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Addendum Aboriginal Cultural Heritage Assessment

Walla Walla Solar Farm

March 2022

Project Number: 21-200

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Acronyms and abbreviations

ACHA	Aboriginal Cultural Heritage Assessment
AFT	Artefact Scatter
AHIMS	Aboriginal heritage information management system
DECCW	Department of Environment, Climate Change and Water was previously responsible for heritage matters in NSW before becoming the Office of Environment and Heritage in 2011
DPIE	Department of Planning, Industry and Environment
EIS	Environmental impact statement
ESD	Ecologically Sustainable Development
FRV	FRV Services Australia Pty Ltd
ha	hectares
IF	Isolated Find
km	kilometres
LALC	Local Aboriginal Land Council
LEP	Local Environment Plan
m	metres
NPW Act	National Parks And Wildlife Act 1974 (NSW)
NSW	New South Wales
OEH	(NSW) Office of Environment and Heritage
PAD	Potential Archaeological Deposit
RAP	Registered Aboriginal Party
RPWF	Rye Park Wind Farm
SEARs	The Secretary of the Department of Planning and Environment Environmental Assessment Requirements
SSD	State Significant Development

Executive summary

NGH Pty Ltd (NGH) was contracted by FRV Services Australia Pty Ltd (FRV) to undertake an Aboriginal Cultural Heritage Assessment (ACHA) in 2018 for the proposed utility scale solar farm at Walla Walla, approximately 4.3km north east of the town of Walla Walla and 9.2km south west of the town of Culcairn, New South Wales (NSW) (see Figure 1-1). The proposed solar farm would comprise of 605 hectares (ha) within Lots 16, 17, 20, 21, 87, 88, 89, 108, 109 and 118 DP753735, and Lot 22 DP1069452 on land primarily used for grazing and some cropping.

The Walla Walla Solar Farm (SSD 9874) is a State Significant Development (SSD) which received approval on 27 November 2020. FRV are seeking to undertake work that may impact previously avoided Aboriginal heritage objects within the areas of Walla Walla PAD 1, Walla Walla PAD 2 and the site Walla Walla SF IF 20. Therefore, further archaeological assessment which includes a subsurface testing programme of Walla Walla PAD 1 and Walla Walla PAD 2 is required. This addendum assessment will form part of a modification application for the Walla Walla Solar Farm. The location of the proposed modification areas within the solar farm site boundary are shown in Figure 1-2.

This addendum report documents the Aboriginal heritage assessment undertaken for the proposed modification which will result in impact to Walla Walla PAD 1 and Walla PAD 2. It will investigate the presence of any Aboriginal objects from the test excavation, assess impacts to cultural heritage values, continue to consult with the registered Aboriginal parties and provide management strategies to mitigate any potential impacts within the proposed modification. This addendum report is intended to be read in conjunction with the original Walla Walla Solar Farm ACHA (NGH 2018).

Aboriginal consultation

The consultation with Aboriginal stakeholders has been undertaken in accordance with clause 80C of the National Parks and Wildlife Amendment (Aboriginal Objects and Aboriginal Places) Regulation 2010 and updated clause 60 of the National Parks and Wildlife Amendment Regulation 2019 following the consultation steps outlined in the Guidelines for Aboriginal cultural heritage consultation requirements for proponents 2010 (ACHCRP) guide provided by OEH. All consultation undertaken for the original Walla Walla Solar Farm ACHA is outlined and documented in the original report. Consultation about the additional modification which will result in impact to Walla Walla PAD 1 and Walla Walla PAD 2 has been a continuation of this process in accordance with provisions of acceptability outlined by OEH and in line with the ACHCRP.

Archaeological context

Based on previous findings in the region, including archaeological surveys and site recordings within the Walla Walla Solar Farm Project Area, there is potential for archaeological evidence to occur throughout the proposed additional areas of impact for the Walla Walla Solar Farm. This is most likely to be in the form of isolated artefacts, artefact scatters and scarred trees.

Excavation results

Transects with crosses were placed in both Walla Walla PAD 1 and Walla PAD 2. A total of 44 test pits (TP) were excavated throughout the subsurface program. Archaeological evidence in the form of isolated artefacts and low-density artefact scatters were recovered during the excavation. A total of 103 artefacts were recorded and analysed which is further outlined in section 4. A potential cultural hearth was also recorded within TP12. To determine the full extent of the potential hearth, it was expanded from 50cm x 50cm to 1m x 1m (excavated in four 50cm x 50cm quadrants). No cultural or artefactual material was found in association with this hearth, but the local Aboriginal Representative Parties (RAPs) present at the time, pointed out that it may have been a cultural/signal fire which would not necessarily leave behind common material culture that is usually associated with hearths. The soil profiles were generally consistent with majority of the TPs ranging from 20cm to 30cm depth.

Potential impacts

The current and previous archaeological investigations of the proposal area have clearly identified that there are Aboriginal archaeological sites present. The archaeological testing program identified subsurface artefacts within both PAD1 and PAD2, with the site PAD2 containing a higher density of artefacts. With the current proposed works, it is not possible to avoid harm to all of the sites within the proposal area. The proposed level of disturbance would be total, with the areas these sites were located within facing ground disturbances. This is considered a direct impact on the sites and the Aboriginal objects by the development in its present form. The total destruction to these sites is not avoidable.

Recommendations

The recommendations are based on the following information and considerations:

- Results of the archaeological survey;
- Consideration of results from the previous Walla Walla SF heritage assessments;
- Results of consultation with the registered Aboriginal parties;
- Appraisal of the proposed development, and
- Legislative context for the development proposal.

It is recommended that:

1) The archaeological sites within the proposed additional areas have presented a low-density concentration of surface artefacts that have been assessed to hold a low scientific value. Based on the assessment of the sites and in consideration of discussions with the Aboriginal representatives during the fieldwork, it is not considered necessary to prevent all development of the proposal area, or for total avoidance of the Aboriginal heritage sites identified within this addendum ACHA.
2) Prior to development works commencing, all surface artefacts facing potential harm are collected during a salvage program, by a qualified archaeologist and RAP representatives, in accordance with the Conditions of Consent. Any artefacts collected would be buried in consultation with the Aboriginal community and would be in line with Requirement 26 of the Code of Practice for Archaeological Investigation of

Aboriginal Objects in NSW. All AHIMS site cards must be updated to reflect that salvage has been undertaken and to record the reburial locations of artefacts. This includes the following site(s):

Site Name	AHIMS Site ID	Site Type
Walla Walla SF IF20	55-6-0193	Isolated Artefact

3) The works within the proposed additional areas should avoid the area containing the cultural hearth (Walla Walla SF Cultural Hearth (TP12)) with a 2m buffer, as outlined in Figure 7-1.

4) Subsurface (archaeological) salvage is required at the location of Walla Walla PAD2 if the area cannot be avoided. Salvage would occur in two open areas of a minimum 2mx2m to a maximum 3m x 3m around the centre of the PAD (where the highest density of artefacts was recorded), as outlined in Figure 7-1.

5) All site staff must receive a site-specific induction, including a cultural heritage induction completed by a suitably qualified individual.

6) If, during works undertaken in accordance within the approval area, any Aboriginal objects (or suspected Aboriginal objects) are identified outside of salvage locations as outlined in the ACHA (NGH 2018) and this addendum, work must stop, and Heritage NSW must be notified.

7) In the unlikely event that human remains are discovered during the development works, all work must cease in the immediate vicinity. Heritage NSW, the local police and the RAPs should be notified. Further assessment would be undertaken to determine if the remains were Aboriginal or non-Aboriginal.

8) An Aboriginal Heritage Management Plan is required, as per Condition 25 of the CoC. This must be completed and endorsed prior to any salvage works commencing.

9) Further archaeological assessment would be required if other proposed activity extends beyond the area of the current or previous investigations, as per Condition 24 of the CoC. This would include consultation with the registered Aboriginal parties and may include further field survey and subsurface testing.

1. Introduction

Walla Walla Solar Farm Pty Ltd (the Proponent) have applied to modify the Conditions of Consent for the Walla Walla Solar Farm. Walla Walla Solar Farm is located off Benambra Road, approximately 2.6 kilometres (km) west of the Olympic Highway in the Greater Hume Local Government Area (LGA) as shown in Figure 1-1.

The Development Consent for the Walla Walla Solar Farm was approved by the Independent Planning Commission of NSW (IPC) on 27 November 2020 (Application Number: SSD 9874) under Section 4.38 of the Environmental Planning and Assessment Act 1979 (EP&A Act) (NSW). The existing consent permits the construction, operation and decommissioning of a 300MWac ground-mounted photovoltaic (PV) solar farm and associated infrastructure.

Key development and infrastructure components include:

- Approximately 700,000 PV solar arrays mounted on single axis tracking systems.
- Approximately 76 modular inverter units.
- New TransGrid substation and connection point comprising transformers, associated switchgear, control and protection equipment.
- 33 kV/330 kV transformer and protection.
- Internal access tracks, operations and maintenance (O&M) building, parking and perimeter fencing.
- Vegetative screening and setbacks.

During detailed design, the Proponent identified aspects of the consented project that required amendment before construction commenced. As a result, a modification application, number SSD-9874-Mod-1 (Mod 1), was submitted to the NSW Department of Planning, Industry and Environment (DPIE). The Mod 1 amendments related to changes in height of approved infrastructure and increased construction traffic for the substation access. The proposed Mod 1 did not affect the project footprint and this did not require further Aboriginal and cultural heritage assessment.

The Project timeline has experienced delays which has provided the opportunity to undertake further archaeological investigation of additional development footprint areas. It is proposed to extend the existing solar arrays and development footprint into areas previously avoided due to uncertainty of archaeological potential and potential Aboriginal cultural heritage impacts.

NGH Pty Ltd (NGH) completed an initial Aboriginal Cultural Heritage Assessment (ACHA) which was submitted to Heritage NSW on 15 January 2020. The currently proposed modification, Mod 2, has the potential to impact Aboriginal objects within the areas identified as potential archaeological deposits (PADs), Walla Walla PAD 1 and Walla Walla PAD 2, as well as isolated find site Walla Walla SF IF 20. This document has therefore been prepared to assess the potential impacts to these sites, and must be read in conjunction with the ACHA (NGH 2019). The recent subsurface testing programme of works is considered to be a continuation of the original SSD project given that the proponent is now seeking to undertake work that will have an impact upon Walla Walla PAD 1 and Walla Walla PAD 2.

1.1 Proposed additional areas of impact

The two PADs (Walla Walla PAD 1 and Walla Walla PAD 2), and isolated find site Walla Walla SF IF 20, which were previously identified in the Aboriginal Cultural Heritage Assessment (ACHA) (NGH 2019) were previously avoided by the development footprint of the Walla Walla Solar Farm project. However, the proponent has recently proposed amendments to the design, Mod 2, which will result in impacts to two new areas through the placement of additional solar panels within areas including the locations of these three sites. Therefore, further archaeological assessment which specifically includes a subsurface testing programme of Walla Walla PAD 1 and Walla Walla PAD 2 is required.

In order to understand the true nature, extent and significance of these two PADs a programme of subsurface testing must be completed as per the *Code of Practice for Archaeological Investigations of Aboriginal Objects in NSW* (DECCW 2010) and this document will outline the results of the testing programme. This Addendum ACHA would be used to form part of a modification application for the Walla Walla Solar Farm. The location of the proposed modification areas within the solar farm site boundary are shown in Figure 1-2.

The proposed modification includes:

- An additional 13–15ha of solar arrays added to the footprint of the project **(additional heritage impacts to two PADs and site Walla Walla SF IF 20)**.

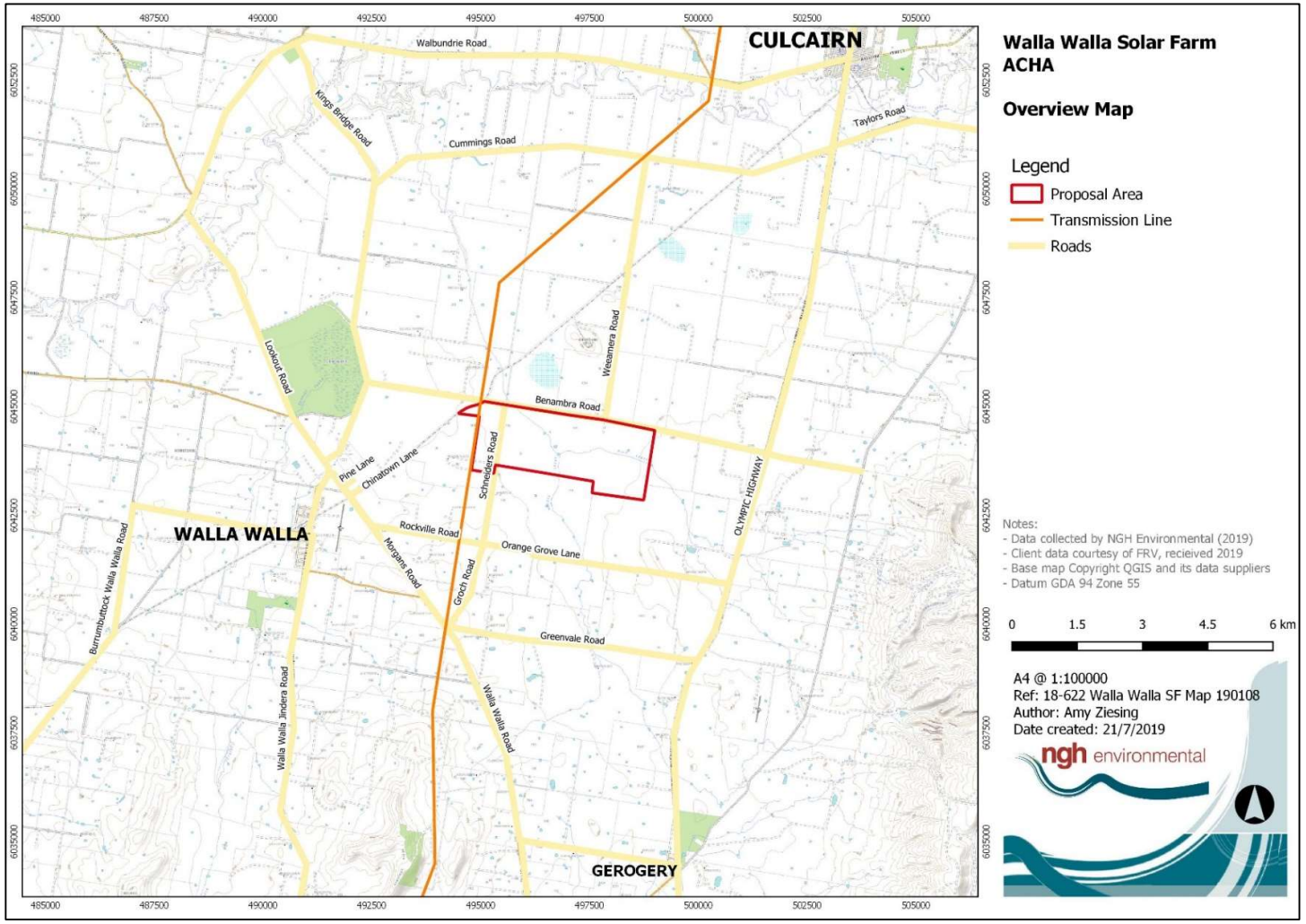

Figure 1-1. General Project Area.

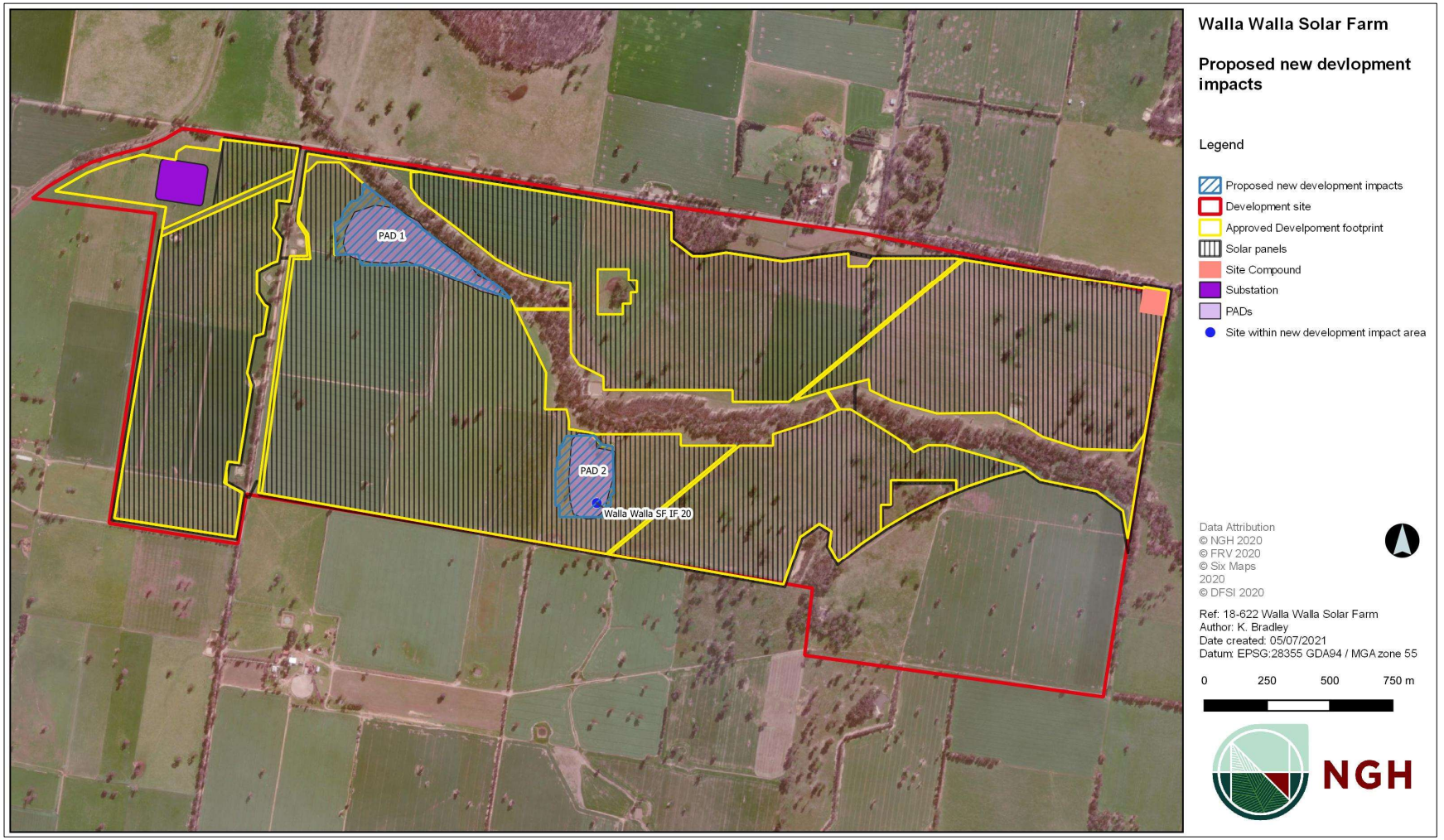

Figure 1-2. Proposed new impacts within the Walla Walla Solar Farm

1.2 Project personnel

The addendum assessment was undertaken by NGH archaeologist Kosta Contos, Ali Byrne and Bronwyn Partell. Aboriginal community consultation and the test excavation was completed by NGH archaeologists Bronwyn Partell and Layne Holloway, and Ali Byrne reviewed the report.

The fieldwork for the proposed additional modification was completed between Monday 20 September to Saturday 25 September 2021 in participation with the three previously Registered Aboriginal Parties (RAPs) engaged for the Walla Walla Solar Farm ACHA.

Further detail and an outline of the consultation process is provided in Section 3.

1.3 Project approach and report format

The purpose of this addendum ACHA report is to provide an assessment of the Aboriginal heritage values which may be impacted as a result of the proposed additional modification to the Walla Walla Solar Farm that will involve disturbance to Walla Walla PAD 1, Walla PAD 2 and Walla Walla SF IF 20. This will provide an opportunity to assess the cultural and scientific significance of any identified Aboriginal objects associated with the heritage sites within the proposed additional modification.

This assessment will:

- Continue Aboriginal consultation as specified in clause updated clause 60 of the *National Parks and Wildlife Regulation 2019*, using the consultation process outlined in the ACHCRP*;*
- Undertake an assessment of the archaeological and cultural values of the proposed expansion areas and any Aboriginal sites therein;
- Assess the cultural and scientific significance of any archaeological material;
- Assess the potential impacts of the proposal on the heritage objects, and
- Provide management recommendations for any objects found.

The approach being undertaken will be consistent with other heritage assessments undertaken for the project and projects in general across NSW, with reference to the following guidelines:

- *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)
- *Aboriginal cultural heritage consultation requirements for proponents 2010* (ACHCRP) (OEH 2010b).

This works described in this document are in accordance with the recommendations of the ACHA (NGH 2019) which noted that:

- If the proposed development footprint is changed and either of the two areas of PAD will be impacted, a limited subsurface testing program must be conducted
- Further archaeological assessment would be required if the proposed activity extends beyond the area assessed in the ACHA. This would include consultation with the registered Aboriginal parties.

The report is structured as follows:

- Section **Error! Reference source not found.**: Introduction
- Section **Error! Reference source not found.**: Aboriginal Community Consultation
- Section 3:Review of Aboriginal Archaeological Context
- Section **Error! Reference source not found.**: Archaeological Investigation Results
- Section **Error! Reference source not found.**: Cultural Heritage Values and Statement of Significance
- Section **Error! Reference source not found.**: Proposed Activity
- Section **Error! Reference source not found.**: Avoiding or Mitigating Harm
- Section 8: Legislative Context
- Section 9: Recommendations
- Section 10: References

2. Aboriginal community consultation

The consultation process for the Walla Walla Solar Farm began in 2019 for the ACHA. The consultation with Aboriginal stakeholders was undertaken in accordance with Clause 60 of the *National Parks and Wildlife) Regulation 2019* and details and documentation of this consultation are provided in Section 2.1 and Appendix A of the ACHA (NGH 2019). As a result of this process, three Aboriginal groups registered their interest in the Walla Walla Solar Farm project as listed below.

- Albury & District Local Aboriginal Land Council (Albury LALC)
- Bundyi Cultural Services (BCS)
- Yalmambirra.

No other party registered their interest, including the entities and individuals recommended by statutory agencies. The survey field work for the project was undertaken with representatives of the Aboriginal community and a copy of the draft ACHA provided to the registered parties for comment. The final ACHA was then incorporated into the Environmental Impact Statement (EIS) submitted to the Department of Planning, Industry and Environment (DPIE) for the SSD application for the Walla Walla Solar Farm.

NGH has and will continue to consult with the Aboriginal community throughout the modification assessment, in line with the requirements outlined in the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010.* The methodology for the completion of test excavations at Walla Walla PADs 1 and 2, as well as the justification as to why this is required, was provided for comment to the Registered Aboriginal Parties (RAPs) who originally registered their interest in the project. The methodology was sent on 6 July 2021, and the following steps were taken:

- Once the 28-day review period for the methodology was completed, the fieldwork component proceeded with assistance from the Aboriginal community as selected by the proponent.
- Once fieldwork was completed, an Addendum Cultural Heritage Assessment report (this document) was drafted to document the subsurface testing results from Walla Walla PAD 1 and Walla Walla PAD 2 and any proposed new impacts to sites. This document will be provided to the registered Aboriginal parties for input and comment (refer to Section 2.1).
- The final Addendum report will incorporate information provided by the Aboriginal community and a copy will be provided to each party for their records.

This final addendum ACHA document can then be used as supporting documentation for the SSD modification application.

2.1 Aboriginal community feedback

Community consultation occurred throughout the project. The draft addendum report was provided to each of the Registered Aboriginal Parties (RAPs) on *23 December 2021* and feedback was sought on the recommendations, the assessment and any other issues that may have been important. Documentation relating to the consultation undertaken for this modification application is provided in Appendix A of this report.

Feedback was received from Mr Mark Saddler of Bundyi Cultural Services, with no other RAP groups providing comment on the Draft Addendum ACHA. The report has been finalised, incorporating the response received as outlined in Table 2-1 below.

Table 2-1. RAP comments received and action taken.

RAP Group	Comment Received	Action Taken
Bundyi Cultural Services	I have had a look over your draft report. All seems to be in order. However, I would like to see the following added into this report please;	
	Request that a Local Wiradjuri Knowledge Holder to be contracted to the Solar Farm as a Cultural Adviser for the duration of the project.	The client is seeking to compromise this request, being willing to engage a Wiradjuri knowledge holder for cultural inductions and some days during the construction where areas within the PADs are to be impacted.
	Request the management, staff, contractors and others that work on this land, to be inducted and culturally immersed in Wiradjuri country, lore and customs. Also "Due Diligence" and "Unexpected Finds"	The client has confirmed that a cultural induction for site staff will be completed by an appropriately qualified individual, this has been incorporated as Recommendation 5. Recommendations 6 and 7 have been designed to serve as an unexpected finds procedure.
	Signs at the entrance of the proposed complex that indicate "Acknowledgement of Wiradjuri Country"	The client has confirmed that this request can be accommodated.
	A location marked and agreed on by the land holder and RAP's for the return of our items.	It has been determined that the location of the hearth (TP12), which is to be avoided by a minimum 2m buffer, will also be an appropriate location to return Aboriginal objects to the land.
	Protection given to the PADs and no AHIPS over such.	As the project is under SSD legislation, no AHIPS will be sought, however, the report assesses impact to the PAD areas with the proposed mitigation being the avoidance of the hearth site with a 2m buffer, and salvage excavations across the higher density PAD 2 (occurring in two open areas measuring a minimum 2mx2m to a maximum 3mx3m).

3. Review of Aboriginal archaeological context

3.1 AHIMS search

A search of relevant heritage registers for Aboriginal sites and places provides an indication of the presence of previously recorded sites. It is to be noted that a register search is not conclusive, as it reflects only those areas that have been surveyed and that sites recorded are added to the register. As a starting point the search will indicate whether any sites are known within or adjacent to the investigation area. The Aboriginal Heritage Information Management System (AHIMS) provides a database of registered Aboriginal heritage sites. The results of the search are considered valid for 12 months. As a result, the AHIMS extensive search completed for the Walla Walla Solar Farm ACHA on 7 December 2018 is now out of date.

On 5 July 2021, a new extensive search of the AHIMS database was undertaken over an area of approximately 7km x 7km centred over the Walla Walla Solar Farm (Client Service ID: 603627). There were 86 Aboriginal sites and no declared Aboriginal Places recorded in the search area. The results of the AHIMS search are shown in Figure 3-1 and Figure 3-2, and summarised in Table 3-1 below.

There are a 36 registered sites within the Walla Walla Solar Farm project area, all of which were recorded as part of the original ACHA undertaken by NGH in 2019 (see Section 3.1) as shown in Figure 3-2. The site types recorded within the Walla Walla Solar Farm are artefact scatters, isolated stone artefacts, scarred trees and cultural trees.

The site Walla Walla SF IF 20 (AHIMS# 55-6-0193) which was a single quartz flake is located within the proposed new impact areas for additional solar panels as shown in Figure 3-2.

Table 3-1 Breakdown of previously recorded Aboriginal sites surrounding the Project Area.

Site Type	Number
Artefact (1 or more)	49
Modified Tree	37
TOTAL	**86**

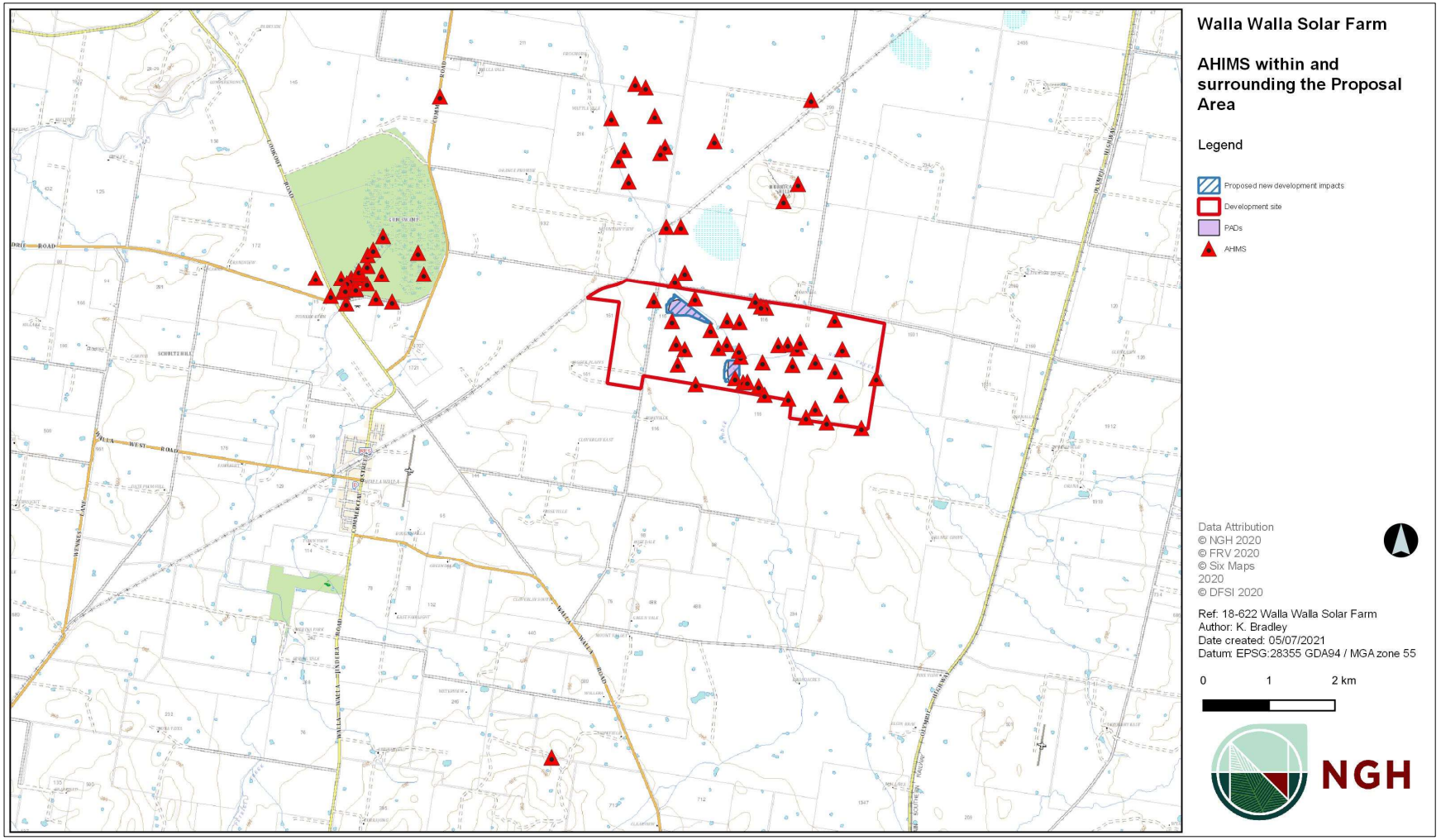

Figure 3-1. AHIMS search results surrounding the Project Area

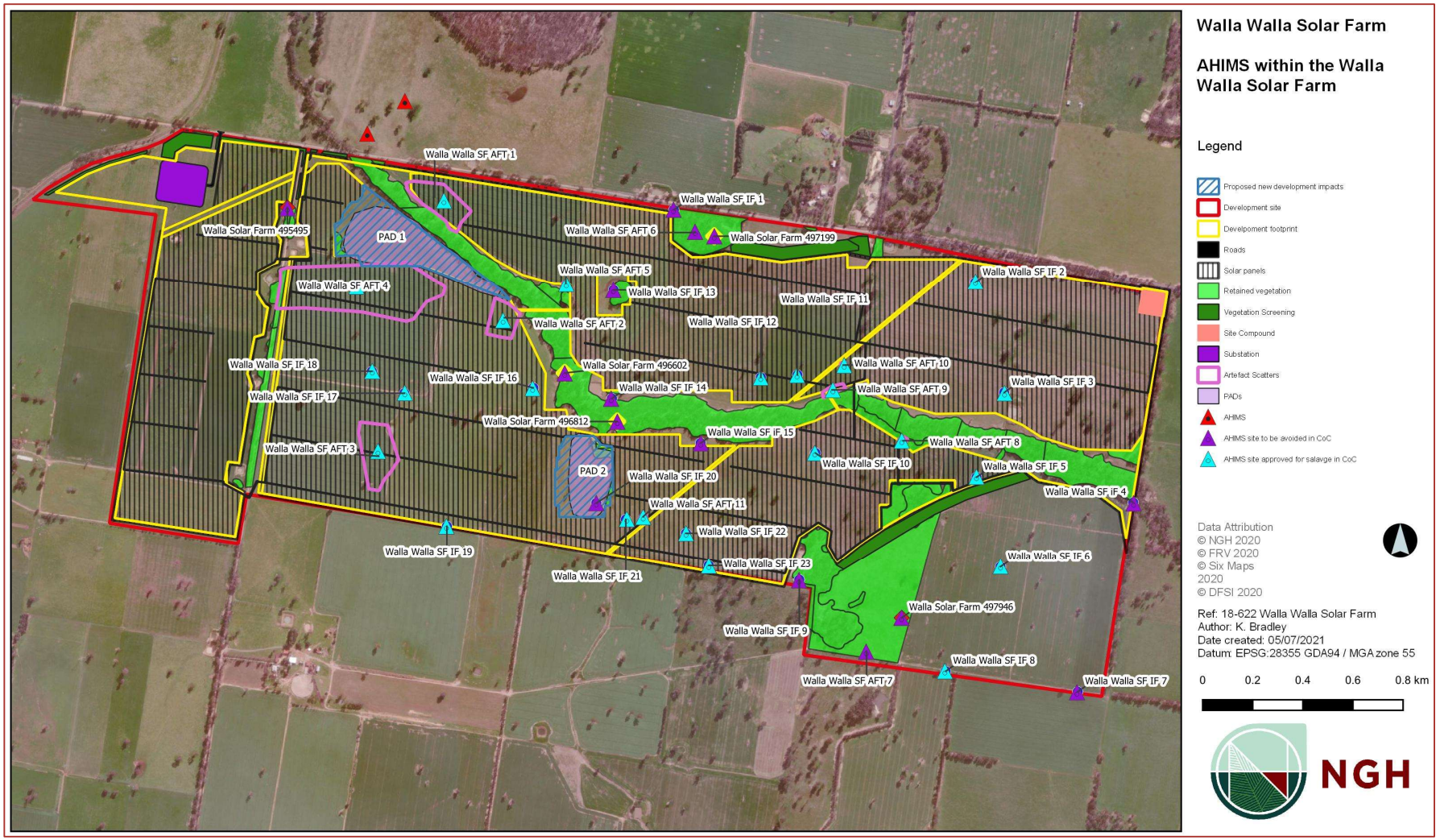

Figure 3-2. AHIMS sites within the Project Area which also show the Conditions of Consent (CoC) for avoidance or salvage.

3.2 Previous archaeological studies

The following information is taken directly from the ACHA (NGH 2019).

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 Walla Walla or Albury area, although the archaeological evidence from Lake Mungo, 425km to the north-west provides ample evidence of Aboriginal occupation dating back 40,00 years (Mulvaney and Kamminga 1999, Hiscock 2007). No regional synthesis of the archaeology has been completed for the Walla Walla or Albury area. The following are summaries of those archaeological survey reports that have been completed in the Albury region, these have been primarily driven by development and infrastructure requirements.

The following are summaries of those archaeological survey reports that have been completed in the surrounding areas and in relative proximity to the current assessment area.

A survey of the Albury area by Crosby (1978) identified that open camp sites and scarred trees are the most common site types in the Albury Region. Crosby (1978) noted that due to the limited range of usable stone outcropping in the region it is unlikely that Aboriginal quarries will occur however, areas where vein quartz occurs should be inspected. Additionally, due to geology and topography of the area and lack of large rock outcrops with shelters suitable for painting or banks suitable for carving it is very unlikely that art sites or ceremonial areas will be identified. Crosby's (1978) survey of six sites returned seven Aboriginal artefacts consisting of six scarred trees and a large volcanic cobble.

In 1978, Djekic undertook an archaeological survey for a proposed transmission line from the Wagga Wagga substation to Albury. The route covered approximately 120km across well-established farming land and passed through approximately 600m east of the proposal area. During the survey, six scarred trees were located, four of which were most likely the result of Aboriginal use in the area. Stone artefacts were also recorded on a property just outside Culcairn. The artefacts recorded included a small grinding stone, a hammer stone, a broken pebble and a small round stone of local material that appeared to have been pecked on either side. Djekic concluded that the small number of sites located during the survey was a direct result of over 100 years of environmental modification through the intensive development of agriculture in the region.

In 1980, Barz undertook an archaeological survey for a proposed transmission line from Jindera to Ettamogah with a 50m wide easement. Numerous isolated artefacts were identified including quartz cores, flakes, thumbnail scraper and a granite flaked piece.

In 1980, Haglund undertook a field survey as one aspect of the Hume Shire Villages Water Supply Scheme approximately 24km south east of the current assessment area. The survey area consisted of approximately 90km of a 6m wide easement for pipelines and five reservoir sites, each approximately 30m in diameter. A single scarred tree was recorded during the survey on the border of a pipeline easement. Haglund identified that several adjoining areas may have archaeological potential. The lack of identified sites may have been because of the previous disturbance of the land in the area.

In 1981, Presland completed a series of archaeological investigations throughout the Albury-Wodonga region as part of Victoria Archaeological Survey (VAS), approximately 36km south

of the current assessment area. The aim of these surveys was to record all Aboriginal heritage sites in 19 areas designated for tree planting and assess the impacts and significance of these sites. 22 isolated finds and 1 artefact scatter were identified across the inspected areas. Three planting sites were not inspected due to time restrictions. All but six isolated finds were in low-lying land that had been ploughed prior to inspection. Five finds were within Pleistocene terrace formation south-west of Wodonga. The artefact scatter was located on the edge of an eroding terrace, approximately 100m from the northern bank of the Murray River.

In 1992, a site survey for a proposed tree plantation approximately 26km to the south east of the current proposal area was undertaken by Smith and Upcher (1992). The study identified five scarred trees, nine open campsites, one open campsite and scarred tree complex and eleven isolated artefacts. All artefacts recorded, with the exception of a single isolated silcrete artefact, were manufactured on a milky quartz which appears to be the primary raw material type for the Albury area. Both box and river redgum were used for manufacturing wooden artefacts consistent with other studies in the region. This study observed that all open campsites were located within 50m of creek lines and all, but one open camp was located on a creek bank. However, erosion into the creek bank to a depth of <10cm was needed before archaeological material was exposed. Additionally, Smith and Upcher (1992) noted that despite the presence of erosion scars and recently ploughed paddocks on hill tops and slopes within the project area, no open camp sites were identified. Scarred trees however, occurred consistently across all of these landforms.

In 1994, Navin Officer undertook an archaeological survey for the proposed extension to the Culcairn Hard Rock Quarry, Hurricane Hill, located 1.5km north of the current assessment area. The survey area consisted of approximately 7ha on the upper and middle slopes of a locally prominent hill, Hurricane Hill. Hurricane Hill was noted to be a prominent low hill which rises above the relatively level and flat topography of the Back Creek-Billabong Creek flood plain. A single probable scarred tree and an isolated find were recorded within the study area. The isolated find was a quartz core which has been bifacially flaked. The scarred tree was a White Box tree. Additionally, a large mature Kurrajong tree was recorded within the study area that was noted to have been considered by locals to either be planted by the first European settlers in the area, or by the local Aboriginal people. Navin Officer deduced that the tree was likely to have been European in origin.

Between 1995 and 1997, Navin Officer completed a cultural heritage assessment for the proposed natural gas pipeline from Wodonga to Wagga Wagga, extending for 146km that intersects the current proposal area. Twelve artefact scatters, three scarred trees and ten isolated finds were identified over the initial stage of the investigations. A further stage of survey was commissioned based on the preliminary results. A further 17 artefact scatters, six scarred trees and nine isolated finds were located in the additional investigation. Five historic sites were also recorded, and eight areas of PAD identified. Two of these PADS, PAD 3 and PAD 4, fall to the immediate north of the current Walla Walla Solar Farm proposal area. PAD 3 is associated with the southern bank of Back Creek and was assessed as having high archaeological potential due to its higher elevation and probable reduced level of disturbance. PAD 4 was on the western margin of an unnamed swamp basin that is generally referred to in subsequent reports as Back Creek Swamp. PAD 4 was assessed as having moderate archaeological potential given its elevated position adjacent to a food and water resource. The majority of the artefact scatters identified were associated with creek

lines, meanders, wetlands and a low gradient spur line while scarred trees were recorded on flat valley floors, alluvial flats, basal slopes and wetland basins.

In 1998, Officer, Navin and Kamminga undertook a subsurface testing program for the proposed Wodonga to Wagga Wagga Natural Gas pipeline. The surveys, as noted above, identified a total of 39 sites, four isolated finds and eight areas of potential archaeological deposit (PAD). Four sites and seven PADs were unable to be avoided by the proposed development and the PAD to be impacted were consequently subject to further investigation in the form of a subsurface testing program (Figure 3-3). PAD 3, which is located to the immediate north of the current Walla Walla Solar Farm proposal area, was one of the PADs investigated during the subsurface testing program. Figure 3-3 below shows the areas identified for further survey in the initial 1995 survey in close proximity to the current assessment area and the refined PAD 3 and PAD 4 areas following the 1996 additional survey. The test pit locations excavated at PAD 3 (now site AHIMS# 55-6-0027) are shown in Figure 3-4 below. A summary of finds from the subsurface testing program undertaken at PAD 3 and PAD 4 is shown in Table 3-3.

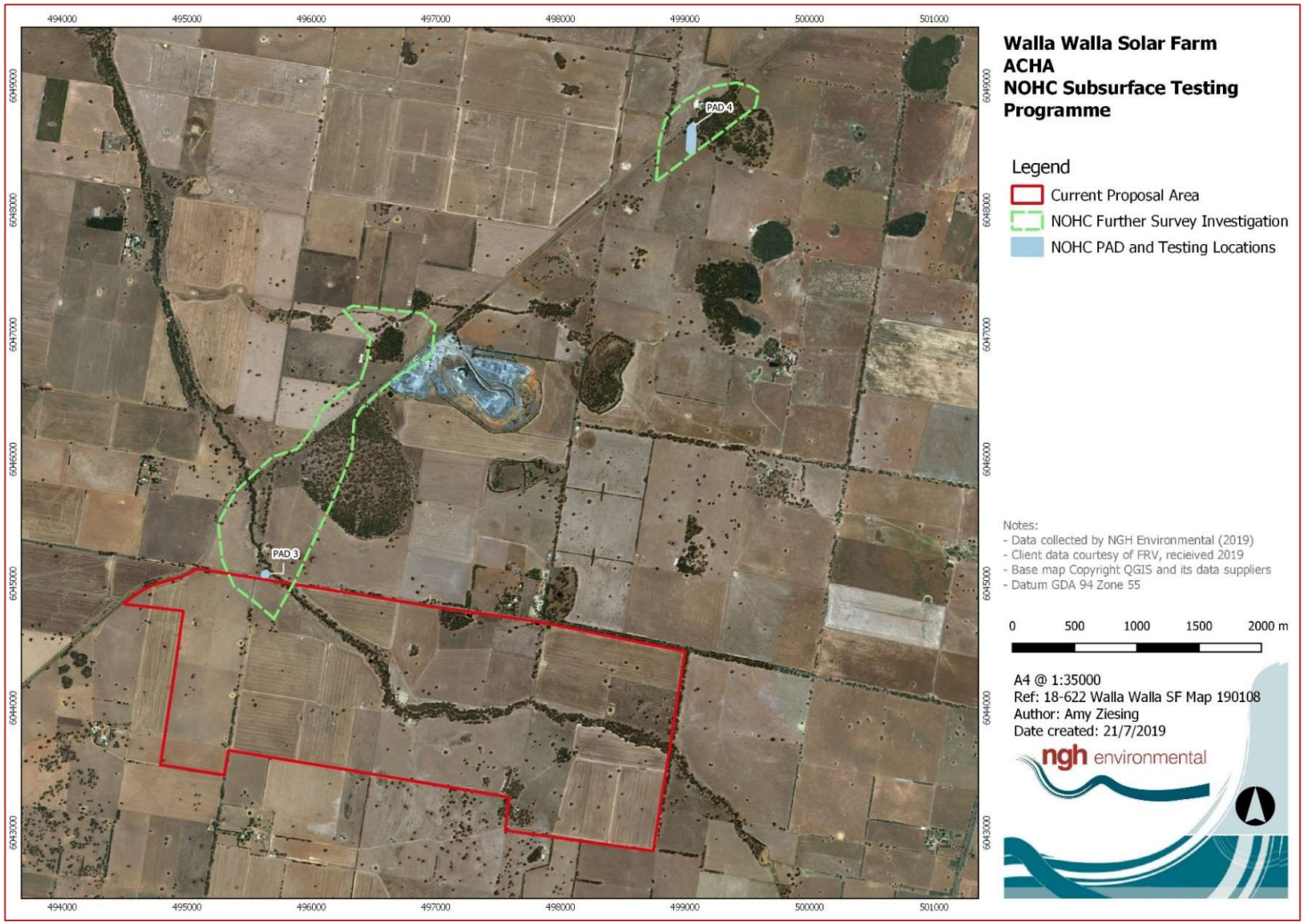

Figure 3-3 NOHC Subsurface Testing Program PAD and Testing Locations.

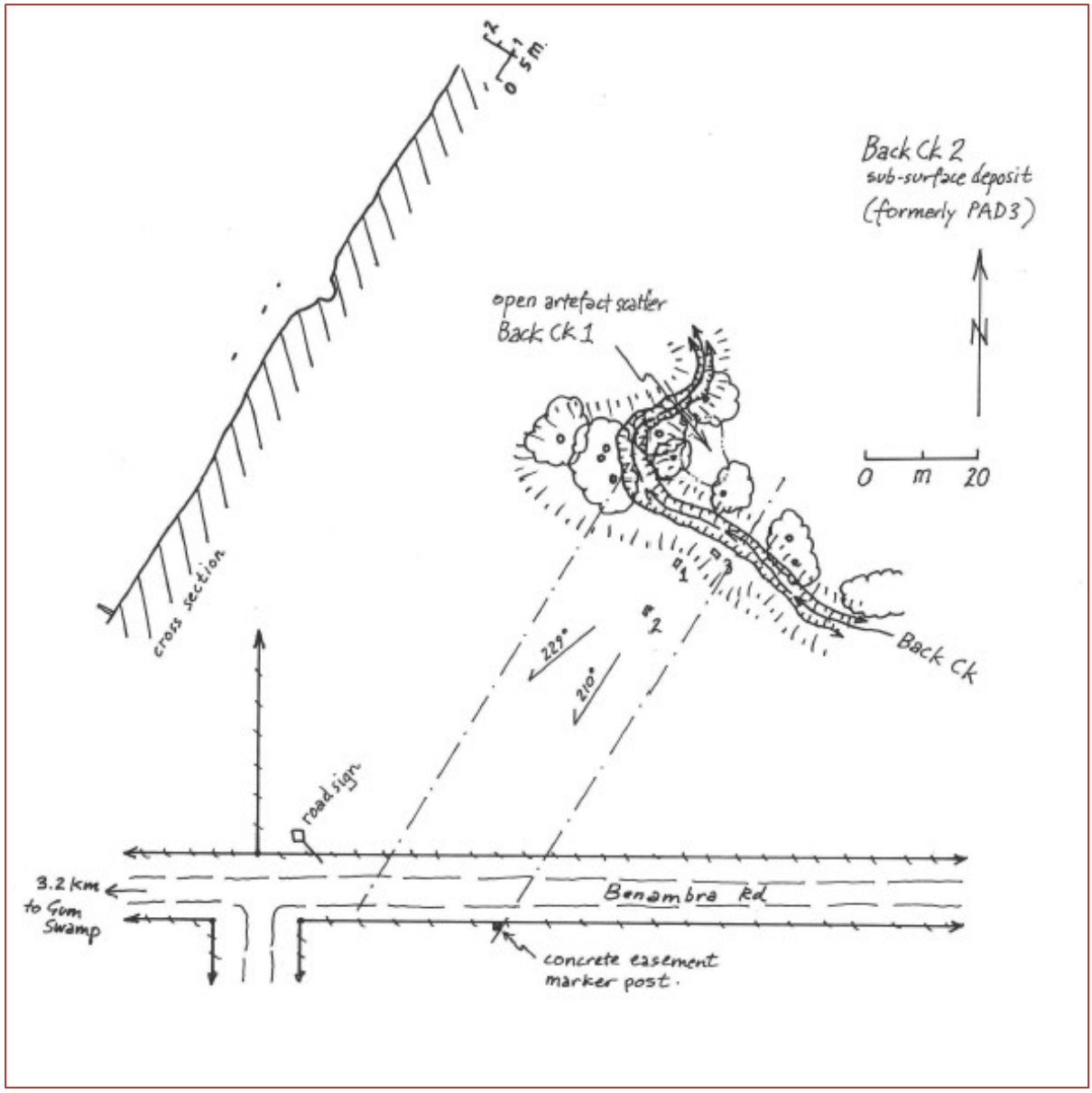

Figure 3-4 Diagram of the testing locations within PAD 3 (NOHC 1996: 84).

Table 3-2 Summary of finds for the Wodonga to Wagga Wagga Natural Gas Pipeline Testing Program in close proximity to the Project Area.

Site Name	PAD No.	Archaeological Potential	No of Test Pits	Finds	Find Type	Location
Back Creek 2	PAD 3	High	3 mechanical pits	1 artefact		Elevated southern bank of inside bend of streamline
Back Creek Swamp 2	PAD 4	Moderate	11 mechanical pits	18 artefacts	Microdebitage from microblade and bipolar flaking	Edge of wetland basin

PAD 3 was subject to limited subsurface testing in 1998 by Officer, Navin and Kamminga. A total of three mechanical pits measuring 2.5m x 0.88m were excavated across PAD 3 (see Table 6). Pits 1 and 2 were located adjacent to the break of the slope and encountered shallow soils and showed evidence of profile disturbance through the mixing of clays in the upper horizon (NOHC 1998: 81). Pit 3 was located to test the deposit on an apparently lower terrace adjacent to the creek. Only one artefact was recovered from the upper 15cm of deposit (spit 1). Pit 3 at PAD 3 which has since been recorded as AHIMS# 55-6-0027/ Back Creek 2. No detailed analysis of the artefact was undertaken. Plate 1 below show the testing program undertaken Back Creek 2 (PAD 3).

Table 3-3 Summary of Pit Data & Soil Profile Descriptions at Back Ck 2 (modified from NOHC 1998: 81).

Pit Number	L x W x D (mm)	Number of Artefacts	Profile
1	2600 x 900 x 600	Nil	Brown/ grey silty loam over mixed silty loamy clay. Then mixed mottled clays and silts. Increasing clay with depth then becomes a brown mottled clay.
2	2600 x 900 x 350	Nil	
3	2600 x 900 x 660	1	

While the PAD 3 area was initially identified as having potential archaeological deposit, the results of the subsurface testing program identified that high densities of subsurface cultural material were not present. Based on the results of the subsurface testing program at PAD 3 Officer, Navin and Kamminga noted that the northern bank and location of the artefact scatter Back Creek 1 was likely the preferred location for Aboriginal occupation in the immediate vicinity due to its position on the bend of the creek (NOHC 1998: 82). Following the completion of the testing program PAD 3 was given the site name Back Creek 2 (AHIMS# 55-6-0027) which was assessed as having low scientific significance due to its small size and low artefact density. The site type was also noted to be common for the region and the context to have been disturbed by agricultural land practices. In

March 1998, a partial Consent to Destroy permit was granted for the portion of Back Creek 2 that existed within the gas pipeline development corridor (NOHC 1998: 82).

Plate 1. General view of Back Creek 2, looking southwest from the creek bed. Pit 3 is in the near foreground (NOHC 1998: 152).

In 2006, Biosis surveyed the North-South Rail corridor for the Albury to Junee Passing Lanes. The southernmost section of Passing Lane 14 (Culcairn- Henty) is located approximately 10km north-east of the current assessment area while the northern most section of Passing Lane 13 (Table Top – Gerogery) is located approximately 8.4km south-east of the current assessment area. During the survey for Passing Lane 14, seven sites were identified, including two artefact scatters and five isolated finds. Four of the sites recorded for Passing Lane 14 were recorded between 5km and 11km north of the township of Culcairn. The four sites located in close proximity to the township of Culcairn consisted primarily of quartz flakes and flake fragments. The sites were all recorded in moderately disturbed contexts within graded areas and fire breaks. During the survey for Passing Lane 13, four isolated finds were recorded. All four isolated finds were manufactured from quartz and noted to be fragmented artefacts recorded in disturbed contexts.

Survey and subsequent test pitting was undertaken by Border Archaeology (2006b, 2007a) of the Carsten Street Residential Development approximately 40km south of the current proposal area. The original survey identified three quartz lithic scatters, one isolated find, one scarred tree and an area of high archaeological potential. Visibility was however very low and consequently test pitting was recommended. The 2007 excavations of the Carsten Street Residential Development used a grader to excavate three areas in 10cm spits down to approximately 20cm depth. A total of 303 artefacts were recovered from grader scrape 1 with 86.8% of artefacts recorded manufactured from plain quartz and 12.8% manufactured from crystal quartz, the remaining 0.4% was listed as pebble quartz. Based upon the authors experience in the Albury region they proposed that “Aboriginal archaeological deposits [are] strongly associated with terrace landform rather than current water course margins” (Border Archaeology 2007a, p.51).

In 2007, Border Archaeology undertook a survey of the proposed Hume Country Club Estate Residential Development, approximately 35km south of the current proposal area. Eight previously

unrecorded sites were identified and consisted primarily of quartz debitage (Border Archaeology 2007b). A previously recorded AHIMS site #60-3-0099 was relocated and was subsequently salvaged by Border Archaeology in 2008. During the salvage program 65 quartz artefacts were relocated, primarily consisting of debitage and angular fragments (<3cm) with a small number of cores, flakes and flaked pieces. The site occurred within a heavily disturbed terrace landform (Border Archaeology 2008).

In 2008, Biosis undertook site survey of a proposed Albury waste management facility, approximately 44km south of the current proposal area, and located a single smoky quartz isolated flake within the valley flat associated with a small creek line. Biosis (2008) assessed creek terraces within the project area as having moderate archaeological sensitivity and valley flats and lower and mid valley slopes as having low archaeological sensitivity.

In 2015, Associates Archaeology and Heritage undertook an ACHA for Lot 204 DP753345 on Drumwood Road, Jindera located approximately 30km south of the current proposal area. The area consisted of a 41ha area on a gentle slope southward of Bowna Creek. The site was located within 200m of water, but it was predicted by Associates Archaeology and Heritage that while artefacts were likely to be found, they would most probably be in relatively low density because the area was a low-lying creek flat, and more complex residential or tool-making sites are typically located on more raised terrace landforms adjacent to creeks. Two surface flaked stone artefacts were recovered during the initial survey which prompted the need for further investigation in the area. Test excavation was carried out across the proposed subdivision area with 82 test pits excavated. A total of eight subsurface artefacts were recovered from 20.5m^2 of excavated material across the project area. This is an artefact density of 0.36 artefacts/m^2. The artefacts recovered were all made from white milky quartz and were located on ridge crest, slope and flat topographic units. The artefact types identified during the survey and testing program were all flakes, flake fragments and angular fragments with no cores recorded. Associates Archaeology suggested that the wide distribution of the eight artefacts across the site was considered to demonstrate that the area was subject to frequent land use by Aboriginal people in the past but was not the site of complex / residential activity. Given that the artefacts were spread from the creek flat up to the ridge crest covering an area of up to 500m from water with very little significant apparent concentration Associates Archaeology noted this was suggestive of the relatively regular, dispersed use of the landscape by Aboriginal people during foraging, hunting and travel. Associates Archaeology concluded that the absence of notable concentrations of artefacts within the project area was consistent with the modelling in the area which suggests that complex moderate-high density lithic sites are found on elevated terraces near to water rather than on low lying flats.

In 2016, Envirokey completed a Review of Environmental Factors (REF) including an Aboriginal and historic heritage assessment for Stage 2 of the Riverina Highway upgrade, approximately 35km south of the current assessment area. It was determined that the proposal was unlikely to impact on Aboriginal heritage and the works were designed to avoid areas of Native Title Claim. The Bethanga Bridge was identified as an item of historic heritage listed on the State Heritage Register (#1750) that may be impacted by the proposed works and an exemption should be sought for this item and interpretive signage should be erected to increase public understanding of the history and significance of the bridge.

In 2018, NGH Environmental undertook survey and subsurface testing for the proposed expansion of the Anderson Clay Mine extraction area, located approximately 40km south of the current

proposal area. The field survey identified two PADs in the subject area, termed Andersons PAD 1 and Andersons PAD 2. Under the development proposal disturbance to Andersons PAD 1 was unavoidable, and poor surface visibility meant the PAD was not fully assessed for its potential to contain Aboriginal objects. Therefore, a program of test excavation was undertaken to establish the presence of subsurface archaeological material. While 25 test pits were proposed for excavation, only 13 were excavated as it was determined that at the completion of the excavation of the 13 test pits that enough data had been gathered to conclude that the area of Andersons PAD 1 had very little topsoil deposit in place and no Aboriginal objects were identified in the excavated test pits. The lack of subsurface deposit may be the result of previous farming practices or that the area has a naturally thin profile however this was unable to be determined as there was also evidence of significant disturbance to the ridge crest. It was consequently determined that Andersons PAD 1 was highly disturbed and modified, and the likelihood of *in situ* archaeology occurring reduced to very low. Despite the highly disturbed area identified during the test excavation program an isolated quartz flake was recorded which indicated that despite the apparent surface disturbance, the area most likely contained an Aboriginal heritage site which has now been largely removed.

In 2019(a), NGH Environmental completed the Aboriginal Cultural Heritage Assessment for the proposed Jindera Solar Farm comprising 521ha of land and approximately 20km southeast of the current proposal area. The survey of the Jindera Solar Farm proposal area identified seven artefact scatters and 15 isolated finds. The Aboriginal community representatives also identified three cultural trees. Four areas of archaeological potential were noted which included a crest landform in close proximity to water (PAD 1) and three slightly raised areas along spur landforms in close proximity water (PAD 2 – PAD 4). The four PADs were subject to subsurface testing program as part of the assessment. A total of 52 test pits were excavated across the four PADs with subsurface stone artefacts recovered from 25 pits. The artefacts densities for each of the pits excavated ranged from nil to 12 with a total of 80 subsurface quartz artefacts recovered. The subsurface testing program was noted to be characterised by discrete low-density clusters of artefacts interspersed with areas of very low or no artefactual material. The subsurface material recovered was recorded as three additional subsurface artefact scatters.

In 2019(b) (in prep), NGH Environmental conducted a survey for the proposed Culcairn Solar Farm comprising of 1,350ha of land, approximately 4km north of the current assessment area. A total of 25 isolated artefacts, 16 artefact scatters and three scarred trees, were identified across the area. Sites were noted to generally be in close proximity to a water source, including Back Creek which extends into the current assessment area. Ten cultural sites, predominantly possible modified trees with ambiguous origins, were also identified by Aboriginal representatives participating in the field survey. The field survey identified the presence of potential subsurface archaeological deposits at six locations within the proposed Culcairn Solar Farm development footprint. These areas were all slightly elevated ground adjacent to water sources including Billabong and Back Creek. Further investigation, in the form of subsurface testing was recommended given that the areas were likely unable to be avoided by the proposed development. The results of the testing program for the Culcairn Solar Farm are currently not available.

In 2019, NGH was engaged to prepare an ACHA report to investigate and examine the presence, extent and nature of any Aboriginal heritage sites within the proposed Walla Walla Solar Farm Project Area, to which this document forms an addendum. The assessment included a review of relevant information relating to the landscapes within the proposal area. Included in this was a search of the AHIMS database which indicated that no Aboriginal sites had previously been

recorded within the proposal area. Based on previous archaeological investigations in the region and knowledge of Wiradjuri cultural practices and traditional activities, the Project Area was noted to have the possibility of containing archaeological sites, especially given that Aboriginal people have lived in the region for tens of thousands of years. The most common site type expected was artefact sites, including artefact scatters and isolated artefacts, with scarred trees also considered to be possible within areas where mature trees were extant. Despite the variable visibility encountered during the survey, 11 artefact scatters, 23 isolated finds and two scarred trees were recorded. Two areas of potential archaeological deposit (PAD) which were named Walla Walla PAD 1 and Walla Walla PAD 2 were also identified. The Aboriginal community representatives also identified three cultural trees. The survey results indicated that artefact scatters and Aboriginal objects can occur throughout the landscape, even in areas of highly disturbed farming activities with the sites recorded noted to most likely be representative of the use of country along Back Creek. As outlined in Section 1, the development footprint at the time avoided impacts to the PADs however it was noted that test excavation would be required should any impacts to these areas be required.

3.2.1 Predictions for subsurface deposits

A predictive model was prepared for the types of Aboriginal objects expected to be present within the project area as part of the ACHA (NGH 2019) and this, coupled with the results of the ACHA survey, indicate that the subsurface deposits within the identified PADs, if present, would comprise medium density deposits at approximately 0-20cm depth, containing stone artefacts primarily manufactured from quartz, with some silcrete. It was also considered possible that hearths, comprising charcoal and clay balls, with burnt elements, may also be present.

3.2.2 Comment on existing information

The AHIMS database is a record of those places that have been identified and had site cards submitted to register them formally. 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 current proposal area NGH has undertaken extensive survey and information is therefore available regarding site characterisation and patterning, however no studies which can assist in predictions regarding the age or geomorphic context are available. The robustness of the AHIMS survey results are therefore considered to be high following the completion of the 2019 survey and reliable for the present investigation. There are likely to be many sites that exist in areas surrounding the project area that have yet to be identified. Past land use activity has moderately disturbed the archaeological record and there are likely to be places that retain *in situ* archaeological material.

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 proposal area, however, there is always the potential for such places to exist, but concerning the current proposed works area, no such places or values have been identified.

4. Archaeological investigation results

4.1 Prior investigation

Between 25 March and 29 March 2019, NGH completed a survey for the current Project Area. The survey strategy was to cover as much of the ground surface as possible within the Project Area. A series of transects were placed across the landscape to achieve maximum coverage. The Project Area was generally cleared paddocks used for grazing livestock or recently ploughed crop fields, transects were spaced evenly with the survey team spread apart at 30m intervals, walking in parallel lines. Visibility within the Project Area was variable however as a whole it generally had low to moderate visibility averaging 30% overall. Despite the variable visibility encountered during the survey 11 artefact scatters (Walla Walla SF AFT 1 to Walla Walla SF AFT 11), 23 isolated finds (Walla Walla SF IF 1 to Walla Walla SF IF 23) and two scarred trees (Walla Solar Farm 495495 and Walla Solar Farm 497946) were recorded. Two areas of potential archaeological deposit were also recorded in association with Back Creek (PAD 1 and PAD 2). The Aboriginal community representatives also identified three cultural trees (Walla Solar Farm 497199, Walla Solar Farm 496602 and Walla Solar Farm 496812). Table 4-1 provides a summary of the site types recorded during the survey.

Table 4-1 Summary of site types from the initial ACHA survey of the Walla Walla Solar Farm Project Area

AHIMS	Name	Type
55-6-0174	Walla Walla SF IF1	Isolated Find
55-6-0175	Walla Walla SF IF2	Isolated Find
55-6-0176	Walla Walla SF IF3	Isolated Find
55-6-0177	Walla Walla SF IF4	Isolated Find
55-6-0178	Walla Walla SF IF5	Isolated Find
55-6-0179	Walla Walla SF IF6	Isolated Find
55-6-0180	Walla Walla SF IF7	Isolated Find
55-6-0181	Walla Walla SF IF8	Isolated Find
55-6-0182	Walla Walla SF IF9	Isolated Find
55-6-0183	Walla Walla SF IF10	Isolated Find

AHIMS	Name	Type
55-6-0184	Walla Walla SF IF11	Isolated Find
55-6-0185	Walla Walla SF IF12	Isolated Find
55-6-0186	Walla Walla SF IF13	Isolated Find
55-6-0187	Walla Walla SF IF14	Isolated Find
55-6-0188	Walla Walla SF IF15	Isolated Find
55-6-0189	Walla Walla SF IF16	Isolated Find
55-6-0190	Walla Walla SF IF17	Isolated Find
55-6-0191	Walla Walla SF IF18	Isolated Find
55-6-0192	Walla Walla SF IF19	Isolated Find
55-6-0193	Walla Walla SF IF20	Isolated Find
55-6-0194	Walla Walla SF IF21	Isolated Find
55-6-0195	Walla Walla SF IF22	Isolated Find
55-6-0196	Walla Walla SF IF23	Isolated Find
55-6-0163	Walla Walla SF AFT1	Artefact Scatter
55-6-0164	Walla Walla SF AFT2	Artefact Scatter
55-6-0165	Walla Walla SF AFT3	Artefact Scatter
55-6-0166	Walla Walla SF AFT4	Artefact Scatter
55-6-0167	Walla Walla SF AFT5	Artefact Scatter
55-6-0168	Walla Walla SF AFT6	Artefact Scatter
55-6-0169	Walla Walla SF AFT7	Artefact Scatter

AHIMS	Name	Type
55-6-0170	Walla Walla SF AFT8	Artefact Scatter
55-6-0171	Walla Walla SF AFT9	Artefact Scatter
55-6-0172	Walla Walla SF AFT10	Artefact Scatter
55-6-0173	Walla Walla SF AFT11	Artefact Scatter
55-6-0144	Walla Solar Farm 495495	Scarred Tree
55-6-0148	Walla Solar Farm 497946	Scarred Tree
55-6-0145	Walla Solar Farm 497199	Cultural Tree
55-6-0147	Walla Solar Farm 496602	Cultural Tree
55-6-0146	Walla Solar Farm 496812	Cultural Tree

4.2 Test excavation methodology

Methods used for the assessment will be as per the *Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW* (OEH 2010) and employed as relevant to the subsurface testing programme of works for the project, the aims of the assessment and any project requirements.

As per the recommendations of the original ACHA report completed in 2019 by NGH, a test excavation was proposed to occur within the boundaries of Walla Walla PAD 1 and Walla Walla PAD 2 which are now within the impact area of the modified development footprint. Testing was be undertaken in accordance with the Code of Practice and the following methodology.

As per the above guidelines, the extent of required testing was determined based on the proposed impacts to the PADs and discussion with RAPs in the field. It was anticipated that a minimum of 30 pits would need to be excavated, with a range of 30 to 60 test pits likely required. The proposed test pit transect locations, based on the known proposed impacts are shown in Figure 4-1. Proposed test pit locations were subject to change dependent on the views of the Aboriginal community throughout the consultation process and fieldwork, the density of subsurface artefacts recovered from each test pit and an appraisal of field and landform conditions during the program of fieldwork.

Subsurface testing involved the following elements:

- Hand excavation using shovels and trowels, pits to be 50cm x 50cm in area.
- Removal of deposit in 5cm levels or 'spits' from one test pit at each PAD with subsequent test pits at 10cm unless features found requiring a different strategy.
- Placement of excavated deposit in buckets labelled by spit and test square.
- Sieving of deposits (dry sieving will be undertaken).
- Removal of residue from sieves which will be bagged and label for analysis.
- Excavated material analysed in an NGH office.
- Proceed with excavation until completed.
- Continual photography of excavated sections and the excavation work in progress.
- Scale-drawn records of the stratigraphy/soil profile features and information on Aboriginal objects recovered from each test pit.
- At completion of excavation, backfill test pits (with sieved material if possible or clean fill if required).

In the unlikely event that human bone was located, an *Unexpected Finds Procedure* was to be followed. This includes stopping work at that location and making the area secure for further assessment. The police and Heritage NSW would have been notified. If the remains were determined to be Aboriginal, further discussion and assessment of options would be considered by all parties.

Post fieldwork analysis involved the following elements and was undertaken at the NGH office in Wagga Wagga.

- Sort the sieved material. Any cultural items and Aboriginal artefacts identified were recorded with the following characteristics:
    - Raw material type and colour.
    - Dimensions (percussion length, width, thickness for complete items).
    - Technological characteristics (platform surface, platform type and termination type).
    - Presence and extent of cortex.
    - Presence and extent and type of edge damage (use wear, retouch).
    - Comments e.g., Production method.
    - Analyse the stone artefacts.
    - Prepare a report on the findings and conclusion of the excavations.

The recovered archaeological material is temporarily stored at the NGH office in Wagga Wagga until a suitable repository site is found within the project area, outside the approved development footprint.

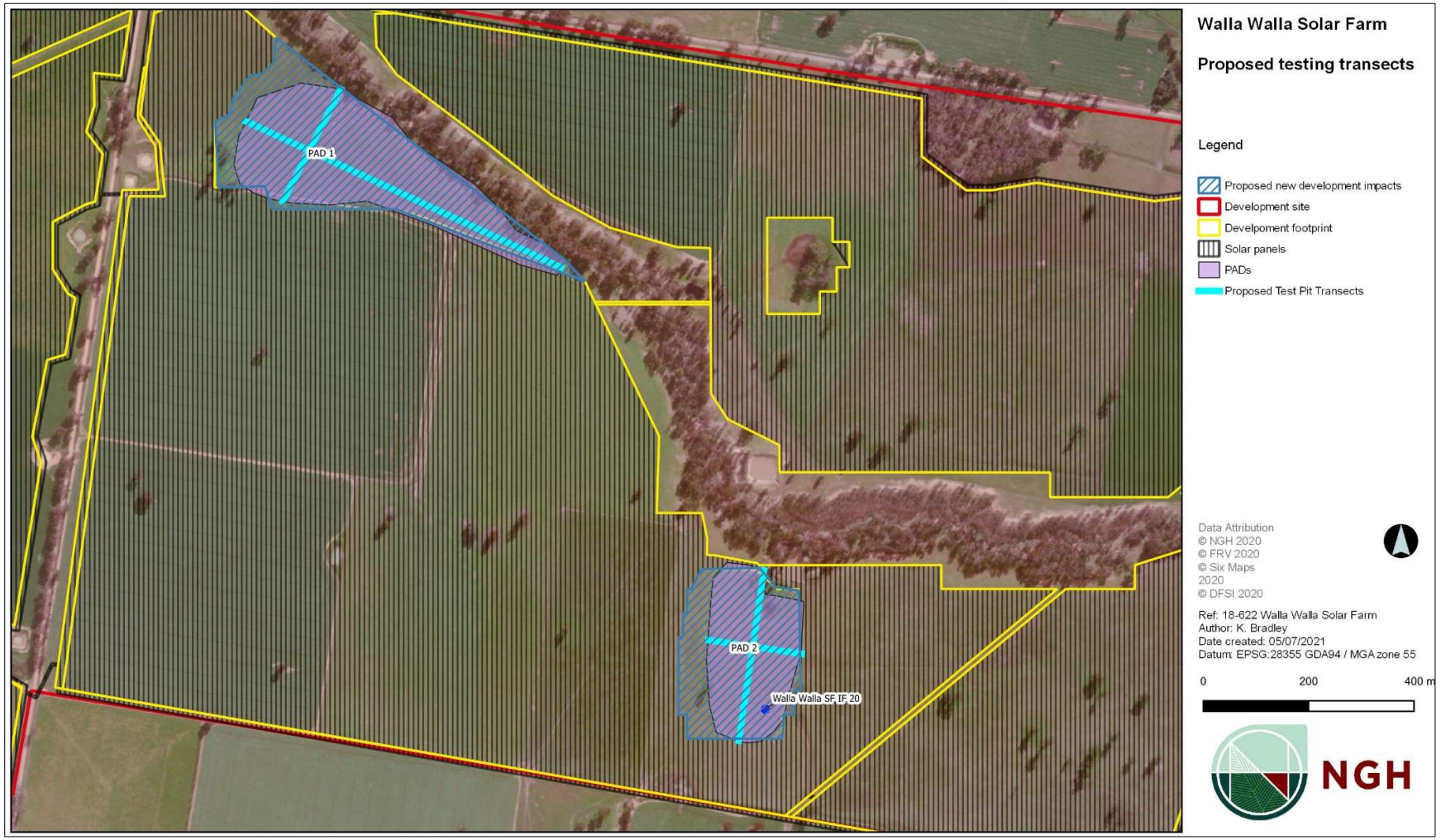

Figure 4-1 Proposed impacts to Walla Walla PA*D* 1 and PAD 2 and the proposed Testing Transects

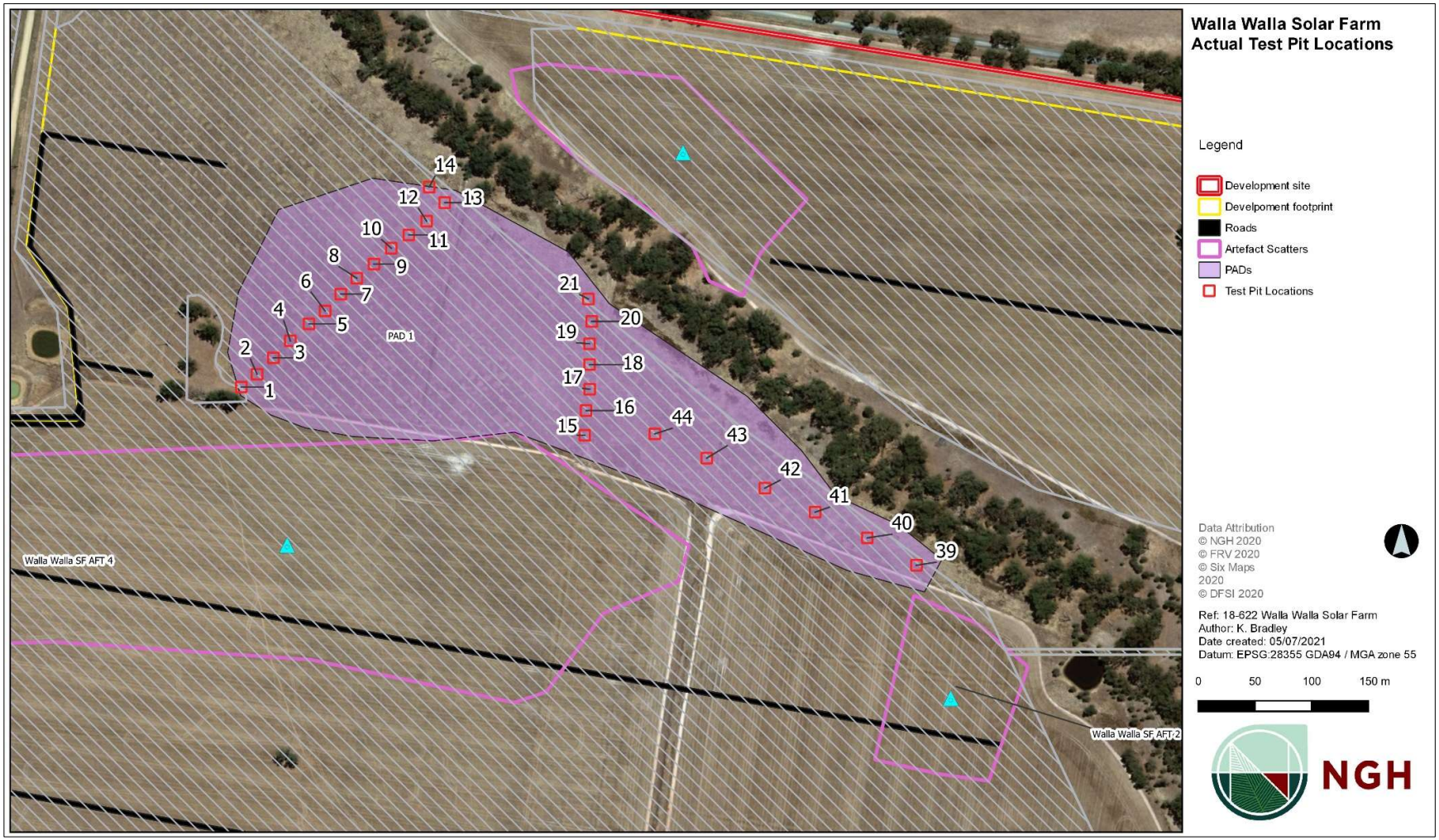

Figure 4-2 *Final test pit locations excavated, Walla Walla PAD 1.*

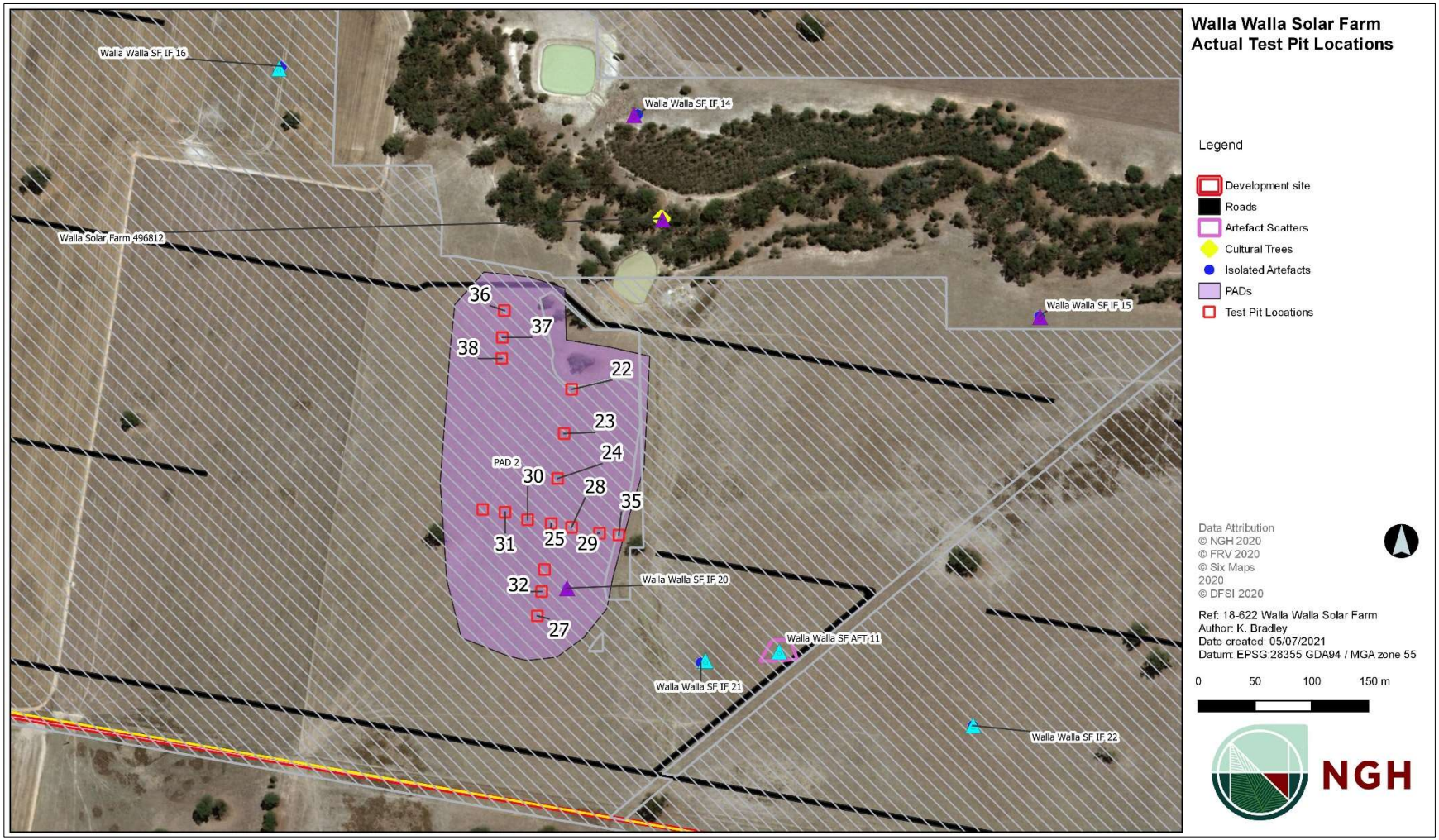

Figure 4-3 *Final test pit locations excavated, Walla Walla PAD 2.*

4.3 Test excavation results

The following describes the results of the test excavation of Walla Walla Solar Farm Project Area. As outlined in the methodology, a total of 44 test pits (TP) were placed in areas that were going to be impacted by the proposed works, as shown in Figure 4-1. The TPs were placed along transects across Walla Walla PAD 1 and Walla Walla PAD 2. The TPs ranged in depth from 15cm to 30cm.

The test excavation for the Walla Walla Solar Farm Project Area was undertaken between Monday 20 September and Saturday 25 September 2021 by NGH archaeologists Layne Holloway, Jorge Fuenzalida Miralles and Bronwyn Partell, and Andom Rendell (Albury LALC) and Mark Saddler (Bundyi Cultural Services). General photographs of the site and recorded artefacts are display below in Plates 2 to 9.

<table>
<tr><td>  </td><td>  </td></tr>
<tr><td>Plate 2. General shot facing north in the Project Area.</td><td>Plate 3. General shot of remnant vegetation within the Project Area.</td></tr>
<tr><td>  </td><td>  </td></tr>
<tr><td>Plate 4. View west of Back Creek that crosses the proposal area (picture taken during survey prior to testing).</td><td>Plate 5. General shot of exposure within the Project Area</td></tr>
</table>

	
Plate 6. View west of wetland depression in the central northern portion of the proposal area.	Plate 7. View north of large depression in the proposal area.
	
Plate 8. View west of wetland depression in the central northern portion of the proposal area.	Plate 9. View north of large depression in the proposal area.

4.3.1 Deposit characteristics

Across the Project Area, the test excavation program revealed 3 main sediment units which related to the landform on which they were located (see

Table 4-2). Majority of the TPs excavated contained an initial layer (0-10cm) of a dark brown humic silty clay, with an abundance of grass rootlets and gravels (sediment unit 1). The following layer (10-20cm) transitioned to an
orange-brown silty clay, with gravel inclusions (sediment unit 2). The deepest layer (20-30cm) transitioned to an orange-brown plastic clay with a high gravel inclusion (75%). The sediment units were overall consistent through the test excavation program as the landforms were similar in nature and had been subject to the same disturbance from agricultural and pastoral practices. The majority of recovered artefacts were from spits 1 (0-10cm) and 2 (10-20cm), with three artefacts recovered from spit 3 (20-30cm), in pits where the transition to the orange, brown plastic clay layer was lower (and fell within the spit). The artefacts were located within the sediment units that had a predominantly silty matrix, with the density decreasing as the clay content increases.

Table 4-2 Sediment units at Walla Walla

Unit	Image	Sediment Description	TP/BH	Landform	Artefacts Present
1		Dark brown humic silty clay, grass rootlets, gravel inclusions	All	Flat/gently sloped	Y
2		Orange brown silty clay, gravel inclusions	All	Flat/gently sloped	Y
3		Orange brown plastic clay, hard compaction, gravel inclusions	All	Flat/gently sloped	Y

4.3.2 Testing Results

A total of 44 test pits (TP) were excavated across Walla Walla PAD 1 and Walla Walla PAD 2 during the subsurface program (Figure 4-1), of these 28 were excavated within PAD 1 and 16 were located within PAD 2. A total of 103 artefacts were recorded during the test excavation, 18 in PAD1 and 85 in PAD2, as well as a cultural hearth in PAD1.

Out of the 44 TPs excavated, a total of 27 contained artefacts, as follows: TP 1, 2, 6, 7, 8, 15, 16, 17, 19, 20, 22, 23, 24, 25, 26, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, and 40. The remaining TPs did not have any artefacts recorded. Figure 4-2 displays the locations of the TPs in relation to the

Project Area. The testing results are highlighted in

Figure 4-4. A high number of artefacts were recorded in TP 25 (n=15, 14.5%, density 45/m^2) and TP 32 (n=16, 15.5%, density 64/m^2), accounting for 30% of the artefact assemblage. Due to the overall consistent depths of the TPs excavated across the site (<30cm), the artefact distribution across the soil profile was concentrated in primarily spit 1 (0-10cm) (n=65, 63%) and spit 2 (10-20cm) (n=35, 34%) with only three artefacts (3%) recorded in spit 3 (20-30cm) across the whole of the two PADs (see Table 4-3).

A cultural hearth was discovered in TP 12. To determine its extent, it was expanded to 1m x 1m (excavated in four 50cm x 50cm quadrants), refer to plates 14-16. No cultural or artefactual material was found in association with this hearth, but the RAP representatives present at the time pointed out that it may have been a cultural/signal fire which would not necessarily leave behind common material culture that is usually associated with hearths. The closest artefactual material recorded to the hearth location was in TPs 7 and 8, which both had proximal fragments recorded. The artefact in TP7 was recorded in spit 1, while the artefact in TP8 was recorded in spit 2. The start point of the hearth was located within Spit 2, with any artefacts at this level potentially relating to the same activity. No artefacts with heat treatment were identified, potentially providing a reasonable explanation for why not artefactual material was recovered in direct association with the hearth.

The shape of the burnt deposit that represented the hearth was not a clean cut along most the northern and western edges, with only a definitive cut outline on the eastern and southern edges. While there was one larger piece of charcoal within the pit and some areas were inconsistent in depth, there were no organic remains to indicate a burnt-out tree root system, however there was also no evidence of burnt clay balls within or surrounding the pit. Due to the cultural value of the location with many significant landmarks surrounding (Tabletop to the southeast, Gum Swamp to the east, and the Billabong Creek to the north, as well as Back Creek immediately adjacent) the RAPs have described the site of the hearth as being highly culturally significant.

Displayed in Figure 4-6, the majority of the raw material utilised for the artefacts from the Walla Walla Solar Farm test excavation were quartz (n=99, 96.1%), followed by silcrete (n=2, 2%) and two (2%) which were unidentified material. A total of nine artefact types were identified during the analysis of the assemblage from the Walla Walla Solar Farm test excavation (Figure 4-7). The majority of the artefact types identified were flaked piece (n=56, 54%), followed by proximal flake (n=18, 17%), complete flake (n=12, 12%), medial flake (n=7, 7%), distal flake (n=6, 6%), broken flake (n=1, 1%), core (n=1, 1%), longitudinally broken right (n=1, 1%), and a manuport (n=1, 1%). Termination was identified on 23 out of 103 artefacts, with feather termination (n=18) being the only method of termination identified. The termination on the remaining five artefacts was indeterminate. Retouch was identified on 14 out of 103 artefacts, with a total of six artefacts containing both retouch and a feather termination.

Plate 10. General shot of common artefact type (proximal flake) and material (quartz), from TP 2 Spit 2.

Plate 11. Silcrete medial flake, from TP 30 Spit 1.

Plate 12. Grey quartz flake with reddish brown cortex covering dorsal surface, from TP 19 Spit 1.	Plate 13. Small quartz core with 2+ negative scars, from TP 24 Spit 1.
	
Plate 14. Potential cultural hearth in TP 12., post sectioning.	Plate 15. Cultural hearth in TP 12, initial quadrant section of hearth deposit.
	
Plate 16. Cultural hearth in TP 12, cross section of hearth interior.	

Figure 4-4. Archaeological Testing Results, PAD1.

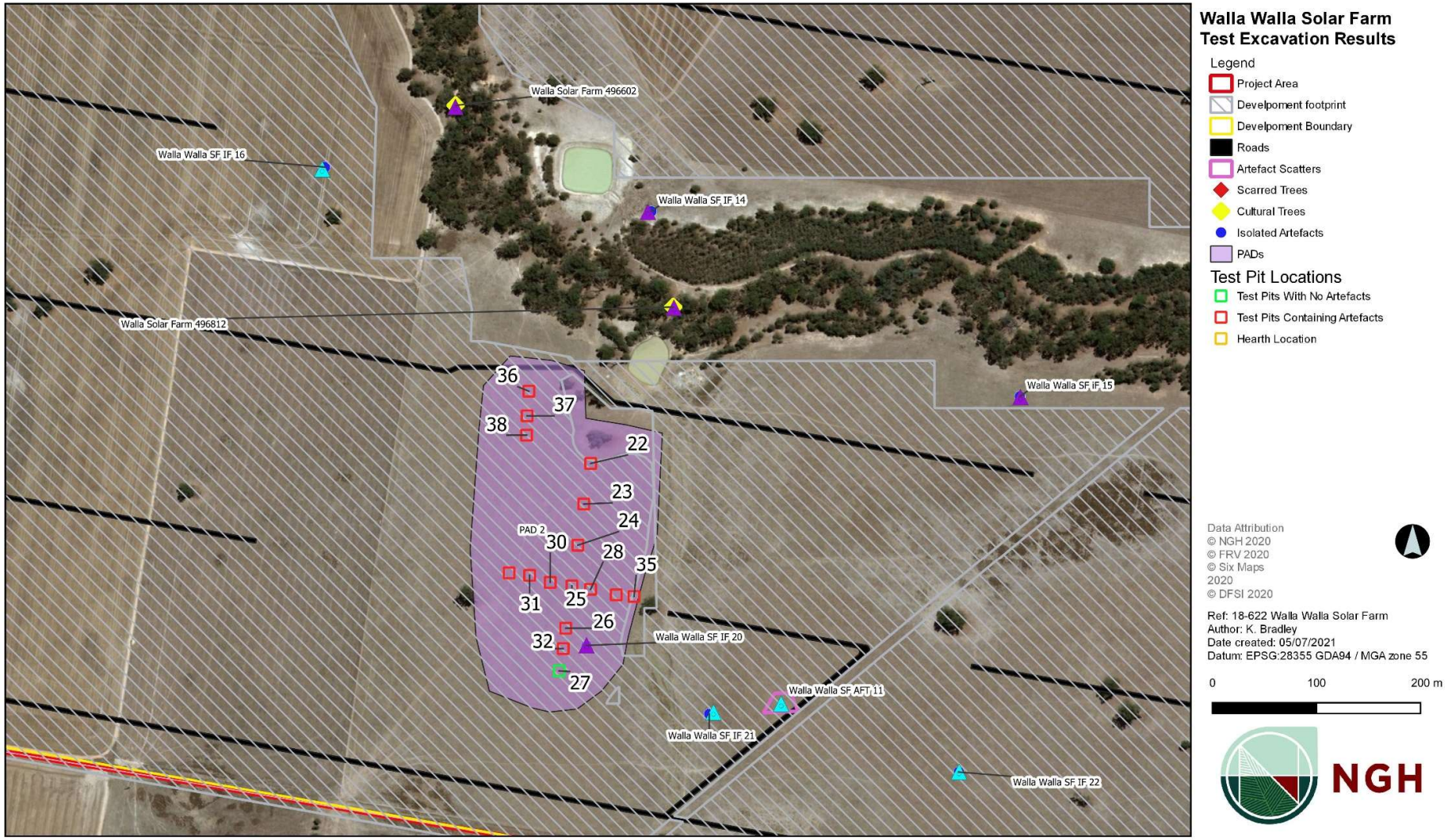

Figure 4-5. Archaeological Testing Results, PAD2.

Table 4-3 Distributions of artefacts by test pits and spit

TP/BH	Spit 1 (0-10cm)	Spit 2 (10-20cm)	Spit 3 (20-30cm)	Clean up	TOTAL
TP 1	0	1	0	0	1
TP 2	0	1	0	0	1
TP 3	0	0	0	0	0
TP 4	0	0	0	0	0
TP 5	0	0	0	0	0
TP 6	1	0	0	0	1
TP 7	2	0	0	0	2
TP 8	0	1	0	0	1
TP 9	0	0	0	0	0
TP 10	0	0	0	0	0
TP 11	0	0	0	0	0
TP 12	0	0	0	0	0
TP 13	0	0	0	0	0
TP 14	0	0	0	0	0
TP 15	0	1	0	0	1
TP 16	0	2	0	0	2
TP 17	2	0	0	0	1
TP 18	0	0	0	0	0
TP 19	3	0	0	0	3
TP 20	1	0	0	0	1
TP 21	0	0	0	0	0
TP 22	0	4	1	0	5
TP 23	2	0	0	0	1
TP 24	1	5	1	0	7
TP 25	4	10	1	0	15
TP 26	7	1	0	0	8
TP 27	0	0	0	0	0
TP 28	3	0	0	0	3
TP 29	8	1	0	0	9
TP 30	3	1	0	0	4
TP 31	2	4	0	0	6
TP 32	15	1	0	0	16
TP 33	3	0	0	0	3
TP 34	1	0	0	0	1
TP 35	0	2	0	0	2
TP 36	2	0	0	0	2
TP 37	1	0	0	0	1
TP 38	3	0	0	0	3
TP 39	0	0	0	0	0
TP 40	1	0	0	0	1
TP 41	0	0	0	0	0
TP 42	0	0	0	0	0
TP 43	0	0	0	0	0
TP 44	0	0	0	0	0
TOTAL	65	35	3	0	103

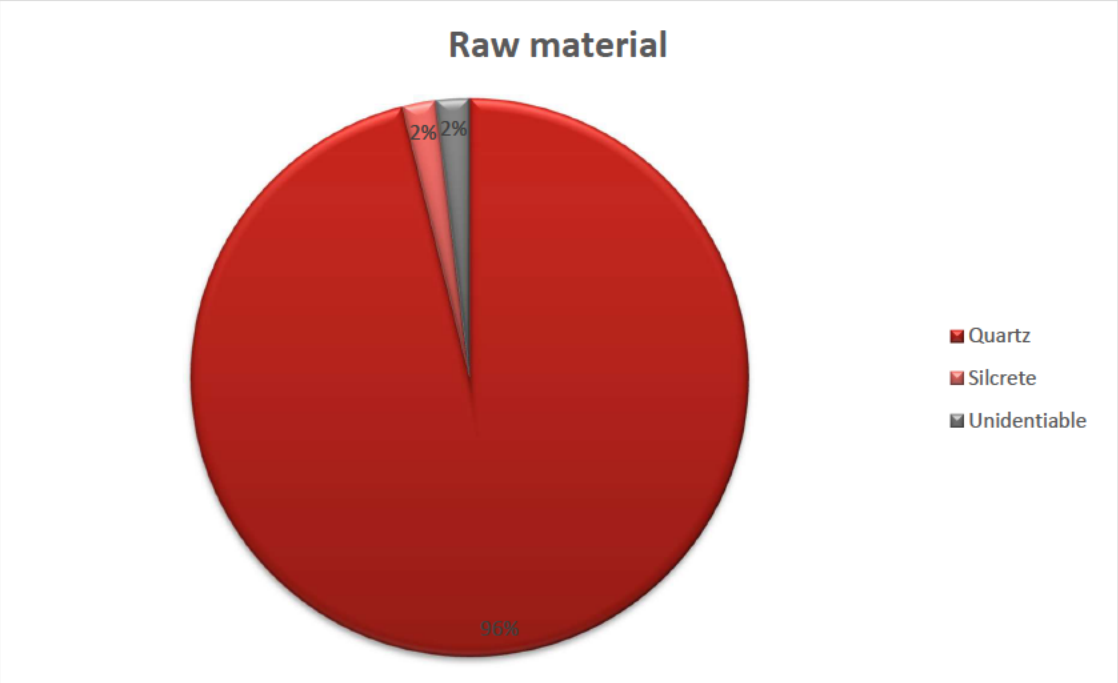

Figure 4-6 Raw material recovered from Walla Walla Solar Farm test excavation

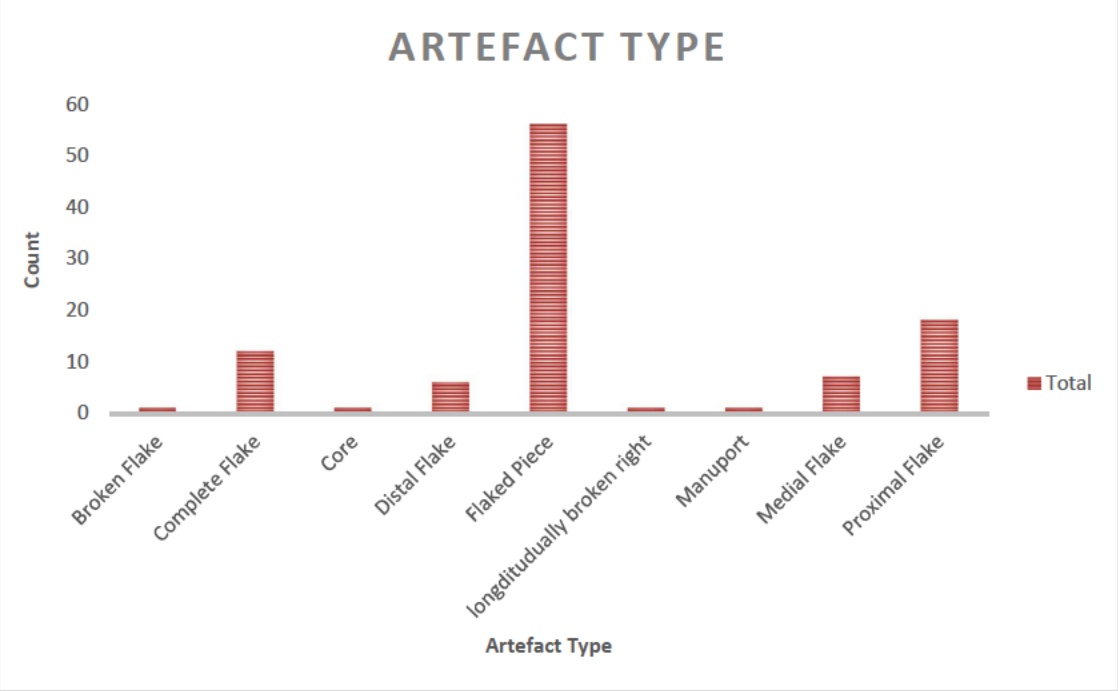

Figure 4-7 Artefact types recorded from the Walla Walla Solar Farm test excavation

4.4 Discussion

The results of previous archaeological surveys in the Walla Walla region, and within the Walla Walla Solar Farm Project Area show that there are sites and artefacts present across the landscape. The predictions based upon the modelling for the additional areas to be impacted were that isolated artefacts, low density artefact scatters and scarred trees in remnant vegetation were

the most likely manifestation of Aboriginal occupation of the area. In keeping with this modelling, isolated artefacts and low-density artefact scatters were recorded during the test excavation program. There were no artefacts identified in direct association with the hearth in TP12. The closest artefacts were located 80m away up the rise of a low spur. The hearth was located on this spur line, between a small crest and Back Creek. Throughout the assemblage, no artefacts with heat treatment were identified, potentially providing a reasonable explanation for why not artefactual material was recovered in direct association with the hearth.

Retouch was identified on 14 artefacts, with this being an important indicator of the value of the stone toolset with no raw material resources in the immediate vicinity. The evidence of retouch is also concentrated in PAD2, where 11 out of the 14 artefacts with retouch were recovered. The maximum artefact density observed in PAD2 (at 64/m^2) is also greatly higher than PAD1 (at 12/m^2). Feather termination was also noted on 23 of the 103 artefacts recorded, which is important to note as it is indicative of useable tools. Cultural knowledge provided by RAPs on site during the test excavations included the necessity for feather termination on tools that were to be used for animal skinning, as well as cultural practices.

Raw material was predominantly a translucent quartz, however there is evidence of at least 3 differing sources that were exploited. During the test excavations, there were no large core stones recovered, with no raw material sources in the immediate vicinity it indicates that the raw materials were brought from elsewhere in a reduced state, and then further refined. The character of the silcrete artefacts recovered would suggest the same. It is evident that the two silcrete broken flakes were from the same source. One is a proximal and one a medial fragment, however they are not from the same artefact (no refit). Both artefacts, however, have evidence of retouch and negative flake scars on the dorsal surface. Cultural knowledge provided by RAPs during the test excavations identified a cultural practice of inserting small, thin, quartz flaked pieces into ridges running lengthways up the tip of a wooden spear. These small quartz pieces would have sharply terminated edges and act similar to a barb on a fishing hook when the spear is used. This could provide an explanation for the dominance of flaked pieces within the assemblage, although it must be noted that the evidence of retouch events could also contribute to presence of small, flaked pieces.

The hearth located in TP12 (PAD1), contained no cultural material in association with the deposit. The start point of the hearth was located within Spit 2, with any artefacts at this level potentially relating to the same activity, however it must be noted that the hearth was clearly dug out and the physical depth does not necessarily need to directly correlate, as noted above all bar 3 artefacts were located in the top two spits. No artefacts with heat treatment were identified, potentially providing a reasonable explanation for why not artefactual material was recovered in direct association with the hearth. Interestingly, however the spatial analysis of the data and similarity in sediment units across the TPs would indicate that the two activities (tool production in PAD2 and the hearth in PAD1) may have been related temporally.

The results of this archaeological investigation within the modified project area do not negate the need for further surveys and/or test excavations to occur in any other areas outside the current assessment 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 all the registered Aboriginal stakeholders for this proposal through the draft reporting process.

It was clear from the conversations held in the field that all sites hold cultural value to the local Aboriginal community. RAP site officer Mark Saddler, who participated in the archaeological test excavations, has submitted a report outlining the cultural significance of the landscape at Walla

Walla. This report also outlines the cultural significance of two areas within the proposed development, the hearth (TP12), and the area identified as PAD 2. It is evident that the entire proposal area, but in particular PAD1 and PAD2, holds high cultural value to the local Aboriginal community.

Scientific (archaeological) value.

As described in this report, subsurface artefacts were located at both sites PAD1 and PAD2. The density of artefacts recovered was considerably higher in PAD2 (maximum density 64/m^2) than was recorded in PAD1 (maximum density 12/m^2), with the quality of artefacts and diversity in raw materials also being greater in PAD2. The area identified as PAD2 has a moderate research potential, representing a relatively small and concentrated area of occupation with a diversity in raw material types and evidence of tool making/repair occurring at the location. In contrast, the relatively low-density background scatter evident in PAD1 would indicate a low research potential. The presence of the sites can and has been used to assist in the development of site modelling for the local landscape and could be used to compare with other artefact assemblages from open camp site locations.

The nature of hearth sites, which generally comprise sporadic, smaller deposits in the wider archaeological record makes the reality of locating one within a 50x50cm test pit low. During the testing the rare opportunity to expand the excavation space and section this hearth was granted, however it was discovered that there was no cultural material in association with the deposit.

While the artefacts themselves are intrinsically interesting in terms of their base technical information, their scientific significance is low in terms of further research potential.

Aesthetic value.

There are no aesthetic values associated with the identified archaeological sites per se, apart from the presence of Aboriginal artefacts in the landscape. Cultural aesthetic values were identified by RAPs during fieldwork, related to the vantage points visible from the proposal area, including Tabletop to the Southeast, Gum Swamp to the East, and Billabong Creek to the North, as well as the natural aesthetic value of Back Creek, which runs through the proposal area.

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

As noted in section 1, FRV Services Australia Pty Ltd (FRV) propose to develop a utility scale solar farm at Walla Walla, approximately 4.3km northeast of the town of Walla Walla and 9.2km south west of the town of Culcairn, New South Wales (NSW) (see Figure 1-1). The proposed solar farm would comprise of 605ha within Lots 16, 17, 20, 21, 87, 88, 89, 108, 109 and 118 DP753735, and Lot 22 DP1069452 on land primarily used for grazing and some cropping. The project is a State Significant Development (SSD) and planning approval was granted on 27 November 2020.

6.1 History and landuse

It has been noted that historically the Walla Walla Solar Farm Project Area has been impacted through land use practices, in particular clearing, ploughing and grazing. European settlement of the Riverina area followed relatively rapidly after Hume and Hovell travelled through the area in 1824. By 1845 four stations, including Round Hill and Walla Walla had been gazetted. The Walla Walla area was settled by eight German Lutheran families from Ebenezer in South Australia in 1868, a few days after the settlement of nearby Jindera. The region has a long history of intensive agricultural and pastoral use. The Project Area is located within the Parish of Creighton, County of Hume. Parish maps dating back as far as 1905 provide an indication of the historical land use across the area. The Project Area was occupied from at least 1868, with the parish map showing a combination of private land grants, which by 1907 were owned by the Commercial Banking Company of Sydney Ltd. The area is indicated to be largely utilised for farming purposes (both agricultural and stock farming). The majority of the land was owned by Henry Henty and Jas Balfour, with small portions south of Back Creek owned by Samuel Müller and north by Charles Weyland. Remnant hand-made bricks and broken glass from the late 1800s were identified south of the creek however no evidence for a structure in this location was identified.

As the location of the proposed Walla Walla Solar Farm is within pastoral and agricultural fields, it has been subject to considerable impacts from farming for many decades. Overall, the Project Area would be categorised as moderately disturbed through consistent farming practices over many decades, including ripping and ploughing.

The implications for this activity are 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

The Walla Walla Solar Farm involves the construction of a solar plant with a capacity up to 300MW (AC). The power generated will be fed into the National Electricity Market (NEM) via a 33kV transmission line that would connect to the existing TransGrid Jindera to Wagga Wagga 330kV transmission line that intersects the western portion of the proposed Project Area.

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

mounted 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 330kV transmission line.

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

Upgrades will be made to the existing creek crossing located at latitude, longitude -35.4451, 146.5831. This area was covered by the assessment and has been previously disturbed from the installation of the existing creek crossing in this location. No heritage sites will be impacted by this activity.

In total, the construction phase of the proposal is expected to take 12 to 18 months. The Walla Walla 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, or upgraded with new photo voltaic equipment.

The development activity will therefore involve disturbance of the ground during the construction of the solar farm. As noted in Section 1.1, a modification is proposed which will result in impact to previously avoided areas within the Project Area. The proposed modification includes:

- An additional 13–15ha of solar arrays added to the footprint of the project (additional heritage impacts to two areas of PAD (PAD1 and PAD2) and site Walla Walla SF IF 20).

Once established however, there would be minimal ongoing disturbance of the ground surface.

6.3 Assessment of harm

The current and previous archaeological investigations of the proposal area have clearly identified that there are Aboriginal archaeological sites present. With the current proposed works, it is not possible to avoid harm to all of the sites within the proposal area. The proposed level of disturbance would be total, with the areas these sites were located within facing ground disturbances. This is considered a direct impact on the sites and the Aboriginal objects by the development in its present form. The total destruction to these sites is not avoidable.

In reference to the proponent's proposal and the archaeology recorded, there would potentially be a low to moderate level of impact on the archaeological record. The type and degree of harm proposed to the recorded sites is outlined in Table 6-1. While the proposed works in additional areas for the modified Walla Walla SF development will have the potential to harm archaeological sites. The identified Aboriginal objects will not be individually harmed, with the harm coming from the destruction of the archaeological context of the site. It would be proposed that all Aboriginal objects facing harm as a result of the modified development be mitigated through salvage collection and reburial in a safe location, as outlined in Section 7.3.

6.4 Impacts to values

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

The impact to the scientific values of the artefacts (if not avoided by the proposed development) is considered low (PAD1) to moderate (PAD2), as there were no artefacts identified that could provide any further information other than their existence within the landscape. The impact to the scientific values of PAD1, if impacted by the current proposal is considered low, as there were no artefacts identified that could provide any further information about Aboriginal occupation of the area other than their existence within the landscape, however, it must be noted that the RAPs have requested the location of the hearth to be avoided and not impacted (any further than excavation has already done so). The impact to scientific values of PAD2, if impacted by the current proposal is considered as low to moderate, as there is a low potential that further information about the Aboriginal occupation of the area may be provided as a result of salvage and analysis of this deposit.

The values potentially impacted by the development include these scientific values and any social and cultural values attributed to the artefacts and the sites by the local Aboriginal community. The extent to which the total or partial loss of the sites would impact on the community is only something the Aboriginal community can articulate. 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 to moderate scientific value they retain.

Table 6-1. Identified risk to sites recorded for this Addendum.

AHMIS #	Site name	Site integrity	Scientific significance	Type of harm	Degree of harm	Consequence of harm	**Recommendation**
55-6-0193	Walla Walla SF IF 20	Poor to Good. The area appears relatively undisturbed, the land has been predominantly cleared of trees and subject to a 100+ year history of farming and has a rough animal tracks through the grass and natural erosion patches within the immediate vicinity of the site.	Low	Direct – the site falls within the solar array footprint and will face total destruction.	Total	Partial loss of value	Surface salvage will be required before construction can commence.
TBC	Walla Walla SF PAD 1	Good. The area appears relatively undisturbed, the land has been predominantly cleared of trees and subject to a 100+ year history of farming but displays no signs of significant ground disturbances.	Low	Direct – the site falls within the solar array footprint and will face total destruction.	Total	Partial loss of value.	Avoid the location of the identified cultural hearth, TP12 with a 2m buffer zone for exclusion. No mitigation recommendations for the remainder of the deposit due to the extremely low density of artefacts recovered.
TBC	Walla Walla SF PAD 2	Good. The area appears relatively undisturbed, the land has been predominantly cleared of trees and subject to a 100+ year history of farming but displays no signs of significant ground disturbances.	Low to Moderate	Direct – the site falls within the solar array footprint and will face total destruction.	Total	Partial loss of value.	Subsurface salvage will be required before construction can commence. It is recommended that this occur in two open areas of a minimum 2m x 2m to a maximum 3m x 3m centered around the locations of TP25 and TP32.

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 during the archaeological testing for the additional proposed works for the Walla Walla Solar Farm. 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.

The principle of inter-generational equity requires the present generation to ensure that the health 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 the proposed development particularly given the existing disturbed nature of the sites and that stone artefacts are the most common site type so far recorded within the local area. The predictive modelling and archaeological record for the region would indicate that there are sites of greater scientific value known within the local area that will not be impacted by the proposed development.

7.2 Consideration of harm

It would not be possible to avoid all known sites due to the construction requirements of the proposed works for the Walla Walla SF. It will not be possible to avoid the recorded sites under the current proposal for the Walla Walla SF.

The archaeological sites within the proposed additional areas have presented a low-density concentration of artefacts, which have been assessed to hold low scientific value. Based on the assessment of the sites and in consideration of discussions with the Aboriginal representatives during the fieldwork, it is not considered necessary to prevent all development of the proposed additional areas, or for total avoidance of the Aboriginal heritage sites identified within the proposed works corridors. It is recommended, however, to avoid the ‘hearth’ site with a minimum 2m buffer zone, and mitigate the harm to the sites PAD2 and Walla Walla SF IF 20 through salvage.

7.3 Mitigation of harm

Mitigation of harm to cultural heritage sites generally involves some level of detailed recording to preserve the information contained within the site or setting aside areas as representative samples of the landform to preserve a portion of 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 artefacts.

It is recommended that any surface artefact sites to be impacted by the development are salvaged by an archaeologist with representatives from the RAPs and removed from the areas where potential harm is to occur prior to the proposed works commencing. The artefacts should be collected and reburied in a safe area (in accordance with Requirement 26 of the Code), as close as possible to their original location, which will not be subject to any ground disturbance, unless otherwise requested by the RAPs.

Avoidance is recommended for the small area within PAD1 that contained the cultural hearth (TP12), as requested by the RAPs on site during the testing program. It would be recommended that a minimum 2m buffer zone be enforced, and the site temporarily fenced off during construction.

Subsurface salvage is recommended at PAD2, where a higher density of artefacts was located on the small spur landform. Subsurface salvage should be conducted in a large open area excavation, with two areas at a minimum of 2m x 2m to a maximum of 3m x 3m excavated. These salvage areas will be placed around the locations of TP25 and TP32, which had the highest artefact densities at 45/m^2 and 64/m^2 respectively.

These recommendations have been designed to provide adequate mitigation to these sites that are unable to be avoided by the proposed Walla Walla SF development.

Figure 7-1. Recommended Mitigation Measures, PAD1.

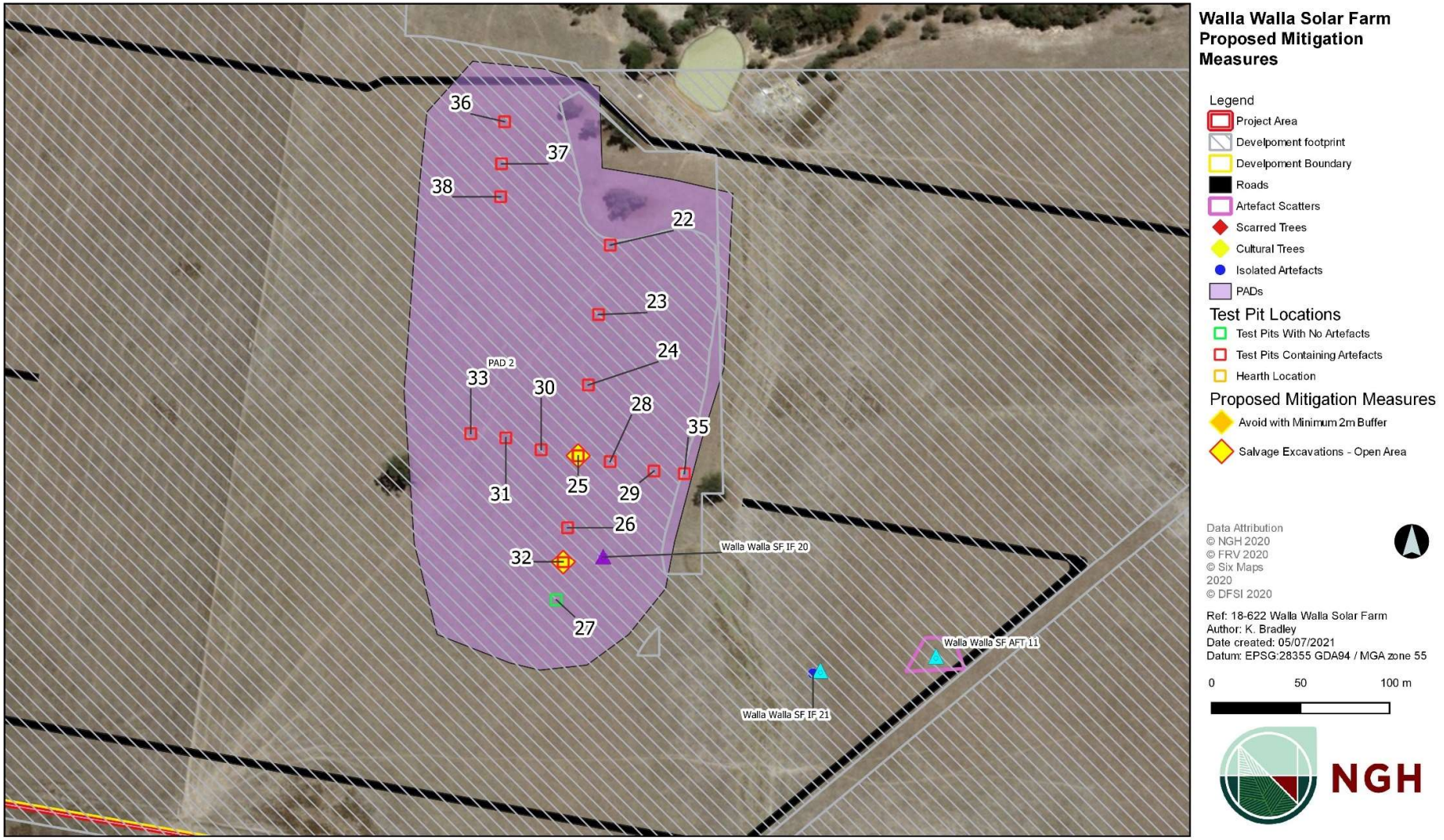

Figure 7-2. Recommended Mitigation Measures, PAD2.

8. Legislative context

Aboriginal heritage is primarily protected under the NPW Act and as subsequently amended in 2019 with the introduction of the *National Parks and Wildlife Amendment (Aboriginal Objects and Places) Regulation 2019*. 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 or State Significant Infrastructure under the EP&A Act 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. 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 Heritage NSW prior to development consent being approved.

The Walla Walla Solar Farm 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 the previous Walla Walla SF heritage assessments;
- Results of consultation with the registered Aboriginal parties;
- Appraisal of the proposed development, and
- Legislative context for the development proposal.

It is recommended that:

1) The archaeological sites within the proposed additional areas have presented a low-density concentration of surface artefacts that have been assessed to hold a low scientific value. Based on the assessment of the sites and in consideration of discussions with the Aboriginal representatives during the fieldwork, it is not considered necessary to prevent all development of the proposal area, or for total avoidance of the Aboriginal heritage sites identified within this addendum ACHA.
2) Prior to development works commencing, all surface artefacts facing potential harm are collected during a salvage program, by a qualified archaeologist and RAP representatives, in accordance with the Conditions of Consent. Any artefacts collected would be buried in consultation with the Aboriginal community and would be in line with Requirement 26 of the *Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW.* All AHIMS site cards must be updated to reflect that salvage has been undertaken and to record the reburial locations of artefacts. This includes the following site(s):

Site Name	AHIMS Site ID	Site Type
Walla Walla SF IF2(	55-6-0193	Isolated Artefact

3) The works within the proposed additional areas should avoid the area containing the cultural hearth (Walla Walla SF Cultural Hearth (TP12)) with a 2m buffer, as outlined in Figure 7-1.
4) Subsurface (archaeological) salvage is required at the location of PAD2 if the area cannot be avoided. Salvage would occur in two open areas of a minimum 2m x 2m to a maximum 3m x 3m around the centre of the PAD (where the highest density of artefacts was recorded), as outlined in Figure 7-1.
5) All site staff must receive a site-specific induction, including a cultural heritage induction completed by a suitably qualified individual.
6) If, during works undertaken in accordance within the approval area, any Aboriginal objects (or suspected Aboriginal objects) are identified outside of salvage locations as outlined in the ACHA (NGH 2018) and this addendum, work must stop, and Heritage NSW must be notified.
7) In the unlikely event that human remains are discovered during the development works, all work must cease in the immediate vicinity. Heritage NSW, the local police

and the RAPs should be notified. Further assessment would be undertaken to determine if the remains were Aboriginal or non-Aboriginal.

8) An Aboriginal Heritage Management Plan is required, as per Condition 25 of the CoC. This must be completed and endorsed prior to any salvage works commencing.
9) Further archaeological assessment would be required if other proposed activity extends beyond the area of the current or previous investigations, as per Condition 24 of the CoC. This would include consultation with the registered Aboriginal parties and may include further field survey and subsurface testing.

10. References

Allen, H., 1974. The Bagundji of the Darling Basin: cereal gatherers in an uncertain environment. World Archaeology, 5 (3), 309–322.

Associates Archaeology and Heritage, 2015. *Archaeological Report: Drumwood Road, Jindera NSW.* Unpublished report to Marg Wehner and Brian Millar.

Bennet, G 1834, Wanderings in New South Wales, Batavia, Pedir Coast, Singapore, and China Vol. 1., Richard Bentley, London.

Beveridge, P 1883, Of the Aborigines inhabiting the great lacustrine and riverine depression of the Lower Murray, Lower Murrumbidgee, Lower Lachlan, and Lower Darling, Sydney.

Biosis, 2008. *Albury Waste Management Facility – Northern Valley Development: Cultural and Archaeological Heritage Assessment.* Unpublished report produced for URS Australia.

Border Archaeology, 2007. *Carsten St Residential Development Archaeological Excavation/Salvage Report.* Unpublished report prepared for Richard Hughes Project Management.

Border Archaeology, 2008. *The 19th Hole Hume Country Club Estate Residential Development Archaeological Salvage Report.* Unpublished report prepared for Doug Gow & Associates.

Braz, K. 1980. *Report on the Survey for Aboriginal Sites and Relics Along the 132 Kv Transmission Line from Jindera to Ettamogah, N.S.W*. Unpublished report prepared for NPWS.

Crosby, E., 1978. *A Site Survey in the Albury Area.* Unpublished report to the NPWS.

Djekic, A., 1978. *An Archaeological Survey for the Wagga Wagga to Albury Transmission Line.* Unpublished report to NPWS.

Dowling, P 1997, A Great Deal of Sickness: Introduced Diseases Among the Aboriginal People of Colonial Southeast Australia 1788-1900, Unpublished Doctor of Philosophy Thesis, The Australian National University.

Egloff, B, Peterson, N & Wesson, SC 2005, Biamanga and Gulaga: Aboriginal cultural association with Biamanga and Gulaga National Parks, Office of the Registrar, Aboriginal Land Rights Acts 1983 (NSW).

Envirokey Pty Ltd, 2016. *Riverina Highway (HW20) – Stage 2 Safety Improvement Work: Review of Environmental Factors.* Unpublished report for Roads and Maritime Services.

Fraser, J 1892, The Aborigines of New South Wales, Charles Potter, Government Printer, Sydney.

Gammage, B (2012) The Biggest Estate on Earth: How Aborigines Made Australia, Allen & Unwin, Crows Nest NSW.

Gibbons, P. 2001. *New South Wales South West Slopes Bioregion Scoping Study, Draft Report*. NPWS, Hurstville.

Gilmore, M 1934, Old Days Old Ways, Angus & Robertson, Melbourne.

Goldsmith, S. W., Barker, P. J., & Johnston, D. 198s5. *Soil Conservation Service of New South Wales: Reconnaissance Land Resources Survey, Jindera*. Report prepared for the Hume Shire Council.

Gott, B 1982, 'Ecology of Root Use by the Aborigines of Southern Australia', Archaeology in Oceania, vol. 17, no. 1, pp. 59–67.

Haglund, L., 1980. *Archaeological Survey in The Brocklesby – Gerogery – Tabletop – Albury Area.* Unpublished report for the Department of Public Works.

Horton, D 1994, The encyclopaedia of Aboriginal Australia: Aboriginal and Torres Strait Islander history, society and culture D Horton (ed), Aboriginal Studies Press, Canberra.

Howitt, AW 1904, The native tribes of south-east Australia, Macmillan and Company Ltd.

Kabaila, P 1999, Archaeological Aspects Of Aboriginal Settlement Of The Period 1870-1970 In The Wiradjuri Region, Unpublished Doctor of Philosophy Thesis, The Australian National University.

Lawrence, RJ 1967, Aboriginal habitat and economy, Unpublished Master's Thesis, Department of Geography, The Australian National University.

Littleton, J & Allen, H 2007, 'Hunter-gatherer burials and the creation of persistent places in southeastern Australia', Journal of Anthropological Archaeology, vol. 26, pp. 283–298.

MacDonald, G 1983, The Concept of Boundaries in Relation to the Wiradjuri People of Inland New South Wales: An assessment of Inter-Group Relationships at the Time of European Conquest, Report prepared for Wiradjuri Land Council.

Navin, K., K. Officer and M. Tracey, 1996a. *Wodonga- Wagga Wagga Natural Gas Pipeline EIS. Cultural Heritage Assessment*. Unpublished report to Sinclair Knight Merz.

Navin, K. and K. Officer, 1996b. *Wodonga to Wagga Wagga Natural Gas Pipeline: Further Archaeological Assessment.* Unpublished report to East Australian Pipeline Ltd.

Navin, K., K. Officer and J. Kamminga, 1998. *Wodonga – Wagga Wagga Natural Gas Pipeline Archaeological Subsurface Testing Program.* Unpublished report to East Australian Pipeline Ltd.

NGH 2019, *Aboriginal Cultural Heritage Assessment Walla Walla Solar Farm.* Report to FRV Services Australia Pty Ltd.

NGH Environmental, 2018. *Aboriginal Cultural Heritage Assessment: Andersons Clay Mine Extension.* Unpublished report for PGH Bricks and Pavers Pty Ltd.

NGH Environmental, 2019a. *Aboriginal Cultural Heritage Assessment: Jindera Solar Farm.* Unpublished report for Greenswitch Australia Pty Ltd.

NGH Environmental, 2019b (*in prep*). *Aboriginal Cultural Heritage Assessment: Culcairn Solar Farm.* Unpublished report for Neoen Australia Pty Ltd.

OEH. 2010a. Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales.

OEH. 2010b. Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales.

OEH. 2010c. Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010.

OEH. 2011. Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW. Ltd.

Officer, K., 1994. *Archaeological Survey Proposed Extension to Culcairn Hard Rock Quarry, Hurricane Hill, NSW.* Unpublished report to Boral Resources (Country) Pty Ltd.

Officer, K., K. Navin and J. Kamminga, 1998. *Wodonga – Wagga Wagga Natural Gas Pipeline Archaeological Subsurface Testing Program.* Unpublished report to East Australian Pipeline Limited.

Oxley, J 1820, Journals of Two Expeditions Into the Interior of New South Wales, undertaken by order of the British Government in the Years 1817-1818, John Murray, London.

Pearson, M 1981, Seen through different eyes: changing land use and settlement patterns in the Upper Macquarie River region of NSW from prehistoric times to 1860, Unpublished Doctor of Philosophy Thesis, Department of Prehistory and Anthropology, The Australian National University.

Presland, G., 1981. *An Archaeological Survey of Tree Planting Areas in the Albury Wodonga Region.* Unpublished report to the Albury Wodonga Development Corporation.

Smith, L. J. and C. Upher, 1992. *Archaeological Survey for Aboriginal Sites of 'Maryvale', Albury NSW.* Unpublished report prepared for Gutteridge Haskins & Davey Pty Ltd.

Spennemann, D. H. R. 1998. The effects of the 1871-72 earthquakes on the Southern Riverina: An overview of historical and anecdotal data, Albury. Charles Sturt University, The Johnstone Centre report no. 102.

Sturt, C 1833, Two expeditions into the interior of Southern Australia during the years 1828, 1829, 1830, and 1831 (2 Volumes), Smith, Elder and Co., London.

Tindale, N 1940, Distribution of Australian aboriginal tribes: a field survey,

Tindale, NB 1974, Aboriginal tribes of Australia: their terrain, environmental controls, distribution, limits, and proper names, ANU Press, Canberra.

White, I 1986, Dimensions of Wiradjuri: an ethnohistoric study, Unpublished B. Litt Thesis, The Australian National University.

Willis, I. L. 1974. 'The geology of the Albury Region.' *Geological Survey Report No. GS 1974/198*. Geological Survey of New South Wales, Department of Mines, Albury-Wodonga Development Corporation.

Woolrych, F. B. W., 1890. Native names of some of the runs etc. in the Lachlan District. Journal of the Royal Society of New South Wales, 24, 63–70.

Appendix A Consultation documentation

Organisation	Contact	Action	Date Sent	Reply Date	Replied by	Response
OEH	[redacted]	letter to OEH via email	7/01/2019		letter via email	supplies list of additianl possible stakeholders
NTScorp		Letter to NTSCorp via email	7/01/2019			
National Native Title Tribunal		online seach	7/01/2019			no determined native title
Office of Registrar *Aboriginal Land Rights Act*	[redacted]	Letter to Office of the Registrar via email	7/01/2019	14/01/2019	letter via email	Suggested contacting Albury & District LALC on 6025 7075
Albury & District LALC	[redacted]	Letter to LALC via email	7/01/2019	1/02/2019	email	AZ acknowledged registration via email
[redacted]						
[redacted]						
Bundyi Cultural Knowledge Group	[redacted]	Letter via email	7/01/2019	7/01/2019	Email	AZ acknowledged registration via email
[redacted]		Letter via email	7/01/2019			
[redacted]		Letter via email	7/01/2019			
Mungabareena Aboriginal Corporation		Letter via email	7/01/2019			
[redacted]		Letter via email	7/01/2019			
Wagga Wagga LALC		Letter via email	7/01/2019			
Yalmambirra		Letter via email	7/01/2019	7/01/2019	Email	AZ acknowledged registration via email
Murray Local Land Services	[redacted]	Letter via email	7/01/2019			
Greater Hume Shire Council		Letter sent via email	7/01/2019			
Local Newspapers	Eastern Riverina Chronicle	Newspaper advertisement	16/01/2019			
OEH list of possible stakeholders						**Due 30th January**
all RAPs on list already contacted		letter sent via email	29/01/2019			
Methodology						**Closes 1st of March**
Albury & District LALC	[redacted]	Methodology sent via email	1/02/2019			
Bundyi Cultural Knowledge Group	[redacted]	Methodology sent via email	1/02/2019			
Yalmambirra		Methodology sent via email	1/02/2019	2/02/2019	Email	No comments on methodology but cannot provide insurance for fieldwork
Reminder for comments on Methodology						
Bundyi Cultural Knowledge Group	[redacted]	via email	21/02/2019	21/02/2019	Email	No comments on methodology. Provided insurance for fieldwork
Albury LALC	[redacted]	via email	21/02/2019			
Fieldwork						
Bundyi Cultural Knowledge Group	[redacted]	via email	7/03/2019	7/03/2019	Email	Provided updated rates
Albury LALC	[redacted]	via email	7/03/2019	7/03/2019	Phone	Available for fieldwork and provided insurance and rates
Change of fieldwork dates						
Bundyi Cultural Knowledge Group	[redacted]	via email	12/03/2019	12/03/2019	Email	Available for change of dates to fieldwork
Albury LALC	[redacted]	via email	12/03/2019	12/03/2019	Phone	Available for change of dates to fieldwork
Modification						
notice re Mod and methdology sent to RAPs						
Bundyi Cultural Knowledge Group		via email	6/07/2021	7/07/2021	email	supplied rates and insurances, no comments on methodology noted
Yalmambirra		via email	6/07/2021	8/07/2021	email	Thanks for the update. I do not have Insurances however. I think that this would impact on my selection as a participant in the project.
Albury LALC		via email	6/07/2021			
Albury LALC		follwu up email and phone call	9/08/2021	12/08/2021	email	provided rate and insirances- no comments noted
Draft Addendum ACHA sent for review						

Albury & District LALC	[redacted]	Draft addendum ACHA sent for comments via email	24/12/2021			
Bundyi Cultural Knowledge Group	[redacted]	Draft addendum ACHA sent for comments via email	24/12/2021	26/12/2021	email	Yamma Kosta, I have had a look over your draft report. All seems to be in order. However I would like to see the following added into this report please, Local Wiradjuri Knowledge Holder to be contracted to the Solar Farm as a Cultural Adviser for the duration of the project. Management, staff, contractors and others that work on this land, to be inducted and culturally immersed in Wiradjuri country, lore and customs. Also "Due Diligence" and "Unexpected Finds" Signs at the entrance of the proposed complex that indicate "Acknowledgement of Wiradjuri Country" A location marked and agreed on by the land holder and RAP s for the return of our items. Protection given to the PADs and no AHIPS over such.
Yalmambirra		Draft addendum ACHA sent for comments via email	24/12/2021			
Reminder sent re comments on draft Addendum ACHA due next week						
Bundyi Cultural Knowledge Group	[redacted]	via email	17/01/2022			
Yalmambirra		via email	17/01/2022			
Albury LALC	[redacted]	via email	17/01/2022			
Draft Addendum ACHA letter sent for review						
Albury & District LALC	[redacted]	Draft addendum ACHA letter sent for comments via email	21/03/2022			
Bundyi Cultural Knowledge Group	[redacted]	Draft addendum ACHA letter sent for comments via email	21/03/2022			
Yalmambirra		Draft addendum ACHA letter sent for comments via email	21/03/2022			

Bronwyn Partell

From: Kirsten Bradley
Sent: Tuesday, 6 July 2021 5:06 PM
To: [redacted]
Cc:
Subject: 21-200 - Walla Walla Solar Farm Modification Application- Subsurface testing
Attachments: 21-200 Walla Walla Solar Farm Modification Testing Methodology_Draft_20210706.pdf

Importance: High

Hi [redacted],

NGH are contacting you as the Albury and District LALC are a Registered Aboriginal Party (RAPs) for the State Significant Development the Walla Walla Solar Farm which was granted approval on the 27th of November 2020.

Recently FVR Services Australia Pty Ltd (FRV) has engaged NGH to undertake two modification application for the project. The first modification will not have any new or additional impacts on Aboriginal heritage as it relates to an increase in the maximum height of power poles for the onsite substation and a change in height of the solar panels from 4 metres to 4.5 metres above ground level. However, the second modification application will be for the use of lands within the solar farm for the placement of additional solar arrays in two areas which were previously excluded from the development design. This modification would impact the previously recorded sites Walla Walla PAD 1, Walla Walla PAD 2 and Walla Walla SF IF 20 which were listed in the Conditions of Consent for the project as to be avoided. Given this, in line with the recommendations of the initial ACHA a programme of subsurface testing is required to be undertaken within the two areas of PAD which are now proposed to be impacted, and an Addendum ACHA written.

NGH is therefore providing all RAPs for the project an archaeological methodology for the subsurface testing of the two previously recorded PAD areas for review and comment which is attached. Please ensure you provide Jill (cc'd above) a copy of your rates and insurances before COB the 3rd of August 2021 if you would like to be put forward for fieldwork selection to FRV for this subsurface testing programme. We currently anticipate that testing would be undertaken in mid-August for 1-2 weeks so if your able to let us know in advance your availability for this period it would also be appreciated.

If you have any questions or concerns about the proposed testing programme and/or modification please don't hesitate to contact either myself or Jill.

Cheers,

KIRSTEN BRADLEY
SENIOR HERITAGE CONSULTANT

T. 02 6153 6324 **M.** 0409 002 289
E. kirsten.b@nghconsulting.com.au
Unit 8, 27 Yallourn St
(PO Box 62) Fyshwick ACT 2609

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Bronwyn Partell

From: [redacted]
Sent: Thursday, 8 July 2021 4:29 PM
To: Kirsten Bradley
Subject: RE: 21-200 - Walla Walla Solar Farm Modification Application- Subsurface testing

Hullo Kirsten

Thanks for the update. I do not have Insurances however. I think that this would impact on my selection as a participant in the project.

[redacted]

Sent from Mail for Windows 10

From: Kirsten Bradley
Sent: Tuesday, 6 July 2021 5:05 PM
To: [redacted]
Cc: [redacted]
Subject: 21-200 - Walla Walla Solar Farm Modification Application- Subsurface testing

Hi [redacted],

NGH are contacting you as you are a Registered Aboriginal Party (RAPs) for the State Significant Development the Walla Walla Solar Farm which was granted approval on the 27th of November 2020.

Recently FVR Services Australia Pty Ltd (FRV) has engaged NGH to undertake two modification application for the project. The first modification will not have any new or additional impacts on Aboriginal heritage as it relates to an increase in the maximum height of power poles for the onsite substation and a change in height of the solar panels from 4 metres to 4.5 metres above ground level. However, the second modification application will be for the use of lands within the solar farm for the placement of additional solar arrays in two areas which were previously excluded from the development design. This modification would impact the previously recorded sites Walla Walla PAD 1, Walla Walla PAD 2 and Walla Walla SF IF 20 which were listed in the Conditions of Consent for the project as to be avoided. Given this, in line with the recommendations of the initial ACHA a programme of subsurface testing is required to be undertaken within the two areas of PAD which are now proposed to be impacted, and an Addendum ACHA written.

NGH is therefore providing all RAPs for the project an archaeological methodology for the subsurface testing of the two previously recorded PAD areas for review and comment which is attached. Please ensure you provide Jill (cc'd above) a copy of your rates and insurances before COB the 3rd of August 2021 if you would like to be put forward for fieldwork selection to FRV for this subsurface testing programme.

If you have any questions or concerns about the proposed testing programme and/or modification please don't hesitate to contact either myself or Jill.

Cheers,

KIRSTEN BRADLEY
SENIOR HERITAGE CONSULTANT

T. 02 6153 6324 **M.** 0409 002 289
E. kirsten.b@nghconsulting.com.au
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NGH acknowledges that we work on the traditional lands of First Nations people across Australia and recognises the enduring connection to the land. We pay our respects to elders, past present and emerging.

Bronwyn Partell

From: [redacted]
Sent: Wednesday, 7 July 2021 10:45 AM
To: Kirsten Bradley
Cc: [redacted]
Subject: RE: 21-200 - Walla Walla Solar Farm Modification Application- Subsurface testing
Attachments: Work Rates 2020.pdf

Yamma (hello)

Work rates are attached.

Insurances are all up to date.

At this stage I would be available from 12th to 22nd August.
We would need to lock in these days urgently if possible.

Guwayu (Safe Travels)

[redacted]

From: Kirsten Bradley
Sent: Tuesday, 6 July 2021 5:01 PM
To: [redacted]
Cc: [redacted]
Subject: 21-200 - Walla Walla Solar Farm Modification Application- Subsurface testing
Importance: High

Hi [redacted],

NGH are contacting you as you are a Registered Aboriginal Party (RAPs) for the State Significant Development the Walla Walla Solar Farm which was granted approval on the 27th of November 2020.

Recently FVR Services Australia Pty Ltd (FRV) has engaged NGH to undertake two modification application for the project. The first modification will not have any new or additional impacts on Aboriginal heritage as it relates to an increase in the maximum height of power poles for the onsite substation and a change in height of the solar panels from 4 metres to 4.5 metres above ground level. However, the second modification application will be for the use of lands within the solar farm for the placement of additional solar arrays in two areas which were previously excluded from the development design. This modification would impact the previously recorded sites Walla Walla PAD 1, Walla Walla PAD 2 and Walla Walla SF IF 20 which were listed in the Conditions of Consent for the project as to be avoided. Given this, in line with the recommendations of the initial ACHA a programme of subsurface testing is required to be undertaken within the two areas of PAD which are now proposed to be impacted, and an Addendum ACHA written.

NGH is therefore providing all RAPs for the project an archaeological methodology for the subsurface testing of the two previously recorded PAD areas for review and comment which is attached. Please ensure you provide Jill (cc'd above) a copy of your rates and insurances before COB the 3rd of August 2021 if you would like to be put forward for fieldwork selection to FRV for this subsurface testing programme. We currently anticipate that testing would be undertaken in mid-August for 1-2 weeks so if your able to let us know in advance your availability for this period it would also be appreciated.

If you have any questions or concerns about the proposed testing programme and/or modification please don't hesitate to contact either myself or Jill.

Cheers,

KIRSTEN BRADLEY
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NGH acknowledges that we work on the traditional lands of First Nations people across Australia and recognises the enduring connection to the land. We pay our respects to elders, past present and emerging.

From: Kosta Contos
Cc: [redacted]
Bcc: [redacted]

Subject: 21-200 - Post approval works Walla Walla Solar Farm
Date: Friday, 24 December 2021 11:34:30 AM
Attachments: image001.png
image002.png
image003.png
image004.png
21-200 Walla Walla SF Addendum ACHA DRAFT for RAPs.pdf
fd57343b-4b89-4d41-b95e-6957240b2176.png

Good morning,

Please find attached the completed draft addendum ACHA for the subsurface testing program for the proposed Walla Walla Solar Farm.

Please send through any comments to either myself or Ali Byrne (ali.b@nghenvironmental.com.au) by **5pm Friday 28 January 2022.**

I hope you have a great Christmas and a New Year!

Kind Regards,

Kosta

KOSTA CONTOS
HERITAGE CONSULTANT

M. 0425 901 566 **D.** 02 8202 8394
E. kosta.c@nghconsulting.com.au
Unit 17, Level 3, 21 Mary St
Surry Hills, NSW, 2110

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NGH acknowledges that we work on the traditional lands of First Nations people across Australia and recognises the enduring connection to the land. We pay our respects to elders, past present and emerging.

From: [redacted]
To: Kosta Contos
Cc: [redacted]
Subject: RE: 21-200 - Post approval works Walla Walla Solar Farm
Date: Sunday, 26 December 2021 10:30:44 AM
Attachments: image001.png
image002.png
image003.png
image004.png
47A656DFC03E4C8F874A89A66556358C.png

Yamma Kosta,

I have had a look over your draft report.

All seems to be in order.

However I would like to see the following added into this report please,

- *Local Wiradjuri Knowledge Holder to be contracted to the Solar Farm as a Cultural Adviser for the duration of the project.*
- *Management, staff, contractors and others that work on this land, to be inducted and culturally immersed in Wiradjuri country, lore and customs. Also "Due Diligence" and "Unexpected Finds"*
- *Signs at the entrance of the proposed complex that indicate "Acknowledgement of Wiradjuri Country"*
- *A location marked and agreed on by the land holder and RAP's for the return of our items.*
- *Protection given to the PADs and no AHIPS over such.*

Guwayu (Safe Travels)

[redacted]

[redacted]

From: Kosta Contos
Sent: Friday, 24 December 2021 11:37 AM
Cc: [redacted]
Subject: 21-200 - Post approval works Walla Walla Solar Farm

Good morning,

Please find attached the completed draft addendum ACHA for the subsurface testing program for the proposed Walla Walla Solar Farm.

Please send through any comments to either myself or Ali Byrne (ali.b@nghenvironmental.com.au) by **5pm Friday 28 January 2022.**

I hope you have a great Christmas and a New Year!

Kind Regards,

Kosta

KOSTA CONTOS
HERITAGE CONSULTANT

M. 0425 901 566 **D.** 02 8202 8394
E. kosta.c@nghconsulting.com.au
Unit 17, Level 3, 21 Mary St
Surry Hills, NSW, 2110

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NGH acknowledges that we work on the traditional lands of First Nations people across Australia and recognises the enduring connection to the land. We pay our respects to elders, past present and emerging.

21 March 2022

ADDRESS

EMAIL

Dear RAP,

RE – Walla Walla Solar Farm – Proposed Minor Development Change

As you would be aware, you are a Registered Aboriginal Party (RAP) for the Walla Walla Solar Farm project that was originally granted State Significant Development (SSD-9874) planning approval on the 27th November 2020. This letter forms an addendum to the ACHA that was completed for the Modification sent for you review on 24 December 2021. A minor change to the Modification is required. As part of the modification application, a heavy vehicle crossing along Back Creek is required and will be located between the two crossings that have already been assessed, refer to Figure 1 below. While the heavy vehicle crossing was not part of the original development footprint, this area was already surveyed during the ACHA and no subsurface potential was identified. An artefact scatter (Walla Walla SF AFT 2) has been identified adjacent to the crossing location, 40m to the west. However Walla Walla SF AFT 2 is already going to be impacted by the solar panel construction and has been marked for surface salvage as a mitigation, as is Walla Walla SF AFT 5, approximately 145m north of the proposed development change. A single cultural tree (Walla Solar Farm 496602) is also located approximately 190 m to the south of the bridge location, however this site will not be impacted by any works and will continue to be avoided. In conclusion, the proposed Modification to the development footprint for the heavy vehicle crossing bridge will not change the significance and impact assessments for the Walla Walla Solar Farm as assessed in the NGH ACHA (2020) and addendum ACHA (2022).

This letter is provided to ensure you are informed about the proposed minor development change for the Walla Walla Solar Farm. Should you have any questions or concerns regarding this update please don't hesitate to contact me.

Yours Sincerely,

Bronwyn Partell

Senior Heritage Consultant

0412 168 312

NGH

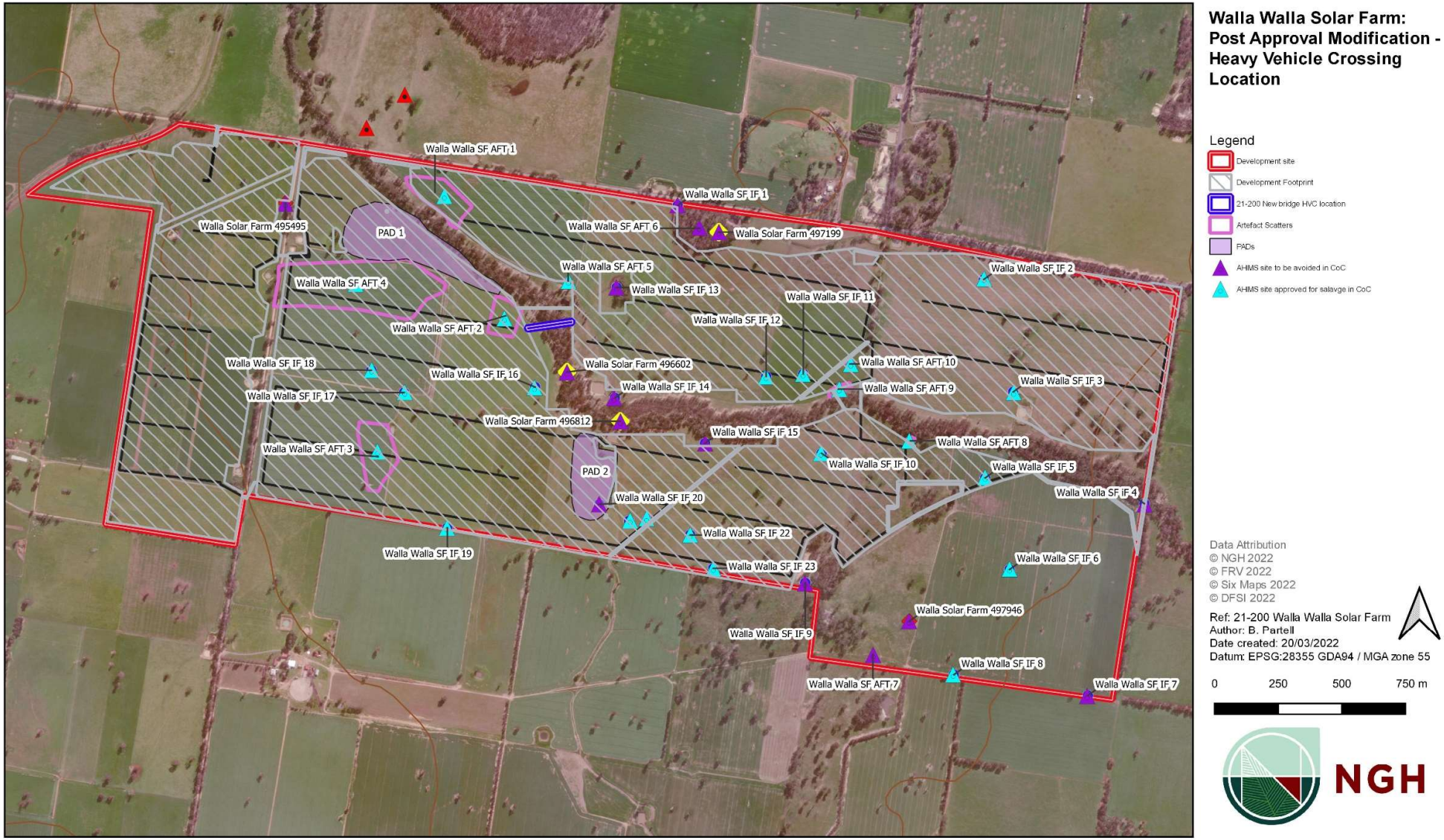

Figure 1. Walla Walla SF Post Approval Modification: Updated Crossing Location.

Bronwyn Partell

From: Bronwyn Partell
Sent: Monday, 21 March 2022 10:21 AM
To: [redacted]
Cc: Bronwyn Partell
Subject: 21-200 Walla Walla SF Modification - proposed development change
Attachments: 21-200 Walla Walla SF - Post approval minor change - HVC_Letter addendum ACHA [redacted].pdf

Good Afternoon [redacted],

NGH are contacting you as a Registered Aboriginal Party (RAPs) for the State Significant Development the Walla Walla Solar Farm which was granted approval on the 27th of November 2020. Recently FVR Services Australia Pty Ltd (FRV) has engaged NGH to undertake two modification application for the project, resulting in an Addendum ACHA documenting the proposed modification and results of archaeological test excavations (a draft copy of which you received for review on 24 December 2020).

Since completion of this Addendum ACHA, one change to the modification has been proposed that was not assessed in the original ACHA or Addendum ACHA documents. This proposed change will not have any new or additional impacts on Aboriginal heritage and involves the creation of one additional creek crossing at a location included within previous assessment areas. NGH is providing an Addendum ACHA letter outlining the proposed development changes for your review and comment, please see attached. If you are unable to provide feedback by Friday April 22nd, please contact me to work out an alternative arrangement.

If you have any questions or concerns about the proposed change to the Walla Walla Solar Farm Modification, please do not hesitate to contact me.

Kind Regards,

Bronwyn

BRONWYN PARTELL
SENIOR HERITAGE CONSULTANT
BABSc; Master of Archaeological Science (Adv)

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NGH

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WWW.NGHCONSULTING.COM.AU

NGH acknowledges that we work on the traditional lands of First Nations people across Australia and recognises the enduring connection to the land. We pay our respects to elders, past present and emerging.

Bronwyn Partell

From: Bronwyn Partell
Sent: Monday, 21 March 2022 10:22 AM
To: [redacted]
Cc: Bronwyn Partell
Subject: 21-200 Walla Walla SF Modification - proposed development change
Attachments: 21-200 Walla Walla SF - Post approval minor change - HVC_Letter addendum ACHA [redacted]pdf

Good Afternoon [redacted],

NGH are contacting you as a Registered Aboriginal Party (RAPs) for the State Significant Development the Walla Walla Solar Farm which was granted approval on the 27th of November 2020. Recently FVR Services Australia Pty Ltd (FRV) has engaged NGH to undertake two modification application for the project, resulting in an Addendum ACHA documenting the proposed modification and results of archaeological test excavations (a draft copy of which you received for review on 24 December 2020).

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