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Aboriginal Cultural Heritage Assessment


SEBASTOPOL SOLAR FARM



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EXECUTIVE SUMMARY

INTRODUCTION

NGH Environmental has been contracted by ib vogt GmbH (ib vogt) to prepare an Aboriginal Cultural Heritage Assessment Report (ACHAR) for the proposed Sebastopol Solar Farm, located 17 kilometres south of the township of Temora in the Temora Local Government Area. The Sebastopol subject land comprises of 546 hectare (ha) with Lot 1/ DP 133994, Lot 4/ DP 1186823 and Lots 62, 88, 90, 91 and 92/ DP 751424 with the proposal development footprint comprising of approximately 248 ha.

The solar farm proposal would involve ground disturbance that has the potential to impact on Aboriginal heritage sites and objects which are protected under the NSW *National Parks and Wildlife Act 1974* (NPW Act). The purpose of the Aboriginal Cultural Heritage Assessment (ACHA) is therefore to investigate the presence of any Aboriginal sites and to assess the impacts and management strategies that may mitigate any impact.

The Secretary of the DPE Environmental Assessment Requirements (SEARs) relating to Aboriginal heritage were as follows:

Include an assessment of the likely Aboriginal and historic heritage (cultural and archaeological) impacts of the development, including adequate consultation with the local Aboriginal community (SEARS for Sebastopol Solar Farm 09/03/18).

This ACHA Report was prepared in line with the following:

- *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW* (OEH 2011);
- *Code of Practice for the Archaeological Investigation of Aboriginal Objects in New South Wales* (OEH 2010a), and
- *Aboriginal cultural heritage consultation requirements for proponents 2010* (ACHCRP) (OEH 2010b) produced by the NSW Office of Environment and Heritage (OEH)

The proposal area is within the Temora Local Government Area.

PROJECT PROPOSAL

The Sebastopol Solar Farm proposal would comprise the installation of a solar farm with a capacity of approximately 108 MW (DC). The power generated will be fed into the National Electricity Market (NEM). A transmission line runs across the western side of the Sebastopol property. The existing 132kv transmission line is part of the electricity distribution network that originates at TransGrid's Wagga North Substation. The proposed solar farm will connect directly to the transmission line, with an additional substation.

ib vogt proposes to retain existing viable native vegetation where possible.

The proposal will consist of the following components:

- Single axis tracker photovoltaic (PV) solar panels, mounted on steel frames over most of the site (up to approximately 308,000 PV solar panels)
- Battery storage to store energy on-site, allowing energy to be stored on-site during periods of low demand and released to the network during periods of higher demand
- Inverter/ transformer units

- Electrical conduits
- On site substation
- Site office, parking access tracks and perimeter fencing.
- Electrical transmission infrastructure to connect the proposal to the existing 132 kV transmission line.

Only the area noted in the maps as the area subject to heritage survey was assessed in this report.

ABORIGINAL CONSULTATION

The consultation with Aboriginal stakeholders was undertaken in accordance with clause 80C of the *National Parks and Wildlife Amendment (Aboriginal Objects and Aboriginal Places) Regulation 2010* following the consultation steps outlined in the (ACHCRP) guide provided by OEH.

The full list of consultation steps, including those groups and individuals that were contacted and a consultation log is provided in Appendix A.

As a result of this process, four Aboriginal groups and eight individuals contacted the consultant to register their interest in the proposal.

The groups who registered interest were:

- Wagga Wagga Local Aboriginal Land Council (Wagga LALC);
- Young Local Aboriginal Land Council (Young LALC);
- Bundyi Aboriginal Cultural Knowledge (BAC); and
- Warrabinya Cultural Heritage and Assessment Group (Warrabinya CHAG).

The individuals who registered interest were:

- Enid Clarke
- Alona Apps
- Krystal Ingram
- Norma Freeman
- Jirrah Freeman
- Jahnayah (Nayah) Freeman
- Keith Freeman
- Marnie Freeman

No other party registered their interest.

The fieldwork was organised and the four groups who registered were asked to participate in the fieldwork. The Wagga Wagga LALC did not participate in the fieldwork however the Young LALC, BAC and Warrabinya CHAG were able to participate in the fieldwork.

A copy of the draft report was provided to all the registered parties for comment.

ARCHAEOLOGICAL CONTEXT

The assessment included a review of relevant information relating to the landscapes within the proposal area. Included in this was a search of the OEH AHIMS database. No Aboriginal sites have previously been recorded within the proposal area. The closest site to the proposal area is a scarred tree located

approximately 5 km to the north east within the Yeo Yeo State Forest. There is a dominance of scarred trees in the area especially where there are remnant stands of native trees.

The results of previous archaeological surveys in the Temora region serve to show that there are sites present in a range of landforms. There does appear however to be a pattern of site location that relates to the presence of potential resources for Aboriginal use with high density sites generally located in elevated areas adjacent to waterways. Lower density background scatters also occur across undulating plains in proximity to water. The dominant lithology within the area appears to be quartz with lesser quantities of silcrete, quartzites, volcanic and fine grained siliceous artefacts. A number of scarred trees are recorded in the area, but this site type tends to occur in areas where old growth trees remain. Elevated sand bodies are considered to have high archaeological potential and burials are known to occur within these landforms.

Based on the previous archaeological investigations in the Temora area and knowledge of Wiradjuri cultural practices and traditional activities the Sebastopol Solar Farm proposal area has a possibility of containing archaeological sites, given that Aboriginal people have lived in the region for tens of thousands of years. This would most likely be in the form of stone artefacts and scarred trees.

SURVEY RESULTS

The survey strategy was to cover as much of the ground surface as possible within the proposal area given that the development was going to disturb approximately 248 hectares. Survey transects were undertaken on foot across the proposal area to achieve maximum coverage. While ib vogt plan to retain existing viable native vegetation stands where possible, the areas of remnant vegetation were deemed to have high archaeological potential and mature trees within the proposal area were also inspected for any evidence of Aboriginal scarring.

Visibility within the proposal area was variable and ranged from 90% in exposures and paddocks which had been recently sown or burnt off to 10% in paddock that still had crop stubble. Over the course of the field survey, approximately 160 km of transects were walked across the proposal area by the participants. Allowing for an effective view width of 5m each person, this equates to a total surface area examined of 80 ha. However, allowing for the visibility restrictions, the effective survey coverage was reduced. Overall, it is considered that the surface survey of the Sebastopol Solar Farm proposal area had sufficient and effective survey coverage.

Despite the variable visibility encountered during the survey a total of 53 Aboriginal stone artefacts were found across the proposal area that were recorded as 37 isolated find sites and three artefact scatter occurrences. Seven possible modified trees were also recorded. The results identified are considered a true reflection of the nature of the Aboriginal archaeological record present within the proposal area.

Based on the land use history, an appraisal of the landscape, soil, level of disturbance and the results from the field survey it was concluded that there was negligible potential for the presence of intact subsurface deposits with high densities of objects within the proposal area.

The sites identified during this assessment were scattered across the proposal area and are representative of the opportunistic use and movement of people through the landscape. The area was likely used intermittently over a period of time by Aboriginal people for camping, hunting and gathering resources. Based on this assumption, there is every chance that there are similar stone artefacts and scarred trees across similar landscapes in the Sebastopol area and that these site types, particularly stone artefacts, could be more prevalent in the landscape than previously recorded.

It should also be noted that the results of this investigation have increased the number of stone artefact sites recorded in the local area from 14 to 54. There appears to previously be a bias towards more obvious site types in the AHIMS record, with scarred trees previously dominating the sites recorded in the area. This is something we consider anomalous in the typical pattern of site recording in Australia. The implications for this relate to significance assessments and the related appraisal of site representativeness. We would argue that there are likely to be many hundreds of such artefact sites in the local area, and that the previous low number of artefact sites in AHIMS is merely an indication that few surveys have been undertaken in the Sebastopol area and therefore they are yet to be found.

The cultural significance of the sites is only determined by the local Aboriginal community.

POTENTIAL IMPACTS

The proposal involves the construction of a solar farm and includes connection to the existing existing 132kv transmission line that cross the property. The development will result in disturbance of almost 248 hectares (ha) of the 546 ha proposal area. The impact is likely to be most extensive where earthworks occur and would involve the removal, breakage or displacement of artefacts. This is considered a direct impact on the Aboriginal objects by the development in its present form.

A total of 37 isolated finds, seven possible scarred trees and three artefact scatters were located within the assessment area. A total of 31 sites with stone artefacts (Sebastopol Solar AFT1, Sebastopol Solar AFT2, Sebastopol Solar AFT3, Sebastopol Solar IF 2, Sebastopol Solar IF 3, Sebastopol Solar IF 5, Sebastopol Solar IF 6, Sebastopol Solar IF 8, Sebastopol Solar IF 9, Sebastopol Solar IF 10, Sebastopol Solar IF 11, Sebastopol Solar IF 12, Sebastopol Solar IF 13, Sebastopol Solar IF 14, Sebastopol Solar IF 15, Sebastopol 551502, Sebastopol 551444, Sebastopol 551696, Sebastopol 551329, Sebastopol 551314, Sebastopol 551335, Sebastopol 551594, Sebastopol 552070, Sebastopol 551912, Sebastopol 551634, Sebastopol 552085, Sebastopol 551081, Sebastopol 550986, Sebastopol 550794, Sebastopol 550750 and Sebastopol 550933) are situated within the area of the proposed solar arrays, tracks and fencing and would be impacted by the proposed development.

The impact to the scientific values if the 31 sites with stone artefacts within the development footprint were to be impacted by the current proposal is considered low. The stone artefacts have little research value apart from what has already been gained from the information obtained during the present assessment. This information relates more to the presence of the artefacts and in the development of Aboriginal site modelling, which has largely now been realised by the recording. The impact to the edge-ground axe fragment (Sebastopol 551081) is considered to have low to moderate loss of scientific value.

The seven possible scarred tree sites (Sebastopol 551708, Sebastopol 551143, Sebastopol 550975, Sebastopol 551780, Sebastopol 551746, Sebastopol 551564, Sebastopol 551202) and nine of the stone artefact sites (Sebastopol Solar IF 1, Sebastopol Solar IF 4, Sebastopol Solar IF 7, Sebastopol 551365, Sebastopol 551717, Sebastopol 551448, Sebastopol 551493, Sebastopol 551745 and Sebastopol 551148) will not be impacted by the proposal.

The original development design was modified following the field survey to ensure all the possible scarred trees were not impacted by the proposed works.

The Sebastopol Solar Farm proposal is classified as State Significant Development under the EP&A Act which have a different assessment regime. As part of this process, Section 90 harm provisions under the NPW Act are not required, that is, an AHIP is not required to impact Aboriginal objects.

The table below lists the sites that will be impacted and avoided by the proposed development of the Sebastopol Solar Farm.

Sites impacted	Sites avoided
1. Sebastopol Solar AFT1 (artefact scatter)	1. Sebastopol Solar IF 1 (isolated stone artefact)
2. Sebastopol Solar AFT2 (artefact scatter)	2. Sebastopol Solar IF 4 (isolated stone artefact)
3. Sebastopol Solar AFT3 (artefact scatter)	3. Sebastopol Solar IF 7 (isolated stone artefact)
4. Sebastopol Solar IF 2 (isolated stone artefact)	4. Sebastopol 551365 (isolated stone artefact)
5. Sebastopol Solar IF 3 (isolated stone artefact)	5. Sebastopol 551717 (isolated stone artefact)
6. Sebastopol Solar IF 5 (isolated stone artefact)	6. Sebastopol 551448 (isolated stone artefact)
7. Sebastopol Solar IF 6 (isolated stone artefact)	7. Sebastopol 551493 (isolated stone artefact)
8. Sebastopol Solar IF 8 (isolated stone artefact)	8. Sebastopol 551745 (isolated stone artefact)
9. Sebastopol Solar IF 9 (isolated stone artefact)	9. Sebastopol 551148 (isolated stone artefact)
10. Sebastopol Solar IF 10 (isolated stone artefact)	10. Sebastopol 551708 (possible scarred tree)
11. Sebastopol Solar IF 11 (isolated stone artefact)	11. Sebastopol 551143 (possible scarred tree)
12. Sebastopol Solar IF 12 (isolated stone artefact)	12. Sebastopol 550975 (possible scarred tree)
13. Sebastopol Solar IF 13 (isolated stone artefact)	13. Sebastopol 551780 (possible scarred tree)
14. Sebastopol Solar IF 14 (isolated stone artefact)	14. Sebastopol 551746 (possible scarred tree)
15. Sebastopol Solar IF 15 (isolated stone artefact)	15. Sebastopol 551564 (possible scarred tree)
16. Sebastopol 551502 (isolated stone artefact)	16. Sebastopol 551202 (possible scarred tree)
17. Sebastopol 551444 (isolated stone artefact)	
18. Sebastopol 551696 (isolated stone artefact)	
19. Sebastopol 551329 (isolated stone artefact)	
20. Sebastopol 551314 (isolated stone artefact)	
21. Sebastopol 551335 (isolated stone artefact)	
22. Sebastopol 551594 (isolated stone artefact)	
23. Sebastopol 552070 (isolated stone artefact)	
24. Sebastopol 551912 (isolated stone artefact)	
25. Sebastopol 551634 (isolated stone artefact)	
26. Sebastopol 552085 (isolated stone artefact)	
27. Sebastopol 551081 (isolated stone artefact)	
28. Sebastopol 550986 (isolated stone artefact)	
29. Sebastopol 550794 (isolated stone artefact)	
30. Sebastopol 550750 (isolated stone artefact)	
31. Sebastopol 550933 (isolated stone artefact)	

RECOMMENDATIONS

It is recommended that:

1. The development must avoid the seven possible Scarred Trees (Sebastopol 551708, Sebastopol 551143, Sebastopol 550975, Sebastopol 551780, Sebastopol 551746, Sebastopol 551564, Sebastopol 551202). A minimum 10m buffer around each tree should be in place to protect the trees canopy and root system.

2. If complete avoidance of the 37 isolated find sites and three artefact scatters recorded within the proposal area is not possible, the artefacts within the development footprint must be salvaged prior to the proposed work commencing and moved to a safe area within the property that will not be subject to any ground disturbance.
3. The collection and relocation of the artefacts should be undertaken by an archaeologist with representatives of the registered Aboriginal parties and be consistent with Requirement 26 of the *Code of practice for Archaeological Investigation of Aboriginal Objects in New South Wales*. The salvage of Aboriginal objects can only occur following development consent that is issued for State Significant Developments and must occur prior to works commencing. A new site card/s will need to be completed once the artefacts are moved to record their new location on the AHIMS database. An Aboriginal Site Impact Recording Form must be completed and submitted to AHIMS following harm for each site collected or destroyed from salvage and/or construction works.
4. A minimum 5m buffer should be observed around all artefact scatters and isolated find sites that cannot be avoided, including those outside the development footprint.
5. Ib vogt GmbH should prepare a Cultural Heritage Management Plan (CHMP) to address the potential for finding additional Aboriginal artefacts during the construction of the Solar Farm and management of known sites and artefacts. The Plan should include the unexpected finds procedure to deal with construction activity. Preparation of the CHMP should be undertaken in consultation with the registered Aboriginal parties.
6. In the unlikely event that human remains are discovered during the construction, all work must cease in the immediate vicinity. OEH, the local police and the registered Aboriginal parties should be notified. Further assessment would be undertaken to determine if the remains were Aboriginal or non-Aboriginal.
7. Further archaeological assessment would be required if the proposal activity extends beyond the area assessed as detailed in this report. This would include consultation with the registered Aboriginal parties and may include further field survey.

1 INTRODUCTION

Ib vogt GmbH (ib vogt) proposes to develop a solar farm at Sebastopol, approximately 17 kilometres south of the township of Temora, NSW in the Temora Local Government Area (LGA) (see Figure 1 and 2). The Sebastopol subject land comprises of 546 hectare (ha) with Lot 1/ DP 133994, Lot 4/ DP 1186823 and Lots 62, 88, 90, 91 and 92/ DP 751424 with the proposal development footprint comprising of approximately 248 ha (Figure 3). The proposal involves the construction of a ground-mounted photovoltaic solar array generating approximately 108 MegaWatt (MW) of renewable energy. NGH Environmental has been contracted by ib vogt to prepare an Aboriginal Cultural Heritage Assessment (ACHA) to investigate and examine the presence, extent and nature of any Aboriginal heritage for the proposal area as part of an Environmental Impact Assessment (EIS).

The solar farm proposal would involve ground disturbance that has the potential to impact on Aboriginal heritage sites and objects which are protected under the NSW *National Parks and Wildlife Act 1974* (NPW Act). The purpose of the Aboriginal Cultural Heritage Assessment (ACHA) is therefore to investigate the presence of any Aboriginal sites and to assess the impacts and provide management strategies that may mitigate any impact.

1.1 DEVELOPMENT CONTEXT

The development of renewable energy projects is one of the most effective ways to achieve the commitments of Australia and a large number of other nations under the Paris Agreement to reduce greenhouse gas emissions. The Sebastopol Solar Farm would provide the following benefits:

- Reduction in greenhouse gas emissions from energy generation (when compared with fossil fuel generating sources).
- Provision of embedded electricity generation to supply into the Australian grid close to a main consumption centre.
- Provision of social and economic benefits through the provision of direct employment opportunities.

The establishment of a Solar Farm would therefore have both local, National and International benefits.

As part of the development impact assessment process, the proposed development application will be assessed under part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). The proposed solar farm is classified as “state significant development” (SSD) under Part 4 of the EP&A Act. SSDs are major projects which require approval from the Minister for Planning and Environment. The EIS has been prepared in accordance with the requirements of the Secretary of the Department of Planning and Environment (DPE).

The Secretary of the DPE Environmental Assessment Requirements (SEARs) relating to Aboriginal heritage were as follows:

Include an assessment of the likely Aboriginal and historic heritage (cultural and archaeological) impacts of the development, including adequate consultation with the local Aboriginal community (SEARs for Sebastopol Solar Farm 09/03/18).

1.2 THE PROPOSAL AND SITE

The Sebastopol Solar Farm proposal area is in Temora LGA approximately 17 kilometres south of the township of Temora. The Sebastopol subject land comprises of 546 ha with Lot 1/ DP 133994, Lot 4/ DP 1186823 and Lots 62, 88, 90, 91 and 92/ DP 751424 with the proposal development footprint comprising of

approximately 248 ha. Goldfields Way runs to the west of the property, and Sebastopol Road to the North. Goldfields Way provides access to the region's transport network. The site would be accessed from Eurolee Road which runs along the southern boundary of the site.

The solar farm would have a total installed capacity of up to 108 MW (DC), and would include:

- Single axis tracker PV solar panels mounted on steel frames over most of the site.
- Battery storage to store energy on-site, allowing energy to be stored on-site during periods of low demand and released to the network during periods of higher demand.
- Electrical conduits and transformers.
- On site substation.
- Site office, parking access tracks and perimeter fencing.
- Electrical transmission infrastructure to connect the proposal to the existing 132 kilovolt (kV) transmission line.

The proposed development footprint is shown in Figure 3.

A transmission line runs across the western side of the Sebastopol property. The existing 132kv transmission line is part of the electricity distribution network that originates at TransGrid's Wagga North Substation. The proposed solar farm will connect directly to the transmission line, with an additional substation required.

The proposal will require the subdivision of the property for the purpose of the substation.

An internal road system would be established for the construction and maintenance of both the solar farm and the Energy Storage Facilities.

The proposal is expected to operate for 30 years. The construction phase of the proposal is expected to take 10-12 months and commence mid-2019. After the initial operating phase, the proposal would either be decommissioned, removing all above ground infrastructure and returning the site to its existing land capability (12 months), or upgraded with new photo voltaic equipment.

1.3 PROJECT PERSONNEL

The assessment was undertaken by archaeologist Kirsten Bradley of NGH Environmental, including research, Aboriginal community consultation, field survey and report preparation. Matthew Barber reviewed the report.

Consultation with the Aboriginal community was undertaken following the process outlined in OEH's *Aboriginal cultural heritage consultation requirements for proponents 2010*. Four Aboriginal groups and eight individuals registered their interest in the proposal.

The groups who registered interest were:

- Wagga Wagga Local Aboriginal Land Council (Wagga LALC)
- Young Local Aboriginal Land Council (Young LALC);
- Bundyi Aboriginal Cultural Knowledge (BAC); and
- Warrabinya Cultural Heritage and Assessment Group (Warrabinya CHAG).

The individuals who registered interest were:

- Enid Clarke
- Alona Apps
- Krystal Ingram
- Norma Freeman

- Jirrah Freeman
- Jahnayah (Nayah) Freeman
- Keith Freeman
- Marnie Freeman

Representatives who participated in the fieldwork were:

- Mark Saddler (Representing BAC on the 8, 10 & 11 May 2018);
- Brett Whyman (Representing Warrabinya CHAG on the 8 - 11 May 2018);
- Marnie Freeman (Representing Young LALC on the 8 & 9 May 2018); and
- Norma Freeman (Representing Young LALC on the 10 & 11 May 2018);

The Wagga LALC were selected for fieldwork participation but due to a number of circumstances were unable to participate.

Further details and an outline of the consultation process is provided in Section 2.

1.4 REPORT FORMAT

For the purposes of this assessment of the Sebastopol Solar Farm, we have prepared the report in line with the following:

- *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW* (OEH 2011);
- *Code of Practice for the Archaeological Investigation of Aboriginal Objects in New South Wales* (OEH 2010a), and
- *Aboriginal cultural heritage consultation requirements for proponents 2010* (ACHCRP) (OEH 2010b) produced by the NSW OEH.

The purpose of this ACHA Report is therefore to provide an assessment of the Aboriginal cultural values associated with the study area and to assess the cultural and scientific significance of any Aboriginal heritage sites. This conforms to the intention of the SEARs.

The objectives of the assessment were to:

- Conduct Aboriginal consultation as specified in clause 80c of the *National Parks and Wildlife Regulation 2009*, using the consultation process outlined in the ACHCRP;
- Undertake an assessment of the archaeological and cultural values of the study area and any Aboriginal sites therein;
- Assess the cultural and scientific significance of any archaeological material, and
- Provide management recommendations for any objects found.

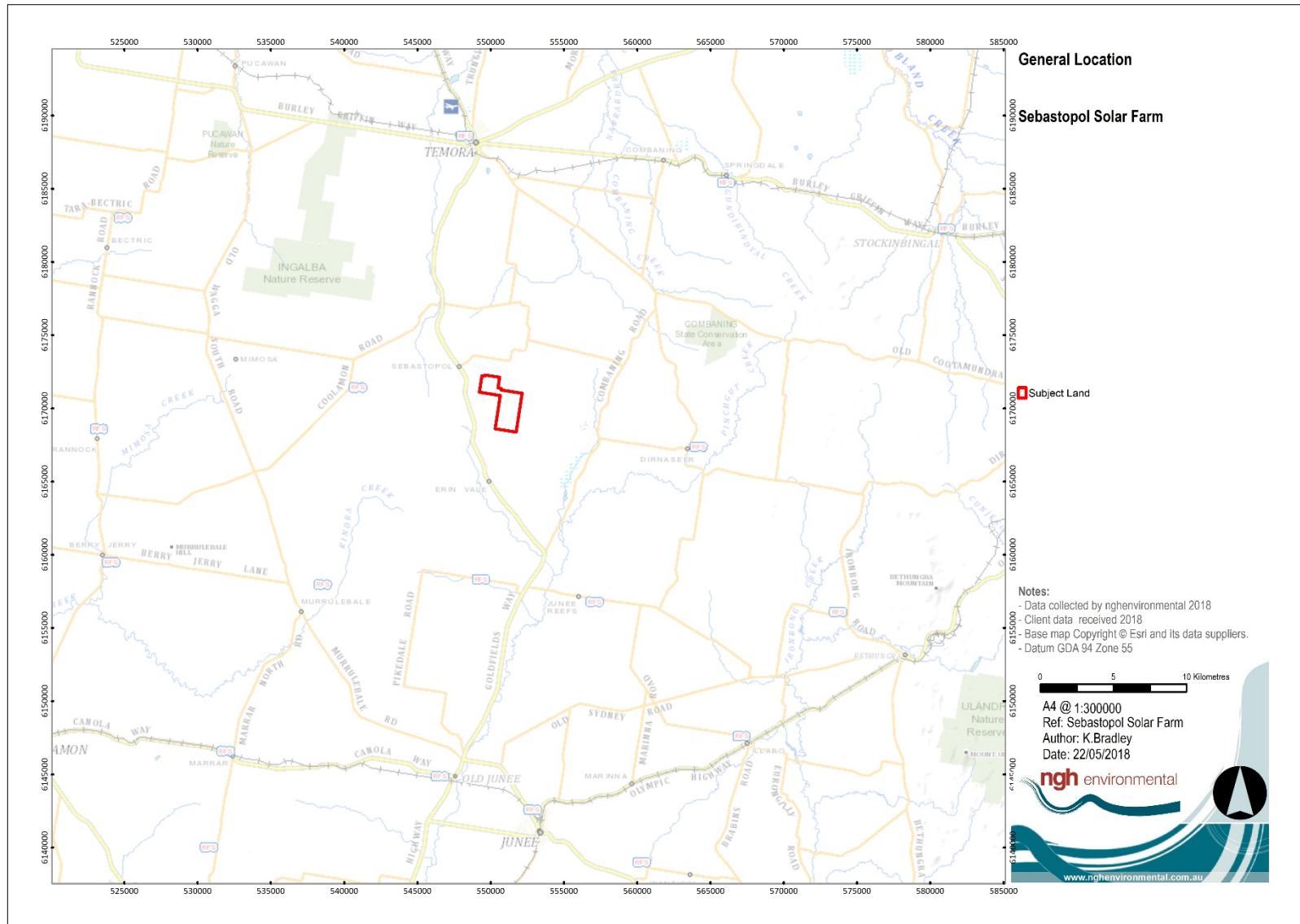


Figure 1. General location of the proposed Sebastopol Solar Farm

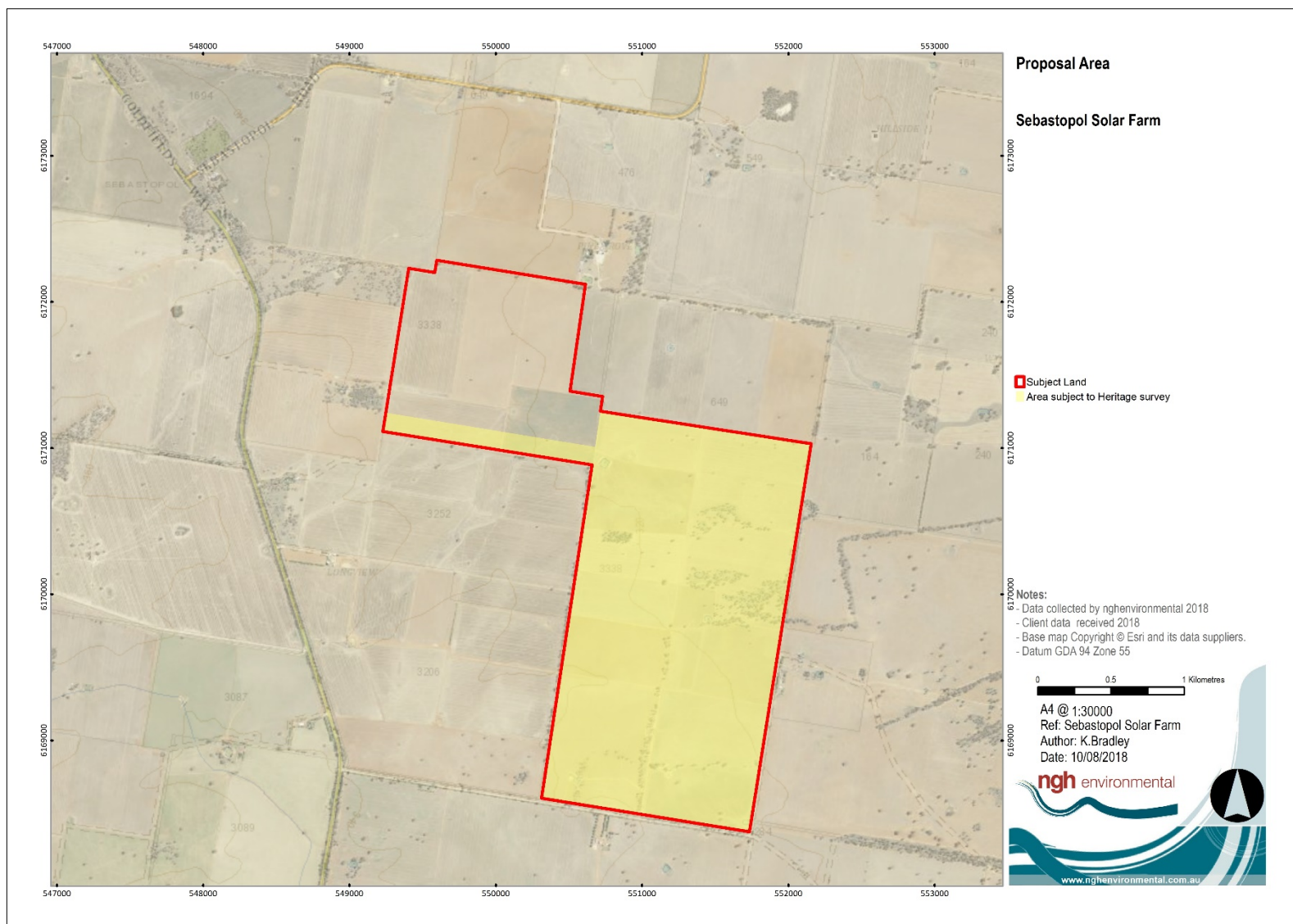


Figure 2. Sebastopol Proposal area.

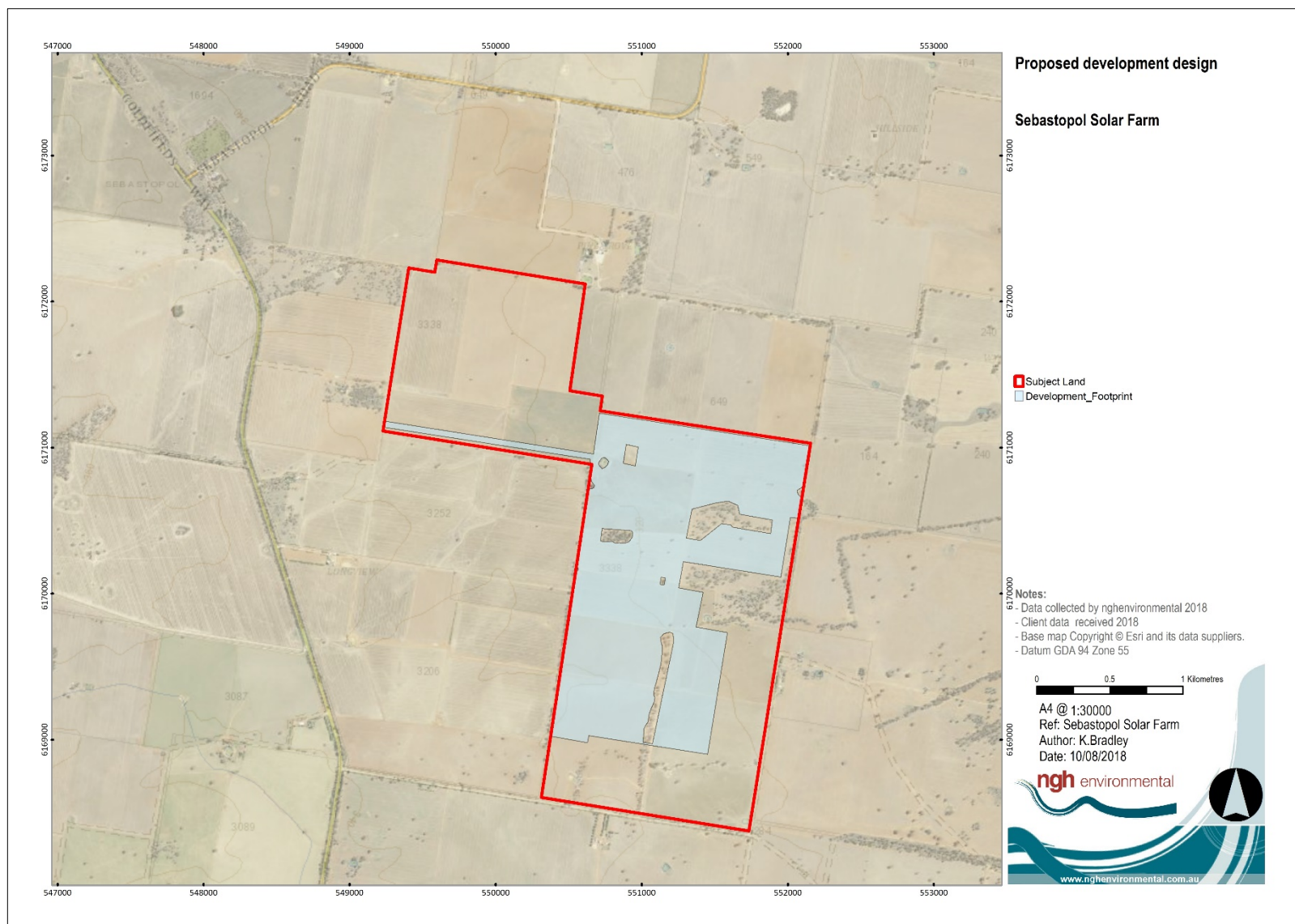


Figure 3. Proposal area with proposed development design.

2 ABORIGINAL CONSULTATION PROCESS

The consultation with Aboriginal stakeholders was undertaken in accordance with clause 80C of the *National Parks and Wildlife Amendment (Aboriginal Objects and Aboriginal Places) Regulation 2010* following the consultation steps outlined in the ACHCRP guide provided by OEH. The guide outlines a four-stage process of consultation as follows:

- Stage 1 – Notification of project proposal and registration of interest.
- Stage 2 – Presentation of information about the proposed project.
- Stage 3 – Gathering information about cultural significance.
- Stage 4 – Review of draft cultural heritage assessment report.

The full list of consultation steps, including those groups and individuals that were contacted and a consultation log is provided in Appendix A. A summary of actions carried out in following these stages are as follows.

Stage 1. Letters outlining the development proposal and the need to carry out an ACHA were sent to the Wagga Wagga and Young LALCs and various statutory authorities including OEH, as identified under the ACHCRP. An advertisement was placed in the local newspapers, the *Wagga Daily Advertiser* and the *Temora Independent* on the 2nd of February 2018 seeking registrations of interest from Aboriginal people and organisations. A further series of letters was sent to other organisations identified by OEH in correspondence to NGH Environmental. In each instance, the closing date for submission was 14 days from receipt of the letter.

As a result of this process, four Aboriginal groups and eight individuals registered their interest in the proposal.

These groups were:

- Wagga Wagga Young Local Aboriginal Land Council (Wagga LALC);
- Young Local Aboriginal Land Council (Young LALC);
- Bundyi Aboriginal Cultural Knowledge (BAC); and
- Warrabinya Cultural Heritage and Assessment Group (Warrabinya CHAG).

The individuals were:

- Enid Clarke
- Alona Apps
- Krystal Ingram
- Norma Freeman
- Jirrah Freeman
- Jahnayah (Nayah) Freeman
- Keith Freeman
- Marnie Freeman

No other party registered their interest.

Stage 2. On the 19th of March 2018, an Assessment Methodology document for the Sebastopol Solar Farm was sent to the Wagga LALC and all other registered groups and individuals as listed above. This document provided details of the background to the proposal, a summary of previous archaeological surveys and the proposed heritage assessment methodology for the proposal. The document invited comments regarding

the proposed methodology and sought any information regarding known Aboriginal cultural significance values associated with the subject area and/or any Aboriginal objects contained therein. A minimum of 28 days was allowed for a response to the document. No comments were received on the methodology from the registered parties however all expressed an interest in participating in fieldwork.

Stage 3. The *Assessment Methodology* outlined in Stage 2 included a written request to provide any information that may be relevant to the cultural heritage assessment of the study area. It was noted that sensitive information would be treated as confidential. No response regarding cultural information was received in response to the methodology.

The fieldwork was organised, and the four registered groups were asked to participate in the fieldwork. Due to a number of circumstances the Wagga LALC were unable to participate. The fieldwork was carried out in early May 2018 by an archaeologist from NGH Environmental with local Aboriginal representatives.

Representatives who participated in the fieldwork were:

- Mark Saddler (Representing BAC on the 8, 10 & 11 May 2018);
- Brett Whyman (Representing Warrabinya CHAG on the 8 till 11 May 2018);
- Marnie Freeman (Representing Young LALC on the 8 & 9 May 2018); and
- Norma Freeman (Representing Young LALC on the 10 & 11 May 2018);

Stage 4 In August 2018 a draft version of this *Aboriginal Cultural Heritage Assessment Report* for the proposal (this document) was forwarded to the RAPs inviting comment on the results, the significance assessment and the recommendations. A minimum of 28 days was allowed for responses to the document.

2.1 ABORIGINAL COMMUNITY FEEDBACK

Community consultation occurred throughout the project. The draft report was provided to each of the Registered Aboriginal Parties (RAPs) and feedback was sought on the recommendations, the assessment and any other issues that may have been important.

Report feedback was provided in writing by Mark Saddler from Bundyi Aboriginal Cultural Knowledge, his response is provided in Appendix A. Feedback on the report from Mark Saddler was positive with the only other comment noted requesting that the acronym used for Bundyi Aboriginal Cultural Knowledge to be amended to BAC. This acronym has been amended in the Final report. No additional comments were provided and Mark Saddler did not raise any concerns with the recommendations outlined in the report.

Report feedback was also provided by the individual Enid Clarke whose footnote indicated she was also responding on behalf of Krystal Ingram and Alona Apps, a copy of the response is provided in Appendix A. The response indicated that the project was undertaken satisfactorily and noted that the artefacts recorded are very precious to the Aboriginal community. Enid Clarke did not raise any concerns with the recommendations outlined in the report and no further comments were provided.

No feedback was received from the Wagga LALC, Warrabinya Cultural Heritage and Assessment Group, the Young LALC and the individuals Norma Freeman, Jirrah Freeman, Jahnayah (Nayah) Freeman, Keith Freeman and Marnie Freeman.

3 BACKGROUND INFORMATION

3.1 REVIEW OF LANDSCAPE CONTEXT

3.1.1 Geology, Topography and Soils

The landscape context assessment is based on a number of classifications that have been made at national and regional level for Australia. The national Interim Biogeographic Regionalisation for Australia (IBRA) system identifies the proposal area as located within the South-Western Slope Bioregion in the Riverina region of NSW (DEE 2016). The base geology of the south-western portion of the proposal area comprises vast flood deposits of Quaternary alluvium clays and silts with sand and gravel which either cut through or overlay older Tertiary deposits. The southern portion of the proposal area consists of rolling hills and rises on Ordovician quartzite, sandstone, greywacke, chert, and phyllite.

The proposal area is divided between the Murrumbidgee-Tarcutta Channels and Floodplains and the Ardlethan Hills Mitchell landscape as shown in Figure 4 (DECC 2002). The Frampton Hills landscape is approximately 1.3 km north of the proposal area. The descriptions of these Mitchell Landscapes are provided in Table 1 below.

Table 1. Description of the Mitchell Landscape relevant to the proposal (DECC 2002)

Mitchell Landscape
<p>Murrumbidgee - Tarcutta Channels and Floodplains NSS Upper and Lower Slopes</p> <p>Channels, floodplain and terraces of Murrumbidgee tributaries on Quaternary alluvium, general elevation 200 to 400m, local relief 25m. Undifferentiated organic sand and loam on the floodplain, brown gradational loam and yellow texture-contrast soils on higher terraces.</p> <p>River red gum (<i>Eucalyptus camaldulensis</i>) gallery woodland on banks, yellow box (<i>Eucalyptus melliodora</i>) and grey box (<i>Eucalyptus microcarpa</i>) open woodland on floodplain and terraces.</p>
<p>Ardlethan Hills</p> <p>Rolling hills and rises on Ordovician quartzose sandstone, greywacke, chert, and phyllite, general elevation 200 to 412m, local relief 50 to 60m. Stony red and brown texture-contrast soils merging to calcareous red earth on valley floors.</p> <p>Woodlands of; bumble box (<i>Eucalyptus populnea</i>), currawang (<i>Acacia doratoxylon</i>), white cypress pine (<i>Callitris glaucophylla</i>) and red ironbark (<i>Eucalyptus sideroxylon</i>). Shrubs common including; western golden wattle (<i>Acacia decora</i>), yarran (<i>Acacia homalophylla</i>), wilga (<i>Geijera parviflora</i>) and needle wattle (<i>Acacia rigens</i>). Dense bumble box (<i>Eucalyptus populnea</i>) and black box (<i>Eucalyptus largiflorens</i>) in the valleys. Large areas white (<i>Eucalyptus dumosa</i>), green (<i>Eucalyptus viridis</i>) and red mallee (<i>Eucalyptus socialis</i>) with dwarf red ironbark, black cypress pine (<i>Callitris endlicheri</i>) and mallee broombush (<i>Melaleuca uncinata</i>).</p>
<p>Frampton Hills</p> <p>Rounded ranges and hills with moderate slopes on Silurian slate, jasper, chert, amphibolite, and Devonian dacite and mudstone, general elevation 400 to 720m, local relief 100m. Shallow stony red brown structured loam.</p> <p>Open forest of grey box (<i>Eucalyptus microcarpa</i>), red stringybark (<i>Eucalyptus macrorhyncha</i>), red ironbark (<i>Eucalyptus sideroxylon</i>), Blakely's red gum (<i>Eucalyptus blakelyi</i>) and black cypress pine (<i>Callitris endlicheri</i>).</p>

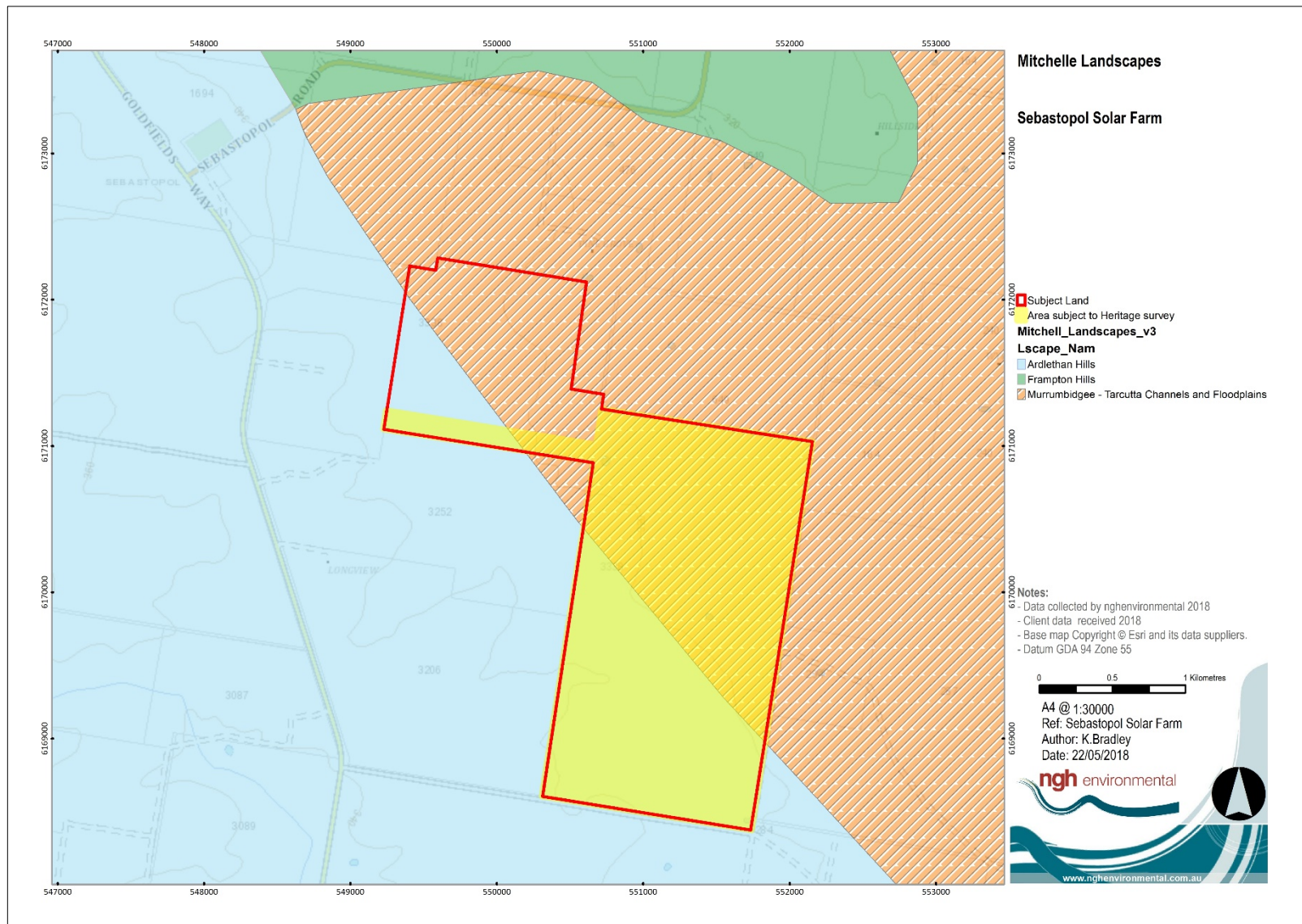


Figure 4. Location of Mitchell landscapes.

The Murrumbidgee Tarcutta Channels and Floodplains and the Ardlethan Hills land system unit covers the proposal area. The area is devoid of naturally occurring bedrock outcrops which would indicate that stone material for artefacts would have to be brought to the area. There is limited topographic variation within the proposal area however, there is clearly a divide between the flat floodplains in the north-east and the rolling hills and associated slopes in the south-west. The topographic variation noted during the survey accurately reflects the divide between the Murrumbidgee Tarcutta Channels and Floodplains and the Ardlethan Hills land systems.

The Murrumbidgee River is a dominant feature within the Riverine landscape and the key factor in the formation of the landforms present. Over many millennia through the Pleistocene, the river system migrated across the plain forming a complex series of channels, levees, source bordering dunes, lunettes and lakes. Some of these features are visible today and along with more recent Holocene features such as cut off meanders or billabongs, swamps and many distributary creeks and anastomosing channels, which altogether form a highly complex landscape of overlapping and interwoven land units. The current proposal area is approximately 55 km north of the Murrumbidgee River.

A small unnamed drainage line exists to the north of the property and a small unnamed drainage line intersect the western portion of the proposal near the proposed transmission line. Seven farm dams occur within the proposal footprint. These are the only hydrological features within the proposal area.

The proposed solar farm area has been heavily modified for the purposes of cropping and grazing. This has included extensive ripping and cultivated management practices, the extensive clearing of native vegetation, ploughing and earth moving for the construction of dams. Additionally, there is an existing TransGrid overhead electricity transmission line(s) which runs north-south across the western part of the proposal area.

Soils within the proposal area are typically a reddish-brown silty loam. The Cootamundra 1:250,000 Soils Landscape series sheet indicates that three soil landscapes, Mimosa, Mount View and Narraburra soils occur within the proposal site as detailed below in Table 2 and shown in Figure 5. Springdale, Pinnacle, Stoney Hill and Eurongilly Soils are also located 1.5 km north of the proposal area (McNamara and Andersson 2009).

Table 2. Soil descriptions of Cootamundra 1:250,000 Soils Landscapes

Cootamundra 1:250,000 Soil Landscapes		
Code	Description	
mz	Mimosa	<p>Landscape- gently undulating footslopes and plains formed on recent Quaternary colluvium underlain by Ordovician metasediments. Elevation 290–330 m, local relief <20 m, slopes <5%. Extensively cleared Eucalypt woodlands.</p> <p>Soils- deep (>100 cm), moderately well-drained Haplic Mesotrophic Red Dermosols (Brown Podzolic Soils) on mid to upper slopes. Deep (>100 cm), moderately well-drained Haplic Mesotrophic Red Chromosols (Red-brown Earths) on lower slopes.</p> <p>Geology- Soils have formed on recent Quaternary colluvium underlain by Ordovician metasediments. Parent materials consist of colluvium and eluvium. These materials were derived from Ordovician metasediments associated with the Wagga Group, which consist of siltstone, sandstone, quartz-mica schist, minor graphite schist and hornfels.</p>
mv	Mount View	<p>Landscape- undulating low hills and rises formed on Ordovician sedimentary rocks. Elevation 320–410 m, local relief 20–60 m, slopes 3–10%. Extensively to totally cleared open Eucalypt woodlands.</p>

Cootamundra 1:250,000 Soil Landscapes		
		<p>Soils- shallow (<50 cm), well-drained Paralithic Leptic Rudosols (Lithosols) on some upper slopes and crests. Moderately deep (<100 cm) to deep (>100 cm), imperfectly to well-drained Mesotrophic Red Dermosols (Brown Earths; Brown Podzolic Soils) on upper, mid and lower slopes. Moderately deep (<100 cm), imperfectly drained Haplic and Mottled Mesotrophic Red Chromosols (Red Podzolic Soils) also on mid-hillslopes.</p> <p>Geology- Soils have formed on Ordovician sedimentary rocks associated with the Wagga Group. Parent materials consist of siltstone, sandstone, quartz mica schist, minor graphite schist and hornfels. Colluvium derived from these materials occurs on lower slopes.</p>
nr	Narraburra	<p>Landscape- broad alluvial plains formed on Quaternary alluvium. Wind-blown sand deposits and prior stream formations occur throughout the plains. Elevation 227–280 m, local relief <9 m, slopes <9%. Extensively cleared mid-high open Eucalypt woodlands.</p> <p>Soils- deep (>100 cm), imperfectly drained Rudosols (Alluvial Soils) and poorly drained Bleached Mesotrophic Sodosols (Solodic Soils; Soloths) along current creek floodplains and in drainage depressions. Deep (>100 cm), well-drained Basic Stratic Rudosols (Earthy Sands) adjacent to some creek lines. Deep (>100 cm), Bleached-Mottled Mesotrophic Red Chromosols and Haplic Magnesic Red Kurosols (Red Podzolic Soils) on adjacent levees and plains. Deep (>100 cm), imperfectly drained Bleached Hypocalcic Red Chromosols and Mottled Calcic Brown Chromosols (Red-brown Earths) on surrounding plains. Brown Dermosols (intergrades of Brown Podzolic Soils to Non-calcic Brown Soils) are also present. Deep (>100 cm), imperfectly drained Endocalcareous-Endohypersodic Crusty Red Vertosols (Red Clays) and imperfectly drained Endocalcareous Grey Vertosols (Grey Clays) also occur on back plains.</p>

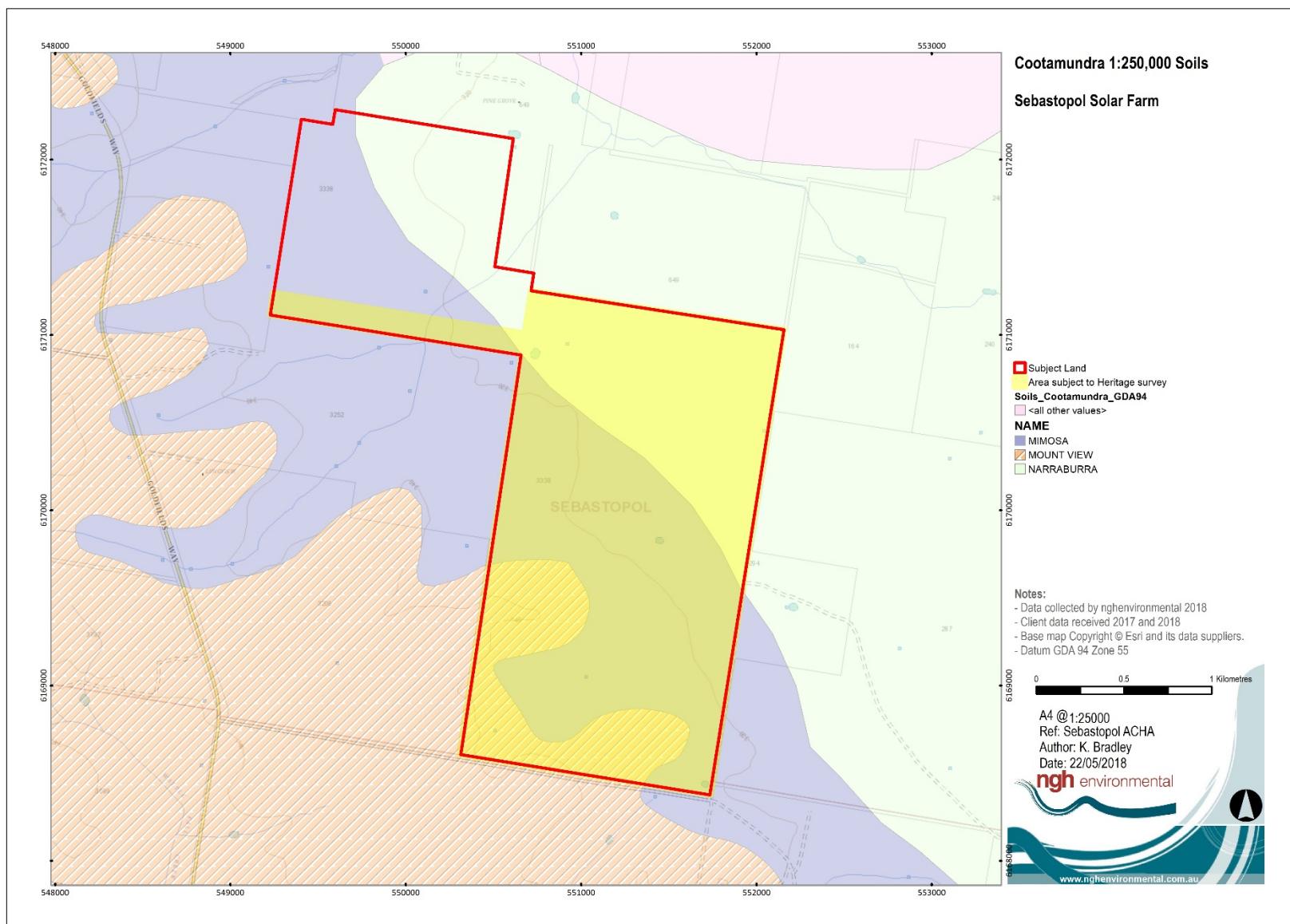


Figure 5. Cootamundra 1:250,000 Soils Landscape

3.1.2 Flora and Fauna

The biodiversity assessment carried out by NGH Environmental (2018) identified four distinct plant community types within the proposal area, the Western Grey Box tall grassy woodlands, White Box grassy woodland, White Box - White Cypress Pine - Western Grey Box shrub/grass/forb woodland and Blakely's Red Gum and Yellow Box tall grassy woodlands.

The majority of the proposal area has been cleared for agriculture and is currently used for cropping and grazing sheep. The paddocks have been deep ripped and cultivated in past management practices. Exotic vegetation within the proposal area is comprised of a mixture of cereal and pulse crops including canola, wheat and lupins. Exotic dominated pastures are heavily grazed by livestock and native groundcover has been entirely lost.

The native vegetation communities remaining in the proposal area occur as linear patches of open grassy woodlands along fence lines and internal roads. The native understorey and groundcover of the majority of these communities has been entirely lost or is heavily degraded. A large patch of woodland through the centre of the proposal area has retained its native understorey. This area of woodland has not been cleared or cultivated in the past enabling native groundcover to persist. A small number of scattered remnant trees of Grey Box (*Eucalyptus microcarpa*) and Yellow Box (*Eucalyptus melliodora*) are present within the exotic dominated paddocks.

These remnant woodland vegetation community provides numerous habitat types for fauna. These areas provide habitat features such as hollows and are likely to support habitats for a number of threatened bird species. The canopy trees also provide foraging and nesting/resting habitat for birds and arboreal fauna. The mid-storey provides foraging and nesting habitat for smaller birds, as well as refuge for small-medium sized mammals and reptiles. Ground cover plants, logs and fallen leaves also provide shelter and foraging habitat for terrestrial fauna. Where hollow-bearing trees are present, they may provide daytime resting habitat for bats and mammals, and roosting habitat for birds.

3.1.3 Historic Land Use

The Temora region has a long history of intensive agricultural and pastoral use with the first pastoral station settlement in the area in 1847. The majority of the area has been utilised for grazing and crop production since European settlement in the mid 1800's and gold was discovered in the area in 1869. However, the main gold rush into the areas did not commence until 1879 with the Temora district proclaimed a gold field in 1880.

The location of the proposed Sebastopol Solar Farm is within pastoral and agricultural fields and therefore has been subject to considerable impacts from farming for many decades. Overall, the project area would be categorised as highly disturbed through consistent farming practices over many decades, including ripping and ploughing.

Additionally, a number of powerlines pass through the site in a north-south direction through the western portion of the proposal area. The construction of the powerlines would have caused additional disturbance to the area.

Overall, the proposal area would be categorised as disturbed through continual modification for farming activities over many decades.

3.1.4 Landscape Context

Most archaeological surveys are conducted in a situation where there is topographic variation, and this can lead to differences in the assessment of archaeological potential and site modelling for the location of Aboriginal archaeological sites. As already noted the proposal area has limited topographic variation however, there is clearly a divide between the flat floodplains in the north-eastern portion and the rolling hills and associated slopes in the south-western portion. The topographic variation noted during the survey accurately reflects the divide between the Murrumbidgee Tarcutta Channels and Floodplains and the Ardlethan Hills land systems. Therefore, the landform was determined to be two units, Murrumbidgee Tarcutta Channels and Floodplains and Ardlethan Hills land systems.

The other slight difference observed across the proposal area was that the ground visibility changed depending on stage of cropping each paddock had been subject to. Some fields recently sowed or with the stubble burnt off had high visibility that ranged from 50- 90% while the paddocks that still had crop stubble had a lower visibility of 10 -40%.

The results of previous archaeological surveys in the Temora region serve to show that there are sites present in a range of landforms. There does appear however to be a pattern of site location that relates to the presence of potential resources for Aboriginal use with high density sites generally located in elevated areas adjacent to waterways. Lower density background scatters also occur across undulating plains in proximity to water.

Based on the previous archaeological investigations in the Temora area and knowledge of Wiradjuri cultural practices and traditional activities the Sebastopol Solar Farm proposal area has a possibility of providing an archaeological signature. Given that Aboriginal people have lived in the region for tens of thousands of years, there is some potential for archaeological evidence to occur across the proposal area.

3.2 REVIEW OF ABORIGINAL ARCHAEOLOGICAL CONTEXT

3.2.1 Ethnohistoric Setting

Cultural areas are difficult to define and “must encompass an area in which the inhabitants have cultural ties, that is, closely related ways of life as reflected in shared meanings, social practices and interactions” (Egloff *et al.* 2005:8). Depending on the culture defining criteria chosen - i.e. which cultural traits and the temporal context (historical or contemporary) - the definition of the spatial boundary may vary. In Australia, Aboriginal “marriage networks, ceremonial interaction and language have been central to the constitution of regional cultural groupings” with the distribution of language speakers being the main determinate of groupings larger than a foraging band (Egloff *et al.* 2005:8 & 16).

Sebastopol and Temora are within an area identified as part of the Wiradjuri language group. This is an assemblage of many small clans and bands speaking a number of similar dialects (Howitt 1996, Tindale 1974, MacDonald 1983, Horton 1994).

The Wiradjuri language group was the largest in NSW prior to European settlement. The borders were however, not static, they were most likely fluid, expanding and contracting over time to the movements of smaller family or clan groups. Boundaries ebbed and flowed through contact with neighbours, the seasons and periods of drought and abundance.

It was the small family group that was at the core of Aboriginal society and the basis for their hunting and gathering life. The immediate family camped, sourced food, made shelter and performed daily rituals

together. The archaeological manifestations of these activities are likely to be small campsites, characterised by small artefact scatters and hearths across the landscape. Places that were visited more frequently would develop into larger site complexes with higher numbers of artefacts and possibly more diverse archaeological evidence.

These small family units were part of a larger band which comprised a number of families. They moved within an area defined by their particular religious sites (MacDonald 1983). Such groups might come together on special occasions such as pre-ordained times for ceremonies, rituals or simply if their paths happened to cross. They may also have joined together at particular times of the year and at certain places where resources were known to be abundant. The archaeological legacy of these gatherings would be larger sites rather than small family camps. They may include large hearth or oven complexes, contain a number of grinding implements and a larger range of stone tools and raw materials.

Identification and differentiation of such sites are difficult in the field. A family group and their antecedents and descendants occupying a particular campsite repeatedly over a long period of time may leave a similar pattern of archaeological signatures as a large group camped over a shorter period of time.

It wasn't long after European arrival in the district that the Aboriginal population began to decline, due to diseases such as small pox and influenza as well as dispossession from traditional lands and acts of violence against the Aboriginal people which all caused great social upheaval and partial disintegration of the traditional way of life. This meant that access to traditional resource gathering and hunting areas, religious life, marriage links and access to sacred ceremonial sites were disrupted or destroyed.

However, despite these disruptions, Aboriginal people continued to maintain their connections to sites and the land in the early days of European settlement. Where Aboriginal people were taken to places like Warangesda, a mission established near Darlington Point in 1880, or Brungle Reserve between Gundagai and Tumut, people were able to maintain at least some form of association with country and maintain traditional stories.

Early settlers and others who wrote about the Wiradjuri people and customs differentiated between the origin of some groups, referring to people as the Lachlan or Murrumbidgee tribes, or the Levels tribe for those between the two major rivers (Woolrych 1890). The extent of the Wiradjuri group means that there were many different environments that were exploited for natural resources and food. Like everywhere in Australia, the Wiradjuri people were adept at identifying and utilising resources either on a seasonal basis or all year round.

Terrestrial animals such as the possum was noted by many early observers as a prime food source and the skins were made into fine cloaks that evidently were very warm (Evans 1815, Oxley 1820, Mitchell 1839). Kangaroos were also eaten, and their skins made into cloaks as well. A range of reptiles and other mammals were food sources. Fish and mussels would have been prevalent from the rivers and creeks and insects were also a common food type, in particular grubs and ants and ant eggs (Pearson 1981, Fraser 1892). Birds including emus were common as a food source, often being caught in nets made from fibres of various plants such as flax, rushes and kurrajong trees. Bird hunts were also often undertaken as group activities, with emus, ducks and other birds targeted through groups of people flushing them out and driving them into pre-arranged nets (Ramson 1983).

Plant foods were equally as important and mostly consisted of roots and tubers, such as *Typha* or Cumbungi whose tubers were eaten in late summer and the shoots in early spring. Other edible plants from the Wiradjuri region include the Yam Daisy or *Murnong*, eaten in summer and autumn, the Kurrajong seeds and roots, Acacia seeds and other rushes (Gott 1982).

Some of the early settlers and pastoralists, surveyors, explorers, administrators and others observed traditional Aboriginal activities, including ceremonies, burial practices and general way of living, and recorded these in letters, journals and books. These early records of Aboriginal lifestyle and society within the region assist in understanding parts of the traditional Aboriginal way of life, albeit already heavily disrupted at the time of the observations and through the eyes of largely ignorant and uninformed observers.

The early observations also note that some weapons and tools were carried, some made from wood such as spears, spear throwers, clubs, shields, boomerangs, digging sticks, bark vessels and canoes. Other materials were observed in use such as stone axes, shell and stone scrapers and bone needles.

In an archaeological context, few of these items would survive, particularly in an open site context. Anything made from bark and timber and animal skins would decay quickly in an open environment. However, other items, in particular those made of stone would survive where they were made, placed or dropped. Shell material may also survive in an archaeological context. Sources of raw materials, such as the extraction of wood or bark would leave scars on the trees that are archaeologically visible, although few trees of sufficient age survive in the modern context. Outcropping stone sources also provide clues to their utilisation through flaking, although pebble beds may also provide sources of stone which leave no archaeological trace.

3.2.2 AHIMS Search

The Aboriginal Heritage Information Management System (AHIMS) is maintained by OEH and provides a database of previously recorded Aboriginal heritage sites. A search provides basic information about any sites previously identified within a search area. However, a register search is not conclusive evidence of the presence or absence of Aboriginal heritage sites, as it requires that an area has been inspected and details of any sites located have been provided to OEH to add to the register. As a starting point, the search will indicate whether any sites are known within or adjacent to the investigation area.

A search of the AHIMS database was conducted over an area approximately 50 km east-west x 50 km north-south centred on the proposal area, was undertaken on the 15th of February 2018. The AHIMS Client Service Number was: 328204. There are 45 Aboriginal sites recorded in the search area. No declared Aboriginal Places are held for the search area in the database. Table 3 below shows the site types previously recorded in the region and Figure 6 shows the location of AHIMS sites in relation to the Sebastopol Solar Farm.

Table 3 Breakdown of previously recorded Aboriginal sites in the region.

Site Type	Number
Modified Tree (Carved or Scarred)	26
Artefact (1 or more)	14
Water Hole	2
Artefact, Potential Archaeological Deposit (PAD), Stone Quarry, Ochre Quarry	1
Burial, Modified Tree (Carved or Scarred)	1
Grinding Groove	1
Stone Arrangement	1
TOTAL	45

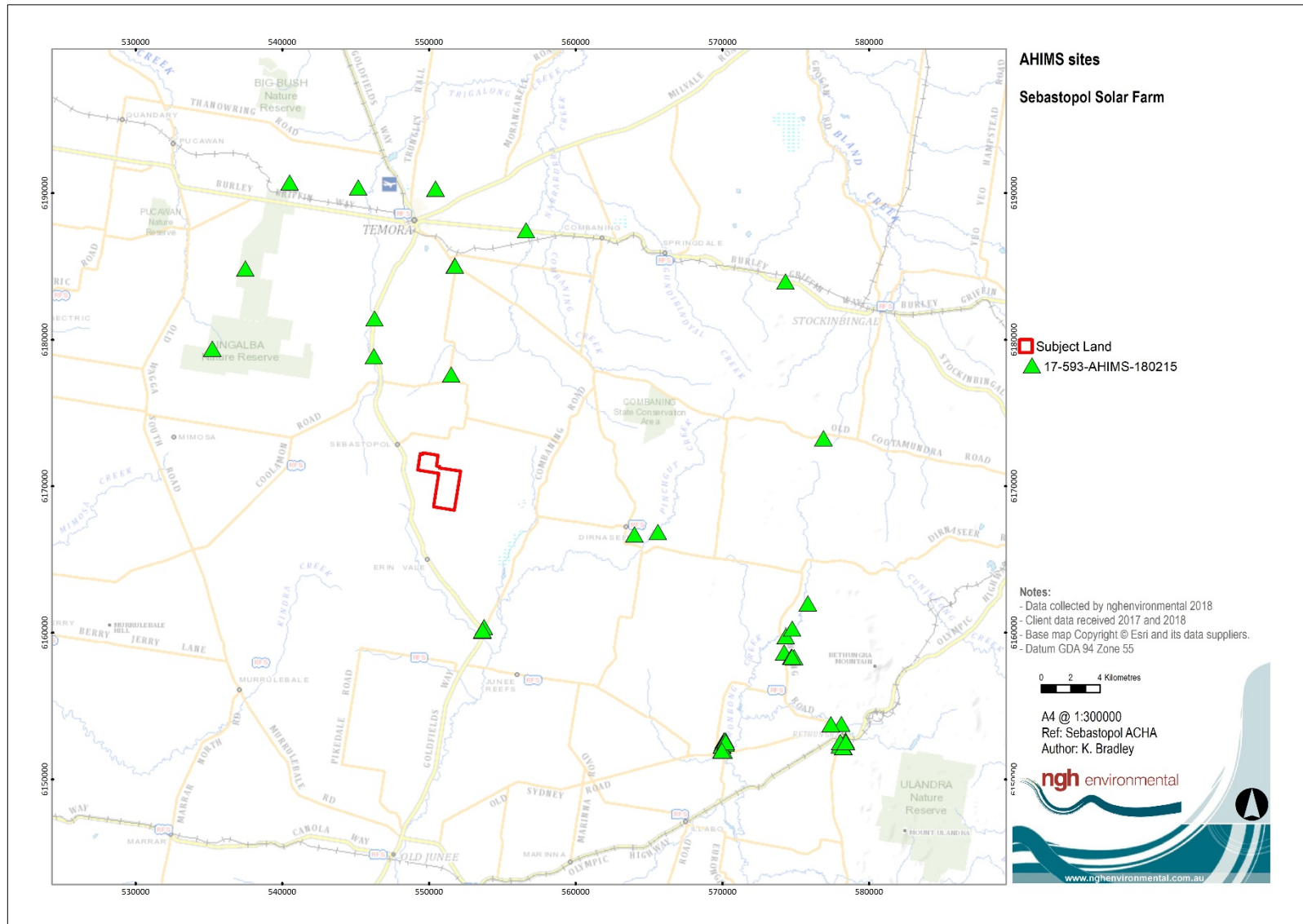


Figure 6. Location of know sites recorded with AHIMS in relation to the proposed Sebastopol Solar Farm.

There are no sites currently recorded within the proposal area. The closest site is a scarred tree located approximately 5 km to the north east within the Yeo Yeo State Forest. Scarred trees are the dominate site type in proximity of the proposal area however it is likely that the lack of other site types is a reflection of lack of survey in the area and the obtrusive nature of scarred trees rather than a lack of other manifestations of Cultural heritage. It is also important to note that approximately 12 km to the east of the proposal area there is an ochre quarry and a possible burial site in proximity of Pinchgut Creek.

There is a dominance of scarred trees in the area especially where there are remnant stands of native trees. Scarred trees provide a tangible link to the past and provide evidence of Aboriginal subsistence activities through the deliberate removal of bark or wood. It is likely that the lack of other site types other than scarred trees in the area surrounding the proposal area is related to lack of surveys in the area and the more obtrusive nature of scarred trees when compared to small artefact scatters and isolated stone artefacts.

3.2.3 Previous archaeological studies

Aboriginal people have occupied what we now know as the Australian continent for at least 40,000 years and perhaps 60,000 years and beyond. There have been no known dated excavations in the Junee and Temora areas, although the archaeological evidence from Lake Mungo, 410 km to the north-west provides ample evidence of Aboriginal occupation dating back 40,000 years (Mulvaney and Kamminga 1999, Hiscock 2007). No regional synthesis of the archaeology has been completed for the Temora area. The following are summaries of those archaeological survey reports that have been completed in the Temora region, these have been primarily driven by development and infrastructure requirements.

Witter carried out a survey for a gas pipeline between Wagga Wagga and Young in 1980. He recorded 14 artefact scatters, 21 isolated finds, a possible rock well and a modified tree. Most of the sites identified by Witter occurred in association with creeks or water courses within a range of landforms including flats, slopes and spurs. Witter recommended the excavation of some of these sites if they were unable to be avoided. One of these sites, artefact scatter BY/4, was salvaged by Kelly later that same year collecting 319 surface artefacts and excavating an additional 48 artefacts (as cited in Kelleher Nightingale Consulting, 2008, p.4).

A 1983 study by Witter and Hughes (as cited in AECOM Australia Pty Ltd, 2010, p.67) of a proposed transmission line near Murrumburrah recorded 18 Aboriginal sites. This consisted of 13 isolated finds, four artefact scatters and one scarred tree. Witter and Hughes suggested that site patterning in the region is dominated by sites clustered along the valleys of water courses with the open undulating plateau containing significantly lower densities of sites.

An archaeological survey of the Ulandra Nature Reserve, approximately 35 km south east of the proposal area was undertaken in 1985 by Paton and Hughes (as cited in AECOM Australia Pty Ltd, 2010, p.67). The survey identified seven artefact scatters and 15 isolated finds. The scatters consisting mostly of quartz with some silcrete basalt and quartzite ranged from between nine and sixty-seven artefacts and all sites were located on low rises associated with creek lines. Paton and Hughes suggested that landforms associated with wide low relief valleys had the highest archaeological potential.

In 1986 Brayshaw and Associates conducted a survey approximately 16 km north west of Temora for a proposed open cut mine with a dam and spoil heap. The area was 5.5 km² and it was noted that any sites found would be consistent with Witter's "Riverine oriented cultural adaptation" model. A total of five sites were recorded during the survey. The site types included an open camp site with an artefact scatter, hearths and a scarred tree; two hearth sites, an artefact scatter and a scarred tree. The artefacts were predominantly flakes and flakes pieces with cores also recorded. Lithologies were a grey chalcedonic silica with lesser numbers of quartz, chert, fine grained siliceous, volcanic and quartzite. All

the hearth sites were noted to have been damaged by erosion and the low density of artefacts in the area was assessed to represent the transient occupation of the area.

Bonhomme (as cited in AECOM Australia Pty Ltd, 2010, p.67) conducted an assessment of a gas pipeline north of Junee in 1987. Eighteen sites consisting of seven artefact scatters, eight isolated finds and three scarred trees were recorded the majority of scatters were located on hill slopes within 100 m of a watercourse.

An assessment was undertaken by Nicholson in 1990 for a proposed natural gas pipeline from Junee South towards Wagga Wagga. The predictive model established by this project suggested that artefact scatters would occur more frequently within valleys, along ridges and adjunct to water. The survey did not identify any sites. This was consistent with the model as the proposed line extended across undulating country removed from water sources. While this model is relatively accurate, a study undertaken by Witter (1980) and a subsequent reassessment by Kelton in 2006 did locate evidence of occupation in the form of a quartz scatter and possible waterhole along an ephemeral drainage line within 1 km of Nicholson's (1990) survey. This suggests that there is potential for sites to occur within the open undulating plains.

HLA Envirosciences (1995) conducted a preliminary archaeological survey of 90 ha for the proposed expansion of the feedlot on the Jindalee property near Springdale approximately 24 km north-east of the current assessment area. No archaeological sites were located which was thought to reflect the small area effectively surveyed and possible a less intensive level of Aboriginal settlement in the general area.

In 1997 Culture and Heritage surveyed the proposed transmission line between Temora and Lake Cowal. Primarily the survey targeted water courses as it was noted that Aboriginal people tended to focus their activities in areas where water was readily available. All creek channels, drainage lines and low-lying areas were inspected for archaeological materials with a total sample area of 22.5 linear kilometres or 10% of the total proposed corridor surveyed. A total of seven artefact scatters, an isolated grinding stone, a scarred tree and five areas of archaeological sensitivity were recorded. Culture and Heritage noted that campsites were all found adjacent to water courses with site size appearing to reflect the reliability of the water course. Sites containing only a few artefacts were found next to small creeks and drainage lines while larger sites were recorded near more permanent water sources. Campsites were noted to be most common in the Temora area. It should be noted however that the selective survey method of focusing on areas near water would have likely skewed these results as it is expected that a background scatter of artefacts would also be located further away and/or between these water sources.

A subsurface investigation was undertaken by Barber in 1997 adjacent to the Muttama Creek just south of Cootamundra. A total of 61 test probes were excavated with only 24 test pits containing artefacts. Sixty-nine artefacts in total were recovered and 45% of the assemblage originated from a single test pit, E8. The overwhelming majority of artefacts (92.8%) were manufactured from quartz with lesser numbers of fine grained siliceous and volcanic raw materials present. The nature of the quartz assemblage suggested that bipolar flaking techniques were predominantly used, and the high density of artefacts found in test pit E8 suggested a knapping event. Barber (1997) suggests that the generally flat topography of the area prevented the concentration of the archaeological record to a topographic feature however, a significant background scatter of artefacts including single knapping events such as located in E8 are present in the landscape (Barber, 1997).

A second survey in the Ulandra Nature Reserve was undertaken by Dearling and Grinbergs in 2002 (as cited in AECOM Australia Pty Ltd, 2010, p.67). The survey was undertaken along TransGrid access tracks and 28 Aboriginal sites were identified within the reserve and an additional site located on a neighbouring private property. A subsequent survey by Dealing in 2004 identified seven artefact scatters and three isolated finds,

recording a total of 146 stone artefacts. Most sites were adjacent to water courses and all occurred on low gradient spurs or locally elevated locations (as cited in AECOM Australia Pty Ltd, 2010, p.67).

AECOM Australia (2010) conducted the Aboriginal and historic heritage study for Stage 1 of a 61 km pipeline project from Bethungra to Wagga Wagga. The survey methodology was designed to only target specific portions of landscapes where archaeological evidence was most likely to be found, resulting in 18 transects being surveyed. A total of 36 Aboriginal sites (30 artefact scatters and 6 isolated artefacts) were recorded along the proposed pipeline route, including 24 previously unrecorded sites. The majority of sites identified during the survey were associated with, or in close proximity to an ephemeral water source with over two thirds of sites located within 50 m of a water source.

A 2011 report by OzArk undertook an assessment of the Wagga north to Junee to Temora 132 kV powerline. The study identified several artefact scatters and a scarred tree (as cited in EMM Consulting, 2018, p.16).

In 2017 EMM undertook an Aboriginal due diligence assessment for the proposed Junee Solar Farm approximately 20 km south of the proposal area. EMM suggest that as the proposal area was not in proximity to a water source, had been extensively disturbed through land management practises. Given the project area was within a relatively flat landscape EMM concluded that there was low potential for cultural material to be present. Based upon the background assessment EMM suggested that artefact scatters were most likely to occur in valleys, along ridges and adjacent to permanent or semi-permanent sources of water. Additionally the absence of mature trees on the property negated the potential for scarred or modified trees to occur (EMM Consulting, 2018).

3.2.4 Summary of Aboriginal land use

The results of previous archaeological surveys in the Temora region serve to show that there are sites present in a range of landforms. There does appear however to be a pattern of site location that relates to the presence of potential resources for Aboriginal use with high density sites generally located in elevated areas adjacent to waterways. Lower density background scatters also occur across undulating plains in proximity to water. The dominant lithology within the area appears to be quartz with lesser quantities of silcrete, quartzites, volcanic and fine grained siliceous artefacts. A number of scarred trees are recorded in the area, but this site type tends to occur in areas where old growth trees remain. Elevated sand bodies are considered to have high archaeological potential and burials are known to occur within these landforms.

The Aboriginal land use of the Temora area is in reality little understood, as few in-depth studies have been completed and no sites have been dated. It is possible however, to ascertain that proximity to raw materials and resources was a key factor in the location of Aboriginal sites. It is also reasonable to expect that Aboriginal people ventured away from these resources to utilise the broader landscape, but the current archaeological record of that activity is limited.

3.2.5 Archaeological Site Location Model

Based on the previous archaeological investigations in the Temora area and knowledge of Wiradjuri cultural practices and traditional activities it is possible to predict the likely archaeological site types that may occur within the project area. These are outlined below.

Stone artefact scatters – representing camp sites can occur across the landscape, usually in association with some form of resource or landscape unit such as spur and ridge crests or water sources such as creeks, billabongs and swamps. Sand bodies, topographically elevated areas or changes in soils with associated changes in vegetation can also be a desirable location for occupation particularly when they are associated

with resource changes. Artefact scatters, if they do occur, are more likely to be characterised as low-density scatters across broad landforms.

Burials – are generally found in elevated sandy contexts or in association with rivers and major creeks. No such features exist within the proposal area and therefore such sites are unlikely to occur.

Scarred Trees – these require the presence of old growth trees and are likely to be concentrated along major waterways and around swamp areas. There are mature trees remaining in the proposal area and this feature is therefore likely to occur.

Hearths/Ovens – are identified by burnt clay used for heat retainers. None are recorded in the district, but they could occur either independently or in association with other Aboriginal cultural features such as campsites, often in association with resource locations. Such places are not obvious within the proposal area and this feature is therefore unlikely to occur.

Stone resources – are areas where people used natural stone resources as a source material for flaking. This requires geologically suitable material outcropping so as to be accessible. The proposal area contains no natural outcropping stone of suitable material.

Shell Middens – are the agglomeration of shell material disposed of after consumption. Such places are found along the edges of significant waterways, swamps and billabongs. The proposal area contains no significant waterways, swamps and billabongs and this feature is therefore unlikely to occur.

Isolated Artefacts – are present across the entire landscape, in varying densities. As Aboriginal people traversed the entire landscape for thousands of years, such finds can occur anywhere and indicate the presence of isolated activity, dropped or discarded artefacts from hunting or gathering expeditions or the ephemeral presence of short term camps.

In summary, the topography and landscape features within the proposed Sebastopol Solar Farm indicate that this area would likely have been part of the Wiradjuri landscape and has a possibility of providing an archaeological signature. Nonetheless, given that Aboriginal people have lived in the region for tens of thousands of years, there is potential for archaeological evidence to occur throughout the area, this is most likely to be in the form of stone artefacts and modified trees.

3.2.6 Comment on Existing Information

The AHIMS database is a record of those places that have been identified and had site cards submitted to OEH. It is not a comprehensive list of all places in NSW as site identification relies on an area being surveyed and on the submission of site forms to AHIMS. There are likely to be many areas within NSW that have yet to be surveyed and therefore have no sites recorded. However, this does not mean that sites are not present.

Within the Temora area there have only been a few archaeological investigations. The information relating to site patterns, their age and geomorphic context is little understood. The robustness of the AHIMS survey results are therefore considered to be only moderate for the present investigation. There are likely to be sites that exist that have yet to be identified although the scale of farming development has altered the natural landscape in some places. This activity has also greatly disturbed the archaeological record and there are unlikely to be many places that retain *in situ* archaeological material due to the scale of agricultural and pastoral development. The current study is the most comprehensive assessment of this locality and therefore the results outlined in this report are the most thorough and up to date available.

With regard to the limitations of the information available, archaeologists rely on Aboriginal parties to divulge information about places with cultural or spiritual significance in situations where non-archaeological sites may be threatened by development. To date, we have not been told of any such places within the

Sebastopol Solar Farm proposal area however there is always the potential for such places to exist but insofar as the current proposal is concerned, no such places or values have been identified.

4 ARCHAEOLOGICAL INVESTIGATION RESULTS

4.1 SURVEY STRATEGY

The survey strategy was to cover as much of the ground surface as possible within the proposal area. Although the actual ground impact from the construction method for the proposed solar farm was likely to be low, the placement of solar arrays across the landscape has the potential to cover any cultural heritage sites.

The strategy therefore was to walk a series of transects across the landscape to achieve maximum coverage. Because the proposal area was generally cleared paddocks, transects were spaced evenly with the survey team spread apart at 30 m intervals, walking in parallel lines. The cleared nature of the paddocks made this an ideal survey strategy. The team were able to walk in parallel lines, at a similar pace, allowing for maximum survey coverage and maximum opportunity to identify any heritage features. The survey team consisted of between three and four people which allowed for approximately 90-120 m wide tract of the proposal area to be surveyed with each transect depending on the number of survey participants. At the end of each transect, the team would reposition along a new transect line at the same spacing and walk back on the same compass bearing.

While the plan to retain existing viable native vegetation remnants where possible the areas of remnant vegetation were deemed to have high archaeological potential and mature trees within the proposal area were also inspected for any evidence of Aboriginal scarring (c.f Long 2005).

We believe that the survey strategy was comprehensive and the most effective way to identify the presence of Aboriginal heritage sites. Discussions were held in the field between the archaeologists and Aboriginal community representatives to ensure all were satisfied and agreed with the spacing, coverage and methodology.

The proposal area was divided into two sections as listed below.

- Murrumbidgee Tarcutta Channels and Floodplains (flats)
- Ardlethan Hills land systems (low hills and associated slopes)

The survey of the solar farm proposed development area and transmission line was undertaken by an archaeologist from NGH Environmental with representatives of the Aboriginal community from the 8th till the 11th of May 2018. Notes were made about visibility, photos taken, and any possible Aboriginal features identified were inspected, assessed and recorded if deemed to be Aboriginal in origin.

4.2 SURVEY COVERAGE

The survey was impeded by poor visibility in some paddocks, although there were paddocks and areas where visibility was quite high, particularly in the fields which had recently had the crop stubble burnt away or had recently been sown.

Fields recently sown or with the stubble burnt off generally had high visibility that ranged from 50% to 90% with an average visibility of 60%. The paddocks that still had crop stubble had a lower visibility of 10% to 40%

with an average visibility of 20%. Bare ground around the perimeter fences, dams, gates and animal tracks across the proposal area also all contributed to the effectiveness of the visibility and the survey coverage.





Soils within the proposal area consisted of a reddish-brown silty loam.

Mature native trees in stands and isolated mature paddock trees were inspected to ascertain if there was any evidence of cultural modification.

Table 4 below shows the calculations of effective survey coverage and Figure 7 shows the division of landforms across the area surveyed. Plates 1-10 show examples of the transects landforms and visibility for the Sebastopol Solar Farm area.

Over the course of the field survey, approximately 160 km of transects were walked across the proposal area by the participants. Allowing for an effective view width of 5m each person, this equates to a total surface area examined of 80 ha. However, allowing for the visibility restrictions, the effective survey coverage for the Murrumbidgee Tarcutta Channels and Floodplains (flats) is reduced to 24.9 ha, or 11.5% and the effective survey coverage for the Ardlethan Hills land systems (low hills and associated slopes) is reduced to 26.2 ha, or 13.8%.

Overall, it is considered that the surface survey of the Sebastopol Solar Farm proposal area had sufficient and effective survey coverage. The results identified are considered a true reflection of the nature of the Aboriginal archaeological record present within the proposal area.

	
Plate 1. View west down a slope in the Ardlethan Hills landform with crop stubble, note low visibility.	Plate 2. View south up slope to a low hill in background in the Ardlethan Hills landform with crop stubble.
	
Plate 3. View south up slope to low hill in the Ardlethan Hills landform with burnt stubble, note high visibility.	Plate 4. View north along the access track from the southern boundary in the Ardlethan Hills landform.

	
<p>Plate 5. View east along the divide between the Murrumbidgee Tarcutta Channels and Floodplains and Ardlethan Hills landforms</p>	<p>Plate 6. View south along Murrumbidgee Tarcutta Channels and Floodplains in recently sown field, note high visibility.</p>
	
<p>Plate 7. View south to a low hill in the background in the Ardlethan Hills landform in a recently sown paddock.</p>	<p>Plate 8. View north along Murrumbidgee Tarcutta Channels and Floodplains.</p>
	
<p>Plate 9. View west along Murrumbidgee Tarcutta Channels and Floodplains, note good visibility in sown field.</p>	<p>Plate 10. View of large remnant vegetation stand of trees in the eastern portion of the proposal area.</p>

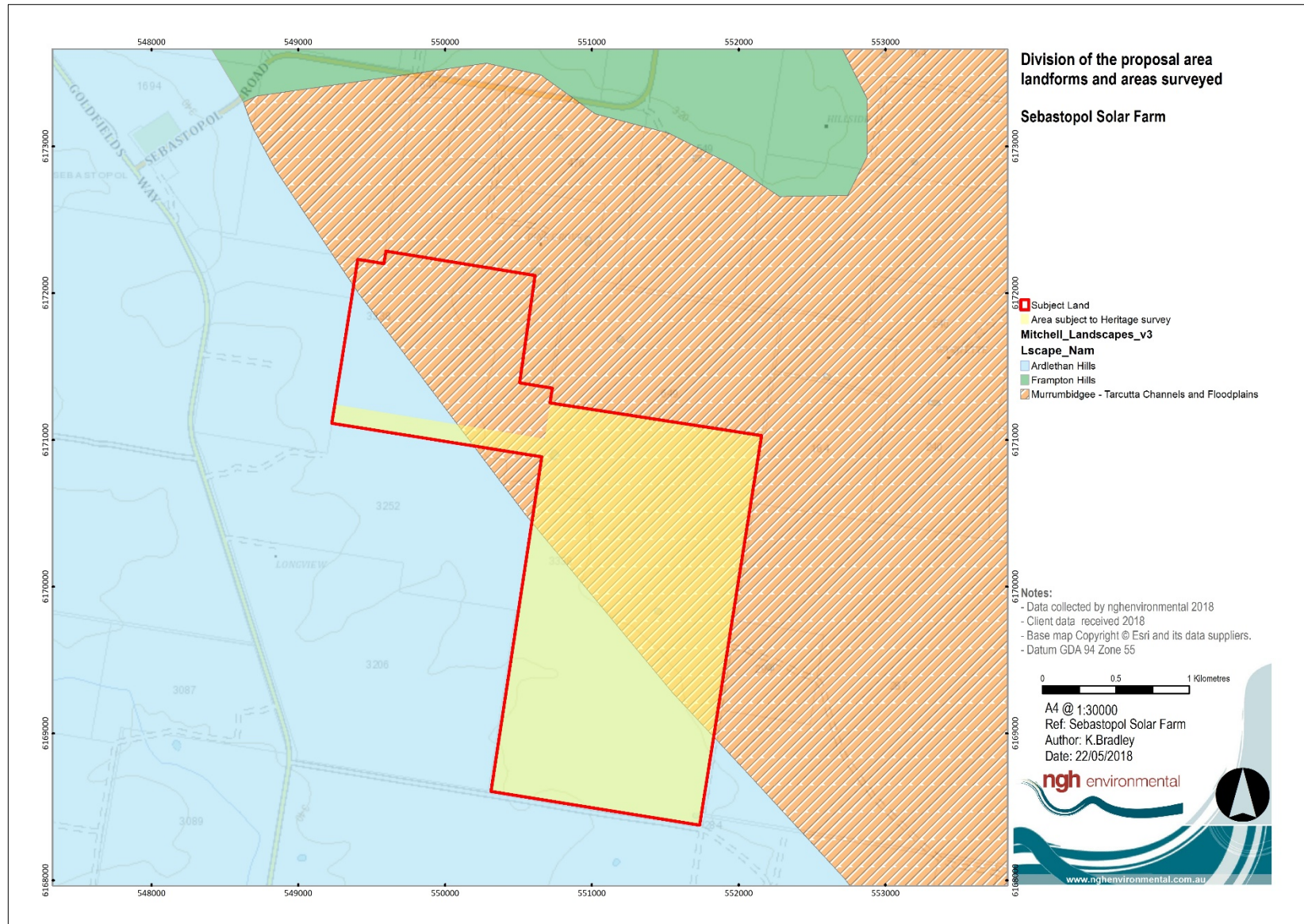


Figure 7. Division of the proposal area landforms and areas surveyed.

Table 4. Transect information.

Survey Section/ Topography	Number of Survey Transects	Exposure type	Proposal Area ha	Surveyed area (length m x width m)	Survey Area m ²	Visibility	Effective coverage (area x visibility) m ²	Proposal Area surveyed (ha)	Percentage of Proposal area effectively surveyed	Archaeological result
Murrumbidgee Tarcutta Channels and Floodplains (flats)	33	Bare ground, gate entrances, fence lines, dam banks, vehicle tracks, sown and burnt paddocks	216	11,550 x 15 12,150 x 20	416,250	60% average	249,750	24.9	11.5	2 possible modified trees 3 artefact scatters 25 isolated finds
Ardlethan Hills land systems (low hills and associated slopes)	28	Bare ground, gate entrances, fence lines, dam banks, vehicle tracks, sown and burnt paddocks	190	18,650 x 20 18,800 x 15	655,000	40% average	262,000	26.2	13.8	5 possible modified trees 12 isolated finds

4.3 SURVEY RESULTS

4.3.1 Summary of Survey Finds

Despite the variable visibility encountered during the survey a total of 53 Aboriginal stone artefacts were found across the proposal area that were recorded as 37 isolated find sites and three artefact scatter occurrences. Seven possible modified trees were also recorded. These locations are shown in Figure 8.

Additionally, it should be noted that 22 of the isolated find stone artefacts and all seven of the possible modified tree were identified in the field and recorded independently by the Aboriginal representative Mark Saddler. Therefore, Mark Saddler independently assigned a naming convention to the sites he identified during the survey and submitted these sites to AHIMS. Mark Saddler has provided NGH with a report on his participation in the Sebastopol Solar Farm survey which is provided in full in Appendix C. A copy of the AHIMS site cards submitted by Mark Saddler have been provided in Appendix E along with the sites submitted by NGH.

4.3.2 Sites Descriptions

Artefact scatters

Sebastopol Solar AFT1/ AHIMS # 50-5-0245

This site consisted of three quartz flakes scattered approximately 20 m apart from each other in a flat ploughed paddock with wheat stubble. The artefacts were all complete quartz flakes. The complete flakes were all identified as products of the tertiary stage of reduction. The artefacts were located on a reddish brown silty loam deposit and visibility within the area was approximately 20%. The area has been subject to disturbance from continual ploughing. The data for the artefacts recorded in this site are provided in Appendix D.



Plate 11. View of Quartz flake from Sebastopol Solar AFT1





Plate 12. View of south across the site Sebastopol Solar AFT1

Sebastopol Solar AFT2/ AHIMS # 50-5-0246



This site consisted of six artefacts in an area approximately 10m (north/south) by 30m (east/west) in a flat ploughed paddock with wheat stubble. The artefacts were flakes (n=3), a flaked piece, a broken flake and a hammerstone. The typologies included chert (n=3), fine grained siliceous (n=2) and volcanic(n=1). The complete flakes were all identified as products of the tertiary stage of reduction. Macroscopic observations of grain, colour and material suggest that the three grey chert artefacts are derive from the same source. As

such, the site is likely to be the result of a single discrete reduction event. The artefacts were located on a reddish brown silty loam deposit and visibility within the area was approximately 20%. The area has been subject to disturbance from continual ploughing. The data for the artefacts recorded in this site are provided in Appendix D.

	
<p>Plate 13. View of chert flake from Sebastopol Solar AFT2</p>	<p>Plate 14. View of west across the site Sebastopol Solar AFT2</p>

Sebastopol Solar AFT3/ AHIMS # 50-5-0247

This site consisted of seven artefacts in an area approximately 30m (north/south) by 20m (east/west) near the gate and associated access track of a flat ploughed paddock. The artefacts were flakes (n=5), a flaked piece and a core. The typologies included quartz (n=4), silcrete (n=2) and chert (n=1). Four of the complete flakes were identified as products of the tertiary stage of reduction while a single chert flake was identified as a product of the secondary stage of reduction. Macroscopic observations of grain, colour and material suggest that the grey silcrete flake and core are derive from the same source material even though the two could not be conjoined. As such, the site is likely to be the result of a single discrete reduction event. The artefacts were located on a reddish brown silty loam deposit and visibility within the area was approximately 90%. The data for the artefacts recorded in this site are provided in Appendix D.

	
<p>Plate 15. View of silcrete flake from Sebastopol Solar AFT3</p>	<p>Plate 16. View west across the site Sebastopol Solar AFT3</p>

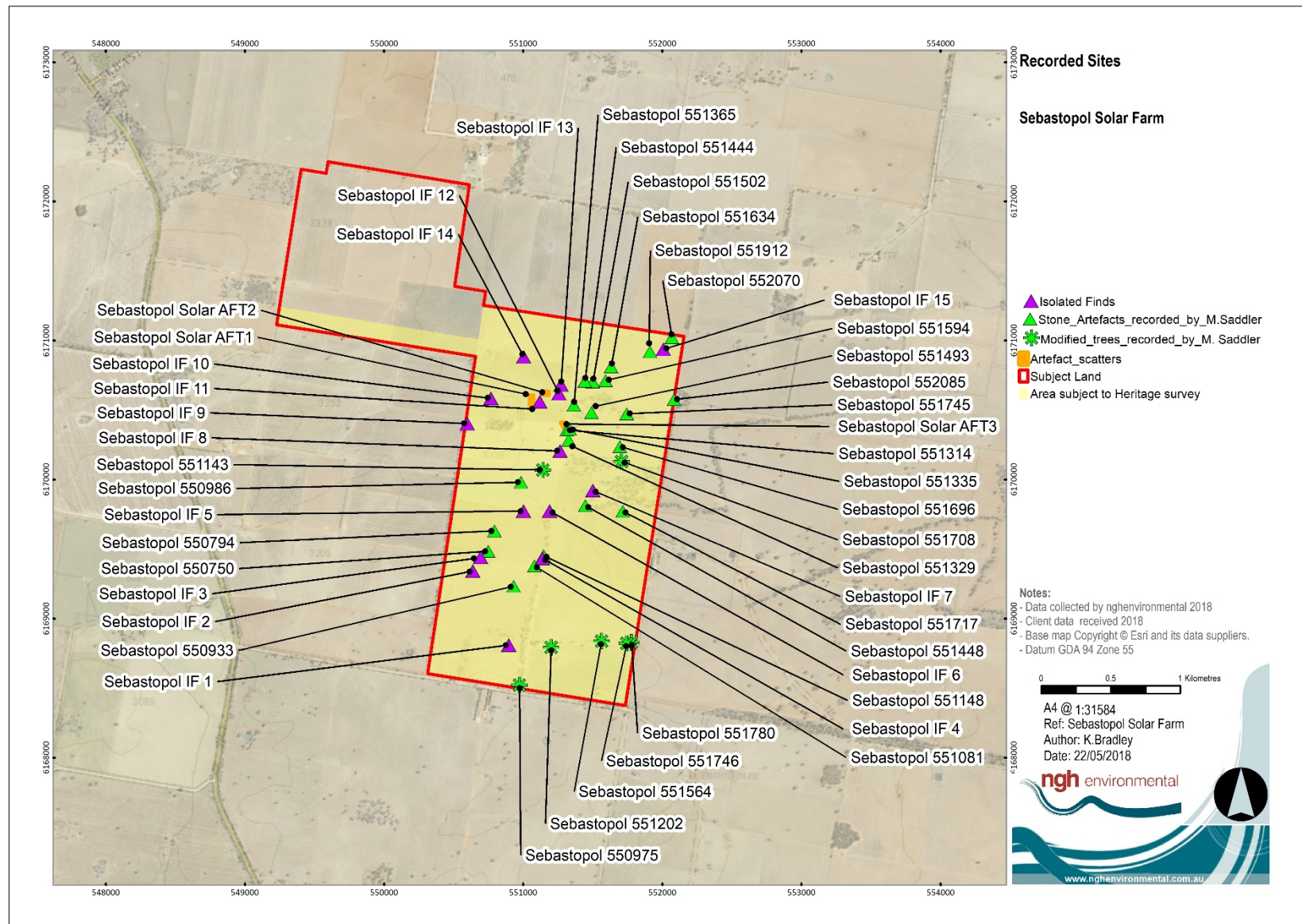










Figure 8. Location of recorded sites.





Isolated finds





The details of the isolated finds recorded and submitted to AHIMS by NGH are detailed in Table 5 below.





Table 5. Isolated finds recorded by NGH





AHIMS #	Site Name	Comments	Pictures
50-5-0248	Sebastopol Solar IF 1	This site consisted of a single artefact in a cleared ploughed paddock. The artefact was a silcrete flake with the dimensions 66 (l) x 62 (w) x 25 (t). The flake had a broad flake scar platform with a feather termination. It was recorded as a product of the secondary stage of reduction with 60% riverine cortex. The deposits consisted of a reddish brown silty loam and visibility within the general area was approximately 30%.	 
50-5-0249	Sebastopol Solar IF 2	This site consisted of a single artefact on a hill top in a cleared ploughed paddock. The artefact was a quartz flake with the dimensions 40 (l) x 31 (w) x 16 (t). The flake had a broad flake scar platform with a feather termination. It was recorded as a product of the tertiary stage of reduction. The deposits consisted of a reddish brown silty loam and visibility within the general area was approximately 20%.	 





AHIMS #	Site Name	Comments	Pictures
50-5-0250	Sebastopol Solar IF 3	This site consisted of a single artefact on the upper slope in a cleared ploughed paddock. The artefact was a silcrete possible manuport with the dimensions 62 (l) x 69 (w) x 36 (t). The deposits consisted of a reddish brown silty loam and visibility within the general area was approximately 90% given the field had recently been burnt off.	 
50-5-0251	Sebastopol Solar IF 4	This site consisted of a single artefact on a track next to a fence line in a cleared ploughed paddock. The artefact was a volcanic flake with the dimensions 33 (l) x 47 (w) x 15 (t). The flake had a broad flake scar platform with a feather termination. It was recorded as a product of the secondary stage of reduction with 10% terrestrial riverine cortex. The deposits consisted of a reddish brown silty loam and visibility within the general area was approximately 80%.	 



AHIMS #	Site Name	Comments	Pictures
50-5-0253	Sebastopol Solar IF 5	This site consisted of a single artefact in a cleared ploughed paddock. The artefact was a quartz flake with the dimensions 17 (l) x 16 (w) x 5 (t). The flake had a broad flake scar platform with a feather termination. It was recorded as a product of the tertiary stage of reduction. The deposits consisted of a reddish brown silty loam and visibility within the general area was approximately 90%.	 
50-5-0252	Sebastopol Solar IF 6	This site consisted of a single artefact in a cleared ploughed paddock. The artefact was a quartz flake with the dimensions 16 (l) x 16 (w) x 8 (t). The flake had a broad flake scar platform with a feather termination. It was recorded as a product of the tertiary stage of reduction. The deposits consisted of a reddish brown silty loam and visibility within the general area was approximately 90%.	 

AHIMS #	Site Name	Comments	Pictures
50-5-0254	Sebastopol Solar IF 7	This site consisted of a single artefact adjacent to the fence line in a cleared ploughed paddock. The artefact was a quartz flake with the dimensions 20 (l) x 20 (w) x 6 (t). The flake had a broad flake scar platform with a feather termination. It was recorded as a product of the tertiary stage of reduction. The deposits consisted of a reddish brown silty loam and visibility within the general area was approximately 90%.	 
50-5-0255	Sebastopol Solar IF 8	This site consisted of a single artefact adjacent to the fence line near a water trough in a cleared ploughed paddock. The artefact was a quartz flake with the dimensions 26 (l) x 29 (w) x 10 (t). The flake had a broad flake scar platform with a feather termination. It was recorded as a product of the tertiary stage of reduction. The deposits consisted of a reddish brown silty loam and visibility within the general area was approximately 90%.	 

AHIMS #	Site Name	Comments	Pictures
50-5-0256	Sebastopol Solar IF 9	This site consisted of a single artefact adjacent to the fence line in a cleared ploughed paddock. The artefact was a quartz flake with the dimensions 12(l) x 11 (w) x 2 (t). The flake had a broad flake scar platform with a feather termination. It was recorded as a product of the tertiary stage of reduction. The deposits consisted of a reddish brown silty loam and visibility within the general area was approximately 70%.	 
50-5-0257	Sebastopol Solar IF 10	This site consisted of a possible volcanic hammerstone in a cleared ploughed paddock. The artefact dimensions are 98(l) x 60 (w) x 44 (t). possible pitting was noted on the object. The deposits consisted of a reddish brown silty loam and visibility within the general area was approximately 30%.	 

AHIMS #	Site Name	Comments	Pictures
50-5-0258	Sebastopol Solar IF 11	This site consisted of a single artefact in a cleared ploughed paddock. The artefact was a silcrete flake with the dimensions 47(l) x 38 (w) x 15 (t). The flake had a broad flake scar platform with a feather termination. It was recorded as a product of the tertiary stage of reduction. The deposits consisted of a reddish brown silty loam and visibility within the general area was approximately 20%.	 
50-5-0259	Sebastopol Solar IF 12	This site consisted of a single artefact in a cleared ploughed paddock. The artefact was a volcanic flake with the dimensions 38(l) x 41 (w) x 8 (t). The flake had a broad flake scar platform with a feather termination. It was recorded as a product of the tertiary stage of reduction. The deposits consisted of a reddish brown silty loam and visibility within the general area was approximately 20%.	 


AHIMS #	Site Name	Comments	Pictures
50-5-0260	Sebastopol Solar IF 13	This site consisted of a single artefact in a cleared ploughed paddock. The artefact was a quartz flake with the dimensions 46(l) x 26 (w) x 15 (t). The flake had a broad flake scar platform with a feather termination. It was recorded as a product of the secondary stage of reduction with 20% terrestrial cortex. The deposits consisted of a reddish brown silty loam and visibility within the general area was approximately 20%.	 
50-5-0262	Sebastopol Solar IF 14	This site consisted of a single artefact located on a track next to fence line in a cleared ploughed paddock. The artefact was a volcanic flake with the dimensions 24(l) x 38 (w) x 12 (t). The flake had a broad flake scar platform with a feather termination. It was recorded as a product of the tertiary stage of reduction and OHR was noted. The deposits consisted of a reddish brown silty loam and visibility within the general area was approximately 70%.	 




AHIMS #	Site Name	Comments	Pictures
50-5-0261	Sebastopol Solar IF 15	This site consisted of a single artefact located in a cleared ploughed paddock. The artefact was a volcanic flake with the dimensions 37(l) x 42 (w) x 12 (t). The flake was weathered and had a broad flake scar platform with a feather termination. It was recorded as a product of the tertiary stage of reduction. The deposits consisted of a reddish brown silty loam and visibility within the general area was approximately 90%.	 




Sites recorded by Aboriginal representative Mark Saddler




The details of the sites recorded and submitted to AHIMS by the Aboriginal representative Mark Saddler are detailed in Table 6 below and shown in Figure 8. Mark Saddler has provided NGH with a report on his participation in the Sebastopol Solar Farm survey which is provided in full in Appendix C.




Table 6. Artefact and Scarred tree characteristics recorded by Mark Saddler




AHIMS #	Site Name	Artefact Type	Raw Material	Comments	Pictures
50-5-0222	Sebastopol 551708	Possible Modified tree	Eucalyptus	Identified, recorded and submitted to AHIMS by Mark Saddler. Oval shaped possible scar facing west, tree trunk circumference 3.4m, tree height 15-20m, scar 30cm above ground. Scar length 94cm x width 20cm x depth 20cm. Large branch extruding from bottom of scar.	



AHIMS #	Site Name	Artefact Type	Raw Material	Comments	Pictures
50-5-0234	Sebastopol 551143	Possible Modified tree	Eucalyptus	Identified, recorded and submitted to AHIMS by Mark Saddler. Oval shaped possible scar facing west, tree trunk circumference 4m, tree height 15-20m, scar 70cm above ground. Scar length 80cm x width 18cm x depth 20cm. Paddock tree located 5m south of fence line.	
50-5-0240	Sebastopol 550975	Possible Modified tree	Eucalyptus	Identified, recorded and submitted to AHIMS by Mark Saddler. Oval shaped possible scar facing north-east, tree trunk circumference 2.7m tree height 15-20m, scar 1.9m above ground. Scar length 90cm x width 15cm x depth 20cm. Tree located 10m west of access track in stand of trees.	
50-5-0243	Sebastopol 551780	Possible Modified tree	Eucalyptus	Identified, recorded and submitted to AHIMS by Mark Saddler. Oval shaped possible scar facing north, tree trunk circumference 3m tree height 15-20m, scar 0.3m above ground. Scar length 60cm x width 20cm x depth 10cm. Tree located 20m west of fence line.	

AHIMS #	Site Name	Artefact Type	Raw Material	Comments	Pictures
50-5-0242	Sebastopol 551746	Possible Modified tree	Eucalyptus	Identified, recorded and submitted to AHIMS by Mark Saddler. Oval shaped possible scar facing south, tree trunk circumference 3m, tree height 15-20m, scar 0.3m above ground. Scar length 85cm x width 22cm x depth 20cm. Tree located 25m west of fence line.	
50-5-0243	Sebastopol 551564	Possible Modified tree	Eucalyptus	Identified, recorded and submitted to AHIMS by Mark Saddler. Oval shaped possible scar facing north-east, tree height 15-20m, scar 1.5m above ground. Scar length 1.4m x width 0.5m. Large branch protruding out of front of possible scar.	
50-5-0244	Sebastopol 551202	Possible Modified tree	Eucalyptus	Identified, recorded and submitted to AHIMS by Mark Saddler. Oval shaped possible scar facing south-west, tree height 15-20m, scar 0.2m above ground. Scar length 0.4m x width 0.2m x depth 0.2m.	




AHIMS #	Site Name	Artefact Type	Raw Material	Comments	Pictures
50-5-0216	Sebastopol 551502	Flake	Quartz	Identified, recorded and submitted to AHIMS by Mark Saddler.	
50-5-0217	Sebastopol 551444	Flake	Quartz	Identified, recorded and submitted to AHIMS by Mark Saddler.	
50-5-0218	Sebastopol 551365	Flake	Silcrete	Identified, recorded and submitted to AHIMS by Mark Saddler. Dimensions length 40mm x width 38mm x thickness 18mm. Flake scar, board platform, feather termination, secondary stage of reduction. in plough paddock 20m north of fence, 20 percent terrestrial cortex.	

AHIMS #	Site Name	Artefact Type	Raw Material	Comments	Pictures
50-5-0219	Sebastopol 551717	Flake	Quartz	Identified, recorded and submitted to AHIMS by Mark Saddler. Dimensions length 25mm x width 20mm x thickness 6mm. Flake scar, board platform, feather termination, tertiary stage of reduction. On edge of plough paddock.	
50-5-0220	Sebastopol 551448	Flake	Quartz	Identified, recorded and submitted to AHIMS by Mark Saddler. Dimensions less than 30mm. On edge of dam.	
50-5-0221	Sebastopol 551696	Flake	Quartz	Identified, recorded and submitted to AHIMS by Mark Saddler. Dimensions length 22mm x width 32mm x thickness 10mm.	


AHIMS #	Site Name	Artefact Type	Raw Material	Comments	Pictures
50-5-0223	Sebastopol 551329	Manuport	Volcanic	Identified, recorded and submitted to AHIMS by Mark Saddler. Dimensions length 90mm x width 110mm x thickness 64mm. Some possible pitting noted. In flat ploughed paddock	
50-5-0224	Sebastopol 551314	Flake	Quartz	Identified, recorded and submitted to AHIMS by Mark Saddler. Dimensions length 18mm x width 16mm x thickness 3mm. Flake scar broad platform, tertiary stage of reduction, in ploughed paddock.	
50-5-0225	Sebastopol 551335	Flake	Quartz	Identified, recorded and submitted to AHIMS by Mark Saddler. Dimensions length 20mm x width 12mm x thickness 2mm. Flake scar broad platform, feather termination, tertiary stage of reduction, in ploughed paddock.	

AHIMS #	Site Name	Artefact Type	Raw Material	Comments	Pictures
50-5-0226	Sebastopol 551493	Flake	Silcrete	Identified, recorded and submitted to AHIMS by Mark Saddler.	
50-5-0227	Sebastopol 551594	Manuport	Volcanic	Identified, recorded and submitted to AHIMS by Mark Saddler.	
50-5-0228	Sebastopol 551745	Flake	River rock	Identified, recorded and submitted to AHIMS by Mark Saddler. River pebble fragment.	

AHIMS #	Site Name	Artefact Type	Raw Material	Comments	Pictures
50-5-0229	Sebastopol 552070	Flake	Quartz	Identified, recorded and submitted to AHIMS by Mark Saddler.	
50-5-0230	Sebastopol 551912	Flake	Quartz	Identified, recorded and submitted to AHIMS by Mark Saddler. Dimensions length 26mm x width 22mm x thickness 8mm. Flake scar focal platform, feather termination, tertiary stage of reduction, in ploughed paddock.	
50-5-0231	Sebastopol 551634	Flake	Quartz	Identified, recorded and submitted to AHIMS by Mark Saddler.	

AHIMS #	Site Name	Artefact Type	Raw Material	Comments	Pictures
50-5-0232	Sebastopol 552085	Manuport	Volcanic	Identified, recorded and submitted to AHIMS by Mark Saddler. Less than 70mm. Some possible pitting. Located adjoined to fence line in ploughed paddock.	
50-5-0233	Sebastopol 551081	Flake (ground edge axe fragment)	Volcanic	Identified, recorded and submitted to AHIMS by Mark Saddler. Dimensions length 45mm x width 40mm x thickness 7mm. Possible ground edge axe fragment on low slope with 90 percent visibility.	
50-5-0235	Sebastopol 550986	Hammer stone	River pebble	Identified, recorded and submitted to AHIMS by Mark Saddler. Dimensions length 92mm x width 85mm x thickness 50mm. Possible pitting for 40mm x 16mm. Located in ploughed paddock.	

AHIMS #	Site Name	Artefact Type	Raw Material	Comments	Pictures
50-5-0236	Sebastopol 550794	Flake	Unknown	Identified, recorded and submitted to AHIMS by Mark Saddler.	
50-5-0237	Sebastopol 551148	Flake	Quartz	Identified, recorded and submitted to AHIMS by Mark Saddler.	
50-5-0238	Sebastopol 550750	Flake	River Rock	Identified, recorded and submitted to AHIMS by Mark Saddler.	

AHIMS #	Site Name	Artefact Type	Raw Material	Comments	Pictures
50-5-0239	Sebastopol 550933	Flake	Quartz	Identified, recorded and submitted to AHIMS by Mark Saddler. Dimensions length 48mm x width 36mm x thickness 18mm. Flake scar broad platform, feather termination, tertiary stage of reduction, in ploughed paddock on low slope with 50% visibility.	

4.3.3 Consideration of Potential for Subsurface material

Discussions were held in the field with the representatives present to assess the potential for subsurface deposits across the proposal area. Based on the land use history, an appraisal of the landscape, soil, level of disturbance and the results from the field survey it was concluded that there was negligible potential for the presence of intact subsurface deposits with high densities of cultural material within the proposal area. It was determined by the archaeologists and representatives from the Aboriginal community present during the survey that subsurface testing was not warranted.

4.4 DISCUSSION

The predictions based on the modelling for the proposal area were that stone artefacts and scarred trees were the most likely manifestation of Aboriginal occupation of the area. It was noted that there were remnant stands of native trees within the proposal area that were likely to have scarred trees. The topography and landscape features within the proposed Sebastopol Solar Farm proposal area suggested that the area would likely have been part of the Wiradjuri landscape and had a possibility of containing an archaeological signature.

The survey results have confirmed these predictions with seven possible scarred tree and 53 stone artefacts recorded as 37 isolated finds and three artefact scatter occurrences across the proposal area. The sites identified in this assessment are scattered across the proposal area and are representative of the opportunistic use and movement of people through the landscape. The area was likely used intermittently over a period of time for camping, hunting and gathering resources. The sites are most likely representative of the use of country away from major rivers and travelling routes for Wiradjuri people given that the proposal area is approximately 5km west of the wetlands associated with Houlaghans Creeks. Based on this assumption, there is every chance that there are similar stone artefacts and scarred trees across similar landscapes in the Sebastopol area and that these site types, particularly stone artefacts, could be more prevalent in the landscape than previously recorded.

While the sites themselves and the distribution of cultural material across the landscape provide an indication that the area was used more than once, scarred trees and artefacts manufactured from quartz with lesser quantities of silcrete, chert, volcanic and fine grained siliceous artefacts are common for the general region. The presence of possible hammerstones, a ground edge axe fragment, a core, flakes and flaked pieces indicates that tool manufacture may have occurred onsite, although the presence of the ground edge ground axe fragment and hammerstones may imply some completed tools and materials were also brought to the site. The low number of cores (n=1) may be representative of the low discard rate of quality raw materials in the area.

The use of a volcanic material for the manufacture of the edge-grounded axes is common for the region however it should be noted that only one grinding groove site has been recorded to date within the AHIMS search area near the proposal area. The recorded grinding groove site is located 32 km south-east of the proposal site. This suggests that edge-grounded axes in the Sebastopol area may have been shaped and sharpened elsewhere and brought into the local Sebastopol area.

Given the level of clearing within the proposal area the presence of seven possible scarred tree in the assessment area is quite high. Scarred trees provide a tangible link to the past and provide evidence of Aboriginal subsistence activities through the deliberate removal of bark or wood. It is likely that the dominance of scarred trees as a site type in the area is related to the more obtrusive nature of scarred trees compared to stone artefacts. It should also be noted that the results of this investigation have increased the number of scarred trees sites recorded in the local area from 26 to 33.

It should also be noted that the results of this investigation have increased the number of stone artefact sites recorded in the local area from 14 to 54 with an additional 40 artefacts sites recorded during this assessment. There appears to previously be a bias towards more obvious site types in the AHIMS record, with scarred trees previously dominating the sites recorded in the area. This is something we consider anomalous in the typical pattern of site recording in Australia. The implications for this relate to significance assessments and the related appraisal of site representativeness. We would argue that there are likely to be many hundreds of such artefact sites in the local area, and that the previous low number of artefact sites in AHIMS is merely an indication that few surveys have been undertaken in the Sebastopol area and therefore they are yet to be found.

In terms of the current proposal therefore, extrapolating from the results of this survey, it is possible that additional stone artefacts could occur within the proposed development footprint. However, consideration must also be given to the level of disturbance of any such sites. Based on the land use history of the proposal area, and an appraisal of the results from the field survey, there is negligible potential for the presence of intact subsurface deposits with high densities of objects or cultural material within Sebastopol Solar Farm proposal area.

5 CULTURAL HERITAGE VALUES AND STATEMENT OF SIGNIFICANCE

The assessment of the significance of Aboriginal archaeological sites is currently undertaken largely with reference to criteria outlined in the ICOMOS Burra Charter (Marquis-Kyle & Walker 1994). Criteria used for assessment are:

- *Social or Cultural Value*: In the context of an Aboriginal heritage assessment, this value refers to the significance placed on a site or place by the local Aboriginal community – either in a contemporary or traditional setting.
- *Scientific Value*: Scientific value is the term employed to describe the potential of a site or place to answer research questions. In making an assessment of Scientific Value issues such as representativeness, rarity and integrity are addressed. All archaeological places possess a degree of scientific value in that they contribute to understanding the distribution of evidence of past activities of people in the landscape. In the case of flaked stone artefact scatters, larger sites or those with more complex assemblages are more likely to be able to address questions about past economy and technology, giving them greater significance than smaller, less complex sites. Sites with stratified and potentially in situ sub-surface deposits, such as those found within rock shelters or depositional open environments, could address questions about the sequence and timing of past Aboriginal activity, and will be more significant than disturbed or deflated sites. Groups or complexes of sites that can be related to each other spatially or through time are generally of higher value than single sites.
- *Aesthetic Value*: Aesthetic values include those related to sensory perception and are not commonly identified as a principal value contributing to management priorities for Aboriginal archaeological sites, except for art sites.
- *Historic Value*: Historic value refers to a site or place's ability to contribute information on an important historic event, phase or person.
- *Other Values*: The Burra Charter makes allowance for the incorporation of other values into an assessment where such values are not covered by those listed above. Such values might include Educational Value.

All sites or places have some degree of value, but of course, some have more than others. In addition, where a site is deemed to be significant, it may be so on different levels or contexts ranging from local to regional to national, or in very rare cases, international. Further, sites may either be assessed individually, or where they occur in association with other sites the value of the complex should be considered.

Social or cultural value

While the true cultural and social value of Aboriginal sites can only be determined by local Aboriginal people, as a general concept, all sites hold cultural value to the local Aboriginal community. An opportunity to identify cultural and social value was provided to the Aboriginal representatives for this proposal through the fieldwork and draft reporting process.

Feedback about the cultural value of the sites while in the field with representatives was that all sites hold cultural value to the Aboriginal community.

It was also clear that scarred trees were viewed as important and a particular site type that should be avoided by development. Mark Saddler also noted this in the report he provided NGH (see Appendix C).

Scientific (archaeological) value.

The research potential of the sites located during this assessment is considered to be low. While the presence of the sites can be used to assist in the development of site modelling for the local landscape, their scientific value for further research is limited.

While the artefacts themselves are intrinsically interesting in terms of their base technical information their current lack of temporal context and the absence of information about local resources makes further conclusions about land use difficult. Their scientific value for further research is also limited due to the disturbed nature of the landscape and the subsequent movement of objects by clearing and ploughing activities. The ground edge axe fragment is considered of higher value due to the relative rarity of the artefact compared to common flaking material of cores and flakes. Axes are an indicator of a different tool use and activity, being mostly for the removal of wood from trees that could have been used for a variety of purposes such as carrying dishes, shields, spears and shelter as well as extraction of food such as possums and honey from tree hollows. The presence of an edge-ground axe fragment within the assessment area would indicate that woodworking activities occurred in the area which is supported by the high number of possible scarred trees recorded by Mark Saddler.

The only other potential area of research would be to analyse the edge-ground axe fragment identified within the assessment area to see if there are any residues present that could indicate what materials were ground or cut. However, this is likely to be difficult as the items would have been moved around by pastoral and agricultural activity and may have been compromised through contact with agricultural crops and livestock.

The seven possible scarred trees most likely represent the opportunistic use of the landscape, but any further observations are restricted especially given that the scars were unable to be unequivocally determined to be Aboriginal in origin by the NGH archaeologist. They were however recorded by Aboriginal representative Mark Saddler to be Aboriginal in origin and have been subsequently submitted to AHIMS. The fact that the surrounding landscape has been cleared and modified means that as a representative example of this site type the seven possible scarred trees have high value. The seven possible scarred trees are all alive and healthy which enhances the viability of their medium-term survival, therefore the integrity of these sites is also high. While scarred trees are a common site type in the district they are relatively rare within a 5 km radius of the proposal site. The fact that the survival of scarred trees is subject to natural factors such as death and decay and bushfires, as well as man-made threats such as land clearing, their long-term survival prospects are diminished. This leads to the conclusion that the remaining scarred trees in the landscape have high value as examples of an ever-reducing Aboriginal cultural feature. The seven possible scarred trees in the assessment area therefore are assessed overall as having high conservation value even though they were unable to be unequivocally determined to be Aboriginal in origin by NGH archaeologists.

The findings of this project have substantially increased the number of such sites listed in the AHIMS database for the area. In terms of representativeness and rarity however, we would argue that there are likely to be many hundreds of such sites in the local area, the lack of sites in AHIMS is merely an indication that few surveys have been undertaken in the Sebastopol area and therefore they are yet to be found. The nature of Aboriginal occupation in almost any landscape in Australia is that stone artefact sites considerably outnumber any other site type, including scarred trees.

Aesthetic value.

There are no aesthetic values associated with the archaeological site per se, apart from the presence of Aboriginal artefacts and scarred trees in the landscape. The modified and heavily disturbed landscape within the solar farm development area however detracts from this aesthetic setting.

Historic Value

There are no known historic heritage values associated with the subject area or the sites identified.

Other Values

The area may have some educational value (not related to archaeological research) through educational material provided to the public about the Aboriginal occupation and use of the area, although the archaeological material is within private property and there is little for the public to see.

6 PROPOSED ACTIVITY

6.1 HISTORY AND LANDUSE

It has been noted above that historically the solar farm proposal area has been impacted through land use practices, in particular clearing, ploughing and grazing.

The implications for this activity is that the archaeological record has been compromised in terms of the potential for scarred trees to remain outside the areas of remnant vegetation. The implication for stone artefacts is that they may have been damaged or moved but they are likely to be present and remain in the general area they were discarded by Aboriginal people.

Despite these impacts, Aboriginal artefacts and cultural material remain in the area, indicating the presence of past Aboriginal people and providing indications of their use of this landscape.

6.2 PROPOSED DEVELOPMENT ACTIVITY

As noted in section 1.3, the proposal involves the construction of a solar plant with a capacity up to 108MW DC. The power generated will be fed into the National Electricity Market (NEM) via the existing 132kv transmission line that crosses the property that is part of the electricity distribution network that originates at Transgrid's Wagga North Substation.

Disturbances will largely be in the preparation of the ground for the solar farm. Piles would be driven or screwed into the ground to support the solar array's mounting system, which reduces the potential overall level of ground disturbance. Flat plate PV modules would be installed and spread across the site. Each of them would be linked to an inverter and a transformer. Trenches would be dug for the installation of a series of underground cables linking the arrays across the proposal site.

Some internal access tracks would also be required, and typically these would comprise of a compacted layer of gravel laid on stripped bare natural ground.

Some ancillary facilities would also be required including parking facilities, operations and maintenance buildings, battery units and an electrical substation.

Electrical transmission infrastructure will be required to connect the solar arrays and substation to the existing 132 kilovolt (kV) transmission line.

A perimeter fence would be constructed around the solar farm and if required vegetation buffers would possibly be planted in some areas for visual screening.

In total, the construction phase of the proposal is expected to take up to 12 months. The Sebastopol Solar Farm is expected to operate for around 30 years. After the initial operating phase, the proposal would either be decommissioned, removing all above ground infrastructure and returning the site to its existing land capability (12 months), or upgraded with new photo voltaic equipment.

The development activity will therefore involve disturbance of the ground during the construction of the solar farm. Once established however, there would be minimal ongoing disturbance of the ground surface.

The final details and timing of the proposed construction activity have yet to be finalised, but it is anticipated that construction could commence in mid-2019.

6.3 ASSESSMENT OF HARM

As described in this report, 37 isolated finds, seven possible scarred trees and three artefact scatter occurrences were located within the assessment area. Table 7 provides a summary of sites to be impacted and avoided while Table 8 details the degree of harm and the consequence of that harm upon the heritage value of each site resulting from the proposed works. Figure 9 also shows the location of the sites and the proposed development footprint.

There is Aboriginal archaeological material present within the solar farm and the assessment is that there are likely to be other artefacts and cultural material present as well, although in similar low densities. The proposed level of disturbance for the construction of the solar farm could impact the stone artefacts recorded during the field survey and others that may be present within other areas of the development site.

A total of 31 sites with stone artefacts (Sebastopol Solar AFT1, Sebastopol Solar AFT2, Sebastopol Solar AFT3, Sebastopol Solar IF 2, Sebastopol Solar IF 3, Sebastopol Solar IF 5, Sebastopol Solar IF 6, Sebastopol Solar IF 8, Sebastopol Solar IF 9, Sebastopol Solar IF 10, Sebastopol Solar IF 11, Sebastopol Solar IF 12, Sebastopol Solar IF 13, Sebastopol Solar IF 14, Sebastopol Solar IF 15, Sebastopol 551502, Sebastopol 551444, Sebastopol 551696, Sebastopol 551329, Sebastopol 551314, Sebastopol 551335, Sebastopol 551594, Sebastopol 552070, Sebastopol 551912, Sebastopol 551634, Sebastopol 552085, Sebastopol 551081, Sebastopol 550986, Sebastopol 550794, Sebastopol 550750 and Sebastopol 550933) are situated within the area of the proposed solar arrays, tracks and fencing and would be impacted by the proposed development (see Figure 9).`

The impact is likely to be most extensive where earthworks occur such as the installation of cabling and the transmission line poles, which may involve the removal, breakage or displacement of artefacts and cultural material. This is considered a direct impact on the sites and the Aboriginal objects by the development in its present form.

The proposed construction methodology for the project will however result in only small areas of disturbance. The construction of access and maintenance tracks may involve some grading but given the flat nature of the majority of the terrain, this is likely to be minimal. The installation of the solar arrays involves drilling or screwing the piles into the ground and no widespread ground disturbance work such as grading is required to accomplish this.

The assessment of harm overall for the project is therefore assessed as low

Table 7. Summary of sites to be impacted and avoided by the proposed development

Sites impacted	Sites avoided
1. Sebastopol Solar AFT1 (artefact scatter)	1. Sebastopol Solar IF 1 (isolated stone artefact)
2. Sebastopol Solar AFT2 (artefact scatter)	2. Sebastopol Solar IF 4 (isolated stone artefact)
3. Sebastopol Solar AFT3 (artefact scatter)	3. Sebastopol Solar IF 7 (isolated stone artefact)
4. Sebastopol Solar IF 2 (isolated stone artefact)	4. Sebastopol 551365 (isolated stone artefact)
5. Sebastopol Solar IF 3 (isolated stone artefact)	5. Sebastopol 551717 (isolated stone artefact)
6. Sebastopol Solar IF 5 (isolated stone artefact)	6. Sebastopol 551448 (isolated stone artefact)
7. Sebastopol Solar IF 6 (isolated stone artefact)	7. Sebastopol 551493 (isolated stone artefact)
8. Sebastopol Solar IF 8 (isolated stone artefact)	8. Sebastopol 551745 (isolated stone artefact)
9. Sebastopol Solar IF 9 (isolated stone artefact)	9. Sebastopol 551148 (isolated stone artefact)
10. Sebastopol Solar IF 10 (isolated stone artefact)	10. Sebastopol 551708 (possible scarred tree)
11. Sebastopol Solar IF 11 (isolated stone artefact)	11. Sebastopol 551143 (possible scarred tree)
12. Sebastopol Solar IF 12 (isolated stone artefact)	12. Sebastopol 550975 (possible scarred tree)
13. Sebastopol Solar IF 13 (isolated stone artefact)	13. Sebastopol 551780 (possible scarred tree)
14. Sebastopol Solar IF 14 (isolated stone artefact)	14. Sebastopol 551746 (possible scarred tree)
15. Sebastopol Solar IF 15 (isolated stone artefact)	15. Sebastopol 551564 (possible scarred tree)
16. Sebastopol 551502 (isolated stone artefact)	16. Sebastopol 551202 (possible scarred tree)
17. Sebastopol 551444 (isolated stone artefact)	
18. Sebastopol 551696 (isolated stone artefact)	
19. Sebastopol 551329 (isolated stone artefact)	
20. Sebastopol 551314 (isolated stone artefact)	
21. Sebastopol 551335 (isolated stone artefact)	
22. Sebastopol 551594 (isolated stone artefact)	
23. Sebastopol 552070 (isolated stone artefact)	
24. Sebastopol 551912 (isolated stone artefact)	
25. Sebastopol 551634 (isolated stone artefact)	
26. Sebastopol 552085 (isolated stone artefact)	
27. Sebastopol 551081 (isolated stone artefact)	
28. Sebastopol 550986 (isolated stone artefact)	
29. Sebastopol 550794 (isolated stone artefact)	
30. Sebastopol 550750 (isolated stone artefact)	
31. Sebastopol 550933 (isolated stone artefact)	

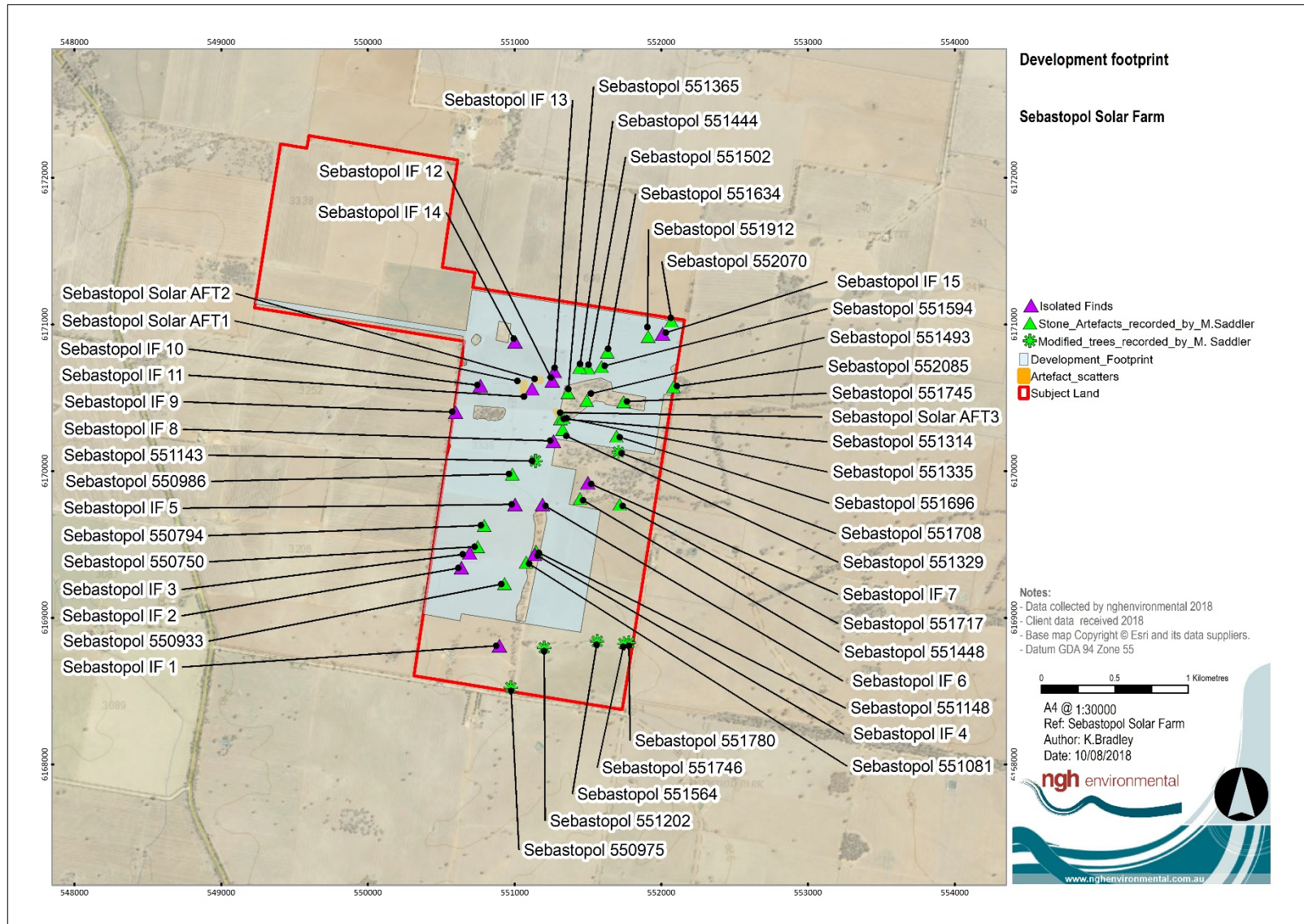


Figure 9. Development footprint.

Table 8. Identified risk to known sites

AHMIS #	Site name	Site Type	Site integrity	Scientific significance	Type of harm	Degree of harm	Consequence of harm	Recommendation
50-5-0245	Sebastopol Solar AFT1	Artefact scatter	Poor – 100+ year history of agricultural and pastoral use	Low	Direct	Total	Total loss of value	Salvage object prior to development of proposal area.
50-5-0246	Sebastopol Solar AFT2	Artefact scatter	Poor – 100+ year history of agricultural and pastoral use	Low	Direct	Total	Total loss of value	Salvage object prior to development of proposal area.
50-5-0247	Sebastopol Solar AFT3	Artefact scatter	Poor – 100+ year history of agricultural and pastoral use	Low	Direct	Total	Total loss of value	Salvage object prior to development of proposal area.
50-5-0248	Sebastopol Solar IF 1	Isolated stone artefact	Poor – 100+ year history of agricultural and pastoral use	Low	Nil- outside of development area	Nil- outside of development area	Nil- outside of development area	N/A- outside of development area. Avoid with a minimum 5 m buffer placed around site.
50-5-0249	Sebastopol Solar IF 2	Isolated stone artefact	Poor – 100+ year history of agricultural and pastoral use	Low	Direct	Total	Total loss of value	Salvage object prior to development of proposal area.
50-5-0250	Sebastopol Solar IF 3	Isolated stone artefact	Poor – 100+ year history of agricultural and pastoral use	Low	Direct	Total	Total loss of value	Salvage object prior to development of proposal area.
50-5-0251	Sebastopol Solar IF 4	Isolated stone artefact	Poor – 100+ year history of agricultural and pastoral use	Low	Nil- outside of development area	Nil- outside of development area	Nil- outside of development area	N/A- outside of development area. Avoid with a minimum 5 m buffer placed around site.
50-5-0253	Sebastopol Solar IF 5	Isolated stone artefact	Poor – 100+ year history of agricultural and pastoral use	Low	Direct	Total	Total loss of value	Salvage object prior to development of proposal area.
50-5-0252	Sebastopol Solar IF 6	Isolated stone artefact	Poor – 100+ year history of agricultural and pastoral use	Low	Direct	Total	Total loss of value	Salvage object prior to development of proposal area.
50-5-0254	Sebastopol Solar IF 7	Isolated stone artefact	Poor – 100+ year history of agricultural and pastoral use	Low	Nil- outside of development area	Nil- outside of development area	Nil- outside of development area	N/A- outside of development area. Avoid with a minimum 5 m buffer placed around site.

AHMIS #	Site name	Site Type	Site integrity	Scientific significance	Type of harm	Degree of harm	Consequence of harm	Recommendation
50-5-0255	Sebastopol Solar IF 8	Isolated stone artefact	Poor – 100+ year history of agricultural and pastoral use	Low	Direct	Total	Total loss of value	Salvage object prior to development of proposal area.
50-5-0256	Sebastopol Solar IF 9	Isolated stone artefact	Poor – 100+ year history of agricultural and pastoral use	Low	Direct	Total	Total loss of value	Salvage object prior to development of proposal area.
50-5-0257	Sebastopol Solar IF 10	Isolated stone artefact	Poor – 100+ year history of agricultural and pastoral use	Low	Direct	Total	Total loss of value	Salvage object prior to development of proposal area.
50-5-0258	Sebastopol Solar IF 11	Isolated stone artefact	Poor – 100+ year history of agricultural and pastoral use	Low	Direct	Total	Total loss of value	Salvage object prior to development of proposal area.
50-5-0259	Sebastopol Solar IF 12	Isolated stone artefact	Poor – 100+ year history of agricultural and pastoral use	Low	Direct	Total	Total loss of value	Salvage object prior to development of proposal area.
50-5-0260	Sebastopol Solar IF 13	Isolated stone artefact	Poor – 100+ year history of agricultural and pastoral use	Low	Direct	Total	Total loss of value	Salvage object prior to development of proposal area.
50-5-0262	Sebastopol Solar IF 14	Isolated stone artefact	Poor – 100+ year history of agricultural and pastoral use	Low	Direct	Total	Total loss of value	Salvage object prior to development of proposal area.
50-5-0261	Sebastopol Solar IF 15	Isolated stone artefact	Poor – 100+ year history of agricultural and pastoral use	Low	Direct	Total	Total loss of value	Salvage object prior to development of proposal area.
50-5-0222	Sebastopol 551708	Possible modified tree	Good- in situ living tree	Low to Moderate	Nil- outside of development area	Nil- outside of development area	Nil- outside of development area	N/A- outside of development area. Avoid with a minimum 10m buffer placed around site.
50-5-0234	Sebastopol 551143	Possible modified tree	Good- in situ living tree	Low to Moderate	Nil- outside of development area	Nil- outside of development area	Nil- outside of development area	N/A- outside of development area. Avoid with a minimum 10m buffer placed around site.

AHMIS #	Site name	Site Type	Site integrity	Scientific significance	Type of harm	Degree of harm	Consequence of harm	Recommendation
50-5-0240	Sebastopol 550975	Possible modified tree	Good- in situ living tree	Low to Moderate	Nil- outside of development area	Nil- outside of development area	Nil- outside of development area	N/A- outside of development area. Avoid with a minimum 10m buffer placed around site.
50-5-0241	Sebastopol 551780	Possible modified tree	Good- in situ living tree	Low to Moderate	Nil- outside of development area	Nil- outside of development area	Nil- outside of development area	N/A- outside of development area. Avoid with a minimum 10m buffer placed around site.
50-5-0242	Sebastopol 551746	Possible modified tree	Good- in situ living tree	Low to Moderate	Nil- outside of development area	Nil- outside of development area	Nil- outside of development area	N/A- outside of development area. Avoid with a minimum 10m buffer placed around site.
50-5-0243	Sebastopol 551564	Possible modified tree	Good- in situ living tree	Low to Moderate	Nil- outside of development area	Nil- outside of development area	Nil- outside of development area	N/A- outside of development area. Avoid with a minimum 10m buffer placed around site.
50-5-0244	Sebastopol 551202	Possible modified tree	Good- in situ living tree	Low to Moderate	Nil- outside of development area	Nil- outside of development area	Nil- outside of development area	N/A- outside of development area. Avoid with a minimum 10m buffer placed around site.
50-5-0216	Sebastopol 551502	Isolated stone artefact	Poor – 100+ year history of agricultural and pastoral use	Low	Direct	Total	Total loss of value	Salvage object prior to development of proposal area.
50-5-0217	Sebastopol 551444	Isolated stone artefact	Poor – 100+ year history of agricultural and pastoral use	Low	Direct	Total	Total loss of value	Salvage object prior to development of proposal area.
50-5-0218	Sebastopol 551365	Isolated stone artefact	Poor – 100+ year history of agricultural and pastoral use	Low	Nil- outside of development area	Nil- outside of development area	Nil- outside of development area	N/A- outside of development area. Avoid with a minimum 5 m buffer placed around site.
50-5-0219	Sebastopol 551717	Isolated stone artefact	Poor – 100+ year history of agricultural and pastoral use	Low	Nil- outside of development area	Nil- outside of development area	Nil- outside of development area	N/A- outside of development area. Avoid with a minimum 5m buffer placed around site.
50-5-0220	Sebastopol 551448	Isolated stone artefact	Poor – 100+ year history of agricultural and pastoral use	Low	Nil- outside of development area	Nil- outside of development area	Nil- outside of development area	N/A- outside of development area. Avoid with a minimum 5 m buffer placed around site.

AHMIS #	Site name	Site Type	Site integrity	Scientific significance	Type of harm	Degree of harm	Consequence of harm	Recommendation
50-5-0221	Sebastopol 551696	Isolated stone artefact	Poor – 100+ year history of agricultural and pastoral use	Low	Direct	Total	Total loss of value	Salvage object prior to development of proposal area.
50-5-0223	Sebastopol 551329	Isolated stone artefact	Poor – 100+ year history of agricultural and pastoral use	Low	Direct	Total	Total loss of value	Salvage object prior to development of proposal area.
50-5-0224	Sebastopol 551314	Isolated stone artefact	Poor – 100+ year history of agricultural and pastoral use	Low	Direct	Total	Total loss of value	Salvage object prior to development of proposal area.
50-5-0225	Sebastopol 551335	Isolated stone artefact	Poor – 100+ year history of agricultural and pastoral use	Low	Direct	Total	Total loss of value	Salvage object prior to development of proposal area.
50-5-0226	Sebastopol 551493	Isolated stone artefact	Poor – 100+ year history of agricultural and pastoral use	Low	Nil- outside of development area	Nil- outside of development area	Nil- outside of development area	N/A- outside of development area. Avoid with a minimum 5 m buffer placed around site.
50-5-0227	Sebastopol 551594	Isolated stone artefact	Poor – 100+ year history of agricultural and pastoral use	Low	Direct	Total	Total loss of value	Salvage object prior to development of proposal area.
50-5-0228	Sebastopol 551745	Isolated stone artefact	Poor – 100+ year history of agricultural and pastoral use	Low	Nil- outside of development area	Nil- outside of development area	Nil- outside of development area	N/A- outside of development area. Avoid with a minimum 5 m buffer placed around site.
50-5-0229	Sebastopol 552070	Isolated stone artefact	Poor – 100+ year history of agricultural and pastoral use	Low	Direct	Total	Total loss of value	Salvage object prior to development of proposal area.
50-5-0230	Sebastopol 551912	Isolated stone artefact	Poor – 100+ year history of agricultural and pastoral use	Low	Direct	Total	Total loss of value	Salvage object prior to development of proposal area.
50-5-0231	Sebastopol 551634	Isolated stone artefact	Poor – 100+ year history of agricultural and pastoral use	Low	Direct	Total	Total loss of value	Salvage object prior to development of proposal area.

AHMIS #	Site name	Site Type	Site integrity	Scientific significance	Type of harm	Degree of harm	Consequence of harm	Recommendation
50-5-0232	Sebastopol 552085	Isolated stone artefact	Poor – 100+ year history of agricultural and pastoral use	Low	Direct	Total	Total loss of value	Salvage object prior to development of proposal area.
50-5-0233	Sebastopol 551081	Isolated stone artefact	Poor – 100+ year history of agricultural and pastoral use	Low to Moderate	Direct	Total	Total loss of value	Salvage object prior to development of proposal area.
50-5-0235	Sebastopol 550986	Isolated stone artefact	Poor – 100+ year history of agricultural and pastoral use	Low	Direct	Total	Total loss of value	Salvage object prior to development of proposal area.
50-5-0236	Sebastopol 550794	Isolated stone artefact	Poor – 100+ year history of agricultural and pastoral use	Low	Direct	Total	Total loss of value	Salvage object prior to development of proposal area.
50-5-0237	Sebastopol 551148	Isolated stone artefact	Poor – 100+ year history of agricultural and pastoral use	Low	Nil- outside of development area	Nil- outside of development area	Nil- outside of development area	N/A- outside of development area. Avoid with a minimum 5 m buffer placed around site.
50-5-0238	Sebastopol 550750	Isolated stone artefact	Poor – 100+ year history of agricultural and pastoral use	Low	Direct	Total	Total loss of value	Salvage object prior to development of proposal area.
50-5-0239	Sebastopol 550933	Isolated stone artefact	Poor – 100+ year history of agricultural and pastoral use	Low	Direct	Total	Total loss of value	Salvage object prior to development of proposal area.

6.4 IMPACTS TO VALUES

The values potentially impacted by the development are any social and cultural values attributed to the artefacts and the sites by the local Aboriginal community. The extent to which the loss of the sites or parts of the sites would impact on the community is only something the Aboriginal community can articulate.

The impact to scientific values for this development are summarised in Section 5 and detailed in Table 8 with the majority of the stone artefact sites rated as having low loss of scientific value.

The stone artefacts have little research value apart from what has already been gained from the information obtained during the present assessment. This information relates more to the presence of the artefacts and in the development of Aboriginal site modelling, which has largely now been realised by the recording.

The intrinsic values of the artefacts themselves may be affected by the development of the proposal area. Any removal of the artefacts, or their breakage would reduce the low scientific value they retain. The impact to the edge-ground axe fragment (AHIMS #50-5-0233/ Sebastopol 551081) is considered to have low to moderate loss of scientific value.

The seven possible scarred tree sites (Sebastopol 551708, Sebastopol 551143, Sebastopol 550975, Sebastopol 551780, Sebastopol 551746, Sebastopol 551564, Sebastopol 551202) will not be impacted by the proposal as per the proposed design in this report. Nine of the stone artefact sites (Sebastopol Solar IF 1, Sebastopol Solar IF 4, Sebastopol Solar IF 7, Sebastopol 551365, Sebastopol 551717, Sebastopol 551448, Sebastopol 551493, Sebastopol 551745 and Sebastopol 551148) will also not be impacted by the proposal.

The proposed development design and the locations of the sites assessed in this report are shown in Figure 9. No other values have been identified that would be affected by the development proposal.

7 AVOIDING OR MITIGATING HARM

7.1 CONSIDERATION OF ESD PRINCIPLES

Consideration of the principles of Ecologically Sustainable Development (ESD) and the use of the precautionary principle was undertaken when assessing the harm to the sites and the potential for mitigating impacts to the sites recorded within the Sebastopol Solar Farm proposal area. The main consideration was the cumulative effect of the proposed impact to the sites and the wider archaeological record. The precautionary principle in relation to Aboriginal heritage implies that development proposals should be carefully evaluated to identify possible impacts and assess the risk of potential consequences.

In broad terms, the archaeological material located during this investigation is similar to what has been found previously within the larger Temora area, comprising of isolated artefacts dominated by quartz lithology and scarred trees. The immediate local area previously had a dominance of scarred trees recorded. However, the identification of an additional 40 sites with one or more stone artefacts during this survey suggest that the dominance of scarred tree in the local area as a site types is the results of a lack of survey and not an accurate representation of the other site types in the area.

While there have been archaeological investigations for other projects in the Temora area currently there is no clear regional synthesis of the nature, number, extent and content for archaeological sites within the Temora LGA. Nevertheless, given the size of the geographical area, it is almost certain that there would be similar site types present within the region. The result of this Aboriginal heritage assessment supports the

proposed model of site location and site distribution, whereby objects and sites could be expected to occur across all landscapes. The results of this Aboriginal heritage assessment suggest that more sites could be expected to occur in the area than was previously envisaged.

The implications for ESD principles is that in fact more sites are likely to be present in the region than previously thought, which reduces the individual value of the particular sites within the proposal site, as they are likely to be represented elsewhere. It must be recognised that large parts of the region have been heavily cleared, farmed and developed through the construction and maintenance of roads and residential structures and therefore other sites are also likely to have been disturbed. The conclusion that similar sites exist reduces the representative values of the sites within the proposal site. It should also be noted that not all sites recorded during this survey fall within the proposed development footprint and that the sites outside the development footprint will not be impacted by the proposed solar farm development.

As noted above, the archaeological values of the sites within the development footprint, considering the scientific, representative and rarity values was deemed to be low given that in terms of representativeness and rarity the previous low number of sites with stone artefacts in AHIMS for the local area was merely an indication that few surveys have been undertaken in the immediate Sebastopol area and therefore they are yet to be found. It is believed therefore that the proposed impacts to the stone artefact sites through the development would not adversely affect the broader archaeological record for the local area or the region.

The principle of inter-generational equity requires the present generation to ensure that the sites and diversity of the archaeological record is maintained or enhanced for the benefit of future generations. We believe that the diversity of the archaeological record is not compromised by development of this solar farm proposal, practically given that all of the possible scarred trees and eight of the stone artefact sites recorded will be avoided by the development.

We estimate, that while the current development proposal will impact the majority of the stone artefact sites identified, the overall cumulative impact on the archaeological record for the region is likely to be minimal, assuming a similar density of sites remain across the wider region. Therefore, it is argued that the cumulative impacts of the proposal are not enough to reject outright the development proposal.

7.2 CONSIDERATION OF HARM

Avoiding harm to the 37 isolated finds, seven possible scarred trees and three artefact scatter sites identified within the proposed Sebastopol Solar Farm proposal area is technically possible through avoidance. However, the scattered nature of the stone artefact sites across the area would pose serious design constraints on the solar farm proposal. Where possible the design has already been altered to avoid remnant vegetation and the seven possible scarred tree sites.

Based on the assessment of the sites and in consideration of discussions with the Aboriginal representatives during the field survey, it is not considered necessary to prevent all development at the solar farm location, or for total avoidance of the stone artefact sites identified within the solar farm area. The stone artefact sites have been shown to be in highly disturbed contexts with little remaining scientific value. Aboriginal cultural value has been determined by the local Aboriginal community to be generally low enough to not prevent the development proposal proceeding.

A total of 31 sites with stone artefacts (Sebastopol Solar AFT1, Sebastopol Solar AFT2, Sebastopol Solar AFT3, Sebastopol Solar IF 2, Sebastopol Solar IF 3, Sebastopol Solar IF 5, Sebastopol Solar IF 6, Sebastopol Solar IF 8, Sebastopol Solar IF 9, Sebastopol Solar IF 10, Sebastopol Solar IF 11, Sebastopol Solar IF 12, Sebastopol Solar IF 13, Sebastopol Solar IF 14, Sebastopol Solar IF 15, Sebastopol 551502, Sebastopol

551444, Sebastopol 551696, Sebastopol 551329, Sebastopol 551314, Sebastopol 551335, Sebastopol 551594, Sebastopol 552070, Sebastopol 551912, Sebastopol 551634, Sebastopol 552085, Sebastopol 551081, Sebastopol 550986, Sebastopol 550794, Sebastopol 550750 and Sebastopol 550933) are situated within the area of the proposed solar arrays, tracks and fencing. The most likely cause of harm to these sites with stone artefacts will therefore be through ground preparation such as vegetation clearance, installation of the posts and solar arrays.

The question remains about possible occurrence of artefacts and cultural material within the balance of the solar farm site. It is possible and considered likely that additional artefacts will be present. Without knowing their exact locations, it is difficult to manage the impacts. We do not consider that the risk of such disturbances means the development should be abandoned. The archaeological material identified in the survey, and potentially present in the balance of the development site is not of sufficient value to reject the development proposal.

Mitigation of harm to cultural heritage sites generally involves some level of detailed recording to preserve the information contained within the site. Mitigation can be in the form of minimising harm, through slight changes in the development plan or through direct management measures of the sites and Aboriginal objects.

Given the avoidance of the seven possible scarred trees (Sebastopol 551708, Sebastopol 551143, Sebastopol 550975, Sebastopol 551780, Sebastopol 551746, Sebastopol 551564, Sebastopol 551202) a site type deemed to have high significance to the Aboriginal community, and nine of the stone artefact sites (Sebastopol Solar IF 1, Sebastopol Solar IF 4, Sebastopol Solar IF 7, Sebastopol 551365, Sebastopol 551717, Sebastopol 551448, Sebastopol 551493, Sebastopol 551745 and Sebastopol 551148) it is argued here that mitigation in the form of alteration is not feasible or warranted within the remainder of the solar farm area in this situation. However, the stone artefact sites within the development footprint that will be impacted by the proposed works are conducive to salvage as a mitigation strategy as requested by the Aboriginal representatives during the field survey.

As identified above, it is recommended that the sites recorded within the proposed Sebastopol Solar Farm development footprint are salvaged by an archaeologist with representatives of the registered Aboriginal parties prior to the proposed development commencing. The artefacts should be collected and moved to a safe area within the property that will not be subject to any ground disturbance.

The Aboriginal community representatives onsite during the field survey noted their preference for the surface artefacts to be relocated and buried outside the development footprint prior to development commencing. The Aboriginal community representatives onsite during the field survey also requested that a Cultural Smoking Ceremony take place to cleanse any artefacts salvaged and the reburial location.

8 LEGISLATIVE CONTEXT

Aboriginal heritage is primarily protected under the NPW Act and as subsequently amended in 2010 with the introduction of the *National Parks and Wildlife Amendment (Aboriginal Objects and Places) Regulation 2010*. The aim of the NPW Act includes:

The conservation of objects, places or features (including biological diversity) of cultural value within the landscape, including but not limited to: places, objects and features of significance to Aboriginal people.

An Aboriginal object is defined as:

Any deposit, object or material evidence (not being a handicraft made for sale) relating to the Aboriginal habitation of the area that comprises New South Wales, being habitation before or concurrent with the occupation of that area by persons on non-Aboriginal extraction and includes Aboriginal remains.

Part 6 of the NPW Act concerns Aboriginal objects and places and various sections describe the offences, defences and requirements to harm an Aboriginal object or place. The main offences under section 86 of the NPW Act are:

- A person must not harm or desecrate an object that the person knows is an Aboriginal object.
- A person must not harm an Aboriginal object.
- For the purposes of this section, "circumstances of aggravation" are:
 - that the offence was committed in the course of carrying out a commercial activity, or
 - that the offence was the second or subsequent occasion on which the offender was convicted of an offence under this section.
- A person must not harm or desecrate an Aboriginal place.

Under section 87 of the NPW Act, there are specified defences to prosecution including authorisation through an Aboriginal Heritage Impact Permit (AHIP) or through exercising due diligence or compliance through the regulation.

Section 89A of the Act also requires that a person who is aware of an Aboriginal object, must notify the Director-General in a prescribed manner. In effect this section requires the completion of OEH AHIMS site cards for all sites located during heritage surveys.

Section 90 of the NPW Act deal with the issuing of an AHIP, including that the permit may be subject to certain conditions.

The EP&A Act is legislation for the management of development in NSW. It sets up a planning structure that requires developers (individuals or companies) to consider the environmental impacts of new projects. Under this Act, cultural heritage is considered to be a part of the environment. This Act requires that Aboriginal cultural heritage and the possible impacts to Aboriginal heritage that development may have are formally considered in land-use planning and development approval processes.

Proposals classified as State Significant Development that are authorised by a development consent do not require an AHIP under section 90 of the NPW Act (refer to Division 4.7 Section 4.41 of the *Environmental Planning and Assessment Act 1979*). However, the Department of Planning and Environment is required to ensure that Aboriginal heritage is considered in the environmental impact assessment process. The Department of Planning and Environment will consult with other departments, including OEH prior to development consent being approved.

The Sebastopol Solar Farm proposal is a State Significant Development and will therefore be assessed via this pathway, which does not negate the need to carry out an appropriate level of Aboriginal heritage assessment or the need to conduct Aboriginal consultation in line with the requirements outlined by the OEH *Aboriginal cultural heritage consultation requirements for proponents 2010* (OEH 2010b).

9 RECOMMENDATIONS

The recommendations are based on the following information and considerations:

- Results of the archaeological survey;
- Consideration of results from other local archaeological studies;
- Results of consultation with the registered Aboriginal parties;
- The assessed significance of the sites;
- Appraisal of the proposed development, and
- Legislative context for the development proposal.

It is recommended that:

1. The development must avoid the seven possible Scarred Trees (Sebastopol 551708, Sebastopol 551143, Sebastopol 550975, Sebastopol 551780, Sebastopol 551746, Sebastopol 551564, Sebastopol 551202). A minimum 10m buffer around each tree should be in place to protect the trees canopy and root system.
2. If complete avoidance of the 37 isolated find sites and three artefact scatters recorded within the proposal area is not possible, the artefacts within the development footprint must be salvaged prior to the proposed work commencing and moved to a safe area within the property that will not be subject to any ground disturbance.
3. The collection and relocation of the artefacts should be undertaken by an archaeologist with representatives of the registered Aboriginal parties and be consistent with Requirement 26 of the *Code of practice for Archaeological Investigation of Aboriginal Objects in New South Wales*. The salvage of Aboriginal objects can only occur following development consent that is issued for State Significant Developments and must occur prior to works commencing. A new site card/s will need to be completed once the artefacts are moved to record their new location on the AHIMS database. An Aboriginal Site Impact Recording Form must be completed and submitted to AHIMS following harm for each site collected or destroyed from salvage and/or construction works.
4. A minimum 5m buffer should be observed around all artefact scatters and isolated find sites that cannot be avoided, including those outside the development footprint.
5. Ib vogt GmbH should prepare a Cultural Heritage Management Plan (CHMP) to address the potential for finding additional Aboriginal artefacts during the construction of the Solar Farm and management of known sites and artefacts. The Plan should include the unexpected finds procedure to deal with construction activity. Preparation of the CHMP should be undertaken in consultation with the registered Aboriginal parties.
6. In the unlikely event that human remains are discovered during the construction, all work must cease in the immediate vicinity. OEH, the local police and the registered Aboriginal parties should be notified. Further assessment would be undertaken to determine if the remains were Aboriginal or non-Aboriginal.
7. Further archaeological assessment would be required if the proposal activity extends beyond the area assessed as detailed in this report. This would include consultation with the registered Aboriginal parties and may include further field survey.

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APPENDIX A ABORIGINAL COMMUNITY CONSULTATION

Consultation Log for the Sebastopol Solar Farm.

Organisation	Contact	Action	Date Sent	Reply date	Replied by	Response
OEH	John Gilding	Sent via email	28/1/2018			
NTScorp		Sent via email	28/1/2018			
National Native Title Tribunal		Searched register	28/1/2018			No native title exists
Office of Registrar <i>Aboriginal Land Rights Act</i>		Sent via email	28/1/2018	2/06/2018	email	They have searched the Register of Aboriginal Owners and the project area described does not have Registered Aboriginal Owners pursuant to Division 3 of the Aboriginal Land Rights Act 1983. Contact the Young LALC
Riverina Local land services		Sent via email	28/1/2018			
Temora Shire Council		Sent via email	28/1/2018	2/02/2018	email	Recommended to contact the Young LALC and Mr Bill Speirs
Wagga Wagga LALC		Sent via email	28/1/2018			
Young LALC		Sent via email	28/1/2018	12/02/2018	phone	Enid called NGH to register LALC and several individuals - suggested Norma Freeman would call to register. All individuals operate under the LALC but are also independent RAPs.
	Enid Clarke			12/02/2018	registered via phone	
	Alona Apps			12/02/2018	Registered by Enid	Request that methodology etc sent by mail
	Krystal Ingram			12/02/2018	Registered by Enid	Request that methodology etc sent by mail
	Norma Freeman			22/02/2018	Registered by Norma	
	Jirrah Freeman			22/02/2018	Registered by Norma	Request that methodology etc sent by mail
	Jahnayah (Nayah) Freeman			22/02/2018	Registered by Norma	Request that methodology etc sent by mail
	Keith Freeman			22/02/2018	Registered by Norma	Request that methodology etc sent by mail
	Marnie Freeman			22/02/2018	Registered by Norma	Request that methodology etc sent by mail
Bill Speirs		Sent via email	28/1/2018			
Bundyi Aboriginal Cultural Knowledge	Mark saddler	responded to newspaper ad	6/02/2018			Registered for project

Organisation	Contact	Action	Date Sent	Reply date	Replied by	Response
Warrabinya Cultural Heritage and Assessment Group		responded to newspaper ad		7/02/2018	email	Registered for project
Local Newspaper						
The Wagga Wagga Daily Advertiser		Advertised 02/2/2018	2/02/2018			
Temora Independent		Advertised 02/2/2018	2/02/2018			
OEH list of potential stakeholders						
Wagga Wagga LALC	already written to					
Young LALC	already written to					
Narrandera LALC	not relevant to project area					
Notification to OEH of RAPs						
OEH		by email	19/03/2018			<p>Please note for your records the registered Aboriginal Parties for the proposed Sebastopol Solar Farm are:</p> <ul style="list-style-type: none"> • Warrabinya Cultural Heritage and Assessment Group • Bundyi Aboriginal Cultural Knowledge • Young Local Aboriginal Land Council • Enid Clarke • Alona Apps • Krystal Ingram • Norma Freeman • Jirrah Freeman • Jahnayah (Nayah) Freeman • Keith Freeman • Marnie Freeman

Organisation	Contact	Action	Date Sent	Reply date	Replied by	Response
						Please note that while the project area is within the Wagga Wagga LALC boundary they have yet to register for the project. A methodology has been sent to the Wagga LALC.
Methodology						comments due 16th April 2018
Warrabinya Cultural Heritage and Assessment Group	Edward Whyman	By Email	19/03/2018			
Bundyi Aboriginal Cultural Knowledge	Mark Saddler	By Email	19/03/2018	9/04/2018	via email	mark commented "All looks to be ok". Mark provided insurances
Young Local Aboriginal Land Council	Norma Freeman	By Email	19/03/2018	11/04/2018	via email	provided rates and insurances, no comments on methodology provided. Noted that these are the details for Keith Freeman, Norma Freeman, Marnie Freeman, Jirrah Freeman & Jahnayah Freeman.
	Enid Clarke	By post and email	19/03/2018	5/04/2018	via email	supplied rates and insurances
	Alona Apps	By post	19/03/2018	5/04/2018	via email from Enid	Enid supplied rates and insurances
	Krystal Ingram	By post	19/03/2018			
	Norma Freeman	By Email	19/03/2018			Young LALC responded for individual
	Jirrah Freeman	By post	19/03/2018			Young LALC responded for individual
	Jahnayah (Nayah) Freeman	By post	19/03/2018			Young LALC responded for individual
	Keith Freeman	By post	19/03/2018			Young LALC responded for individual
	Marnie Freeman	By post	19/03/2018			Young LALC responded for individual
Wagga Wagga LALC	Lorraine Lyons	By Email	19/03/2018			

Organisation	Contact	Action	Date Sent	Reply date	Replied by	Response
Reminder emails re methodology comments due 16 April						
Warrabinya Cultural Heritage and Assessment Group		by email	9/04/2018			
Bundyi Aboriginal Cultural Knowledge		by email	9/04/2018	9/04/2018	via email	Mark commented "All looks to be ok". Mark provided insurances. Kb sent follow up email re rates.
Young Local Aboriginal Land Council		by email	9/04/2018	11/04/2018	via email	provided rates and insurances, no comments on methodology provided. Noted that these are the details for Keith Freeman, Norma Freeman, Marnie Freeman, Jirrah Freeman & Jahnayah Freeman.
Wagga Wagga LALC		by email	9/04/2018			
Bundyi Aboriginal Cultural Knowledge		Via email	11/04/2018			Supplied rates
Post fieldwork						
Bundyi Aboriginal Cultural Knowledge		Via email	23/05/2018			Mark supplied his report on the fieldwork to NGH
Draft report						
Warrabinya Cultural Heritage and Assessment Group	Edward Whyman	NGH sent draft report via email	15/08/2018			
Bundyi Aboriginal Cultural Knowledge	Mark Saddler	NGH sent draft report via email	15/08/2018	15/08/2018	Mark responded via email	All looks Ok expect my Bundyi Aboriginal Cultural Knowledge is written as BAC not BACK
Young Local Aboriginal Land Council		NGH sent draft report via email	15/08/2018			

Organisation	Contact	Action	Date Sent	Reply date	Replied by	Response
Young Local Aboriginal Land Council	Enid Clarke	NGH sent draft report via email	15/08/2018	19/09/2018	via email	I do not have any comment as I think that the project was done in a satisfactory way. The artefacts that were found are very precious. A job well done Thank you ,Enid Clarke also for Krystal Ingram and Alona Apps
Young Local Aboriginal Land Council	Alona Apps	NGH sent draft report via post	15/08/2018	19/09/2018	via email	as per email from Enid
Young Local Aboriginal Land Council	Krystal Ingram	Young LALC to provide members as indicated in email	15/08/2018	19/09/2018	via email	as per email from Enid
Young Local Aboriginal Land Council	Norma Freeman	NGH send draft report via post	15/08/2018			
Young Local Aboriginal Land Council	Jirrah Freeman	Young LALC to provide members as indicated in email	15/08/2018			
Young Local Aboriginal Land Council	Jahnayah (Nayah) Freeman	Young LALC to provide members as indicated in email	15/08/2018			
Young Local Aboriginal Land Council	Keith Freeman	Young LALC to provide members as indicated in email	15/08/2018			
Young Local Aboriginal Land Council	Marnie Freeman	Young LALC to provide members as indicated in email	15/08/2018			

Organisation	Contact	Action	Date Sent	Reply date	Replied by	Response
Wagga Wagga LALC	Lorraine Lyons	NGH sent draft report via email	15/08/2018			
Reminder re comments due						
Wagga Wagga LALC	Lorraine Lyons	NGH sent reminder via email	14/09/2018			
Young Local Aboriginal Land Council	Enid Clarke	NGH sent reminder via email	14/09/2018	19/09/2018	Enid replied via email	see above for comments
Young Local Aboriginal Land Council		NGH sent reminder via email	14/09/2018			
Warrabinya Cultural Heritage and Assessment Group	Edward Whyman	NGH sent reminder via email	14/09/2018			
Reminder re comments lapsed						
Wagga Wagga LALC	Lorraine Lyons	NGH sent reminder via email	21/09/2018			
Young Local Aboriginal Land Council	Norma Freeman	NGH sent reminder via email	21/09/2018			
Warrabinya Cultural Heritage and Assessment Group	Edward Whyman	NGH sent reminder via email	21/09/2018			

Public Notice placed in the Temora Independent on 2nd of February 2018.



P 6977 1077 F 6977 2707 E advertising@temoraindependent.com.au
Deadlines: Monday 10am (Tuesday's Paper), Thursday 10am (Friday's Paper)

DEATH/FUNERAL NOTICES

HINDE, Stuart Ian on 30th January 2018.
Late of Holbrook Street, Temora. Loving father and father in law of Elizabeth & Robin and Lucy & Kyla. Much loved grandfather of Wren. Loved son of Col & Heather (deceased) Hinde and brother of Meredith, Janette, Liz and Andrew. Aged 62 years.
At Peace
Relatives and friends of Stuart are respectfully informed that a service celebrating his life will be held at the Temora Bowling Club commencing at 11.00am on Saturday, 3rd February 2018 followed by private cremation.
TEMORA & DISTRICT FUNERAL SERVICE
Accredited Member of F.D.A. of NSW
306 Hoskins Street, Temora. 2696
02 6977 1332 / 0428 848 543

IN MEMORIAM

PERRY, Eric Richard - 4.2.2016
Always in our hearts
Missed everyday.
Love
Wendy, Daniel & Kirby, Ryan & Martin, Renee & Simon, Dean & Lisa, Adrian and all the grandchildren.

THANK YOU

Thank You

To all my friends, neighbours and associates who helped me celebrate my 90th Birthday. Your kindness and best wishes made my day one to remember.
George Elliot

RETURN THANKS

Return Thanks
The family of the late Vic Macauley

Would like to thank everyone for their care and support shown to us in so many ways at the time of our sad loss. It was all very much appreciated. Please accept this as our personal thanks.
Lynette and family

MEETINGS

Temora Ex-Services Fishing Club
GENERAL MEETING
Wednesday, February 7, 7.30pm
at the Club
All welcome



Temora Schoolboys Rugby League Inc.

ANNUAL GENERAL MEETING
Monday, February 5, 7.30pm
at Terminus Hotel
All welcome.

Open Minds Brighter Future
Support Group
MONTHLY MEETING
Wednesday, February 7, 2018
5.30pm, Salvation Army Hall
Supportive group raising awareness for mental health in our region.
All Welcome.
For further information Phone 6977 4263

MEETINGS

Temora Tennis Association

2018 ANNUAL GENERAL MEETING
Thursday, February 15, 8pm
at Club house
Everyone welcome to attend.



TEMORA SHIRE COUNCIL

NOTICE OF COMMITTEE MEETING

Date: Tuesday, February 6, 2018
10:00am Youth Committee
12:00pm Promotions & Visitation Committee
2:00pm Assets & Operations Committee
4:30pm Economic Development Committee
6:00pm Aerodrome Users Committee

Place of Meetings: Council Chambers, 105 Loftus Street, Temora

The meetings are open to the public an opportunity will be afforded at the commencement of the meeting.

PUBLIC NOTICES

Temora Catholic Debutante Ball
Friday, April 20, 2018
All intending Debutantes please contact
Liz Grant on 0428 737 537
by February 9.

Meet a Greyhound

- Always wanted to know more about greyhound dogs
- Come along to a race meeting and get the chance
- Watch a greyhound race and get to pat the dog after the race
- Ask questions about the dogs.

Temora Golf Club

Friday Night Meals
from 6.30pm
Family Friendly Menu
FREE Assorted Desserts

Sunday - Scott Fuller Shield at Tumut
Thursday - Vets Golf 12pm.

The Club House Phone 6978 0160



TEMORA SHIRE COUNCIL

NOTIFICATION OF EXHIBITION OF DRAFT CEMETERIES POLICY

The public exhibition of the Temora Shire Council Draft Cemeteries Policy will occur between 22nd January 2018 and 20th February 2018.
The Draft Guidelines are available for inspection at:
- Temora Shire Council office between 8:00am to 4:30pm (Monday to Friday)
- Councils website: www.temora.nsw.gov.au
Written submissions on the Draft policy must be addressed to the General Manager, Temora Shire Council, PO Box 262, Temora 2696 or email secretary@temora.nsw.gov.au and received by 4:00pm on Thursday 20th February, 2018.
GC Lavelle
GENERAL MANAGER

PUBLIC NOTICES



NSW RURAL FIRE SERVICE

TRAINING ACTIVITY

Bland Temora Zone - NSW Rural Fire Service

A training day for NSW Rural Fire Service volunteers has been scheduled for **First Aid** on Saturday 3rd February 2018. These are 1 day courses.
Location: 3rd Feb at Aftah Park Brigade Shed

What's happening: This is a nationally certified course that covers first aid - topics include CPR, bleeding control, snake bite management, using RFS AED.

Course times: Day commences at 09:00hrs - conclude around 16:00hrs

Accommodation: N/A

Meals: Will be provided at the course venue

Clothing: Neat and casual - there will be some activities that require lying on the floor.

Equipment: All equipment and resources will be provided at the course

Assessment: The assessment process will be explained during the activities.

Course contact: Bill Britt 02 6977 4737 or 0427 000 977 or e-mail: bill.britt@rfs.nsw.gov.au

Yours faithfully,
Supt. Steve Holden
Manager Bland Temora Zone
NSW Rural Fire Service

Notification for registration of interest for Aboriginal stakeholders

NGH Environmental has been contracted by its vlogt GmbH (b vlogt) to undertake an Aboriginal Cultural Heritage Assessment (ACHA) for a proposed solar farm that will be identified as Sebastopol Solar Farm. The proposed location for the Sebastopol Solar Farm is approximately 17 km south of Temora in the Temora Shire Local Government Area (LGA).

The assessment area for the proposed solar farm comprises of Lot 1/ DP 133994 and Lots 4, 18, 62, 88, 90, 91 and 92/ DP 751424. The proposed development footprint comprises of Lot 1/ DP 133994 and Lots 90, 91 and 92/ DP 751424 with parts of Lot 62 and 88/ DP 751424 for connection to existing transmission lines and Lot 4 and 18/ DP 751424 for property access.

The proponent (b vlogt, Level 35, 1 International Tower, 100 Barangaroo Avenue, Sydney NSW 2000) is proposing to construct a utility scale solar farm including panels, electrical conduits, transformers, internal access tracks, a site office and perimeter fencing.

The purpose of this consultation, particularly with Aboriginal people, is to assist the proponent in the preparation of an ACHA for the proposal site and to be involved in consultation as part of the lodgement of a State Significant Development application.

In order to fulfil the requirements set out in the OEH Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010, NGH Environmental is seeking interested Aboriginal parties who hold cultural knowledge of the assessment areas to register their interest in the consultation process for the projects and to assist in the determination of cultural significance of any Aboriginal objects or places located within the proposed Sebastopol Solar Farm area.

Registrations should be provided in writing to:
NGH Environmental Pty Ltd
PO Box 62
Fyshwick ACT 2609

Or Via Email to:
nghe@nghenvironmental.com.au

All correspondence must be received by COB 16th February 2018.

Those registering an interest will be contacted to discuss the project further. Those who do register are advised that their details will be provided to OEH and the Local Aboriginal Land Council, unless they specifically advise in writing that their details are not to be forwarded.

PUBLIC NOTICES

Temora Arts and Craft Group
Open Day, Friday, February 2
3pm to 5pm at Army Huts
Crowley Street
A great display of craft
FREE ENTRY



Australian Boating College

Southern NSW
GET YOUR BOAT OR JETSKI LICENCE

Temora, Thursday, February 15 - 6.30pm
BOOKINGS ESSENTIAL
Phone 1300 889 321 - Mob: 0434 705 327
admin@abcoffice.com
www.abcoffice.com
"It's as Easy as ABC"



TEMORA SHIRE COUNCIL

BUILDING APPROVALS - January 2018

ENVIRONMENTAL PLANNING & ASSESSMENT ACT, 1979

In accordance with the provisions of Section 101 of the Act, and Section 124 of the Regulations, notification is given that the unmentioned developments have recently been granted consent.

DEVELOPMENT CONSENTS ISSUED

- CC 87/2016 - Lot 7 & 8; DP 758957; Section 13; 113/115 Baker Street, Temora - Seven (7) X Two (2) Bedroom Brick Veneer Dwellings
- CC 76/2016 - Lot 3; DP 1079625; 9-11 Timmins Street, Temora - Seventy Two (72) Placement Child Care Centre
- SUB 87/2017 - Lot 48; DP 750628; 122 Coddingtons Lane, Temora - Rural Subdivision
- DA/CC 92/2017 - Lot 1; DP 6207; Section D; 4 Lawson Road, Temora - Steel Framed Residential Shed/Garage
- DA/CC 94/2017 - Lot 122; DP 750862; 89 Pitt Street, Arrah Park - Dwelling
- DA/CC 95/2017 - Lot 30; DP 1073421; 11 Evely Street, Temora - Dwelling
- DA/CC 96/2017 - Lot 5; DP 758957; Section 28; 110 Camp Street, Temora - Dwelling
- DA/CC 97/2017 - Lot 6; DP 1037893; 11 Rosella Street, Temora - Dwelling
- DA/CC 1/2018 - Lot 13; DP 758957; Section 18; 154 Baker Street, Temora - Carport Extension to Existing Steel Framed Shed/Garage
- SUB 2/2018 - Lot 2; DP 1165762; 7795 Milvale Road, Temora - Subdivision
- DA/CC 3/2018 - Lot 114; DP 750587; 2 Leary Place, Temora - Steel Framed Shed/Garage (Residential Storage Only)
- DA/CC 4/2018 - Lot 3; DP 758957; Section 30; 125 Vesper Street, Temora - Dwelling Additions & Alterations
- DA/FS 5/2018 - Lot 1; DP 26829; 171 Baker Street, Temora - Homes Based Business

COMPLYING DEVELOPMENT ISSUED

- CDC 1/2018 - Lot 5; DP 758957; Section 27; 131 Twynham Street, Temora - Dwelling House Alterations & Additions (Rear Awning)
- CDC 2/2018 - Lot 1; DP 6207; Section D; 4 Lawson Road, Temora - Relocation of Existing Steel Framed Shed/Garage (Residential)
- CDC 3/2018 - Lot 2; DP 322398; 174 Britannia Street, Temora - Dwelling House Additions (Rear Skillion Roof)
- CDC 4/2018 - Lot 8; DP 13604; 29 Coolamon Street, Arrah Park - Steel Framed Shed/Garage (Residential Storage Only)
- CDC 5/2018 - Lot 8; DP 769957; Section 26; 195 Camp Street, Temora - Rear Verandah Incorporating a Carport
- CDC 6/2018 - Lot 1; DP 1033595; 635 Quindary Road, Quindary - Rural Fire Shed (Quindary)
- CDC 7/2018 - Lot 14; DP 801407; 85 Bantondale Road, Temora - Steel Framed Shed/Garage (Residential Storage Only)

Temora Independent, Friday, February 2, 2018 15

Public Notice placed in the Wagga Daily Advertiser on 2nd of February 2018.

dailyadvertiser.com.au
Friday, February 2, 2018 THE DAILY ADVERTISER 37

Connect with Classifieds

Phone: 1300 656 562
Email: riverinaclassifieds@fairfaxmedia.com.au

The Daily Advertiser

Connect with Classifieds

Place a Classifieds ad

- 1300 656 562
- riverinaclassifieds@fairfaxmedia.com.au
- Save time, submit online 24/7
- advertisers.com.au

Print and online packages available throughout Australia

Ongoing business advertising self service enquiries: acmadonline@fairfaxmedia.com.au

Emoji now available 😊

For Sale

SALE

All items under \$20
NOW \$2

ITEMS \$20 +
NOW 1/2 price

Kids Clothing \$1

WWEH Op Shop,
24A Fitzmaurice St
Wed 2/1 to Mon 5/2

Motorcycles & Scooters

COOLAMON

Lifestyle Blocks

2000 sq mtrs (1/2 acre)

Close to Shops

\$79,000 - \$99,000

bellevuehillproperty.com.au

Call Pete 0429 641324

Land for Sale

Positions Vacant

FABRICATOR

Full time based in Tumut.

Knowledge of measuring, cutting, assembly and installation of different types of windows & doors is desirable.

Essential current drivers licence, valid white card, some heavy lifting & positive work attitude.

Genuine applicants only.

Please email CV to crawford@westnot.com.au or post PO Box 223 Tumut NSW 2720

Positions Vacant

Aged Care - Casual Supervisor Afternoon Shift

Setters Apartments are seeking care staff to be our afternoon shift supervisor.

Friday/Saturday/Sunday afternoons.

Extra hours can also be negotiated.

Qualifications & Experience:

- Min Cert 3 or 4 in aged care.
- Current First Aid Certificate

Duties: Overseeing staff and assisting where needed.

We need someone who has a professional attitude and excellent leadership and communication skills.

Police checks will be conducted for successful applicants.

All applications emailed to: manager@settlersvillage.com.au

Adult Services

MYLIE Minx

42 yo Sensual Sexy Blonde

Fantasies catered for Wagga and surrounds

Ph 0419 091 681

Out calls only

Gina, Lala

NEW

20 - 25 yo, Size 6 & 7

Handed

Pretty, Hot body, Gorgeous, Friendly

Top Service

In/out calls

6931 8118

Funeral Directors

DELANEY

Stacey Veronica

9/4/1978 - 2/2/2012

"Thoughts today, memories forever."

Love, Claude, Millie, Chicks & Smith family.

Royce ANGEL

24/4/33 - 2/2/16

Sweet is the sleep that ends all pain

We would not wake you to suffer again

The tears in your eyes we can wipe away

But love and caring will always stay.

Patricia, Debbie, Karen, Vicki, Gerry, Anthony and families

Council Notices

CARRATHOOL SHIRE COUNCIL

"Promoting our future through diversity"

TENDER 2018-003

HILLSTON CARAVAN PARK MANAGEMENT

Carrathool Shire Council is calling tenders for the Management of the Hillston Caravan Park.

The Tender Document Package can be obtained by emailing council@carrathool.nsw.gov.au between 8.30 am to 4.15 pm weekdays.

Tenders must be submitted in accordance with the tender lodgement requirements contained in the tender package and be received by Council in full prior to **4.00 pm Friday 9 February 2018**.

For further information, please contact Council's Director Infrastructure Services, Paul Farrell, on (02) 6945 1900 or email council@carrathool.nsw.gov.au.

Joanne Treacy, General Manager
PO BOX 12, GULGO NSW 2810
(02) 6945 1900 www.carrathool.nsw.gov.au

Trades & Services

A Job for Bob

Pruning, Weeding, Guttering, Yard, Shed cleaning, Tree, Fences, Rubbish Removal.

Odd jobs.

Free Quotes.

Phone Bob

0418 658 770

PAINTER

Interior & Exterior

Lic 1776584

Phone Kevin

0418 657 397

6925 1753

In Memoriam

DELANEY

Stacey Veronica

9/4/78 - 2/2/12

Forever 33

Our breath, our light, The One our hearts fly towards

Our 6th long year without you

So desperately missed by

Mamma & Dad, Shelley, Dave, William, Rastie Stacey & Hudson

xxxxxx

SCHULZ

Scott David

27/2/1986 - 2/2/2006

It is 12 years ago today we lost our only son and brother.

The pain of losing you will never end.

We think of you and miss you every day.

In life we loved you dearly,

In death we love you still,

You will be in our hearts forever.

Loved and remembered every day.

Mum and Dad, Melinda, Lisa, and families.

Public Notices

Notification for registration of interest for Aboriginal stakeholders

NGH Environmental has been contracted by its vogt GmbH (bv vogt) to undertake an Aboriginal Cultural Heritage Assessment (ACHA) for a proposed solar farm that will be identified as Sebastopol Solar Farm. The proposed location for the Sebastopol Solar Farm is approximately 17 km south of Temora in the Temora Shire Local Government Area (LGA).

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The proponent (bv vogt, Level 35, 1 International Tower, 100 Barangaroo Avenue, Sydney NSW 2000) is proposing to construct a utility scale solar farm including panels, electrical conduits, transformers, internal access tracks, a site office and perimeter fencing.

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FYSHWICK ACT 2609

Or Via Email to:

ngh@nghenvironmental.com.au

All correspondence must be received by COB 16th February 2018.

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Adult Services

New to Town

Pretty face, Asian, real 23, slim, busty, best service, DD.

No Rush.

Phone 0452 006 329

PROMOTE YOUR BRAND

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Let your Valentine know how much you adore them

Declare your love for your special someone in Classifieds. For only \$20 you get a photo and up to 4 lines of text.

Connect with Classifieds

Sexy Thai lady 27 yo

Maya sexy Thai lady I have an amazing body boggy smooth tan skin always smile with pretty face.

Phone number

0420330465

Draft ACHA Response from: Mark Saddler – Bundyi Aboriginal Cultural Knowledge (BAC)

From: Mark Saddler <[REDACTED]>

Sent: Wednesday, 15 August 2018 4:36 PM

To: Kirsten Bradley <[REDACTED]>

Subject: RE: Draft ACHA Sebastopol Solar Farm

Thanks,

All looks Ok expect my Bundyi Aboriginal Cultural Knowledge is written as BAC not BACK 😊

Guwayu (Safe Travels)

Mark Saddler,
Cultural Awareness,
School & Tour Programs,
Bundyi Cultural Tours,
www.bundyculture.com.au
[REDACTED]



I respectfully acknowledge the traditional custodians of my land "The Wiradjuri people"

Draft ACHA Response from: Enid Clarke on behalf of Krystal Ingram and Alona Apps

From: Enid Clarke <[REDACTED]>
Sent: Wednesday, 19 September 2018 8:52 AM
To: Kirsten Bradley <[REDACTED]>
Subject: Re: Draft ACHA Sebastopol Solar Farm

Hi Kirsten,

Thank you for the reminder.

I do not have any comment as I think that the project was done in a satisfactory way.

The artefacts that were found are very precious.

A job well done

Thank you

Enid Clarke

also for Krystal Ingram and Alona Apps

Email correspondence to the Young LALC in regards to the distribution of Draft ACHA to Young LALC members registered as individuals for the project.

From: Norma Freeman <[REDACTED]>
Sent: Wednesday, 15 August 2018 10:59 AM
To: Kirsten Bradley <[REDACTED]>
Subject: Re: Draft ACHA Sebastopol Solar Farm

Hi Kirsten,

Nice to hear from you, Sorry but do you think you could send a copy out to Alona, and one copy to our LALC and our printer isn't working. Much appreciated.

I can then show the rest of the group the report. If you don't have Alona's address just post it to our LALC [REDACTED] as she works from here a couple of days a week.

cheers

Norma Freeman

Chief Executive Officer

Young Local Aboriginal Land Council

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

I acknowledge the Traditional Custodians of the lands on which I Live, Walk & Work, across Wiradjuri & pay my respects to all Elders Past, Present and Future

On Wed, Aug 15, 2018 at 8:44 AM, Kirsten Bradley <kirsten.b@nghenvironmental.com.au> wrote:

Hi Norma,

Please find attached a copy of the draft ACHA report for the proposed Sebastopol Solar Farm for review and comment. As you would be aware we are obliged to provide a 28 day review period for the report. It would be greatly appreciated if you would be able to review the draft report and provide any comments by COB Wednesday the **12th September 2018**.

Naturally, if you have any questions about the report please feel free to contact me.

Additionally, you mentioned in the field that you would be able to distribute the draft ACHA to the Young LALC members who had also registered as individuals (Alona Apps, Krystal Ingram, Jirrah Freeman, Jahnayah (Nayah) Freeman, Keith Freeman and Marnie Freeman). Can you please confirm that this is still the case as I only have an email address for Enid and yourself. If your unable to provide the individuals with a copy please let me know ASAP as I will otherwise post them a copy of the draft report for review.

Cheers,

Kirsten Bradley | Heritage Consultant

nghenvironmental

www.nghenvironmental.com.au | www.sumosystem.com.au

Unit 8, 27 Yallourn St | Fyshwick ACT 2609 | Australia



We tweet!

This email may contain privileged and/or confidential information. If you are not the intended recipient of this email you must not disseminate, copy or take action in reliance on it. If you have received this email in error please notify nghenvironmental by email immediately and erase all copies of the message and its attachments. The confidential nature of, and/or privilege in the documents transmitted is not waived or lost as a result of a mistake or error in transmission.

APPENDIX B AHIMS SEARCH

Culturally sensitive information withheld.

APPENDIX C BUNDYI CULTURAL SERVICES (2018) SEBASTOPOL SOLAR FARM SURVEY REPORT

Culturally sensitive information withheld

APPENDIX D ARTEFACT SCATTER DATA

#	Site Name	Artefact type	Lithology	Size Class	Dimensions			Platform surface	Platform Type	Termination	Reduction stage	Comments
					Length	Width	Thickness					
1	Sebastopol Solar AFT 1	flake	quartz	<30mm	31	28	8	flake scar	broad	feather	tertiary	
2	Sebastopol Solar AFT 1	flake	quartz	<20mm	18	20	8	flake scar	broad	hinge	tertiary	1 neg flake scars
3	Sebastopol Solar AFT 1	flake	quartz	<20mm	18	13	5	flake scar	focal	feather	tertiary	
4	Sebastopol Solar AFT 2	Hammer stone	volcanic	<80mm	73	40	38					river pebble with pitting, broken
5	Sebastopol Solar AFT 2	broken flake	chert	<20mm	20	18	5	flake scar	broad	feather	tertiary	grey chert
6	Sebastopol Solar AFT 2	flaked piece	chert	<20mm	0	0	0					grey chert
7	Sebastopol Solar AFT 2	flake	fine-grained siliceous	<40mm	30	24	5	flake scar	broad	feather	tertiary	1 neg flake scar
8	Sebastopol Solar AFT 2	flake	fine-grained siliceous	<30mm	21	15	4	flake scar	focal	feather	tertiary	
9	Sebastopol Solar AFT 2	flake	chert	<20mm	17	15	5	flake scar	broad	feather	tertiary	
10	Sebastopol Solar AFT 3	flake	quartz	<20mm	18	8	4	flake scar	broad	feather	tertiary	
11	Sebastopol Solar AFT 3	flake	quartz	<40mm	22	38	11	flake scar	broad	feather	tertiary	1 neg flake scar
12	Sebastopol Solar AFT 3	flake	chert	<20mm	13	15	5	flake scar	broad	feather	secondary	40 percent riverine cortex, brown chert
13	Sebastopol Solar AFT 3	flake	silcrete	<30mm	29	21	11	flake scar	broad	feather	tertiary	grey silcrete same parent material as core below but does not conjoin
14	Sebastopol Solar AFT 3	core	silcrete	<40mm	32	36	18					single platform core same silcrete as flake. 8 negative scars
15	Sebastopol Solar AFT 3	flake	quartz	<30mm	22	16	8	flake scar	broad	feather	tertiary	
16	Sebastopol Solar AFT 3	flaked piece	quartz	<30mm	25	25	6	flake scar	focal			

APPENDIX E SITE CARDS

Culturally sensitive information withheld