

6.0 PREDICTIVE STATEMENT

6.1 DEGREE OF DISTURBANCE

Historic land use and natural taphonomic processes have impacted on the surface and subsurface archaeological potential of the Woodlawn Wind Farm Transmission Line study area. In general, lower levels of ground surface disturbance correlate to higher potential for the survival of the Aboriginal archaeological resource, once patterns of past Aboriginal landscape use have been taken into consideration.

The main processes leading to ground surface disturbance in the Woodlawn Wind Farm Transmission Line study area are the historic land-use effects of vegetation clearance; ploughing and agriculture; grazing of hoofed animals; construction of sealed roads and unsealed access tracks; construction of farm infrastructure such as fences, dams and earthworks; and the natural taphonomic processes of hill slope and ridge erosion from rain; creek bank erosion from river flows; and the deposition and removal of sediment as a result of flooding. It must also be noted that past land use practices such as extensive vegetation clearance will have intensified the effects of natural processes such as erosion.

Categories of ground disturbance and their potential impact on surface and subsurface archaeological resources are described in Table 6.1 below.

Table 6.1 Categories of Ground Disturbance

Degree of Disturbance	Impact Description	Impact on Archaeological Resource
Undisturbed	No apparent disturbance to original land surface.	<i>In situ</i> archaeological deposits may be present.
Low	Non-mechanical vegetation clearance and stock grazing.	Archaeological material will retain some spatial integrity although localised displacement is expected. Removal of tree stumps has subsurface impact.
Moderate	Mechanical vegetation clearance and cultivation (ploughing) sheet/gully erosion, fluvial disturbance.	Archaeological materials may be present, although localised spatial displacement and artefact damage is likely; <i>in situ</i> deposits may remain beyond plough zone (usually between 100 – 150 mm).
Severe	Removal of topsoil via excavation for residential development, road and infrastructure construction, landscaped gardens, sheer erosion through natural causes and development, earthworks for dam construction (when topsoil has been moved to create earthworks).	While archaeological sites may be destroyed, remnant dispersed archaeological material may survive. The context of such material may be unknown.

Based on the above mapping, preliminary levels of disturbance for the Woodlawn Wind Farm Transmission Line study area are as follows:

- The majority of the study area would have undergone low to moderate impact, in the form of clearance, pastoral use, fence construction, limited farm vehicle traffic, and differing levels of fluvial disturbance through sheet erosion, gully erosion and creek bank erosion.
- It is anticipated that some of the creek banks intersected by the Woodlawn Wind Farm Transmission Line study area would have undergone severe disturbance due to deep gully erosion and/or dam or bund earthwork construction.
- A small percentage of the study area has undergone severe disturbance from the construction of Taylors Creek Road.

These estimates were generated after examination of available topographic maps and aerial imagery.

6.2 PREDICTIVE STATEMENT

Taking into consideration the archaeological context, local Aboriginal history, and past land disturbances in the study area, a predictive statement has been generated for the Woodlawn Wind Farm Transmission Line study area.

The predictive statement suggests likely site locations, site types, and degree of site preservation:

- Site Location
 - o Sites may be found on all landforms within the Woodlawn Wind Farm Transmission Line study area.
 - o Sites are most likely to occur on lower slopes and alluvial landforms.
 - o Sites may also occur on ridgeline crests.
- Site Type
 - o Stone artefact sites are the most common site type in the region.
 - o Stone artefact sites are likely to be small and represent one-off or short-term use of an area, indicative of the “background scatter” of artefacts that characterises the archaeological record in the region.
 - o Scarred trees would be unlikely except in areas where trees of at least 150 + years of age have survived.
- Site Preservation
 - o In cleared paddocks, archaeological material may have undergone localised displacement but may still maintain some spatial integrity.
 - o In areas of sheet or gully erosion and areas which have undergone fluvial disturbance, such as stream banks, archaeological materials may be present, but damage and displacement is likely and spatial and/or stratigraphic integrity is likely to be low.
 - o In areas impacted by the construction of roads, unsealed access tracks, and other farm infrastructure, archaeological sites will likely be destroyed, though dispersed archaeological material may survive out of context.
 - o Artefacts may also be located on dams as the disturbance of the deposit through earthmoving works and subsequent erosion of the dam walls increases visibility. However the spatial and/or stratigraphic integrity of any artefacts found in such contexts would most likely be low.

6.3 SECTION SUMMARY

It is estimated that the majority of the Woodlawn Wind Farm Transmission Line study area has undergone low to moderate disturbance from clearance, pastoral activities and erosion, while a small percentage has undergone severe impacts from road and dam construction. It is predicted that lower slopes and alluvial flats have the highest archaeological potential, followed by the crests of ridgelines. Small open artefact scatters are considered to be the most likely site type, though scarred trees may be present in areas with trees of suitable age. Site preservation is tied in with levels of ground surface disturbance, and it is estimated that sites with some spatial integrity may be present in areas of low to moderate impact such as cleared paddocks. This predictive statement was to be tested during the field assessment. The field assessment methodology is provided in Section 7.0.

7.0 FIELD ASSESSMENT METHODOLOGY

7.1 METHODOLOGY

This survey methodology has been developed to meet the requirements of the *NSW National Parks & Wildlife Service Aboriginal Cultural Heritage Standards & Guidelines Kit* (NSW NPWS 1997).

The Woodlawn Wind Farm Transmission Line field assessment methodology aimed to accomplish the following:

- To undertake a full pedestrian survey of the study area;
- To identify Aboriginal archaeological and cultural sites and issues;
- To identify areas of potential archaeological deposit, and/or archaeologically sensitive landscapes, within the area covered by the development envelope; and,
- To consult with the Aboriginal stakeholders in the field in relation to the inherent cultural values of the subject property, and to discuss recommendations to avoid or minimise impact to Aboriginal heritage values of the subject area.

7.1.1 Survey Units

The Woodlawn Wind Farm Transmission Line study area was divided into three sections – North, Central and South – based on access to these areas by existing sealed roads or internal access tracks.

The Woodlawn Wind Farm Transmission Line – North Survey Unit (WLTL-N) was the portion of the study area from the northernmost extent of the Transmission Line route, to where it intersected the internal access track on the Pylara property. WLTL-N was approximately 1.5 km in length, and 30 m wide.

The Woodlawn Wind Farm Transmission Line – Central Survey Unit (WLTL-C) was the portion of the study area between the Pylara access track and Taylors Creek Road. WLTL-C was approximately 5 km in length, and 30 m wide.

The Woodlawn Wind Farm Transmission Line – South Survey Unit (WLTL-S) was the remainder of the Transmission Line route, from where the study area intersected Taylors Creek Road to its southernmost extent. WLTL-S was approximately 1.2 km in length, and 30 m wide.

Each Survey Unit was walked as a single transect by archaeologists and Aboriginal stakeholders. Attempts were made to stay as close to the Transmission Line route as possible within each transect, however landforms and exposures of interest that intersected the study area or were in the vicinity were also targeted.

Consistent recording methods, as outlined below in Section 7.1.2, were employed to allow comparison of findings between Survey Units and the production of a synthesis of results to inform discussion of the archaeological record and potential of the Woodlawn Wind Farm Transmission Line study area.

7.1.2 Archaeological Recording

Each of the survey units was recorded on its own pro forma field recording sheet, to enable all finds and survey unit specifics to be recorded. This ensured that all terrain, land disturbance, resource location and Aboriginal site distribution information for each survey unit was comparable with data recorded for the others.

Landform, landform unit, vegetation type, land use, distance to water, aspect and site features are to be recorded in accordance with the criteria provided in the DECCW AHIMS Aboriginal site recording form.

Exposure and ground surface visibility was recorded following the system outlined in Table 7.1, and levels of disturbance were assessed according to a similar scale (refer to Table 6.1).

Likewise, a pro forma sheet for each artefact find recorded during assessment was kept.

Recordable artefact attributes for field assessment included: type, length, breadth, width, material, cortex, and evidence of any diagnostic traits, as well as evidence of use wear and/or retouch. Artefacts were photographed in the field with visible scale reference. GPS co-ordinates (in GDA94) were kept for each artefact find.

Artefacts were recorded singularly, except when major artefact scatters were observed. In such cases, estimates of scatter size based on the number of artefacts per square meter over the estimated size of the area were employed. Site maps and sketches were also made where appropriate.

Each site and area of PAD was recorded on a DECCW AHIMS Aboriginal site recording form for submission to the AHIMS registry as per Section 91 of the *NP&W Act 1974*.

Table 7.1 Categories of Ground Surface Visibility

Ground Surface Visibility	Percentage Rating
Very Poor – heavy vegetation, scrub, foliage or debris cover, dense tree or scrub cover. Soil surface of the ground difficult to see.	0-9% ground surface visible.
Poor – moderate level of vegetation, scrub, and/or tree cover. Some small patches of soil surface visible in the form of animal tracks, erosion, scalds, blowouts etc, in isolated patches. Soil surface visible in random patches.	10-29% ground surface visible.
Fair – moderate levels of vegetation, scrub and/or tree cover. Moderate sized patches of soil surface visible, possibly associated with animal /stock tracks, unsealed walking tracks, erosion, blowouts etc. Soil surface visible as moderate to small patches, across a larger section of the study area.	30-49% ground surface visible.
Good – moderate to low level of vegetation, tree or scrub cover. Greater amount of areas of soil surface visible in the form of erosion, scalds, blowouts, recent ploughing, grading or clearing.	50-69% ground surface visible.
Very Good – low levels of vegetation/scrub cover. Higher incidence of soil surface visible due to past or recent land-use practices such as ploughing, grading, mining etc.	70-89% ground surface visible.
Excellent – very low to non-existent levels of vegetation/scrub cover. High incidence of soil surface visible due to past or recent land use practices, such as ploughing, grading, mining etc.	90-100% ground surface visible.

7.1.3 Aboriginal cultural heritage consultation

The Aboriginal cultural heritage component of the Woodlawn Wind Farm Transmission Line archaeological and cultural heritage assessment was undertaken simultaneously with the archaeological field assessment component.

The rationale behind the identification of those stakeholders invited to participate in the Woodlawn Wind Farm Transmission Line assessment is explained in Section 1.4, and the application of Guidelines governing Aboriginal community consultation to the Woodlawn Wind Farm Transmission Line assessment are explained in Section 2.0.

During the field assessment of the Woodlawn Wind Farm Transmission Line, representatives of the Aboriginal stakeholder organisations BNAC, PLALC, NLALC and GTCAC were asked to identify issues, items or areas of cultural significance and offer comment on cultural rather than archaeological grounds.

Austral Archaeology recognises that it may not be culturally appropriate for certain information on areas of Aboriginal cultural and/or spiritual significance to be provided to archaeologists. However, it was determined that best efforts would be made to elicit general information including, if possible, locational data on the cultural values of the Woodlawn Wind Farm Transmission Line study area without overstepping cultural boundaries.

7.2 SECTION SUMMARY

Austral Archaeology proposed an Aboriginal archaeological and cultural heritage assessment methodology that had been tailored to the aims of the Woodlawn Wind Farm Transmission Line study.

The field assessment component of the proposed methodology aimed to undertake complete coverage and systematic recording of the archaeological resource of the study area, whilst providing flexibility in response to onsite conditions and stakeholder and Client requirements.

The cultural heritage assessment component of the proposed methodology aimed to undertake community consultation and thereby characterise the Aboriginal cultural values of the study area in a culturally appropriate way. The results obtained through application of the above methodology are provided in Section 8.0 below.

8.0 FIELD ASSESSMENT RESULTS

8.1 SURVEY CONDITIONS & LIMITATIONS ENCOUNTERED IN THE FIELD

The field assessment took place over two days, on the 10th and 11th of November 2009. Representatives from NLALC, PLALC and BNAC attended on November 10th, with the addition of representatives from GTCAC on November 11th.

The surveys took place on hot and cloudless days. Visibility however was generally poor to very poor outside of areas of exposure, due to fairly consistent ground cover from paddock and native grasses and occasional stands of trees and shrubs. Visibility improved significantly in areas of exposure.

The proposed methodology was adhered to without alteration, and the length of the Woodlawn Wind Farm Transmission Line was subjected to pedestrian survey. Each Survey Unit was walked as a single transect by archaeologists and Aboriginal stakeholders. Attempts were made to stay as close to the Transmission Line route as possible within each transect, however landforms and exposures of interest that intersected the study area or were in the vicinity were also subjected to field assessment.

On the first day of survey, representatives from NLALC, PLALC and BNAC declined to survey the southernmost third of WLTL-S after sighting a brown snake. However, the stakeholders stated that they were content with observing the remainder of the area from the edge of the gully where the snake was sighted, noting that ground surface visibility and landform were unchanged. In addition, the stakeholders did not identify any cultural issues regarding this area. Austral Archaeology representatives walked the remainder of WLTL-S and did not identify any areas of archaeological potential.

GTCAC representatives were only available to attend the second day of survey. However, a debrief meeting was held on the morning of the second day of survey, wherein GTCAC representatives were informed of the findings of the previous day of survey.

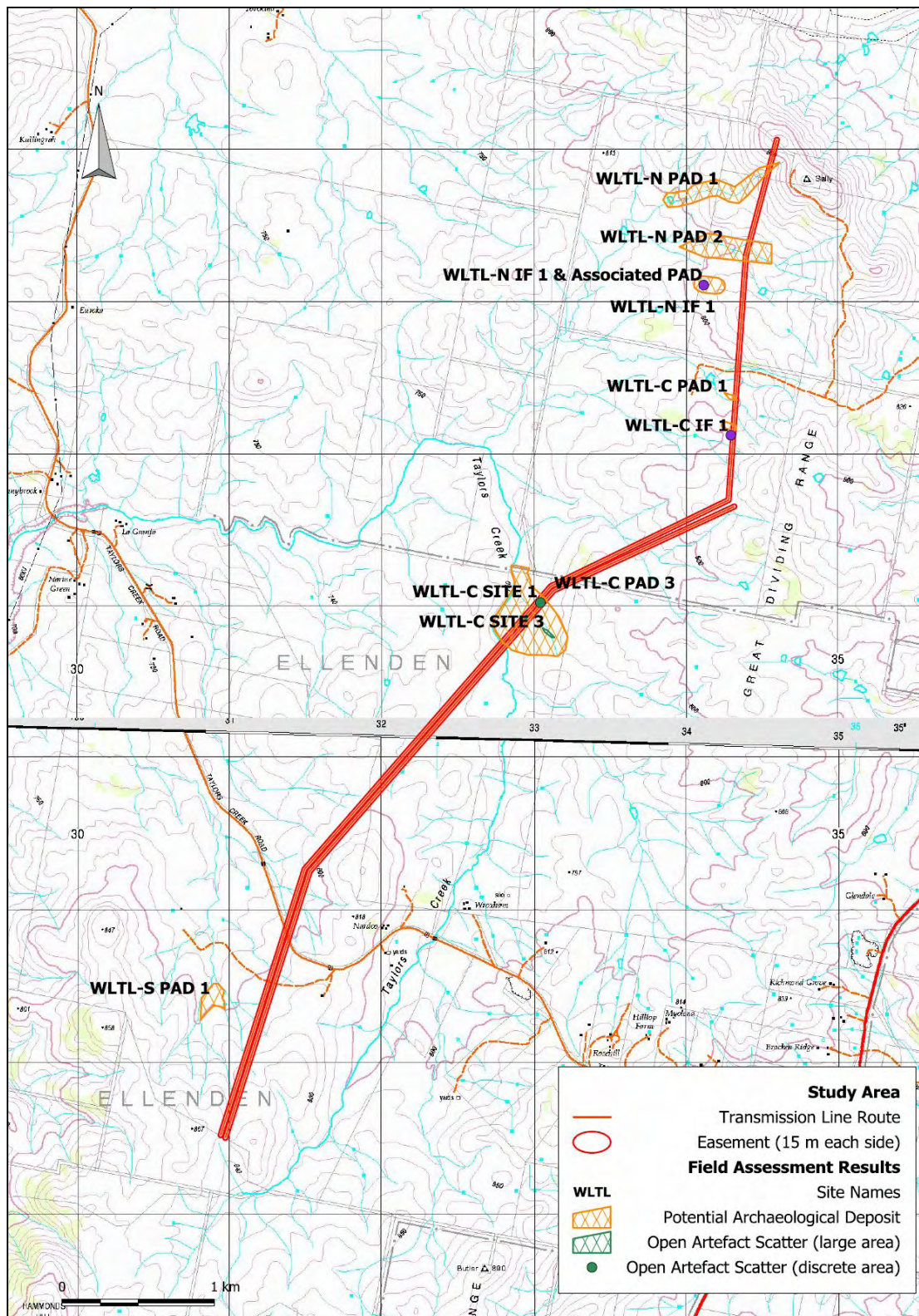
Consultation regarding the Aboriginal cultural heritage values of the study area took place during the field assessment phase. At the end of the field assessment, survey results were summarised, information regarding the cultural significance of the recorded artefacts was sought, and potential mitigation and recommendations were discussed.

8.2 FIELD ASSESSMENT RESULTS

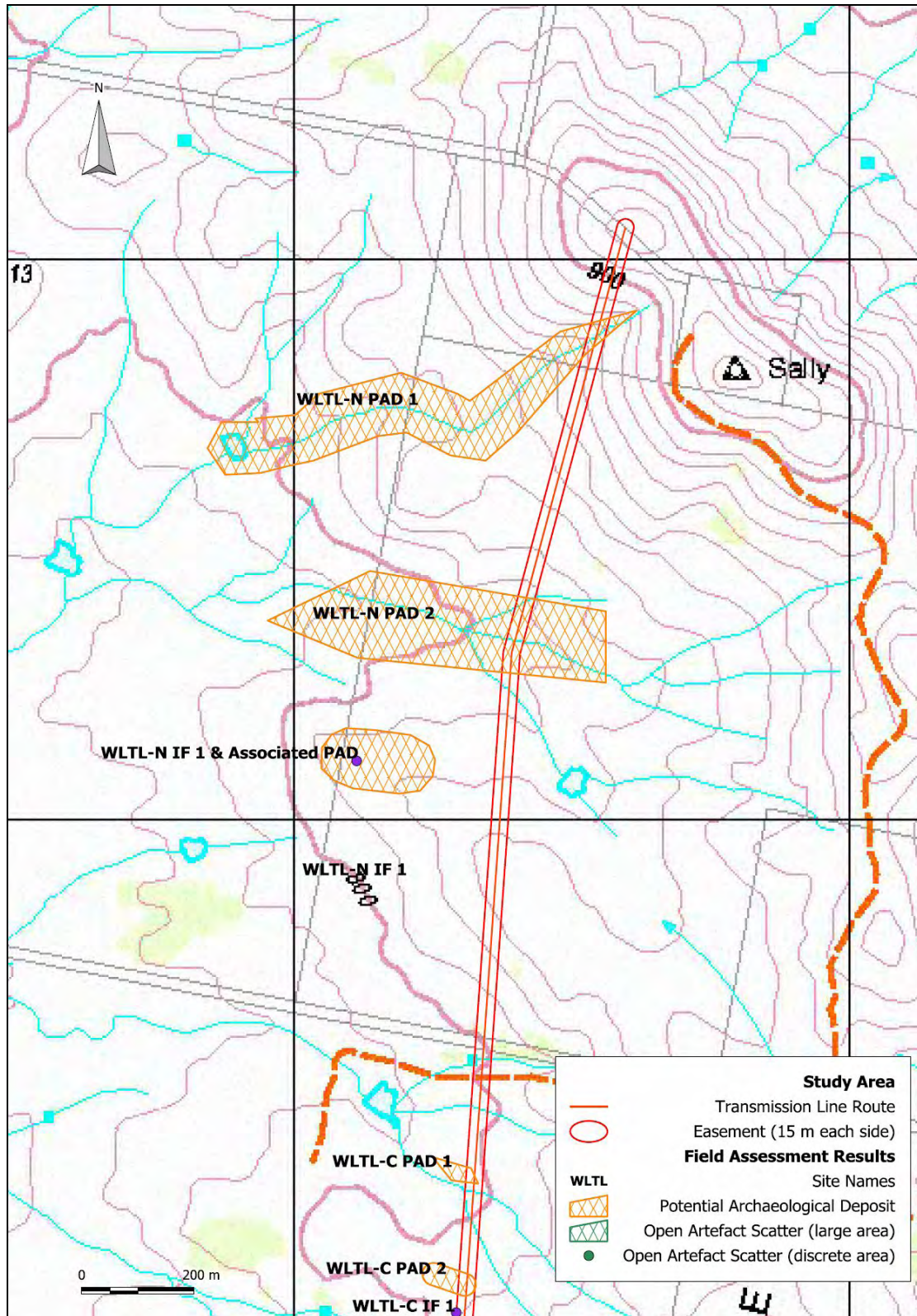
As a result of the field assessment of the Woodlawn Wind Farm Transmission Line study area, and consultation with stakeholders, it was determined that:

- The three Survey Units – WLTL-N, WLTL-C and WLTL-S – had been covered by the field assessment. Detailed Survey Unit recordings are available in Appendix C.1.
- Two isolated finds (WLTL-N IF 1 and WLTL-C IF 1) and three open artefact scatters (WLTL-C SITE 1, WLTL-C SITE 2 and WLTL-C SITE 3) were visible as surface archaeological material in the Woodlawn Wind Farm Transmission Line study area. Detailed Site recordings are available in Appendix C.2.
- Seven areas of archaeological potential were identified in the Woodlawn Wind Farm Transmission Line study area. Two of these (WLTL-N IF 1 & PAD and WLTL-C PAD 3) were in association with surface artefactual material. The remainder (WLTL-N PAD 1, WLTL-N PAD 2, WLTL-C PAD 1, WLTL-C PAD 2 and WLTL-S PAD 1) were determined based on landform characteristics alone. Detailed Site recordings are available in Appendix C.2.

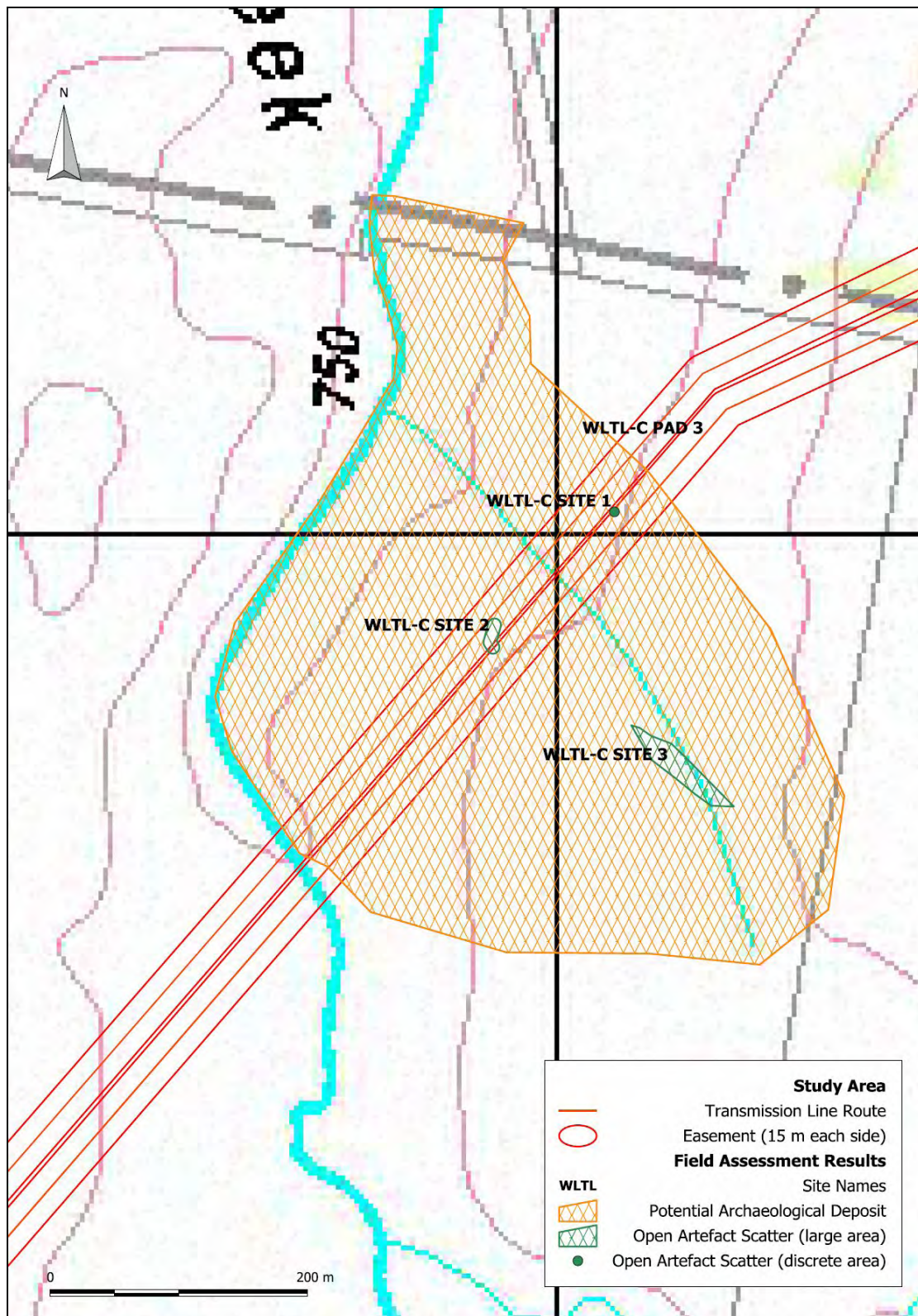
The locations of the sites are shown in Figures 8.1, 8.2, 8.3 and 8.4, and site data is summarised in Table 8.1.



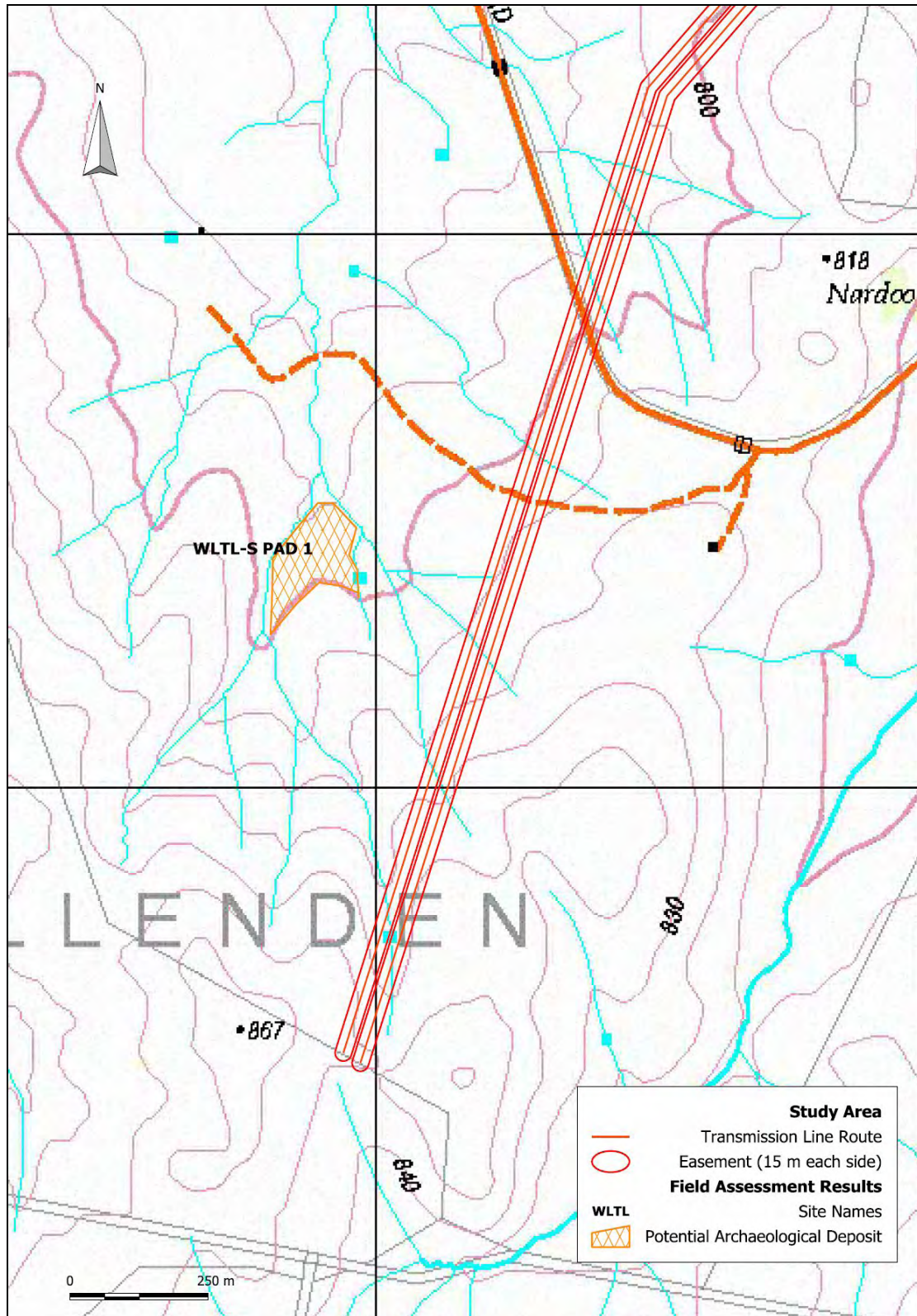
8.1 All sites and areas of potential archaeological deposit recorded during the field assessment of the Woodlawn Wind Farm Transmission Line study area. Base image © Department of Lands 2006. Mosaic of 1:25 000 scale topographic maps Lake Bathurst 88274 N and Boro 88274 S.



8.2 Sites recorded in WLTL-N and the northern part of WLTL-C during the field assessment of the Woodlawn Wind Farm Transmission Line study area. Base image © Department of Lands 2006. 1:25 000 scale topographic map Lake Bathurst 88274 N.



8.3 Location of sites WLTl-C SITE 1, WLTl-C SITE 2 and WLTl-C SITE 3 within WLTl-C PAD 3. Base image © Department of Lands 2006. 1:25 000 scale topographic maps Lake Bathurst 88274 N.



8.4 Location of WLT-S PAD 1 within Survey Unit WLT-S, as recorded during the field assessment of the Woodlawn Wind Farm Transmission Line study area. Base image © Department of Lands 2006. 1:25 000 scale topographic map Boro 88274 S.

Table 8.1 Field Assessment Results

Site Name	Site Features	Landform	Number of Artefacts
WLTL-N PAD 1	PAD	Mid-slope of slope down from ridge, overlooking confluence	-
WLTL-N PAD 2	PAD	Mid-slope of slope down from ridge, overlooking confluence	-
WLTL-N IF 1 & Associated PAD	Isolated find & PAD	Mid-slope	1
WLTL-C PAD 1	PAD	Gentle rise overlooking creek	-
WLTL-C PAD 2	PAD	Gentle rise overlooking creek	-
WLTL-C IF 1	Isolated find	Mid-slope	1
WLTL-C SITE 1	Open artefact scatter	Mid-slope overlooking creek	7
WLTL-C SITE 2	Open artefact scatter	On flat of gentle rise overlooking creek	4
WLTL-C SITE 3	Open artefact scatter	On flat of gentle rise overlooking creek	80 – 100 (a sample of 5 artefacts was recorded in detail)
WLTL-C PAD 3	PAD	Entirety of gentle rise overlooking creek	Contains WLTL-C Sites 1 – 3.
WLTL-S PAD 1	PAD	Gentle rise between two creeks, overlooking confluence	-

WLTL-N PAD 1:

Located in the WLTL-N Survey unit, this area of PAD is located along the banks of an ephemeral first order stream that intersects the Woodlawn Wind Farm Transmission Line study area.

The area of highest potential is located down slope to the west of the Transmission Line route, on a gentle rise overlooking a dam at the point where the first order stream converges with a second order stream. This area has been recorded as that area between the GDA 94 Zone 55 points 734167 E 6113699 N $\pm$ 5 m and 734196 E 6113787 N $\pm$ 5 m. It was identified as a good vantage point over the permanent waterways down slope to the southwest. The remainder of the PAD is defined as covering 50 m either side of the stream.

The archaeological potential of the PAD at the area of highest potential is considered to be moderate. The archaeological potential of the PAD at the point where it intersects the easement is considered to be low.

WLTL-N PAD 2:

Located in the WLTL-N Survey unit, this area of PAD is located near the confluence of several ephemeral first order streams on a moderate west facing slope. Raw non-artefactual stone material was observed scattered on the surface. In the same manner as WLTL-N PAD 1, the area of highest archaeological potential was identified as a good vantage point over the permanent waterways down slope to the west. The area of highest potential has been defined as that area between GDA 94 Zone 55 points 734116 E 6113285 N $\pm$ 5 m, 734145 E 6113439 N $\pm$ 5 m and 733966 E 6113346 N $\pm$ 5 m. The area of PAD extends upslope to the east to intersect the Transmission Line easement but is considered to be of lower potential in this area due to the increased slope.

The archaeological potential of the PAD at the area of highest potential is considered to be moderate. The archaeological potential of the PAD at the point where it intersects the easement is considered to be low.

WLTL-N IF 1 & Associated PAD:

Located in the WLTL-N Survey Unit, this isolated find and associated area of potential archaeological deposit are located on the mid slope of a moderately sloped rise. The isolated find consisted of one pale grey silcrete flake with a clearly visible bulb of percussion, located at GDA 94 Zone 55 734116 E 6113102 N $\pm$ 5 m. A piece of non-artefactual grey silcrete was also located at GDA 94 Zone 55 734207 E 6113095 N $\pm$ 5 m. The location of this item was taken into consideration when defining the area of associated potential archaeological

deposit: the area of PAD has been defined as 50 m either side of the ridge crest and 50 m around both the isolated find and the associated raw material.

Pale sandy soil was visible in the track exposure, with red raw silcrete pieces also visible on the surface. The soil profile was skeletal in places with stone outcroppings visible in places.

The archaeological potential of the PAD is considered to be low to moderate.

WLTL-C PAD 1:

Located in the WLTL-C Survey unit, this area of PAD is located on a gentle rise on the north bank of a dry, heavily eroded ephemeral first order creek or drainage gully. The area of PAD has been defined as lying within the following GDA 94 Zone 55 coordinates: East – 734333 E 6112346 N $\pm$ 5, North – 734321 E 6112373 N $\pm$ 5 m, West – 734252 E 6112393 N $\pm$ 5 m and South – 734286 E 6112351 N $\pm$ 5 m.

The creek bank and surrounding landform have undergone severe deposit due to deep erosion (> 2 m) along the creek banks. In addition, a dam and associated earthworks have been constructed at the eastern extent of the PAD, and another dam has been constructed immediately to the west. These impacts serve to confine the area of PAD.

Taking these impacts into account, the archaeological potential of this PAD is considered to be moderate.

WLTL-C PAD 2:

Located in the WLTL-C Survey Unit, this area of PAD is located on a rise between two dry first order streams or gullies, which run down slope towards a confluence in the northwest.

The area of PAD has been defined 20 m either side of a 'line' drawn between the following GDA 94 Zone 55 coordinates: 734254 E 6112184 N $\pm$ 5 m. The 'line' corresponds to the crest of the rise. The rise is at least 100 m distant from either stream line, and was observed to be impacted by wash erosion. A small amount of raw non-artefactual material was observed on the crest and down slope in the wash.

Taking the impact of erosion and the distance from water into consideration, the archaeological potential of this PAD is considered to be low.

WLTL-C IF 1:

Located in the WLTL-C Survey Unit, this isolated find was recorded on the midslope of a moderate west facing slope in the vicinity of WLTL-C PAD 2. It was recorded at GPS coordinates GDA 94 Zone 55 734295 E 6112115 N $\pm$ 6 m.

The item is a broken proximal flake of grey silcrete. The flake may have washed down slope from the crest identified as WLTL-C PAD 2. The erosion wash and surrounding area was inspected carefully but no other archaeological material was located.

The archaeological significance of this artefact is considered to be low.

WLTL-C SITE 1:

Located in the WLTL-C Survey Unit, this open artefact scatter was recorded on a gentle south facing slope overlooking a first order tributary of Taylors Creek. The scatter was located approximately 200 m to the east of the confluence of the tributary with the main body of Taylors Creek.

The open artefact scatter consists of seven non-diagnostic flakes of good quality red silcrete spread over an area of approximately 5 m x 2 m along a sheep track exposure running roughly east to west downslope. The location was recorded as GDA 94 Zone 55 733043 E 6111015 N $\pm$ 5 m. T

The scatter was interpreted as representing the debitage from a single knapping incident. WLTL-C SITE 1 is within the bounds of the larger area of potential archaeological deposit, WLTL-C PAD 3, but was recorded as a single site due to the discrete grouping of flakes, shared raw material, and interpreted as the archaeological remains of a single knapping incident.

The archaeological significance of this open artefact scatter is considered to be moderate. The archaeological potential of this scatter, as a surface manifestation of WLTL-C PAD 3, is moderate to high.

WLTL-C SITE 2:

Located in the WLTL-C Survey Unit, this open artefact scatter was recorded on a track exposure that intersects the Woodlawn Wind Farm Transmission Line route. The track exposure runs across the same gently sloped terrain on the east bank of Taylors Creek as WLTL-C SITE 1, and lies within the larger area of potential archaeological deposit WLTL-C PAD 3.

The scatter consists of an incomplete ground-edge axe of granite, showing partial sharpening of one end (located at GDA 94 Zone 55 732948 E 6110909 N $\pm$ 5 m); half of a granite ground-edge axe, and associated raw material of granite, cream and red silcrete and quartz (located at GDA 94 Zone 55 732950 E 6110927 N $\pm$ 5 m); and further raw material of quartz and silcrete cortex (located at GDA 94 Zone 55 732945 E 6110913 N $\pm$ 5 m).

Taking into account the artefact types and range of raw materials, the archaeological significance of this open artefact scatter is considered to be moderate. The archaeological potential of this scatter, as a surface manifestation of WLTL-C PAD 3, is moderate to high.

WLTL-C SITE 3:

Located in the WLTL-C Survey Unit, this open artefact scatter was recorded in a large sandy gully exposure to the east of the Woodlawn Wind Farm Transmission Line route. The exposure lies along the route of an ephemeral first order tributary leading into Taylors Creek, to the west of the Transmission Line route. The stream was dry and grassed over at the time of survey.

The extent of the site was recorded as the extent of the exposure, an area of approximately 100 m x 17 m, with erosion from 0.3 to 1.5 m deep. The following GDA 94 Zone 55 coordinates were taken at various points around the exposure: 733056 E 6110849 N, 733062 E 6110847 N, 733071 E 6110840 N, 733087 E 6110834 N, 733101 E 6110820 N, 733135 E 6110785 N, 733118 E 6110786 N, 733106 E 6110795 N, 733091 E 6110807 N, and 733071 E 6110822 N $\pm$ 5m.

Artefacts were observed scattered over the entire surface of the exposure, and artefact numbers were estimated at from 80 – 100. After discussion with stakeholders, a sample of five artefacts was recorded as representative of the range of raw materials and artefact types found within the scatter.

These artefacts were a flake of fine quality quartz, a smaller quartz flake, an incomplete broken granite axe showing signs of shaping but no edge-grinding, a large granite cortex flake and a red silcrete nodule. Chert items were also observed.

The site has undergone disturbance from erosion and also dumping of building materials and some domestic rubbish – a small amount of sheet metal and fibro was observed partially buried in the sand, and two large brown glass bottles (of recent age) were observed on the surface of the exposure.

Taking into account the artefact types, large number of artefacts, and range of raw materials, the archaeological significance of this open artefact scatter is considered to be high. The archaeological potential of this scatter, as a surface manifestation of WLTL-C PAD 3, and taking into account the impacts of erosion and rubbish dumping, is moderate to high.

WLTL-C PAD 3:

Located in the WLTL-C Survey Unit, this area of PAD encompasses the open artefact scatters WLTL-C SITE 1, WLTL-C SITE 2 and WLTL-C SITE 3, and that area on the east bank of Taylors Creek characterised by gently sloped grassed over sandy deposits overlooking Taylors Creek, within at least 100 m of the banks of Taylors Creek and the unnamed first order tributary which flows southeast – northwest across the Woodlawn Wind Farm Transmission Line route to join Taylors Creek.

The western extent of the PAD is taken to be the east bank of Taylors Creek. No GPS coordinates were taken for the northern, southern or eastern extents of the PAD; rather, the bounds of the PAD as shown in Figure 8.3 are based on a distance of 100 m from the banks of Taylors Creek and its unnamed first order tributary. The south-western extent of the PAD is taken to be GDA 94 Zone 55 732026 E 6110736 N $\pm$ 5 m, which is the point where the Woodlawn Wind Farm Transmission Line route crosses Taylors Creek to the south-west. At this point the sandy deposit was observed to come to an end at the heavily eroded and

modified channel of Taylors Creek, and no archaeological potential was identified on the opposite bank of the Creek.

Taking into account the presence of open artefact scatters WLTL-C SITE 1, WLTL-C SITE 2 and WLTL-C SITE 3 on the surface, the range of artefact types and raw materials present in those sites, the underlying Aeolian sand deposits and gently sloped topography overlooking Taylors Creek (at this point a fourth-order or higher permanent stream) within the landform designated as WLTL-C PAD 3, the archaeological potential of WLTL-C PAD 3 is considered to be high.

GTCAC, PLALC, NLALC and BNAC representatives indicated that the artefacts within WLTL-C PAD 3 were of cultural significance. Tyronne Bell of the Buru Ngunawal Aboriginal Corporation mentioned that burials were known to occur in sandy deposits such as those found within WLTL-C PAD 3; however, he did not have first-hand knowledge of burials in this particular locality.

WLTL-S PAD 1:

Located in the WLTL-S Survey Unit, this area of PAD lies on a gentle rise between two ephemeral creek channels and overlooks their confluence. The central point of the area of PAD has been recorded as GDA94 Zone 55 730910 E 6108398 N $\pm$ 5 m.

The area has undergone impacts from dam and earthwork construction, sheet erosion and severe gully erosion on the creek banks on either side of the rise. It was agreed that the area of potential was confined to the part of the rise to the west of the dam.

The archaeological potential of this area of PAD is considered to be low.

8.3 SECTION SUMMARY

As a result of the field assessment of the Woodlawn Wind Farm Transmission Line study area, three open artefact scatters (WLTL-C SITE 1, WLTL-C SITE 2 and WLTL-C SITE 3), two isolated finds (WLTL-N IF 1 & Associated PAD and WLTL-C IF 1), and seven areas of potential archaeological deposit (WLTL-N PAD 1, WLTL-N PAD 2, WLTL-C PAD 1, WLTL-C PAD 2 and WLTL-C PAD 3). WLTL-C PAD 3 has as its surface manifestations the three open artefact scatters WLTL-C Sites 1 – 3. A total of 13 artefacts were recorded at sites WLTL-C SITE 1, WLTL-C SITE 2, WLTL-C IF 1 and WLTL-N IF & Associated PAD. A sample of 5 artefacts was also recorded from WLTL-C SITE 3, which was estimated as having 80 – 100 artefacts scattered across the surface. Raw materials included quartz, granite and silcrete. Artefact types included ground-edge axes (in varying stages of completion), flakes and nodules. The archaeological significance of the sites, and archaeological potential of the areas of PAD, shall be discussed in the following section.

9.0 DISCUSSION AND SIGNIFICANCE ASSESSMENT

9.1 DISCUSSION OF FIELD ASSESSMENT FINDINGS

9.1.1 Introduction to the Discussion

As described in the previous section, three open artefact scatters, two isolated finds (one with associated PAD), and six potential archaeological deposits (one in association with the three open artefact scatters) were located during the field assessment of the Woodlawn Wind Farm Transmission Line study area.

Consideration of these findings in light of the past archaeological research, models of past Aboriginal land use in the area, and the predictive statement generated for the Woodlawn Wind Farm Transmission Line study area, will allow quantification of the archaeological significance and potential of these results.

9.1.2 Discussion

In accordance with the Predictive Statement provided in Section 6.0, all of the sites (as distinct from areas of potential archaeological deposit) recorded during the field assessment were stone artefact sites.

The isolated finds – WLTL-N IF 1 & Associated PAD and WLTL-C IF 1 – were located on mid slopes a considerable distance from permanent water. Their location and small size would support their identification as part of the ‘background scatter’ previously identified as characterising the archaeological resource of the Woodlawn Wind Farm area.

This background scatter has been described as the debris of repeated transient use of parts of the landscape by Aboriginal people passing through *en route* to more attractive areas, such as permanent sources of water and richer ecosystems associated with Lake George, for example.

The absence of associated PAD with WLTL-C IF 1, and the low to moderate potential for additional archaeological deposit ascribed to WLTL-N IF 1, has been determined in light of the expectation of ‘background scatter’ on the ridgeline, and was also determined by the probable erosion and denudation of soil profile in this landform.

The other small areas of potential archaeological deposit – namely WLTL-N PAD 1, WLTL-N PAD 2, WLTL-C PAD 1 and WLTL-C PAD 2 – were identified based on landform characteristics only. In general, these areas of PAD were identified on moderately sloped midslopes or the crests of small rises overlooking confluences of ephemeral watercourses that were dry at the time of survey.

The majority of these PADs had also undergone disturbance through vegetation clearance, pastoral use of the land, and modification of creek banks through dam and bund construction as well as bank erosion ranging from moderate to severe in its impact.

Taking into account models of past Aboriginal land use and predictive models for expected artefact density on the landforms where these PADs are located, their archaeological potential has been determined to be low. That is, these areas of PAD are not anticipated to contain artefacts in greater concentration than the generalised low density background scatter of artefacts which characterises the archaeological record of the Woodlawn Wind Farm study area.

The three open artefact scatters and associated underlying area of PAD recorded on the east banks of Taylors Creek in the central section of the Woodlawn Wind Farm Transmission Line study area also conform with predictive statements for the Woodlawn Wind Farm study area. That is, the open artefact scatters WLTL-C SITE 1, WLTL-C SITE 2 and WLTL-C SITE 3, and the large area of potential archaeological deposit, WLTL-C PAD 3, lie within areas of increased archaeological sensitivity as identified by Biosis (2006b: 31); namely, areas within 100 m of water, and on alluvial landforms.

The range of artefact types and raw materials suggest that more intensive use of this area occurred than on other landforms encountered along the Woodlawn Wind Farm Transmission Line route. These activities may still have been transient and represented one-off incidents

rather than long term stays – for example, the contents of WLTL-C SITE 1 have been interpreted as the debitage of a one-off knapping incident. However, the location of the very large open artefact scatter WLTL-C SITE 3, in a sandy gully exposure along the route of a dry ephemeral stream leading into Taylors Creek, indicates that these repeat visits may have been more concentrated on the landform identified as WLTL-C PAD 3 than in other areas of the landscape through which the study area passes.

The large number of artefacts located on this ephemeral stream line, when considered in light of the proximity of a much larger – although still impermanent – stream within 200 m, suggests that it is likely that a similarly higher concentration of artefacts may be present on the gently sloped and slightly raised landform between WLTL-C SITE 3 and the bank of Taylors Creek itself.

Taylors Creek was dry at the time of the survey, and has not been identified as a reliable water source in earlier studies (see Biosis 2005a); the nearest reasonably reliable sources of water to the Woodlawn Wind Farm study area are Crisps Creek (3 kilometres away), the Mulwaree River (4 kilometres away) and Lake George, when full (10 kilometres away). However, the higher density of artefacts found in WLTL-C SITE 3 suggest that the area may have been attractive as a seasonal water source, leading to a higher density of artefacts being found in the vicinity.

As Taylors Creek also eventually drains into Lake George, it may have provided a travel route to the Lake, and could have been a relatively attractive travel route for past Aboriginal people, at least during seasons when the Creek contained water.

Therefore, the results of the current study provide some confirmation of previously suggested models of past Aboriginal land use and archaeological site distribution within the vicinity of the Woodlawn Wind Farm. Namely, the location of the isolated artefacts and areas of PAD (exception WLTL-PAD 3) conform with predictive models for a generalised background scatter of artefacts along ridge lines and slopes consistent with people passing through the area, and the increased artefact density observed in WLTL-C SITE 1 and WLTL-C SITE 2, and the increased archaeological potential posited for WLTL-C PAD 3, conform with predictive models positing increased archaeological sensitivity and higher artefact density for areas within 100 m of more reliable water and on alluvial flats.

9.2 INTRODUCTION TO THE HERITAGE ASSESSMENT PROCESS

An assessment of significance seeks to determine and establish the importance or value that an object or site may have to the community at large. The concept of cultural significance is intrinsically connected to the object or place, its location, setting and relationship with other items in its surrounds. The assessment of cultural significance is ideally a holistic approach that draws upon the response these factors evoke from the Aboriginal community.

Archaeological sites require a different approach to significance assessment because the extent of the heritage resource, and the degree to which it can contribute to our understanding of history, is not fully known at the outset. Also of significance is the type of information that can be revealed by potential archaeological deposits, especially where the information is not available through any other source, and the contribution it can make to our understanding of a place, which may also be of cultural heritage significance.

9.3 BASIS FOR ASSESSMENT OF ABORIGINAL SITES

The NSW National Parks and Wildlife Service assessment criteria for archaeological significance have been developed to deal specifically with archaeological resources and cover:

- A) Research Potential. This criterion is designed to qualify the significance of potential research which may be carried out at a site. Significance is apportioned according to the amount of new information which might be contained in the deposit, rather than the potential to yield a large number of artefacts. A site may have high significance under this criterion if it has an intact stratigraphic sequence and good integrity, the potential to provide a chronology extending into the past, or if it is connected to other sites within the region. Within this criterion are the subsets of representativeness and rarity. Representativeness is the ability of the site to demonstrate a type of site or deposit. This is important to maintain a contingency sample of all site types. Rarity is often described

within the framework of representativeness as it relates to the distinctive features of a site which set it apart from similar sites.

- B) Educational Potential. This criterion allows the educational value of a site to be considered as a component of significance. Under this criterion, an archaeologist may assess the potential of a site to educate the general public. DECCW has acknowledged that this criterion is open to misinterpretation by archaeologists who have the ability to convey the value of a site to other archaeologists. DECCW recommends that, in cases where significance is determined on educational potential, the onus is on the archaeologist to go to the public for an assessment of this value.
- C) Aesthetic Significance. Aesthetic significance is not inherent in a place, but arises from the response that people have to it. It is pertinent to remember that this response can vary dramatically between cultures and social groups, therefore an assessment of significance based on aesthetic value should incorporate the views of different cultures.

For a full description of assessment procedures refer to the Aboriginal Cultural Heritage: Standards and Guidelines Kit (NPWS 1997). These criteria have been designed to deal specifically with the archaeological resource; however they do not provide a framework for the assessment of social significance to the Aboriginal community. For this reason, the criteria for assessment provided in the *Australia ICOMOS charter for the conservation of places of cultural significance* (the Burra Charter) are sometimes also used to assess significance as they provide a framework for a more holistic assessment of significance.

9.4 ASSESSMENT OF AREAS IDENTIFIED IN THIS STUDY

The comments made in this section are a reflection of significance from a scientific perspective only, based on established DECCW approved significance assessment criteria. They are not intended as a reflection of cultural significance. Please refer to stakeholder comments for relevant views and statements of cultural significance (Appendix A).

Each of the criteria of assessment outlined in the previous section will now be considered in the sub-sections below.

9.4.1 Research Potential

The research and educational potential of the sites and areas of potential archaeological deposit identified in the field assessment is tabulated as follows:

As described in Section 9.3, the research potential of Aboriginal archaeological sites is based on the amount of new information which might be obtained from more detailed investigation of the site; the representativeness or ability of the site to demonstrate a type of site or deposit; and, the rarity or distinctiveness of the site in relation to other sites.

The three criteria used to calculate research potential for the areas of potential archaeological deposit WLTL-N PAD 1, WLTL-N PAD 2, WLTL-C PAD 1, WLTL-C PAD 2 and WLTL-S PAD 1 may be addressed simultaneously. As outlined in Section 9.1.2, the areas of PAD WLTL-N PAD 1, WLTL-N PAD 2, WLTL-C PAD 1, WLTL-C PAD 2 and WLTL-S PAD 1 are considered to offer low potential for new information as they are not anticipated to contain artefacts in greater concentration than the generalised low density background scatter of artefacts predicted for the general area. Therefore, the potential for new information, representativeness and rarity of these PADs is considered to be low.

The sites WLTL-N IF 1 & Associated PAD, WLTL-C IF 1 and WLTL-C IF 1 are considered to offer low potential for new information to be gained from further investigation, due to the high number of similar sites recorded in earlier assessment of the Woodlawn Wind Farm area and the generally poor condition of these sites. For the same reasons, they are not considered to be representative or rare.

The sites WLTL-C SITE 2 and WLTL-C SITE 3, respectively, are considered to offer low and moderate potential for new information. As mentioned in Section 9.3, significance is apportioned according to the amount of new information that might be contained in the deposit, rather than the potential to yield a large number of artefacts. WLTL-C SITE 2, despite the presence of a relatively unusual artefact type (ground-edge axes), is located in a disturbed context on a sheep or cattle track exposure, and is therefore unlikely to maintain spatial integrity. Although the ground-edge axes present in WLTL-C SITE 2 and WLTL-C SITE 3 were an unanticipated find, their incomplete (unfinished and/or broken) condition

precludes their being representative examples of the type. Their presence however does provide both WLTL-C SITE 2 and SITE 3 a moderate level of rarity.

WLTL-C SITE 3, with its very high number of artefacts, comparatively wider range of artefact types, and range of raw materials, has potential to offer information regarding the range of materials used in the area and possibly also the type of activities undertaken on this landform. However, the disturbed context – a gully exposure along the bank of a dry ephemeral tributary, which has also undergone an undetermined amount of disturbance from dumping of building material – means that the potential for intact spatial and stratigraphic context is reduced. Therefore the site has been ascribed a moderate potential to provide new information. A moderate level of representativeness has been ascribed. A moderate to high level of rarity has been ascribed to WLTL-C SITE 3 due to the relatively low frequency of such large artefact scatters and the range of materials observed.

The area of potential archaeological deposit WLTL-C PAD 3 is considered to have high potential for new information. As the soil landscape of the area is an aggrading landscape, and the sandy deposit is deemed to be at least 1 m deep (based on the observed depth of erosion in the gully where WLTL-C SITE 3 is located, and comparison of the height of the top of the gentle rise with the height of the banks of Taylors Creek), there is potential for sub-surface archaeological deposit. It is possible that deposits in this area may be in more complete spatial and stratigraphic contexts however further investigation of the fluvial and erosional processes acting on the landform would be necessary to clarify the level of potential. The landform has been ascribed a moderate level of representativeness due to the conformation of the area to predictive modelling for the area as supported by the three open artefact scatters identified as surface manifestations of the PAD. The rarity of the PAD is considered to be high within the Woodlawn Wind Farm study area, but this has been reduced to moderate in light of the possibility of other similar landforms being located on similar landforms along Taylors Creek outside of the study area.

Table 9.1 Assessments of Research Potential

Site Name	Potential for new information	Representativeness	Rarity	Research Potential
WLTL-N PAD 1	Low	Low	Low	<u>Low</u>
WLTL-N PAD 2	Low	Low	Low	<u>Low</u>
WLTL-N IF 1 & Associated PAD	Low	Low	Low	<u>Low</u>
WLTL-C PAD 1	Low	Low	Low	<u>Low</u>
WLTL-C PAD 2	Low	Low	Low	<u>Low</u>
WLTL-C IF 1	Low	Low	Low	<u>Low</u>
WLTL-C SITE 1	Low	Low	Low	<u>Low</u>
WLTL-C SITE 2	Low	Low	Moderate	<u>Low</u> – <u>Moderate</u>
WLTL-C SITE 3	Moderate	Moderate	Moderate – High	<u>Moderate</u> – <u>High</u>
WLTL-C PAD 3	High	Moderate	Moderate	<u>Moderate</u> – <u>High</u>
WLTL-S PAD 1	Low	Low	Low	<u>Low</u>

9.4.2 Educational Potential

The educational potential of a study area is best considered in light of its value to the general public, the Aboriginal stakeholders, and other researchers: those people whom the archaeologist has a duty to inform. Therefore the educational potential of the current study area is tied up with its research potential: what can be learnt from further archaeological investigation, and whom will that knowledge benefit?

The educational value of a site to the general public is the most important criterion. The educational potential must be linked to something that can add to the public's knowledge of the Aboriginal past of a particular area.

The sites and potential archaeological deposits WLTL-N PAD 1, WLTL-N PAD 2, WLTL-N IF 1 & Associated PAD, WLTL-C PAD 1, WLTL-C PAD 2, WLTL-C IF 1 and WLTL-S PAD 1 are considered to be of low educational value. These sites do not have the potential to add new information to the public's knowledge of past Aboriginal use of the study area. However, they

retain some value as they have provided supporting information to existing ways of understanding past Aboriginal use of the landscape. Similarly, it is unlikely that any subsurface material in the areas of PAD listed above would differ substantially from the archaeological assemblage already known for the region: it would be neither rare nor representative. In addition, the concept of 'research potential' is neither tangible nor accessible to a public audience. As a result, the educational potential in terms of the public is considered to be low.

The open artefact scatters WLTL-C SITE 1, WLTL-C SITE 2, and WLTL-C SITE 3, in association with the area of potential archaeological deposit WLTL-C PAD 3 have been identified as having moderate to high research potential. This research potential may translate to educational potential if the sites are presented to the public as a unit. As a complex of sites on a distinct landform near a fairly significant hydrological feature, they could be used to show the range of past Aboriginal activities which took place in the proximity of a seasonal water source: transient one-off stops, such as the knapping incident represented by WLTL-C SITE 1, plus repeated stops using a range of materials as shown particularly by WLTL-C SITE 3. However, the transmission of this potential to a public audience may prove problematic, and the sites themselves are inaccessible to the general public as they are located on private property. Therefore, the educational potential of these sites and the area of PAD have been described as low to moderate.

The perspective of Aboriginal stakeholders is likely to differ from that of the archaeologist and that of the general public: the archaeological record is a component of Aboriginal oral history and prehistory. As a non-Aboriginal person, the consultant is unable to offer such a valuation as has been provided in consideration of the general public or other researchers.

What can be offered in terms of considering educational value and Aboriginal stakeholders is that which has been offered before in this consideration of overall potential. That is, that the information from the current study area is unlikely to shed new light on Aboriginal people's use of landscape in times past, and may also be assessed as low. However it is appreciated that perspectives do differ and unlike the general public or other researchers, Aboriginal stakeholders may see the compilation of further archaeological data of the same type as a confirmation of their story, which may be of high educational value to them.

Lastly, although the consultant acknowledges that in consideration of a study area's educational potential that its value in educating other archaeologists and researchers is not paramount, it is still of importance. Sufficient data currently exists to satisfy questions of site distribution on this landform type, and therefore the educational value of the current study area for other researchers is considered to be low.

The overall educational value of the current study area is therefore considered to be low.

9.4.3 Aesthetic Significance

Austral views aesthetic significance to be something culturally determined by Aboriginal stakeholders. As noted in Section 9.3, the concept of aesthetic significance deals with the response that people have to a particular place. This criterion differs from the other two in that it is not so readily quantifiable but takes into account a subjective or emotive response to a place as opposed to providing comment upon a tangible item (such as an Aboriginal artefact) or an issue of research relevance (such as an area of PAD).

The criteria that deal with research and educational significance are almost wholly concerned with the archaeological or 'scientific' significance. These are values that are determined by archaeologists, as has been included in subsections 9.4.1 & 9.4.2. However this report must also take into account the Aboriginal *cultural* heritage value of a site or study area. It is this criterion that is utilised to such an end.

The consultant posits that, as this document constitutes an Aboriginal archaeological and *cultural* assessment, the appropriate community or culture to be approached to ascertain such a response is that of the local Aboriginal community. To canvass any other aspect of the wider community to give a response to aesthetic qualities from the viewpoint of Aboriginal cultural heritage would be inappropriate and outside the purview of the current study.

Specifically the consultant has approached and consulted with the Aboriginal stakeholders identified for this study. This is in keeping with the DECCW Aboriginal community consultation guidelines and ethical consultative practice. Each stakeholder organisation was asked to consider the study area from the perspective of the Aboriginal cultural heritage (a view on

which the consultant is unqualified to give not being an Aboriginal person) and offer any insights and/or knowledge they may have specific to the current study area.

All of the Aboriginal stakeholder organisations consulted for the Aboriginal archaeological and cultural heritage assessment of the Woodlawn Wind Farm Transmission Line study area – namely PLALC, BNAC, GTCAC and NLALC – expressed a contemporary link with the local area and the archaeological record contained within.

The general area where the Woodlawn Wind Farm development is located was identified by stakeholders as being of cultural sensitivity due to its proximity to Lake George.

In addition, several areas of concern within the Woodlawn Wind Farm Transmission Line study area were identified by stakeholders during the field survey component of this Aboriginal archaeological and cultural heritage assessment. Specifically, representatives of all groups present for the assessment indicated that the open artefact scatters WLTL-C SITE 2 and WLTL-C SITE 3 were of particular significance due to the range of site types.

Tyronne Bell of BNAC also indicated that the sandy landform to WLTL-C PAD 3, where sites WLTL-C SITE 1, WLTL-C SITE 2 and WLTL-C SITE 3 are located, was of concern as he felt it may have the potential to contain burials.

The other areas of potential archaeological deposit were also generally indicated to be of concern to Aboriginal stakeholders and all representatives indicated that avoidance of impact to these PADs was their preferred outcome.

A draft copy of this report has not yet been provided to NLALC, PLALC, BNAC and GTCAC. Once the report has been made available to these groups, their comments regarding the proposed Woodlawn Wind Farm Transmission Line will be included with this report as Appendix B.1.

10.0 CONCLUSIONS & RECOMMENDATIONS

10.1 CONCLUSIONS

As a result of the field assessment of the Woodlawn Wind Farm Transmission Line study area, three open artefact scatters (WLTL-C SITE 1, WLTL-C SITE 2 and WLTL-C SITE 3), two isolated finds (WLTL-N IF 1 & Associated PAD and WLTL-C IF 1), and seven areas of potential archaeological deposit (WLTL-N PAD 1, WLTL-N PAD 2, WLTL-C PAD 1, WLTL-C PAD 2 and WLTL-C PAD 3) were recorded. WLTL-C PAD 3 has as its surface manifestations the three open artefact scatters WLTL-C SITE 1, WLTL-C SITE 2 and WLTL-C SITE 3.

The research potential of WLTL-N PAD 1, WLTL-N PAD 2, WLTL-N 1 & Associated PAD, WLTL-C PAD 1, WLTL-C PAD 2, WLTL-C IF 1, WLTL-C SITE 1 and WLTL-S PAD 1 are considered to be low. WLTL-C SITE 2 is considered to provide low to moderate archaeological potential, whilst WLTL-C SITE 3 and WLTL-C PAD 3 are considered to provide moderate to high and moderate research potential.

The educational potential of sites WLTL-C SITE 1, WLTL-C SITE 2 and WLTL-C SITE 3, if they are viewed as surface manifestations of WLTL-C PAD 3, is described as low to moderate, however the overall educational potential of the results of the field assessment is considered to be low.

The sites and areas of potential archaeological deposit identified during the field assessment have been identified by Aboriginal stakeholders as being of cultural significance.

The proposed Woodlawn Wind Farm Transmission Line is contained within a narrow easement of 30 m, being a 15 m buffer on either side of the Transmission Line route. It is understood that the Transmission Line is to be a 33kV line, and therefore that the ground surface disturbance associated with the installation of each transmission line pole will be limited to a small area, and that not all of the easement is to be impacted.

Therefore it is likely that it may be possible for the Client to avoid impacts on the majority of sites and areas of potential archaeological deposit identified during this Aboriginal archaeological and cultural heritage assessment. Avoidance could be obtained by locating transmission line pole impacts outside of areas of PAD and not within a specified distance of recorded surface archaeological material. Unobtrusive fencing-off of sensitive areas and/or selection of preferred vehicle access routes which do not pass near artefacts or cross over areas of PAD are possible mitigation strategies which may be employed.

However, the large area covered by WLTL-C PAD 3 suggests that it may not be possible to span the area through widely spacing the transmission line pole impacts. If it is not possible to avoid impact to the area of PAD and associated surface material, the high archaeological potential, moderate to high research potential, and cultural sensitivity of the area indicates that further archaeological assessment may be required. The focus of the further investigation would be the characterisation of the potential sub-surface archaeological resources present within the area of WLTL-C PAD 3, particularly within the transmission line pole impact areas and any proposed vehicle access routes. Characterisation of the archaeological resource within the area of WLTL-C PAD 3 would allow more appropriate mitigation measures to be developed.

10.2 RECOMMENDATIONS

As a result of the Aboriginal archaeological and cultural heritage assessment of the Woodlawn Wind Farm Transmission Line, the following recommendations are made:

1. All Aboriginal archaeological material and areas of potential archaeological deposit identified in this assessment should be avoided if possible.
2. Should direct development impacts not be able to be avoided, a combined Section 87 / Section 90 AHIP application should be prepared to allow the collection of Aboriginal artefact sites WLTL-N IF 1, WLTL-C IF 1, WLTL-C SITE 1, WLTL-C SITE 2 and WLTL-C SITE 3. The Aboriginal stakeholders (BNAC, PLALC, NLALC, GTCAC) should be consulted and participate in any collection programme. A 'Care and

Control' agreement for the artefact material present is to be developed in consultation with the Aboriginal stakeholders as part of the AHIP application.

3. Should direct development impacts not be able to be avoided, a Section 87 AHIP application, including the development of a methodology by a qualified archaeologist, should be prepared to allow the test excavation of WLTLC PAD 3 and collection of sites WLTLC SITE 1, WLTLC SITE 2 and WLTLC SITE 3. This methodology is to be developed in consultation with Woodlawn Wind Pty Ltd and the participating Aboriginal stakeholders (BNAC, PLALC, NLALC and GTCAC).
4. In the event that any Aboriginal archaeological material not identified and discussed in this assessment report is encountered, works must cease immediately to allow an archaeologist to make an assessment of the finds. The archaeologist may need to consult with the relevant Aboriginal stakeholder groups (BNAC, PLALC, NLALC and GTCAC) concerning the significance of any further Aboriginal archaeological material encountered.

As required by Section 91 of the *NP&W Act 1974 (amended)*, previously unrecorded Aboriginal artefactual material must be reported to the NSW DECCW within a reasonable timeframe.

In addition, as required by the *NSW Heritage Act 1977 (amended)*, in the event that historic relics are encountered, works must cease immediately to allow an archaeologist to make an assessment of the finds. The archaeologist may need to consult with the Heritage Branch Department of Planning concerning the significance of historic cultural material unearthed.

5. Copies of this report are to be forwarded to the Aboriginal stakeholder groups: PLALC, BNAC, GTCAC and NLALC.
6. Copies of this report and the resulting Aboriginal archaeological site cards are to be forwarded to the DECCW's AHIMS database Registrar.
7. In the event that this report is to go on public exhibition, access to some Aboriginal archaeological information should be restricted. Consultation with Austral Archaeology Pty Ltd and the relevant Aboriginal stakeholders will be necessary to determine the appropriate level of public release.

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APPENDIX A STAKEHOLDER CONSULTATION

APPENDIX A.1 STAKEHOLDER RESPONSES TO DRAFT REPORT

From: Col Williams [nlalc1@bigpond.net.au]
Sent: Monday, 1 February 2010 9:08 AM
To: 'Krissy Moore'
Subject: RE: 9033 Woodlawn Wind Farm Report

Krissy

We do not have any issues with the report it is ok do you need anything further from us

Col Williams

BNAC, PLALC and GTCAC responses pending.

Responses will be attached when received from stakeholders. Efforts to obtain responses from stakeholders are shown in Appendix A.2: Consultation Log.

APPENDIX A.2 CONSULTATION LOG

Date	Method	From	To	Notes
26/10/09	Phone	Austral	BNAC, PLALC, GTCAC, NLALC	Phone call initiating consultation for Woodlawn Wind Farm Transmission Line assessment, and discussing field dates.
27/10/09	Email	Austral	“ “	Sent info-packs to groups requesting confirmation of attendance of one field representative and a schedule of rates/disbursements for fieldwork.
28/10/2009	Phone	Austral	OLALC	Spoke to Matt. Organised Dezy Connors as field rep.
30/10/2009	Phone	Austral	PLALC	Spoke to Delise. She will respond to infopack next week.
3/11/2009	Phone	Austral	PLALC	Spoke to Delise. She provided contact details for field rep Justin Boney.
3/11/2009	Phone	Austral	PLALC	Called Justin. Trying to organise transport for him to site.
4/11/2009	Phone, Email	Austral	PLALC	Spoke to Delise. Trying to organise transport for Justin. Sent email of transport options.
9/11/2009	Phone	Austral	GTCAC	Called and left message on mobile re: contact details for field rep and schedule of rates. Called landline, couldn't leave message.
9/11/2009	Phone	Austral	PLALC	Email didn't get through. She and Justin will organise transport and meet us at Tarago and we will transport Justin to and from site.
10/11/2009	Phone	Austral	GTCAC	Called mobile and landline several times trying to find out where field reps are, then asking them to meet us at bioreactor.
10/11/2009	Phone	GTCAC	Austral	GTCAC can't attend first day due to scheduling conflict. Will be onsite tomorrow.
12/11/2009	Phone	GTCAC	Austral	Missed call after hours asking about findings of assessment and comment.
12/11/2009	Phone	Austral	GTCAC	Tried to return call, left message.
13/11/2009	Phone, email	Austral	GTCAC	Left another message, sent email regarding her phone message + updated invoicing details.
13/11/2009	Email	Austral	BNAC, PLALC, NLALC	Email regarding updated invoicing details.
16/11/2009	Phone	NLALC	Austral	Geoff Murray called – seeking confirmation that attendance record had been sent to NLALC. Confirmed.
24/11/2009	Phone	BNAC	Austral	Tyrone Bell calling to check invoicing details.
14/12/2009	Phone	GTCAC	Austral	Missed call – left message seeking invoicing details
15/12/2009	Phone	Austral	GTCAC, BNAC	Called back re: invoicing details
16/12/2009	Phone	Austral	GTCAC, BNAC	Touched base re: 9033 while discussing another project.
21/12/2009	Email	Austral	GTCAC, BNAC, PLALC, NLALC	Sent PDF of draft report to groups for their comment and review.

Date	Method	From	To	Notes
11/1/2010	Phone	BNAC	Austral	Tyronne Bell called re: invoicing information, Mentioned had received report but not had time to look at it yet.
12/1/2010	Phone	Austral	PLALC	Called and left message re: infigen account information and also touching base re: report
29/1/2010	Email	Austral	GTCAC, BNAC, PLALC, NLALC	Sent email seeking comments on report.
1/2/2010	Email	NLALC	Austral	Provided response to report. Austral replied with thank you email and said no other information required.

APPENDIX B AHIMS SEARCH RESULTS

site_id	site_name	zone	easting	northing	Grid	permit	features	recorders	asrtypes	reports	state_archive_box_number
57-2-0007	Lake George;	55	726400	6111300	AGD		AFT : -	Lampert	Open Camp Site		NRS/17798/1/565
57-2-0462	Wright Creek 1 Open Artefact Scatter & Associated PAD Capital Wind Farm	55	726857	6106344	AGD		AFT : 6	Mebbersen, Matic	None	99722	
57-3-0001	Nardoo;Lake George;	55	730100	6111200	AGD		AFT : -	Flood	Open Camp Site		NRS/17798/1/571
57-3-0366	WL01	55	734404	6111660	AGD	2201, 2202, 2288, 2289	AFT : 1	Reeves	None	99321, 99582	NRS/17798/1/577
57-3-0367	WL02	55	733893	6114788	AGD	2201, 2202, 2288, 2289	AFT : 1	Reeves	None	99321, 99582	NRS/17798/1/577
57-3-0368	WL03	55	734211	6114357	AGD	2201, 2202	AFT : 11	Reeves	None	99321, 99582	NRS/17798/1/577
57-3-0369	WL04	55	734288	6114226	AGD	2201, 2202, 2288, 2289	AFT : 1	Reeves	None	99321, 99582	NRS/17798/1/577
57-3-0370	WL05	55	733880	6115504	AGD	2201, 2202, 2288, 2289	AFT : 5	Redbank Power Company	None	99321, 99582	NRS/17798/1/577
57-3-0371	WL06	55	733872	6114842	AGD	2201, 2202, 2288, 2289	AFT : 1	Thomson	None	99321, 99582	NRS/17798/1/577
57-3-0372	WL07	55	734141	6114480	AGD	2201, 2202	AFT : 1	Thomson	None	99321, 99582	NRS/17798/1/577
57-3-0373	WL08	55	733890	6115661	AGD	2201, 2202	AFT : 6	Thomson	None	99321, 99582	NRS/17798/1/577
57-3-0374	WL09	55	734546	6111989	AGD	2201, 2202, 2288, 2289	AFT : 1	Thomson	None	99321, 99582	NRS/17798/1/577
57-3-0375	WL10	55	734461	6113930	AGD	2201, 2202	AFT : 1	Thomson	None	99321, 99582	NRS/17798/1/577
57-3-0376	WL11	55	734856	6114974	AGD	2201, 2202, 2288, 2289	AFT : 1	Thomson	None	99321, 99582	NRS/17798/1/577
57-3-0377	WL12	55	734254	6114550	AGD	2201, 2202, 2288, 2289	AFT : 2	Reeves	None	99321, 99582	NRS/17798/1/577
57-3-0378	WL13	55	734973	6113268	AGD	2201, 2202, 2288, 2289	AFT : -	Thomson	None	99321, 99582	NRS/17798/1/577
57-3-0379	WL14	55	734943	6112675	AGD	2201, 2202, 2288, 2289	AFT : -	Thomson	None	99321, 99582	NRS/17798/1/577
57-3-0381	WL16	55	733661	6114849	AGD		AFT : 8	Reeves	None	99321, 99582	NRS/17798/1/577
57-3-0382	WL17	55	733587	6114963	AGD		AFT : 1	Reeves	None	99321, 99582	NRS/17798/1/577
57-3-0383	WL18	55	733485	6115041	AGD		AFT : 1	Reeves	None	99321, 99582	NRS/17798/1/577

site_id	site_name	zone	easting	northing	Grid	permit	features	recorders	asrtypes	reports	state_archive_ box_number
57-3-0384	WL19	55	733253	6115496	AGD		AFT : 70	Reeves	None	99321, 99582	NRS/17798/1/577
57-3-0385	WL20	55	733178	6115682	AGD		AFT : 3	Reeves	None	99321, 99582	NRS/17798/1/577
57-3-0386	WL21	55	732723	6116466	AGD		AFT : 1	Reeves	None	99321, 99582	NRS/17798/1/577
57-3-0393	Hammonds Hill 4 Isolated Find Capital Wind Farm	55	729691	6106181	AGD		AFT : 1	Mebbersson, Matic	None	99722	
57-3-0413	TCR1 (Lake Bathurst)	55	730050	6111479	GDA		AFT : 7	Saunders	None		
57-3-0414	TCR2 (Lake Bathurst)	55	729919	6111535	GDA		AFT : 10	Saunders	None		