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HUNT ARCHITECTS

ALLIED PINNACLE FLOUR AND MAIZE MILL

PROPOSED MODIFICATION (DA-318-12-2004)

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NOVEMBER 2021

PUBLIC

APPENDIX D ADDITIONAL ABORIGINAL HERITAGE DUE DILIGENCE ASSESSMENT





Reference: 21095 26 October 2021

Dr Mark Maund Principal Environmental Consultant WSP Australia Limited Level 3, 55 Bolton Street Newcastle, NSW, 2300

Dear Mark,

RE: ABORIGINAL CULTURAL HERITAGE DUE DILIGENCE ADVICE FOR ALLIED PINNACLE, 330 PICTON ROAD, MALDON, NSW 2571

Austral Archaeology Pty Ltd (Austral) has been engaged by WSP Australia Limited (WSP) to provide Aboriginal Cultural Heritage Due Diligence Advice (ACHDDA) for the proposed construction of an onsite wastewater management system at the Allied Pinnacle facility (formerly Allied Mills) at 330 Picton Road, Maldon, New South Wales (NSW) [the study area]. The study area is situated on Lot 1 DP1128013. The location of the study area can be seen in Figure 1 and Figure 2. This advice is intended to assist WSP in determining their obligations concerning the *National Parks and Wildlife Act 1974* (NPW Act) and to determine whether the project will involve activities that may harm Aboriginal objects or places.

The study area is 19,927 m² in area, situated along with the southern and western areas of the current Allied Pinnacle mill. The proposed development is the construction of an onsite wastewater management system which will include expansion of the building in the northwest corner of the mill, for conversion into a warehouse, the addition of office space and toilet, and the fitting of two new production rooms.

Section 87 of the NPW Act makes it a strict liability offence to knowingly or unknowingly harm Aboriginal objects or declared Aboriginal places without an AHIP. Harm is defined under the NPW Act as "any act or omission that destroys, defaces or damages the object or place or about an object, moves the object from the land on which it had been situated". The NPW Act allows for a person or organisation to exercise due diligence in determining whether their actions will or are likely to impact upon Aboriginal objects or places. Any person or organisation who can demonstrate that they have exercised due diligence has a defence against prosecution under the strict liability provisions of the NPW Act. Where an activity is likely to harm Aboriginal objects or places, consent in the form of an Aboriginal Heritage Impact Permit (AHIP) is required

The National Parks and Wildlife Regulation 2009 (NPW Regulation) adopted the Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW (DECCW 2010a) (the Code). The Code sets out the reasonable and practicable steps that individuals and organisations need to take to:

- Identify whether Aboriginal objects are, or are likely to be, present within the study area.
- If Aboriginal objects are, or are likely to be present, determine whether their activities are likely to cause harm.
- Determine whether further assessment or an AHIP application is required for the activity to proceed.

This advice has been formulated to provide a robust assessment that will identify whether Aboriginal objects or places are present or are likely to be present within the study area. This has been achieved through the completion of a desktop review and archaeological survey of the study area. The Code provides a series of questions that clarify whether it applies to a proposed project. These questions are addressed in Table 1.



Table 1 Applicability of the Code to the proposed activity

Question	Response
Is the activity a declared project under Part 3A of the EP&A Act?	No
Is the activity an exempt activity listed in the NPW Act or other legislation?	No
Will the activity involve harm that is trivial or negligible?	No
Is the activity in an Aboriginal place or are you already aware of Aboriginal objects on the land?	No
Is the activity a low impact activity for which there is a defence in the NPW Regulation?	No
Do you want to use an industry specific code of practice?	No
Do you wish to follow your own procedure?	No

As none of the questions outlined in Table 1 apply to the project, due diligence must be established through using the Code. The Code consists of a series of 5 steps outlined below.

STEP 1. WILL THE ACTIVITY DISTURB THE GROUND SURFACE OR ANY CULTURALLY MODIFIED TREES?

The proposed construction of a wastewater management system will include the construction and installation of a grease trap, 6,000 litre aeration, settling and collection tanks, connecting plumbing between the tanks and areas of irrigation, a biological treatment system for processing wastewater, a mound and 4,500 metres² of irrigation area. The installation of plumbing connecting the grease trap to the three tanks in the north-western corner of the study area will utilise existing infrastructure. However, all other connecting plumbing to the irrigation areas in the eastern section of the study area are still under evaluation.

The activity will disturb the ground surface and therefore consideration of steps 2a and 2b of the Code is required.

STEP 2A. SEARCH THE ABORIGINAL HERITAGE INFORMATION MANAGEMENT SYSTEM (AHIMS) DATABASE AND USE ANY OTHER SOURCES OF INFORMATION OF WHICH YOU ARE ALREADY AWARE

An extensive search of the Aboriginal Heritage Information Management System (AHIMS) database was conducted on 5 August 2021 (Client service ID: 611020). The search identified 85 Aboriginal archaeological sites within a four-kilometre search area centred on the proposed study area (Figure 3). Two duplicates were identified and are outlined in Table 3. The mapping coordinates recorded for these sites were checked for consistency with their descriptions and location on maps from Aboriginal heritage reports where available. These descriptions and maps were relied upon where notable discrepancies occurred. Such discrepancies were noted with eight nearby sites, previously identified during a survey and subsequent assessment of the entire Allied Mills Property (Austral 2004, Austral 2007). Figure 4 outlines the discrepancy between the AHIMS coordinates and those from the 2007 Salvage report (Austral 2007, p.3). With the new coordinates, one site is found to be located within the boundaries of the current study area: AMP PAD 1 (AHIMS # 52-2-3220).

The search identified artefact scatters or isolated artefacts (n=38) as the most common archaeological sites in the local area. Potential Archaeological Deposits (PADs) with artefacts (n=10) and PADs (n=10) are also proportionally common. Artefacts generally occur on most landforms in the region but have been noted to be denser along the banks of streams and creeks. The greater the density of artefacts, the more important that water course tends to be (McDonald 1998).



Table 2 AHIMS sites identified within 4 kilometres of the study area.

Site type	Occurrence
Aboriginal Ceremony and Dreaming	1
Art (pigment or engraved)	9
Art and Artefact	2
Art, Artefact and PAD	1
Art and PAD	4
Artefact	38
Artefact and PAD	10
Grinding Groove	1
Modified Tree	7
PAD	10
Total	83

 Table 3
 Duplicates identified within the search

Site name / AHIMS #	Duplicate name / AHIMS #
WJ-RS-07 / 52-2-4073	WJ-RS-07 / 52-2-4070
Wilton Park 7 / 52-2-3031	Wilton Park BC 7 / 48-2-0011

Within the property boundary of the Allied Pinnacle facility, now identified as Lot 1 DP1128013, eight sites have been recorded. These sites form part of a previous investigation of the property during the construction of the mill (Austral 2004). Sites AMP IF 1 (AHIMS # 52-2-3218) a flaked glass bottle, AMP IF 3 (AHIMS # 52-2-3214) a distal, mudstone flake fragment found on the reservoir banks, AMP IF 5 (AHIMS # 52-2-3216) mudstone flake found on the banks of the reservoir and AMP IF 2 (AHIMS # 52-2-3214) a complete tuff flake found on the gentle slope adjacent to a creek gully were all included as part of a protected Aboriginal Heritage Cultural Zone (AHCZ A). Conservation requirements of the area have continued to the present. Similarly, AMP ST 1, a modified tree found on an elevated landform above the first-order tributary to Carriage Creek, was outlined by an Aboriginal Heritage Cultural Zone (ACHZ B).

The area of PAD known as AMP PAD 1 (AHIMS # 52-2-3220), was salvaged by Austral (2007). In total 171 artefacts were recovered from the grassy plateau, adjacent to a gentle slope. The majority of this assemblage comprised unretouched flakes (92%), with nearly two thirds of all artefacts (64.9%) unbroken. Of the ten retouched flakes recorded, six were backed artefacts. The presence of backed artefacts indicated the age of the site was Late Holocene of between 500 to 5,000 years before present (Austral 2007, p.58).

AMP OCS 1 (AHIMS # 52-2-3217) and AMP IF 4 (AHIMS # 52-2-3215), were to be collected as part of a Section 90 Consent to Destroy #2508, but they were not able to be relocated during the salvage investigation (Austral 2007, p.25). AMP OCS 1 (AHIMS # 52-2-3217) and AMP IF 4 (AHIMS # 52-2-3215) original locations are found within the boundary of the study area, within the present day-embankment.



Site name / AHIMS	Site Feature	Distance from study area
AMP IF 1 / 52-2-3212	Artefact	270 metres north-west
AMP OSC 2 / 52-2-3218	Artefact	308 metres north-east
AMP IF 5 / 52-2-3216	Artefact	195 metres north
AMP IF 2 / 52-2-3213	Artefact	190 metres north-west
AMP IF 3 / 52-2-3214	Artefact	193 metres north-west
AMP IF 4 / 52-2-3215	Artefact	Within the central section on the embankment.
AMP OCS 1 / 52-2-3217	Artefact	Within the central section, on the embankment.
AMP ST 1 / 52-2-3219	Modified tree	42 metres west
AMP PAD 1 / 52-2-3220	PAD	Within the southern section of the study area.

Table 4 Sites identified within the boundaries of the Allied Pinnacle pro-	operty
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The investigations undertaken in and around the Picton/Maldon region over the last decade have confirmed that the area was a place visited and utilised by Aboriginal people. Substantial evidence of Aboriginal occupation is centred on creek lines and associated sandstone outcrops and overhangs. The location of many recorded sites around permanent creek lines confirms the focus of Aboriginal occupation around natural resource rich areas. The propensity of sandstone outcrops, some of which have been used by Aboriginal people in the past, also indicates that the area was one where shelter from the elements was also available.

A review of the reports held on the AHIMS database identified several archaeological studies which have been undertaken in and near the study area (Table 5). Austral has also undertaken a review of information to identify whether the activity is located within landscape features likely to contain Aboriginal objects. This includes an assessment of ethnographic information, soils, geology, landform, disturbance and resource information pertinent to the study area. The outcome of this review is outlined in Table 6.

Author & Date	Distance from study area	Details
Sefton C. 1992	Four kilometres west of the Allied Pinnacle property.	Survey on the southern banks of Redbank Creek. Background research as part of this project identified 29 sites within a 150 km ² area. One sandstone overhang with art and archaeological deposit was identified. No further information was available regarding this site, as the site was outside the roadway impact zone.
McDonald J. 1998	5.34 kilometres north-west from the study area.	Survey of 110 hectares on the Nattai Plateau on the northern side of Thirlmere Way in Picton. The study area is bounded on several sides by small creek lines including Rumker Gully and Matthews Creek. Land within the study area had been substantially modified with much of the native vegetation cleared and the land grazed. Seven sites were identified. Stonequarry Creek 1 (SC1) consisted of two groups of axe grinding groves in the bed of Stonequarry Creek. Group 1 comprised 69 grooves ranging in length from 18 – 46 cm with an average depth of between 0.5 – 1 cm. Group 2 included a total of 22 grooves ranging in length from 20 - 41 cm with an average depth of between 0.5–1 cm. Site SC1 was assessed as having moderate to high archaeological significance based on the number of grooves and the relatively good condition of the site. A shelter with PAD located on the eastern side of Cedar Creek just over the gorge edge was a spacious westerly facing overhang with a level floor (1998:19). No art or artefacts were observed within the shelter although the potential for occupation deposit was considered within the sandy soil matrix of the shelter floor (an area of 50 m ²). Five

Table 5	Archaeological studies undertaken in the vicinity of the study area.
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Author & Date	Distance from study area	Details
		isolated finds were also identified. These included: ISF-1: a complete chert flake located on the western side of a tributary of Stonequarry Creek; ISF-2: a flaked piece of white quartz located 15 m east of ISF- 1; ISF-3: a retouched silcrete flake with possible use-wear located in an area of exposure on the eastern side of Abbotsford Road; ISF-4: a yellow silcrete flake fragment identified in an eroding section of hill slope; and ISF-5: a pink-orange silcrete flake fragment identified in an erosion scour on a lower slope about 90 m southwest of ISF-4.
Navin Officer 2003		A survey near Wilton of gently undulating slopes and gorges near Stringybark and Allens creeks relocated six previously recorded sites and identified an additional 14 sites, eight of which were shelters with art and deposits, while the remaining six were open artefact scatters. The artefact scatters were located in close proximity to the western tributary of Stringybark and Allens creeks. In particular, the artefact scatters; Wilton Park 10, BC 10 (AHIMS 52-2-3034), Wilton Park 11, BC11 (AHIMS 52-2-3035) and Wilton Park 12, BC12 (AHIMS 52-2- 3036), found on the junction of hillslopes and the tops of gorges overlooking Stringybark Creek, have moderate potential for subsurface deposits.
Austral 2004a	Within and surrounding the study area.	Survey of former Lot 32 DP 731012, within the property boundary of the Allied Pinnacle facility. Eight Aboriginal archaeological sites were recorded during the survey. Two small open artefact scatters, five isolated finds (single artefacts) and a scarred tree were documented. A large area of archaeological sensitivity was also identified along the banks of the first and second-order tributaries and the associated low slopes of the surrounding land.
Austral 2007	Within and surrounding the study area.	Salvage archaeology program in former Lot 32 DP 731012, was undertaken for AMP PAD 1 (AHIMS # AHIMS # 52-2-3220), (in the current study area). A total of 171 artefacts were recovered, including a majority of (92%) unretouched flakes, with nearly two-thirds of all artefacts (64.9%) unbroken. Of the ten retouched flakes recorded, six were backed artefacts. The total number of artefacts from one square ranged from 1 to 68 with an average over the 15 pits of 4.5 per pit. There is a wide variation in the number of artefacts recovered from individual squares. About a third of the squares (14 or 31.8%) contained three or fewer artefacts. More than half of the pits (8 or 53.3%) yielded between one and five, another two squares (13.3%) contained between six and nine artefacts. Considerably more artefacts were found in the remaining four (26.7%) excavation units. Two squares contained 21 artefacts each, another pit yielded 30 flaked artefacts and the last pit mentioned here produced the highest with 68. These figures indicate a widespread buried cultural deposit with highly variable artefact densities, even between adjacent squares. based on the presence of the backed artefacts relative dates to the Late Holocene of between 500 to 5,000 years before present were attributed to this site. Based on the artefact analysis it was concluded that the assemblage at AMP PAD 1 (AHIMS # AHIMS # 52-2-3220) was the result of artefact production with no evidence to confirm that the site represented an occupational episode. It is more likely that it was used sporadically, likely whilst engaged in food gathering activities or travelling through the landscape to nearby resource bases or areas of occupation. The report determined that there was no requirement for further Aboriginal archaeological work to be undertaken associated with AMP PAD 1/AMAD 1 on former Lot 32 DP731012.



Author & Date	Distance from study area	Details
Biosis 2011	One kilometre south-east of the study area.	A survey immediately north of Nepean River and Carriage Creek, near Maldon, over undulating plains, creeks, riverbanks and foot slopes. One previously identified art site was relocated during the survey; Bulli Site 12 (AHIMS # 52-2-3692). Areas of high archaeological sensitivity were found on the banks of Carriage Creek, due to the adjacent undulating plains. Areas of moderate archaeological sensitivity were focused on the undulating plains found above the Nepean River and Carriage Creek. Low archaeological sensitivity was accorded to the footslopes, where material was most likely to be the result of a transient use of this landform.
Biosis 2016	Six kilometres south-east of the study area.	Survey of the Wilton South-East Precinct, on farmland at 990-1140 Picton Road, Wilton. Two PAD's were identified on flat, elevated landforms near Stringybark Creek as well as an elevated flat near a drainage line and M2D PAD 1 (AHIMS # 52-2-3954). Two previously recorded sites; Wilton 02 (AHIMS # 52-2-3591) and WJ-IF-10 (AHIMS # 52-2-4085) were not relocated.
Biosis 2018	Six kilometres south-east of the study area.	Test excavation at the Wilton South-East Precinct, on farmland at 990- 1140 Picton Road, Wilton, NSW. Three PADs were investigated but only one quartz flake fragment was found. This very low density of artefacts recovered indicates that the locality was not a desirable place for occupation, probably due to the limited options for shelter, and the lack of seasonal availability of freshwater provided by the drainage lines.

Table 6 Assessment of landscape features

Information	Details
Background Archaeology	According to Tindale's maps of tribal boundaries in Australia, the region of the study area lies within the traditional lands of the Wodi Wodi people of the Tharawal language group, however, boundaries are often indicative at best and the traditional boundaries of the Gundungara people have also been associated with the Picton area (Attenbrow 2010, p.35).
	The pre-contact population numbers for the study area are not known and, due to smallpox and influenza epidemics preceding the arrival of European settlers into the region (Attenbrow 2003, p.21), it is unlikely that the early European explorers were able to successfully grasp the traditional population size.
	Spears in the Sydney region were usually made of a grass tree spike (for the shaft) with a hardwood point. Stone, bone, shell or wood were sometimes used as barbs (Turbet 2001, p.40). Thin and straight spear-throwers were made from wattle (Turbet 2001, p.40). Fishing spears were usually tipped with four hardwood prongs with bone points (Attenbrow 2003, p.117, Turbet 2001, p.42). Fish were also caught by means of shell or bird talon fish hooks (Attenbrow 2003, p.117, Turbet 2001, p.45).
	Bark of various types was used for making such diverse items as wrappings for newborn babies, shelters, canoes, paddles, shields and torches (Attenbrow 2003, p.10). Resin from the grass tree was used as an adhesive for tool and weapon making (Attenbrow 2003, p.116, Turbet 2001, p.36). Similarly, 'Boomerang' is believed to be a Darug word. Various kinds of boomerangs and clubs were made from hardwoods as were such items as digging sticks (Turbet 2001, p.37–39, Attenbrow 2003, p.112). Early observations of Aboriginal people in the Sydney region have described the use of a simple hatchet to climb tall trees to access their fruits; one toe hold at a time (Barrington 1802, p.9).
	A range of land mammals was hunted for food, including kangaroos, possums, wombats and echidnas as well as native rats and mice (Attenbrow 2003, p.70). Birds, such as the muttonbird and brush turkey were eaten and it is recorded that eggs were a favourite food of the Aboriginal people (Attenbrow 2003, pp.75–76). In 1810, the diet of the Gundungurra people was described as consisting of a variety of foods including "possums, eels, snakes, blue-tongued lizards, freshwater



Information	Details
	mussels and a variety of birds" (Kohen 1982, p.3). The use of fish, in particular, has been observed not only for consumption but also for repelling insects such as mosquitos (Barrington 1802, p.10).
Soils	The study area is found within the Blacktown residual soil landscape. This usually consists of a friable greyish brown loam, overlaying hard setting brown clay loam, overlaying a mottled brown, light clay. This profile can range from shallow to moderately shallow, with depths of up to 150 centimetres (Bannerman & Hazelton 1990).
Hydrology	The study area is found in proximity to two first and second-order drainage lines which feed into Carriage Creek, 320 metres to the west in the adjoining property. Carriage Creek in turn joins the Nepean River south of the study area. This network of creeks would have provided Aboriginal people in the past with shelter, food and raw materials as well as travelling corridors through the landscape.
Geology	The Allied Pinnacle site is underlain by the Ashfield Shale formation and the Hawkesbury Sandstone formation. The Liverpool-Picton region is identified as an area of major outcropping for this geological group, which has a diversity of soil landscapes also. Hawkesbury Sandstone outcrops occur along Stonequarry Creek (hence the name) and its tributaries, including Carriage Creek, to the west of the Allied Pinnacle site. This geology of the site was confirmed by geotechnical studies conducted by Sinclair Knight Merz. The Ashfield Shale was reported to be approximately 10-20 m thick within the development site and is composed of laminite, thin-bedded siltstone, mudstone and claystone with thin sandstone beds (Sinclair Knight Merz 1991). Sandstone outcrops are common in the surrounding region of the study area, as is evident by the rock shelter and art sites found within the search radius.
Landform	The landscape of the study area is typically comprised of gently undulating rises on Wianamatta Group Shale, with local relief of up to 30 metres slopes, with a less than five percent gradient, broad crests, ridges and drainage depression and valley flats (Bannerman & Hazelton 1990).
Disturbance	Before the construction of the current flour mill, the study area was relatively undisturbed, apart from local land use patterns; which included grazing practices, mostly unchanged since its initial land clearance. A review of historical aerials, further supports this understanding, as the earliest imagery from 1965 shows land clearance observed during the most recent survey (Figure 7) Between 1965 and 2005 further disturbance is observed with the creation of two artificial dams; in the eastern section and central section of the study area, and the levelling of the eastern section where a previous drainage depression can be observed in 1965 (Figure 8).
	Presently the study area is heavily disturbed. The construction of the mill and its associated roads line the current development footprint. Bitumen roads are found along the central section, eastern and north-eastern sections of the study area. A Secondary car park is also located adjacent to the proposed irrigation area. There is evidence of prior irrigation and plumbing infrastructure, both in the north-western corner of the study area in the form of sub-terranean tanks, as well as in the far eastern section of the study area. There, you can see disused sprinklers, water tanks and pumps on the ground surface. A network of irrigation piping is known across the study area, and evidence of subterranean drains can be seen in the western section of the study area. However, the full extent of this network to the east has been impossible to determine using non-disturbing technologies.
Past vegetation	The environment of the Cumberland Lowlands would have provided a wide variety of plants and animals which were used by the local Aboriginal populations for tool manufacturing, medicinal purposes, ceremonial items and food.
	The naturally occurring vegetation within the Blacktown soil landscape would have consisted of tall open forests and woodland, which included Red Gum <i>Eucalyptus camaldulensis</i> , Blackbutt <i>Eucalyptus pilularis</i> , Sydney Blue Gum <i>Eucalyptus saligna</i> , Narrow Leaved Ironbark <i>Eucalyptus crebra</i> and Grey Box <i>Eucalyptus macrocarpa</i> (Bannerman & Hazelton 1990). Furthermore, Attenbrow has noted that "Sydney vegetation communities include over 200 species that have edible parts,



Information	Details
	such as seeds, fruits, tubers/roots/rhizomes, leaves, flowers and nectar (Attenbrow 2003, p.76). Observations from the earliest European settlers describe Aboriginal people in the Sydney region roasting fern-roots, eating small fruits the size of cherries as well as a type of nut and the root of "a species of the orchid" amongst other types of plant food. As Attenbrow points out, however, the settlers' lack of knowledge of the local plant species make identification of the various plants used difficult (Attenbrow 2003, pp.76–79).

Based upon the results of these background studies Austral has been able to develop a series of predictive statements relating to the type and character of Aboriginal cultural heritage sites that are likely to exist in the study area and where they are more likely to be located. These predictive statements indicate that:

- Archaeological potential centred on the headwaters of 1st order creeks is likely to be limited to low-density artefact scatters and isolated stone artefacts, defined as background scatter.
- Archaeological potential is likely to consist of denser artefact scatters in proximity to 2nd order creeks, the result of transitional but focused activity.
- Archaeological potential along third-order creeks is likely to consist of frequent, repeated and more concentrated activities.
- Archaeological potential along fourth-order creeks and above is likely to consist of more permanent occupation with evidence of greater complexity.
- Archaeological material may be denser near swamps and creek junctions.
- Where sandstone outcrops and overhangs are present, the archaeological potential for identifying art and grinding grooves is more likely (McDonald 1992).
- Sandstone outcropping is associated with Stonequarry and Carriage Creeks which form overhangs, where archaeological sites including shelters with archaeological deposits and art are present.
- Grinding grooves may occur on sandstone platforms near reliable water sources
- Low-density surface open artefact scatters and isolated finds may occur on gentle slopes and alluvial flats near creek lines. Major confluences are prime locations for occupation sites
- Open archaeological sites are not expected to occur on steeper slopes.
- Scarred trees are unlikely to occur due to widespread land clearance
- Subsurface archaeological deposits are often recovered in areas where no visible surface archaeological remains may occur in the right environmental contexts.
- Stone materials found in assemblages will most likely include silcrete, mudstone and quantities of quartz.
- Artefact assemblages usually comprise flaked debitage and a small proportion of formal tool types associated with the manufacture of backed artefacts attributed to late Holocene occupation.



STEP 2B. ACTIVITIES IN AREAS WHERE LANDSCAPE FEATURES INDICATE THE PRESENCE OF ABORIGINAL OBJECTS

Table 7Applicability landscape features from the Code that are likely to have
Aboriginal objects in the study area.

Question	Response
Is the activity within 200m of 'waters'?	Yes
Is the activity within a sand dune system?	No
Is the activity located on a ridge top, ridge line or headland?	No
Is the activity located within 200m below or above a cliff face?	No
Is the activity within 20m of or in a cave, rock shelter or cave mouth?	No
Is the activity (or any part of it) on land that is disturbed?	Yes
Do the predictive statements of 2A indicate Aboriginal Objects or places are likely to occur on any of the topographic elements of the activity area?	No

STEP 3. CAN YOU AVOID HARM TO THE OBJECT OR DISTURBANCE OF THE LANDSCAPE FEATURE?

It is not possible to avoid harm to the landscape features present within the study area. The proposed works will encompass the entirety of the study area.

STEP 4. DESKTOP ASSESSMENT AND VISUAL INSPECTION

In order to ground-truth the desktop assessment, a visual inspection of the study area was undertaken on 21 October 2021 by Pauline Ramsey (Archaeologist, Austral) and Glenda Chalker (Cubbitch Barta Native Title Claimants Aboriginal Corporation). The visual inspection consisted of a systematic survey of the study area to identify and record any Aboriginal archaeological sites visible on the surface or areas of Aboriginal archaeological potential and cultural sensitivity. The archaeological survey was conducted on foot. The methods used during the visual inspection conformed to requirements 5 to 8 of the *Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW* (DECCW 2010b).

Three survey units were identified before the start of the survey. These were the eastern section where the proposed irrigation system will be installed, the central section where the embankment which follows the road into the mill is aligned and the western section, which consists of the gentle slope associated with the grassy plateau, previously investigated. Visibility throughout the study area was overall poor, as the majority of the area was covered in grass or bitumen (Figure 9).

The eastern section consisted of a gentle slope (**Figure 10**). Overall Ground Surface Visibility (GSV) was less than 10% due to the consistent grass cover. No areas of exposure were identified. The disturbance was evident in the most eastern section, where previous irrigation infrastructure is currently present (Figure 11). These include sub-surface plumbing and water tanks. The north-eastern border of the area is lined with recent tree plantings. Sediment seems to have accumulated at the base of the trees which indicates the frequent transport of soil across this area (**Figure 12**). Water pooling is also evident in the western half of the section, with tall grasses lining the fence, and water-logged soil at the surface (Figure 13). This type of disturbance, however, is surface deep and does not include sub-surface material. Norm Cuthbert, a representative of the Allied Pinnacle Mill, indicated during the survey that pipes may be present below ground level, pertaining to the older irrigation infrastructure. Attempts to relocate this network have been made in the past using Ground Penetrating Radar, but the infrastructure was not relocated.

The central section of the study area consisted of the embankment which lines the north side of the road leading into the mill (Figure 14). GSV was similar in this section, as it too was covered inconsistent grass with no exposures. This embankment represents a completely disturbed landform. The location of previously identified AMP OCS 1 (AHIMS # 52-2-3217) and AMP IF 4



(52-2-3215) are also situated within this embankment. These sites were destroyed under Aboriginal Heritage Impact Permit (AHIP) # 2508 issued on 15 August 2006.

The western section of the study area has overall low levels of GSV due to the same, consistent grass cover. The north-western corner of the study area, where the three 6,000 litre tanks are set to be installed, contains existing subterranean tanks (Figure 15). This area is highly disturbed due to these previous installations, surface clearance and continued grass cutting, and the association of this area with nearby major developments including the railway line, the mill and the embankment.

Patches of exposure were identified in the gentle slope landform in the south-west corner of the study area, adjacent to the current mill building. These patches were the results of erosional processes linked with the heavy use of the site. Blue metal, gravel and ironstone fragments littered this section, most likely linked to the use of the mill and the railway line to the west (Figure 16). Furthermore, a depression in the ground on a north to south alignment was observed on the gentle slope. It continues past the boundary of the current study area and links to a natural depression in the landscape which terminates in the dam along the adjacent, northern slope (Figure 17). This depression is the location of an old service line as well as the location of the new drainage line for the proposed works.

No Aboriginal archaeological material about any of the previously identified sites or to any new sites was located during the course of the survey. This in combination with the extensive disturbance relating to the construction of the mill has resulted in the area holding low archaeological potential.

Results of the survey are outlined in Figure 15.

STEP 5. FURTHER INVESTIGATIONS AND IMPACT ASSESSMENT

Based upon the outcome of Steps 1 to 4 of the code, further assessment is not warranted. As such the project may proceed with caution. The following recommendations apply:

- 1. The project may **proceed with caution** if appropriate mitigation strategies are implemented.
- 2. The installation of plumbing connecting all aspects of this wastewater management system should re-use the previous infrastructure when plausible. The northern embankment lining the access road to the mill should be utilised for the installation of new connecting plumbing, so as to avoid disturbance of 'Aboriginal Heritage Conservation Zone B'.
- 3. Considerations for the indirect disturbance to 'Aboriginal Heritage Conservation B' in the form of increased run-off and water pooling at the base of the identified scarred tree (AMP ST 1 (AHIMS # 52-2-3219), should be made and planned for. This can include the construction of a mound lining the fence to the west of the proposed irrigation area, so as to direct run-off away from AMP ST 1 (AHIMS # 52-2-3219).
- 4. All Aboriginal objects and Places are protected under the NPW Act. It is an offence to knowingly disturb an Aboriginal site without a consent permit issued by Heritage NSW. Should any Aboriginal objects be encountered during works associated with this proposal, works must cease in the vicinity and the find should not be moved until assessed by a qualified archaeologist. If the find is determined to be an Aboriginal object the archaeologist will provide further recommendations which will include notifying Heritage NSW and Aboriginal stakeholders.
- 5. A copy of this report should be forwarded to Glenda Chalker of Cubbitch Barta Native Title Claimants Aboriginal Corporation a known associate of the Tharawal Local Aboriginal Land Council for review. A period of 14 days should be allowed for review, to enable the groups to provide feedback and comments on the results. Response of this consultation is in Appendix A.
- 6. Aboriginal ancestral remains may be found in a variety of landscapes in NSW, including middens and sandy or soft sedimentary soils. If any suspected human remains are discovered during any activity, you must:



- immediately cease all work at that location and not further move or disturb the remains
- notify the NSW Police and Heritage NSW's Environmental Line on 131 555 as soon as practicable and provide details of the remains and their location
- not recommence work at that location unless authorised in writing by Heritage NSW.

If you have any questions regarding the advice within this letter, please do not hesitate to contact me on the details below.

Yours sincerely,

autinet. ~

Pauline Ramsey Archaeologist Austral Archaeology Pty Ltd ABN: 55 629 860 975 M: 0419 264 344 E: pauliner@australarch.com.au



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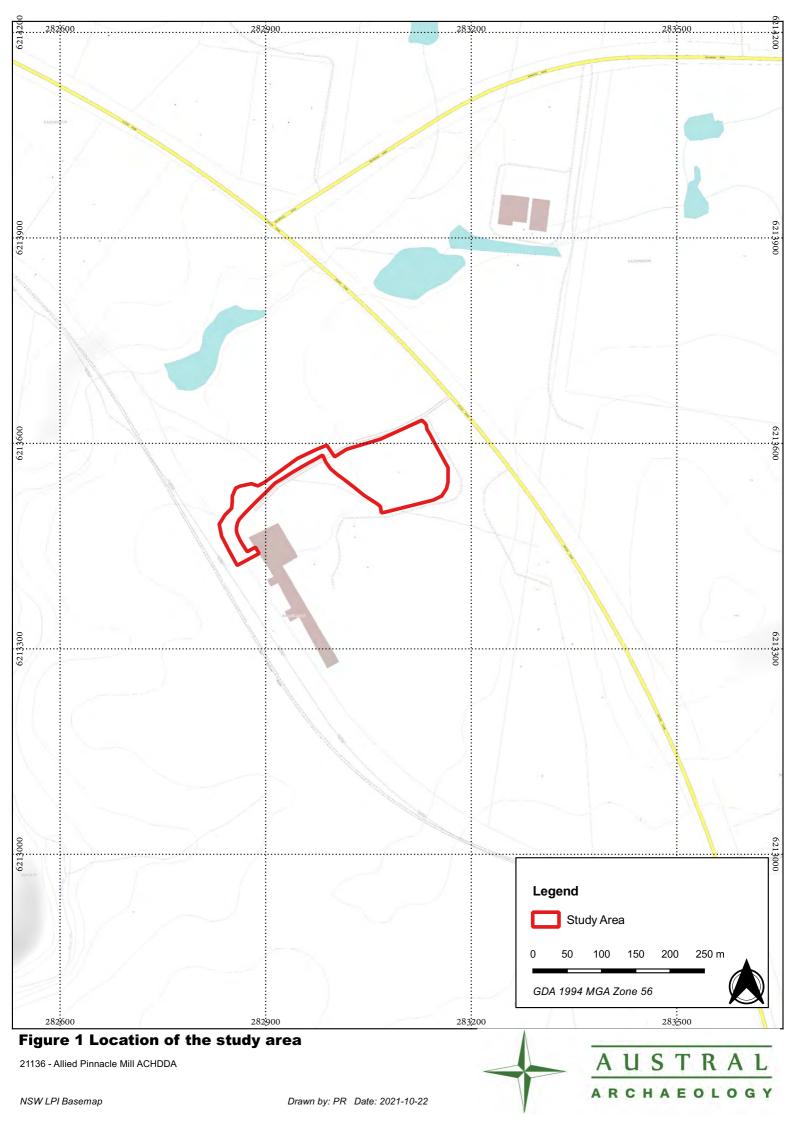
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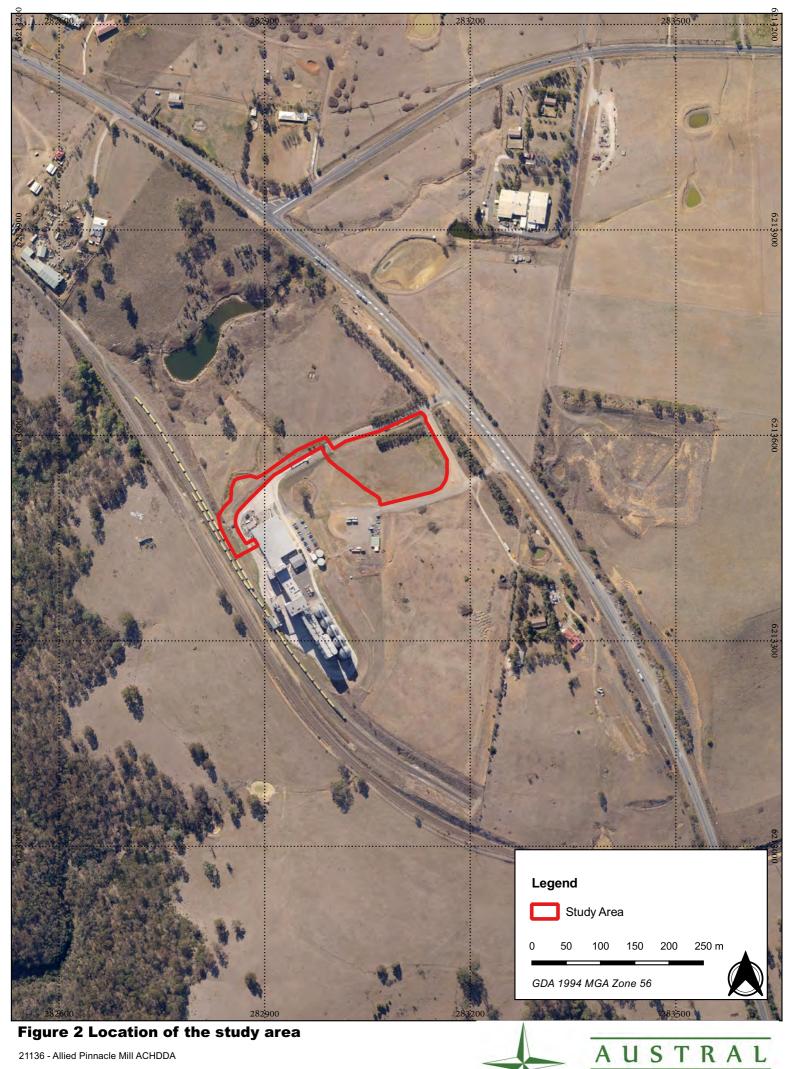
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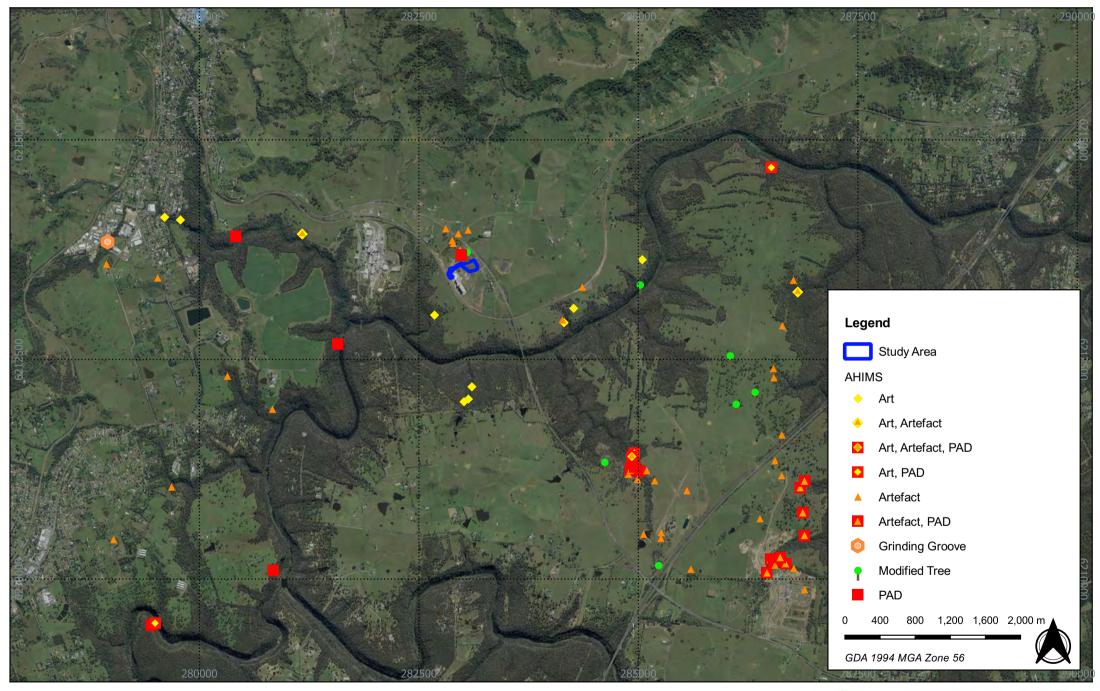
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21136 - Allied Pinnacle Mill ACHDDA

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Figure 3 - AHIMS search results

21136 - 330 Picton Road, Maldon, NSW - ACHDDA

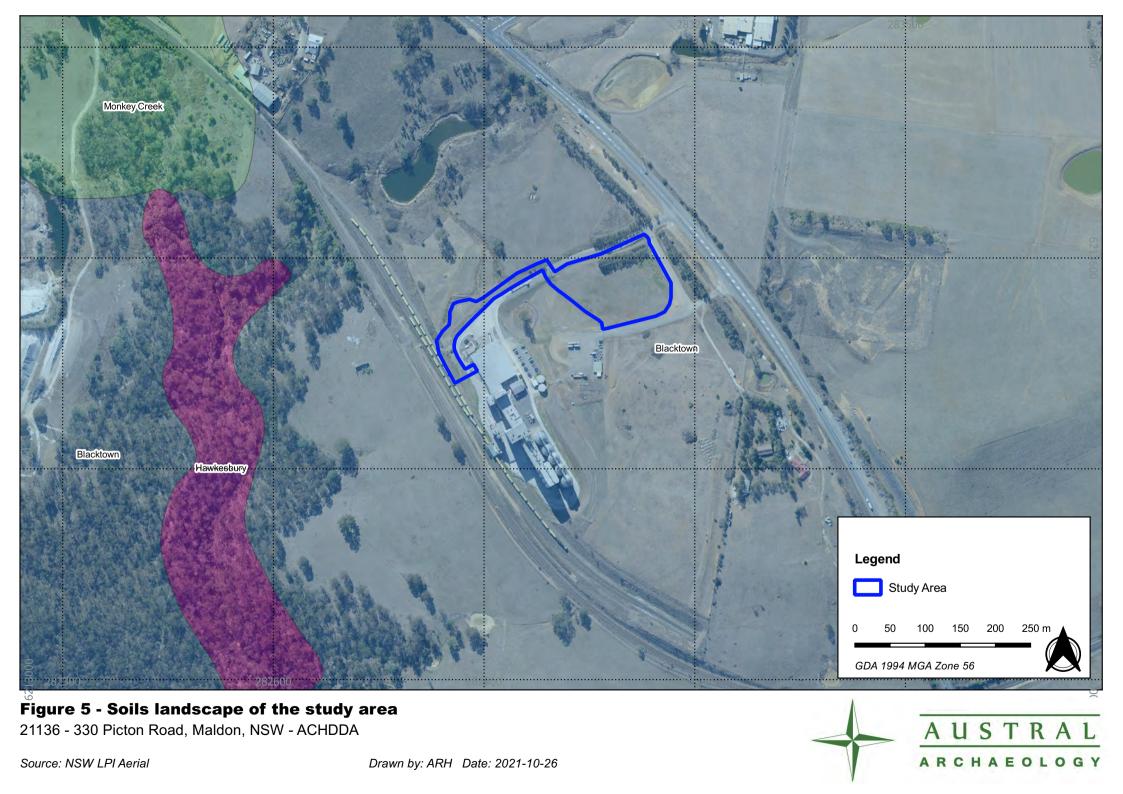
Source: NSW LPI Aerial

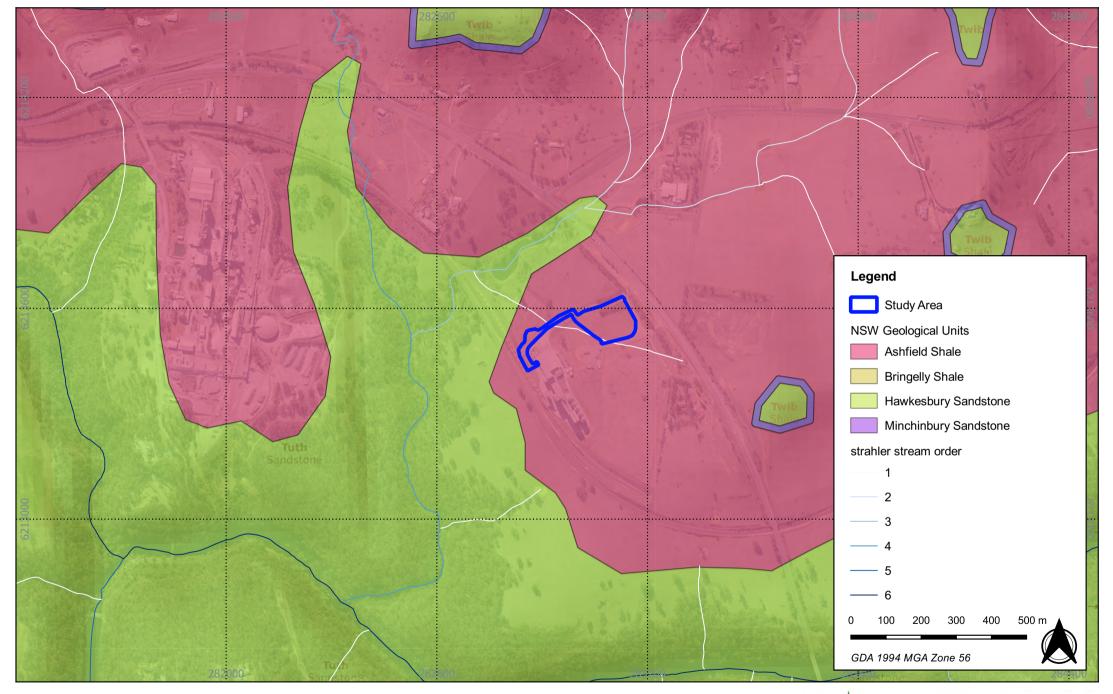


Figure 4 AHIMS Sites within Lot 32 DP 731012 21136 - Allied Pinnacle Mill ACHDDA

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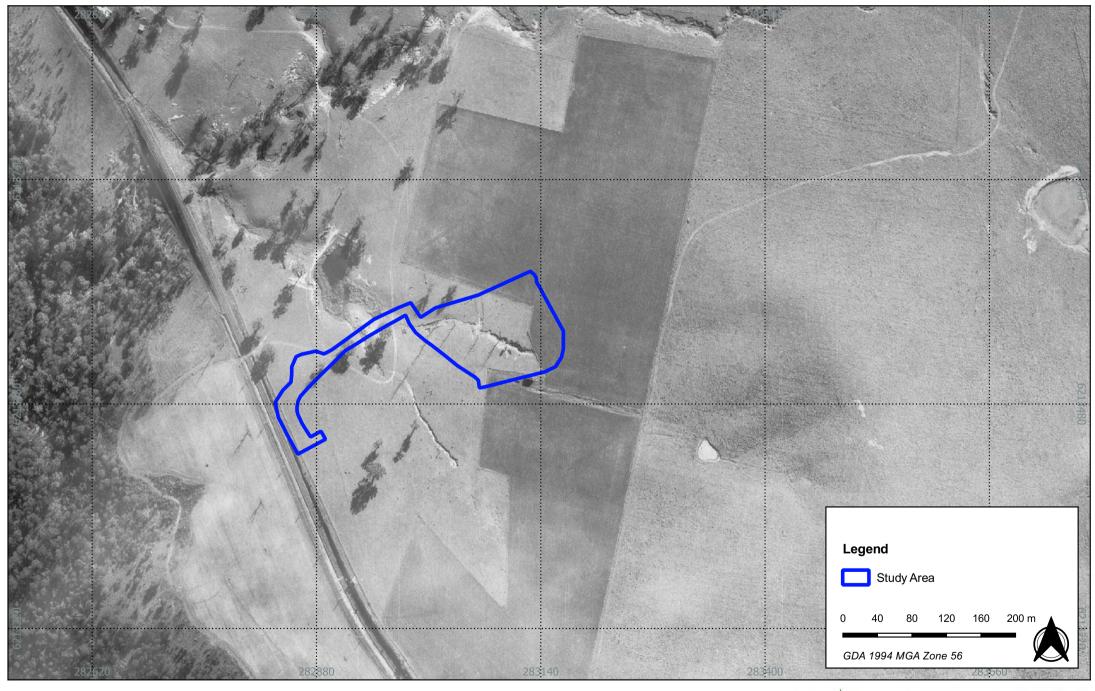


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Figure 6 - Geology and Hydrology of the study area

21136 - 330 Picton Road, Maldon, NSW - ACHDDA

Source: NSW LPI Aerial



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Figure 7 1961 Aerial of the study area 21136 - 330 Picton Road, Maldon, NSW - ACHDDA

Source: NSW LPI Aerial



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Figure 8 2005 Aerial of the study area 21136 - 330 Picton Road, Maldon, NSW - ACHDDA

Source: NSW LPI Aerial





Figure 9 Typical GSV of grassed covered areas in the study area



Figure 10 View towards the north of gentle slope landform in eastern section





Figure 11 View towards the north of previous irrigation infrastructure



Figure 12 View towards the east of gentle slope and reforested section. Reforested area is on a slight rise where sediment accumulation has occurred.





Figure 13 View towards the south of water pooling



Figure 14 View towards the south of embankment lining the access road to the mill





Figure 15 View towards the east of subterranean tanks and embankment within the north-western section of the study area



Figure 16 View towards the south-east of gentle slope lining the current mill with typical grass cover and patches of exposure





Figure 17 View towards the north-east of mild depression in gentle slope lining the mill



Figure 18 Results of the survey

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APPENDIX A: GLENDA CHALKER RESPONSE

Cubbitch Barta Native Title Claimants Aboriginal Corporation 55 Nightingale Road, PHEASANTS NEST. N.S.W. 2574. 10th November, 2021.

Austral Archaeology,

Dear Pauline,

RE; ALLIED MILLS PICTON.

Thank you for the opportunity of participating and commenting in this proposed project.

The only real issue that I have in regards to this project, is that there be no further accumulation of water around the base of the scarred tree. During the site inspection it was noticed that there was an already existing issue with water laying just outside of the perimeter fence around the tree. This tree will not like its feet to be in water for extensive periods of time, and could cause premature death. Further treated water up hill from the tree could add more water to the problem. Any drains to be installed should take away excess water to the other side of the road into the mill, not direct it to the drain near the tree.

The remainder of the area to be impacted by this proposal, has in the past been disturbed, so any new impacts should try not to go outside of the already disturbed footprint.

Thank you for our consideration in this matter

Yours faithfully,

G. Chalbas.

Glenda Chalker Phone 0427218425 kgchalker@bigpond.com

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