

Our Ref: 4738_R02_SurveySummary

10 January 2020

Lee Shearer
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Dear Lee

Re: Outcomes of the archaeological survey undertaken at Wallarah, NSW

The Darkinjung Local Aboriginal Land Council (Darkinjung LALC) is proposing to rezone a part of existing Darkinjung LALC land holdings in Wallarah, NSW. The industrial rezoning area comprises Lots 1, 2 and Part Lot 3, DP 1156997, shown in **Plate 1.1**. Darkinjung LALC has engaged Umwelt Environmental and Social Consultants (Umwelt) to prepare an Aboriginal Cultural Heritage Assessment (ACHA) for the proposed rezoning. The key objective of this assessment is to ensure that the Aboriginal cultural values of the proposal area are appropriately assessed with reference to the approach specified in the *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW*, the consultation requirements and with the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales*. As part of the ACHA process, a survey of the proposed rezoning area has been undertaken in order to determine the potential impact to Aboriginal heritage. This letter provides preliminary results of the archaeological survey.

It is noted that this letter has not been subject to review to the Registered Aboriginal Parties and does not fulfill the requirements of an ACHA report.

1.0 Previous Assessment of the Project Area

Previous archaeological inspection and assessment of the project area has been undertaken by GML Heritage (2017). This due diligence assessment included a review of relevant environmental and archaeological contextual information and included a targeted inspection of part of the Darkinjung LALC Wallarah land holdings. GML Heritage (2017) identified varying levels of archaeological sensitivity within the assessment area, primarily linked to the nature of landforms and the extent of disturbance. In particular, two potential archaeological deposit (PAD) areas and one culturally modified tree were observed as having further archaeological potential or cultural significance. The two areas of PAD were described as an elevated crest near Wallarah Creek and a ridgeline/spur in the north-eastern part of the project area.

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Key recommendations of this assessment included the requirement to undertake further assessment and consultation in the form of an ACHA to inform any considerations of the development of the assessment area, including impact to the abovementioned areas of archaeological or cultural sensitivity.

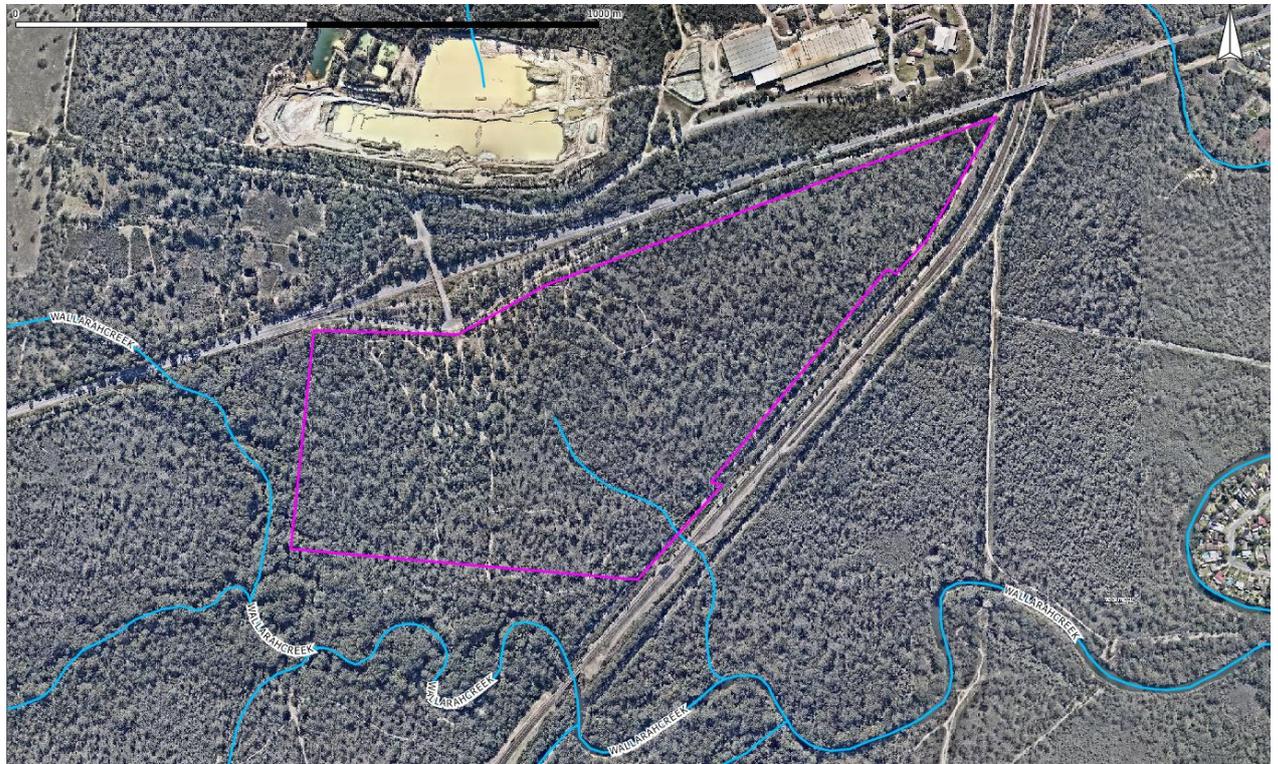


Plate 1.1 Wallarah rezoning project area (shown in pink).

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2.0 Archaeological Survey

A survey of the project area was undertaken by Umwelt representatives Ashley O’Sullivan and Nicola Roche, Tracey Howie and Baili Walker (representing ATOAC) and Barry Williams and Amanda Shields (Darkinjung LALC).

2.1 Methodology

A copy of a draft survey methodology was provided to the RAPs during the consultation process, with an opportunity to provide comment and feedback on the proposed survey program. The draft survey methodology is designed to ensure compliance with requirements for archaeological survey as established in the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (the Code of Practice). Based on the size of the project area, full coverage of the project area was proposed, noting that vegetation limited access and visibility in some areas. Two comments on the draft survey methodology were provided, both in support of the proposed methodology.

Survey units were defined and named with reference to Requirement 5c of the Code of Practice, including recording start and finish points and/or boundaries for all survey units using a hand-held GPS receiver (set to allow recording of data with datum MGA94) and topographic mapping (where relevant), with track logs to be recorded for all pedestrian transects.

Information recorded for each survey unit included:

- Landform (in units based on those established by McDonald et al 2009).
- Gradient (where relevant).
- Vegetation.
- Geology and soils (where suitable areas of exposure/visibility are present).
- Identified Aboriginal resources (food and medicine plants, prey animals, stone and water).
- Levels of average ground surface visibility within the survey unit (in accordance with the Requirement 9 of the Code of Practice).
- Extent and type of exposures within the survey unit (with reference to the factors leading to the exposure such as erosion, earth-moving activities, track establishment etc.)
- Any information provided by the registered Aboriginal parties in relation to cultural values, noting that such information will be recorded in accordance with the wishes of the party providing the information.
- Any site, area of Potential Archaeological Deposit (PAD) or landscape feature of Aboriginal cultural value present within the survey unit (see below for further information on site/PAD recording).

2.2 Results of the Archaeological Survey

The survey assessment of the project area was conducted on 18 December 2019 by Ashley O’Sullivan (Senior Archaeologist, Umwelt) and Nicola Roche (Manager – Cultural Heritage, Umwelt) along with representatives of both Awabakal Traditional Owners Aboriginal Corporation (Tracey Howie and Baili Walker) and the Darkinjung LALC (Amanda Shields and Barry Williams). The project area was divided into survey units according to both landform and location. Six survey units were identified within the project area (SU1 – SU6, refer to **Plate 2.1**). The ground surface visibility (GSV) and exposure were recorded and analysed for each survey unit, as shown in **Table 1**.

As identified by GML Heritage (2017), large parts of the project area have been subject to significant levels of disturbance through the creation of vehicle and walking tracks, as well as natural disturbances such as topsoil erosion. All survey units contained vehicle tracks that had been subject to significant disturbance or erosion. Information provided by representatives of the Darkinjung LALC on site also identified that areas where a sandy profile was observed on the tracks was primarily due to Darkinjung LALC undertaking significant sediment management of the tracks to ensure they were safe for pedestrian or vehicle movement. Ground surface visibility was generally low across areas away from these tracks, with heavy leaf litter and vegetation coverage present throughout.

The GML Heritage (2017) areas of archaeological sensitivity were reassessed during the survey, in order to understand if the conditions of the areas had changed since the initial assessment. The elevated area in proximity to Wallarah Creek (area between Location A and B identified by GML) was reidentified during the survey undertaken for the ACHA (located within SU3). While associated with one of the culturally sensitive sites identified during the 2017 inspection, the potential for subsurface deposits identified by GML was not observed during the 2019 survey. Exposures within areas subject to minimal disturbance (i.e. away from the existing tracks) were generally a skeletal topsoil with low potential for further subsurface deposits to remain. Similar conditions were observed on the ridgeline (Location C) identified by GML (2017). As this area of potential archaeological sensitivity

was identified based on topographic / contour mapping and not inspected in 2017, this area was thoroughly surveyed to better understand the landform. The area can be described as the crest of a gentle rise away from the banks of Wallarah Creek. The elevation of this crest did not provide significant visibility of the local area and with no water source nearby, likely would not have been an attractive location to Aboriginal people. While limited exposures were present in this area, where present, skeletal A₂ horizon soils were observed indicating that the potential for remnant subsurface deposits was low. All Aboriginal parties present during the survey were in agreement that while these areas may have been utilised by Aboriginal people in the past, the environmental conditions observed during the survey meant that it was highly unlikely evidence of this use remained in subsurface deposits.

It was agreed by all on the survey that the most likely site type to remain present would be low density artefact scatters, and while no Aboriginal objects were observed during the survey, management of unexpected finds of this nature should be including into management recommendations in the finalised ACHA. All registered Aboriginal parties will be given an opportunity to provide further feedback on the management recommendations for potentially unidentified sites within the review period of the ACHA.

The culturally sensitive site identified during the GML Heritage (2017) survey was reidentified during the 2019 survey. Further to this, a new site of a similar nature was identified and recorded during the survey. Both sites are located to the south of the current project area boundary, and from an archaeological perspective these sites will not be impacted upon with the proposed boundary. However, given the cultural nature of these sites, discussions were held on-site to better understand how to appropriately manage these sites within the proposed rezoning. Feedback provided on-site suggested that the current boundary of the project area was an appropriate distance from these sites, and that a hard fence line (i.e. fence with no public access) on the southern boundary should be implemented to ensure there is no inadvertent impact before, during or after rezoning and associated construction of the industrial area.

While no culturally modified trees were identified within the project, given the vegetation density of the project area, it was not possible to survey all trees. Similarly, mechanisms for managing unexpected finds of this nature will be built into the finalised ACHA in order to appropriately protect and manage Aboriginal cultural heritage. All registered Aboriginal parties will be given an opportunity to provide further feedback on the management recommendations of these identified sites and unexpected cultural sites within the review period of the ACHA.

2.3 Effective Coverage

Generally, the level of effective coverage within the project area was low. The main factor contributing to the low coverage was grass cover and leaf litter, rubbish and introduced fill material that limited exposure. Where tracks were present, the level of exposure was very high (between 90 and 100%), however these areas were generally eroded to hard-setting A₂ horizon soils or B horizon soils. In some cases where 4WD use of the project area was evident, this erosion exposed C horizon soils. As such, the survey units with the highest levels of effective coverage also represented the areas with the largest amount of tracks present.

Table 1 Effective survey coverage of the project area.

Survey Unit	Landform	Survey Unit Area	Visibility %	Exposure %	Effective Coverage Area	Effective Coverage Percentage
SU1		123,345 m ²	40%	50%	24,669 m ²	20%
SU2		52,849 m ²	10%	20%	1,056.98 m ²	2%
SU3		85,612 m ²	20%	30%	2,568.36 m ²	6%
SU4		84,790 m ²	10%	20%	1,695.8 m ²	2%
SU5		92,814 m ²	20%	20%	3,712.56 m ²	4%
SU6*		71,017 m ²	20%	40%	5,681.36 m ²	8%

*SU6 is located outside the project area and was included to appropriate cover the landform to the south of the project area (nearest to Wallarah Creek) and identify the culturally sensitive sites.

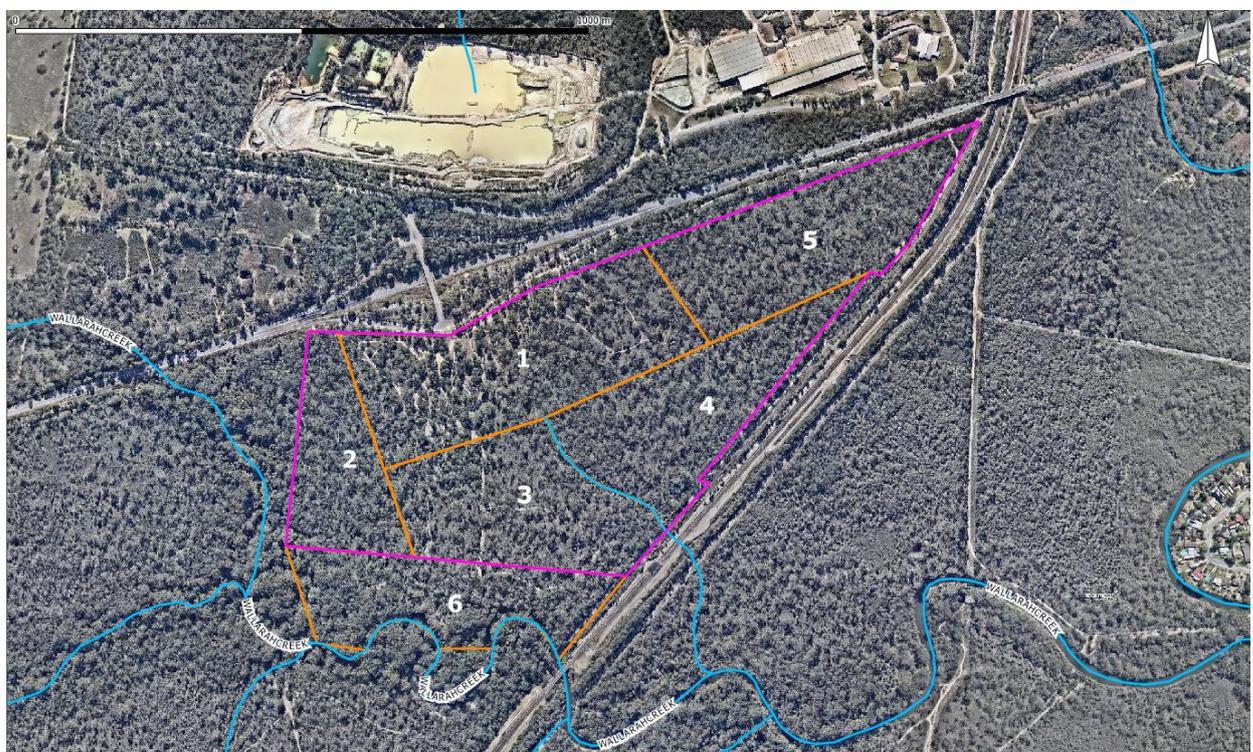


Plate 2.1 Survey units (in orange) within the Wallarah project area. The Wallarah rezoning project area is shown in pink.

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2.4 Summary of Results

Overall, the project area, while located in close proximity to Wallarah Creek and an associated tributary contained within, demonstrated low archaeological potential. These landforms within the project area were assessed as having low archaeological potential based on the lack of direct access to reliable water, the skeletal nature of the soil profile and, in some instances, the occurrence of substantial disturbance. No Aboriginal objects were observed during the survey.

Two culturally sensitive sites were observed during the survey, both located outside of the curtilage of the current rezoning footprint. While there is unlikely to be direct impact to these sites through the rezoning, mechanisms for the management of these sites (including limiting access to beyond the southern boundary) will be established to ensure that these sites can be appropriately maintained.

Mechanisms for managing these sites will be included in the finalised ACHA, which will include input from the registered Aboriginal parties.

3.0 Preliminary Outcomes of the Assessment

Based on the results of the survey and preliminary discussions with the Aboriginal parties on site, the following outcomes have been identified:

- Two culturally sensitive sites have been identified within close proximity to the project area (southern boundary). Rezoning plans should allow for a hard fence line at the southern boundary to limit access from the industrial estate to the Wallarah Creek banks. If possible, a locked gate should be installed with key access available to members of the Aboriginal community if necessary for access to the culturally sensitive sites.
- The proposed rezoning area has low archaeological potential and therefore the proposed rezoning is considered unlikely to lead to activities that result in harm to Aboriginal objects. As a result, rezoning of the project area should be able to proceed with no further archaeological investigation warranted.
- The finalised Aboriginal Cultural Heritage Assessment will provide mechanisms for unexpected finds such as unidentified/unexpected Aboriginal objects or previously unidentified culturally modified trees.
- All future organisations working on the site should ensure that its employees and contractors are aware that it is an offence under Section 86 of the NPW Act to harm or desecrate an Aboriginal object unless that harm or desecration is the subject of an Aboriginal Heritage Impact Permit (AHIP).

We trust this information meets with your current requirements. Please do not hesitate to contact the undersigned on 1300 793 267 should you require clarification or further information.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Ashley O'Sullivan', written in a cursive style.

Ashley O'Sullivan
Senior Archaeologist