated several hundred metres to the west to avoid impacting the area of identified Aboriginal heritage sensitivity. The alternate site is also regarded as having a degree of sensitivity due its proximity to a creek line.

Hammonds Hill no. 4 site was located between Turbines 48 and 49 near Hammonds Hill on a ridgeline. It was assessed as having low potential for sub-surface archaeological deposit due to its exposed location distant from water.

Areas of PAD have been identified mainly based on the context of the location and cultural sensitivity. Areas of PAD numbered 1 to 3 in Table 8.5 are on low hill tops or ridgelines in close proximity to Lake George and offering close views over the Lake. Areas of PAD numbered 4 to 6 in the Table 8.5 are associated with creeks or drainage lines further distant from the Lake.

The ranking of the potential archaeological or cultural sensitivity, assigned by Austral Archaeology, for the PAD areas listed in Table 8.5 has been used by Austral to formulate heritage recommendations. Those recommendations are provided in Appendix E and are also incorporated as mitigation measures set out in Section 8.7 of this chapter of the EA.

It is possible that other surface and sub-surface remains occur in the project area as other areas have moderate to good archaeological potential on the basis of the predictive model. However, the moderate to high levels of existing disturbance mean that they are unlikely to have survived in situ.

8.4.3 Effective Survey Coverage

Effective survey coverage is an estimate of the ground surface visible during field survey. Low ground surface visibility reduces the potential for detection of surface archaeological items. In these cases the assessment may rely on other factors to attribute the potential heritage significance.

The effectiveness of the Capital Wind Farm survey was considered by the archaeologists as generally low due to the poor ground surface visibility in the study area. They assessed visibility as low (<20%) due to widespread cover of grass. However vehicle and animal tracks and heavily grazed areas have provided some exposures where visibility was high (>90%). Visibility was also higher along eroded creek lines and on some of the rocky ridges where there is very thin soil and grass cover.

Artefacts were only found on the surface where there has been some form of ground disturbance (e.g. erosion, ploughing, cattle treadage, vehicle or sheep tracks) which has exposed otherwise concealed artefactual material.

Despite the low ground surface visibility, the inspection of the majority of the study area was achieved and observations made in the field combine with knowledge of the local archaeological record. Austral considered the results of the survey to be adequate to extrapolate the potential level of impact by the proposal on areas of archaeological sensitivity.

8.5 Aboriginal and Archaeological Significance

The DEC (NSW) Aboriginal Heritage Unit assessment criteria for archaeological significance have been developed to deal specifically with archaeological resources and cover, Research, Education and Aesthetic potential:

- Research potential, is based on the amount of information which may be contained in the deposit.
- Educational potential, considers the potential of the site to educate the public.
- Aesthetic potential, arises from the response that people of different cultures may have to the place.

Wrights Creek has been assessed as having moderate to high research potential because of its topographic location and intact soil profiles.

Hammonds Hill no. 2, 3 and 4 are considered to be of low significance in terms of educational or aesthetic value, however in the archaeological context of the study area and the landscapes in which these artefacts were found, they are indicators of possibly larger archaeological sites. Hammonds Hill no. 2 and 3 are associated with PAD which has research potential. These sites are representative of the confluence zone in which the substation is proposed to be located.

The five identified sites are considered to be subject to localised movement through ground clearance and as a result of the continual stock grazing which has occurred across the study area. However, the level of ground disturbance throughout the study area is generally low and as such the sites are considered to be relatively intact.

Six areas where no artefacts were identified were assessed as having potential heritage significance. Turbines sites in the Red Hill area and the western part of the Groses Hill Group adjacent to and overlooking Lake George were assessed as areas where sub-surface archaeological deposits are likely to be present but remain undetected. Locations of Turbines 1 to 3 (Groses Hill, west), 18 to 21(Red Hill) and 29 (Ellenden, south) and the access road between Turbines 52 and 53 (hammonds Hill Group) are considered to be areas where subsurface archaeological deposits (PAD) are likely to remain undetected and as PAD therefore have research potential.

Despite the lack of surface archaeological evidence in these areas, large continuous surface sites have been previously recorded close to Lake George. While the archaeological significance of these areas was not determined by the assessment, subsurface excavation was recommended by Austral to establish the nature and extent of any subsurface deposits along this sensitive lake zone.

Overall the western part of the project area, in particular the lower gently sloping hills and broad ridge crests, is considered to be of higher archaeological sensitivity than the eastern half because of its proximity to Lake George and the propensity of permanent creeklines.

The high steep ridgelines in the development area are unlikely to contain substantial archaeological deposits given their rugged topography and rocky landscape.

The archaeological sites recorded on the Capital Wind Farm development area indicate that the area is likely to yield further archaeological deposits. The low level of previous ground disturbance across the much of the site supports this theory.

8.5.1 Aboriginal Landscape Values

No specific landscape values have been raised by the PLALC or BNAC. A report has been received from the BNAC regarding the development and the archaeological and cultural values (Appendix E2).

8.6 Conclusions

The archaeological and cultural heritage assessment of the Capital Wind Farm site located five Aboriginal archaeological sites consisting of two small artefact scatters and three isolated finds. Of these, only two are subject to direct impact by the development. Only the isolated site (H4) was detected along the broad ridge crests, with the others associated with areas of archaeological potential focussed on intermittent to semi-permanent creeks which run through the study area.

In addition to the five sites, six areas of archaeological sensitivity which are subject to development impact have been distinguished. One of these, at Wrights Creek, is associated with an identified surface site and five others are identified on the basis of topographic features, location and their estimated research potential.

On the basis of the assessments, the impact of the project's component parts on Aboriginal heritage values have been identified as summarised below.

There are currently no known heritage constraints associated with the following components:

- Groses Hill Group Turbines 4-17 and its associated Batch Plant
- Ellenden Group Turbines 22-28 and 30-34
- The alternate Batch Plant Site between Ellenden and Hammond Hill Groups

- Hammond Hill Group Turbines 35-63 and the associated Site Office and Batch Plant.

However, there are areas of archaeological sensitivity and potential archaeological deposit (PAD) associated with the following components:

- Groses Hill Group: Turbines 1-3 above Lake George
- Ellenden Group: Red Hill Turbines 18-21
- Ellenden Group, Turbine 29
- Hammonds Hill Group: between Turbines 52 and 53 where an access road alignment is proposed
- The existing track crossing Wrights Creek south east of the Ellenden Group
- The proposed substation location near Dry Creek

The paucity of archaeological material found within the Capital Wind Farm site does not preclude the presence of Aboriginal sites across the landscape, particularly on landforms which are predicted to be archaeologically sensitive. The topography of the immediate study area increases its potential to yield further archaeological deposits.

Much of the property has been subject to minimal disturbance as a result of land clearance and grazing. These activities are likely to have affected the archaeological resource; however, intact archaeological sites may be encountered in identified areas where minimal ground disturbance has occurred. As a result, the identified archaeological resource and the potential cultural deposits distinguished in the development area are likely to have archaeological integrity and have moderate to high archaeological potential.

The construction activities will involve substantial ground disturbance from vegetation clearing and targeted earthworks during turbine, substation and cable installation and the construction of additional access roads in specific locations. The activities have the capacity to damage the context of any surface site or subsurface archaeological deposit and/or destroy an archaeological site via soil removal and mitigation measures have been developed to address the potential impacts.

8.7 Mitigation Measures relating to Aboriginal Heritage Issues

Based on the consideration of the archaeological assessment (Appendix E - Austral, 2005), the report of the Buru Ngunawal Aboriginal Corporation, consultation with the Pejar LALC and Gundungurrah TCAC and the recommendations of the assessments in the context of the project objectives, the following mitigating measures are proposed.

1. The project layout has been adjusted where practical to avoid areas of potential archaeological/cultural sensitivity. The substation site has been relocated to the west to avoid PAD but the alternative site has also been assessed as sensitive and will be investigated further. No excavation work will be undertaken at the Wrights Creek site or between turbines 52 and 53.

2. Creeklines will be avoided where possible, but in some places, crossings will be necessary for access tracks and/or trenches for underground cables. In these cases, the zone of impact will be minimised.

3. Given the overlying high degree of archaeological sensitivity in the western area around Lake George, the proposed access tracks and cabling corridors will as far as possible follow existing vehicle tracks to minimise disturbance to this potentially sensitive archaeological and cultural zone. Where this is not viable, then cabling will aim to avoid areas of highest archaeological sensitivity such as higher order creeklines and tributary confluences.

4. Where creek banks are subject to minor drainage works as a result of road construction and cable installation, the working easement at creeklines will be reduced where possible. Trenches for power and control cables are anticipated to be 0.5 to 1 m wide and about 1 m deep. Upgrading of existing tracks and the construction of new access tracks connecting the turbine locations and the substation complex may require widening to about 5 m, bend modification, grade adjustments at minor creek

crossings, resurfacing and associated drainage. Additional tracks will be constructed to access turbine sites and temporary extra widening by a further 2.5m on each side will be required to accommodate construction machinery. In each case, easements will not exceed their construction width to ensure minimal impact to archaeologically sensitive creeklines.

5. While the installation of the overhead transmission line is considered to be of minimal environmental impact, the specific footing locations will consider areas of archaeological sensitivity and aim to also avoid creek banks.

6. Excavation at several areas of potential archaeological sensitivity cannot be avoided without adversely impacting the viability of the wind farm project. Accordingly, an application for a Section 87 permit under the NPW Act was submitted to the DEC in December 2006. Once granted the Permit will enable further investigations of the following areas, to confirm their heritage status and any need for further mitigation.

   - Groses Hill Group: Turbines 1-3 above Lake George
   - Ellenden Group: Red Hill Turbines 18-21
   - Ellenden Group: Turbine 29
   - The proposed substation location on Dry Creek

7. The testing program, under a Section 87 Permit, will be conducted by an archaeologist in conjunction with Aboriginal stakeholder representatives. It will aim to establish the archaeological and cultural significance of any deposit recovered. A proposed excavation methodology (WorkPlan) is included with the Section 87 Application to DEC. The Workplan including selection of representative sites for salvage/test-pitting will be confirmed after consultation with the Pejar LALC, BNAC and GTCAC and any other stakeholders, in accordance with DEC requirements.

8. The results of the Section 87 investigations will be submitted as a report to DEC for its consideration and used by RPV to finalise the project design and mitigating measures. Should any of the Section 87 investigations confirm the archaeological or cultural sensitivity for impacted sites, the options for project redesign or site salvage will be reviewed with archaeologists, the DEC and Aboriginal stakeholders.

9. It is noted that all Aboriginal Objects and Places are protected in NSW. As such, in the event that Aboriginal archaeological material or deposits are encountered that are not described in this report, works within 100 metre radius of the find will cease immediately to allow a qualified archaeologist to make an assessment of the find. The archaeologist may need to consult with the NSW Department of Environment and Conservation, Conservation Planning Unit, Environment Protection and Regulation Division regarding the finds.

10. Copies of the Aboriginal heritage assessment report (Appendix E) and the Section 87 Permit Application have been distributed to Pejar Local Aboriginal Land Council, Gundungurra Tribal Council Aboriginal Corporation, Buru Ngunawal Aboriginal Corporation and the NSW Department of Environment and Conservation (Queanbeyan). Any subsequent site assessments will also be distributed to the relevant Aboriginal stakeholders.

8.8 Non Aboriginal Heritage Issues

This section of the EA provides an overview of the non-Aboriginal heritage for the Capital Wind Farm locality and describes heritage aspects that are present in the vicinity of the project area.

A number of sites or items within the vicinity of the project area have been identified as having varying degrees of heritage significance. These include Currandooley Homestead, rock cairn trig stations on Groses Hill, Governors Hill, Big Hill and the Butler and Lake George North Base Trig Station. Most of

these heritage items will be well clear of the construction activities. Where the works are in close proximity to any heritage item, the project will incorporate controls to ensure that identified heritage features are not disturbed.

8.8.1 Overview of Local Recent History

White men first visited the area known as the Mulwaree Shire in 1798. The exploration spread to the Lake George area by the 1820s. Surveyor General James Meehan discovered Lake Bathurst in April 1818 and Governor Lachlan Macquarie visited both Lake George and Lake Bathurst in 1820. Lake George was named after King George III by Governor Lachlan Macquarie on 27 October 1820. Settlement of lands in the vicinity of Tarago occurred from the 1820s onward and Lake Bathurst and Tarago were established around 1827. In 1877 the present township of Tarago was a little settlement known as Sherwin's Flats. At that time, the township of Lake Bathurst was known as Tarago, but the name of Tarago was transferred in 1884 when that section of the Cooma railway was completed. The early history of the locality includes Coach travel and bushrangers. Mining was also undertaken at the Boro Mines near Mt Fairy.

Settlement has continued to grow but the pattern of settlement has changed over time in response to modernisation of transport systems and economic and social factors. The main centres of Goulburn, Queanbeyan and Canberra have been the dominant commercial and residential centres for the region with smaller nearby town centres of Bungendore and Tarago. Some rural lands around the project area have experienced increased density of settlement. In recent times there appears to be an increased subdivision of rural lands in the region for rural residential and small acreage farms.

8.8.3 Historic Development of Transport Routes

Key events in the 1800's development of transport infrastructure for the Southern Tablelands included:

- Mitchell's Great South Road (Sydney to Goulburn) completed in 1843
- Rail reached Goulburn in 1869
- Rail extended to Tarago in 1884 and to Bungendore by 1885

The Tarago to Bungendore Rail Line (31 km) passes to the east and south of the wind farm site. The nearest railway stations to the project area are at Fairy (13.5 km south of Tarago) and Butmaroo (23 km south of Tarago), but these are no longer in use. Neither the railway line nor the former stations will be affected by the project.

8.8.4 Currandooley Homestead

The "Currandooley" Homestead, built between 1869 and 1873 is located to the west of Big Hill. It is the home of one of the landowners that has agreed to lease its land to Renewable Power Ventures for development of the wind farm. The residence is a large two storey building constructed from stone as shown in Plate 8.2.1. It has several smaller single storey buildings nearby, an example is shown in Plate 8.2.2.

The homestead will not be affected by the development as it is distant from the areas where turbines, lines or cables will be located and separate from access tracks.

Plate 8.1 – Currandooley Homestead

Plate 8.2 - Currandooley Homestead

Plate 8.3 Osborne Trig Station

Plate 8.4 Red Hill Trig Station

8.8.5 Trignometrical Stations

There are two trigonometrical (Trig) stations ("Red Hill" and "Osborne") that are in close proximity to proposed turbine sites. "Osborne" is located on a Crown Land Reserve and is a rock cairn structure. Other Trig Stations that are more distant from turbine sites and will not be affected by construction works include "Butler", "Ellenden", "Groses Hill" and "Lake George North Base". The potential impacts of the wind farm on the use of the Trig Stations for survey purposes has been discussed in Section 5.7. Potential impacts on the heritage values of the Trig Stations are discussed below.

All of the Trig Stations have heritage significance with four of the six being constructed rock cairns and five being established prior to 1890. The rock cairn structure which is close to proposed turbine sites is shown in Plate 8.2.5. Measures will be incorporated in the construction management program to ensure that the Trig Station structures are not damaged. This will include fences to be erected around the Osborne rock cairn and Red Hill Trig Station as well as any associated survey reference marks. The fences will be maintained for the duration of the construction period.

8.8.6 Mitigation measures relating to Non-Aboriginal heritage items

The wind farm construction works will not affect items that have non-Aboriginal heritage significance due to:

- The items being distant from these works (eg Currandooley homestead), or
- because controls will be incorporated into the works to prevent impacts (eg Trig Station sites).

Where the wind farm works are in close proximity to the identified items of heritage significance, a temporary fence will be constructed around the item for the duration of the construction works to avoid disturbance of the particular feature. Trig Station sites that have been identified as needing to be protected by fencing are:

- Red Hill Trig Station
- Osborne Trig Station

The fences will also surround the Trig Station reference marks and be maintained for the duration of the construction works. Such fencing would be at least 5 metres in each direction from the Trig Station or any reference marks in its vicinity, and no construction activities will occur within the fenced area. Site monitoring will routinely ensure that the fences are secure.