APPENDIX A: ABORIGINAL ARCHAEOLOGICAL TECHNICAL REPORT

Temora Hospital Redevelopment
Lot 2 DP 572392
169-189 Loftus Street
Temora NSW 2666
(Temora Shire LGA)

Sarah Hannan, Prue Newton,
& Steven J. Vasilakis

Archaeo*logical* Management & Consulting Group

for

Health Infrastructure NSW (HI)

December 2024

ACKNOWLEDGEMENT OF COUNTRY

AMAC Group and Health Infrastructure NSW (HI) would like to acknowledge the Traditional Custodians of the Temora Shire Area – the Wiradjuri People– and pay respect to their cultural heritage, beliefs and continuing relationship with the land and sea country.

AMAC Group and HI would also like to acknowledge the post contact experiences of Aboriginal peoples who have attachment to the Temora Shire Area.

"We pay our respect to the Elders – past, present and future – for they hold the memories, traditions, culture and hopes of Aboriginal Peoples in the area".

AMAC Group and HI recognises the role of the registered Aboriginal parties in the management of the Aboriginal cultural heritage sites, landscape features and values of this project.

AMAC Group and HI would like to thank the Registered Aboriginal Parties for their participation in this project and for their valuable contribution to this Aboriginal Cultural Heritage Assessment which has been enriched by their willingness to share valuable aspects of their cultural knowledge especially in respect of Caring for Country.

CULTURAL WARNING

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Cover Image
Final section shot of ATT 5.
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Date	Version	Action	Issued by
13th December 2024	1	Draft issued for client feedback	Prue Newton
17th December 2024	1	Proofread	Emma Williams
18th December 2024	2	Internal Review	Benjamin Streat
18th December 2024	2	Report issued to client following comments	Prue Newton
	2	Report issued to RAPs feedback	Prue Newton

EXECUTIVE SUMMARY

Background of Project

Archaeological Management and Consulting Group (AMAC Group) was commissioned in September 2024 by Health Infrastructure NSW (HI) to prepare an Aboriginal Cultural Heritage Assessment Report (ACHAR) and accompanying Aboriginal Archaeological Technical Report (AATR) and test excavation for the proposed Temora Hospital Redevelopment at the street address 169-189 Loftus Street, Temora, NSW 2666. This report has been produced in support of a Review of Environmental Factors (REF).

GML Heritage Pty Ltd. (GML) was initially engaged to prepare an ACHAR (January 2024) for the entire Temora Hospital Redevelopment site, which formed part of the Environmental Impact Statement (EIS), prepared for the projects Secretary's Environmental Assessment Requirements (SEARs) for a forthcoming State Significant Development (SSD) application. Based on the management recommendations in GML Heritage's ACHAR (January 2024), AMAC Group conducted a program of Aboriginal test excavation on behalf of HI within SZ3 to address the potential for Aboriginal objects and/or features of archaeological and cultural significance to be present. Any Aboriginal sites and objects are protected by the *National Parks and Wildlife Act 1974.*

Interpretation of the Results

Test excavation was undertaken between 18th and 21st November 2024. The programme was conducted under the Code of Practice (DECCW 2010b) and consisted of the excavation of 15 test trenches (50cm x 50cm).

As a result, no Aboriginal objects and/or features were located in Sensitive Zone 3 during the programme of test excavation. The soil profile was consistent with the Temora Soil Landscape; however, it was found to contain a largely truncated/reformed A horizon (artefact bearing deposit) as a result of past land clearance, building, and development activity leading to significant disturbance of the soil profile. Thus, it has been revised that the study area (SZ3) has nil archaeological potential for intact Aboriginal objects and/or features to be present.

This in turn limits the scientific value of the study area. However, the previous ACHAR (GML 2024) identified that the broader study area retains aesthetic and social value, thus the study area may still have cultural significance to the local Aboriginal community.

Recommendations

The proposed development will disturb the ground surface in the study area (SZ3). The findings from the test excavation, however, indicate that the site has nil archaeological potential and limited scientific value. The A horizon (artefact bearing deposit) had been largely removed and consisted of a heavily truncated/reformed topsoil, due to significant past disturbances. Therefore, the development should be allowed to proceed with caution.

The following recommendations have been formulated in consultation with the RAPs, the proponent, and Heritage NSW for the proposed development to proceed:

- Consultation with the registered Aboriginal stakeholders should continue. Stakeholders will be given the opportunity to comment on the recommendations outlined in this report. All comments will be included in the final Aboriginal Stakeholder approved version of this report.
- Archaeological test excavation in accordance with *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales, Part 6 National Parks and Wildlife Act 1974*, (DECCW 2010) revealed no Aboriginal archaeological objects or deposits in Sensitive Zone 3 (SZ3): as a result, the development in this area as shown in Figure 3.1 should be allowed to 'proceed with caution.'
- An Unexpected Finds Procedure should be implemented during any works that will disturb the ground surface of the study area.
- After this and before any ground disturbance takes place all development staff, contractors and workers should be briefed prior to works commencing on site, as to the status of the study area. They should also be informed of their responsibilities regarding any Aboriginal archaeological deposits and/or objects that may be located during the proposed development.

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1.1 BACKGROUND OF THE PROJECT

Archaeological Management and Consulting Group (AMAC Group) was commissioned in September 2024 by Health Infrastructure NSW (HI) to prepare an Aboriginal Cultural Heritage Assessment Report (ACHAR) and accompanying Aboriginal Archaeological Technical Report (AATR) and test excavation for the proposed Temora Hospital Redevelopment at the street address 169-189 Loftus Street, Temora, NSW 2666. This report has been produced in support of a Review of Environmental Factors (REF).

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This document forms the accompanying Aboriginal Archaeological Technical Report (AATR) as Appendix A of the ACHAR. This AATR presents the results of test excavation that was conducted in November 2024 and provides evidence of material traces of Aboriginal land use. These findings are integrated with other data from the assessment of Aboriginal heritage to support the conclusions and management recommendations outlined in the ACHAR.

1.2 PURPOSE OF THE ARCHAEOLOGICAL INVESTIGATION

The purpose of the Aboriginal archaeological investigation which consisted of test excavation was to identify and record any Aboriginal objects and/or sites that were identified in GML ACHAR (January 2024). The ACHAR identified intangible heritage values connected with the Temora Hospital site and allocated area with Aboriginal archaeological potential. The areas had potential to contain Aboriginal objects within a buried subsurface context that would be impacted on by the proposed development. An archaeological zoning plan (AZP) was developed describing the areas of archaeological potential and other social and aesthetic values.

1.3 PROJECT BRIEF

The NSW Government has announced a total of $95 million towards the redevelopment of Temora Hospital. The proposed redevelopment is to be delivered by HI in collaboration with MLHD. The redevelopment has been proposed as a new build on the existing hospital site and will provide for a range of new clinical and non-clinical facilities.

1.4 DESCRIPTION OF THE STUDY AREA

The study site is that piece of land described as Lot 2 of the Land and Property Information, Deposited Plan 572392 within (Temora Shire LGA) forming the

following street address: 169-189 Loftus Street, Temora, NSW 2666 in the Parish of Bundawarrah, County of Bland.

Lot	Deposited Plan	Street Address
2	572392	169-189 Loftus Street, Temora

Figure 1-1 **Site location outlined in red,** QGIS using Six Maps. LRS Online (accessed 23/09/2024).

Figure 1-2 Aerial photograph showing the study site outlined in red.
QGIS using Six Maps. LRS Online (accessed 03/12/2024).

1.4 OBJECTIVES OF THE ABORIGINAL ARCHAEOLOGICAL TECHNICAL REPORT

The objectives for this Aboriginal Archaeological Technical Report include:

- Engage and consult with local Aboriginal communities, people and organisations in the assessment process and communicate the project details to ensure cultural concerns are addressed.
- Provide evidence about the material traces of Aboriginal land use.
- Integrate findings on material traces with other cultural, environmental and historical findings from the assessment of Aboriginal heritage.
- Assess and determine the impact of the proposed development on any identified items or places of Aboriginal cultural heritage value.
- Use the integrated evidence to strengthen and support the conclusions and management recommendations within the ACHAR, and in consultation with Registered Aboriginal Parties for the management of Aboriginal archaeological and cultural heritage values of the study area.
- Ensure this assessment and project complies with relevant laws and regulations protecting Aboriginal cultural heritage.

This report has been carried out in accordance with the *Guide to Investigating, Assessing, and Reporting on Aboriginal Cultural Heritage* (OEH, 2011), the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (DECCW 2010), and *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (DECCW 2010).

2.0 INVESTIGATORS AND CONTRIBUTORS

2.1 AUTHOR AND FIELD TEAM IDENTIFICATION

The archaeological background analysis and report were conducted by Steven J. Vasilakis (B. Arts. Hons.), Sarah Hannan (B. Arts, B. Sc., M. Arch. Sc.), Prue Newton (B. Arts, Hons, MMarArchaeol) and reviewed by Benjamin Streat (BA, Grad Dip Arch Her, Grad Dip App Sc), Director of Indigenous Heritage, with contributions from Young Local Aboriginal Land Council (YLALC) on cultural knowledge and significance. The field team for the test excavation consisted of Benjamin Streat, Sian McInnes and Norma Freeman and Marnie Freeman of YLALC.

2.2 ACKNOWLEDGMENTS

AMAC Group would like to thank the following for advice and/or input into this assessment:

- Health Infrastructure NSW (HI)
- MLHD
- Young Local Aboriginal Land Council (YLALC)
- Korri Currell, Koori Digs Services
- Norma Freeman
- Marnie Freeman
- Keith Freeman
- Jirrah Freeman
- Jahnayah Freeman
- Enid Clarke
- Alona Apps
- Krystal Ingram
- Martin Riley
- Cowan Freeman
- Tori Apps
- Gail Freeman
- Brodie Apps

3.0 DESCRIPTION OF DEVELOPMENT PROPOSAL

3.1 DESCRIPTION OF THE PROPOSED ACTIVITY

The proposed redevelopment of Temora Hospital includes the demolition of current structures and construction of a new purpose-built health facility. In addition to the maintenance of the existing arboretum and upgrade of existing services. The existing site will be used to reduce ground surface disturbance, and the hospital is to be single storey. Whilst the majority of works are to occur within the current hospital footprint, the new building will extend to the northeast and southeast which will require excavation of the ground surface.

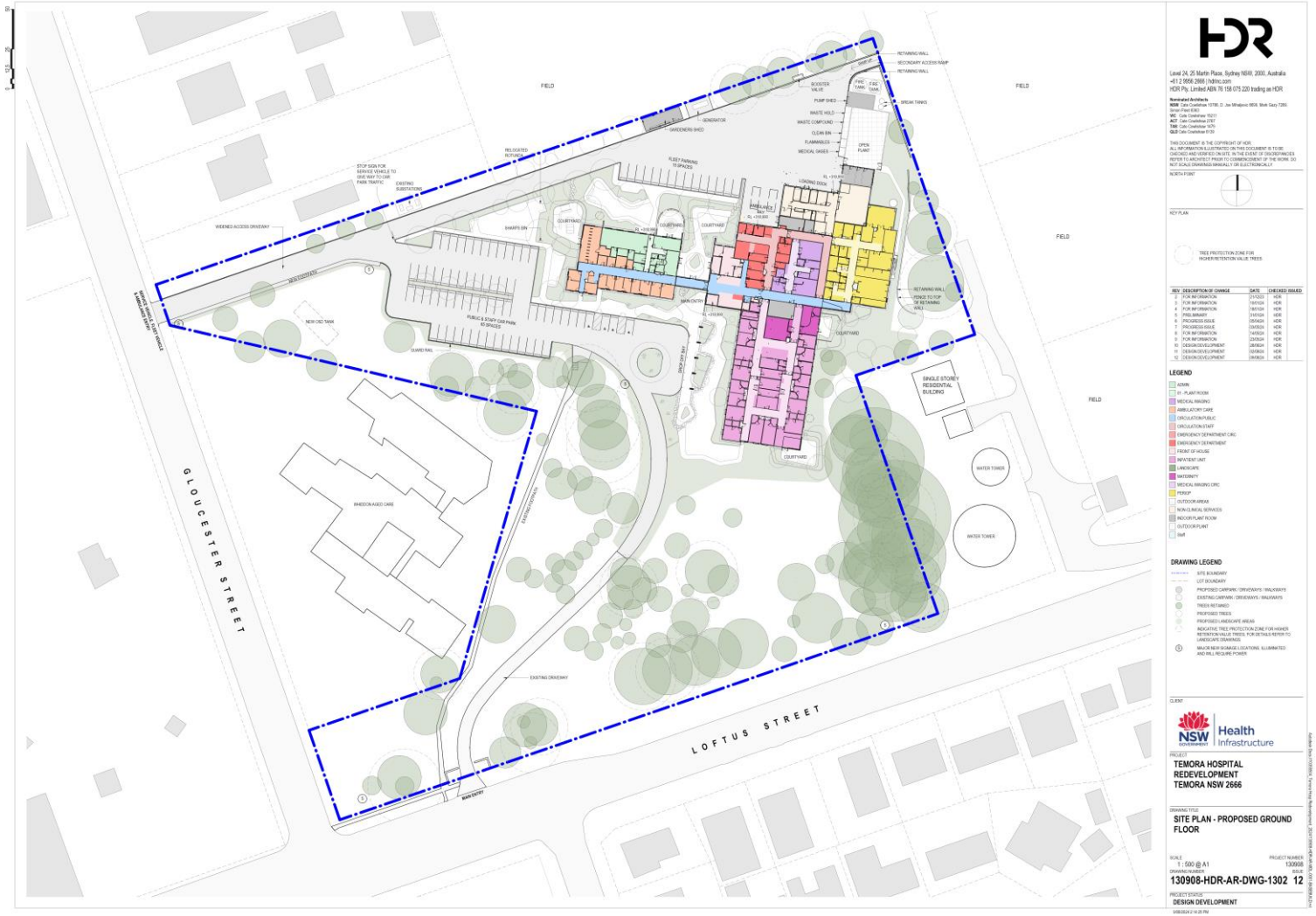

Figure 3-1 Site Plan – Proposed Ground Floor.
HDR Architects, Drawing No. 130908-HDR-AR-DWG-1302, Issue 12 (09/08/2024).

4.0 BACKGROUND RESEARCH OF ABORIGINAL HERITAGE

This section provides a summary of background research on Aboriginal heritage in the study area, including an Aboriginal Heritage and Information Management System (AHIMS) register search and previous archaeological and heritage studies. For full comprehensive information, consult the Aboriginal Cultural Heritage Archaeological Report (AMAC Group, December 2024 and GML Heritage, January 2024).

4.1 AHIMS REGISTER

AHIMS is an online database maintained by Heritage NSW. This contains all the previously recorded Aboriginal archaeological sites registered with Heritage NSW.

An AHIMS extensive 1km search was conducted on 23/09/2024 (ID-933106). No registered sites were identified within the study area.

A copy of the AHIMS search is available in Appendix 13.1.

4.2 PREVIOUS HERITAGE STUDIES WITHIN THE STUDY AREA

As part of the research process of this report, the library of archaeological assessments, which is maintained by Heritage NSW Offices was searched. Refer to the GML ACHAR (January 2024) for a detailed overview of this section. Presented below are summaries of assessments which have been carried out within or nearby to the study area. This list is by no means exhaustive and is merely a representative sample of the most recent archaeological activity within the vicinity of the study area.

Witter 1980, An Archaeological Pipeline Survey between Wagga Wagga and Young

In 1980, Witter conducted the archaeological survey for the pipeline between Wagga Wagga and Young, providing early predictive modelling for the area. The survey resulted in 35 stone artefact sites including 14 artefact scatters and 21 isolated finds, a potential Aboriginal rock well, and a scarred tree were also identified. The artefact types were predominately quartz cores and flakes. Witter observed that the sites occurred in association with watercourses and creeks and along landforms including flats, hill slopes, and spurs.

Witter and Hughes 1983, Archaeological Survey of the Murrumburrah-Yass and Murrumburrah to Wagga Electricity Transmission Line

The archaeological survey was undertaken in 1983 and is approximately 71km east of the study area. A total of 16 lithic sites were identified, including three artefact scatters and 13 isolated finds predominately quartz. The authors observed the sites are mostly located along valley flanks of waterways as opposed to the dry flat plateau.

Silcox 1986, Archaeological Survey for Aboriginal Sites along the Proposed Water Pipeline Routes and Construction Sites of Stage 1 of Augmentation of SW Tablelands Water Supply Scheme

In 1986, Silcox conducted the archaeological survey across the southwest Tablelands region which included Temora and wider surrounds. The survey found two stone artefact sites consisting of surface stone scatters and three scarred trees. One of the two artefact scatters was located approximately 2km along the south bank of Trigalong Creek, a recurrent watercourse. Artefacts ranged from predominately quartz to silcrete, some fine-grained siliceous material as well as some volcanics. One of the scarred trees was also located in close proximity to Trigalong Creek, approximately 100m north of the artefact scatter.

Silcox 1987, Test Excavations at Cunningham Creek, near Murrumburrah, NSW

The 1987 test excavations were the results of the two sites identified by Silcox in the 1986 archaeological survey. The excavations were conducted at the sites of JK1 and JK2 along Cunningham Creek on a range of landforms and consisting of 1m x 25cm wide trenches. The excavations recovered 155 artefacts including 143 quartz, 9 FGS, 1 FG Volcanics, and 1 IMST and were mainly cores, flakes, and flake pieces. It was concluded that the artefact densities of between 8 and 68 lithics/m2 indicated that excavations yield higher artefact densities than the surface artefact scatters located during surveys.

David Scobie Architects and Irvine, A. 2007, Temora Shire Community Based Heritage Study

The study mentions the presence of Aboriginal objects at Temora Hospital in a publication by Elizabeth Apps, 'Stone keepsakes: an analysis of Aboriginal artefacts from some collections in the Temora district.' No further details, however, are given.

AECOM 2010, Heritage Assessment – Stage 1, Young to Wagga Wagga Looping Gas Pipeline

The survey in 2010 by AECOM was undertaken approximately 45km southeast of the study area inspecting an existing pipeline easement. The survey resulted in identifying 36 stone artefact sites including 30 low density artefact scatters as well as six isolated finds. The material was predominately quartz and most of the sites were identified along stream banks, lowers slopes, and terrace flats.

Colin Pardoe Bio-Anthropology and Archaeology 2013, Cowal Gold Mine Extension Modification ACHAR

In 2013, Pardoe conducted an archaeological survey adjacent Lake Cowal, approximately 89km north of the study area. Numerous archaeological sites have been identified in previous years, including artefact sites, hearths, and scarred trees. The survey for revising the ACHAR included relocating identified sites and locating previously unrecorded sites such as ground ovens, oven stones, and artefact sies.

NGH 2018, Sebastopol Solar Farm ACHAR

The archaeological survey in 2018 was undertaken approximately 17km south of the study area on flood deposits of Quaternary alluvium clays and silts on a landform of rolling hills and rises. The area has been classified as highly disturbed due to intense land clearing, ploughing, crop cultivation and livestock grazing. The survey located 53 stone artefacts, recorded in AHIMS as three artefact scatters, 37 isolated finds, and seven potentially modified (scarred) trees.

Artefacts included a core, flakes, flake fragments, possible hammerstones, and a ground edge axe fragment indicating the site may have been a tool manufacture site. The artefacts ranged from quartz, chert, silcrete, fine-grained siliceous, and volcanic material. Artefact densities were interpreted as opportunistic use by people passing through the area with the single core found suggesting there was a low discard rate of raw material. As a result, the area was deemed to have insignificant potential for locating intact high-density subsurface deposits.

Artefact 2019, West Wyalong Solar Farm ACHAR

The archaeological survey undertaken by Artefact in 2019 was approximately 73km north of the study area. The landforms comprised of an undulating plain and rises and like the study area, no major watercourses were within close proximity. Several ephemeral creek lines were, however, within 2km of the survey area. A total of four Aboriginal sites were identified in the survey area including an artefact scatter, two isolated finds, and a modified tree with the material ranging from silcrete, chert and basalt.

GML 2019, Hilltops Cultural, Community and Education Precinct, Young ACHAR

In 2019, GML conducted an archaeological survey approximately 70km east of the study area. The survey identified an area with Aboriginal archaeological potential leading to the excavation of 23 0.5m x 0.5m test trenches recovering 26 stone artefacts, 24 of which were of a volcanic material. The artefacts were found in the two lowest (50mm) spits within an intact unmodified soil, located below the plough zone which reaches 400mm below the present ground surface.

GML 2022, Inland Rail-Albury to Ilabo ACHAR

The archaeological assessment undertaken by GML in 2022 was approximately 31km east of the study area. The assessment commenced with a field survey and proceeded to test excavation after the identification and subsequent recording of 18 areas of Aboriginal sensitivity, 14 of which were located within 'river flats,' a further three on lower slopes, and one located on an undulating plain. Excavation of 205 test trenches some outside the sensitivity zones recovered 120 stone artefacts with a subsurface density rate of 0.58 artefacts/test trench roughly estimated at 2 artefacts/m2. Only some of the test trench locations were greater than the regional average of 7/m2 with material averages ranging from quartz (63%), IMSTC (17.3%), quartzite (3.9%), silcrete (3.1%), and sandstone (0.8%).

NGH 2023, Temora Hospital Redevelopment Due Diligence

The desktop study and predictive modelling suggested the study area had low potential for artefact scatters, there was potential for isolated finds, and should there be remnant mature vegetation present, high potential for modified trees. The desktop study considered areas of potential archaeological deposits (PADs) were unlikely.

A site inspection concluded the study area to be significantly disturbed due to the construction of buildings, carparks, driveways, pathways, landscaping, and utility services. It identified some mature regrowth trees in the study area's southwest corner, but none showed any signs of cultural modification. No Aboriginal finds were located during the site inspection. NGH recommended no further investigation was warranted based on the predictive modelling and significant site disturbance indicating the study area had low potential for any Aboriginal objects to be present. GML (2023) disagreed with this analysis and is further discussed below.

GML 2024, Temora Hospital Redevelopment ACHAR

The archaeological investigation identified and assessed the Aboriginal heritage values of the study area and produced a mechanism for the conservation and mitigation of harm to said values which included consultation with the Aboriginal community. The assessment included a site survey which identified Aboriginal archaeological sensitive zones (SZ). In areas considered significantly disturbed such as the locations of buildings, tennis courts, roads, etc. the soil condition and integrity were determined to be very low, and not deemed to be archaeologically sensitive. Other areas considered to have had lower historical and modern impacts, however, have been determined as retaining soil profiles with good condition and integrity.

Three zones (i.e., SZ1/SZ2/SZ3) with archaeological potential were identified as a result of the site survey with two assigned (SZ1/SZ2) low Aboriginal archaeological potential and SZ3 assigned with moderate potential. SZ1 located along the western extent of northern hospital boundary while relatively undisturbed was considered to hold low potential due to the undifferentiated landform and deemed unlikely to have

been used for Aboriginal activity that could have resulted in dense archaeological deposits. SZ2 located to the south was also observed to be relatively undisturbed and according to the Geotech report had residual soil. Based on the landform and particularly being an undifferentiated slope below a more prominent south facing main hilltop this zone was determined to hold low sensitivity. SZ3, the subject of this report, is situated along the boundary in the northeast corner of the study area and was observed to be relatively undisturbed. Its location at the top of the ridgeline, near level landform, and expansive views to the surrounding area made it an attractive place to undertake activities. GML point out that these features would have 'likely formed part of a wider walking route following the ridgeline' (GML 2024). They concluded that the Temora Hospital site illustrated intangible heritage values with designated areas showing Aboriginal archaeological potential for Aboriginal objects and/or deposits. As a result, they recommended archaeological test excavations for this area, with an Archaeological Research Design (ARD), and production of a post excavation report (AATR) detailing the findings. This report outlines the results of the test excavations conducted at Sensitive Zone 3 (SZ3). Other recommendations in the GML ACHAR included reviewing the Aboriginal heritage values within the Masterplan, a Connecting with Country Report which also incorporates Heritage interpretation as part of future landscape design, as well as an Unexpected Finds Procedure.

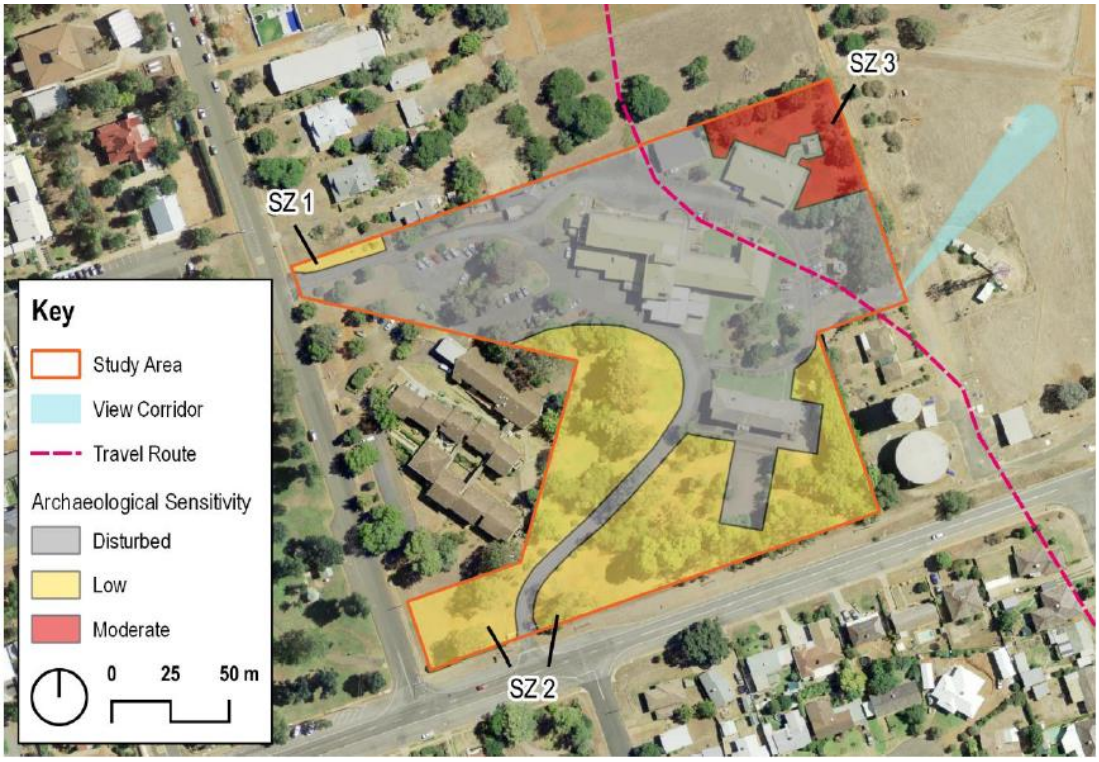

Figure 4-1 **Plan showing archaeological sensitive zones (SZ).** Archaeological sensitive zone 3 (SZ3) the subject of this report indicated in red (GML 2024:73, fig 4.22).

4.2.1 Summary of Archaeological Assessments

The list of reports above is considered a collection of those recently conducted with a substantial number mostly completed within the wider area. This is due to the increased infrastructure growth, Water Pipeline Routes (Silcox 1986), Gas Pipeline (AECOM 2010), and Solar Farm (NGH 2018) within the region and wider surrounds. Archaeological works within the immediate vicinity of

Temora, however, were minimal except for the 2023 Due Diligence (NGH) and 2024 ACHAR (GML) both conducted as part of the Temora Hospital Redevelopment. Within these studies, evidence of intact natural soil profiles was frequently encountered where test excavations were conducted as part of the archaeological investigation, such as at the Hilltops Cultural, Community and Education Precinct at Young (GML 2019). Sites were frequently identified with the most common site types consisting of artefact scatters and modified trees. This is consistent in the wider Temora Shire region. As mentioned above, most of the reports were conducted in the wider region and thus not providing a clear representation of the Aboriginal archaeological heritage that may be present at the township of Temora. Further archaeological investigations in the future may provide more information on the Aboriginal heritage of the area.

The practical ramifications of the aforementioned archaeological assessments and excavations is a low-moderate potential for Aboriginal archaeological objects to be present within the study area, particularly if intact original soil profiles are present. The program of test excavation conducted for this report, however, found the site to be absent of any Aboriginal objects and/or deposits as well as the presence of previous ground disturbance.

5.0 ENVIRONMENTAL CONTEXT

This section provides a summary of the environmental context of the study area. For full comprehensive information, consult the Aboriginal Cultural Heritage Archaeological Report (AMAC Group, December 2024).

5.1 TOPOGRAPHY AND LANDFORMS

The study area is located within the township of Temora and represents a built-up area and modified landscape. The study area is located upon a mid to upper slope, with a roughly northwest-southeast orientation within a landscape generally characterised by undulating hills and plains. The near-flat ridgeline of the study area affords expansive views to the surrounding area particularly over the landforms that are downslope to the north and east. The elevation upon the site varies between 300 and 320m asl, sloping down towards the northeast which faces and overlooks the Weddin Mountains and Gap in the same direction. These mountain ranges are known to be significant to the Wiradjuri people. The Lachlan and Murrumbidgee Rivers are to the north and south respectively of Temora.

The Temora Hospital is located over two topographic zones: the Temora soil landscape and Reynold soil landscape. As the study area is outside of the latter soil landscape's boundary (see Figure 5.3) only the Temora soil landscape is discussed for this report's test excavation area. The study area is located on the Temora erosional soil landscape. Within this landscape, undulating low hills and slopes rise from 3-5% on upper hillslopes and crests, between 3-10% on mid-hillslopes, and rise-up to 25% on steeper slopes. Local relief is between 20-50m, elevation ranges from 260-336m, and rock outcrops can be observed 2-10% across some of the upper slopes, crests, and ridgelines.

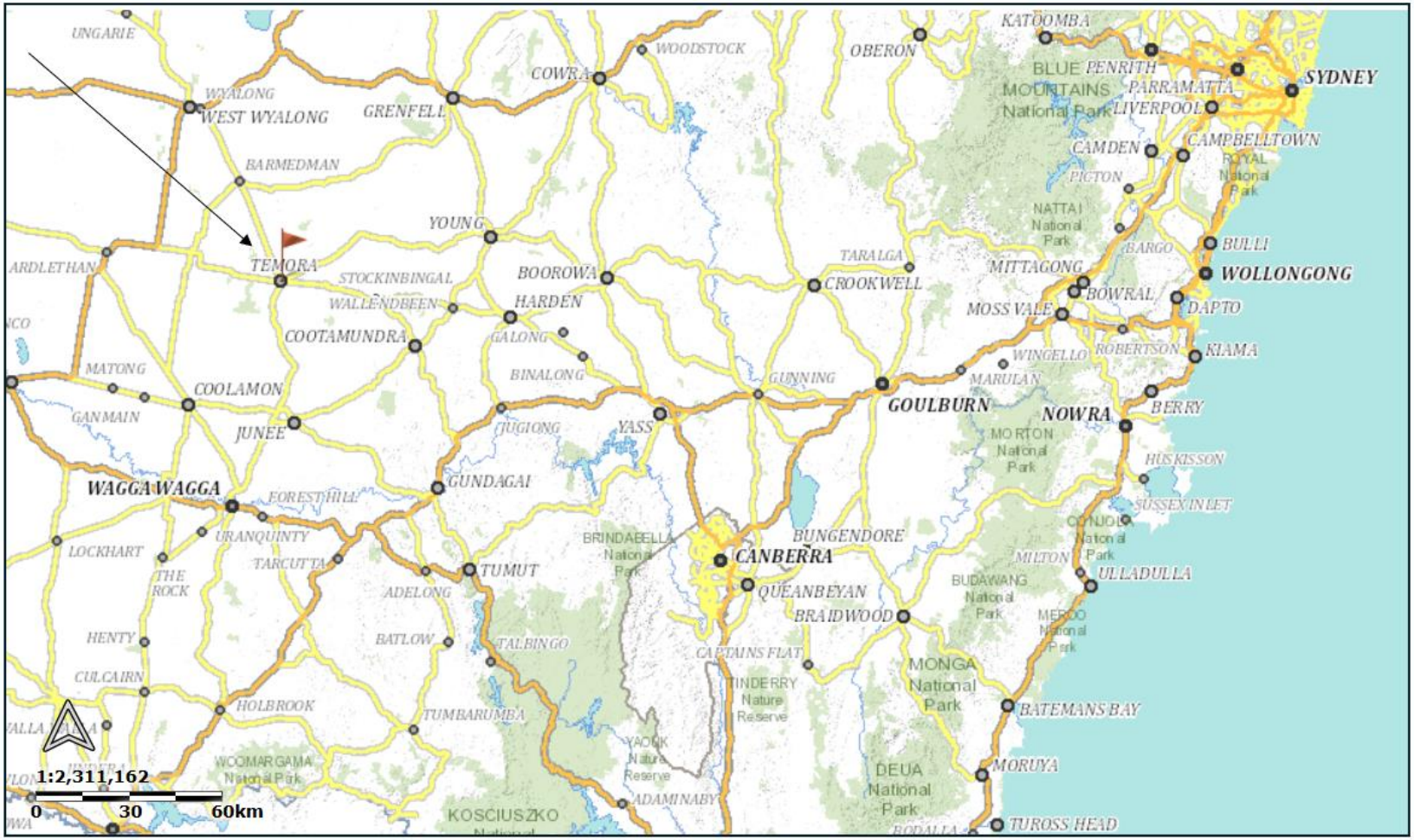

Figure 5-1 Topographic map with site location indicated by black arrow.
Study area indicated by black arrow. Six Maps, LRS Online (accessed 03/12/2024).

5.2 GEOLOGY AND SOILS

The Temora soil profile is located over much of the study area. The geology consists of Ordovician Temora and Junawarra Volcanics, with parent materials for the former made up of andesite, latite, trachyandesite, and basaltic andesite and parent material for the latter comprising of andesite, latite, andesitic agglomerate, sedimentary rocks and minor dacite. Quaternary colluvium are found in small areas of this formation.

Soils are typically shallow <25cm Acidic Paralithic Leptic Rudosol (Lithosol) and moderately deep to deep (50–150 cm), well-drained Haplic Calcic Red Chromosols (Red-brown Earths) on the crests and upper slope. On mid-lower slopes, deep (>100 cm), well-drained Haplic Eutrophic Red Chromosols (Red Podzolic Soils) are present with deep (>100 cm) and well-drained Haplic and Sodic Calcic Eutrophic Red Chromosols and Dermosols (Non-calcic Brown Soils; Red-brown Earths; structured Red Earths) also found on mid-slopes. Topsoil erosion, localised high run-on, and hardsetting water repellent surfaces with localised salinity-subsoils are characteristic.

Table 5.1 Description of dominant soil material.

Soil Horizon	Upper Slope (Profile1)	Mid-slope (Profile 2)	Mid-slope (Profile 3)	Crest (Profile 4)
A1	Dark reddish brown sandy clay loam, moderately moist, coarse fragments with fine gravel inclusions (te1), 0-50mm depth.	Dark brown heavy sandy loam, coarse fragments (te2), 0-50mm depth.	Dark reddish brown fine sandy clay loam, moderately firm with quartz and fine gravel inclusions (te1), 0-50mm depth.	Sandy loam, gravel (te1), 0-150mm depth.
A2	Dark reddish brown clay loam, moderately moist, with quartz and fine gravel (te3), 50-250mm depth.	Dark brown light sandy clay loam, moderately moist, coarse fragments, (te2), 50-200mm depth.	Reddish brown fine sandy clay loam, moderately firm with quartz and fine gravel to gravel size inclusions (te3), 50-200mm depth.	Dark brown sandy loam, gravel (te1), soil continues to weathered bedrock below, 150-200mm depth.
B1	Heavy clay, moderately strong, moderately moist, coarse fragments (te5), 250mm-650mm depth.	Dark reddish-brown sandy clay, moderately moist, coarse fragments (te4), 200-350mm depth.	Red medium clay, moderately strong force, (te4), soil continues to weathered bedrock below 200-500mm	-
B2	Red heavy clay, moderately strong, moist, coarse fragments soil continues to weathered bedrock below (te5), 250mm-1000mm depth.	Reddish-brown (with <2% orange mottles) medium clay, moderately moist, soil continues to weathered bedrock below (te5), 350-750mm depth.	-	-

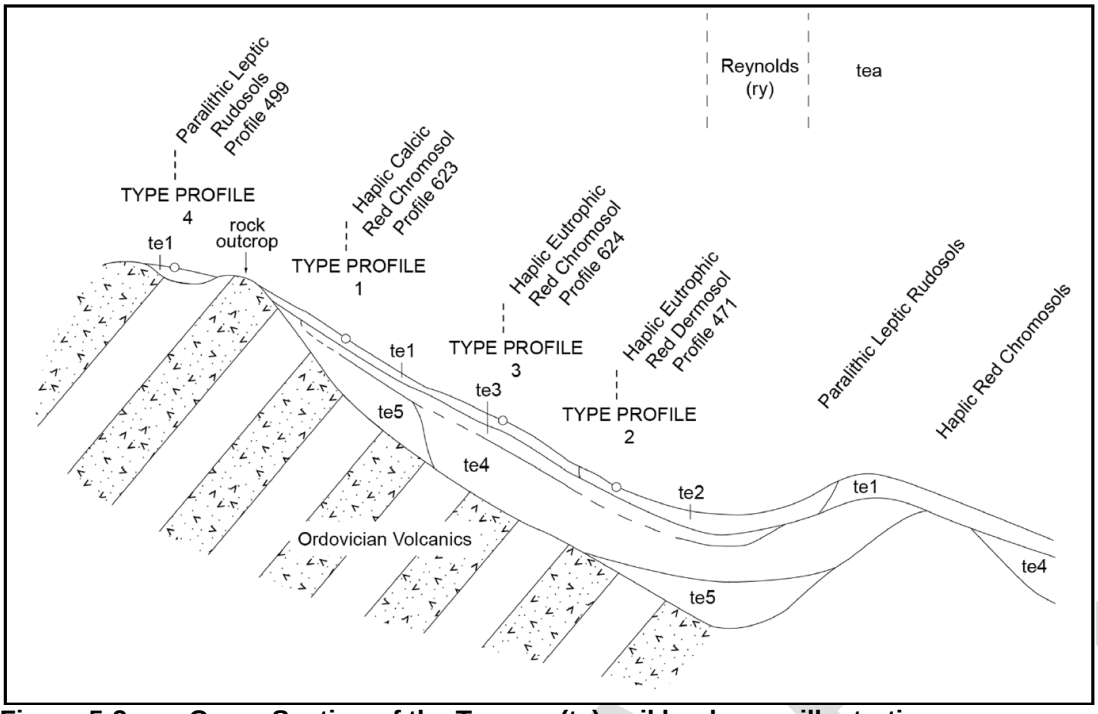

Figure 5-2 **Cross Section of the Temora (te) soil landscape illustrating relationships between landscape features and dominant soil materials.** Department of Climate Change, Energy, the Environment and Water (DCCEEW) 2024, Soil Landscapes of Central and Eastern NSW.

Figure 5-3 Study area outlined in red on soil map.
Department of Climate Change, Energy, the Environment and Water (DCCEEW) 2024, Soil Landscapes of Central and Eastern NSW.

5.3 VEGETATION

The vegetation found in the study area is no longer in a native state and is comprised of a variety of introduced and noxious types of vegetation. This movement away from the natural vegetation is a result of previous land clearing for farming, residential and urban development. These lands were cleared soon after European settlement due to the relatively high agricultural value of the soils upon which they are situated.

The surrounding landscape of Temora has been extensively to totally cleared of mid-high open Eucalypt woodlands. The majority of native vegetation has been cleared for agricultural development and only remnants of the original communities remain along road and fenced reserves. Eucalyptus albens (white box) communities occur on upper slopes and crests. E. microcarpa (grey box) and Callitris columellaris (white cypress pine) communities occur on mid to lower slopes. The understorey consists of a mixed sparse shrub layer over tussock grasses and annual forbs. Species include Acacia spp. (wattle), Dodonaea viscosa (sticky hopbush), Lycium ferocissimum (African boxthorn), Austrostipa aristiglumis (plains grass), Austrodanthonia spp. (Wallaby Grass), Bothriochloa macra (red grass), Chloris truncata (windmill grass), Panicum effusum (hairy panic) and Echium plantagineum (Paterson's curse).

5.4 WATERCOURSES

The study area is located between two significant high (4th) order watercourses, the Lachlan and Murrumbidgee Rivers. These are significant environmental resources which are believed to determine the occupational extent of the Wiradjuri. These rivers are, however, a significant distance from the study site. The closest sources of water are two unnamed tributaries located approximately 770m northeast and 1.077km east respectively. These creek lines are known to have channelled Aboriginal activity to this area as an important resource within the landscape. Several lakes, reservoirs, swamps, and man-made ponds are located in the wider surrounding landscape.

Figure 5-4 **Topography map indicating watercourses in blue.**
Temora Hospital outlined in yellow. Study site outlined in red. Six Maps, LRS Online (accessed 03/11/2024).

6.0 REGIONAL CHARACTER

6.1 HISTORY OF LAND USE AND DISTURBANCE FACTORS

This section offers an overview of the historical land use by both Aboriginal and European occupants on the study area, along with the factors that have contributed to disturbances. For full comprehensive information, consult GML ACHAR (2024).

6.1.1 Aboriginal Land Use

The Wiradjuri people moved through the Temora Shire and wider region following river flats, creek lines, and other common watercourses. As a result, archaeological evidence of Aboriginal occupation along waterways is common. Evidence of culturally modified trees, artefact deposits, grinding grooves, hearths and rock art sites has been found in close proximity to waterways and particularly along the banks of larger watercourses such as the Lachlan and Macquarie Rivers. The major watercourses were important resource areas providing the Wiradjuri people with abundant food supplies, such as fish, yabbies, plants, mussels, birds, and other smaller game.

The use of ground ovens (e.g., hearths) was widespread to cook large game such as kangaroo and emu, as well as fish and plant products including roots and seeds. The Wiradjuri people carved and modified trees to use the bark to create canoes, coolamons, and shields. The scarred trees were also used as selected landscape markers to show people congregation areas, or important burial sites of celebrated community members, or the location of abundant resources.

The study area lies in a resource zone which had resources that may have been exploited on either a regular or repeated basis. Reliable access to fresh water may have been present nearby to the study area. Sites containing fresh water and sedentary food sources, coupled with the presence of other resources which may have been exploited or available on a seasonal basis, would suggest that Aboriginal land use of the study area was regular and repeated, with this reflected in the archaeological record. Concentrated and repeated occupation may be represented in areas that have reliable access to water and foods sources. These areas will possess a high archaeological potential (Goodwin 1999).

The study area is within close proximity to several unnamed watercourses located between 700-1200m away to the northeast and east respectively. In the past the accessibility of permanent water and resources along the creek banks would have channeled Aboriginal movement and land use to this location and would have been a major resource of food and water There are a number of manmade dams within the vicinity as a result of European occupation and past land use.

6.1.2 European Land Use and Disturbance

Background research indicates that past European land use has led to the clearing of the land. No deep excavations have been undertaken on the site with the standing structures being predominately one storey auxiliary buildings, a three-storey main hospital building, and a two-storey nurses' accommodation building, all with associated services. There has also been the construction of pathways, driveways, carparks, and associated services with

land modification attributed moderate to high disturbance across portions of the study area.

The study area falls within the Wiradjuri traditional lands. Founded initially as a pastoral station in 1847, the local population boomed following the gold rush between 1869-1879 leading the small site of Temora to officially become a town in 1880.

Construction for the Temora Hospital on the study area commenced in 1938 and completed in 1939 replacing an earlier 1908 hospital operating in a different part of the Temora township. Prior to this, the study area was used for residential and agricultural activity before being part of the subdivision of a large rectangular lot identified on an 1894 parish map (see Figure 6.1) owned by a J. Baker. Together with the hospital, major landscaping works established an extensive garden around the hospital grounds, including planting native and non-native trees, such as gums, cedars, fruit trees, poplars, cypresses and ironbark. A view of aerials in Figures 6.2-6.4 indicate the study area layout has been largely unaltered during the last six decades with only small additions of outbuildings and carpark expansions.

Figure 6-1 **1894 Parish Map indicating approximate study area in blue and Temora Hospital in red.**
Historical Land Records Viewer.

Figure 6-2 **1961 aerial indicating approximate study area in blue and Temora Hospital in red.**
AMAC 2024 (Historical Aerial Imagery Viewer).

Figure 6-3 **1978 aerial indicating approximate study area in blue and Temora Hospital in red.**
AMAC 2024 (Historical Aerial Imagery Viewer).

Figure 6-4 **1997 aerial indicating approximate study area in blue and Temora Hospital in red.**
(Historical Aerial Imagery Viewer).

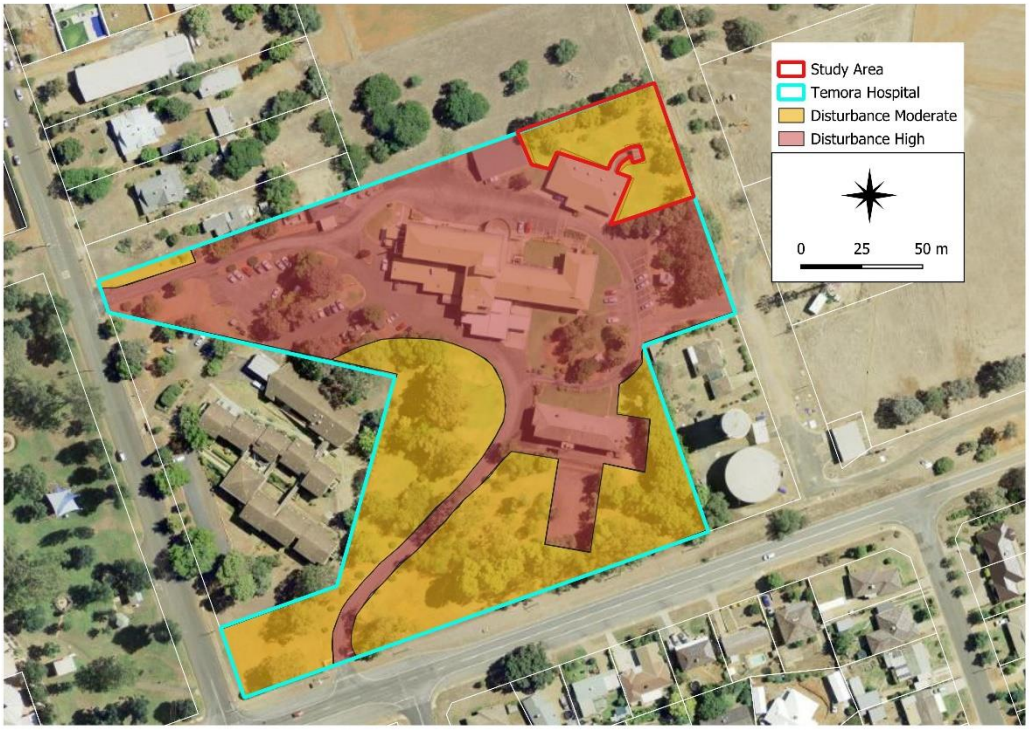

Figure 6-5 **Disturbance map of study area.**
Study area indicated by red outline. Red indicates high disturbance – Orange moderate disturbance. Six Maps. LRS Online (accessed 04/12/2024).

6.2 ARCHAEOLOGICAL PREDICTIVE MODELS

The archaeological predictive model that GML (January 2024) produced in the original ACHAR will be presented and revised as per the results from test excavation. An archaeological predictive model is a tool that indicates the probability of finding an archaeological site within a specific type of landscape.

6.2.1 Summary of Predictive Model

In summary, the predictive modelling indicated that the most likely site types to be present within the study area are stone artefacts (concentrations and/or isolated finds) and culturally modified trees. As a hillock landform, the study area was predicted to contain shallow soil profiles impacted by gradational erosion. As such, stone artefacts were anticipated to be found in limited densities and modified trees may be present should remnant vegetation be retained within the study area. GML described the outcomes from the predictive model as follows:

> The outcomes from the modelling, contrasted against the history of recent land use, provide an indication of locations and landforms that could be connected with physical (tangible) aspects of Aboriginal heritage. Disturbance levels within the study area, as evident in historical aerials, are likely to be high as a result of the construction of the hospital and associated outbuildings, roads, carparks and footpaths; landscaping associated with creation and maintenance of the hospital gardens; and trenching for installation of utilities. Especially considering the shallow nature of the soil profile, it is unlikely that intact, in-situ soils are present beyond small areas of intact soil within the study area. Further, the unfavourable westerly slope and distance to nearby watercourses suggest that it is unlikely that dense subsurface artefact deposits would be present within the study area. As such, the study area holds a general low level of Aboriginal archaeological potential. The high point (hillock) and limited slopes facing east and north hold the greatest levels of Aboriginal archaeological potential (GML 2024: 34).

The results of test excavation determined that the predictive model was correct in its assessment of the high level of disturbance. However, the study area was anticipated to be in an area that held greater levels of Aboriginal archaeological potential, which did not manifest within SZ3. No Aboriginal objects and/or features were located during the program including the predicted site type of stone artefacts and culturally modified trees. The A1 horizon (artefact bearing deposit) was largely truncated/ removed as a result of previous development leading to significant disturbance of the soil profile. While the redeposited and reformed A2 soil profile was found to be considerably shallow, there were no signs of significant disturbance identified in the B horizon. Sensitive Zone 3 (SZ3) is exposed to the strong frequent northerly winds which likely also contributed the surface erosion and the exposure of the B horizon in some areas. While the predictive model remains unchanged for areas outside of the study area, the results indicate that there is nil potential for intact Aboriginal objects and/or features attributed to this site type, to be present within the study area (SZ3).

7.0 FIELD METHODS AND RESULTS

As part of the ACHAR development process, a Research Design and Test Excavation Methodology document was developed by AMAC Group and supplied to all registered stakeholders for review and comment in October 2024. An archaeological site survey and test excavation methodology was developed per the guidelines under the Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales (DECCW 2010b).

The methodology and proposed test excavation program was supported by those registered stakeholders, and no modifications were proposed during the statutory review period. Refer to the Aboriginal Cultural Heritage Assessment Report for a detailed description of community consultation for this project.

7.1 EXISTING SURVEY OF THE STUDY AREA

A geotechnical assessment was completed within the study area as part of the proposed Temora Hospital redevelopment.

In May 2023, JK Environments opened a total of 67 locations (BH/TP101-BH/TP163) to gather select soil samples for analysis across the study area (see Figure 7.9). The tests pits were initially advanced using a combination of track-mounted excavator with hydraulic powered drilling rig as well as hand tools. Only 6 locations were opened within the study area (SZ3) including, five test pits TP13, TP137, TP138, TP139, TP140, and one borehole, BH6. Depths reached up to 1.3m (BH6) with fill encountered in all testing locations between 100-300mm overlying residual soils.

The 2023 Geotechnical investigation produced the following results for the study area:

> **Topsoil – A Horizon/Fill** (artefact bearing layer) – was encountered in all test pits (TP13, TP137, TP138, TP139, TP140) and in the borehole (BH6) consisting of red-brown silty clay fill with root content and glass fragments in TP139/TP140 and ranging from low-medium to medium plasticity with depths between 0.1m-0.3m.
>
> **Natural soil – B Horizon** – was encountered underlying the topsoil or fill in all test pits and the borehole, comprising predominantly of a cohesive soil varying from red to reddish brown with low-medium plasticity and varying from firm to stiff. The natural soils were encountered at depths ranging from 0.1m (TP138) – 0.3m (TP13).
>
> **Bedrock** - was encountered consisting of weathered Andesite bedrock either grey and/or light brown, low strength. The upper bedrock profile was generally extremely weathered with traces of fine to coarse igneous gravel with bit refusal depths ranging between 0.5m (BH139) – 1.3m (BH6).
>
> **Groundwater** – No groundwater inflow was encountered in the test pits or boreholes during and on completion of testing. A groundwater monitoring well was installed at 1.3m for BH6.

An overview of the test pit/borehole termination depths is presented below in Table 7-1.

Table 7.1 Test Pit & Borehole Depth to Base of Unit (m) – below existing ground level in SZ3 area.

Test Pits/ Borehole	Topsoil/A1 Horizon (m)	Fill/A2 (m)	Natural/B Horizon (m)	Bedrock Terminated Depths (m)
TP13	-	0.3	1.05	1.05
TP137	-	0.2	0.4	0.7
TP138	-	0.1	0.3	0.65
TP139	-	0.2	0.4	0.5
TP140	-	0.2	0.4	0.7
BH6	-	0.2	0.7	1.3

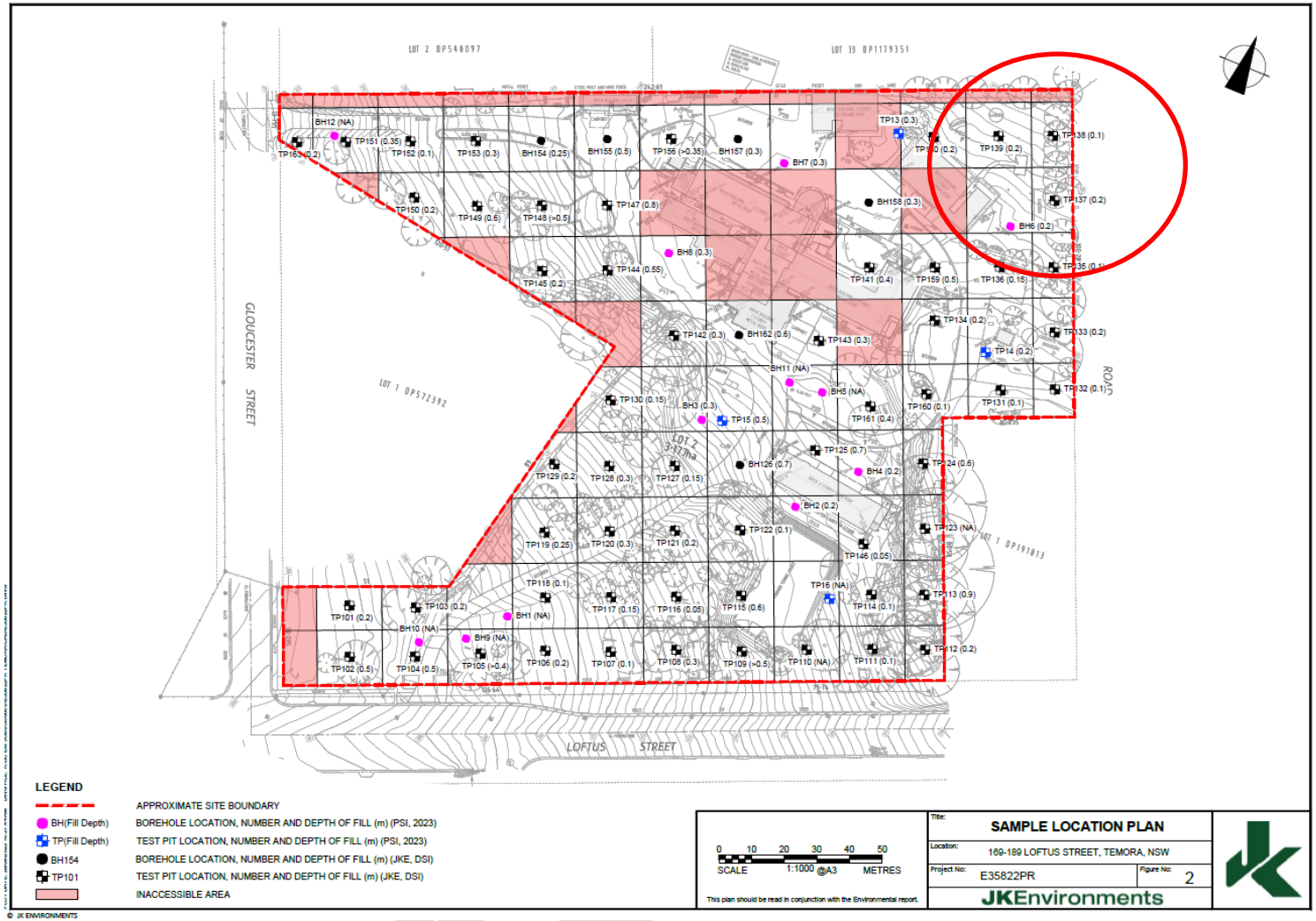

Figure 7-1 Test Pit Location Plan Temora Hospital.
Test pits (TP13 & TP137-TP140) and borehole (BH6) assessed as part of this report indicated in red. JK Environment 2024.

7.2 ARCHAEOLOGICAL SITE SURVEY

As a site survey was conducted by GML in 2023, and AMAC was only commissioned to undertake test excavations within Sensitive Archaeological Zone 3 (SZ3), the following is a summary of GML's findings during the preparation of the ACHAR. For a more comprehensive overview of the archaeological site survey see GML 2024.

The field survey was undertaken on the 11th of September 2023, by archaeologist's Dr Tim Owen and Andie Coulson of GML with Norma Freeman and Marnie Freeman both members of the Young Local Aboriginal Land Council (YLALC). The study site was inspected on foot. Where practical the whole of the study area was inspected, however there were a number of limiting factors such as concealed surfaces, buildings, and other structures encompassing areas of the site. Sampling areas such as the landforms of the study area that will be possibly impacted by the proposed redevelopment as well as any areas of exposed soil or areas of erosion were inspected in detail. The survey also included an inspection of the Temora Hospital's indoor areas for the purpose of viewing Aboriginal artwork located within the main hospital building.

7.2.1 Survey Method and Strategy

All visible landscape units were inspected as well as photographed where informative details as to land use and disturbance could be ascertained. Information was also collected regarding landforms, ground surfaces, and vegetation conditions as encountered during the survey.

The following broadly outlines the methods adopted:

- Field inspections will be carried out on foot.
- Highly disturbed areas indicated on plans will be inspected to verify the level of disturbance and depending on level of disturbance will be included or excluded from the additional survey.
- Undisturbed areas will be inspected in as much detail as the remaining surface coverage and environment will allow and the results will be recorded.
- Areas of exposed ground such as tracks or eroded surfaces which allow good surface visibility will form the focus of the field inspections.

The description of a survey coverage in accordance with Heritage NSW guidelines (DECCW 2010:13), includes landforms units, the total area surveyed within that landform unit and a calculation of the level of visibility and exposure. To quantify this, Heritage NSW has defined visibility and exposure as follows:

> Visibility is the amount of bare ground (or visibility) on the exposures which might reveal artefacts or other archaeological materials. It is important to note that visibility, on its own, is not a reliable indicator of the detectability of buried archaeological material. This like vegetation, plant or leaf litter, loose sand, stone ground or introduced materials will affect the visibility. Put another way, visibility refers to 'what conceals'.
>
> Exposure is different to visibility because it estimates the area with a likelihood of revealing buried artefacts or deposits rather than just being an observation of the amount of bare ground. It is the percentage of land for which erosion and exposure was sufficient to reveal archaeological evidence on the surface of the ground. Put another way, exposure refers to 'what reveals' (DECCW 2010, Appendix A).

7.2.2 Site Survey Results

The site survey involved the inspection of three survey units (e.g., SU1, SU2, SU3) and did not identify any physical Aboriginal objects. The site inspection classified the study area into two survey categories: a) disturbed areas with no archaeological sensitivity for Aboriginal objects; and b) sensitive zones (SZs) that have a level of archaeological potential.

The findings identified that much of the Temora Hospital grounds were found to be disturbed from buildings, carparks, roadways, tennis courts, and the modification of the sloping landform frequently benched to accommodate the infrastructure resulting in significant site disturbance. For the purpose of this overview, only survey unit 2 (SU2) which includes the study area, SZ3 the subject of this report, is discussed below.

Located on the northeast corner of the Temora Hospital grounds SZ3, the study area was found to be flat with a gentle slope rising to the north, grassed, with mature gum trees along the northern and eastern boundaries. Partial views were observed towards the Weddin Mountains and soil exposure from excavated test pits from the recent geotechnical assessment were noted. The soil profile (see Figure 7.2) consisted of silty clay A horizon, approximately 400m deep, with the upper 150mm-200mm layer described as reworked/fill, over the lower 200mm appearing to be intact, and overlying an extremely weathered volcanic bedrock. It was on the basis of the gentle slope landform, presence of a remnant A2 horizon, (below the reworked A1) of the study area that SZ3 was assigned a moderate archaeological sensitivity. As mentioned above, the study area (SZ3) was only part of the site inspection for survey unit 2 (SU2) which is presented in Table 7.2 below.

Table 7.2 Survey coverage, as per DECCW 2010, of survey unit 2 (SU2) which includes the study area (SZ3).

Unit	Landform	Area (sq. m)	Visibility (%)	Exposure (%)	Effective Coverage (sq. m)	Effective Coverage (%)
SU2	Ridgeline/ hilltop	4,431	20%	100%	886.2	20%

Figure 7-2 Site inspection photo of exposed soil profile.
Exposed geotechnical test pit (TP137) of study area (SZ3) indicating silty clay A horizon, overlying a silty clay B horizon (GML 2024:59, fig. 4.11).

Figure 7-3 View northeast to the Weddin Mountains from survey unit 2 (SU2).
The view is from the ridgeline showing the culturally significant Weddin Mountains in the background whose views hold social and aesthetic significance to the local Aboriginal community (GML 2024:60, fig 4.12).

7.3 TEST EXCAVATION

Test excavation was undertaken by AMAC Group in response to the proposed development and its impact on Aboriginal archaeological and cultural deposits and/or objects. Test excavation was undertaken over 4 days from the 18th to 21st November 2024. The test excavation program was conducted under the Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales (DECCW 2010). Test excavation consisted of the excavation of 15 test trenches (50cm x 50cm).

Due to the scale of the project not all the registered stakeholders were able to participate in the excavations, however, all stakeholders were kept informed as to the outcome and progress of the excavations.

7.3.1 Aims of Test Excavation

The purpose of subsurface test excavation is to identify the nature and extent of any intact archaeological deposit and/ or objects which may be situated within the study area and its significance.

It aims to collate additional information regarding any site characteristics which may enhance our understanding of the local and/or regional prehistory of the area. The results of the test excavation aid in the formalisation of appropriate management recommendations and conservation goals for the proposed development and any archaeological material recovered.

The methodology and recommendations presented in the following section of the report consider the following:

- Legislation which protects Aboriginal cultural and archaeological objects and places in New South Wales
- Research and assessment carried out by the author/s of this report and previous reports
- Results of previous archaeological assessment and excavation in the vicinity of the study area
- The impact of the proposed development on any Aboriginal archaeological material that may be present.

7.3.2 Test Excavation Team

Test excavations were carried out by a team of archaeologists from AMAC Group in association with Aboriginal parties. The table below shows the excavation team.

Table 7.3 Test excavation team

Organisation	Contact	Role
AMAC Group	Benajmin Streat	Director
AMAC Group	Sian McInnes	Archaeologist
Young LALC	Norma Freeman	RAP
Young LALC	Marnie Freeman	RAP

7.3.3 Test Pit Location

Test trench locations (Figure 7.2) were placed with reference to known or suspected locations of Aboriginal archaeological deposits, the location of development excavation and areas of known disturbance as well as services.

The order of excavation was established on site as logistics and site access were factors that needed to be considered, as well as ensuring the investigation of all landforms were performed accordingly in order to maximise the results.

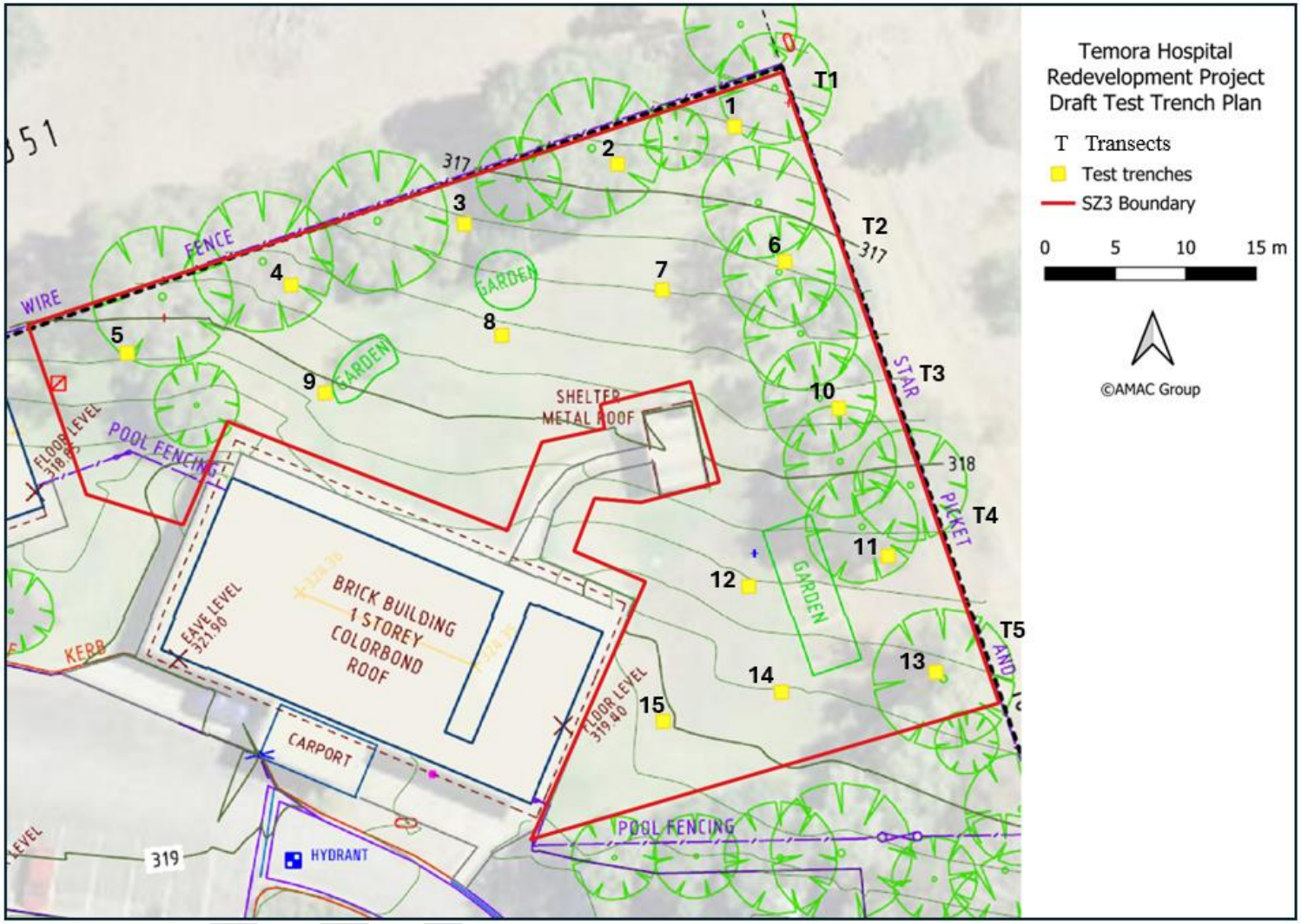

Figure 7-4 **Location of test trenches indicated in yellow.**
AMAC Group (2024).

7.3.4 Field Methods and Results

Test excavation was undertaken over 4 days from the 18th to 21st November 2024. The test excavation program was conducted under the Code of Practice (DECCW 2010b). This involved the excavation of 15 test trenches (50cm x 50cm), situated evenly across the site in order to obtain information and data that could systematically determine a distribution pattern and/or density pattern within a localised scale of the site. All 15 test pits were excavated and identified a remnant A2 overlaying a sterile B horizon. The A1 soil profile was absent in all 15 test pits.

The test excavation was located on the northeastern boundary corner of the study area which was identified as an archaeological sensitive zone (SZ3) by GML (2024). Located at the upper slope on a near-flat ridgeline area the study area was flanked by a building to the south, gardens around the outer perimeter, and enclosed by boundary fences. The near level location of this landform on top of a ridgeline with expansive views of the surrounding region would have channelled Aboriginal people to the site to undertake cultural activities and perhaps formed part of a walking route (GML 2024).

A total of five transects (Figure 7.3) were situated in a northeast-southwest orientation with Transect 1 at the northern end of the study area and Transect 5 at the southern. The transects from the northern end consisted of the following test pits. Transect 1, test pits 1-5, Transect 2, test pits 6-9, Transect 3, test pit 10, Transect 4, test pits 11-12, and Transect 5, test pits 13-15. All 15 test pits showed evidence of a modified and truncated topsoil with the A1 soil horizon absent. Test pits were found to be considerably shallow. The maximum depth of the soil profile reached was 250mm, where a heavy reddish-brown basal clay was observed (B horizon). Excavation of the test trenches ceased once the sterility of the soil could be confirmed.

7.3.5 Stratigraphic Analysis

The soil profile was consistent with the Temora Soil Landscape; however, the study area was found to have surface disturbance with the presence of fill from past development and building activity leading to the truncation of the soil profile. As a result, the A1 horizon (artefact bearing deposit) had been largely removed and consisted of a reformed topsoil. All 15 test pits were excavated and identified a remnant and redeposited A2 overlaying a sterile B horizon. The A1 soil profile was absent in all 15 test pits. While the redeposited and reformed A2 soil profile was found to be shallow, there were no signs of significant disturbance identified in the B horizon in any of the test pits. In Test Pit 9, however, the B horizon was exposed at the surface indicating possible surface erosion from a combination of environmental and anthropogenic factors. Located on the top of the ridgeline of the hospital's upper slope, Sensitive Zone 3 (SZ3) is exposed to strong frequent northerly winds which can strip unsealed and unvegetated ground surfaces of any present topsoil. This may have been the case prior to the hospital's landscaping works which would have included importing topsoil, plants, and turf.

The study area was found to be located within the Temora soil landscape (te). The A2 soil profile was observed in all the test pits, except Test Pit 9, and consisted of up to 250mm of red to reddish brown sandy loam clay with roots and gravel on top of a reddish-brown heavy stiff clay (B horizon). In Test Pits 1 and 2 the presence of European material, e.g. broken ceramic sherd, glass, metal, brick was observed. The soil was found to be highly compacted. The study area was absent of any Aboriginal objects and/or deposits.

Table 7.4 Identified soils within the study area.

Soil Horizon	Upper Slope (Profile1)	Crest (Profile 4)
A1	Dark reddish brown sandy clay loam, moderately moist, coarse fragments with fine gravel inclusions (te1), 0-50mm depth.	Sandy loam, gravel (te1), 0-150mm depth.
A2	Dark reddish brown clay loam, moderately moist, with quartz and fine gravel (te3), 50-250mm depth.	Dark brown sandy loam, gravel (te1), soil continues to weathered bedrock below, 150-200mm depth.
B1	Heavy clay, moderately strong, moderately moist, coarse fragments (te5), 250mm-650mm depth.	-

7.3.6 Summary of Test Trench Results

The following table provides a summary of each individual test trench, detailing their locations, dimensions, and key findings. The table also includes precise specifications, such as number of spits, description of soil layers, and the number of artefacts encountered. This organised summary allows for a clear comparison of each trench's characteristics and findings. This summary is followed by photographs of individual test trenches.

Table 7.5 Test trench summary.

Test Trench No.	Zone	No. Spits	Final Depth	Description	No. Artefacts
1	1	3	220mm	Mixed red-red brown sandy loam, clay, roots, gravel with European material (A2), overlying heavy red clay with decomposing weathered bedrock (B1)	0
2	1	3	200mm	Red-brown sandy loam clay, roots, gravel with European artefacts (A2), overlying heavy red clay with decomposing weathered bedrock (B1)	0
3	1	3	200mm	Red-brown sandy loam clay, gravel (A2), overlying heavy red clay with decomposing weathered bedrock (B1)	0
4	1	2	150mm	Red-brown, sandy loam clay, gravel (A2), overlying heavy red clay with decomposing weathered bedrock (B1)	0
5	1	3	250mm	Mixed red brown sandy loam, gravel (A2), overlying heavy red-brown clay with decomposing weathered bedrock (B1)	0
6	2	3	240mm	Red sandy loam clay, roots, gravel (A2), overlying heavy red clay with decomposing weathered bedrock (B1)	0
7	2	3	210mm	Red-brown sandy silty clay, roots, gravel (A2), overlying red clay with decomposing weathered bedrock (B1)	0
8	2	3	210mm	Disturbed sandy clay (A2/B1), overlying heavy red clay with decomposing weathered bedrock (B1)	0
9	2	2	100	Disturbed (B1) heavy red clay with decomposing weathered bedrock, A1/A2 absent	0
10	3	3	220mm	Disturbed redeposited fill onto reddish-brown sandy loam, roots, gravel (A2), overlying heavy red clay with decomposed weathered bedrock	0

11	4	3	210mm	Compact red-brown, sandy clay, roots, gravel (A2), overlying compacted heavy red clay with decomposing weathered bedrock (B1)	0
12	4	2	140mm	Disturbed redeposited fill with red sandy clay, gravel (A2), overlying heavy red clay with decomposed weathered bedrock	0
13	5	3	240mm	Disturbed fill 2-5mm layer, roots onto red sandy clay, gravel (A2), overlying compacted heavy red clay with decomposing weathered bedrock (B1)	0
14	5	2	150mm	Compact red sandy clay, gravel (A2), overlying compacted heavy red clay with decomposing weathered bedrock (B1)	0
15	5	3	240mm	Disturbed fill layer onto red compacted sandy clay, gravel (A2), overlying compacted heavy red clay with decomposing weathered bedrock (B1)	0

7.3.7 Test Trench Photographs

ATT1 Final Shot, facing north
AMAC 2024, Image No.110246.

ATT1 Section Shot, facing north.
AMAC 2024, Image No. 10416.

ATT2 Final Shot, facing north.
AMAC 2024, Image No. 110656.

ATT2 Section Shot, facing north.
AMAC 2024, Image No. 110740.

ATT3 Final Shot, facing north.
AMAC 2024, Image No. 110918.

ATT3 Section Shot, facing north.
AMAC 2024, Image No. 111012.

ATT4 Final Shot, facing north.
AMAC 2024, Image No. 111128.

ATT4 Section Shot, facing north.
AMAC 2024, Image No. 111205.

ATT5 Final Shot, facing north.
AMAC 2024, Image No. 111328.

ATT5 Section Shot, facing north.
AMAC 2024, Image No. 111411.

ATT6 Final Shot, facing north.
AMAC 2024, Image No. 111732.

ATT6 Section Shot, facing north.
AMAC 2024, Image No. 111811.

ATT7 Final Shot, facing north.
AMAC 2024, Image No. 111958.

ATT7 Section Shot, facing north.
AMAC 2024, Image No. 112202.

ATT8 Final Shot, facing north.
AMAC 2024, Image No. 112439.

ATT8 Section Shot, facing north.
AMAC 2024, Image No. 112510.

ATT9 Final Shot, facing north.
AMAC 2024, Image No. 112707.

ATT9 Section Shot, facing north.
AMAC 2024, Image No. 112741.

ATT10 Final Shot, facing north.
AMAC 2024, Image No. 113153.

ATT10 Section Shot, facing north.
AMAC 2024, Image No. 113230.

ATT11 Final Shot, facing north.
AMAC 2024, Image No. 113447.

ATT11 Section Shot, facing north.
AMAC 2024, Image No. 113524.

ATT12 Final Shot, facing north.
AMAC 2024, Image No. 113801.

ATT12 Section Shot, facing north.
AMAC 2024, Image No. 113830.

ATT13 Final Shot, facing north.
AMAC 2024, Image No. 114105.

ATT13 Section Shot, facing north.
AMAC 2024, Image No. 114152.

ATT14 Final Shot, facing north.
AMAC 2024, Image No. 114430.

ATT14 Section Shot, facing north.
AMAC 2024, Image No. 114509.

ATT15 Final Shot, facing north.
AMAC 2024, Image No. 114914.

ATT15 Section Shot, facing north.
AMAC 2024, Image No. 114958.

8.0 ANALYSIS AND DISCUSSION

8.1 RESEARCH CONTEXT

The research questions are based on the information that has been gathered from previous excavations within the vicinity of the study area as well as making an attempt to place the site in a regional context and offer some explanation for the activities that may have taken place within the study area.

8.1.1 Archaeological Research Questions

- Are archaeological or cultural materials present in the Holocene Age deposits?
- If so, how do these artefact densities compare at a local and regional level?
- Are rare or representative archaeological or cultural materials present?
- Are locally or regionally significant archaeological or cultural material present in the Holocene age deposits?
- Is it possible to assign a temporal framework to any of the excavated material?
- What was the nature and extent of the activity that took place within the study area and how does the study area compare with other sites in the immediate vicinity and similar landforms to the study area?
- What raw materials were chosen for the manufacture of stone implements?
- Is the area suitable to be set aside for preservation of Aboriginal archaeological material?

8.1.2 Response to Research Design Questions

Archaeological test excavation determined that no Aboriginal objects and/or features were located at the study site (SZ3) as a result of previous disturbance. This removed the ability to respond to the archaeological research questions. Due to the absence of Aboriginal archaeological data the study site does not need to be set aside for preservation of Aboriginal archaeological material. However, this site still retains cultural significance to the local Aboriginal community.

8.2 ARCHAEOLOGICAL ANALYSIS AND DISCUSSION

The analysis of the environmental landscape, Aboriginal land use, archaeological context and predictive modelling indicated some probability for Aboriginal archaeological evidence in the form of open artefact scatters or isolated artefacts to be present within less disturbed areas of the study site. Test excavation did not reveal physical evidence of Aboriginal artefacts in Sensitive Zone 3, all test trenches excavated were found to be sterile.

The site contains surface disturbance from past agricultural and building activity. An intact A1 horizon was notably absent across all test trenches, it appears Sensitive Zone 3 and surrounding area had been modified during the construction of the hospital building and landscaping activities leaving only a redeposited and reformed A2 horizon to be observed.

The position of the study area on an upper slope and on top of a ridgeline landform would have channelled Aboriginal movement through this area with cultural activities potentially leaving Aboriginal cultural traces. Similar to other environmental locations

such as riverbanks, creeks, and watercourses along lower slopes which offer major Aboriginal movement routes, ridgelines may have been used as temporary open camp sites and meeting places, overlooking the surrounding area and thus increasing the potential for identifying the presence of surface or sub-surface artefact scatters or isolated finds. The results of the test excavation, however, found that the study area, Sensitive Zone 3, was absent of any Aboriginal objects and/or deposits.

9.0 SCIENTIFIC VALUES & SIGNIFICANCE ASSESSMENT

9.1 INTRODUCTION

The processes of assessing significance for items of cultural heritage value are set out in The Australian ICOMOS Charter for the Conservation of Places of Cultural Significance: the Burra Charter (amended 1999; 2013) formulated in 1979 and based largely on the Venice Charter of International Heritage established in 1966. As part of the archaeological assessment for significance, a key step in the process is to assess the potential impact of a proposed activity to reflect the cultural significance or value of an object, site, or place in the recommendations for conservation, management, or mitigation.

As defined in the 'Burra Charter' (ICOMOS 1988) cultural significance is broken into four parts: aesthetic, historic, scientific, and social value for past, present, or future generations. Cultural significance is a concept which assists in understanding the value of (pre-) historical places as a means to enrich the present and be of value to future generations (ICOMOS 1988). The Burra Charter is considered best practice standard for cultural heritage management and conservation for archaeological and cultural significance for Aboriginal people in Australia. The social, historical, and aesthetic significance has been discussed within the Aboriginal Cultural Heritage Assess Report. This report subsequently assesses the scientific significance through the analysis of the archaeological remains.

9.2 ASSESSMENT OF SCIENTIFIC SIGNIFICANCE

The scientific value of any given location will depend on the importance of the data that can be obtained from any archaeological material located on its rarity, quality, and on the degree to which this may contribute further substantial information to a scientific research process (Australia ICOMOS 1988).

No Aboriginal objects and/or features of cultural and archaeological significance were located during the programme of test excavation. The soil profile was consistent with the Temora Soil Landscape; however, it was found to contain a largely truncated/reformed A2 horizon (artefact bearing deposit). The A1 horizon was found to be absent due to past land clearance, building, and landscaping activity leading to surface disturbance of the soil profile. The proposed development and associated works will impact the study area. The results, however, indicate that there is a nil potential for intact Aboriginal objects of archaeological and cultural significance to be present and therefore, the study area holds limited scientific significance.

10.0 IMPACT ASSESSMENT

10.1 ASSESSMENT OF IMPACT TO ABORIGINAL OBJECTS AND/OR PLACES AND CULTURAL HERITAGE

In the ACHAR undertaken by GML (2024), three archaeologically sensitive zones (SZ1/SZ2/SZ3), local and regional view corridors and a traditional Aboriginal walking route in connection with the study area was identified. It was assessed that SZ3 which forms the study site of this report, would be directly impacted by the proposed development, as well as the associated Aboriginal heritage. The following Table 10.1 demonstrates an overview of impacts to aspects of Aboriginal heritage and values assessed in GML (2024) ACHAR.

Table 10.1 The identified potential harm to Aboriginal heritage and values within SZ3 – assessed by GML (2024: 85).

Aboriginal Heritage Type	Type of Harm	Degree of Harm	Consequence of Harm
Archaeological sensitive zone 3 (SZ3)	Direct	Total	Partial loss of value
Walking Route	Direct	Partial	Partial loss of value
View Corridor	Direct	Partial	Partial loss of value
Scientific Value	Direct	Partial	Partial loss of value

The study site of this report SZ3 was identified for further assessment due to it holding moderate archaeological potential. Test excavation, however, found the study area to be absent of Aboriginal objects and/or features which reduced both the archaeological potential and scientific value of the study area to nil. The following Table 10.2 provides an overview of the revised impacts to aspects of Aboriginal heritage and values for the study area (SZ3).

Table 10.2 Revised overview of impacts and potential harm to aspects of Aboriginal heritage and values within SZ3..

Aboriginal Heritage Type	Type of Harm	Degree of Harm	Consequence of Harm
Archaeological sensitive zone 3 (SZ3)	Nil	Nil	Nil
Walking Route	Direct	Partial	Partial loss of value
View Corridor	Direct	Partial	Partial loss of value
Scientific Value	Nil	Nil	Nil

10.2 STATEMENT OF IMPACT TO ABORIGINAL CULTURAL HERITAGE

GML ACHAR (2024) conducted an assessment of Aboriginal heritage, identifying archaeologically sensitive zones, local and regional view corridors, and a traditional walking route associated with the broader study site. The area subjected to test excavation was located within Sensitive Zone 3 (SZ3), which had been assessed as having moderate archaeological potential. The proposed activity was initially expected to directly impact potential Aboriginal objects and/or places, resulting in a complete loss of value. However, test excavations revealed no Aboriginal objects or features within the study area, reducing its archaeological potential and scientific

value to nil. Consequently, the proposed development will not affect any Aboriginal heritage as it does not exist on the site. There remains, however, the possibility of partially affecting the value of the walking route, view corridor, as well as any social and aesthetic value associated with the study area.

11.0 RESULTS AND RECOMMENDATIONS

11.1 ARCHAEOLOGICAL RESULTS

A program of test excavation was conducted to assess the archaeological potential of the study area, Sensitive Zone 3 (SZ3) which had previously been assessed as retaining moderate archaeological potential (GML 2024). Test excavation, however, did not reveal physical evidence of Aboriginal objects and/or features within all test trenches excavated. The A horizon (artefact bearing deposit) had been largely removed and consisted of a heavily truncated and reformed topsoil, due to significant past disturbances. While the proposed development will disturb the ground surface and any intact soils that may contain Aboriginal archaeological remains, the results suggest that there is nil archaeological potential for Aboriginal objects to survive within SZ3. Therefore, the proposed development should be allowed to proceed with caution within SZ3.

11.2 RECOMMENDATIONS

The following recommendations have been formulated in consultation with the RAPs, the proponent, and Heritage NSW for the proposed development to proceed:

- Consultation with the registered Aboriginal stakeholders should continue. Stakeholders will be given the opportunity to comment on the recommendations outlined in this report. All comments will be included in the final Aboriginal Stakeholder approved version of this report.
- Archaeological test excavation in accordance with *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales, Part 6 National Parks and Wildlife Act 1974*, (DECCW 2010) revealed no Aboriginal archaeological objects or deposits in Sensitive Zone 3 (SZ3): as a result, the development in this area as shown in Figure 3.1 should be allowed to 'proceed with caution.'
- An Unexpected Finds Procedure should be implemented during any works that will disturb the ground surface of the study area.
- After this and before any ground disturbance takes place all development staff, contractors and workers should be briefed prior to works commencing on site, as to the status of the study area. They should also be informed of their responsibilities regarding any Aboriginal archaeological deposits and/or objects that may be located during the proposed development.

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13.0 APPENDICES

13.1 AHIMS SEARCH

AHIMS Web Services (AWS)
Search Result

Your Ref/PO Number : Temora Hospital
Client Service ID : 933106

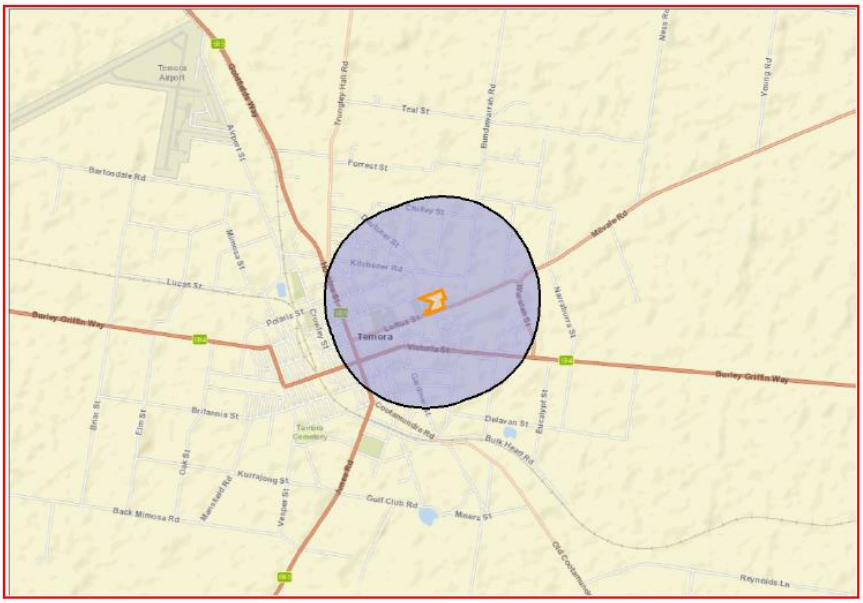
AMAC Group P/L
122c Percival Rd
Stanmore New South Wales 2048
Attention: Martin Carney
Email: amac@archaeological.com.au

Date: 23 September 2024

Dear Sir or Madam:

AHIMS Web Service search for the following area at Lot : 2, DP:DP572392, Section : - with a Buffer of 1000 meters, conducted by Martin Carney on 23 September 2024.

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of Heritage NSW AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

0	Aboriginal sites are recorded in or near the above location.
0	Aboriginal places have been declared in or near the above location. *

If your search shows Aboriginal sites or places what should you do?

- You must do an extensive search if AHIMS has shown that there are Aboriginal sites or places recorded in the search area.
- If you are checking AHIMS as a part of your due diligence, refer to the next steps of the Due Diligence Code of practice.
- You can get further information about Aboriginal places by looking at the gazettal notice that declared it. Aboriginal places gazetted after 2001 are available on the NSW Government Gazette (https://www.legislation.nsw.gov.au/gazette) website. Gazettal notices published prior to 2001 can be obtained from Heritage NSW upon request

Important information about your AHIMS search

- The information derived from the AHIMS search is only to be used for the purpose for which it was requested. It is not be made available to the public.
- AHIMS records information about Aboriginal sites that have been provided to Heritage NSW and Aboriginal places that have been declared by the Minister;
- Information recorded on AHIMS may vary in its accuracy and may not be up to date. Location details are recorded as grid references and it is important to note that there may be errors or omissions in these recordings,
- Some parts of New South Wales have not been investigated in detail and there may be fewer records of Aboriginal sites in those areas. These areas may contain Aboriginal sites which are not recorded on AHIMS.
- Aboriginal objects are protected under the National Parks and Wildlife Act 1974 even if they are not recorded as a site on AHIMS.
- This search can form part of your due diligence and remains valid for 12 months.

Level 6, 10 Valentine Ave, Parramatta 2150
Locked Bag 5020 Parramatta NSW 2124
Tel: (02) 9585 6345

ABN 34 945 244 274
Email: ahims@environment.nsw.gov.au
Web: www.heritage.nsw.gov.au

13.2 CONTEXT SHEETS

AMAC Group Aboriginal Archaeology Recording Form Temora Hospital Redevelopment

Excavator	Recorded By	Date:	Area	Pit Number
SM	B.S	20/11/24	—	AT1

Dimensions	Transect (GPS)	Location/Landform	Pit GPS:
0.5m x 0.5m / 1m x 1m /	ONE	UPPER SLOPE	N/A

Description of Pit: (e.g., Historical Features, Natural Features)

N/A

Spit No.	Spit Depth (mm)	Soil Horizon	Notes e.g., Matrix, Colour (mottled), Horizontal boundary (diffuse, sharp, clear), texture (grainy, smooth, plasticine, spongy), Moisture (dry, moist), Compaction (loose, weak, firm,), Inclusions (grass roots, rocks, charcoal etc)	No. Artefacts (NPW)	No. of Buckets
1	50	A2	Mixed red to red brown, sandy loam with European material in top layer	—	5
2	100	A2	roots, common stone throughout clay content increases with depth	—	6
3	70	A2	〃 〃	—	5
4	—	B1	B HORIZON HEAVY RED CLAY with decomposing bedrock.	—	—
5					
6					
7					
8					

Additional Notes: (e.g., section collapse, contamination etc)

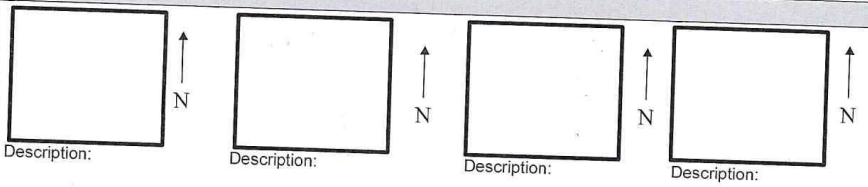
Sample Charcoal (C14)
Spit:

Sample Soil (TL / OSL)
Spit:

Photographs:

Image	Notes	Dir	Image	Notes	Dir	Image	Notes	Dir

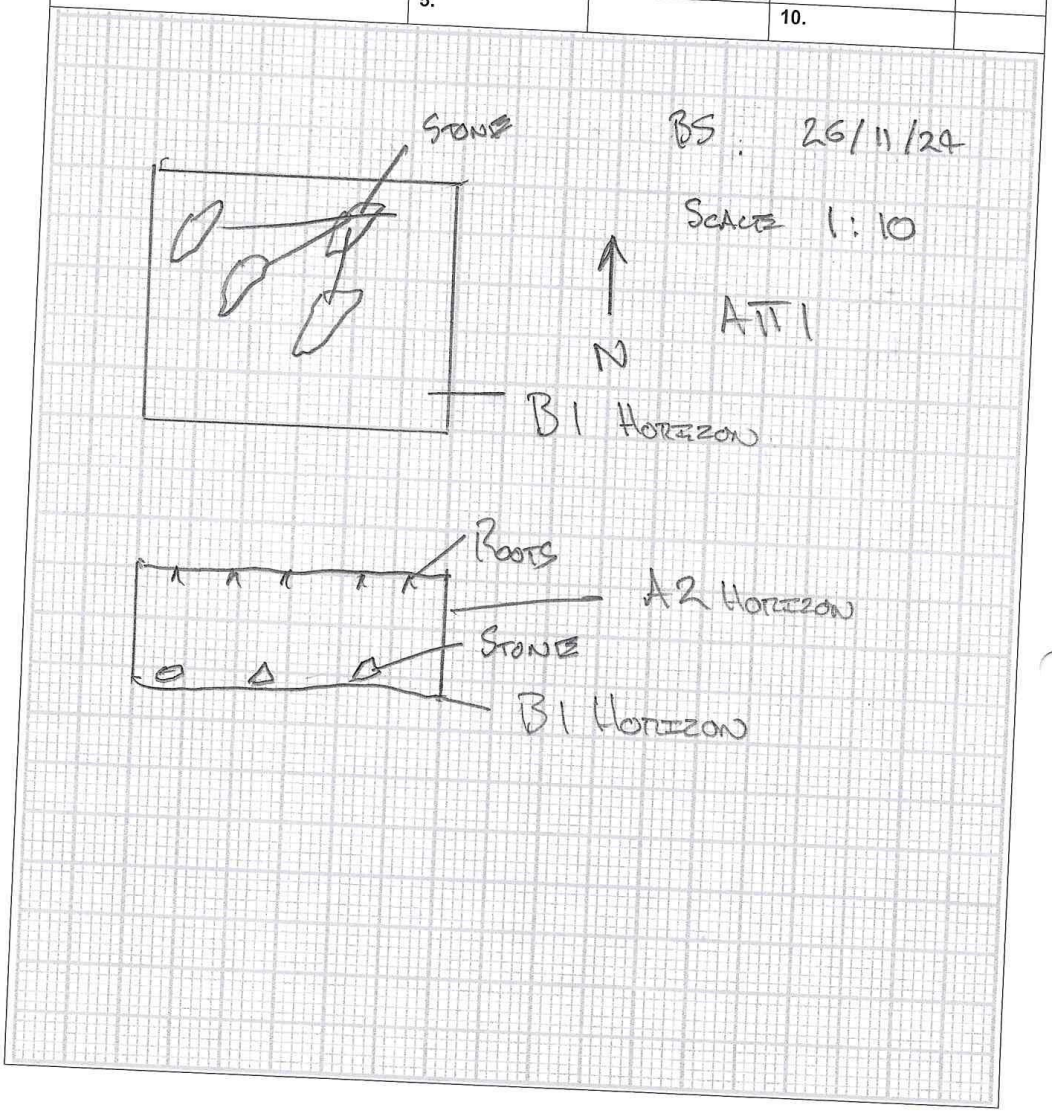
Sketches:



Description: Description: Description: Description:

Archaeological Management and Consulting Group | amac@archaeological.com.au | (02)95686093 | 0411727395

LEVELS			Pit No.	
Location of Datum:	Level	RL (=HOI – Lvl)	Level	RL (=HOI – Lvl)
	1.		6.	
Datum:	2.		7.	
Backsight (BS):	3.		8.	
Height of Instrument (HOI) (= Datum + BS):	4.		9.	
	5.		10.	



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AMAC Group Aboriginal Archaeology Recording Form — Temora Hospital Redevelopment

Excavator	Recorded By	Date:	Area	Pit Number
NF. + MF	B.S	20/11/12	—	ATI 2

Dimensions	Transect (GPS)	Location/Landform	Pit GPS:
0.5m x 0.5m / 1m x 1m	ONE	UPPER SLOPE	N/A

Description of Pit: (e.g., Historical Features, Natural Features)

Spit No.	Spit Depth (mm)	Soil Horizon	Notes e.g., Matrix, Colour (mottled), Horizontal boundary (diffuse, sharp, clear), texture (grainy, smooth, plasticine, spongy), Moisture (dry, moist), Compaction (loose, weak, firm,), Inclusions (grass roots, rocks, charcoal etc)	No. Artefacts (NPW)	No. of Buckets
1	50	A2	Red, brown sandy loam, roots common European Artefacts stone increasing	/	2
2	100	A2	with depth as is clay content	/	5
3	50	A2	" "	/	3
4		B1	Heavy red clay, decomposing bedrock.		
5					
6					
7					
8					

Additional Notes: (e.g., section collapse, contamination etc)

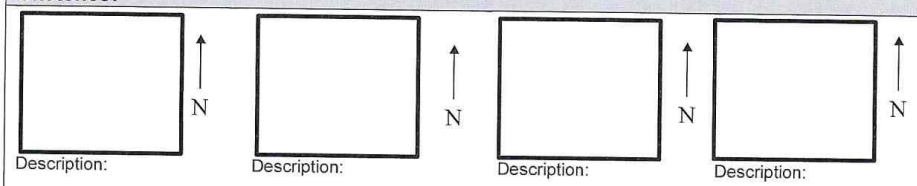
Sample Charcoal (C14)
Spit:

Sample Soil (TL / OSL)
Spit:

Photographs:

Image	Notes	Dir	Image	Notes	Dir	Image	Notes	Dir

Sketches:



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LEVELS			Pit No.	
Location of Datum:	Level	RL (=HOI – Lvl)	Level	RL (=HOI – Lvl)
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Datum:	2.		7.	
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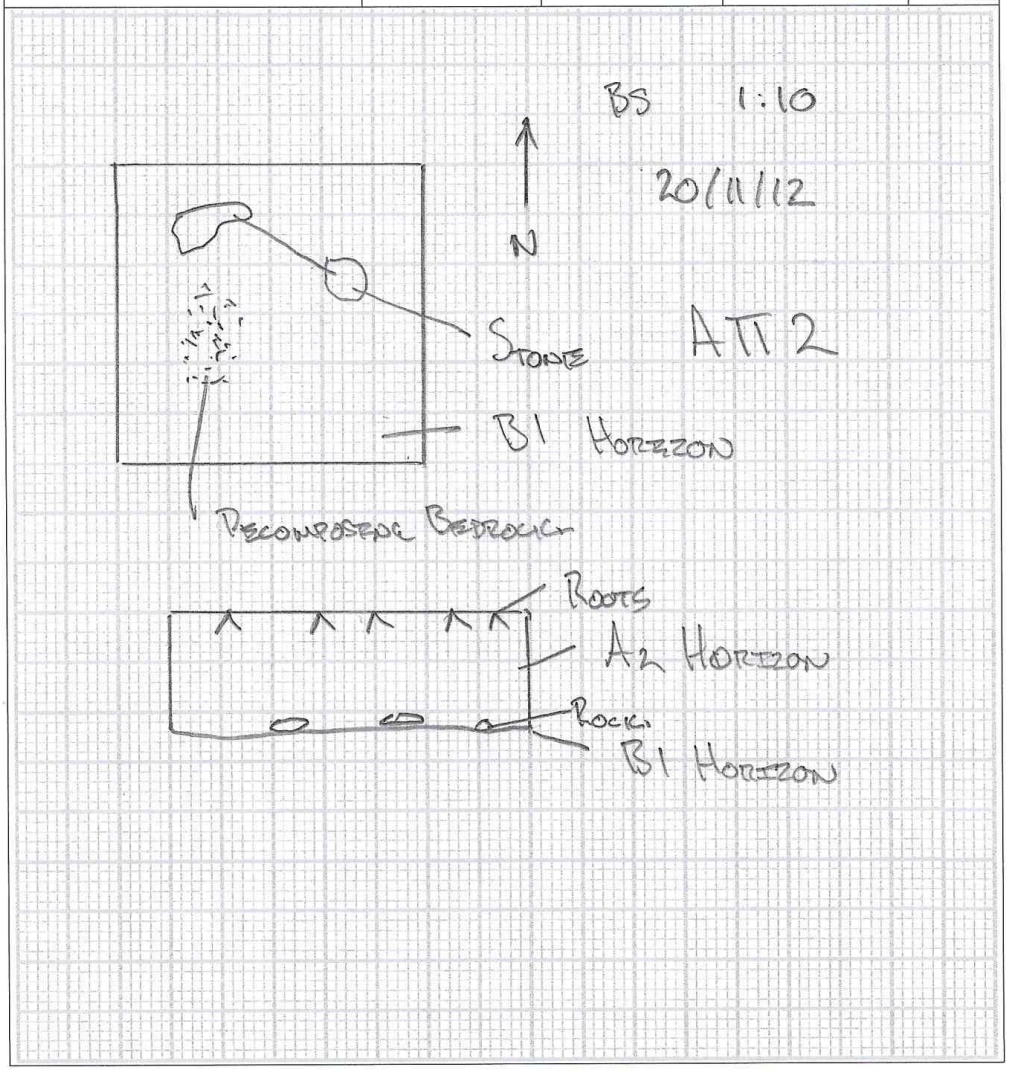
	5.		10.	



AMAC Group Aboriginal Archaeology Recording Form — Temora Hospital Redevelopment

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Dimensions	Transect (GPS)	Location/Landform	Pit GPS:
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Description of Pit: (e.g., Historical Features, Natural Features)

Spit No.	Spit Depth (mm)	Soil Horizon	Notes e.g., Matrix, Colour (mottled), Horizontal boundary (diffuse, sharp, clear), texture (grainy, smooth, plasticine, spongy), Moisture (dry, moist), Compaction (loose, weak, firm,), Inclusions (grass roots, rocks, charcoal etc)	No. Artefacts (NPW)	No. of Buckets
1	50		Sandy clay loam, reddish brown with high stone content	—	2
2	100		" "	—	6
3	50		" "	—	4
4	—	B1	Heavy red clay and decomposing bedrock		
5					
6					
7					
8					

Additional Notes: (e.g., section collapse, contamination etc)

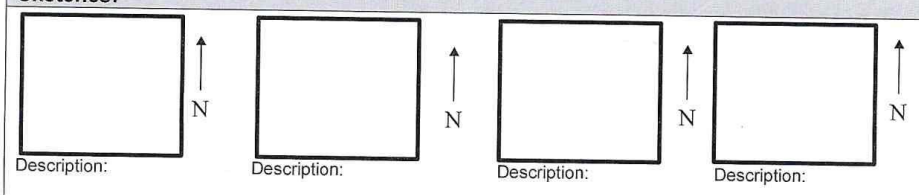
Sample Charcoal (C14)
Spit:

Sample Soil (TL / OSL)
Spit:

Photographs:

Image	Notes	Dir	Image	Notes	Dir	Image	Notes	Dir

Sketches:



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LEVELS			Pit No.	
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Datum:	2.		7.	
Backsight (BS):	3.		8.	
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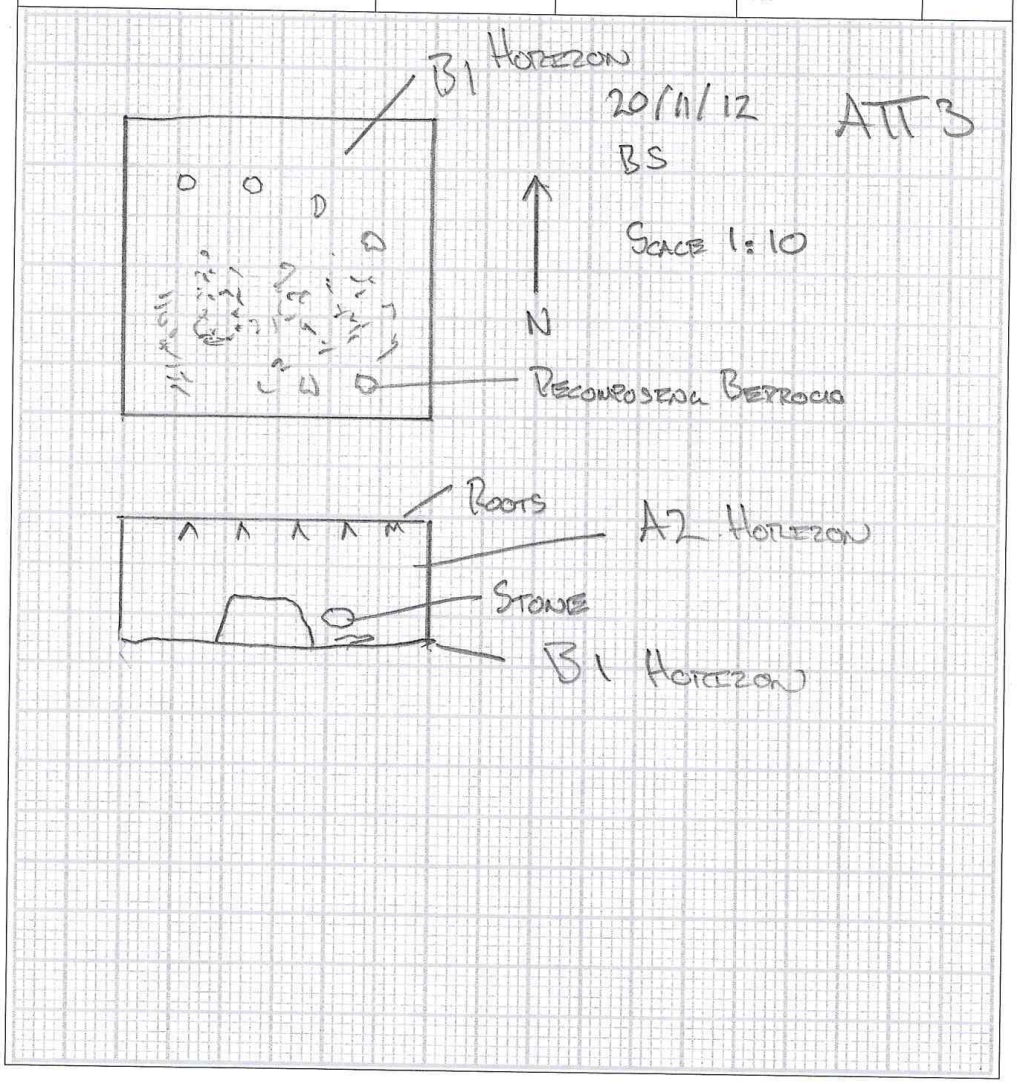

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AMAC Group Aboriginal Archaeology Recording Form — Temora Hospital Redevelopment

Excavator	Recorded By	Date:	Area	Pit Number
NF MF	BS	20/11/24	—	ATT 9

Dimensions	Transect (GPS)	Location/Landform	Pit GPS:
0.5m x 0.5m ✓ 1m x 1m	ONE	UPPER SLOPE	—

Description of Pit: (e.g., Historical Features, Natural Features)

No historical figures.

Spit No.	Spit Depth (mm)	Soil Horizon	Notes e.g., Matrix, Colour (mottled), Horizontal boundary (diffuse, sharp, clear), texture (grainy, smooth, plasticine, spongy), Moisture (dry, moist), Compaction (loose, weak, firm,), Inclusions (grass roots, rocks, charcoal etc)	No. Artefacts (NPW)	No. of Buckets
1	50	A2	Reddish Brown sandy loam, abundant stone clay content increases with depth	–	3
2	100	A2	" "	–	6
3		B1	Heavy red clay, decomposing bedrock		
4					
5					
6					
7					
8					

Additional Notes: (e.g., section collapse, contamination etc)

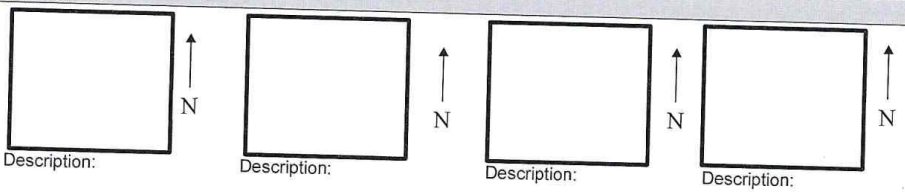
Sample Charcoal (C14)
Spit:

Sample Soil (TL / OSL)
Spit:

Photographs:

Image	Notes	Dir	Image	Notes	Dir	Image	Notes	Dir

Sketches:



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LEVELS			Pit No.	
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Datum:	2.		7.	
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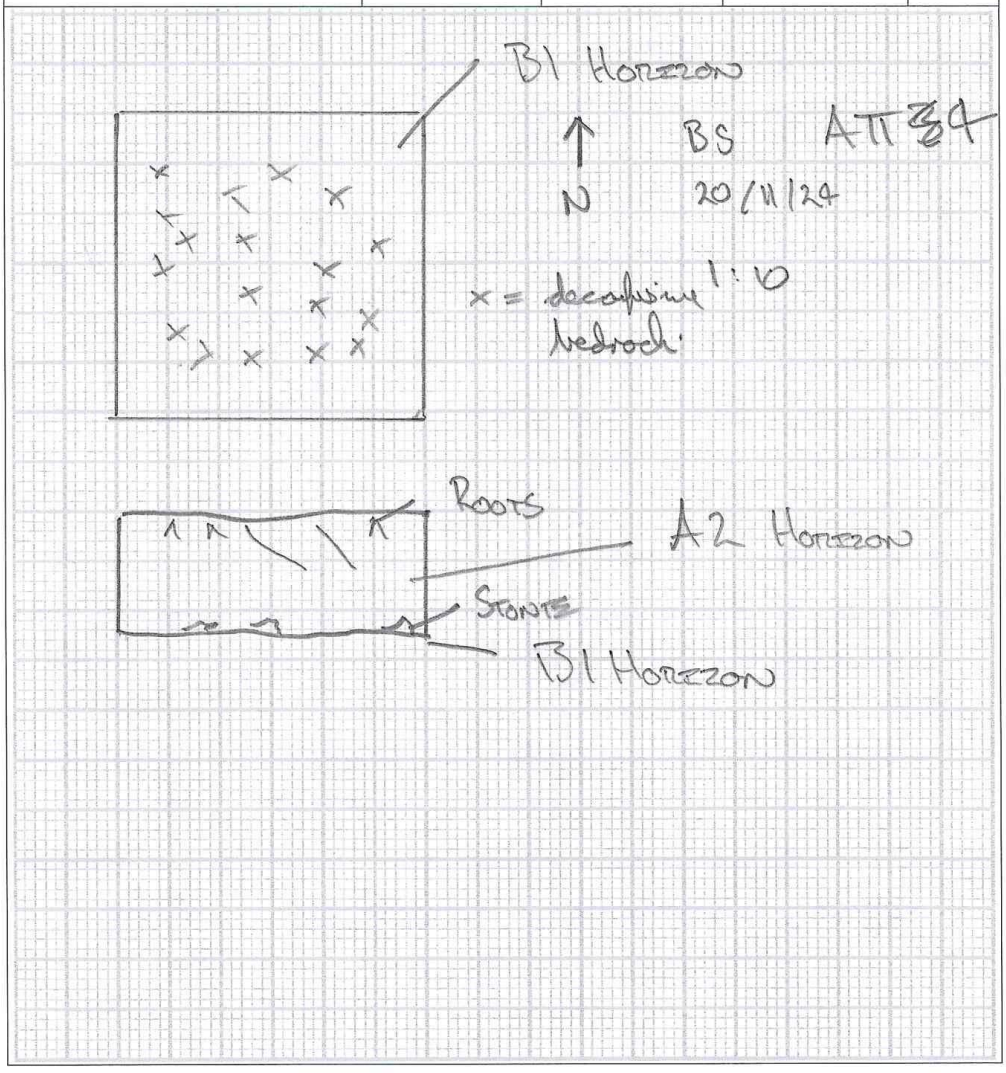


AMAC Group Aboriginal Archaeology Recording Form — Temora Hospital Redevelopment

Excavator	Recorded By	Date:	Area	Pit Number
SM	BS	21/11/24	ONE	AT 5

Dimensions	Transect (GPS)	Location/Landform	Pit GPS:
0.5m x 0.5m / 1m x 1m	ONE	UPPER SLOPE	—

Description of Pit: (e.g., Historical Features, Natural Features)

Spit No.	Spit Depth (mm)	Soil Horizon	Notes e.g., Matrix, Colour (mottled), Horizontal boundary (diffuse, sharp, clear), texture (grainy, smooth, plasticine, spongy), Moisture (dry, moist), Compaction (loose, weak, firm,), Inclusions (grass roots, rocks, charcoal etc)	No. Artefacts (NPW)	No. of Buckets
1	50	A2	Mixed red brown sandy loam, abun large amounts of stone, roots.	—	2
2	100	A2	" "	—	5
3	100	A2	" "	—	6
4	—	B1	Heavy red brown clay and decomposing bedrock		
5					
6					
7					
8					

Additional Notes: (e.g., section collapse, contamination etc)

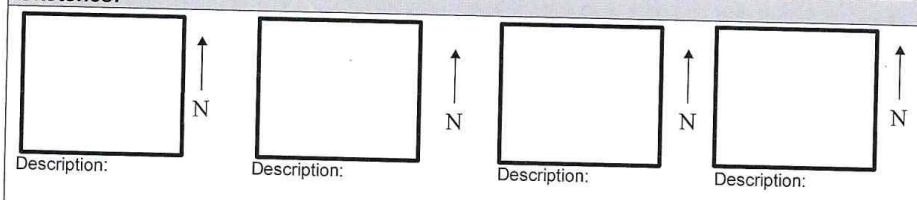
Sample Charcoal (C14)
Spit:

Sample Soil (TL / OSL)
Spit:

Photographs:

Image	Notes	Dir	Image	Notes	Dir	Image	Notes	Dir

Sketches:



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LEVELS			Pit No.	
Location of Datum:	Level	RL (=HOI – Lvl)	Level	RL (=HOI – Lvl)
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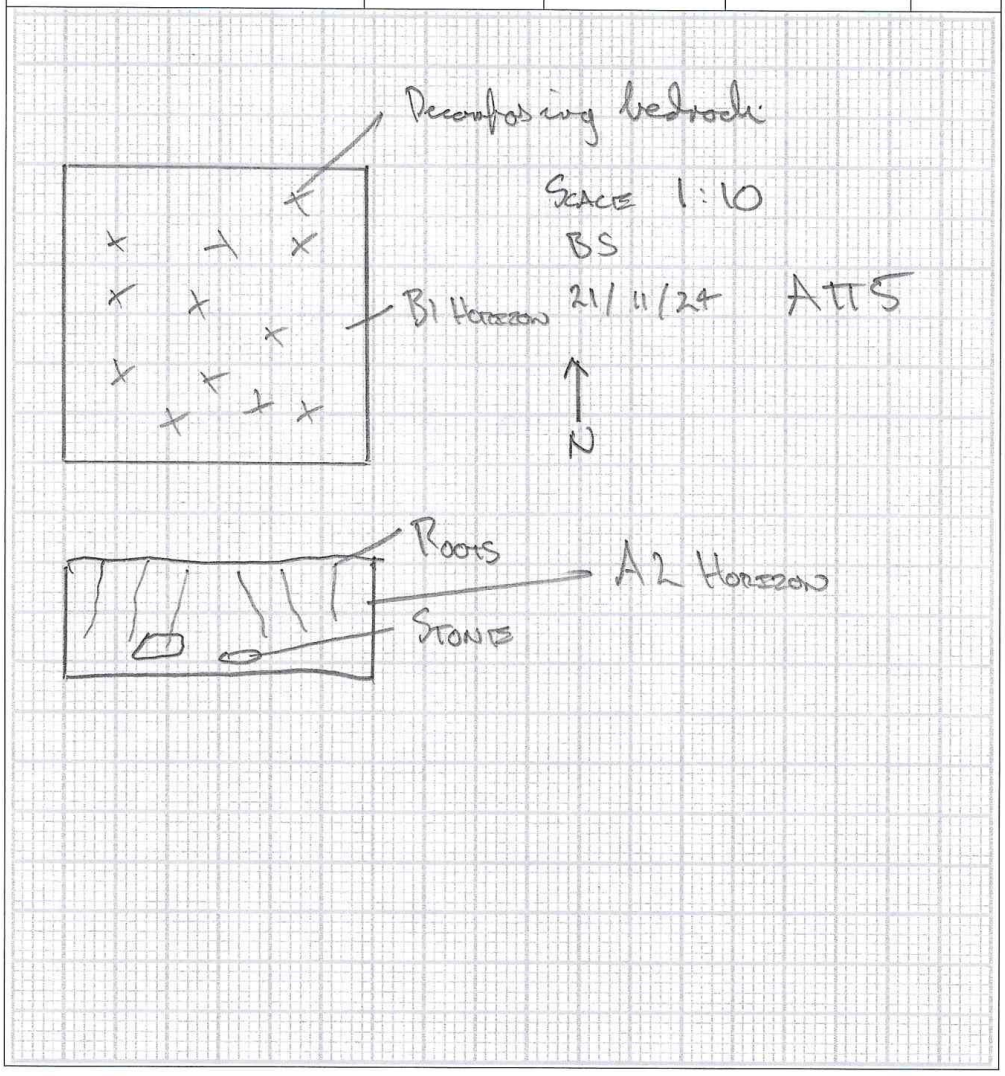
Datum:	2.		7.	
Backsight (BS):	3.		8.	
Height of Instrument (HOI) (= Datum + BS):	4.		9.	
	5.		10.	



AMAC Group Aboriginal Archaeology Recording Form — Temora Hospital Redevelopment

Excavator	Recorded By	Date:	Area	Pit Number
SM	BS	22/11/24	ONE	ATI G

Dimensions	Transect (GPS)	Location/Landform	Pit GPS:
0.5m x 0.5m 1m x 1m	TWO	UPPER SLOPE	/

Description of Pit: (e.g., Historical Features, Natural Features)

No Historical figures

Spit No.	Spit Depth (mm)	Soil Horizon	Notes e.g., Matrix, Colour (mottled), Horizontal boundary (diffuse, sharp, clear), texture (grainy, smooth, plasticine, spongy), Moisture (dry, moist), Compaction (loose, weak, firm,), Inclusions (grass roots, rocks, charcoal etc)	No. Artefacts (NPW)	No. of Buckets
1	50	A2	Red sandy loam with high clay content abundant rocks and roots	1	3
2	100	A2	"	/	5
3	90	A2	"	/	5
4		B1	HEAVY RED CLAY Decomposing bedrock	/	
5					
6					
7					
8					

Additional Notes: (e.g., section collapse, contamination etc)

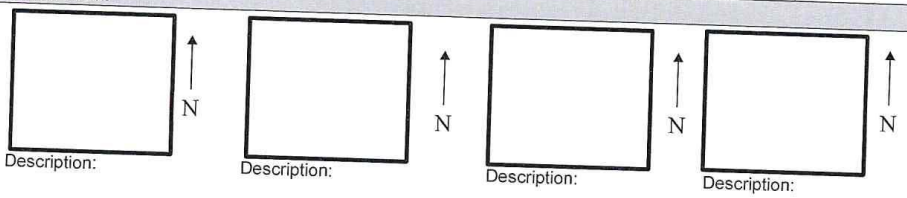
Sample Charcoal (C14)
Spit:

Sample Soil (TL / OSL)
Spit:

Photographs:

Image	Notes	Dir	Image	Notes	Dir	Image	Notes	Dir

Sketches:



Description: Description: Description: Description:

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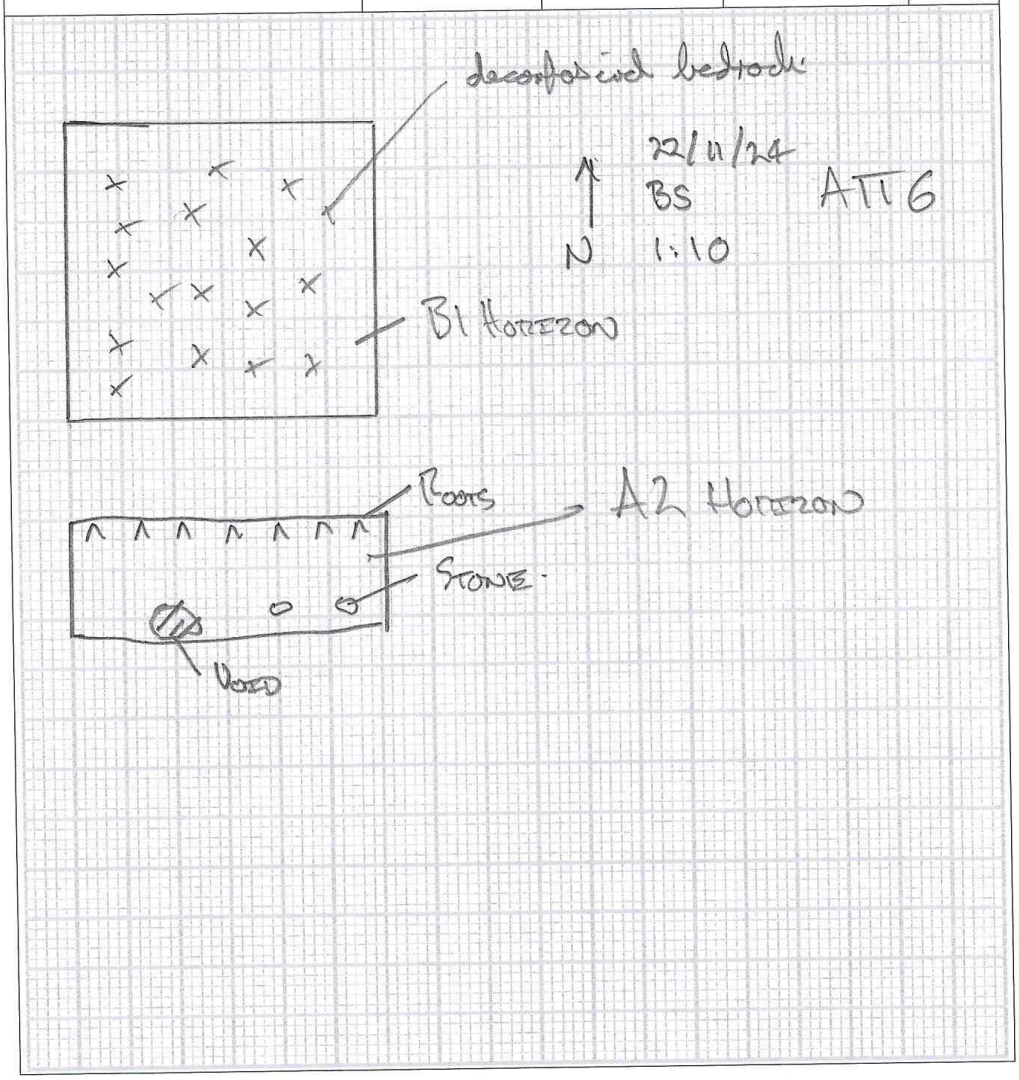
LEVELS			Pit No.	
Location of Datum:	Level	RL (=HOI – Lvl)	Level	RL (=HOI – Lvl)
	1.		6.	
Datum:	2.		7.	
Backsight (BS):	3.		8.	
Height of Instrument (HOI) (= Datum + BS):	4.		9.	
	5.		10.	



AMAC Group Aboriginal Archaeology Recording Form — Temora Hospital Redevelopment

Excavator	Recorded By	Date:	Area	Pit Number
NM + MF	BS	22/11/24	ONE	AT 7

Dimensions	Transect (GPS)	Location/Landform	Pit GPS:
0.5m x 0.5m 1m x 1m	TWO	UPPER SLOPE	N/A

Description of Pit: (e.g., Historical Features, Natural Features)

No historical features

Spit No.	Spit Depth (mm)	Soil Horizon	Notes e.g., Matrix, Colour (mottled), Horizontal boundary (diffuse, sharp, clear), texture (grainy, smooth, plasticine, spongy), Moisture (dry, moist), Compaction (loose, weak, firm,), Inclusions (grass roots, rocks, charcoal etc)	No. Artefacts (NPW)	No. of Buckets
1	50	A2	Red brown sandy silt, rocks and roots increased clay content with depth	/	3
2	100	A2	" "	/	5
3	60	A2	" "	/	6
4	–	B1	Red clay and decomposing bedrock	/	–
5					
6					
7					
8					

Additional Notes: (e.g., section collapse, contamination etc)

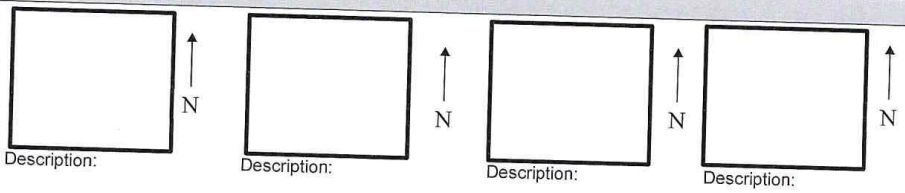
Sample Charcoal (C14)
Spit:

Sample Soil (TL / OSL)
Spit:

Photographs:

Image	Notes	Dir	Image	Notes	Dir	Image	Notes	Dir

Sketches:



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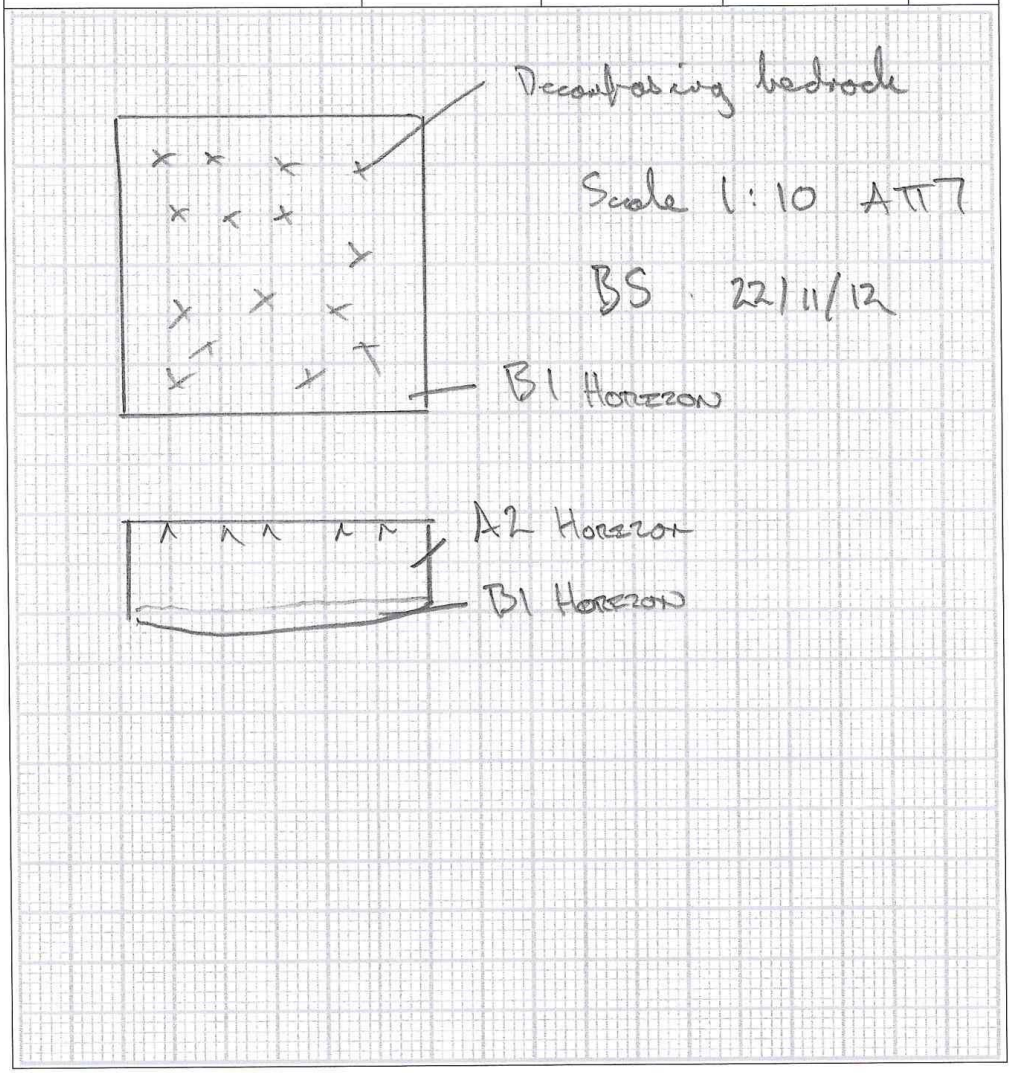
LEVELS			Pit No.	
Location of Datum:	Level	RL (=HOI – Lvl)	Level	RL (=HOI – Lvl)
	1.		6.	
Datum:	2.		7.	
Backsight (BS):	3.		8.	
Height of Instrument (HOI) (= Datum + BS):	4.		9.	
	5.		10.	



AMAC Group Aboriginal Archaeology Recording Form — Temora Hospital Redevelopment

Excavator	Recorded By	Date:	Area	Pit Number
SM	BS	22/11/24	ONE	AT 8

Dimensions	Transect (GPS)	Location/Landform	Pit GPS:
0.5m x 0.5m 1m x 1m	TWO	UPPER SLOPE	—

Description of Pit: (e.g., Historical Features, Natural Features)

No historical features.

Spit No.	Spit Depth (mm)	Soil Horizon	Notes e.g., Matrix, Colour (mottled), Horizontal boundary (diffuse, sharp, clear), texture (grainy, smooth, plasticine, spongy), Moisture (dry, moist), Compaction (loose, weak, firm,), Inclusions (grass roots, rocks, charcoal etc)	No. Artefacts (NPW)	No. of Buckets
1	50	A2/B1	Sandy, clayey material, clay content increases with depth, disturbed A2/B1	/	4
2	100	B1	11 11	/	6
3	60	B1	Heavy red clay and decomposing bedrock	/	4
4					
5					
6					
7					
8					

Additional Notes: (e.g., section collapse, contamination etc)

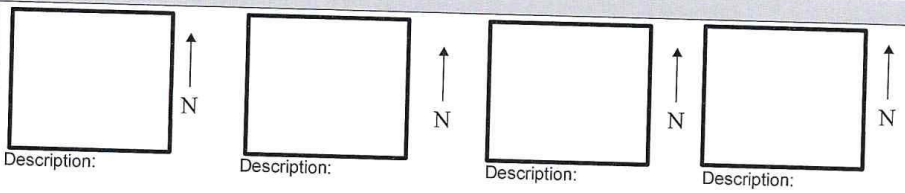
Sample Charcoal (C14)
Spit:

Sample Soil (TL / OSL)
Spit:

Photographs:

Image	Notes	Dir	Image	Notes	Dir	Image	Notes	Dir

Sketches:



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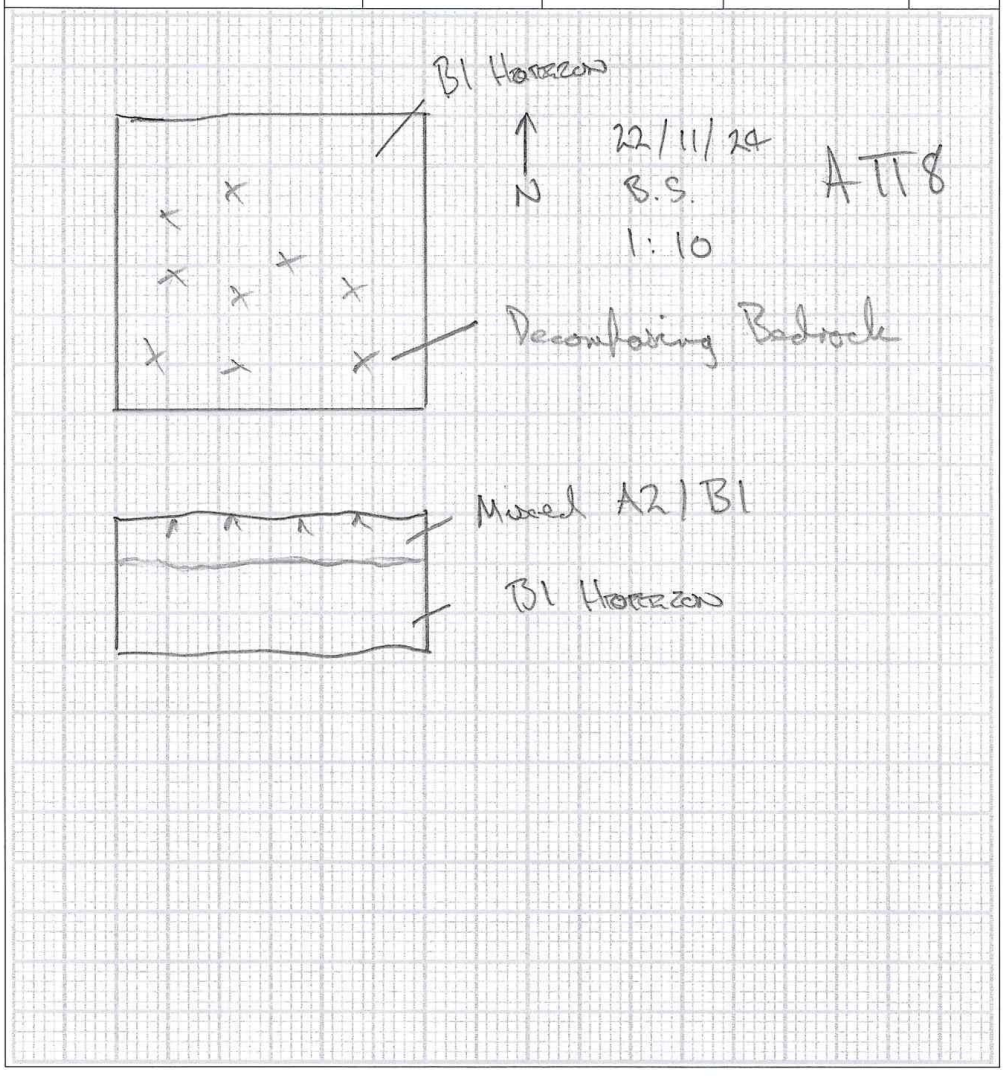
LEVELS			Pit No.	
Location of Datum:	Level	RL (=HOI – Lvl)	Level	RL (=HOI – Lvl)
	1.		6.	
Datum:	2.		7.	
Backsight (BS):	3.		8.	
Height of Instrument (HOI) (= Datum + BS):	4.		9.	
	5.		10.	



AMAC Group Aboriginal Archaeology Recording Form — Temora Hospital Redevelopment

Excavator	Recorded By	Date:	Area	Pit Number
NF MF	BS	23/11/24	ONE	AH 9
Dimensions	**Transect (GPS)**	**Location/Landform**	**Pit GPS:**	
0.5m x 0.5m / 1m x 1m /	Two	Upper Slope	—	

Description of Pit: (e.g., Historical Features, Natural Features)

No Historic features

Spit No.	Spit Depth (mm)	Soil Horizon	Notes e.g., Matrix, Colour (mottled), Horizontal boundary (diffuse, sharp, clear), texture (grainy, smooth, plasticine, spongy), Moisture (dry, moist), Compaction (loose, weak, firm,), Inclusions (grass roots, rocks, charcoal etc)	No. Artefacts (NPW)	No. of Buckets
1	50	B1	Heavy, red clay with bedrock	/	3
2	50	B1	" "	/	5
3					
4					
5					
6					
7					
8					

Additional Notes: (e.g., section collapse, contamination etc)

A2 and A1 absent, disturbed B1 Horizon

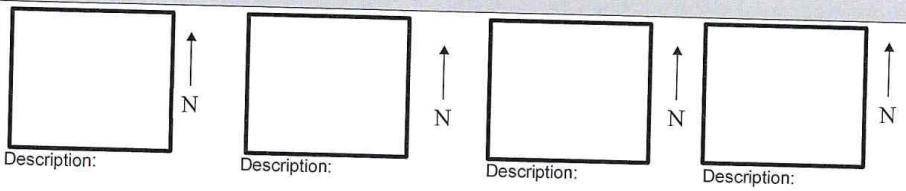
Sample Charcoal (C14)
Spit:

Sample Soil (TL / OSL)
Spit:

Photographs:

Image	Notes	Dir	Image	Notes	Dir	Image	Notes	Dir

Sketches:



Description: Description: Description: Description:

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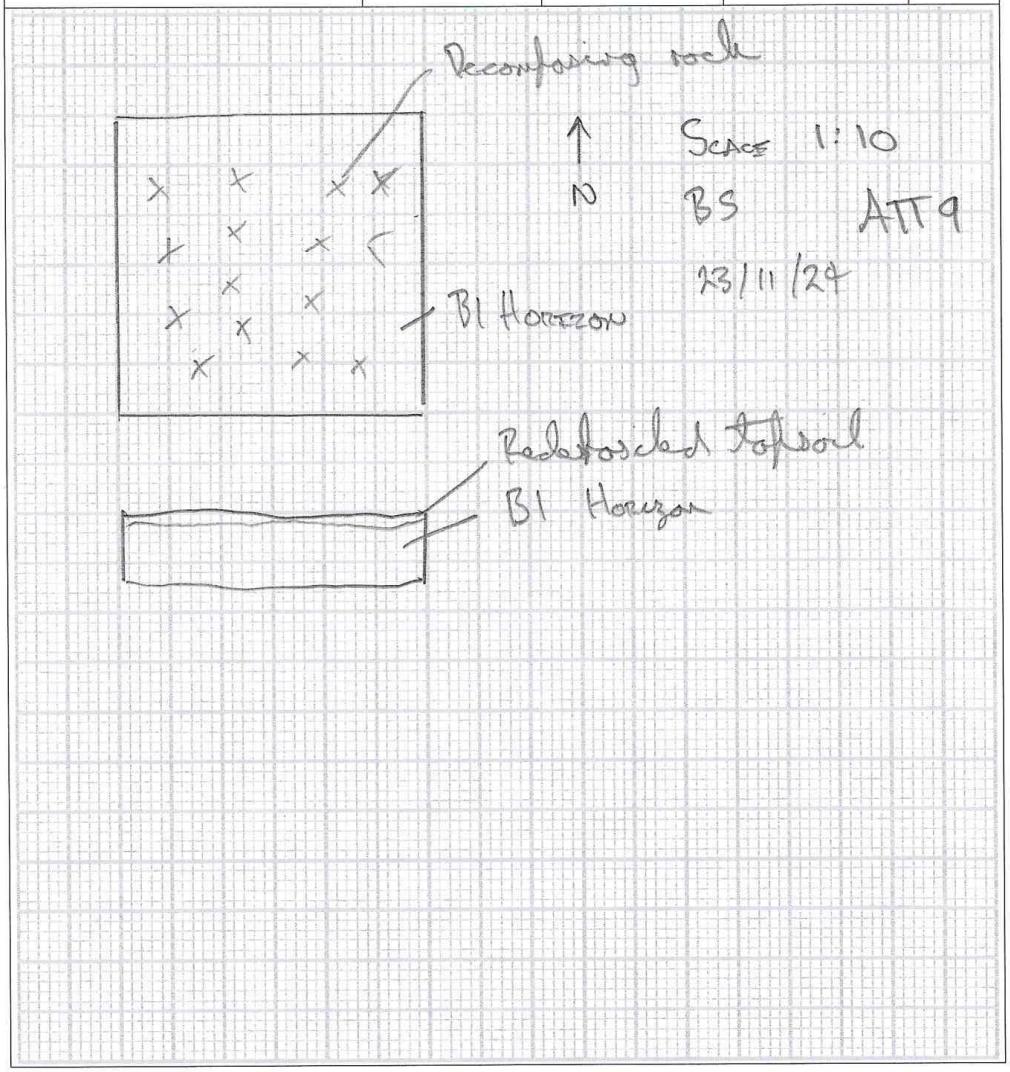
LEVELS			Pit No.	
Location of Datum:	Level	RL (=HOI – Lvl)	Level	RL (=HOI – Lvl)
	1.		6.	
Datum:	2.		7.	
Backsight (BS):	3.		8.	
Height of Instrument (HOI) (= Datum + BS):	4.		9.	
	5.		10.	



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Excavator	Recorded By	Date:	Area	Pit Number
SB	BS	23/11/24	ONE	ATT 10

Dimensions	Transect (GPS)	Location/Landform	Pit GPS:
0.5m x 0.5m 1m x 1m	THREE	UPPER SLOPE	/

Description of Pit: (e.g., Historical Features, Natural Features)

No features

Spit No.	Spit Depth (mm)	Soil Horizon	Notes e.g., Matrix, Colour (mottled), Horizontal boundary (diffuse, sharp, clear), texture (grainy, smooth, plasticine, spongy), Moisture (dry, moist), Compaction (loose, weak, firm,), Inclusions (grass roots, rocks, charcoal etc)	No. Artefacts (NPW)	No. of Buckets
1	50	FILL A2	A thin layer of redeposited topsoil and onto A2 a reddish brown sandy	/	3
2	100	A2	loam with large amounts of rock and roots decreasing with depth	/	6
3	70	A2	" "	/	5
4	/	B1	Heavy red clay and decomposed bedrock	/	/
5					
6					
7					
8					

Additional Notes: (e.g., section collapse, contamination etc)

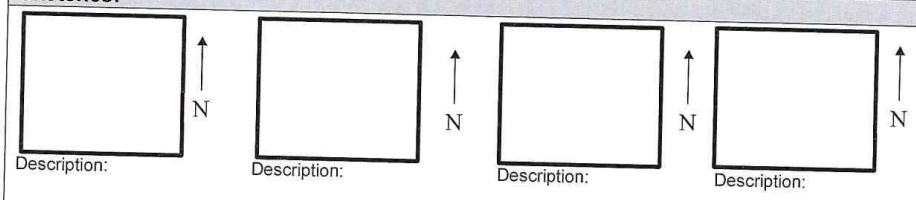
Sample Charcoal (C14)
Spit:

Sample Soil (TL / OSL)
Spit:

Photographs:

Image	Notes	Dir	Image	Notes	Dir	Image	Notes	Dir

Sketches:



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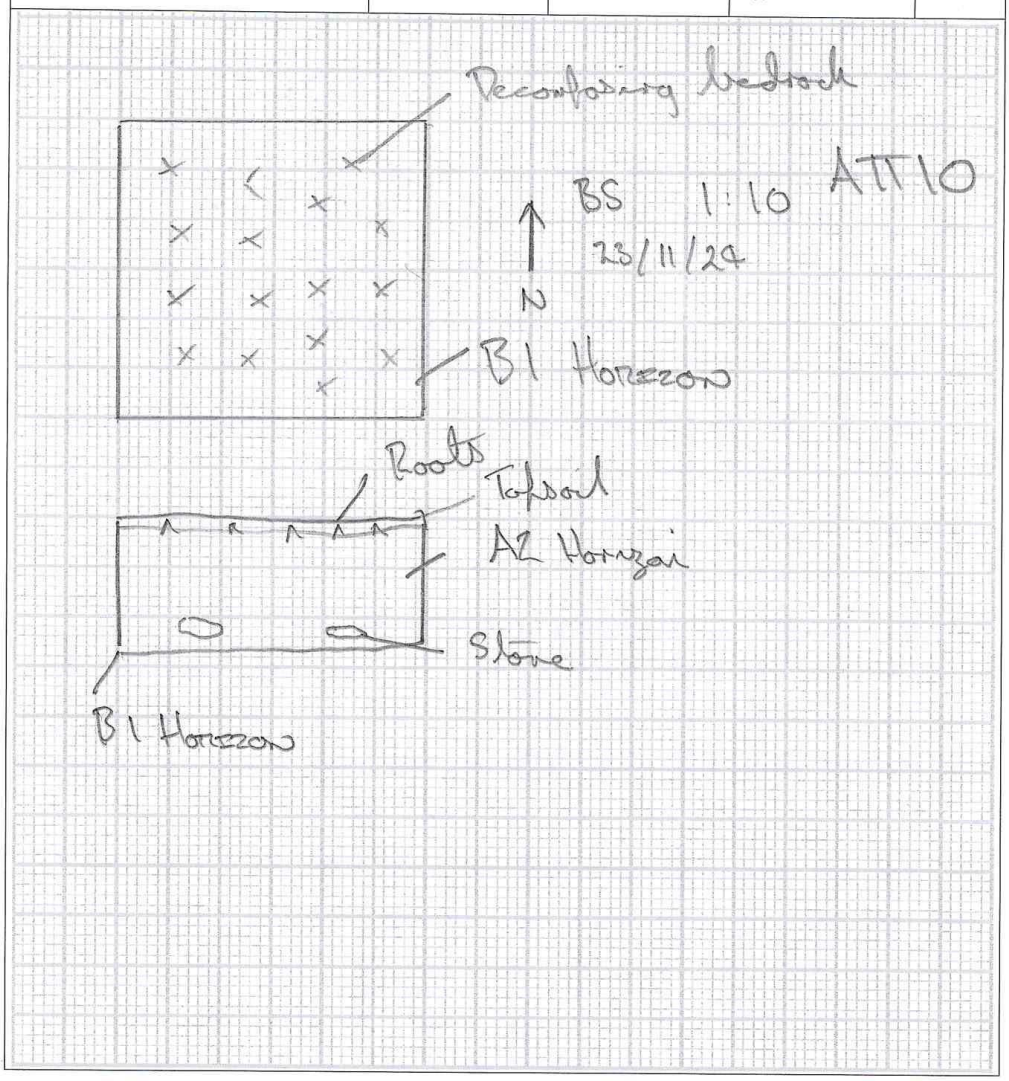
LEVELS			Pit No.	
Location of Datum:	Level	RL (=HOI – Lvl)	Level	RL (=HOI – Lvl)
	1.		6.	
Datum:	2.		7.	
Backsight (BS):	3.		8.	
Height of Instrument (HOI) (= Datum + BS):	4.		9.	
	5.		10.	



AMAC Group Aboriginal Archaeology Recording Form — Temora Hospital Redevelopment

Excavator	Recorded By	Date:	Area	Pit Number
SM	BS	23/11/24	ONE	AT 11

Dimensions	Transect (GPS)	Location/Landform	Pit GPS:
0.5m x 0.5m 1m x 1m	~~THREE~~ FOUR	UPPER SLOPE	—

Description of Pit: (e.g., Historical Features, Natural Features)

No Historical features

Spit No.	Spit Depth (mm)	Soil Horizon	Notes e.g., Matrix, Colour (mottled), Horizontal boundary (diffuse, sharp, clear), texture (grainy, smooth, plasticine, spongy), Moisture (dry, moist), Compaction (loose, weak, firm,), Inclusions (grass roots, rocks, charcoal etc)	No. Artefacts (NPW)	No. of Buckets
1	50	A2	Comfort, red brown, sandy clay, abundant stone and clay content increasing	—	3
2	100	A2	with depth, no topsoil, roots in upper layers.	—	6
3	60	A2	" "	—	4
4	—	B1	Heavy, comfort, red clay with decomposing bedrock	—	
5					
6					
7					
8					

Additional Notes: (e.g., section collapse, contamination etc)

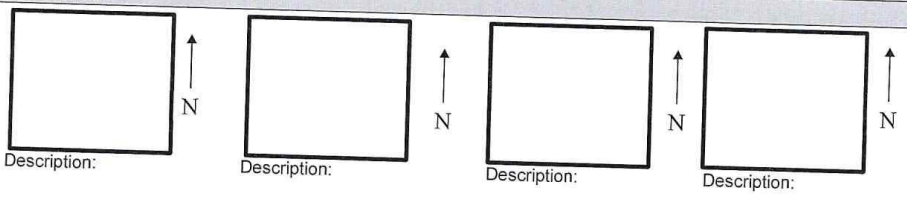
Sample Charcoal (C14)
Spit:

Sample Soil (TL / OSL)
Spit:

Photographs:

Image	Notes	Dir	Image	Notes	Dir	Image	Notes	Dir

Sketches:



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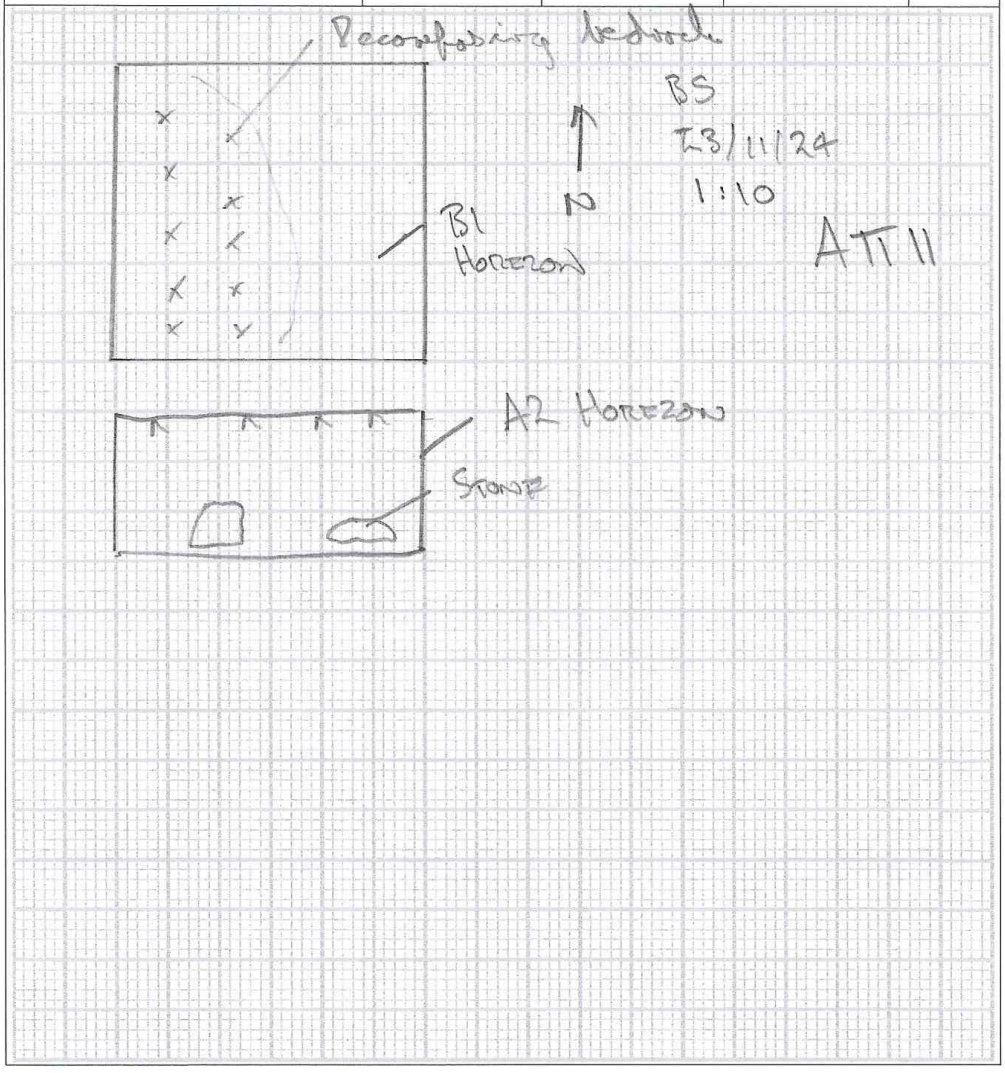
LEVELS			Pit No.	
Location of Datum:	Level	RL (=HOI – Lvl)	Level	RL (=HOI – Lvl)
	1.		6.	
Datum:	2.		7.	
Backsight (BS):	3.		8.	
Height of Instrument (HOI) (= Datum + BS):	4.		9.	
	5.		10.	



AMAC Group Aboriginal Archaeology Recording Form — Temora Hospital Redevelopment

Excavator	Recorded By	Date:	Area	Pit Number
SM	BS	23/11/24	ONE	ATT 12

Dimensions	Transect (GPS)	Location/Landform	Pit GPS:
0.5m x 0.5m 1m x 1m	Four	UPPER SLOPE	—

Description of Pit: (e.g., Historical Features, Natural Features)

No features

Spit No.	Spit Depth (mm)	Soil Horizon	Notes e.g., Matrix, Colour (mottled), Horizontal boundary (diffuse, sharp, clear), texture (grainy, smooth, plasticine, spongy), Moisture (dry, moist), Compaction (loose, weak, firm,), Inclusions (grass roots, rocks, charcoal etc)	No. Artefacts (NPW)	No. of Buckets
1	50	Fccc A2	Thin layer of introduced topsoil with A2 Horizon a red sandy clay with	/	3
2	90	A2	abundant stone in crossing with light content	/	5
3	—	B1	Heavy red		
4					
5					
6					
7					
8					

Additional Notes: (e.g., section collapse, contamination etc)

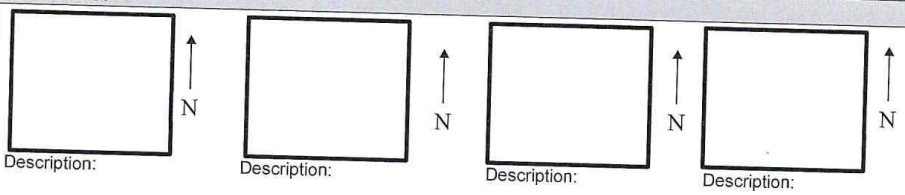
Sample Charcoal (C14)
Spit:

Sample Soil (TL / OSL)
Spit:

Photographs:

Image	Notes	Dir	Image	Notes	Dir	Image	Notes	Dir

Sketches:



Description: Description: Description: Description:

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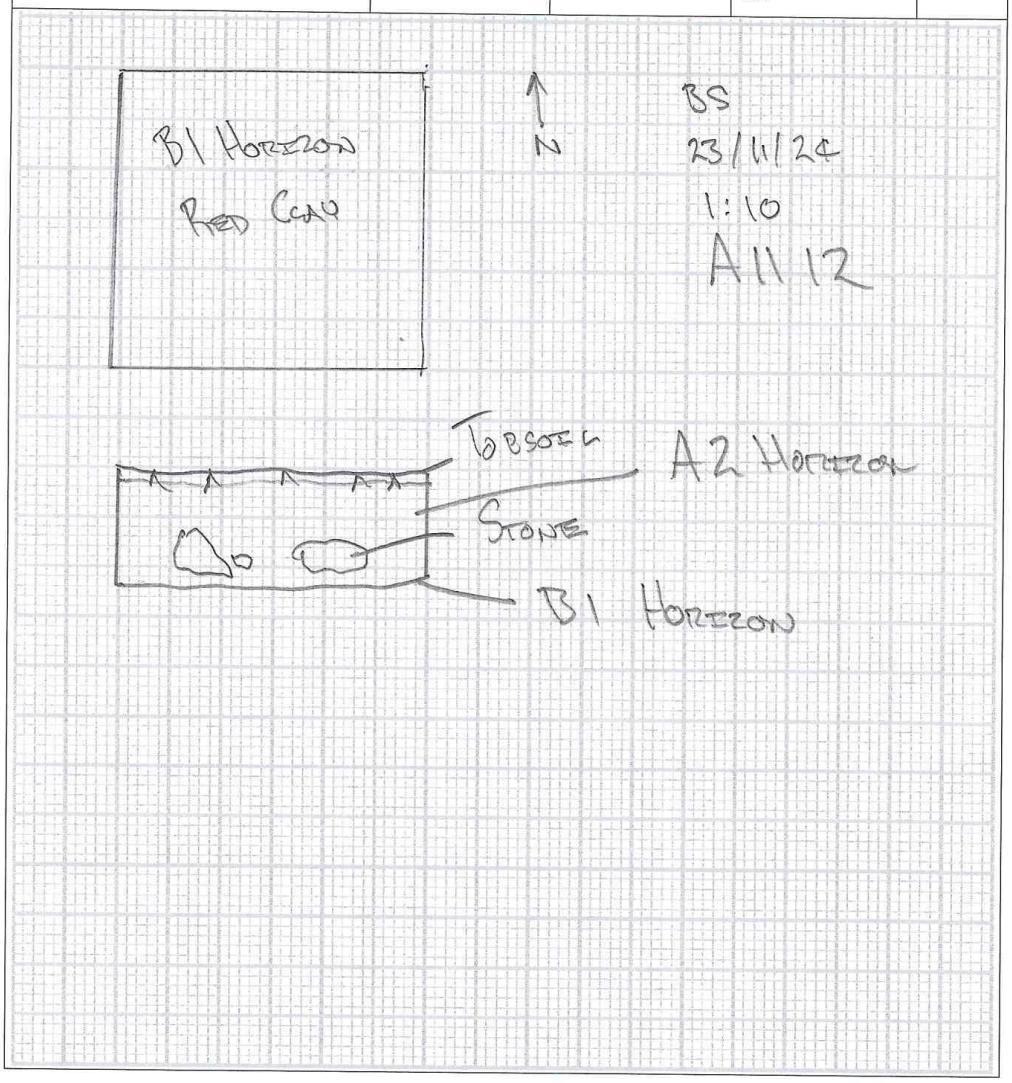
LEVELS			Pit No.	
Location of Datum:	Level	RL (=HOI – Lvl)	Level	RL (=HOI – Lvl)
	1.		6.	
Datum:	2.		7.	
Backsight (BS):	3.		8.	
Height of Instrument (HOI) (= Datum + BS):	4.		9.	
	5.		10.	



AMAC Group Aboriginal Archaeology Recording Form — Temora Hospital Redevelopment

Excavator	Recorded By	Date:	Area	Pit Number
NF. NF	BS	23/11/24	ONE	ATT 13

Dimensions	Transect (GPS)	Location/Landform	Pit GPS:
0.5m x 0.5m 1m x 1m	FIVE	UPPER SLOPE	—

Description of Pit: (e.g., Historical Features, Natural Features)

No FEATURES

Spit No.	Spit Depth (mm)	Soil Horizon	Notes e.g., Matrix, Colour (mottled), Horizontal boundary (diffuse, sharp, clear), texture (grainy, smooth, plasticine, spongy), Moisture (dry, moist), Compaction (loose, weak, firm,), Inclusions (grass roots, rocks, charcoal etc)	No. Artefacts (NPW)	No. of Buckets
1	50	TOPSOIL A2	Thin layer of topsoil 2–5 cm with roots then onto A2 a red sandy clay with	✓	3
2	100	A2	large amounts of stone and clay content increasing with depth	✓	5
3	90	A2	4	✓	6
4		B1	Comfort, large red clay with bedrock	✓	
5					
6					
7					
8					

Additional Notes: (e.g., section collapse, contamination etc)

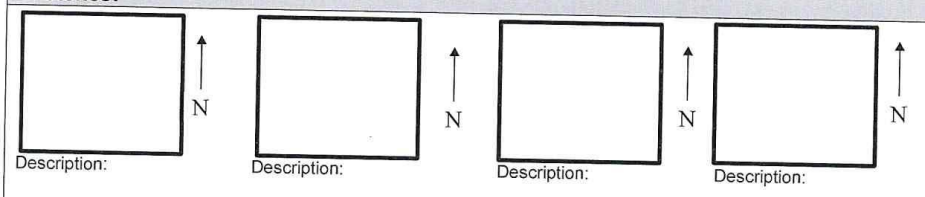
Sample Charcoal (C14)
Spit:

Sample Soil (TL / OSL)
Spit:

Photographs:

Image	Notes	Dir	Image	Notes	Dir	Image	Notes	Dir

Sketches:



Description: Description: Description: Description:

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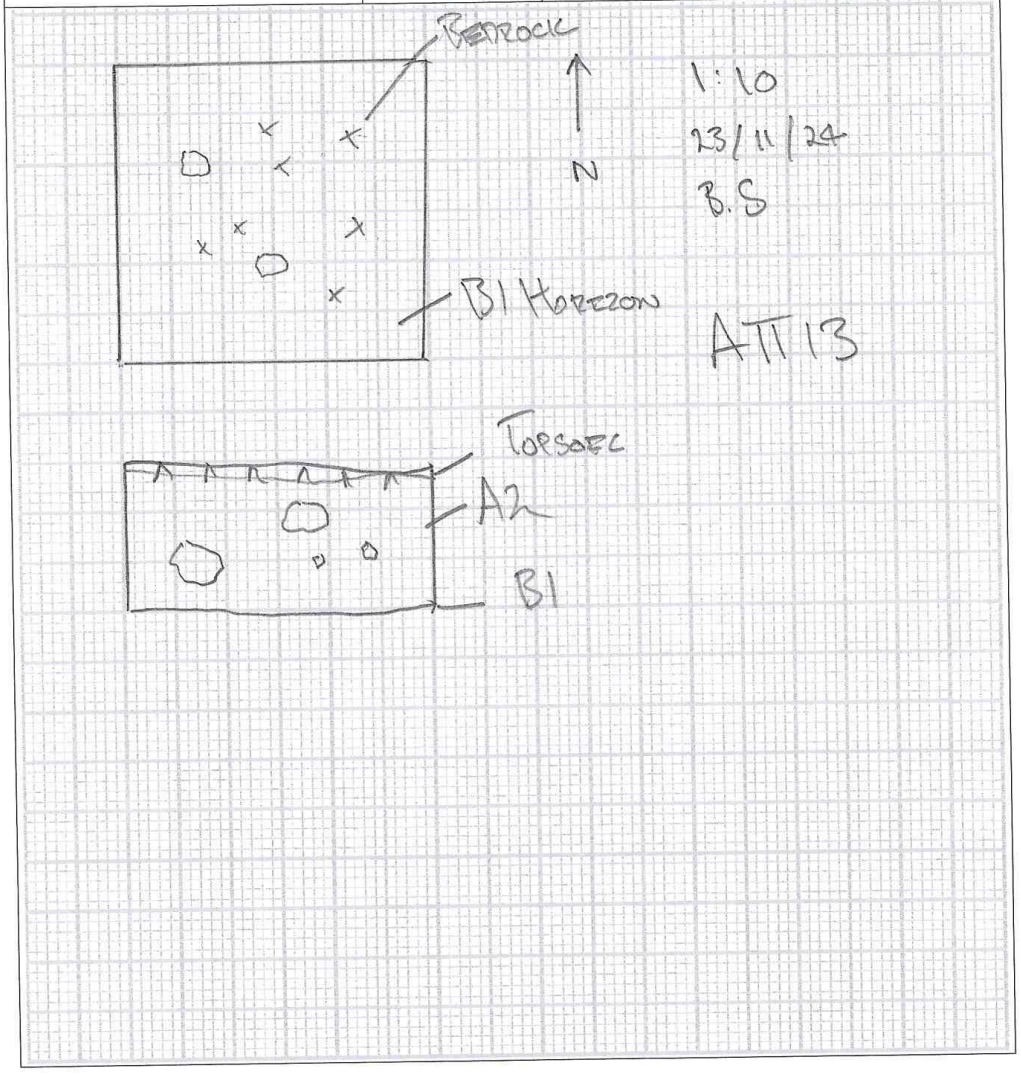
LEVELS			Pit No.	
Location of Datum:	Level	RL (=HOI – Lvl)	Level	RL (=HOI – Lvl)
	1.		6.	
Datum:	2.		7.	
Backsight (BS):	3.		8.	
Height of Instrument (HOI) (= Datum + BS):	4.		9.	
	5.		10.	



AMAC Group Aboriginal Archaeology Recording Form — Temora Hospital Redevelopment

Excavator	Recorded By	Date:	Area	Pit Number
SM	BS	23/11/24	ONE	ATT 14

Dimensions	Transect (GPS)	Location/Landform	Pit GPS:
0.5m x 0.5m 1m x 1m	FEVE	UPPER SLOPE	

Description of Pit: (e.g., Historical Features, Natural Features)

No features

Spit No.	Spit Depth (mm)	Soil Horizon	Notes e.g., Matrix, Colour (mottled), Horizontal boundary (diffuse, sharp, clear), texture (grainy, smooth, plasticine, spongy), Moisture (dry, moist), Compaction (loose, weak, firm,), Inclusions (grass roots, rocks, charcoal etc)	No. Artefacts (NPW)	No. of Buckets
1	50	A2	Comfort, red, stoney, sandy clay with clay content increasing	/	4
2	100	A2	11	-	6
3	/	B1	Comfort heavy red clay with bedrock	/	
4					
5					
6					
7					
8					

Additional Notes: (e.g., section collapse, contamination etc)

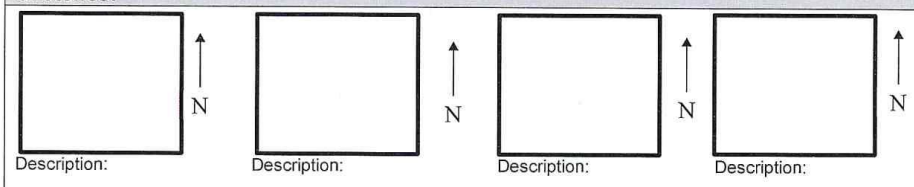
Sample Charcoal (C14)
Spit:

Sample Soil (TL / OSL)
Spit:

Photographs:

Image	Notes	Dir	Image	Notes	Dir	Image	Notes	Dir

Sketches:



Description: Description: Description: Description:

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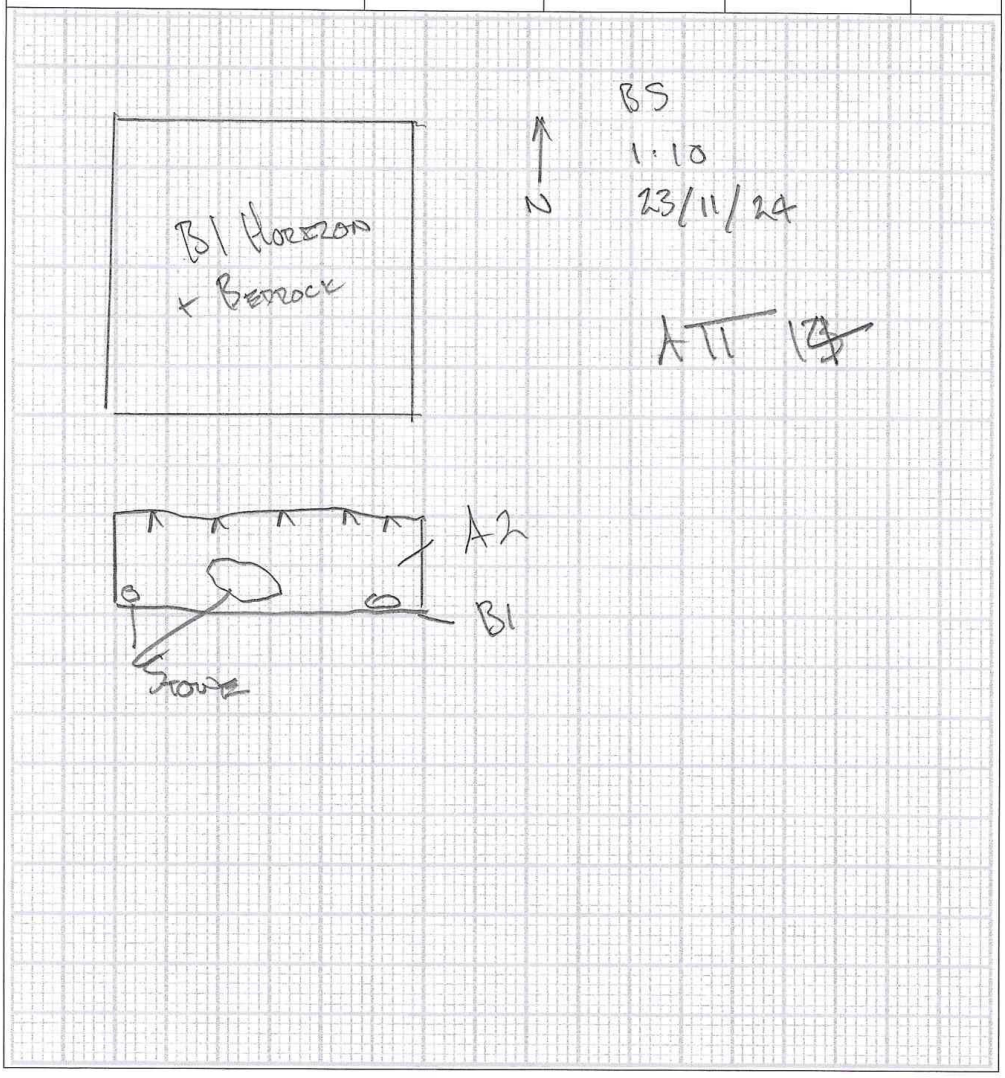
LEVELS			Pit No.	
Location of Datum:	Level	RL (=HOI – Lvl)	Level	RL (=HOI – Lvl)
	1.		6.	
Datum:	2.		7.	
Backsight (BS):	3.		8.	
Height of Instrument (HOI) (= Datum + BS):	4.		9.	
	5.		10.	



AMAC Group Aboriginal Archaeology Recording Form — Temora Hospital Redevelopment

Excavator	Recorded By	Date:	Area	Pit Number
SM	BS	23/11/24	ONE	ATT 15

Dimensions	Transect (GPS)	Location/Landform	Pit GPS:
0.5m x 0.5m 1m x 1m	FENCE	UPPER SLOPE	

Description of Pit: (e.g., Historical Features, Natural Features)

No Features

Spit No.	Spit Depth (mm)	Soil Horizon	Notes e.g., Matrix, Colour (mottled), Horizontal boundary (diffuse, sharp, clear), texture (grainy, smooth, plasticine, spongy), Moisture (dry, moist), Compaction (loose, weak, firm,), Inclusions (grass roots, rocks, charcoal etc)	No. Artefacts (NPW)	No. of Buckets
1	50	FEC A2	Thin layer of topsoil then straight onto red compact sandy clay with a high stone content	1	3
2	100	A2		1	6
3	90	A2		1	5
4		B1	Compact heavy red clay, with decomposing bedrock	1	1
5					
6					
7					
8					

Additional Notes: (e.g., section collapse, contamination etc)

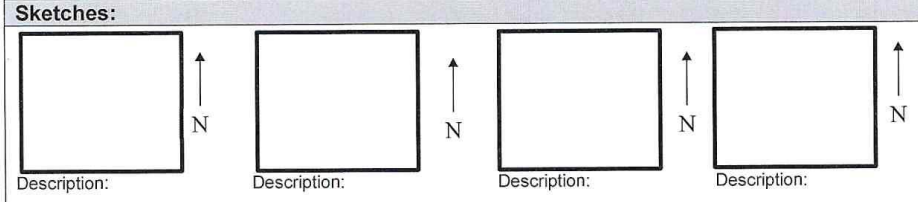
Sample Charcoal (C14)
Spit:

Sample Soil (TL / OSL)
Spit:

Photographs:

Image	Notes	Dir	Image	Notes	Dir	Image	Notes	Dir

Sketches:



Description: Description: Description: Description:

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LEVELS			Pit No.	
Location of Datum:	Level	RL (=HOI – Lvl)	Level	RL (=HOI – Lvl)
	1.		6.	
Datum:	2.		7.	
Backsight (BS):	3.		8.	
Height of Instrument (HOI) (= Datum + BS):	4.		9.	
	5.		10.