

Aboriginal Objects Due Diligence Assessment

Appin (Part) Precinct Part 2

Wollondilly Shire Local Government Area

Prepared for Walker Corporation Pty Ltd

Prepared by Niche Environment and Heritage | 4 October 2024



Acknowledgement of Country

We acknowledge to Traditional Owners of the many lands on which we live and work. We pay respects to First Nations Elders past and present and thank them for their continuing care of Country, culture, and community.

Please be advised that this report discusses the deaths and burial of past inhabitants of Appin NSW, in particular the Appin Massacre.

Document control

Project number	Client	Project manager	LGA
5947	Walker Corporation	Deirdre Lewis-Cook	Wollondilly

Version	Author	Review	Status	Date
D1	Riley Finnerty and Kate Morris	Niche Internal	Draft	20/4/2023
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4 October 2024

Mr Ahmad Ali
Walker Corporation
Senior Development Manager
Level 21 Governor Macquarie Tower
1 Farrer Place, Sydney NSW
Via email: Ahmad.Ali@walkercorp.com.au

Dear Mr Ali,

Re: Appin (Part) Precinct Part 2 - Aboriginal Objects Due Diligence Assessment (Niche ref # 5947)

The result of this assessment indicates that Aboriginal Objects have survived within the Activity Area. The assessment identified one newly recorded Aboriginal cultural heritage site, Appin_ST_1 (AHIMS ID# *pending*), within the Activity Area.

The Due Diligence Code states that where a desktop and visual inspection has occurred and concluded that Aboriginal objects are present and/or likely within the Activity Area that cannot be avoided, further investigation and impact assessment is required.

In accordance with the relevant legislative codes and guidelines, and in compliance with the heritage controls outlined in Part 7 Section 7.2 of the Wollondilly DCP (2016), Niche recommends the following measures be undertaken before development occurs on the land:

- No works may proceed until the following recommended investigations are undertaken.
- Aboriginal community consultation is to be carried out in accordance with the (DECCW 2010) *Aboriginal Cultural Heritage Consultation Guidelines for Proponents 2010*.
- An Aboriginal Cultural Heritage Assessment (ACHA) will be required to fully assess the impact of the proposed works on Aboriginal objects and cultural heritage resources within and in proximity to the Activity Area. The ACHA is required to be completed in accordance with the *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW* (OEH 2011).
- All new Aboriginal cultural heritage sites identified during the site inspection be registered through the Australian Heritage Information Management System (AHIMS).
- An Aboriginal Heritage Impact Permit (AHIP) under Section 90 of the NSW *National Parks and Wildlife Act 1974* will be required for the identified Aboriginal objects if the proposed harm cannot be avoided.
- All subsequent Aboriginal cultural heritage assessments should be undertaken in accordance with the Greater Macarthur Investigation Area: Archaeological Research Design and Management Strategy prepared by AHMS (2017).

Please do not hesitate to contact me on **0499 774 095** or via email: **rfinnerty@niche-eh.com** if you would like to clarify details of this assessment.

Yours sincerely,



Riley Finnerty
Heritage Consultant
Niche Environment and Heritage

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1. Introduction

1.1 The Proponent

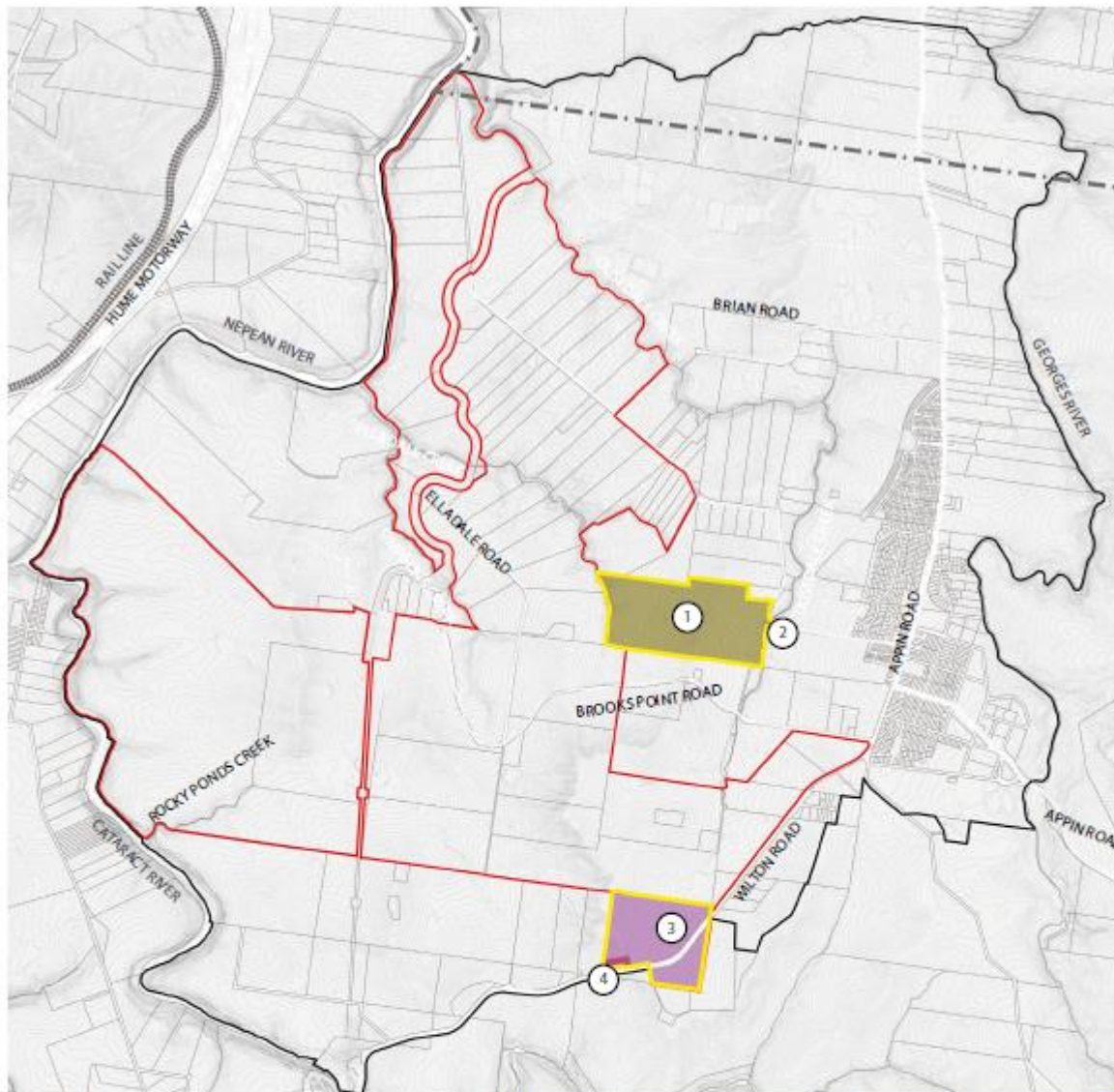
Niche Environment and Heritage Pty Ltd (Niche) have been engaged by Walker Corporation ('the Proponent') to undertake an Aboriginal Objects Due Diligence (DD) Assessment in accordance with the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW* (DECCW 2010; 'The Due Diligence Code') to support the Appin (Part 2) Precinct Plan (*the precinct plan*) and Appin (Part 2) Precinct Structure Plan (*the structure plan*) (Figure 1; hereafter referred to as the 'Activity Area').

Refer to Plate 1 and Table 1 for key attributes of the precinct plan and structure plan area.

1.2 The Activity Area

The Activity Area is situated within the suburb of Appin and is located 54 kilometres (km) south-west of Sydney and 26 km north-west of Wollongong (Figure 1). The Activity Area is located within the Wollondilly Shire Local Government Area (LGA), County of Cumberland, Parish of Appin, within the boundaries of the Tharawal Local Aboriginal Land Council (LALC), on the traditional lands of the Dharawal people. It is located within the Appin and North Appin Precincts and comprises four properties as detailed in Plate 1.

The Appin (Part 2) Precinct Plan zones land for conservation, urban development, and infrastructure. It establishes the statutory planning framework permitting the delivery of a range of residential typologies, retail, education, business premises, recreation areas, and infrastructure services and provides development standards that development must fulfil. Within the proposed urban development zone, 1,312 dwellings and more than 30,000 square metres (sqm) of gross lettable floor area for retail and commercial space can be delivered (Table 1).



LEGEND:

- Appin & North Appin Precinct Boundary
- Appin (Part) Precinct Plan
- Appin (Part 2) Precinct Boundary
- LGA Boundary

LAND OWNERSHIP

- Phillip Nelson Dunbier and Penny Grace Dunbier
- John Joseph McEvoy
- Glynis Rita Patrick

Properties forming the Appin (Part 2) Precinct

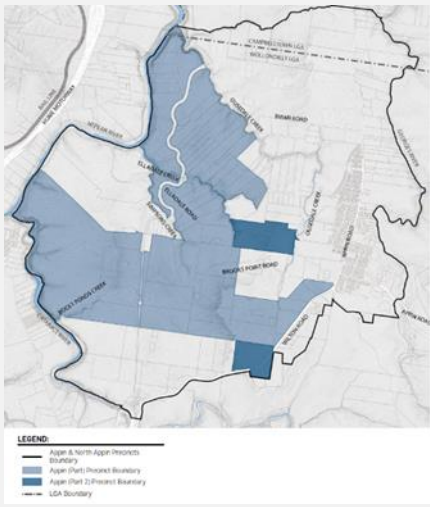
REF	LOT #	PLAN REF	ADDRESS	AREA (HA)
DUNBIER LAND				
1	32	DP736923	110 Macquariedale Road	61.18
2	1	DP1000355	90 Macquariedale Road	0.23
KINGS LAND				
3	3	DP804375	725 Wilton Road	36.61
4	1	DP 804375	525 Wilton Road	1.41

APPIN (PART 2) PRECINCT - LAND OWNERSHIP PLAN

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DATE: 23-03-23
REVISION NO: -

Plate 1. Boundary of the Appin (Part 2) Precinct

Table 1. Appin (Part 2) Precinct – summary of key attributes

Location		Key Attributes	
Appin (Part 2) Precinct		Area	Total – 100.1 hectares (ha) Private Ownership – 100.1 ha
		LGA	Wholly Wollondilly LGA
		Proposed Dwellings	1,312
		Proposed retail & commercial floor space	30,000+
		Proposed Population	3,709

1.1 The proposed activity

The Proponent has prepared the subject submission to rezone 100.1 ha of land (the Site) within the Appin Precinct from RU2 Rural Landscape to the following zones:

Urban Development Zone

Zone 1 Urban Development (UDZ)

Special Purposes Zone

Zone SP2 Infrastructure (SP2)

Conservation Zone

Zone C2 Environmental Conservation (C2)

The Site is known as the Appin (Part 2) Precinct. The Site directly adjoins the Appin (Part 1) Precinct – refer to Figure 1.

1.1.1 The Appin (Part 1) Precinct Planning Proposal (PP-2022-3979)

In November 2022, Walker Corporation Pty Ltd and Walker Group Holdings Pty Ltd (the Proponent) lodged a Planning Proposal (PP-2022-3979) to rezone part of the Appin Precinct.


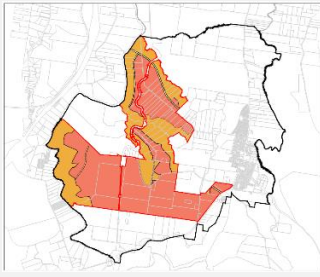

PP-2022-3979 (referred to as the Appin (Part 1) Precinct) proposes to rezone the land from RU2 Rural Landscape to Urban Development Zone (UDZ), C2 Environmental Conservation and SP2 Infrastructure via an amendment to State Environmental Planning Policy (Precincts – Western Parkland City) 2021.

The UDZ will facilitate approximately 12,000 dwellings. The C2 zone will facilitate the conservation of 470 ha of endangered ecological community and help implement the Office of the NSW Chief Scientist & Engineer (NSW Chief Scientist) recommendations.

The new zones are accompanied by a structure plan outlining the intended land uses. In addition, the Proponent produced an Appin and North Appin Precincts Indicative Plan to illustrate how the new zones might fit within the broader precinct as land is developed. The Indicative Plan has no statutory weight and will be refined as further planning proposals are prepared.

These plans are summarised in Table 2.

Table 2. PP-2022-3979 Title and Purpose of Plans

<p>(1) APPIN & NORTH APPIN PRECINCTS INDICATIVE PLAN</p> <p><i>Broader context and for information purposes only. It has no statutory weight. It identifies:</i></p> <ul style="list-style-type: none"> • Higher-order transport network • Centres hierarchy • School sites • Conservation areas • Residential areas • Cultural Sites and Connections 	<p>(2) APPIN (PART 1) PRECINCT PLAN (THE PRECINCT PLAN)</p> <p><i>It shows the land proposed to be rezoned and incorporated into a new schedule in the Western Parkland City SEPP 2021.</i></p> <p><i>The precinct plan contains the development provisions (clauses and maps) applicable to the Site and is used in assessing development applications.</i></p>	<p>(3) APPIN (PART 1) PRECINCT STRUCTURE PLAN (THE STRUCTURE PLAN)</p> <p><i>Structure plan for the Site, showing staging of release areas.</i></p> <p><i>Development is to be generally consistent with the structure plan. It illustrates land use components including (but not limited to):</i></p> <ul style="list-style-type: none"> • Low and medium-density residential • Retail and employment centres • School • Open space • Drainage network/basins • Transport network
 <p>(21,000 dwellings)</p>	 <p>(12,000 dwellings)</p>	 <p>(12,000 dwellings)</p>

1.1.2 Population growth

Greater Sydney's population is projected to grow to approximately 6.1 million by 2041 – over a million more people than currently live in the Sydney region.

The NSW Government has identified Growth Areas to accommodate the population that will choose to live in greenfield areas (new suburbs). The Greater Macarthur Growth Area (GMGA) is one such growth area and is a logical extension of the urban form of south-west Sydney. The GMGA is divided into precincts. The Appin Precinct and North Appin Precinct are the southernmost land release precincts of the GMGA. The goal is to deliver 21,000 dwellings.

The rezoning and release of land for development will achieve this goal.

1.1.3 The Appin (Part 2) Precinct Planning Proposal


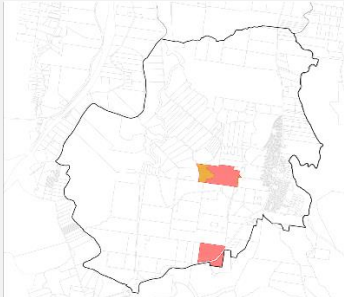

The Appin (Part 2) Precinct Plan (the precinct plan) shows the proposed new zones. 'The precinct plan' will be incorporated into the State Environmental Planning Policy (Precincts – Western Parkland City) 2021 and contain the provisions (clauses and maps) that will apply to 'the Site.' 'The precinct plan' envisages the delivery of the following:

- 1,312 dwellings (as a mix of low-density, medium density and apartments)
- 30,312 sqm of gross lettable retail/commercial floor area
- 16.91ha conservation land

The planning proposal submission is aligned with strategic land use planning, State and local government policies, infrastructure delivery and PP-2022-3979. The development potential is tempered by a landscape-based approach that protects the environment and landscape values, shaping the character of new communities. A series of residential neighbourhoods are to be delivered within the landscape corridors of the Nepean and Cataract Rivers, supported by local amenities, transit corridors and community infrastructure.

The submission includes a hierarchy of plans. The plans and their purpose are summarised in Table 3.

Table 3. The subject Planning Proposal's Plans and Proposal

<p>(1) APPIN & NORTH APPIN PRECINCTS INDICATIVE PLAN</p> <p><i>Broader context and for information purposes only. It has no statutory weight. It identifies:</i></p> <ul style="list-style-type: none"> • Higher-order transport network • Centres hierarchy • School sites • Conservation areas • Residential areas • Cultural Sites and Connections 	<p>(2) APPIN (PART 2) PRECINCT PLAN (THE PRECINCT PLAN)</p> <p><i>It shows the land proposed to be rezoned and incorporated into a new schedule in the Western Parkland City SEPP 2021.</i></p> <p><i>The precinct plan contains the development provisions (clauses and maps) applicable to the Site and is used in assessing development applications.</i></p>	<p>(3) APPIN (PART 2) PRECINCT STRUCTURE PLAN (THE STRUCTURE PLAN)</p> <p><i>Structure plan for the Site, showing staging of release areas.</i></p> <p><i>Development is to be generally consistent with the structure plan. It illustrates land use components including (but not limited to):</i></p> <ul style="list-style-type: none"> • Low and medium-density residential • Retail and employment centres • School • Open space • Drainage network/basins • Transport network
 <p>(21,000 dwellings)</p>	 <p>(1,312 dwellings)</p>	 <p>(1,312 dwellings)</p>

1.3 Statutory controls

The *National Parks and Wildlife Act 1974* (NPW Act), administered by Heritage NSW, is the primary legislation for the protection of some aspects of Aboriginal cultural heritage in NSW¹. Part 6 of the NPW Act provides specific protection for Aboriginal objects and declared Aboriginal places by establishing offences of harm.

The NPW Act provides that a person who exercises due diligence in determining that their actions will not harm Aboriginal objects has a defence against prosecution if they later unknowingly harm an object without an Aboriginal Heritage Impact Permit (AHIP).

The *Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW* sets out a process for individuals and organisations to follow to determine whether an Aboriginal object will be harmed by an activity, whether further investigation is needed, and whether that harm requires an AHIP.

1.1.4 NSW Environmental Planning & Assessment Act 1979

The *NSW Environmental Planning and Assessment Act 1979* (EP&A Act) establishes the framework for cultural heritage values to be formally assessed in the land use planning and development consent process and requires that environmental impacts are considered prior to land development; this includes impacts on heritage items. The EP&A Act also requires that local governments prepare planning instruments (such as Local Environmental Plans) in accordance with the principles of the legislation to provide guidance on the level of environmental assessment required.

1.1.5 Wollondilly Development Control Plan 2016

The Wollondilly Development Control Plan (DCP) outlines detailed local provisions for all land within the Wollondilly LGA. Part 7 of the Wollondilly DCP states requirements and controls that apply to all development that may impact on Aboriginal heritage. Specifically, it states that:

¹ For further information visit: <https://www.environment.nsw.gov.au/licences/achregulation.htm>

An Indigenous heritage and archaeological report must be prepared for any development application on land which contains a known Aboriginal object or Aboriginal Place of heritage significance. The report must be prepared by a suitably qualified archaeologist. The report must be prepared in accordance with the Code of Practice for Archaeological Investigation of Aboriginal objects in NSW.” According to the DCP, a report may also be required for “a proposal (including subdivision) which affects primarily undeveloped land (irrespective of land size) and has the following site features: river frontage, creek line, sandstone exposures at ground level larger than 5m² sandstone cliff line or isolated boulder higher than 2m, disturbance to the roots, trunk, branches, of old growth trees, which are native to the Wollondilly Shire and greater than 150 years of age (Wollondilly DCP, 2016).

1.1.6 Wollondilly Local Environmental Plan 2016

Clause 5.10 of the Wollondilly Local Environmental Plan (LEP) (2016) outlines the controls for heritage conservation including the conservation of Aboriginal objects and Aboriginal Places of heritage significance. Part 2 outlines requirements that apply to all development that may impact on Aboriginal objects and Aboriginal Places of heritage significance. Specifically, Part 2 (f) (ii) states that development consent is required when subdividing land on which an Aboriginal object is located or that is within an Aboriginal Place of heritage significance.

1.1.7 Greater Macarthur 2040 interim plan 2018

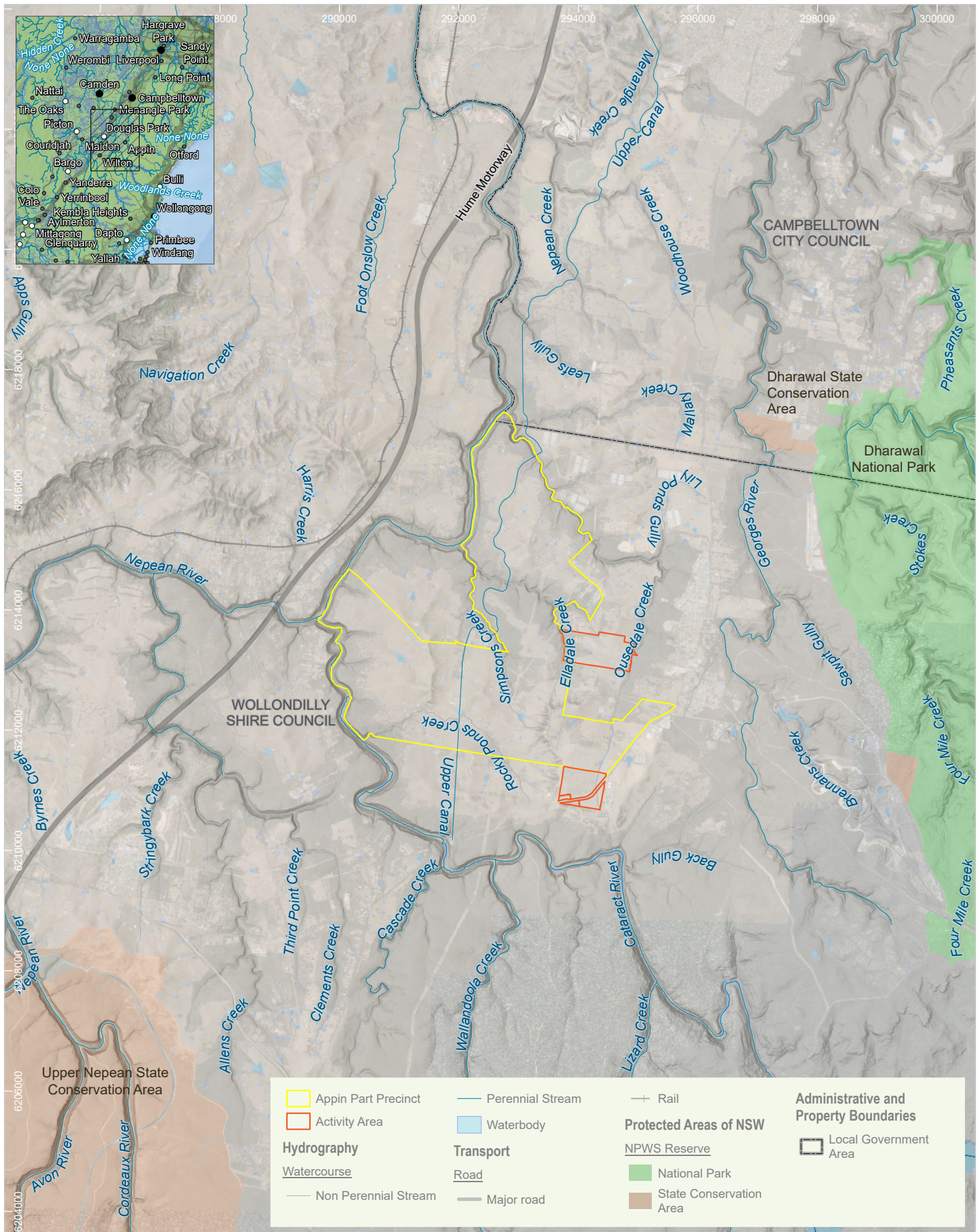
The GMGA centred around Campbelltown-Macarthur contains areas that have been identified and assessed as providing potential for urban development and growth within the precinct. This land use and infrastructure development plan is designed to balance growth within the GMGA and provide local jobs, education, recreation and housing opportunities while preserving significant cultural and environmental values of the area. The plan sets out a long-term vision for the precinct and provides the framework for two elements of the GMGA including the urban renewal of the rail corridor between Glenfield and Macarthur in the north of the GMGA, and the development of land release areas between Menangle Park and Appin in the south of the GMGA. The current Activity Area relates the later of these elements and has been identified as representing ‘Urban Capable Land’ (See DPE 2018: Figure 2).

1.4 Objectives

The aim of the assessment was to assess whether Aboriginal objects and/or places are present, or are likely to occur within, or near the Activity Area, if those Aboriginal objects and/or places may be harmed by the proposed works, and if further investigation is required.

1.5 Assessment methodology

This DD follows the process outlined in Plate 2.



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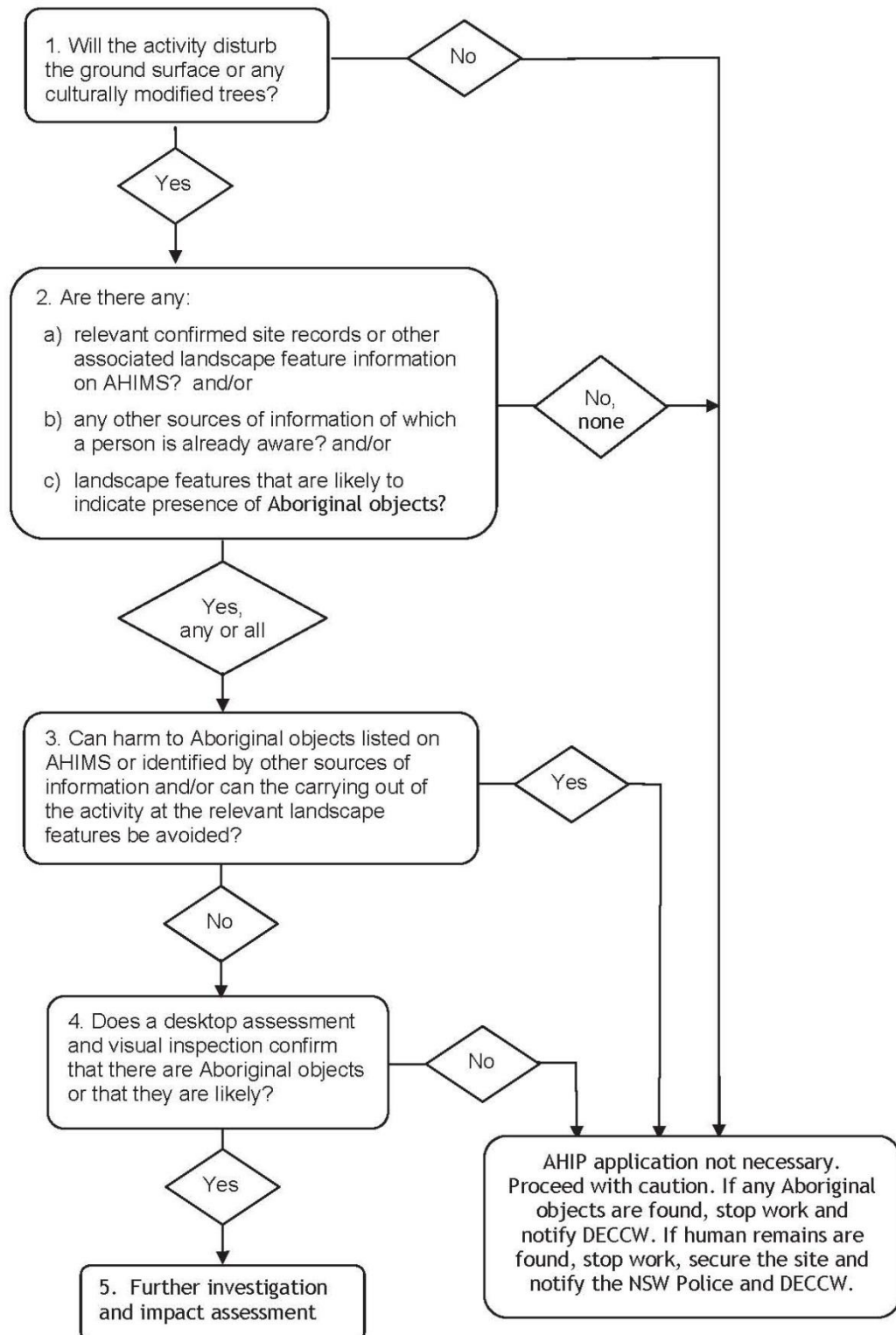


Plate 2: The due diligence assessment process

2. Aboriginal objects Due Diligence assessment

Is the proposed activity a 'low impact activity' as defined by the Regulation?

No.

The activity of rezoning existing RU2 (Rural Landscape) land to UDZ (Urban Development Zone), C2 (Environmental Conservation) and SP2 (Special Infrastructure) land is not one of the low impact activities defined under section 80B of the *National Parks and Wildlife Regulation 2019* ('the Regulation').

Step 1 - Will the activity disturb the ground surface or any culturally modified trees?

No.

The activity of rezoning existing RU2 (Rural Landscape) land to UDZ (Urban Development Zone), and C2 (Environmental Conservation) land would not disturb the ground surface or any currently registered culturally modified trees.

Step 2a - Are there any relevant confirmed site records or other associated landscape feature information on AHIMS (or other heritage registers)?

Yes.

Heritage registers

AHIMS

An extensive search of the AHIMS was conducted on 27 March 2023 (AHIMS Client Service ID # 767596) covering the Activity Area for the following area at GDA Zone 56, Eastings: 292370.0 – 296572.0 and Northings: 6210269.0 – 6214575.0. See Attachment 1 for details of the search and Aboriginal cultural heritage sites within the search area.

A total of thirty-nine (39) Aboriginal cultural heritage sites were identified within the wider search area. However, none of these Aboriginal cultural heritage sites are located within the Activity Area (Figure 3). Table 4 provides a summary of the AHIMS sites located within the wider region surrounding the Activity Area. Within the wider search area, Open Camp Sites (artefact scatter or isolated) (n = 12) was the most common Aboriginal site feature documented on the AHIMS register. The next most common was Potential Archaeological Deposits (PAD) (n=8), Isolated Find (n=5), Modified Tree (Carved or Scarred) (n=4), Shelter with Art (n=3), and Shelter with Art and Artefact/s (n=2). The least common site types in the AHIMS search area include Artefact Scatter and Art (n=1), Axe Grinding Groove and Water Hole/Well (n=1), Midden (n=1), Shelter with Artefact/s and Grinding Groove (n=1), Art (Pigment or Engraved) (n=1).

Table 4: Summary of AHIMS site features within the wider region surrounding the Activity Area

Site type	Total	Percentage (%)
Art (Pigment or Engraved)	1	3%
Artefact Scatter and Art	1	3%
Axe Grinding Groove and Water Hole/Well	1	3%
Isolated Find	5	13%
Midden	1	3%
Modified Tree (Carved or Scarred)	4	10%

Site type	Total	Percentage (%)
Open Camp Site	12	31%
Potential Archaeological Deposit (PAD)	8	21%
Shelter with Art	3	8%
Shelter with Art and Artefact/s	2	5%
Shelter with Artefact/s and Grinding Groove	1	3%
Grand Total	39	100%

It must be noted that care should be taken when using the AHIMS database to reach conclusions about site prevalence or distribution. The distribution of registered sites does not reflect patterns of occupation, but rather is often indicative of survey coverage and conditions.

Aboriginal Heritage Impact Permit (AHIP)

A search was conducted of the Department of Planning and Environment (DPE) AHIP Public Register (2021-22) and AHIP Public Register Archive (2010-21) on 27 March 2023. It was determined that no existing AHIPs have been registered over the current Activity Area or immediate surrounds.

Other heritage registers

Searches of the Australian World Heritage Database, the Commonwealth Heritage List, National Heritage List, State Heritage Register, State Heritage Inventory, the Wollondilly LEP(2011) and the Wollondilly Development Control Plan (DCP) (2016) were conducted on the 27 March 2022. Clause 5.10 of the Wollondilly LEP (2011) outlines the controls for Heritage conservation including the conservation of Aboriginal objects and Aboriginal places of heritage significance.

The searches above concluded that there is one (1) recorded heritage item or Aboriginal place with Aboriginal heritage significance within close proximity to the Activity Area. The Appin Massacre Cultural Landscape (SHR#02067) is of State heritage significance for its historical importance as one of the most devastating massacre events of First Nations people in the history of NSW. The curtilage of the item is listed as "All those pieces or parcels of land in the Parish of Appin, County of Cumberland shown on the plan catalogued HC 3294 in the office of the Heritage Council of NSW." (NSW Government Gazette No 553 of 25 November 2022). The larger landscape is represented as a series of five non-contiguous places that are key locations significant to the Appin Massacre:

- Area 1: 1816 Appin Massacre Sorry Place
- Area 2: 1814 Rocky Ponds Creek Burial (Mount Britain) Sorry Place
- Area 3: Teston Farm (homestead complex and setting) and Lachlan Vale (homestead complex archaeological site and setting) Shared Histories Place
- Area 4: Dharawal and Gundungurra Cultural Route, including the Hanging Trees (McGees Hill) Sorry Place, Ridgeline Camping Place and Vantage Point Teaching Place
- Area 5: Dharawal and Gundungurra Cultural Route, Corridor to Gathering Place.

The Appin Massacre is also listed on the University of Newcastle's Colonial Frontier Massacres map which identifies and records sites of frontier massacres of Aboriginal, Torres Strait Islander and non-Indigenous people across Australia from 1788 to 1930.

Heritage items of national, state, and local significance that were identified to be within 500 m of the Activity Area are shown in Table 5 below illustrated in Figure 3.

Table 5: Summary of heritage listings within the wider region of the Activity Area

Heritage register	Items in the Activity Area	Items within 500 m of the Activity Area
Australian World Heritage Database	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A
Commonwealth Heritage List	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A
National Heritage List	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A
State Heritage Register	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Appin Massacre Cultural Landscape (#02067) Windmill Hill Group, including Ruins (#01931)
Schedule 5 of Wollondilly LEP	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Elladale (I11) Northhamptondale Group - House, Trees, Slab Farm, Outbuildings, Stables (I13) Windmill Hill Group. Including Brennan's Farm, Larkin's Farm, Winton's Farm (I17)
Development Control Plan	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Part 7 of the Wollondilly LEP (2016) outlines the controls for the conservation of Aboriginal objects and Aboriginal Places of heritage significance.

Assessment of historical heritage constraints associated with the Activity Area is beyond the scope of this DD.

Step 2b - Are there any other sources of information of which a person is already aware?

Yes.

The Appin Massacre

The early decades of the 19th Century saw significant unrest and often open hostilities between local Aboriginal groups and European settlers in the Appin region and the wider Cumberland Plain.

The Activity Area was at the frontline of some of the hostilities. In 1814, three soldiers killed a Gundungara boy who was taking maize from a field on the Lachlan Vale Estate. One of the soldiers was speared and killed in response, leading to a series of retaliation attacks and atrocities across the region including the killing and mutilation of a Gundungara woman and three children. Following the revenge killing of a stock keeper and his wife in Bringelly, Governor Macquarie visited the area and declared that justice had been satisfied and all attacks were to cease (Karskens, 2015).

Hostilities did not end with this proclamation, and the men who had killed the Gundungara woman and children were speared by Gundungara warriors on the Lachlan Vale estate. This led Governor Macquarie to establish an official party of armed civilians and local Aboriginal guides to search for the perpetrators. The party was unsuccessful; however, later events in 1816 at Bringelly saw the Governor form a second party with military personnel. Three detachments of soldiers were sent out to roam the entire colony and to track down, capture or kill all Aboriginal people they encountered, including women and children. Macquarie ordered any bodies to be hung from trees to better strike fear into the survivors (Karskens, 2015).

The detachment under Captain Wallis headed towards the Appin district, where they encountered Gundungara warriors Bitgully and Yelloming on John Kennedy's Teston farm. Both warriors were on a wanted list, but Kennedy convinced Wallis that they had been removed from the list and were there to protect the farm from hostile attack. Wallis then left to search other farms in the area but returned to Lachlan Vale in the early morning of 17 April 1816 following a tip off that Aboriginal people were camped on the estate. The detachment encountered an abandoned campsite, with still burning fires. One of the soldiers heard a child's cry, so the detachment immediately formed a line rank and pushed through the deep bush towards the noise. The line of soldiers opened fire ahead of them and the Aboriginal men, women and children fled to their deaths over the 60 m high precipitous gorge of the Cataract River. Others were wounded or shot dead by the detachment (Karskens, 2015).

The official records suggest that 14 bodies were identified following the massacre, including those of warriors Durelle and Cannabayagal. The bodies of the warriors were strung up in trees on a hill on the Lachlan Vale estate. A later account by William Byrne suggests that the official death toll from the massacre is likely to be much higher. He also recounted that three bodies were strung up on McGee's Hill and that their heads were removed and sent to Sydney and later Scotland (Karskens, 2015).

Oral history

The location of burials associated with the Appin massacre, likely to be those of Durelle and Cannabayagal have long been considered to be located at the historical corner of Teston Farm. Oral histories passed down since the period of the massacre indicate that the burials are located below bedding stones and blackberry growth. The site card for the burials Rocky Ponds Creek/Brook's Point (AHIMS ID#52-2-1933) details this oral history and situates the site outside the boundary of the Activity Area, approximately 2 km south-west of the current Activity Area.

Previous heritage assessments within or relevant to the Activity Area

Five previous heritage assessments have been undertaken within close proximity to the current Activity Area.

Table 6 provides an outline of heritage assessments that are relevant to the Activity Area.

Table 6: Previous heritage assessments within the Activity Area

Author	Title	Year	Relevance to the Activity Area
Heritage Concepts Pt Ltd	Aboriginal & Historic Archaeological and Cultural Heritage Values: Proposed Rezoning Macquariedale Road, Appin, NSW.	2007	<p>The assessment included a desktop review of historic and Aboriginal cultural heritage values for the proposed rezoning site located on Macquariedale Road, Appin. The target area (Lot 1 DP1218358) for this assessment is directly east of the current Activity Area.</p> <p>A field inspection was conducted which identified four new Aboriginal cultural heritage sites; one artefact scatter and three isolated artefacts, which support the predictive model for Aboriginal cultural heritage sites across the Cumberland Plain. Low-density sites are often associated as background scatters within the Cumberland landscape, evidence of transitory activity.</p> <p>Results of the assessment detailed historic and Aboriginal cultural heritage values, including recommendations for testing, s.90 Consent to Destroy application and surface collection of the four above sites.</p>
Mary Dallas Consulting Archaeologists (MDCA)	Due Diligence Aboriginal Heritage Assessment for Rezoning of Lot 1 DP20779, Lot 1 DP558807 and Lot 4 DP1160566, 40 Appin Road, 55 Macquariedale Road Appin NSW	2014	<p>This archaeological assessment was prepared for Walker Corporation Pty Ltd by MDCA for the proposed rezoning of 40 Appin Road and 55 Macquariedale Road Appin NSW. The study identified 4 Aboriginal cultural heritage sites located within the vicinity of the proposed residential zoning and subdivision. As a result of this. These Aboriginal cultural heritage sites are one artefact scatter and three isolated artefacts, which support the predictive model for Aboriginal cultural heritage sites across the Cumberland Plain. Low-density sites are often associated as background scatters within the Cumberland landscape, evidence of transitory activity. It was recommended that isolated finds AP_A2 (AHIMS ID# 52-2-3527), AP_A3 (AHIMS ID# 52-2-3528) and AP_A4 (AHIMS ID# 52-2-3529) should be considered as being a part of a site complex that has been subject to erosional activity such as slope wash. It was also recommended that testing take place as well as the management of sites AP_A2, AP_A3 and AP_A4 to be considered for preservation. An AHIP will need to be sought in order to impact AP_A1 (AHIMS ID# 52-2-3526) as recommended by MDCA.</p>
Niche Environment and Heritage	Aboriginal Objects Due Diligence Assessment Macquariedale Road, South Appin, NSW	2020	<p>This assessment was prepared by Niche for the proposed geotechnical investigations and borehole samples within the Activity Area. Section 87 of the NPW Regulation defines geotechnical investigations as low-impact activity that is excluded from the definition of harm under the NPW Act1974. However, mitigative strategies were in place in the form of buffers around known registered sites within the</p>

			Activity Area in order to facilitate the geotechnical investigations while also preserving the cultural heritage of the Activity Area.
Niche Environment and Heritage	Aboriginal Cultural Heritage Assessment Report Macquariedale Road Appin, NSW	2021	<p>This assessment was prepared by Niche for the proposed residential subdivision and development of Appin South, located at the consolidated address of 55 Macquarie Road, Appin, NSW, Lot 1 DP 1218358, Lot 1 DP1148758 and Lot 1 DP 249446. The ACHA was to inform the subdivision and development process in order to manage and mitigate harm to Aboriginal objects and cultural heritage values during any future development.</p> <p>A site survey and testing were conducted within the Subject Area with attempts to relocate cultural heritage site AP_A1 (AHIMS ID# 52-2-3526), which were unsuccessful. The testing resulted in no new Aboriginal objects and/or features located within the Subject Area.</p> <p>Overall, the results from this assessment are relevant to the current Activity Area as it demonstrates that the area is likely associated with low-intensity, infrequent and sporadic occupation by Aboriginal people in the past. This is represented by a low-density background artefact scatter (AP_A1; AHIMS ID#522-3526) and Isolated Find (MAC_IF; AHIMS ID# 52-2-4665), indicative of infrequent and sporadic occupation/use of the area by Aboriginal people during the late-Holocene period/last 5,000 years (i.e., the Bondian phase of the eastern regional sequence). The investigations confirm that extensive disturbance to the topsoil and A horizon were observed across the Subject Area as a result of vegetation clearance and past agricultural land use. This has impacted the structural integrity of the soil profile and artefact bearing deposit.</p>
Niche Environment and Heritage	Aboriginal Objects Due Diligence Assessment: 55 Macquariedale Road, Appin NSW	2022	<p>This assessment was prepared by Niche for the proposed geotechnical investigations and borehole samples within the Activity Area. Section 87 of the NPW Regulation defines geotechnical investigations as low-impact activity that is excluded from the definition of harm under the NPW Act (1974). However, mitigative strategies were in place in the form of buffers around known registered sites within the Activity Area in order to facilitate the geotechnical investigations while also preserving the cultural heritage of the Activity Area. This assessment concluded that despite the proximity of the Activity Area to low-order streams there is nil to low potential for Aboriginal objects due to significant ground disturbances associated with historic farming activities.</p>

As part of the *A Plan for Growing Sydney* project, the Department of Planning and Environment (DPE) undertook an investigation to assess the potential for greenfield development south and south-west of the Campbelltown-Macarthur region (i.e., the Greater Macarthur Investigation Area [GMIA]) including the current Activity Area (DPE 2017). A preliminary analysis identified an area potentially suitable for future urban development. As part of the project, Archaeological and Heritage Management Solutions Pty Ltd (AHMS) was commissioned by DPE to undertake an Aboriginal Heritage Gap Analysis of the GMIA to

develop a regional study, characterise the cultural heritage values of the area and identified areas requiring further investigation. The results of this study are of relevance to the current Activity Area as they contribute to the archaeological record of the region and assist in establishing a predictive model for the nature and distribution of Aboriginal sites. The key findings of the study that are of relevance to the current project and Activity Area are summarised below (DPE 2017):

- Historically the area is associated with early agricultural expansion outside of Sydney with large pastoral estates established throughout Appin.
- Environmentally the area is dominated by the Cumberland Plain sub-region and the Sydney Cataract sub-region. The area contains key waterways such as the Nepean, Cataract and Georges Rivers which are recognised to be associated with a high potential for yielding significant cultural sites. In areas where dissecting sandstone is present, there is a high potential for shelter sites, engravings and axe-grinding grooves.
- Several instances of early interaction between Aboriginal and European people are noted to have occurred around Menangle and Menangle Park (as recorded on AHIMS ethnographic database).
- Based on a review of past assessments, Aboriginal cultural heritage site distribution patterns were found to be largely influenced (and limited) by the compliance-based assessments that have occurred in the area. Nevertheless, patterning indicates that sites are generally located within 200 m of larger river systems with sites greater than 500 m away rare and shelter sites are dominant.
- The archaeological predictive model developed for the region broadly states that:
 - Areas of high potential for Aboriginal objects/sites include: the banks of the Nepean, Cataract and Georges Rivers, and Allens, Elladale, Clemens, Cascade, Ousedale and Wallandoola Creeks.
 - The potential for locating significant cultural material in the above-mentioned locations is heightened by the fact that areas adjacent to these waterways and corridors are frequently elevated and remain largely undisturbed by development.
 - The potential for finding evidence for deeply stratified and early Aboriginal occupation in the area in association with these major river systems is demonstrated by results from excavations undertaken by AHMS along Georges River which revealed cultural materials on an elevated ridgeline at Moorebank dating to >20ka.
 - The integrity of some sites, particularly along the Nepean River, may have been affected by flooding events (DPE 2017).

Step 2c - Are there landscape features that are likely to indicate the presence of Aboriginal Objects?

Based on the desktop assessment and site inspection (Section 2, Steps 2a and 2b), the Activity Area contains the following landscape features that are likely to indicate the presence of Aboriginal objects, as identified by the Due Diligence Code:

- Within 200 m of water.
- Located on a ridge top, ridge line or headland.

The perennial Cataract River is approximately 700 m from the Activity Area and runs adjacent to the southern boundary. Additionally, the perennial Nepean, located approximately 3.5 km from the Activity Area, would have provided a reliable source of water and abundant riverine resources. Furthermore, Ousedale Creek, Elladale Creek and a number of non-perennial drainage lines are located within the Activity Area. These minor waterways, according to White and McDonald (2010), have a high potential for PADs. Higher-order drainage lines tend to have higher artefact densities and more continuous distributions than lower-order drainage lines. Landforms with higher densities occur on terraces and lower slopes, and with sparse discontinuous scatters on upper slopes. Higher artefact densities tend to be within 50 m of 2nd-order drainage lines. The presence of sandstone outcropping within the Activity Area in association with the

Hawkesbury colluvial soils along the tributaries of the Nepean River represents an additional archaeologically sensitive landscape feature within the Activity Area. The presence of existing registered shelter sites (Ousedale Creek 05; AHIMS ID# 52-2-4447) nearby the Activity Area confirms the potential.

The archaeological characteristics and potential of an area are additionally defined through a range of factors, including stability of the soil matrix, underlying geology, and land use history. The Activity Area sits atop the Picton, Blacktown, and Luddenham soil landscapes (Figure 4).

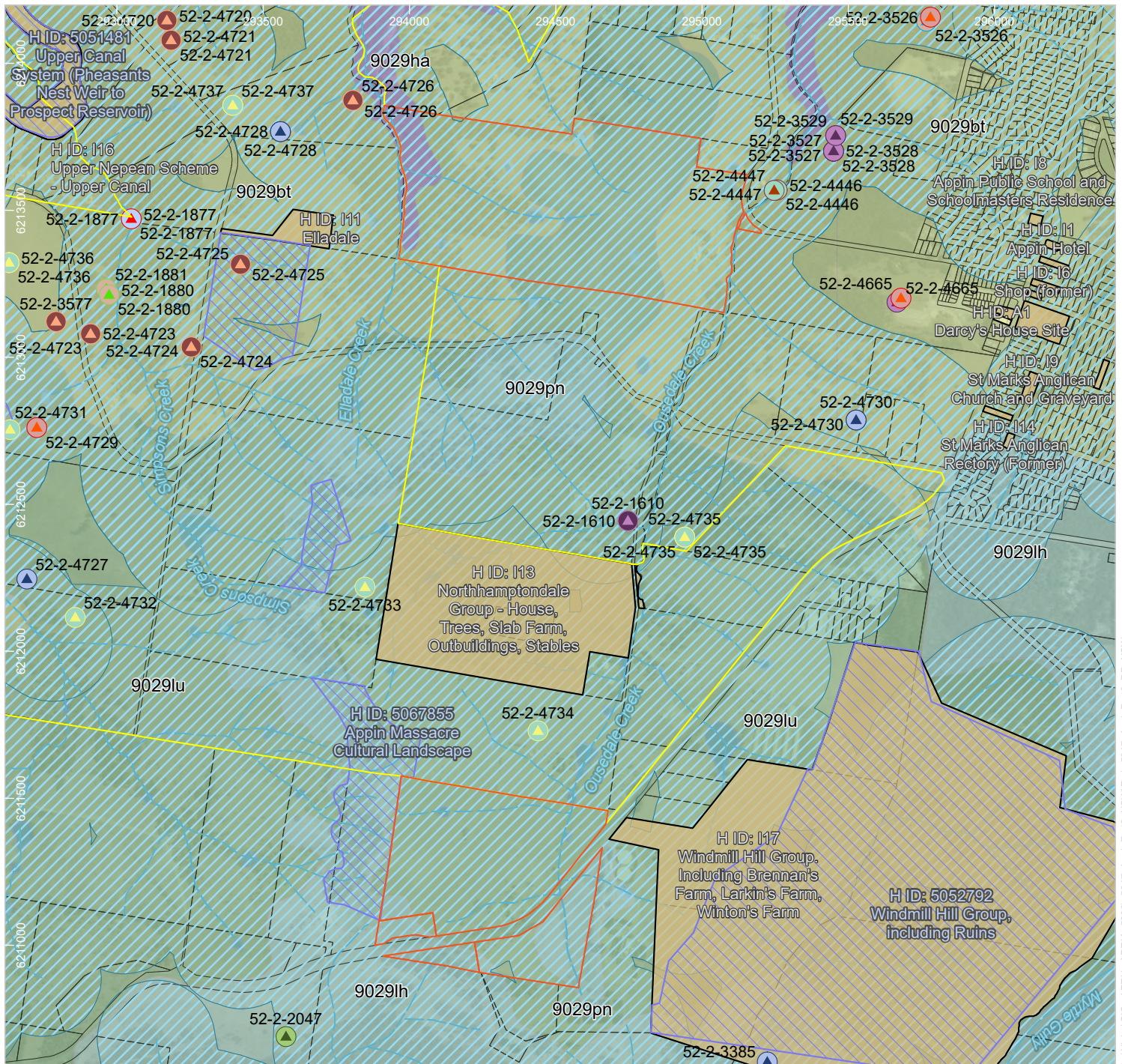
The Picton soil landscape varies from shallow to deep (50-200 centimetres (cm)) with Red and Brown Podzolic Soils on upper slopes; Brown and Yellow Podzolic Soils and Soloths on lower slopes and benches; and Red and Brown Earths on colluvial material. On lower slopes and in drainage lines, the soil is very deep (>300 cm) with Yellow Podzolic Soil and Soloths. The associated geology includes the Wianamatta Group and the associated landscape is characterised by steep to very steep side slopes and terraces. The deep soils associated with waterways are likely to preserve Aboriginal objects. Site types would likely include isolated artefacts, open campsites where suitable geology occurs, and artefacts and/or deposit.

The Blacktown soil landscape is generally shallow to moderately deep (<150 cm) and comprises Red Podzolic Soils and Brown Podzolic Soils on crests, upper slopes and well-drained areas, and deep (150-300 cm) Yellow Podzolic Soils on lower slopes and in drainage depressions and localised areas of poor drainage (Hazelton and Tille 1990). The associated geology is also Wianamatta Group. This soil landscape is known to preserve Aboriginal objects in association with hill crests, lower slopes and flats associated with good outlooks and/or drainage lines. These site types are more likely to comprise isolated stone artefacts rather than more significant concentrations. This landscape is prone to localised erosion, which may impact the integrity of archaeological deposits.

The Luddenham soil landscape is generally shallow (<100 cm) on crests; moderately deep (<150 cm) on upper and lower slopes and drainage lines (Hazelton and Tille 1990). The associated geology comprises the Wianamatta Group which includes Ashfield Shale. Ashfield Shale contains dark grey siltstone which can be used in stone tool manufacture. This soil landscape is likely to preserve Aboriginal objects in association with hillcrests and valleys with water sources nearby. Erosion may have impacted archaeological deposits, however, particularly in areas that have been cleared or grazed or along drainage lines depending on the speed of flow of water. Site types would likely include isolated artefacts, open campsites where suitable geology occurs, axe grinding grooves, rock engravings and shelters with art, artefacts and/or deposit.

The geology of the wider Wollondilly area would additionally have provided a number of resources to Aboriginal people including silcrete, silicified wood, tuff, mudstone, quartz, quartzite and basalt. Suitable pebbles of hard, igneous rock for axes also occur along the Nepean River (JMCHM 2007:11). Silcrete is the most common raw material type used for stone tool making recovered from archaeological sites within the greater Wollondilly area and across the Cumberland Plain and the Cumberland Lowlands, with known sources including the St Marys Formation, Rickabys Creek gravels and terraces along the Nepean River.

The entire Activity Area is currently zoned as RU2: Rural Landscape which means large portions of the Activity Area have been cleared and used for grazing. The potential for in-situ Aboriginal objects is lower on land that has been disturbed by more recent European land use. For instance, major earthworks, construction of dwellings, dams, services and infrastructure may remove the archaeological potential while vegetation clearance, grazing and ploughing may damage or remove the integrity of any archaeological deposits within the top 30 cm of soil.



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|--|---|--|--|---|
| <p>Appin Part Precinct</p> <p>Activity Area</p> <p>Hydrography</p> <p>Waterbody</p> <p>Hydrology buffer (200m)</p> <p><u>Watercourses</u></p> <p>Non Perennial Stream</p> <p>Perennial Stream</p> | <p>Administrative and Property Boundaries</p> <p>Lot</p> <p>Soils</p> <p><u>Soil Landscapes of Central and Eastern NSW</u></p> <p>9029bt, Blacktown</p> <p>9029ha, Hawkesbury</p> <p>9029lh, Lucas Heights</p> <p>9029lu, Luddenham</p> | <p>9029pn, Picton</p> <p>Heritage places</p> <p><u>AHIMS</u></p> <p>Artefact</p> <p>Artefact Scatter</p> <p>Axe Grinding Groove and Water Hole/Well</p> <p>Axe Grinding Groove, Shelter with Deposit</p> <p>Isolated Find</p> | <p>Midden</p> <p>Midden and Artefact Scatter</p> <p>Modified Tree (Carved or Scarred)</p> <p>Open Camp Site</p> <p>Potential Archaeological Deposit (PAD)</p> <p>Shelter with Art</p> <p>Shelter with Art and Artefact/s</p> | <p>Shelter with Artefact/s and Grinding Groove</p> <p>State Heritage Register Curtilage</p> <p><u>Local Heritage Place (Wollondilly Local Environmental Plan 2011)</u></p> <p>Item - Archaeological</p> <p>Item - General</p> |
|--|---|--|--|---|

Step 3 - Can the harm or the activity be avoided?

Undetermined.

Although there are no registered AHIMS within the Activity Area, the proposed activity transverses some archaeologically sensitive landscape features (refer to Step 2c) and existing Aboriginal cultural heritage sites are registered within close proximity to the Activity Area (refer to Step 2a; Figure 4). The Activity Area is located within 200 m of water and located on a ridge-top which constitute landscapes with elevated archaeological potential. Moreover, the Activity Area is located on the boundary of the Appin Massacre Cultural Landscape which is part of a broader cultural landscape. The item is significant for its associative and social values for its high importance to the Dharawal and Gundungurra people as the site of the brutal murder of their ancestors and their dispossession and displacement from Country.

Ground disturbance of these landscape features within the Activity Area cannot be effectively determined through desktop analysis alone. Therefore, a site inspection will be required to determine if any previously unidentified Aboriginal cultural heritage sites are present within the Activity Area and immediate surrounds.

Step 4 - Does a desktop assessment and visual inspection confirm that there are Aboriginal Objects or that they are likely?

Yes.

A desktop and visual inspection confirmed that Aboriginal objects and archaeologically sensitive landscape features are present within the Activity Area (Step 2a and Step 2c).

A visual site inspection was conducted by Riley Finnerty (Niche Heritage Consultant) and assisted by Ahmed Ali (Walker Corporation) on 29 March and 19 April 2023. The photographic record from the visual site inspection is provided in Plate 3 –Plate 12. A comprehensive assessment of the entire Activity Area is required to further assess the archaeological and cultural heritage potential.

The inspection targeted areas within the Activity Area that contained potential archaeologically sensitive landscape features such as areas adjacent to the many creeks and water bodies that exist within the Activity Area (Figure 5). All rock overhangs encountered were inspected for evidence of suitability for past habitation such as evidence for art, surface artefacts and/or sediment accumulation/potential archaeological deposit.

Ground surface visibility (GSV) across the Activity Area was generally low (<10%) with densely vegetated areas and thick pastoral grasses obscuring the ground surface in most areas (Plate 3). Rare areas of exposure included erosional areas where the shallow soil profile has resulted in the surface wash during periods of rain (Plate 10), or around constructed dams (Plate 4). Intact soil profiles were observed around the dams, showing topsoils and light brown silty clay deposits (Plate 9).

Disturbances observed across the Activity Area included widespread vegetation clearances, pastoral and agricultural impacts, construction of roads, tracks and easements and localised areas of earthworks including the construction of houses and farming infrastructure (Plate 11-Plate 12). The Activity Area has predominantly been historically cleared of all vegetation for farming and agriculture with small clusters of mature trees remaining. Any mature trees within the Activity Area were inspected for cultural modification, resulting in the identification of one (1) newly recorded Aboriginal cultural heritage site (Appin_ST_1; AHIMS ID# pending) (Table 7).

A portion of the Activity Area at 110 Macquarredale Road has not been disturbed and retains native vegetation and is situated within a highly sensitive landscape (embankment of Elladale Creek). The landscape is in good condition, characterised by an open-woodland forest with minimal GSV and extensive leaf litter (Plate 7 -Plate 8). Any sandstone outcropping was inspected for potential habitation structures and grinding grooves along the creek line (Plate 7).

The site inspection also inspected along the existing boundary of the Appin Massacre Cultural Landscape (Item #02067) which identified significant views and vistas from the hill, overlooking the adjacent landscape (Plate 13 -Plate 14). The Activity Area is situated within the broader regional cultural landscape which further emphasises its connection to gathering places and the lands of other First Nations people via the identified Dharawal and Gundungurra Cultural Route (Areas 4-5).

As historical disturbance of the northern and southern areas could not be verified during the site inspection for these landforms with elevated archaeological potential and as low visibility hampered identification of any surface archaeological materials, archaeological potential with the southern area of the Activity Area is still likely and therefore requires further assessment. Moreover, during the course of the inspection, one previously unidentified site was identified 'Appin_ST_1' (AHIMS ID# pending). Details of this site are included below.



Plate 3: Example of thick and dense grasses obscuring ground surface visibility, facing east.



Plate 4: Example of earthworks for dam construction, facing west.



Plate 5: Vegetation clearance and use of the land as pasture, with thick pastoral grass growth facing north. Located at 110 Macquariedale Road.



Plate 6: Vegetation clearance and use of the land as pasture, facing north. Located at 725 Wilton Road.



Plate 7. Example of a pristine gully and sandstone outcropping (Elladale Creek), facing north.



Plate 8. Intact open woodland along Elladale Creek, facing south.



Plate 9. Example of an exposed soil profile



Plate 10. Example of small exposures from sheet wash and hill erosion, facing south.



Plate 11. Example of dam construction, facing north.



Plate 12. Example of farming infrastructure, facing southeast.



Plate 13: Views at the top of the ridge, along existing curtilage of Appin Massacre (Item #02067) , facing west.





Plate 14: Views of the ridgeline within the southern Activity Area, facing north.

New sites identified within the Activity Area

A total of one (1) newly recorded Aboriginal cultural heritage site was identified during the site inspection (Figure 5). This included a culturally modified tree (Appin_ST_1; AHIMS ID# *pending*) located within the property at 725 Wilton Road (Lot 3/-/DP804375). The site was located on the mid-slope of the hill within a small cluster of remaining mature trees. Details are provided below in Table 7.

Table 7. Summary of newly identified Aboriginal cultural heritage sites.

Site name	AHIMS ID	Site type	Description	Image reference
Appin_ST_1	Pending	Modified Tree	<p>Appin_ST_1 consists of scar on an alive mature <i>Eucalyptus paniculate</i> (Grey ironbark) (Plate 17). The scar is single curved elliptical (coolamon) in shape and is assessed as conforming to the standard scarring morphology accepted for Aboriginal modification (cf. Long 2005). The oval scar has symmetrical tapered ends and sides and is facing 60 degrees north-east. The tree is approximately 20 m in height. No axe marks were visible.</p> <p>The dimensions of the scar are shown as:</p> <p>Height = 80 cm Width = 20 cm Depth = 10 cm Tree circumference = 2.8 m</p> <p>Scar regrowth:</p> <p>Top-Left = 12 cm Top-Right = 10 cm Bottom Left = 12 cm Bottom Right = 12 cm Height from ground = 85 cm</p>	 <p>Plate 15. Location of Appin_ST_1, facing east.</p>  <p>Plate 17. Appin_ST_1 modified tree (scar facing north-east).</p>

Additionally, small fine white fibres were observed on the bark of the tree. Likely associated with shedding of livestock within paddock (horses). A large fungal growth is shown to have grown on the scars 'dry face' (Plate 18). This is a result of dry faces providing access for fungi, insects, and fire to the heartwood of a tree and it is for this reason that many scars on non-durable species of eucalypt are hollow.



Plate 16. Close-up of scar

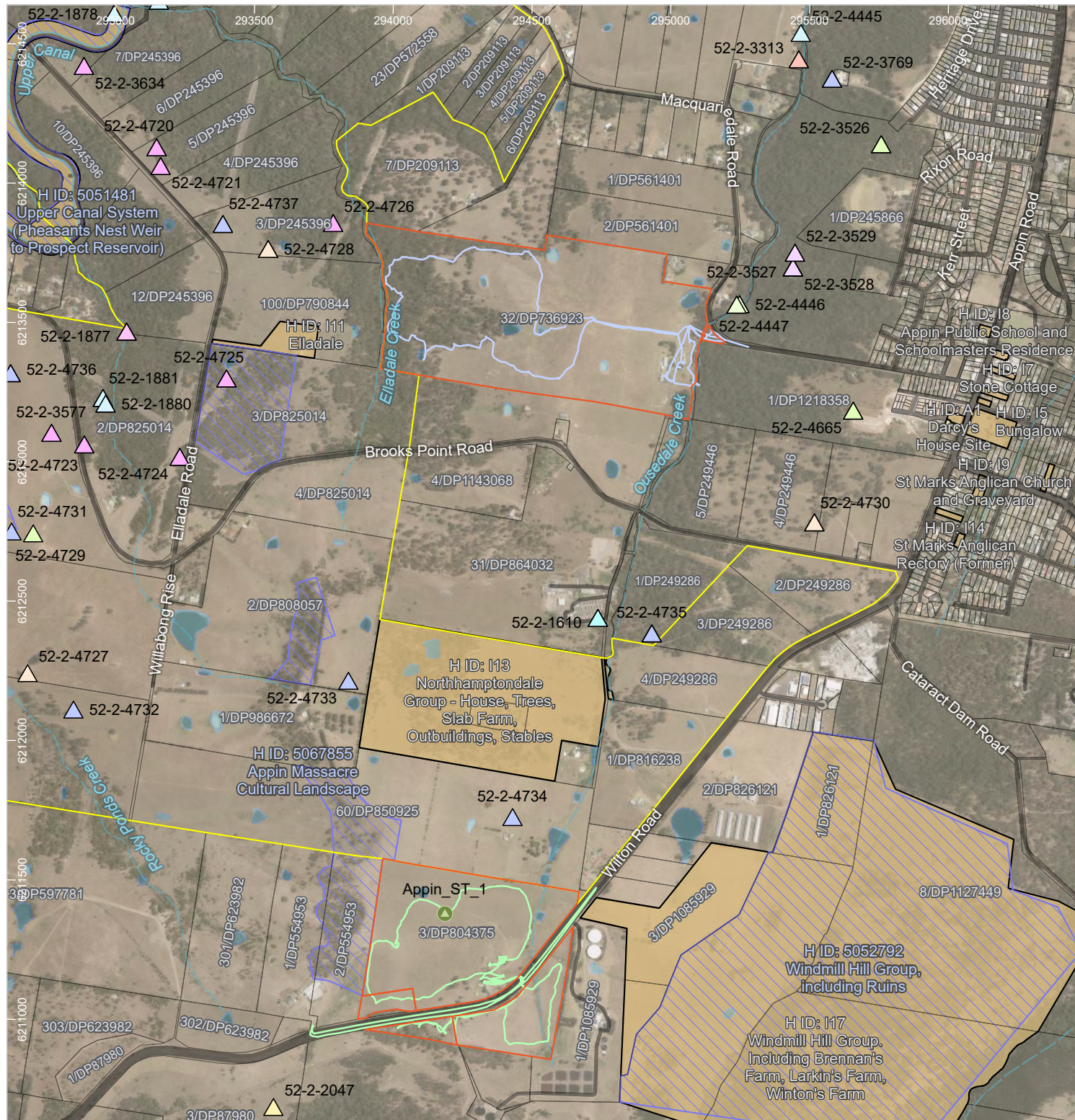


Plate 18. Close-up of tree fungus, growth on scar dry face.

Summary of site inspection

The results of the site inspection can be summarised as follows:

- One (1) newly recorded Aboriginal cultural heritage site (Appin_ST_1) was identified during the site inspection.
- Potential highly significant cultural and social values associated with the Appin Massacre Cultural Landscape were identified in the southern portion of the Activity Area. The proximity to existing heritage curtilages of the Appin Massacre landscape and its association with the Dharawal and Gundungurra Cultural Route, including the Hanging Trees (McGees Hill) Sorry Place, Ridgeline Camping Place and Vantage Point Teaching Place.
- Disturbance is variable across the Activity Area, with intensive farming across the majority of the Activity Area. In particular, disturbance of landform features with elevated archaeological potential cannot be substantiated in the southern area, suggesting potential in the areas is still present.
- Visibility is very low in the open paddocks and fields due to very thick growth of pastoral grasses.
- Visibility is very low within the open forest along Elladale Creek, due to extensive leaf litter.



Activity Area

- Appin Part Precinct
- Activity Area

Survey tracks

- 2023-03-29 10:39:11
- 2023-04-19 10:22:44

AHIMS

- Art (Pigment or Engraved)

Artefact

- Artefact Scatter
- Artefact Scatter and Art
- Axe Grinding Groove and Water Hole/Well
- Axe Grinding Groove, Shelter with Deposit
- Isolated Find
- Midden

Midden and Artefact Scatter

- Modified Tree (Carved or Scarred)
- Open Camp Site
- Potential Archaeological Deposit (PAD)
- Shelter with Art
- Shelter with Art and Artefact/s

Shelter with Artefact/s and Grinding Groove

Newly Identified Sites

- Appin_ST_1 - Modified Tree (Scarred)

Heritage places

- State Heritage Register Curtilage

Local Heritage Place (Campbelltown and Wollondilly Local Environmental Plan 2011)

- Item - Archaeological
- Item - General

Hydrography

- Watercourse
- Non Perennial Stream
- Perennial Stream

Waterbody

Transport

- Road
- Major road
- Minor road

Administrative and Property Boundaries

- Lot

Step 5 - Further investigations and impact assessment

Yes.

This assessment indicates that Aboriginal objects occur within the Activity Area. One (1) new Aboriginal cultural heritage site was identified during the visual inspection, concluding that Aboriginal objects are present within the Activity Area. The Activity Area contains archaeologically sensitive landscape features that are likely to indicate the presence of Aboriginal objects, as identified by the Due Diligence Code. The proposed activities are located within 200 m of water and are in proximity to ridge top/ ridge lines. Ousedale and Elladale Creek run adjacent and throughout the Activity Area which would have provided a reliable water source, whilst a number of non-perennial order drainage lines are also located within the Activity Area that would have offered Aboriginal people with a range of plant and animal resources throughout the year. Furthermore, the Activity Area is within proximity to a number of Historical Heritage Items, including the location of the Appin Massacre Cultural Landscape (SHR# 02067), giving this area the potential to have contact archaeology as it is a known contact site. The existing heritage curtilages of the Appin Massacre landscape are situated within the broader landscape and are not reflected by the stagnant property boundaries, therefore the Activity Area hold high potential for cultural and social values associated with the Appin Massacre.

As such, further assessment, consultation, and investigation of the Aboriginal heritage constraints within the Activity Area is required prior to any works in accordance with the *National Parks and Wildlife Act 1974* and *National Parks and Wildlife Regulation 2019*. Consideration of how potential impacts could detract from the significance criterion outlined in the State Heritage listing should be included in this additional assessment.

3. Conclusions and recommendations

Niche was commissioned by Walker Corporation to complete a DD to support Part 2 of the Appin (Part) Precinct Plan, a portion of land within the Appin (Part) Precinct Structure Plan of the Greater Macarthur Growth Area (GMGA).

Based on this DD, it is confirmed that the proposed works may impact Aboriginal objects within the Activity Area. The assessment identified one newly recorded Aboriginal cultural heritage site, Appin_ST_1 (AHIMS ID# *pending*), within the Activity Area.

The Due Diligence Code states that where a desktop and visual inspection has occurred and concluded that Aboriginal objects are present and/or likely within the activity area that cannot be avoided, further investigation and impact assessment is required.

In accordance with the relevant legislative codes and guidelines, and in compliance with the heritage controls outlined in Part 7 Section 7.2 of the Wollondilly DCP (2016), Niche recommends the following measures be undertaken before development occurs on the land:

Table 8: Recommendations

Recommendations	
1.	Aboriginal community consultation is to be carried out in accordance with the (DECCW 2010) <i>Aboriginal Cultural Heritage Consultation Guidelines for Proponents 2010</i> .
2.	An Aboriginal Cultural Heritage Assessment (ACHA) will be required to fully assess the impact of the proposed works on Aboriginal objects and cultural heritage resources within and in proximity to the Activity Area. The ACHA is required to be completed in accordance with the <i>Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW</i> (OEH 2011).
3.	If required, archaeological test excavations will determine the nature, extent, values and significance of any Aboriginal objects and archaeological deposits. As defined by the <i>Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales</i> (DECCW, 2010c), any works occurring in areas known or suspected to be conflict or contact sites, require an AHIP.
4.	All new Aboriginal cultural heritage sites identified during the site inspection be registered through Australian Heritage Information Management System (AHIMS).
5.	An Aboriginal Heritage Impact Permit (AHIP) under Section 90 of the NPW Act 1974 will be required for the identified Aboriginal objects if the proposed harm cannot be avoided.
6.	All subsequent Aboriginal cultural heritage assessments should be undertaken in accordance with the Greater Macarthur Investigation Area: Archaeological Research Design and Management Strategy prepared by AHMS (2017).
General	
7.	All workers should be inducted into the Activity Area, so they are made aware of their obligations under the <i>National Parks and Wildlife Act 1974</i> and any conditions of any future AHIP prior and during and after construction activities.
8.	In the event that previously unknown Aboriginal object(s) and/or sites are discovered during the proposed activity, work must stop. A temporary fence is to be erected around the Aboriginal cultural heritage site, with a buffer zone of at least 10 metres around the known edge. An appropriately qualified archaeologist is to be engaged to assess the findings, and notification is to be provided to Heritage NSW. Works should not proceed without advice from Heritage NSW or an appropriately qualified archaeologist.
9.	In the unlikely event that suspected human remains are encountered during construction, all work in the area that may cause further impact, must cease immediately and:

Recommendations

- The location, including a 20 m curtilage, should be secured using barrier fencing to avoid further harm.
- The NSW Police must be contacted immediately.
- No further action is to be undertaken until the NSW Police provide written notification the Proponent.
- If the skeletal remains are identified as Aboriginal, the Proponent or their agent must contact:
 - Heritage NSW's Enviroline on 131 555; and representatives of the RAPs.
- No works are to continue until Heritage NSW provides written notification to the proponent or their Agent.

References

- Archaeological and Heritage Management Solutions (AHMS). 2017. Greater Macarthur Investigation Area: Archaeological Research Design and Management Strategy. Unpublished report prepared for DPE.
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Attachment 1 – AHIMS extensive search



AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref/PO Number : 5947 AHIMS Search 2023

Client Service ID : 767596

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status **	SiteFeatures	SiteTypes	Reports
52-2-4736	PAD-WA6	GDA	56	292650	6213322	Open site	Valid	Potential Archaeological Deposit (PAD) : -		
	<u>Contact</u>							<u>Recorders</u>	Niche Environment and Heritage,Mr.Riley Finnerty	<u>Permits</u>
52-2-4725	WA-16	GDA	56	293428	6213320	Open site	Valid	Artefact : -		
	<u>Contact</u>							<u>Recorders</u>	Niche Environment and Heritage,Mr.Riley Finnerty	<u>Permits</u>
52-2-2232	ACC1	AGD	56	292450	6212260	Open site	Valid	Artefact : -		
	<u>Contact</u>							<u>Recorders</u>	Navin Officer Heritage Consultants Pty Ltd	<u>Permits</u>
52-2-3385	LW219 Possible Scarred Tree	GDA	56	295301	6210660	Open site	Valid	Modified Tree (Carved or Scarred) : -		100434
	<u>Contact</u> Searle							<u>Recorders</u>	Sam Moody	<u>Permits</u>
52-2-4446	OUSEDALE CREEK 06	GDA	56	295270	6213627	Closed site	Valid	Art (Pigment or Engraved) : -, Artefact : -		
	<u>Contact</u>							<u>Recorders</u>	Illawarra Prehistory Group,Mr.Bruce Howell	<u>Permits</u>
52-2-4603	APPIN FALLS 17	GDA	56	295796	6210332	Closed site	Valid	Art (Pigment or Engraved) : -		
	<u>Contact</u>							<u>Recorders</u>	Illawarra Prehistory Group,Illawarra Prehistory Group,Mr.Bruce Howell	<u>Permits</u>
52-2-4727	WA-13	GDA	56	292735	6212247	Open site	Valid	Modified Tree (Carved or Scarred) : -		
	<u>Contact</u>							<u>Recorders</u>	Niche Environment and Heritage,Mr.Riley Finnerty	<u>Permits</u>
52-2-1881	Brooks Point 6	AGD	56	292880	6213050	Closed site	Valid	Art (Pigment or Engraved) : -	Shelter with Art	3655,3665
	<u>Contact</u>							<u>Recorders</u>	Mrs.Caryll Sefton	<u>Permits</u> 833
52-2-3313	MDI	AGD	56	295360	6214320	Open site	Valid	Art (Pigment or Engraved) : 3, Artefact : 30		
	<u>Contact</u> T Russell							<u>Recorders</u>	Mr.David Maynard	<u>Permits</u>
52-2-3769	Ousedale Creek East Bank PAD	GDA	56	295586	6214443	Open site	Valid	Potential Archaeological Deposit (PAD) : 1		101830
	<u>Contact</u>							<u>Recorders</u>	Austral Archaeology	<u>Permits</u>
52-2-3384	LW219 Isolated Find	GDA	56	295740	6210556	Open site	Valid	Artefact : 1		100434
	<u>Contact</u> Searle							<u>Recorders</u>	Sam Moody	<u>Permits</u>
52-2-4665	MAC_IF	GDA	56	295688	6213254	Open site	Valid	Artefact : -		
	<u>Contact</u>							<u>Recorders</u>	Niche Environment and Heritage,Miss.Chelsea Freeman	<u>Permits</u>
52-2-1880	Brooks Point 5	AGD	56	292890	6213030	Closed site	Valid	Art (Pigment or Engraved) : -	Shelter with Art	3655,3665
	<u>Contact</u>							<u>Recorders</u>	Mrs.Caryll Sefton	<u>Permits</u> 833,1579,2228

Report generated by AHIMS Web Service on 27/03/2023 for Riley Finnerty for the following area at Datum :GDA, Zone : 56, Eastings : 292370.0 - 296572.0, Northings : 6210269.0 - 6214575.0 with a Buffer of 0 meters.. Number of Aboriginal sites and Aboriginal objects found is 39

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AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref/PO Number : 5947 AHIMS Search 2023

Client Service ID : 767596

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status **	SiteFeatures	SiteTypes	Reports
52-2-4728	WA-12	GDA	56	293568	6213788	Open site	Valid	Modified Tree (Carved or Scarred) : -		
	Contact							Recorders	Niche Environment and Heritage,Mr.Riley Finnerty	Permits
52-2-4733	PAD-WA3	GDA	56	293891	6212245	Open site	Valid	Potential Archaeological Deposit (PAD) : -		
	Contact							Recorders	Niche Environment and Heritage,Mr.Riley Finnerty	Permits
52-2-2213	PICTON	AGD	56	292390	6212070	Open site	Valid	Artefact : -		97779
	Contact							Recorders	Ms.Trish Saunders	Permits
52-2-1610	Ousedale Creek 1;	AGD	56	294680	6212300	Open site	Valid	Shell : -, Artefact : -	Midden	2148
	Contact							Recorders	Kerry Navin	Permits
52-2-4735	PAD-WA5	GDA	56	294980	6212439	Open site	Valid	Potential Archaeological Deposit (PAD) : -		
	Contact							Recorders	Niche Environment and Heritage,Mr.Riley Finnerty	Permits
52-2-4723	WA-08	GDA	56	292921	6213072	Open site	Valid	Artefact : -		
	Contact							Recorders	Niche Environment and Heritage,Mr.Riley Finnerty	Permits
52-2-3648	Jordans Pass 2 (Appin)	GDA	56	293363	6210348	Open site	Valid	Art (Pigment or Engraved) : -		
	Contact							Recorders	Mr.Jamie Reeves	Permits
52-2-2047	Ashley's Hole;Metropolitan Catchment Area;	AGD	56	293550	6210520	Open site	Valid	Grinding Groove : -, Water Hole : -	Axe Grinding Groove,Water Hole/Well	
	Contact							Recorders	Tony Kondek	Permits
52-2-4447	OUSEDALE CREEK 05	GDA	56	295260	6213625	Closed site	Valid	Art (Pigment or Engraved) : -, Artefact : -		
	Contact							Recorders	Illawarra Prehistory Group,Mr.Bruce Howell	Permits
52-2-3528	AP_A3	GDA	56	295460	6213763	Open site	Valid	Artefact : 1		100570
	Contact							Recorders	Searle	Permits
52-2-4729	WA-11	GDA	56	292744	6212749	Open site	Valid	Artefact : -		
	Contact							Recorders	Heritage Concepts	Permits
52-2-4732	PAD-WA2	GDA	56	292903	6212120	Open site	Valid	Potential Archaeological Deposit (PAD) : -		
	Contact							Recorders	Niche Environment and Heritage,Mr.Riley Finnerty	Permits
52-2-4737	PAD-WA7	GDA	56	293403	6213874	Open site	Valid	Potential Archaeological Deposit (PAD) : -		
	Contact							Recorders	Niche Environment and Heritage,Mr.Riley Finnerty	Permits

Report generated by AHIMS Web Service on 27/03/2023 for Riley Finnerty for the following area at Datum :GDA, Zone : 56, Eastings : 292370.0 - 296572.0, Northings : 6210269.0 - 6214575.0 with a Buffer of 0 meters.. Number of Aboriginal sites and Aboriginal objects found is 39

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AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref/PO Number : 5947 AHIMS Search 2023

Client Service ID : 767596

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status **	SiteFeatures	SiteTypes	Reports
52-2-4731	PAD-WA1	GDA	56	292666	6212754	Open site	Valid	Potential Archaeological Deposit (PAD) : -		
	<u>Contact</u>							<u>Recorders</u>	Niche Environment and Heritage,Mr.Riley Finnerty	<u>Permits</u>
52-2-4724	WA-09	GDA	56	293266	6213035	Open site	Valid	Artefact : -		
	<u>Contact</u>							<u>Recorders</u>	Niche Environment and Heritage,Mr.Riley Finnerty	<u>Permits</u>
52-2-4726	WA-14	GDA	56	293800	6213886	Open site	Valid	Artefact : -		
	<u>Contact</u>							<u>Recorders</u>	Niche Environment and Heritage,Mr.Riley Finnerty	<u>Permits</u>
52-2-4734	PAD-WA4	GDA	56	294493	6211769	Open site	Valid	Potential Archaeological Deposit (PAD) : -		
	<u>Contact</u>							<u>Recorders</u>	Niche Environment and Heritage,Mr.Riley Finnerty	<u>Permits</u>
52-2-3527	AP_A2	GDA	56	295460	6213763	Open site	Valid	Artefact : 1		100570
	<u>Contact</u> Searle							<u>Recorders</u>	Heritage Concepts	<u>Permits</u>
52-2-3529	AP_A4	GDA	56	295466	6213816	Open site	Valid	Artefact : 1		100570
	<u>Contact</u> Searle							<u>Recorders</u>	Heritage Concepts	<u>Permits</u>
52-2-4730	WA-10	GDA	56	295557	6212850	Open site	Valid	Modified Tree (Carved or Scarred) : -		
	<u>Contact</u>							<u>Recorders</u>	Niche Environment and Heritage,Mr.Riley Finnerty	<u>Permits</u>
52-2-3526	AP_A1	GDA	56	295768	6214212	Open site	Valid	Artefact : 2		100570
	<u>Contact</u> Searle							<u>Recorders</u>	Heritage Concepts	<u>Permits</u>
52-2-1877	Brooks Point 2	AGD	56	292960	6213290	Closed site	Valid	Artefact : -, Grinding Groove : -	Axe Grinding Groove,Shelter with Deposit	3655,3665
	<u>Contact</u>							<u>Recorders</u>	Mrs.Caryll Sefton	<u>Permits</u>
52-2-4720	WA-04	GDA	56	293158	6214144	Open site	Valid	Artefact : -		
	<u>Contact</u>							<u>Recorders</u>	Niche Environment and Heritage,Mr.Riley Finnerty	<u>Permits</u>
52-2-3577	MDO4	GDA	56	292802	6213111	Open site	Valid	Artefact : 1		
	<u>Contact</u> Searle							<u>Recorders</u>	Heritage Concepts	<u>Permits</u>
52-2-3634	Brooks Point 3 [duplicate copy see 52-2-1878]	GDA	56	292890	6214430	Open site	Valid	Artefact : -		3665
	<u>Contact</u>							<u>Recorders</u>	Mrs.Caryll Sefton	<u>Permits</u>
52-2-4721	WA-03	GDA	56	293174	6214077	Open site	Valid	Artefact : -		
	<u>Contact</u>							<u>Recorders</u>	Niche Environment and Heritage,Mr.Riley Finnerty	<u>Permits</u>

** Site Status

Valid - The site has been recorded and accepted onto the system as valid

Destroyed - The site has been completely impacted or harmed usually as consequence of permit activity but sometimes also after natural events. There is nothing left of the site on the ground but proponents should proceed with caution.

Partially Destroyed - The site has been only partially impacted or harmed usually as consequence of permit activity but sometimes also after natural events. There might be parts or sections of the original site still present on the ground.

Not a site - The site has been originally entered and accepted onto AHIMS as a valid site but after further investigations it was decided it is NOT an aboriginal site. Impact of this type of site does not require permit but Heritage NSW should be notified

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with a Buffer of 0 meters.. Number of Aboriginal sites and Aboriginal objects found is 39

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Archaeology
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Assessment and approvals
Management and compliance

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