APPENDIX D: SURVEY UNIT RECORDINGS

Survey Area 1

Survey Area 1: Detailed Description

Survey Area: 1

Description: Covering the locations of turbines 21-31, access tracks and underground cabling location. This Survey area was mainly restricted to the ridgelines and saddles within the group of steep hills where it was located.

Area: Approximately 8 km x 0.02 km.

Landform Unit: Steep hills. Including; upper slope as well as crests ridges and saddles. Some slopes had a gentle gradient yet over all the area consisted primarily of steep hills.

Soil type: Light to mid brown loam, red brown clay loam with natural gravels as well as mid reddish brown loam. In areas prone to erosion soils that were reddish and clayey predominated while in flatter areas darker and browner loam was dominant in the soil composition.

Vegetation/ground cover: Long grass, weeds, clover, thistles as well as young and mature gum trees.

Exposure Type: Natural, vehicle track and exposures associated with the base of trees. Exposures relating to vehicle tracks were longer and thinner while those occurring naturally were usually irregular in shape and of a much smaller size. Often exposures were associated with a form of disturbance i.e. animal trampling or vehicle access.

GSV: 0 - 10%. Heavy ground cover limited visibility throughout all of this survey area.

Exposure: $< 0.5 \text{ m}^2$ in general, most were much smaller while exposures along vehicle or animal tracks could be spread out in thin bands anywhere up to 10 m^2 .

Nearest Water Course: Kangaroo Flat Creek

Distance to Water: Approximately 500 m.

Date: 26/10/2010



Example of exposure within Survey Area 1. Photo © Austral Archaeology Pty Ltd 26/10/2010.



Characteristic vegetation, ground surface visibility, rock outcropping and vegetation for Survey Area 1. Photo © Austral Archaeology Pty Ltd 26/10/2010.

Current Land Use: Pastoral

Disturbance Type: Previous land clearance has taken place as well as the impacts associated with pastoral activity, such as, trampling from animals, fence construction and vehicle access.

Degree of Disturbance: The level of disturbance varies throughout this survey area, where only land clearance by hand has taken place the disturbance can be considered to be low but in areas of fence construction and high stock movement then the level of disturbance is moderate.

Aboriginal sites: No areas of archaeological potential or cultural sensitivity were observed within this survey area.

Survey Area 1: Survey Units

Survey Unit	ea 1: Survey Units Description	Photographs
Errowanba ng Road to T22-23 track upgrade and cable route	Method: Vehicle transect/walked Landform: Steep hills. Including; upper slope as well as crests ridges and saddles. Land Use/Disturbance: Clearance, rural infrastructure, pastoral activity. Low to moderate disturbance. Vegetation: Thick low grass to tall (30 cm) grass and weeds with numerous clumps of Scots thistle. GSV/Exposure: GSV-0-10% A few small exposures located along tracks. Hydrology: Crossed by ephemeral streams. Aboriginal Sites: None. Soil: Light brown loam. Comments: N/A	Looking southeast to Turbine 23 location. Photo © Austral Archaeology Pty Ltd 26/10/2010.
Turbine 22	Method: Walked Landform: Steep hills. Including; upper slope as well as crests ridges and saddles. Land Use/Disturbance: Clearance, rural infrastructure, pastoral activity. Low to moderate disturbance. Vegetation: Thick low grass to tall (30 cm) grass and weeds. Many Scots thistles. GSV/Exposure: 0-10% GSV with a few small natural exposures. Hydrology: Crossed by ephemeral streams. Aboriginal Sites: None. Soil: Red brown clay loam with natural gravels in exposures. Comments: Hilltop is flat and rocky with poor quality stone. No signs of engraving/quarrying. Several dead stumps indicate tree cover in the past, although rocks at surface would have prohibited some tree growth.	Looking east over the location of Turbine 22. Photo © Austral Archaeology Pty Ltd 26/10/2010.
T22-23 access road and cabling route	Method: Vehicle transect/walked Landform: Rolling hills. Including; upper, lower, mid slope as well as crests and a saddle. Land Use/Disturbance: Clearance, rural infrastructure, pastoral activity. Low to moderate disturbance, except in areas of rural infrastructure i.e. dams where disturbance becomes severe. Vegetation: Thick low grass and weeds with scattered new growth gum trees. GSV/Exposure: 0-10% GSV. A few very small natural exposures. Hydrology: N/A. Aboriginal Sites: None. Soil: Red brown clay loam. Comments: Vehicle transects as very thick grass and almost zero visibility. Sloping down to saddle between T23 and T22. Animal track near fence line with three	View north, showing the potential location of the cabling and access track leading from Turbine 23 to Turbine 22, which is intended to be located near the trees on the ridgeline. Photo © Austral Archaeology Pty Ltd 26/10/2010.

Animal track near fence line with three pieces of unmodified (natural) quartz

26/10/2010.

located on this exposure.

Turbine 23

Method: Walked

Landform: Steep hill crest.

Land Use/Disturbance: Clearance, rural infrastructure, pastoral activity. Low to

moderate disturbance.

Vegetation: Thick low grass to tall (30 cm) grass and weeds with scattered new

growth gum trees.

GSV/Exposure: 0-10% GSV. Tiny natural

exposures.

Hydrology: N/A.

Aboriginal Sites: None.

Soil: Red brown clay loam.

Comments: N/A



View west over Turbine 23 location.

T22-21 access road and cabling route

Method: Vehicle transect/walked. Landform: A saddle between steep hills. Land Use/Disturbance: Clearance, rural infrastructure construction and pastoral activity. Low to moderate disturbance.

Vegetation: Thick tall (30 cm) grass and

weeds.

GSV/Exposure: 0-10% GSV. Several animal

track exposures. **Hydrology:** N/A. **Aboriginal Sites:** None. **Soil:** Mid brown clayey loam.

Comments: Access track south of cabling from c. 100m west of T22. Inspected by

vehicle transects.



To the east looking over the access road and cabling route in between Turbine 21 and Turbine 22. Photo © Austral Archaeology Pty Ltd 26/10/2010.

Turbine 21

Method: Walked.

Landform: Crest of steep hill.

Land Use/Disturbance: Clearance and

pastoral activity.

Vegetation: Thick tall (30 cm) grass and

weeds.

GSV/Exposure: 0-10% GSV.

Hydrology: N/A.
Aboriginal Sites: None.
Soil: Reddish clayey loam

Comments: Rocky outcrop at the top of the

knoll.



View north over Turbine 21 location. Photo © Austral Archaeology Pty Ltd 26/10/2010.

T21-T25 access road route

Method: Vehicle transect/walked. **Landform:** Steep hills along the ridgeline with gentle slopes to knoll between.

Land Use/Disturbance: Clearance, rural infrastructure, pastoral activity. Low to moderate disturbance, except in areas of rural infrastructure i.e. dams where disturbance becomes severe.

Vegetation: Thick and tall (30 cm) grass

and weeds.

GSV/Exposure: 0-10% GSV. One exposure approximately 20 m x 2 m located near centre of route but no artefacts noted.

Hydrology: N/A
Aboriginal Sites: None.
Soil: Reddish clayey loam.

Comments: Vehicle transects as very thick

grass and almost zero visibility.



View to the east over the access road route in between Turbine 21 and Turbine 25. Photo © Austral Archaeology Pty Ltd 26/10/2010.

Turbine 25

Method: Walked.

Landform: A large knoll on the crest of a steep hill. The knoll is longer along its east west axis, with a rocky outcrop along its northeastern edge.

Land Use/Disturbance: Some clearance and some pastoral activity. Low to moderate disturbance.

Vegetation: Thick low grass to tall (30 cm) grass and three mature trees on the south

side of knoll checked for scars. GSV/Exposure: 0% GSV. Hydrology: N/A Aboriginal Sites: None. Soil: Reddish clayey loam.

Comments: N/A.



Looking west over Turbine 25 location. Photo © Austral Archaeology Pty Ltd 26/10/2010.

Turbine 25-26 access road and cabling route

Method: Vehicle transect/walked.
Landform: Rolling hills. Including; upper, lower and mid slope as well as crests.
Land Use/Disturbance: Clearance and pastoral activity. Low to moderate

disturbance.

Vegetation: Very thick and very tall (30 - 40

cm) grass and weeds. **GSV/Exposure:** 0-10% GSV.

Hydrology: N/A
Aboriginal Sites: None.

Soil: Brown loam, slightly clayey.

Comments: Vehicle transects as very thick

grass and almost zero visibility.



Looking north over the access road and cabling route location. Between Turbine 25 and Turbine 26. Photo © Austral Archaeology Pty Ltd 26/10/2010.

Turbine 26

 $\textbf{Method:} \ \ \textbf{Vehicle transect/walked}.$

Landform: Steep hill crest.

Land Use/Disturbance: Clearance, rural infrastructure construction and cultivation.

Low to moderate disturbance.

Vegetation: Thick I and very tall (30 cm) grass, thistles and weeds One mature tree to the west but no cultural scarring. **GSV/Exposure:** 0-10% GSV. A few tiny, <

0.25 m, natural exposures.

Hydrology: N/A
Aboriginal Sites: None.

Soil: Reddish brown clayey loam.

Comments: Located near fence line at SE section of knoll. This location had a small

amount of rocky outcropping.



Turbine 26 location in centre background. Photo © Austral Archaeology Pty Ltd 26/10/2010.

T26-27 access road and cabling route

Method: Walked.

Land Use/Disturbance: Clearance, rural infrastructure, such as fences and pastoral activity. Low to moderate disturbance.

Vegetation: Thick low grass/clover to tall grass and weeds, such as daisies, with scattered new growth gum trees.

GSV/Exposure: 0-10% GSV. One exposure near gate but very disturbed as trampled by stock.

Hydrology: Crossed by ephemeral streams.

Aboriginal Sites: None.

Soil: Reddish brown clayey loam.

Comments: Thick grass cover but walked

this transect



View west over access road and cabling route between Turbine 26 and Turbine 27. Photo © Austral Archaeology
Pty Ltd 26/10/2010.

Turbine 27

Method: Walked.

Landform: Crest and ridge of steep hills, a flat open area on top of a knoll.

Land Use/Disturbance: Land clearance and pastoral activity have caused this land to

be moderately disturbed.

Vegetation: Very thick grass and Patterson's Curse acting as ground cover with scattered new growth gum trees. Several mature trees inspected but no

scarring noted.

GSV/Exposure: 0-10% GSV. Around base of

trees.

Hydrology: N/A.
Aboriginal Sites: None.
Soil: Reddish brown loam.

Comments: Almost zero ground visibility.



View to the east showing Turbine 27 location. Photo © Austral Archaeology Pty Ltd 26/10/2010.

T27-28 access road and cabling route

Method: Walked.

Landform: Ridge within steep hills. Land Use/Disturbance: Clearance fence construction and pastoral activity. Low to moderate disturbance.

Vegetation: The grass and Paterson's Curse was around 20 - 40 cm in height and very thick, there were some young gum trees also in this area.

GSV/Exposure: 0-10% GSV. Tiny natural

exposures. Hydrology: N/A Aboriginal Sites: None. Soil: Reddish brown loam.

Comments: Transects walked although thick grass cover so almost zero visibility Several dead trees but no scarring. Some

rocky outcrops and boulders.



Looking southwest over the beginning of the access road and cabling route between Turbine 27 and Turbine 28. Photo © Austral Archaeology Pty Ltd 26/10/2010.

Turbine 28

Method: Walked.

Landform: Steep hill crest.

Land Use/Disturbance: Land clearance and pastoral activity. Low to moderate

disturbance.

Vegetation: Thick grass, Paterson's Curse and thistles as well as various other weeds. GSV/Exposure: 0-10% GSV. A few very

small natural exposures.

Hydrology: N/A Aboriginal Sites: None. Soil: Brown humus.

Comments: Good vantage point, views to south and west. Some rocky outcrops



View south showing the location of Turbine 28 in the centre of the picture on the terrace. Photo © Austral Archaeology Pty Ltd 26/10/2010.

T27-T30 access track and cabling route

Method: Walked.

Landform: Rolling hills. Including; upper,

lower and mid slope.

Land Use/Disturbance: Clearance, rural infrastructure construction and pastoral activity. Low to moderate disturbance, except in areas of rural infrastructure, i.e. dams, where disturbance becomes severe. **Vegetation:** Thick low grass to tall (30 cm)

grass and weeds with scattered new

growth gum trees.

GSV/Exposure: 0-10% GSV. Some animal tracks along fence to the west of the route. Exposures on dam wall along western section of route.

Hydrology: Crossed by ephemeral streams.

Aboriginal Sites: None. Soil: Brown clayey humus. Comments: N/A.



Looking south over the beginning of the access track and cabling route between Turbine 27 and Turbine 30. Photo © Austral Archaeology Pty Ltd 26/10/2010.

Turbine 30

Method: Walked.

Landform: Western side of knoll on

ridgeline.

Land Use/Disturbance: Land clearance and pastoral activity. Low to moderate

disturbance.

Vegetation: Thick low grass to tall (20 cm) grass and weeds including a large amount of Patterson's Curse. Several mature and dead trees inspected for scarring. **GSV/Exposure:** 0-10% GSV. Some exposures especially at base of trees.

Hydrology: N/A
Aboriginal Sites: None.

Soil: Reddish brown clayey loam. **Comments:** Good views to the south and

west.



Turbine 30 location. Photo © Austral Archaeology Pty Ltd 26/10/2010.

T30-T29 access road and cabling route

Method: Walked.

Landform: Steep hills with the route across a slightly lower saddle along the ridge. **Land Use/Disturbance:** Land clearance and pastoral activity. Low to moderate

disturbance.

Vegetation: Thick grass and Patterson's

Curse.

GSV/Exposure: 0 -10% GSV. A few small exposures probably from animal activity. **Hydrology:** Crossed by ephemeral streams.

Aboriginal Sites: None.

Soil: Reddish brown clayey loam.

Comments: N/A.



Looking north west over the access road and cabling route location between Turbine 30 and Turbine 29. Photo ©
Austral Archaeology Pty Ltd 26/10/2010.

Turbine 29

Method: Walked.

Landform: A flat knoll on a steep hill,

gently sloping to the west.

Land Use/Disturbance: Land clearance and pastoral activity. Low to moderate

disturbance.

Vegetation: Thick grass and Paterson's

Curse

GSV/Exposure: 0-10% GSV. Some very

small natural exposures.

Hydrology: N/A Aboriginal Sites: None.

Soil: Reddish brown clayey loam.

Comments: Some rocks.



Looking south over Turbine 29 location in the foreground. Photo © Austral Archaeology Pty Ltd 26/10/2010.

T30-31 access road and cabling route

Method: Vehicle transect/walked.
Landform: Ridge line of steep hills. Land
Use/Disturbance: Clearance, fence
construction and pastoral activity. Low to
moderate disturbance.

Vegetation: Dense grass and Patterson's

Curse.

GSV/Exposure: 0-10% GSV. A few very

small natural exposures.

Hydrology: N/A
Aboriginal Sites: None.

Soil: Reddish brown clayey loam.

Comments: this turbine location was very rocky especially on top of the knoll.



View to the east over the access track and cabling route between Turbine 30 and Turbine 31. Photo © Austral Archaeology Pty Ltd 26/10/2010.

Turbine 31

Method: Walked.

 $\textbf{Landform:} \ \ \text{Southern side of the crest of a}$

steep hill.

Land Use/Disturbance: Some light land clearance and moderate pastoral activity. Low to moderate disturbance.

Vegetation: Thick weed cover, largely Patterson's Curse. Stands of trees to the south and east that were inspected for

scars

GSV/Exposure: 0-10% GSV. A few small exposures located along tracks.

Hydrology: N/A

Aboriginal Sites: None.

Soil: Reddish brown clayey loam.

Comments: Very rocky.



Location of Turbine 31 area. Photo © Austral Archaeology Pty Ltd 26/10/2010.

Turbine 24

Method: Walked.

Landform: Rolling to steep hills. Including; upper, lower, mid slope as well as crests

 $ridges\ and\ saddles.$

Land Use/Disturbance: Some land clearance and pastoral activity. Low to moderate disturbance.

Vegetation: Thick, middling high grass (10

cm).

GSV/Exposure: 0-10% GSV. A few tiny exposure in association with rocks.

Hydrology: N/A
Aboriginal Sites: None.
Soil: Brown humus.
Comments: Very rocky.



Turbine 24 location in foreground. Photo © Austral Archaeology Pty Ltd 26/10/2010.

T24-T25 cabling access route

Method: Vehicle transect/walked. Landform: Upper low and mid slope of

rolling hills.

Land Use/Disturbance: Extensive land clearance and pastoral activity. Low to moderate disturbance.

Vegetation: Only one tree along cabling

route, inspected for scars.

GSV/Exposure: 0-10% GSV. Some small

natural exposures. Hydrology: N/A Aboriginal Sites: None. Soil: Mid brown loam. Comments: N/A.



View south over the cabling and access route between Turbine 24 and Turbine 25. Photo © Austral Archaeology Pty Ltd 26/10/2010.

T24 - T21 cabling access

Method: Vehicle transect/walked.

Landform: Rolling to steep hills. Including; upper, lower, mid slope as well as crests

ridges and saddles.

Land Use/Disturbance: Clearance, rural infrastructure construction and pastoral activity. Low to moderate disturbance. Vegetation: Thick and tall (30 cm) grass

and weeds with scattered.

GSV/Exposure: 0-10% GSV. Tiny natural

exposures. Hydrology: N/A Aboriginal Sites: None.

Soil: Reddish mid brown clayey loam.



View to the west over the cabling access route between Turbine 24 and Turbine 21. Photo © Austral Archaeology Pty Ltd 26/10/2010.

Survey Area 2

Survey Area 2: Detailed Description

Survey Area: 2

Description: Covering the locations of turbines 32-37, access tracks and underground cabling location. This survey mainly encompassed higher ground, such as hill crests and saddles.

Area: 5.0 km x 0.02 km

Landform Unit: The landform in this survey area was comprised largely of hill slopes, with gradients ranging from shallow to steep. Ridgelines, saddles and crests all formed a considerable element in the shape of the terrain.

Soil type: The soils in this survey area ranged from mid brown loam to light reddish brown clayey loam. The former often found in areas less prone to erosion while the latter occupied hill tops with evidence of some disturbance. Deposits of light brown to light reddish brown clayey soils with natural gravels including natural quartz gravels were observed in places of washout or erosion.

Vegetation/ground cover: Long grass, numerous weeds, clover, thistle, Patterson's Curse, native and exotic shrubs as well as some young and mature gum trees.

Exposure Type: There were some natural exposures, particularly; washouts, erosion scars and exposures at the base of trees. Exposures around gates and along animal or vehicle tracks were common yet the disturbed nature of these locales reduced the chance of observing artefacts.

GSV: 0 - 10%. Owing to the large amount of thick ground cover visibility approached 0% throughout most of this survey area. In areas of exposure visibility was generally high at around 60 - 70%.

Exposure: $< 0.5 \text{ m}^2$ in general, most were much smaller while exposures along vehicle or animal tracks could be spread out in thin bands anywhere up to 10 m^2 .

Nearest Water Course: Kangaroo Flat Creek.

Distance to Water: Approximately 1.0 km.

Date: 27/10/10



View northwest showing an exposure within Survey Area 2. Photo © Austral Archaeology Pty Ltd 27/10/2010.



View to the north west showing typical landform and vegetation for Survey Area 2. Photo © Austral Archaeology Pty Ltd 27/10/2010.

Current Land Use: Pastoral

Disturbance Type: Previous land clearance has taken place as well as the impacts associated with pastoral activity, such as, trampling from animals, fence construction and vehicle access.

Degree of Disturbance: The level of disturbance varies throughout this survey area, where only land clearance by hand has taken place the disturbance can be considered to

	be low but in areas of fence construction and high stock movement then the level of disturbance is moderate.
Aboriginal sites: No areas of archaeological potential or cultu	iral sensitivity were observed within this survey area.

Survey Area 2: Survey Units

Survey Ar	Survey Area 2: Survey Units					
Survey Unit	Description	Photographs				
Road to T32 access track and site office location adjacent to road.	Method: Vehicle transect/walked. Landform: Lower and mid slope of rolling hills. Land Use/Disturbance: Land clearance, fencer construction and ploughing. Moderate to severe. Vegetation: Thick and moderately tall grass (20 cm). GSV/Exposure: 0-10% GSV. Some exposures on vehicle track. Hydrology: N/A Aboriginal Sites: None. Soil: Light brown with natural gravels including natural quartz gravels Comments: N/A.	Location of site office, view to the west. Photo © Austral Archaeology Pty Ltd 27/10/2010.				
Turbine 32	Method: Walked. Landform: A flat topped knoll in rolling hills. Land Use/Disturbance: Land clearance and pastoral activity. Low to moderate disturbance. Vegetation: Thick low grass to tall (30 cm) grass and weeds. One mature tree with no scarring. GSV/Exposure: 0-10% GSV. A few small exposures located along tracks. Hydrology: N/A Aboriginal Sites: None. Soil: Brown humus. Comments: Good views to the north and east. One large boulder of poor quality rock on E edge of knoll, inspected for grooves, some rocky outcrops.	Looking east over the location of Turbine 32 in foreground. Photo © Austral Archaeology Pty Ltd 27/10/2010.				
T32-T33 cabling route and access track	Method: Vehicle transect/walked. Landform: Rolling hills mid and upper slope. Land Use/Disturbance: Land clearance, vehicle access and intensive pastoral activity. Moderate disturbance. Vegetation: Thick grass and weeds, some mature trees, no scarring. GSV/Exposure: 0-10% GSV. A few small exposures mostly located around the base of trees and along the vehicle access track. Hydrology: N/A Aboriginal Sites: None. Soil: reddish brown humic loam. Comments: N/A.	View northeast over the cabling route and access track in between Turbine 32 and Turbine 33. Photo @ Austral Archaeology Pty Ltd 27/10/2010.				

Turbine 33

Method: Walked.

Landform: Located on the upper slope of

rolling hills.

Land Use/Disturbance: Moderate land

clearance and pastoral activity.

Disturbance is low to moderate, tending

towards moderate.

Vegetation: Thick low grass and weeds with some mature gum trees in the vicinity,

no scarring noted.

GSV/Exposure: 0-10% GSV. Some natural

exposures. **Hydrology:** N/A **Aboriginal Sites:** None.

Soil: Reddish brown loam with natural

gravel inclusions.

Comments: Very rocky with dead tree

stumps.



View to the northwest over the location of Turbine 33. Photo © Austral Archaeology Pty Ltd 27/10/2010.

T32-Errowanban g Road cabling route

Method: Walked.

Landform: Rolling hills upper lower and

middle slope.

Land Use/Disturbance: Land clearance and

pastoral activity. Low to moderate

disturbance.

Vegetation: Tall grass (30 cm) growing

thickly.

GSV/Exposure: 0-10% GSV. Tiny natural

exposures.

Hydrology: N/A

Aboriginal Sites: None.

Soil: Reddish dark brown loam.

Comments: N/A.



Looking northeast over the location of the cabling access route from Turbine 32 to where it intersects with Errowanbang Road. Photo © Austral Archaeology Pty Ltd 27/10/2010.

Turbine 34

Method: Walked.

Landform: Located in the middle of a slope on the eastern side of knoll on the side of a steep hill.

Land Use/Disturbance: Area is moderately to severely disturbed with evidence of terracing (earthworks), land clearance and pastoral activity all present.

Vegetation: low thick grass and weeds, mostly daisies, some mature trees around the periphery were checked for scarring. **GSV/Exposure:** 0-10% GSV. Several animal track exposures.

Hydrology: Crossed by ephemeral streams.

Aboriginal Sites: None. **Soil:** Red brown clayey loam.



View south over Turbine 34 location, which is the terrace in the centre of the photograph. Photo © Austral Archaeology Pty Ltd 27/10/2010.

T34 – T33 access track and cabling route

Method: Vehicle transect.

Landform: Lower, middle and upper slopes

in rolling hills.

Land Use/Disturbance: Clearance and pastoral activity. Low to moderate

disturbance.

Vegetation: Thick low grass and weeds. **GSV/Exposure:** 0-10% GSV. No significant

Hydrology: N/A
Aboriginal Sites: None.
Soil: Reddish dark brown loam.

Comments: N/A.



Looking north over the access track and cabling route between Turbine 34 and Turbine 33. Photo © Austral Archaeology Pty Ltd 27/10/2010.

T34-T35 access track and cabling route

Method: Vehicle transect.

Landform: Steep hill crest/ridge.

Land Use/Disturbance: Land clearance and pastoral activity with low to moderate

disturbance.

Vegetation: Very thick grass and weeds, numerous swathes if thistles. No trees

though some dead branches.

 $\textbf{GSV/Exposure:} \ 0\text{-}10\% \ \mathsf{GSV.} \ \mathsf{A} \ \mathsf{few} \ \mathsf{tiny}$

exposures.

Hydrology: N/A

Aboriginal Sites: None.

Soil: Reddish brown clayey loam.

Comments: Some rock y outcroppings of stone unsuitable to artefact manufacture.



Looking north west over the access track and cabling route in between Turbine 34 and 35. Photo © Austral Archaeology Pty Ltd 27/10/2010.

Turbine 35

Method: Walked.

Landform: Steep ill crest.

Land Use/Disturbance: Land clearance and

pastoral activity. Low to moderate

disturbance.

Vegetation: Thick low grass and weeds. **GSV/Exposure:** 0-10% GSV. Some natural

exposures.

Hydrology: N/A

Aboriginal Sites: None.

Soil: Reddish clayey loam.

Comments: N/A.



Showing a section of Turbine location 35 in the foreground. Photo © Austral Archaeology Pty Ltd 27/10/2010.

T35-T36 access track and cabling route

Method: Vehicle transect/walked.
Landform: Rolling hill middle slope.
Land Use/Disturbance: Land clearance, vehicle access, stone quarrying and pastoral activity. Low to moderate disturbance except in the area around the quarry which is severely disturbed.

Vegetation: Thick low exotic grass along with a considerable amount of native

grasses.

GSV/Exposure: 0-10% GSV. Faint exposures along a disused vehicle track.

Hydrology: N/A.
Aboriginal Sites: None.
Soil: Light brown sandy loam.

Comments: N/A.



View to the south over the access track and cabling route between Turbine 35 and Turbine 36. Photo © Austral Archaeology Pty Ltd 27/10/2010.

Turbine 36

Method: Walked.

Landform: Steep hill crest.

Land Use/Disturbance: Land clearance and pastoral activity. Low to moderate

disturbance.

Vegetation: Thick weeds, grasses and

stands of thistles.

GSV/Exposure: 0-10% GSV. Very few small

natural exposures.

Hydrology: N/A.

Aboriginal Sites: None.

Soil: Light brown loam.

Comments: N/A.



Looking south and showing a section of Turbine 36 location in the foreground. Photo © Austral Archaeology Pty Ltd 27/10/2010.

T36-T37 access track and cabling route

Method: Walked.

Landform: Steep hill saddle.

Land Use/Disturbance: Clearance with associated pastoral activity. Low to

moderate disturbance.

Vegetation: Large amounts of Patterson's Curse and thick tall grass (30 cm). **GSV/Exposure:** 0-10% GSV. A few small natural exposures, natural gravel visible

within.

Hydrology: N/A.
Aboriginal Sites: None.

Soil: Reddish brown clayey loam.



Looking south over the access track and cabling route in between Turbine 36 and Turbine 37. Photo © Austral Archaeology Pty Ltd 27/10/2010.

Turbine 37

Method: Walked.

Landform: A lower slope of westerly aspect within steep hills.

Land Use/Disturbance: Clearance, rural infrastructure, pastoral activity. Low to moderate disturbance, except in areas of rural infrastructure i.e. dams where disturbance becomes severe.

Vegetation: Grass and Patterson's curse dominated with some mature trees on periphery having no scarring noted.
GSV/Exposure: 0-10% GSV. A few small exposures located around rocky outcrops.
Hydrology: Crossed by ephemeral streams.

Aboriginal Sites: None.

Soil: Light reddish brown clayey loam.



Looking west and showing a section of Turbine 37 location in the left of the photograph. Photo © Austral Archaeology Pty Ltd 27/10/2010.

Survey Area 3

Survey Area 3: Detailed Description

Survey Area: 3

Description: Covering the locations of turbines 39-46, access tracks and underground cabling location. This survey area was characterised by rolling hills that became steeper towards the southeast.

Area: 8.0 km x 0.02 km.

Landform Unit: This area was composed of rolling to steep hills. In areas of rolling hills gentle slopes with occasional flat broad crests predominated while in areas of steep hills the survey area was mostly confined to ridges, saddles upper slopes and crests. The banks and terrace carved by Dirty Creek were also located within this survey area.

Soil type: The soil was generally less compact in areas of gentle gradients and ranged from a light brown sandy humus through a mid brown loam to a reddish brown clayey loam.

Vegetation/ground cover: Long grass, numerous weeds, clover, thistle, Patterson's Curse, native and exotic shrubs as well as some young and mature gum trees.

Exposure Type: There were some natural exposures, particularly; washouts, erosion scars and exposures at the base of trees. Exposures around gates and along animal or vehicle tracks were common yet the disturbed nature of these locales reduced the chance of observing artefacts. Exposure along the creek banks in this area was minimal owing to heavy vegetation.

GSV: 0 - 10%. Heavy ground cover limited visibility throughout all of this survey area.

Exposure: $< 0.5 \text{ m}^2$ in general, most were much smaller while exposures along vehicle or animal tracks could be spread out in thin bands anywhere up to 10 m^2 .

Nearest Water Course: Dirty Creek.

Distance to Water: Dirty Creek is within this survey area.

Date: 28/10/2010, 29/10/2010



Looking south over an exposure within the site office location. Photo © Austral Archaeology Pty Ltd 28/10/2010.



Example of vegetation, ground cover and rock outcropping commonly found within Survey Area 3. Photo © Austral Archaeology Pty Ltd 29/10/2010.

Current Land Use: Pastoral

Disturbance Type: Previous land clearance has taken place as well as the impacts associated with pastoral activity, such as, trampling from animals, fence construction and vehicle access.

Degree of Disturbance: The level of disturbance varies throughout this survey area, where only land clearance by hand has taken place the disturbance can be considered to

	be low but in areas of fence construction and high stock movement then the level of disturbance is moderate.
Aboriginal sites: Other than the 3 sites (FCWF-PAD-01, FCWF-or cultural sensitivity were observed within this survey area.	-IF-01 and FCWF-S-03), no areas of archaeological potential

Survey Area 3: Survey Units

Survey Unit	Description	Photographs
Site office location	Method: Walked. Landform: Lower slope/gentle incline of rolling hills. Land Use/Disturbance: Land clearance, fence construction and pastoral/ploughing activity. Moderate disturbance. Vegetation: Thick low grass. GSV/Exposure: 0-10% GSV. A few small exposures along tracks and near gate. Hydrology: N/A. Aboriginal Sites: None. Soil: Mid brown loam. Comments: N/A.	Looking south over the site office location. Photo © Austral Archaeology Pty Ltd 28/10/2010.
Halls Rd – T39 access track route	Method: Vehicle transect/walked. Landform: Lower slope of rolling hills. Land Use/Disturbance: Land clearance, vehicle access and pastoral activity. Low to moderate disturbance. Vegetation: Thick low grass. GSV/Exposure: 0-10% GSV. A few small exposures located along tracks. Hydrology: N/A. Aboriginal Sites: FCWF-S-03. Soil: Light brown sandy humus. Comments: Only the exposures created by the existing track were walked. A low-density scatter of artefacts, FCWF-S-03, was found along the rise in to the east up to the gate along the track.	Looking north over a section of the track to be upgraded. Photo © Austral Archaeology Pty Ltd 29/10/2010.
Turbine 39	Method: Walked. Landform: Flat crest of gently rolling hills. Land Use/Disturbance: Land clearance and pastoral activity. Low to moderate disturbance. Vegetation: Thick low grass throughout, some mature trees to the south of the turbine location, none had evidence of cultural scarring or modification. GSV/Exposure: 0-10% GSV. No significant exposures. Hydrology: N/A. Aboriginal Sites: None. Soil: Mid brown loam. Comments: N/A.	View top the northwest showing Turbine 39 location in the foreground. Photo © Austral Archaeology Pty Ltd 29/10/2010.

T39-T40
Access
track and
cabling
route

Method: Vehicle transect.

Landform: Upper slope within an area of

rolling hills

Land Use/Disturbance: Land clearance and

pastoral activity.

Vegetation: Low thick grass and some

clumps of native grass. **GSV/Exposure:** 0-10% GSV.

Hydrology: N/A.
Aboriginal Sites: None.
Soil: Light brown humus.
Comments: N/A.



View to the west over the access track and cabling route between Turbine 39 and Turbine 40. Photo © Austral Archaeology Pty Ltd 29/10/2010.

Turbine 40

Method: Walked.

Landform: Saddle in an area of rolling hills. **Land Use/Disturbance**: Land clearance, pastoral activity and extensive disturbance owing to the excavation of rabbit warrens. Moderate disturbance.

Vegetation: Thick grass (10 - 20 cm) and weeds with scattered new growth gum trees. **GSV/Exposure:** 0-10% GSV. A number of medium, 2.0 m x 2.0 m, exposures occurred as the result of rabbit burrowing activity and while these were checked for artefacts none were noted.

Hydrology: N/A.
Aboriginal Sites: None.

Soil: Light reddish brown clayey loam.

Comments: N/A.



Turbine 40 location in the centre of the photograph. Photo © Austral Archaeology Pty Ltd 29/10/2010.

T40-T41 access track and cabling route

Method: Walked.

Landform: A ridge within an area of rolling

hills

Land Use/Disturbance: Land clearance and pastoral activity. Low to moderate

disturbance.

Vegetation: Thick low grass to tall (30 cm) grass and weeds with scattered new growth

gum trees.

GSV/Exposure: 0-10% GSV. No significant

exposures.

Hydrology: Crossed by ephemeral streams.

Aboriginal Sites: None. Soil: Light brown loam. Comments: N/A.



Looking south over the access track and cabling route in between Turbine 40 and Turbine 41. Photo © Austral Archaeology Pty Ltd 29/10/2010.

Turbine 41

Method: Walked.

Landform: Flat crest within an area of rolling

hills

Land Use/Disturbance: Land clearance and pastoral activity resulting in low to moderate

disturbance.

Vegetation: Thick low grass and a few exotic shrubs. There were some dead tress and a single mature gum tree but no evidence of cultural modification.

GSV/Exposure: 0-10% GSV.

Hydrology: N/A Aboriginal Sites: None. Soil: Mid brown loam. Comments: N/A.



Looking southeast over Turbine 41 location. Photo © Austral Archaeology Pty Ltd 29/10/2010.

T41-T42 access track and cabling

route

Method: Walked.

Landform: A ridge line and saddle in rolling

hills.

Land Use/Disturbance: Land clearance and pastoral activity. Low to moderate

disturbance.

Vegetation: Thick low grass and some native

grasses.

GSV/Exposure: 0-10% GSV. A few small natural exposures scattered throughout.

Hydrology: N/A
Aboriginal Sites: None.
Soil: Mid brown loam.
Comments: N/A.



Access track and cabling route in between Turbine 41 and Turbine 42, view to the south-southeast. Photo © Austral Archaeology Pty Ltd 29/10/2010.

Turbine 42

Method: Walked.

Landform: A crest in an area of rolling hills.
Land Use/Disturbance: Land clearance and pastoral activity. Low to moderate, most likely low as the amount of rocks present indicate that little alteration to the ground surface, i.e. ploughing, has taken place.
Vegetation: Very thick grass, daisies and some native grasses. A stand of gum trees on the edge of the knoll did not display any evidence of cultural modification.

GSV/Exposure: 0-10% GSV. A few small exposures, natural and associated with rocky outcroppings.

Hydrology: N/A. Aboriginal Sites: None. Soil: Mid brown loam. Comments: Very rocky.



Turbine 42 location, view to the south. Photo © Austral Archaeology Pty Ltd 29/10/2010.

Gap Rd – T46 access track

Method: Vehicle transect/ walked.

Landform: Undulating valley flat and rolling to steep hills. Including; upper, lower and

middle slopes.

Land Use/Disturbance: Clearance, rural infrastructure construction, agricultural activity. Moderate disturbance except in areas of rural infrastructure construction, i.e. dams, where disturbance becomes severe.

Vegetation: Thick low grass to tall grass (30

cm) and weeds with scattered new growth gum trees and also some mature trees,

checked for scars.

GSV/Exposure: 0-10% GSV. The track running through this area constitutes a single

exposure.

Hydrology: As well as a dam this survey unit was crossed by an unnamed ephemeral stream. There were also some indications of rills on the slopes of the hills in this area.

Aboriginal Sites: None. **Soil:** Light brown sandy loam.

Comments: Some imported gravels noted on

track.



View south west over a section of the access track and cabling route between Turbine 46 and Gap Road. Photo © Austral Archaeology Pty Ltd 29/10/2010.

Turbine 46

Method: Walked.

Landform: Steep hill crest.

Land Use/Disturbance: Land clearance and

pastoral activity. Low to moderate

disturbance.

Vegetation: Low grass, a variety of native

grasses and daisies.

GSV/Exposure: 0-10% GSV. A single 10 m x 10 m exposure at the turbine location, most

likely owing to stock activity.

Hydrology: N/A.
Aboriginal Sites: None.
Soil: Mid brown humic loam.

Comments: Excellent views to the north

south and east.



Looking southeast over Turbine 46 location. Photo © Austral Archaeology Pty Ltd 29/10/2010.

T46-T45 access track and cabling route

Method: Vehicle transect/walked. **Landform:** A ridgeline along the back of

several steep hills.

Land Use/Disturbance: Land clearance and pastoral activity. Low to moderate

disturbance.

Vegetation: Thick low grass with a single stand of gum trees, no cultural modification

isible.

GSV/Exposure: 0-10% GSV. No significant

exposures.

Hydrology: N/A.

Aboriginal Sites: None.

Soil: Light brown humic loam.



View southeast over access track and cabling route between Turbine 46 and Turbine 45. Photo © Austral Archaeology Pty Ltd 29/10/2010.

Turbine 45

Method: Walked.

Landform: Ridgeline along the back of steep

hills

Land Use/Disturbance: Land clearance and pastoral activity. Low to moderate

disturbance.

Vegetation: Thick low grass and some native grasses covering the ground surface with

some new growth gum trees.

GSV/Exposure: 0-10% GSV. A few small exposures located along animal tracks.

Hydrology: N/A Aboriginal Sites: None. Soil: Mid brown loam.

Comments: Rocky outcrops present.



Looking north over Turbine 45 location in foreground. Photo © Austral Archaeology Pty Ltd 29/10/2010.

T45-44 access track and cabling route

Method: Vehicle transect.

Landform: Ridgeline along the back of steep

hills.

Land Use/Disturbance: Land clearance and pastoral activity. Low to moderate disturbance.

Vegetation: Thick low grass and some native grasses covering the ground surface with

some tree stumps.

GSV/Exposure: 0-10% GSV. No significant

exposures.

Hydrology: N/A.

Aboriginal Sites: None.

Soil: Mid brown loam.

Comments: Rocky outcrops.



View southeast over Photo © Austral Archaeology Pty Ltd 29/10/2010.

Turbine 44

Method: Walked.

Landform: Steep hill crest.

Land Use/Disturbance: Land clearance and pastoral activity. Low to moderate.

Vegetation: Thick low grass and some native grasses. A single mature tree was located to the south of the turbine location but no traces of cultural modification were

observed.

GSV/Exposure: 0% GSV. No exposures.

Hydrology: N/A.
Aboriginal Sites: None.
Soil: Mid brown loam.

Comments: Good views to the north, west

and south.



View south over Turbine 44 location. Photo © Austral Archaeology Pty Ltd 29/10/2010.

T44-T43 access track and cabling route

Method: Vehicle transect.

Landform: Steep hill upper slope and saddle. **Land Use/Disturbance**: Land clearance and pastoral activity. Low to moderate

disturbance.

Vegetation: Low thick grass, daisies and

some native grasses.

GSV/Exposure: 0% GSV. No exposures.

Hydrology: N/A.
Aboriginal Sites: None.
Soil: Mid brown loam.
Comments: N/A.



Access track and cabling route in between Turbine 44 and Turbine 43, view to the east. Photo © Austral Archaeology Pty Ltd 29/10/2010.

Turbine 43

Method: Walked.

Landform: Ridgeline that runs along the back

of several steep hills.

Land Use/Disturbance: Land clearance and pastoral activity. Low to moderate

disturbance.

Vegetation: Thick grass (to 10 cm), daisies

and clumps of native grass.

GSV/Exposure: 0-10% GSV. Some small

natural exposures.

Hydrology: N/A.

Aboriginal Sites: None.

Soil: Mid brown loam.

Comments: N/A.



Turbine 43 location, looking south. Photo © Austral Archaeology Pty Ltd 29/10/2010.

T43-Gap Rd cabling route

Method: Sighted/walked.

Landform: Upper, middle and lower slopes of

steep hills.

Land Use/Disturbance: Land clearance, pastoral activity, earthworks (terracing) and road construction. Moderate disturbance. Vegetation: Thick low grass and gum trees along Gap Road, no cultural modification

noted.

GSV/Exposure: 0-10% GSV. A few small exposures located along the road in the

valley flat. **Hydrology:** N/A. **Aboriginal Sites:** None. **Soil:** Mid brown loam.

Comments: Bottom of slope walked and the

rest sighted.



View southwest over the cabling route in between T43 and Gap Road. Photo © Austral Archaeology Pty Ltd 29/10/2010.

T39-Gap Rd cabling route

Method: Vehicle transect/walked.

Landform: Steep hill side, creek flat, creek

bank and valley flat.

Land Use/Disturbance: Land clearance, pastoral activity, ploughing and fence construction. Moderate disturbance.

Vegetation: Thick grass and gum trees, no

scars noted.

GSV/Exposure: 0-10% GSV. A few large along exposures along an access track extending down the hill slope and along the stream

Hydrology: Crossed by a perennial stream.

Aboriginal Sites: None. **Soil:** Dark brown loam.

Comments: An exposure at the gate onto Gap Rd was checked for artefacts, some

natural quartz noted.



Looking east over the flat area adjacent to Gap Road within this survey unit. Photo © Austral Archaeology Pty Ltd 29/10/2010.

T38-T39 cabling route

Method: Vehicle transect/walked.

Landform: Lower, middle and upper slopes within an area of rolling hills. Creek bank and creek terrace.

Land Use/Disturbance: Land clearance and pastoral activity. Low to moderate disturbance.

Vegetation: Thick low grass with weeds and a few mature gum trees that bore no evidence of cultural modification.

GSV/Exposure: 0-10% GSV. A few small natural exposures and a single large exposure constituted by the eroded creek bank.

Hydrology: This survey unit contains an unnamed ephemeral stream.

Aboriginal Sites: None.

Soil: Reddish brown clayey loam.



Looking east over the cabling route, between Turbine 38 and Turbine 39, the location of Turbine 39 is visible in the background. Photo © Austral Archaeology Pty Ltd 29/10/2010.

Survey Area 4

Survey Area 4: Detailed Description

Survey Area: 4

Description: Covering the locations of turbines 19-20, 38, access tracks and underground cabling location. In the eastern portion of this survey unit the hills had a gentler slope whereas increasingly towards the north the gradient became sharper.

Area: Approximately 10.50 km x 0.02 km.

Landform Unit: Steep to rolling hill slopes, crest and ridges as well as creek flats, banks and terraces.

Soil type: Light brown reddish loam was a common feature of this survey area at times varying between sandy and clayey. An eroded creek bank displayed a profile of 30-40cm of humic clay loam over yellow/red clay loam with high gravel content going to a red/yellow clay. Some naturally occurring quartz was also disclosed within the creek bank.

Vegetation/ground cover: Long grass, numerous weeds, clover, thistle, Patterson's Curse, native and exotic shrubs as well as some young and mature gum trees.

Exposure Type: Natural, vehicle track and exposures associated with the base of trees. Exposures relating to vehicle tracks were longer and thinner while those occurring naturally were usually irregular in shape and of a much smaller size. Often exposures were associated with a form of disturbance i.e. animal trampling or vehicle access. Exposures also occurred along eroded creek banks and dam walls within this survey area.

GSV: 0 - 10%. Owing to the large amount of thick ground cover visibility approached 0% throughout most of this survey area. In areas of exposure visibility was generally high at around 60 - 70%.

Exposure: < 0.5 m^2 in general, most were much smaller while exposures along vehicle or animal tracks could be spread out in thin bands anywhere up to 10 m^2 . Exposure around dam walls and creek banks was normally under 25 m^2 but occasionally was somewhat larger.

Nearest Water Course: Numerous unnamed perennial and ephemeral streams.

Distance to Water: Several small streams were within the survey area.

Date:



Looking west an example of a creek bank exposure within Survey Area 4. Photo © Austral Archaeology Pty Ltd 28/10/2010.



View south showing the typical exposures, vegetation and ground surface visibility located in Survey Area 4. Photo © Austral Archaeology Pty Ltd 28/10/2010.

Current Land Use: Pastoral

Disturbance Type: Previous land clearance has taken place as well as the impacts associated with pastoral activity, such as, trampling from animals, fence construction and vehicle access. There were some indications that the lower

areas with gentler slopes had been subjected to ploughing. Evidence of heavy earthworks was noted, such as the location of the gas pipeline or dam. In valley flats and along some lower slopes processes of erosion have contributed significantly to disturbance through the removal and deposition of soil.

Degree of Disturbance: The level of disturbance varies throughout this survey area, where only land clearance by hand has taken place the disturbance can be considered to be low but in areas of fence construction and high stock movement then the level of disturbance is moderate. Increased levels of erosion and deposition in lower areas also contribute to disturbance. Around earthworks disturbance is considered to be severe.

Aboriginal sites: Other than the site (FCWF-S-01 and FCWF-S-02), no areas of archaeological potential or cultural sensitivity were observed within this survey area.

Survey Unit	rea 4: Survey U	Characteristics	Photographs
Turbine 38	Method: Walked. Landform: Rolling hill c Land Use/Disturbance: pastoral activity. Low to disturbance. Vegetation: Thick low g bushes and Patterson's GSV/Exposure: 0% GSV exposures. Hydrology: N/A. Aboriginal Sites: None. Soil: Light brown reddis Comments: Some smal	rest. Land clearance and on moderate grass, blackberry Curse. /. No significant	View to the southeast over the location of Turbine 38. Photo © Austral Archaeology Pty Ltd 28/10/2010.
T38- Halls Rd access road	Method: Vehicle transe Landform: Lower slope rolling hills and includin creek flat. Land Use/Disturbance: pastoral activity, house possible ploughing and Moderate disturbance. Vegetation: Thick low g mature gum trees, no s GSV/Exposure: 0-10% o exposures located along Hydrology: Bordered to perennial stream. Aboriginal Sites: None. Soil: Light brown sandy Comments: Some natu along the exposures ass vehicle access track. Lo access track was a histo indicating more intensic and therefore greater o previous time.	within an area of ag a creek bank and Land clearance, construction, orchard planting. grass and some carring noted. GSV. A few slender g the vehicle track. The east by a cloam. ral quartz was visible sociated with the cated 50 m east of the orical ruin, possibly we use of this area,	Looking north over a section of the location of the access road between Halls Road and Turbine 38. Photo © Austral Archaeology Pty Ltd 28/10/2010.
T38 – Halls Rd cabling route	Method: Walked. Landform: Upper, midd as well as a valley flat in hills. A terraced area, the older of the lower slope and used by fluvial action walley flat, was also locating of the lower slope and Use/Disturbance: infrastructure construct activity (e.g. ploughing Low to moderate disturbance becomes so vegetation: Thick grass native grasses and wee fallow.	n an area of rolling the location of FCWF-S-nd probably a terrace on the edge of the ated at on the gentle of a rolling hill. Clearance, rural tion and agricultural and stock grazing). The bance, except in a cture i.e. dams, where evere. Specifically, Patterson's Curse,	View to the north, showing the cabling route in between Turbine 38 and Halls Road. FCWF-PAD-01 and FCWF-S-01 are located in the scatter of the photograph courts of the

GSV/Exposure: 10-20% GSV. Exposures

are located in the centre of the photograph south of the

where formed by plough furrows.

Hydrology: Includes an ephemeral stream. **Aboriginal Sites:** FCWF-S-01 and FCWF-PAD-

01

Soil: Dark brown loam. **Comments:** N/A.

damn. Photo © Austral Archaeology Pty Ltd 28/10/2010.

TL from Halls rd to cabling route

Method: Walked.

Landform: Lower slope, valley flat and creek bank within an area of rolling hills.

Land Use/Disturbance: Land clearance and pastoral activity. Low to moderate

disturbance.

Vegetation: Thick low grass cover.

GSV/Exposure: 0-10% GSV. A few moderate exposures located along creek banks. **Hydrology:** A perennial stream is located

within this survey unit. **Aboriginal Sites:** None.

Soil: Reddish brown clayey loam.

Comments: Soil profile on eroded creek shows 30-40cm of humic clay loam over yellow/red clay loam with high gravel content to red/yellow clay. Some naturally occurring quartz was disclosed within the creek bank. No potential archaeological deposit was deemed to be within this area as the flood plain directly abuts the hill slope without any areas of level ground, i.e. terraces.



Looking southeast over a section of the 33 kV transmission line where it extends to the south of Halls Road. Photo © Austral Archaeology Pty Ltd 28/10/2010.

T38 – Errowanba ng Rd cabling route

Method: Walked.

Landform: Rolling to steep hills. Including; upper, lower, mid slope as well as crests ridges and saddles.

Land Use/Disturbance: Land clearance, agriculture and sediment deposition.

Moderate disturbance.

Vegetation: Tall native grasses (up to 30 cm) low grass and weeds. Some gum trees located along Errowanbang Road, no scars observed

GSV/Exposure: 0-10% GSV. A few small exposures located along tracks.

Hydrology: An unnamed perennial stream.

Aboriginal Sites: None. Soil: Mid brown loam. Comments: N/A.



Looking north east and showing the location of the cabling route from Turbine 38 to Errowanbang Road to the top right of the photograph. Photo © Austral Archaeology Pty Ltd 28/10/2010.

Turbine 19

Method: Walked.

Landform: Steep hill crest.

Land Use/Disturbance: Land clearance and

pastoral activity. Low to moderate

disturbance.

Vegetation: Thick grass and daisies. **GSV/Exposure:** 0-10% GSV. A few small

natural exposures. **Hydrology:** N/A. **Aboriginal Sites:** None. **Soil:** Light brown loam.

Comments: Some small rocks and good views to the south, west and east.



Turbine 19 location in foreground, view to the south. Photo © Austral Archaeology Pty Ltd 28/10/2010.

T18-T19 access Rd and cabling route

Method: Vehicle transect/walked. **Landform:** Steep hill saddle.

Land Use/Disturbance: Land clearance, vehicle access tracks and intensive pastoral

activity. Moderately disturbed.

Vegetation: Low grass, daisies and some clumps of native grasses. A few mature gum

trees, no scars present.

GSV/Exposure: 0-10% GSV. A few small exposures located intermittently and along animal tracks, likely a result of grazing activity. Some exposures along vehicle tracks.

Hydrology: N/A.
Aboriginal Sites: None.

Soil: Light reddish brown clayey loam with

some natural gravels. **Comments:** N/A.



Access road and cabling route in between Turbine 18 and turbine 19, looking to the south. Photo © Austral Archaeology Pty Ltd 28/10/2010.

Turbine 18

Method: Walked.

Landform: Flat knoll where the ridge running from the southeast flattens and becomes

gentle to the northwest.

Land Use/Disturbance: Land clearance and pastoral activity. Low to moderate.

Vegetation: Low grass and several mature

gum trees, no evidence of cultural

modification.

GSV/Exposure: 0-10% GSV. Some exposure

along animal tracks. **Hydrology:** N/A. **Aboriginal Sites:** None. **Soil:** Light reddish brown loam.



Looking north over Turbine 18 location. Photo © Austral Archaeology Pty Ltd 28/10/2010.

T19-T20 access track route

Method: Walked.

Landform: A saddle between two steep hill

crests.

Land Use/Disturbance: Land clearance and pastoral activities, so mostly low to moderate disturbance. Also in this area was the route of a gas pipeline and at least 1 m to each side of the gas pipeline is severely

disturbed ground.

Vegetation: Thick grass, native grasses and

gum trees.

GSV/Exposure: 20 – 30% GSV. Good exposure along each side of the gas pipeline.

Hydrology: N/A.
Aboriginal Sites: None.

Soil: Light reddish brown soil with natural

gravel inclusions.

Comments: The first section of this survey unit extended across a grassed area and then into a copse of trees, likely young, that contained a section of a gas pipeline. Walked back to the S of treed area for alternate route, no sites were identified in this area.



View to the southeast showing the cabling route and access track in between Turbine 19 and Turbine 20. Photo © Austral Archaeology Pty Ltd 28/10/2010.

Turbine 19 to transmissio n line cabling

route

Method: Walked.

Landform: Ridgeline along the back of

several steep hills.

Land Use/Disturbance: Land clearance and pastoral activity. Low to moderate

disturbance.

Vegetation: Thick low grass to tall (30 cm) grass and weeds with scattered new growth

gum trees.

GSV/Exposure: 0% GSV. The sole source of exposure within this survey unit was provided by a track that runs across it.

Hydrology: N/A.
Aboriginal Sites: None.
Soil: Mid brown loam.
Comments: N/A.



Looking to the northwest and showing the beginning of the cabling route from Turbine 19 to the 33 kV transmission line in the centre of the photograph. Photo © Austral Archaeology Pty Ltd 28/10/2010.

Turbine 20

Method: Walked.

Landform: Steep hill crest.

Land Use/Disturbance: Land clearance and

pastoral acitivty.

Vegetation: Thick ground cover (up to 20 cm) of grass, weeds and native grasses. Some tree stumps were also at this location.

GSV/Exposure: 0-10% GSV. No significant

exposures.

 $\textbf{Hydrology:} \ \textbf{Crossed by ephemeral streams.}$

Aboriginal Sites: None. **Soil:** Mid brown clayey loam.

Comments: Good views in every direction.



Turbine 20 location in foreground. Photo © Austral Archaeology Pty Ltd 28/10/2010.

TL NW of T19-Halls Rd

Method: Walked.

Landform: Upper, lower and middle slope of a steep hill tending towards a gentler incline at the bottom where the landform alters to a gently undulating valley flat.

Land Use/Disturbance: Clearance, rural infrastructure construction and pastoral activity. Low to moderate disturbance, except in areas of rural infrastructure i.e. dams, where disturbance becomes severe. Vegetation: Low grass, native grasses, weeds and some mature gum trees. No scars were noted on the gum trees.

GSV/Exposure: 0-10% GSV. A few small natural exposures, damn walls and animal tracks near damns.

Hydrology: Some rills and several damns.

Aboriginal Sites: FCWF-S-02. **Soil:** Light brown clayey loam.

Comments: Dam near road, disturbed in vicinity of dam, no artefacts noted on dam wall exposures. At the second dam at the base of hill was the location of FCWF-S-02 within a disturbed context on dam wall.



Looking south east over the 33 kV transmission line in between Turbine 19 and Halls Road. Photo © Austral Archaeology Pty Ltd 28/10/2010.

TL NW of T19 to Errowanba ng Rd

Method: Walked.

Landform: Upper, lower and middle slopes of a steep hill

of a steep hill.

Land Use/Disturbance: Clearance, rural infrastructure construction (terraces and dams) and pastoral activity. Low to moderate disturbance, except in areas of rural infrastructure, i.e. dams, where disturbance becomes severe.

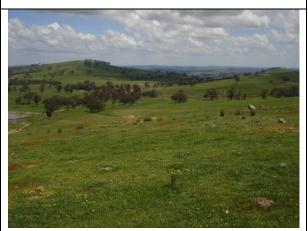
Vegetation: Thick low grass to tall (30 cm) grass and weeds with scattered new growth gum trees.

GSV/Exposure: 0-10% GSV. Exposures associated with disturbance consequent on rural infrastructure construction, such as

Hydrology: Rills.
Aboriginal Sites: None.
Soil: Light brown clayey loam.

dam walls and terraces.

Comments: N/A.



Looking south-southeast over the 33 kV transmission line route, from Turbine 19 to Errowanbang Road. Photo © Austral Archaeology Pty Ltd 28/10/2010.

Halls Rd to T20 cabling route

Method: Walked.

Landform: Upper, lower and middle slope of a steep hill.

Land Use/Disturbance: Land clearance and pastoral activity. Low to moderate disturbance.

Vegetation: No trees, however, there was a large amount of very thick low grass. **GSV/Exposure:** 0-10% GSV. No exposures, except those on the roadside at the base of

the hill, which were inspected. **Hydrology:** N/A

Aboriginal Sites: None.
Soil: Light brown clayey loam.



View to the north over the underground cabling route from Turbine 20 to Halls Road. Photo © Austral Archaeology Pty

	Ltd 28/10/2010.

Survey Area 5

Survey Area 5: Detailed Description

Survey Area: 5

Description: Covering the locations of turbines 17-18, access tracks and underground cabling location. An area of very steep hills, washouts and thick ground cover.

Area: Approximately 8.0 km x 0.02 km.

Landform Unit: Steep to rolling hill slopes, crest and ridges as well as creek banks.

Soil type: Mid brown loam to reddish brown clayey loam.

Vegetation/ground cover: Long grass, numerous weeds, clover, thistle, Patterson's Curse, native and exotic shrubs as well as some young and mature gum trees.

Exposure Type: Natural, vehicle track and exposures associated with the base of trees. Exposures relating to vehicle tracks were longer and thinner while those occurring naturally were usually irregular in shape and of a much smaller size. Often exposures were associated with a form of disturbance i.e. animal trampling or vehicle access. No exposures also occurred along creek banks. Dam walls provided a significant contribution to the level of exposure within this survey area.

GSV: 0 - 10%. In areas of exposure visibility was generally high at around 60 - 70%.

Exposure: < 0.5 m^2 in general, most were much smaller while exposures along vehicle or animal tracks could be spread out in thin bands anywhere up to 10 m^2 . Several of the larger washouts had areas around 100 m^2 while the smaller washout areas might only be a matter of meters. Exposure around dam walls was normally under 25 m^2 .

Nearest Water Course: Numerous unnamed perennial and ephemeral streams.

Distance to Water: Several small streams were within the survey area.

Date: 1/11/2010, 2/11/2010



Example of vegetation and ground surface visibility within Survey Area 5. Photo © Austral Archaeology Pty Ltd 1/11/2010.



Example of quartz bearing washout in Survey Unit 5. Photo

© Austral Archaeology Pty Ltd 2/11/2010.

Current Land Use: Pastoral

Disturbance Type: Previous land clearance has taken place as well as the impacts associated with pastoral activity, such as, trampling from animals, fence construction and vehicle access. Evidence of heavy earthworks was noted in the case of dam construction. Along some lower slopes processes of erosion have contributed significantly to disturbance through the removal and deposition of soil.

Degree of Disturbance: The level of disturbance varies throughout this survey area, where only land clearance by hand has taken place the disturbance can be considered to be low but in areas of fence construction and high stock

	movement then the level of disturbance is moderate. Increased levels of erosion and deposition in lower areas also contribute to disturbance. In areas of earthwork disturbance is considered to be severe.
Aboriginal sites: Other than the site (FCWF-IF-02), no areas or observed within this survey area.	f archaeological potential or cultural sensitivity were

Survey Area 5: Survey Units

Survey Unit	Description	Characteristics	Photographs
Dunstaffe	Method: Vehicle tra		
Lane	Landform: Valley flat/lower slope in an area of rolling hills. Land Use/Disturbance: Vehicle access track, clearance and fence construction. Moderate to severe disturbance. Vegetation: Thick low grass and young gum trees, forking at base indicated they were regrowth. GSV/Exposure: 0-10% GSV. Exposures along the road verge. Hydrology: N/A. Aboriginal Sites: None. Soil: Light brown sandy loam. Comments: Lane surveyed from vehicle as the road was composed of introduced gravels. Some exposures on the roadside and these were inspected on foot. Possible scarred tree, however the scar was of an		View to the east along Dunstaffe Lane. Photo © Austral Archaeology Pty Ltd 1/11/2010.
	irregular shape on a		
Dunstaffe Lane – T18 access track	Method: Vehicle transect/ walked. Landform: Lower and middle slopes within an area of rolling hills. Land Use/Disturbance: Land clearance and pastoral activity. Vegetation: Thick grass (10 cm) and some native grasses. Some trees were located at the end of this survey unit. GSV/Exposure: 0% GSV. Hydrology: N/A Aboriginal Sites: None. Soil: Mid brown loam. Comments: NTrack route from gate up a rocky slope to the edge of a stand of trees. Vehicle transect to trees, walked from fence near trees to Turbine 18. Trees inspected for scars.		View to the west over a section of the access track location connecting to Turbine 18. Photo © Austral Archaeology Pty Ltd 1/11/2010.
TL from NE T19- access track near T17	in an area of steep I Land Use/Disturban pastoral activity. Lo disturbance. Vegetation: Thick Ic some gum trees but GSV/Exposure: 0-10 several erosional sc down the slopes. Hydrology: Some w Aboriginal Sites: No Soil: Light brown los Comments: There w mature trees, espec portion of the surve from intersection w T17 to NE of T19. Ti	once: Land clearance and we to moderate ow grass and weeds, at no scars noted. Of GSV. There were ars in the gullies cutting ashouts and rills. One.	Looking north-northeast along the route of the 33 kV transmission line. Photo © Austral Archaeology Pty Ltd 1/11/2010.

steep and rocky for any PAD to be identified.

Access track from Dunstaffe Lane behind residences 77 and 78

Method: Vehicle transect.

Landform: Rolling to steep hills. Including; upper, lower, mid slope as well as crests ridges and saddles.

Land Use/Disturbance: Land clearance, pastoral activity and rural infrastructure construction.

Vegetation: Very thick high grass and weeds with some gum trees, no scars noted.

GSV/Exposure: 0-10% GSV. Some exposures associated with ground disturbance behind houses.

Hydrology: N/A. Aboriginal Sites: None. Soil: Mid brown loam Comments: N/A.



View north showing the route of the access track as it passes behind the residence on Dunstaffe Lane. Photo © Austral Archaeology Pty Ltd 1/11/2010.

Access track route in between **Dunstaffe** Lane and **Turbine 17**

Method: Vehicle transect/walked. **Landform:** Upper slope, ridge and saddle along a rolling hill that gradually becomes

Land Use/Disturbance: Extensive land clearance and a long history of stock grazing. Low to moderate disturbance. **Vegetation:** Variation in ground cover from low grass to around 30-40 cm high grass. GSV/Exposure: 0-10% GSV. A few small

exposures located along tracks. Hydrology: N/A. Aboriginal Sites: None. Soil: Brown loam.

Comments: Very rocky with stray head sized boulders and numerous outcrops.



View to the west showing a section of the access track to Turbine 17. Photo © Austral Archaeology Pty Ltd 2/11/2010.

Turbine 17

Method: Walked.

Landform: Crest of steep hill.

Land Use/Disturbance: Land clearance and

pastoral activity. Low to moderate

disturbance.

Vegetation: Long grass (30 cm), thistles and clover. There were some nearby pine

trees of recent origin.

GSV/Exposure: 0-10% GSV. No significant

exposure. Hydrology: N/A. Aboriginal Sites: None.

Soil: Reddish brown clayey loam



View to the southeast showing the location of Turbine 17 in the foreground. Photo © Austral Archaeology Pty Ltd 2/11/2010.

Underground Cabling Route between T17 and T16

Method: Sighted

Landform: Upper, lower and middle slope of steep/rolling hills and creekbank.
Land Use/Disturbance: Clearance, rural infrastructure, pastoral activity. Low to moderate disturbance, except in areas of rural infrastructure i.e. dams where disturbance becomes severe.

Vegetation: Tall and thick grass, clover and thistles.

 $\textbf{GSV/Exposure:} \ 0\text{-}10\% \ \mathsf{GSV.} \ \mathsf{No} \ \mathsf{significant}$

exposures.

Hydrology: Crossed by an ephemeral stream running from a cleft in the hills to the east but banks 0% GSV.

Aboriginal Sites: None.

Soil: Reddish brown clayey loam.

Comments: N/A.



View to the north east showing the location of the cabling route between Turbine 17 and Turbine 16. Photo © Austral Archaeology Pty Ltd 2/11/2010.

33 kV transmission line to the east of Turbine 17 and to the southwest of Turbine 16

Method: Vehicle transect/walked.
Landform: Upper, lower and middle slope of steep/rolling hills and creek bank.
Land Use/Disturbance: Land clearance, dam construction and pastoral activity.

Moderate to high disturbance. **Vegetation:** Thick grass, from 5 cm to 40 cm in height, and weeds especially

Patterson's Curse.

GSV/Exposure: 0-10% GSV. Several large washout exposures, dam walls and erosional areas associated with dams.

Hydrology: Crossed by an ephemeral stream running from the cleft in the hills to the east.

Aboriginal Sites: FCWF-IF-01. **Soil:** Reddish brown clayey loam.

Comments: A few washouts were noted and inspected, mostly contained natural quartz but 1 isolated find was located at the bottom of the valley, in a washout associated with the dams also located within this study area.



View to the north showing the 33 kV transmission line route. Photo © Austral Archaeology Pty Ltd 2/11/2010.

Survey Area 6

Survey Area 6: Detailed Description

Survey Area: 6

Description: Covering the locations of turbines 14-16, access tracks and underground cabling location.

Area: Approximately 4.7 km x 0.02 km.

Landform Unit: Steep to rolling hill slopes, crest and ridges as well as creek banks.

Soil type: Mid brown loam to reddish brown clayey loam.

Vegetation/ground cover: Long grass, numerous weeds, clover, thistle, Patterson's Curse, native and exotic shrubs as well as some young and mature gum trees.

Exposure Type: Natural, vehicle track and exposures associated with the base of trees. Exposures relating to vehicle tracks were longer and thinner while those occurring naturally were usually irregular in shape and of a much smaller size. Often exposures were associated with a form of disturbance i.e. animal trampling or vehicle access. Exposures also occurred along eroded creek banks within this survey area.

GSV: 0 - 10%. In areas of exposure visibility was generally high at around 60 - 70%.

Exposure: $< 0.5 \text{ m}^2$ in general, most were much smaller while exposures along vehicle or animal tracks could be spread out in thin bands anywhere up to 10 m^2 .

Nearest Water Course: Numerous unnamed perennial and ephemeral streams.

Distance to Water: Several small streams were within the survey area.

Date: 3/11/2010, 4/11/2010



Example of exposure and vegetation within Survey Area 6.

Photo © Austral Archaeology Pty Ltd 4/11/2010.



Indicative landform and vegetation for Survey Area 6.

Photo © Austral Archaeology Pty Ltd 4/11/2010.

Current Land Use: Pastoral

Disturbance Type: Previous land clearance has taken place as well as the impacts associated with pastoral activity, such as, trampling from animals, fence construction and vehicle access.

Degree of Disturbance: The level of disturbance varies throughout this survey area, where only land clearance by hand has taken place the disturbance can be considered to be low but in areas of fence construction and high stock movement then the level of disturbance is moderate.

Aboriginal sites: No areas of archaeological potential or cultural sensitivity were observed within this survey area.

Survey Area 6: Survey Units

Survey Unit	Description	Characteristics	Photographs
Gap Rd to	•		riiotograpiis
Turbine 16 access track	Method: Vehicle transect/walked. Landform: Lower and mid slopes in an area of rolling hills. Land Use/Disturbance: Land clearance and pastoral activity. Low to moderate disturbance. Vegetation: Thick low grass to tall (30 cm) grass and weeds with scattered new growth gum trees. GSV/Exposure: 0-10% GSV. A few moderately sized exposures located along existing track. Hydrology: N/A. Aboriginal Sites: None. Soil: Light reddish brown clayey loam. Comments: N/A.		View west along the access track to Turbine 16. Photo © Austral Archaeology Pty Ltd 3/11/2010.
Site office location	Method: Walked. Landform: Rolling hills lower slopes. Land Use/Disturbance: Pastoral activity and land clearance. Low to moderate disturbance. Vegetation: Thick low grass and weeds. GSV/Exposure: 0-10% GSV. Some exposures owing to animal activity. Hydrology: N/A. Aboriginal Sites: None. Soil: Brown loam. Comments: Site office location to the west of the shed on a slight incline down to the north. Tracks through the area that have created exposures. Not good visibility on exposures as churned up dried mud.		View southwest over the location of the site office. Photo © Austral Archaeology Pty Ltd 3/11/2010.
Turbine 16	Method: Walked. Landform: Steep hill crest. Land Use/Disturbance: Pastoral activity and land clearance. Low to moderate disturbance. Vegetation: Thick high grass and weeds, especially Patterson's Curse. GSV/Exposure: 0-10% GSV. Several natural exposures. Hydrology: N/A. Aboriginal Sites: None. Soil: Light reddish brown clayey loam. Comments: N/A.		Looking west over the location of Turbine 16. Photo © Austral Archaeology Pty Ltd 4/11/2010.

Turbine 16 to Turbine 15 access track

Method: Walked.

Landform: Rolling hills, upper mid and lower

slopes

Land Use/Disturbance: Pastoral activity, dam construction and land clearance. Low to moderate disturbance except around the

dam where disturbance is severe. **Vegetation:** Thick low grass and weeds. **GSV/Exposure:** 0-10% GSV. Exposures around track, fences/gates and dam.

Hydrology: N/A.
Aboriginal Sites: None.

Soil: Reddish brown clayey loam.

Comments: Follows existing track, which was

walked, and exposures checked.



Looking east over the location of the access track between Turbine 16 and Turbine 15. Photo © Austral Archaeology
Pty Ltd 4/11/2010.

Turbine 16 to Turbine 15 cabling route

Method: Walked.

Landform: Rolling hills, upper mid and lower

slopes.

Land Use/Disturbance: Pastoral activity and

land clearance. Low to moderate

disturbance.

Vegetation: Thick low grass and weeds. **GSV/Exposure:** 0-10% GSV. Exposure along

animal tracks. **Hydrology:** A rill. **Aboriginal Sites:** None.

Soil: Reddish brown clayey loam.

Comments: N/A.



Looking west over the access track and section of the cabling route, note that the cabling route is towards the left of the photograph. Photo © Austral Archaeology Pty Ltd 4/11/2010.

Turbine 15

Method: Walked.

Landform: Rolling hill crest.

Land Use/Disturbance: Pastoral activity and

land clearance. Low to moderate

disturbance.

Vegetation: Thick low grass and weeds. **GSV/Exposure:** 0-10% GSV. No significant

exposures, **Hydrology:** N/A. **Aboriginal Sites:** None.

Soil: Reddish brown clayey loam.

Comments: Much rock was outcropping.



Turbine 15 location, view to the west. Photo © Austral Archaeology Pty Ltd 4/11/2010.