



View north along the 330kV Electricity Transmission Line through the Study Area

ABORIGINAL DUE DILIGENCE ARCHAEOLOGICAL ASSESSMENT

**Industrial Subdivision of Lots 37 and 38 South Street
Marsden Park, Sydney NSW
Blacktown LGA**

February 2018

Report Prepared by
OzArk Environmental & Heritage Management Pty Ltd
For
Intercapital Consultants



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Acknowledgement

OzArk acknowledge Traditional Owners of the area on which this assessment took place and pay respect to their beliefs, cultural heritage and continuing connection with the land. We also acknowledge and pay respect to the post-contact experiences of Aboriginal people with attachment to the area and to the elders, past and present, as the next generation of role models and vessels for memories, traditions, culture and hopes of local Aboriginal people.

EXECUTIVE SUMMARY

OzArk Environmental & Heritage Management has been engaged by Intercapital Consultants (the client), on behalf of Jones Lang LaSalle (JLL) (the proponent) to complete a Due Diligence archaeological assessment for the proposed industrial subdivision of Lots 37 and 38 South Street in Marsden Park, Sydney NSW (the study area). This report examines the proposed work associated with the subdivision of Lots 37 and 38 South Street (the proposal). The proposal is situated within the Blacktown Local Government Area.

The desktop assessment found that five Aboriginal heritage sites were recorded as located within the study area and that other Aboriginal objects could exist in the study area, particularly on landforms identified as having Aboriginal archaeological potential. Such landforms could exist in the study area and are not able to be avoided; therefore, visual inspection of the study area was undertaken by OzArk Principal Archaeologist, Dr Jodie Benton, on Wednesday 13 December 2017.

No new Aboriginal sites were recorded as a result of the field assessment, however five previously recorded AHIMS sites were attempted to be located. These sites include an artefact scatter, South St 1 (45-5-4904), an isolated artefact, SROS5 (45-5-2384) and a PAD, MPIP PAD 3 (45-5-4620). MPIP 21 (45-5-3752) is partially located within the current study area. The isolated artefact site MPIP 20 (45-5-3751) was not located at its recorded coordinates and is believed to instead be situated further to the south outside of the study area.

To date there is no specific impact footprint for the proposed subdivision although overall, subdivision of the land is likely to result in impacts to the recorded sites.

Where the Due Diligence assessment indicates that there are Aboriginal objects in the area of the proposed activity that may be harmed, as has been demonstrated here, then more detailed investigation and impact assessment is required. This assessment will take the form of an Aboriginal Cultural Heritage Assessment Report (ACHAR) and is required to support any AHIP application.

If after this detailed investigation and impact assessment it is clear that harm will occur to Aboriginal objects then an AHIP application must be made. All AHIP applicants must undertake Aboriginal community consultation in accordance with clause 80C of the *NPW Regulation*, which is described in the guiding document *Aboriginal cultural heritage consultation requirements for Proponents 2010* (DECCW 2010).

Based on the previous assessment reports as summarised in this document and the result of the current Due Diligence assessment, it is anticipated that the AHIP application required for the Marsden Park Industrial subdivision of Lots 37 and 38 would include:

- All sites not previously subject to an AHIP. This would include SROS5 (45-5-2384) and South St 1 (45-5-4904).
- There would need to be consultation with OEH or Blacktown Council as to the progress of the AHIP application for MPIP PAD 3 (45-5-4620) and MPIP 21(45-5-3752) to determine whether they will be destroyed prior to the subdivision project or will need to be included in the AHIP required for this project.
- Consultation will be required with OEH and AHIMS as to whether they will accept the altered coordinates for site MPIP 20, which place it outside the current study area. If not, this site will also need to be included in the AHIP application.

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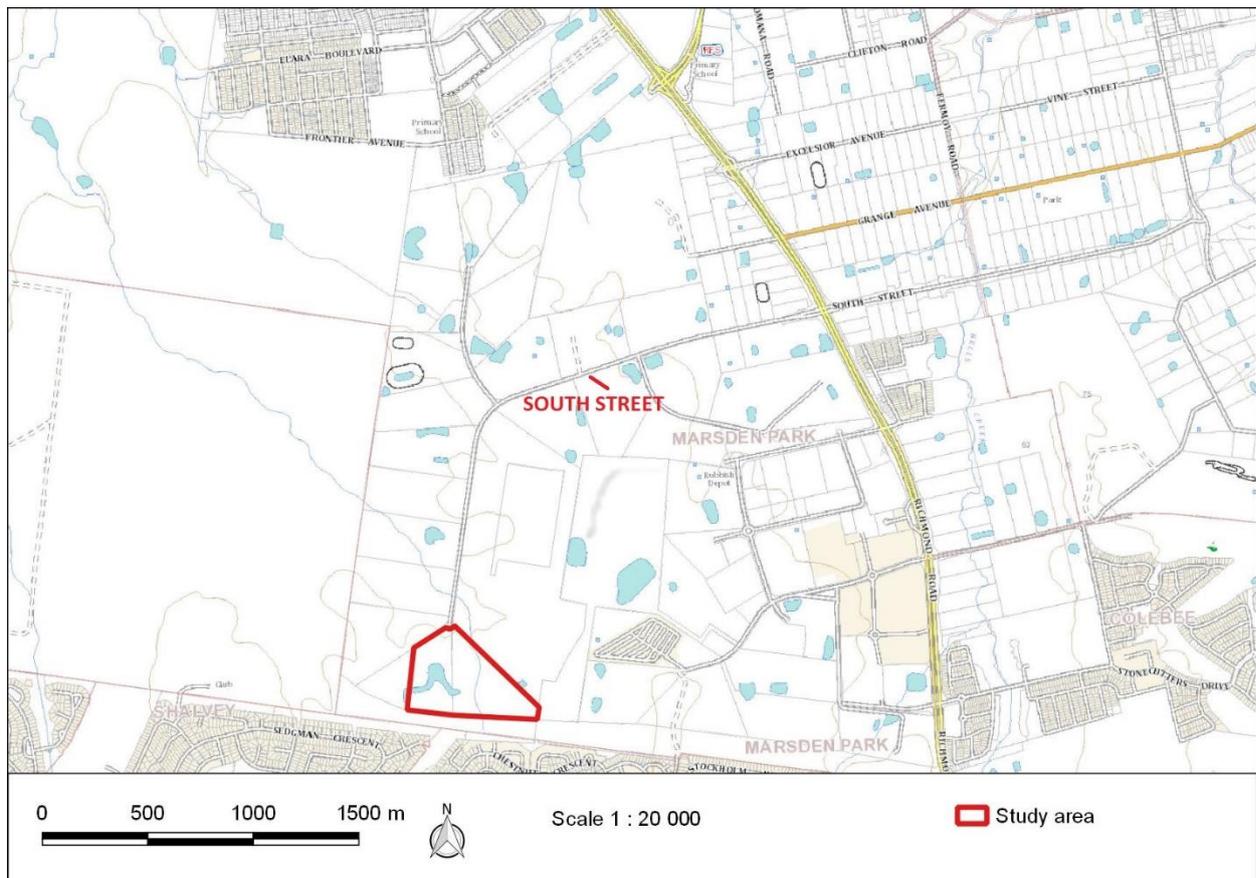
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1 INTRODUCTION

1.1 BRIEF DESCRIPTION OF THE PROPOSAL

OzArk Environmental & Heritage Management has been engaged by Intercapital Consultants (the client), on behalf of Jones Lang LaSalle (JLL) (the proponent) to complete a Due Diligence archaeological assessment for the proposed industrial subdivision of Lots 37 and 38 South Street in Marsden Park, Sydney NSW (the study area). This report examines the proposed work associated with the subdivision of Lots 37 and 38 South Street (the proposal). The proposal is situated within the Blacktown Local Government Area (LGA) (**Figure 1-1**).

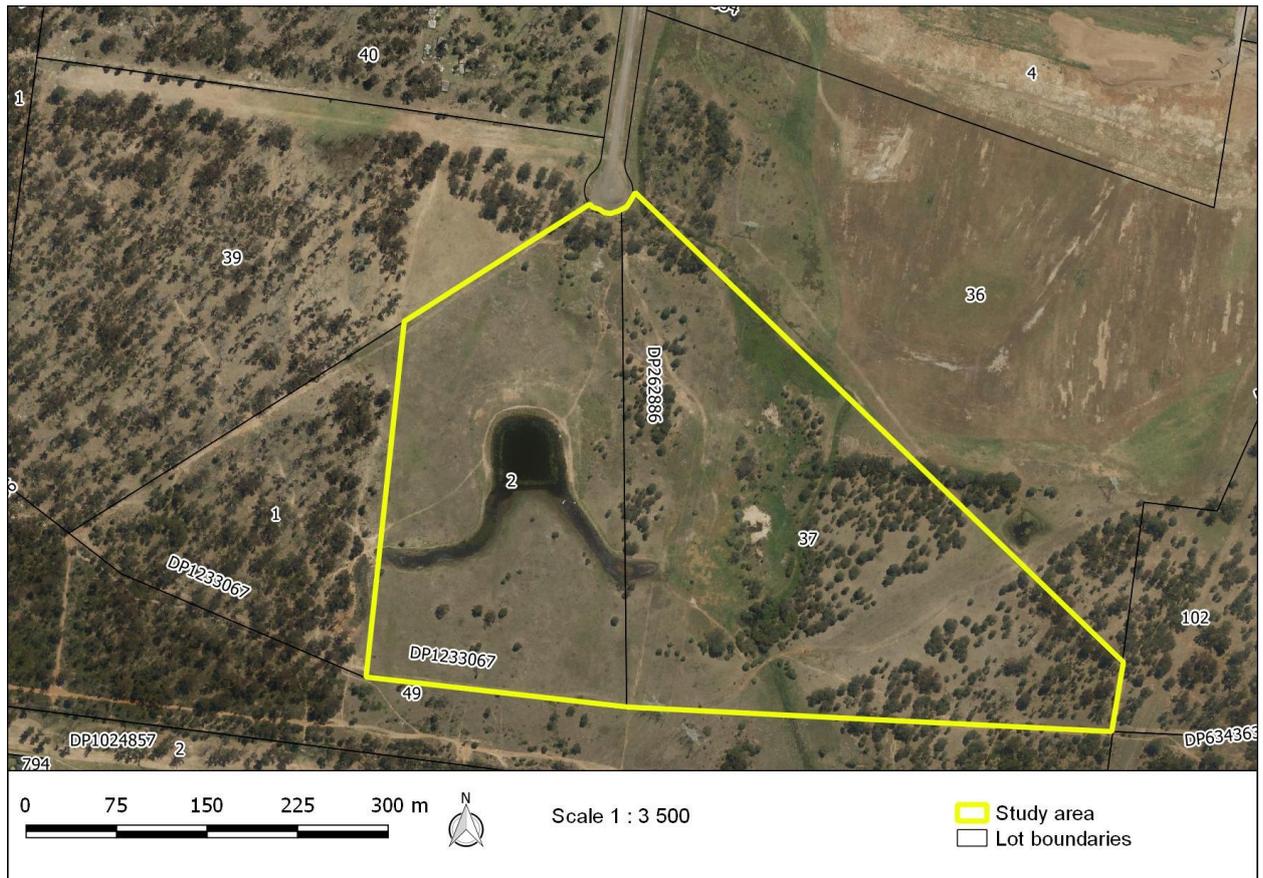
Figure 1-1. Location of the study area in relation to South Street.



1.2 STUDY AREA

The study area includes Lot 37 DP 262886 and Lot 2 DP 1233067 (formerly part of lot 38) South Street, which encompasses approximately 17.4 hectares of land located about 9.5 kilometres northwest of Blacktown off Richmond Road (**Figure 1-2**).

Figure 1-2: Aerial showing the study area with cadastral details.



1.3 ASSESSMENT APPROACH

The desktop and visual inspection component for the study area follows the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales* (Due Diligence; DECCW 2010). The field inspection followed the *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in New South Wales* (OEH 2011).

2 DUE DILIGENCE ASSESSMENT

2.1 INTRODUCTION

The National Parks and Wildlife Regulation 2009 (NPW Regulation) made under the *National Parks and Wildlife Act 1974* (NPW Act) advocates a Due Diligence process to determining likely impacts on Aboriginal objects. Carrying out Due Diligence provides a defence to the offence of harming Aboriginal objects and is an important step in satisfying Aboriginal heritage obligations in NSW.

2.2 DEFENCES UNDER THE NPW REGULATION 2009

2.2.1 Low impact activities

The first step before application of the Due Diligence process itself is to determine whether the proposed activity is a “low impact activity” for which there is a defence in the NPW Regulation. The exemptions are listed in Section 80B (1) of the NPW Regulation (DECCW 2010: 6).

The proposal is not considered to be a ‘low impact activity’ and therefore, the Due Diligence process must be applied.

2.2.2 Disturbed lands

Relevant to this process is the assessed levels of previous land-use disturbance.

The NPW Regulation Section 80B (4) (DECCW 2010a: 18) define disturbed land as follows:

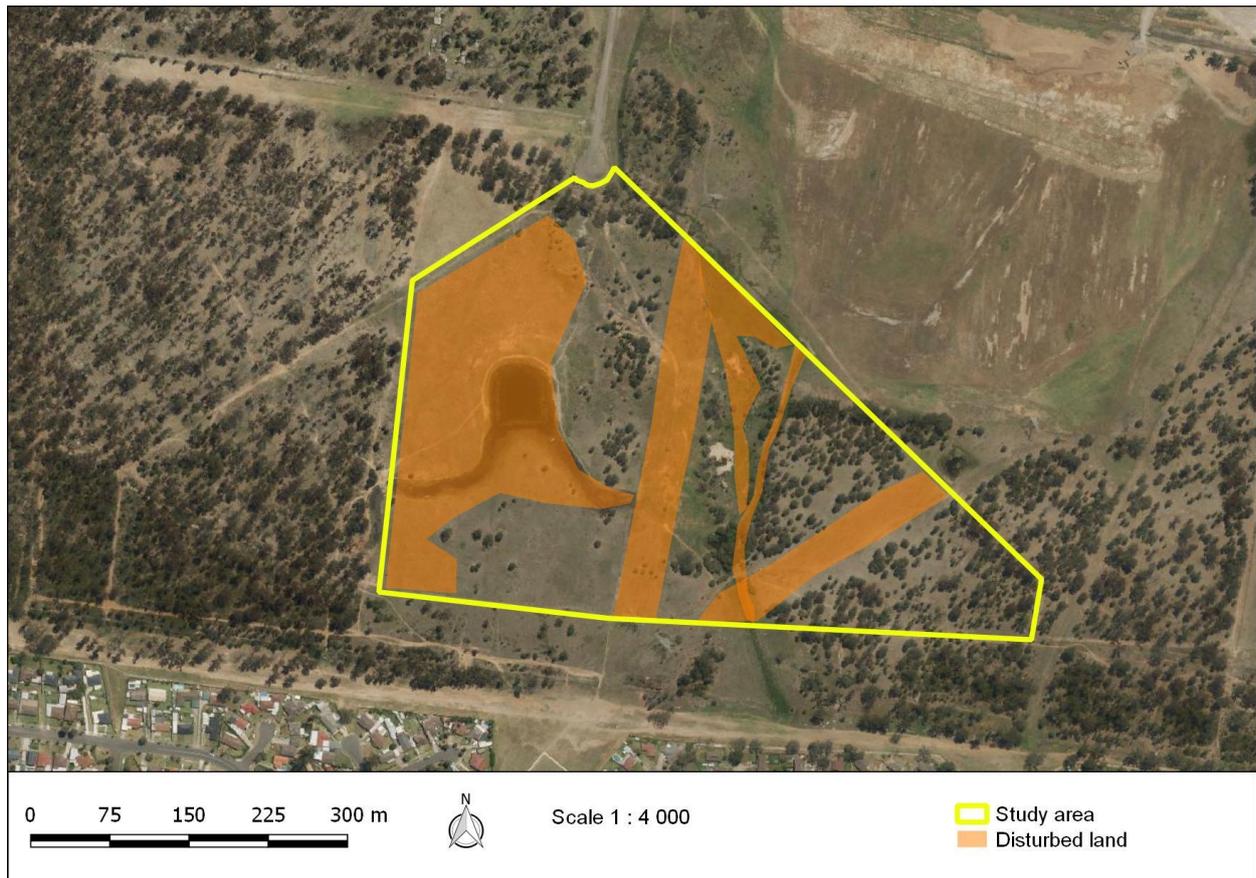
Land is disturbed if it has been the subject of a human activity that has changed the land’s surface, being changes that remain clear and observable.

Examples include ploughing, construction of rural infrastructure (such as dams and fences), construction of roads, trails and tracks (including fire trails and tracks and walking tracks), clearing vegetation, construction of buildings and the erection of other structures, construction or installation of utilities and other similar services (such as above or below ground electrical infrastructure, water or sewerage pipelines, stormwater drainage and other similar infrastructure) and construction of earthworks.

Figure 2-1 maps those portions of the study area which fall under the NPW Regulation definition of ‘disturbed land’ and those where the Due Diligence process must be applied further, as the level of disturbance to the ground surface cannot be seen in a clear and observable manner. The area shown to be ‘disturbed land’ in **Figure 2-1** include those impacted by: grazing, vehicle tracks, drainage construction and associated earthworks, stormwater management works and the installation of electricity transmission lines. Those areas identified as ‘disturbed’ require no further assessment under the Due Diligence process. The remainder of the study area has been subject

to lower levels of disturbance and were visually assessed. This area has been largely cleared of vegetation, primarily associated with the electricity easements and historical agriculture. A drainage feature traverses the central portion of the study area, following a primarily north to south alignment. Remnant trees exist throughout the study area in patches of open woodland in the southeastern, central and northern portions of the study area. Several ungraded access tracks traverse the borders and central portion of the study area at various alignments.

Figure 2-1: Aerial of the study area showing portions defined as ‘disturbed land’.



2.3 APPLICATION OF THE DUE DILIGENCE CODE OF PRACTICE TO THE PROPOSAL

To follow the generic Due Diligence process, a series of steps in a question/answer flowchart format (DECCW 2010: 10) are applied to the proposed impacts and the study area, and the responses documented.

2.3.1 Step 1

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

Yes. The proposal involves the subdivision of Lot 37 and Lot 38 in preparation for future industrial development. The subdivision of land is a local government administrative procedure that does not in itself involve surface ground disturbance and will not affect any culturally modified trees. However, industrial development is proposed to occur after the subdivision is complete and this

development will disturb the ground surface and could affect culturally modified trees, if present. This assessment takes into consideration the impacts associated with subsequent industrial development across the entirety of the study area.

2.3.2 Step 2a

Are there any relevant confirmed site records or other associated landscape feature information on AHIMS?

Yes. A search of the Office of Environment and Heritage (OEH) administered Aboriginal Heritage Information Management System (AHIMS) database was conducted on 8 December 2017. The search encompassed a 1.1 kilometre by 0.7 kilometre area, centred on the study area. The AHIMS search returned 14 Aboriginal sites within the search area (**Appendix 1**). The results are summarised in (**Table 1**) and site locations and types are plotted in (**Figure 2-2**) in relation to the study area.

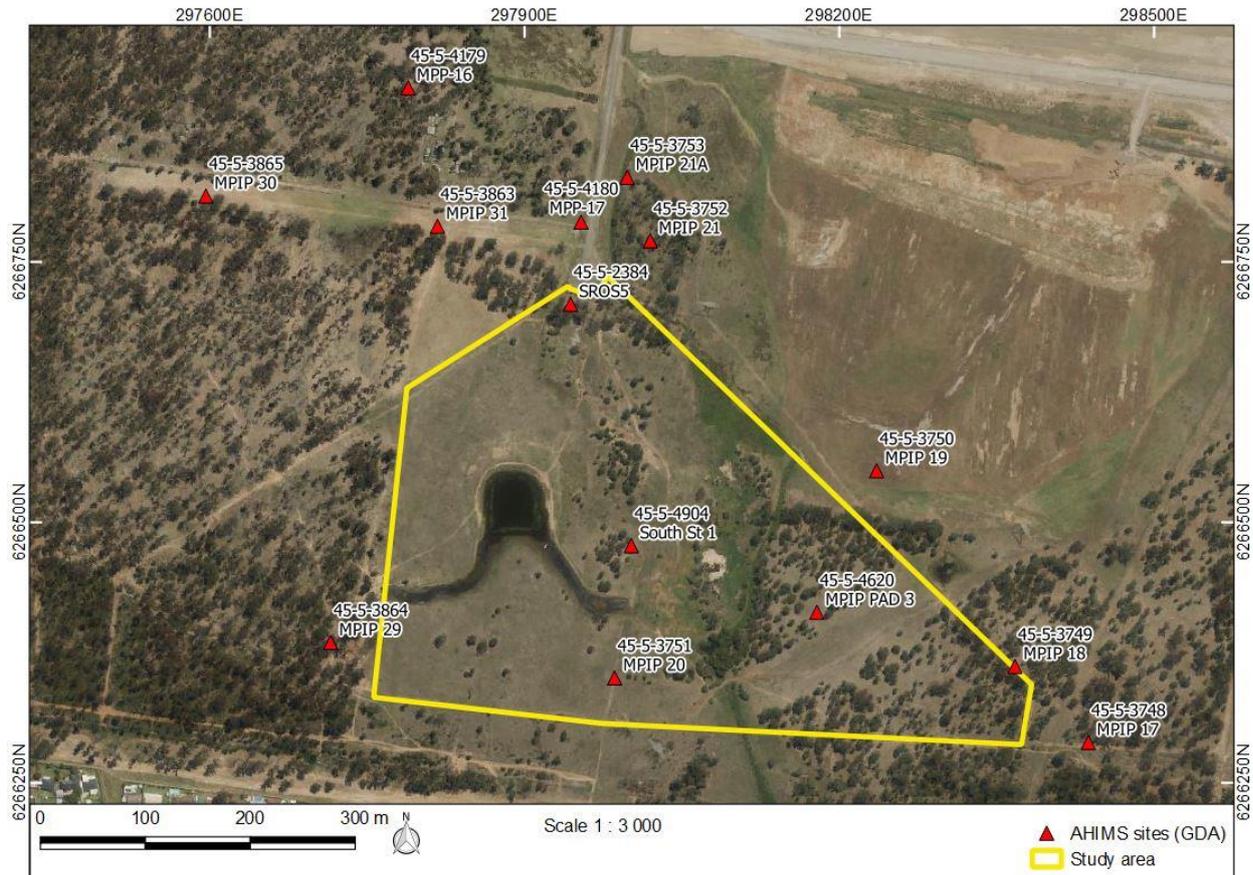
Artefact scatters are the dominant site type, comprising 64% of recorded AHIMS sites, followed by isolated finds (21%). Most of these lithic sites are located within or adjacent to wooded areas where exposures of visible ground surface are present. The single PAD (45-5-4620) is located on a gentle rise / low spur landform within 100m of the unnamed drainage feature.

Table 2-1: AHIMS site types and frequencies.

Site Type	Number	% Frequency
Artefact scatter	9	64%
Isolated find	3	21%
Open camp site	1	7%
Potential Archaeological Deposit (PAD)	1	7%
Total	14	

Of these sites, four are recorded as located directly within the proposed study area. These are an open camp site (45-5-2384), an artefact scatter (45-5-4904), an isolated find (45-5-3751), and the PAD (45-5-4620). In addition to these, another open camp site (45-5-3752) was found through desktop assessment to have incorporated a subsurface deposit which extends into the boundaries of the current study area.

Site descriptions of these sites are outlined below and derive from previous assessment reports.

Figure 2-2: The study area in relation to previously recorded sites.

South St 1

AHIMS Site ID: 45-5-4904

Site Type: Artefact scatter

Recorded Location of Site: South St 1 is located within Lot 37 on an exposed surface approximately 275m south of the South Street cul-de-sac and 150 north of the transmission easement (**Figure 2-2**).

Description of Recording: This site was recorded on 20th Mar 2017 by Eco Logical Australia Pty Ltd as an artefact scatter. The site consisted of a red silcrete core and a non-artefactual red silcrete angular fragment.

MPIP PAD 3

AHIMS Site ID: 45-5-4620

Site Type: Potential archaeological deposit (PAD)

Recorded Location of Site: MPIP Pad 3 is located within Lot 37 on a slight regrowth-covered rise on the northwest side of the transmission easement (**Figure 2-2**).

Description of Recording: This site was recorded during August 2008 by Kelleher Nightingale Consulting Pty Ltd as a potential archaeological deposit (PAD) and later reported in Kelleher Nightingale Consulting 2009. This site comprised 2ha of a mid-lower slope and was described as being in relatively good condition despite being affected by vegetation clearance. The PAD was later test excavated in seven 0.5 x 0.5m squares and one 1 x 1m square by Eco Logical Australia Pty Ltd (2017) to define its subsurface extent. This excavation found that the deposit extended several metres west of the AHIMS coordinates. The excavated material was recorded as revealing a low density artefact scatter with varying levels of integrity. This evidence of disturbance at depth coupled with the commonly-identified nature of the site, led Eco Logical to conclude that they had achieved a sufficient sample to characterise the site and to assess it as being of low scientific significance. (An AHIP has been sought for this site in relation to the stormwater works for which this assessment was carried out. As such, this site will (or is likely to) be further impacted before the current proposed subdivision takes place.

MPIP 20

AHIMS Site ID: 45-5-3751

Site Type: Isolated find

Recorded Location of Site: MPIP 20 was recorded as located on a cleared slope within a vehicle track in the southwest corner of lot 37 10m west of the transmission easement (**Figure 2-2**). A photograph was also included with the AHIMS site card to assist with location (**Plate 10**).

Description of Recording: This site was recorded on 27th Aug 2009 by Kelleher Nightingale Consulting Pty Ltd as an isolated find. The site consisted of a single red silcrete distal flake and was described as being in an area of poor ground exposure, surrounded by moderate-dense ground cover.

SROS5

AHIMS Site ID: 45-5-2384

Site Type: Open camp site

Recorded Location of Site: SROS5 is located within revegetated open forest approximately 50m southwest of the South Creek tributary on a track/driveway at the end of South Street cul-de-sac, within Lot 2 (38) (**Figure 2-2**).

Description of Recording: This site was recorded on 30th Oct 1996 by Australian Museum Business Services as an open camp site. The site consisted of an isolated, silcrete flake and was described as being situated in an area subject to high previous

ground disturbance relating to historical clearing, erosion, and grazing. A 2012 Aboriginal Heritage assessment of the greater Marsden park Precinct performed by Kelleher Nightingale Consulting Pty Ltd confirmed SR-OS-5 as a previously identified site, however this site was not re-recorded in the report (Kelleher Nightingale Consulting 2012).

In addition to those sites recorded in AHIMS as being situated within the current study area, another open camp site (45-5-3752) was found through a desktop assessment to have incorporated a subsurface deposit which extends into the boundaries of the current study area.

MPIP 21 and MPIP 21a

AHIMS Site ID: 45-5-3752 & 45-5-3753

Site Type: Open camp site and PAD

Recorded Location of Site: MPIP 21 is located in lot 36 on a flat lower slope context bounded by South Street to the west, the modified drainage line to the south and the transmission easement to the east, (**Figure 2-2**).

Description of Recording: This site was recorded on 27th Aug 2009 by Kelleher Nightingale Consulting Pty Ltd as an open camp site and PAD. The site consisted of four red silcrete flakes and a deposit comprising 0.9ha of a slight, regrowth-covered rise. The site was described as being in moderate condition with a small degree of sheet wash erosion on the western border related to the modified drainage. During 2017, Eco Logical Pty Ltd conducted and reported on test excavations across the site to confirm the presence of an archaeological deposit and to define its extent. This excavation involved twenty-five 0.5 x 0.5m squares and two 1 x 1m squares, recording over 50 artefacts. Only the southwestern-most 0.5 x 0.5m square is located in the current study area and it recorded subsurface artefacts at low density. Eco Logical concluded that these findings reflected one continuous deposit extending several metres to the south of the AHIMS coordinates. The site was assessed as having moderate scientific significance. An AHIP is purported to have been sought for this site in relation to the works for the stormwater project for which this assessment was carried out. As such, this site will (/is likely to) be further impacted before the current proposed subdivision takes place.

2.3.3 Step 2b

Are there any other sources of information of which a person is already aware?

Previous assessments in close proximity to the current study area

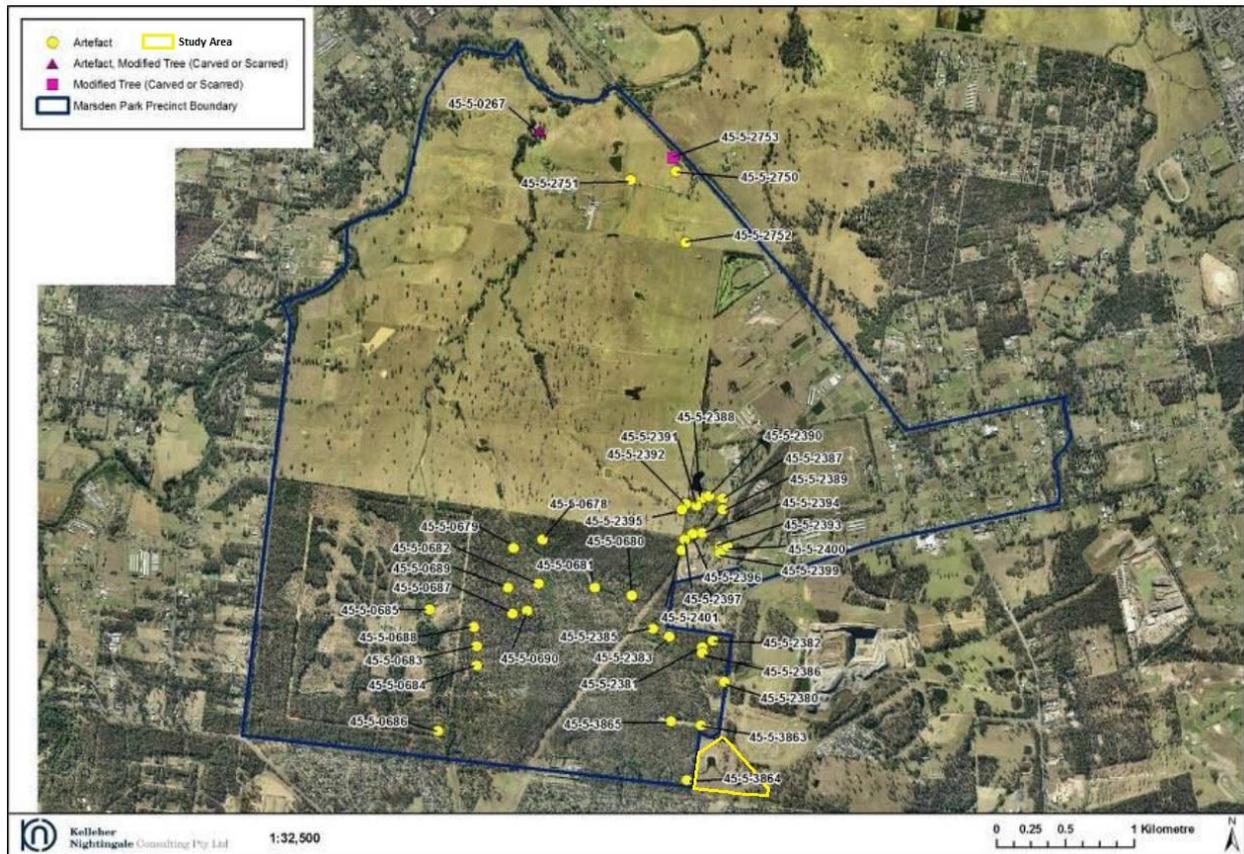
A 2012 assessment carried out by Kelleher Nightingale Consulting Pty Ltd surveyed approximately 1700 hectares of land (**Figure 2-3**) directly abutting the current study area. This assessment's study area was described as having overall low ground surface visibility (GSV) with

sections subject to variable levels of dam construction, infrastructure establishment, land clearance and agriculture activity. South Creek, a third order permanent water source, abuts the northwestern boundary. In addition, several tributaries of South Creek traverse the assessment's study area by various alignments. This assessment identified 43 previously recorded Aboriginal archaeological sites and recorded 24 new sites within its study area, including 44 open artefact scatters, 15 isolated artefacts, 6 artefact scatters, and 2 scarred trees. Sites were most likely to be recorded in open contexts nearest to permanent or semi-permanent water sources, however, sites with the best archaeological integrity and highest scientific significance were recorded in raised areas outside of flood prone lands. The assessment also identified good lithic raw material sources in its study area, including natural silcrete gravels and clasts of chert. The report's findings were consistent with these being dominant raw materials of sites in the area. Other recorded raw materials included quartz, tuff and mudstone. Registered Aboriginal stakeholders consulted during the 2009 assessment expressed the wish for Marsden Park to be recognised as a significant area, emphasising that all sites are of cultural value and are significant to the contemporary Aboriginal community.

It is noted that no Aboriginal community members accompanied the current visual inspection, as it was a due diligence assessment.

As previous archaeological investigations have recorded sites within similar, nearby, landforms, the response to Step 2b is **yes**.

Figure 2-3: Location of previously identified sites in relation to the study area and previously assessed areas (adapted from Kelleher Nightingale 2012).



2.3.4 Step 2c

Are there any Landscape features that are likely to indicate presence of Aboriginal objects?

The Study Area falls within the Sydney Basin Bioregion, within the Cumberland ecosystem, and is comprised wholly of the Cumberland Plain landscape unit (Mitchell 2002: 71) (**Figure 2-4**).

The Cumberland Plains landscape unit comprises the low rolling hills and valleys between the coast and Blue Mountains (Mitchell 2002:71). Landscape relief is up to 50m with general elevation ranging 30 to 120m.

The geology of the Cumberland Plains is characterised by lithic sandstones and Triassic shales with Quaternary alluvium along the main streams. Cumberland Plains are partially covered by Tertiary river sands and gravels, and intruded infrequently by volcanic vents. Sedimentology of this landscape unit is typically red to brown clays on volcanic hills with red-brown texture-contrast soils on crests grading to yellow harsh texture-contrast soils in the valleys (Mitchell 2002:71).

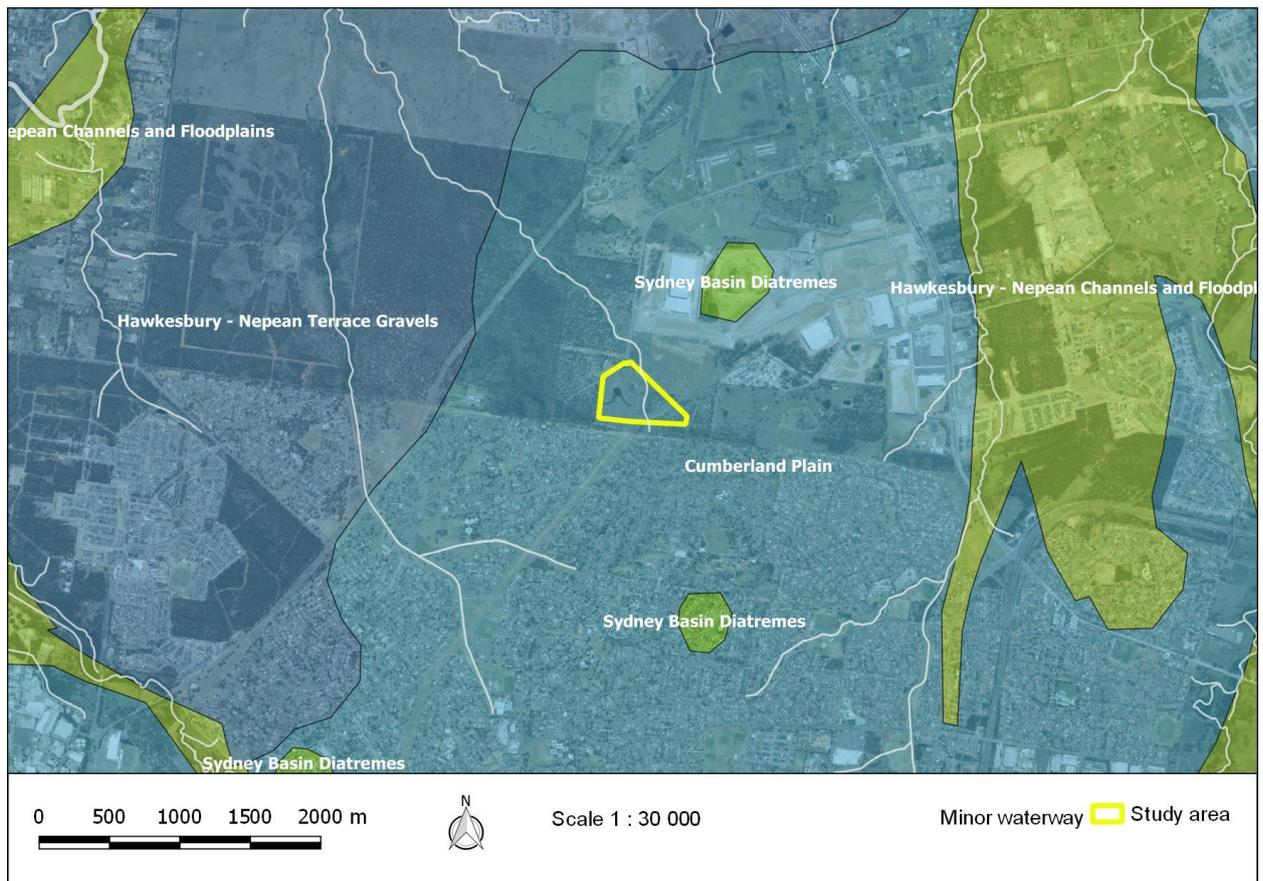
The study area is a generally flat landscape sloping towards South Creek to the north and drainage features within the study area are limited to the modified drainage line traversing the western portion of lot 37. This feature is an ephemeral first order tributary of South Creek, running along a generally north to south alignment (**Figure 2-4**). Vegetation communities present within

the study area are largely native regrowth in isolated stands or patches of open forest separated by derived grasslands of the Sydney Basin. Several stands of regrowth protect small rises from erosion between the transmission easements and drainage line.

Through examination of the landscape features present and previous assessments completed in close proximity to the study area, it is predicted that there is a moderate potential for Aboriginal sites to be present. However, considering the history of intensive previous archaeological projects being conducted in the immediate and surrounding areas, the likelihood of new sites being recorded is reduced. If new sites are recorded, artefact scatters and isolated finds are expected to be the most likely site types encountered, with scarred trees highly unlikely considering the intensity of local clearing. Artefacts are most likely to have been manufactured from silcrete and would be expected to be most frequently encountered adjacent to the modified drainage line or on exposures within the wooded rises. PADs may be relatively *in situ*, especially at depth, however previous disturbances across the study area such as widespread clearance, erosion, transmission line construction, dam construction and drainage modification decrease this possibility. Quarries for the procurement of raw materials used to manufacture stone tools, likely silcrete, are possible if suitable sources of outcropping stone exist in the study area.

As the study area includes landforms that have the potential to contain Aboriginal sites, the response to Step 2c is **yes**.

Figure 2-4: Landscape classifications of the study area (source State Government of NSW and Office of Environment and Heritage (OEH) 2016).



2.3.5 Step 3

Can harm to Aboriginal objects listed on AHIMS or identified by other sources of information and/or can the carrying out of the activity at the relevant landscape features be avoided?

No. Several Aboriginal sites identified through the AHIMS search occur within the proposed impact footprint. In addition, the presence of relevant landscape features, including an ephemeral watercourse and gentle elevations that have not been universally subject to high levels of disturbances, increase the potential for Aboriginal archaeological heritage. As such, a visual inspection of the study area is required to determine whether harm is likely to occur. This would involve confirmation of the location and condition of identified AHIMS sites and assessment of the likelihood of Aboriginal objects existing within relevant landforms.

2.3.6 Step 4

Does a desktop assessment and visual inspection confirm that there are Aboriginal objects or that they are likely?

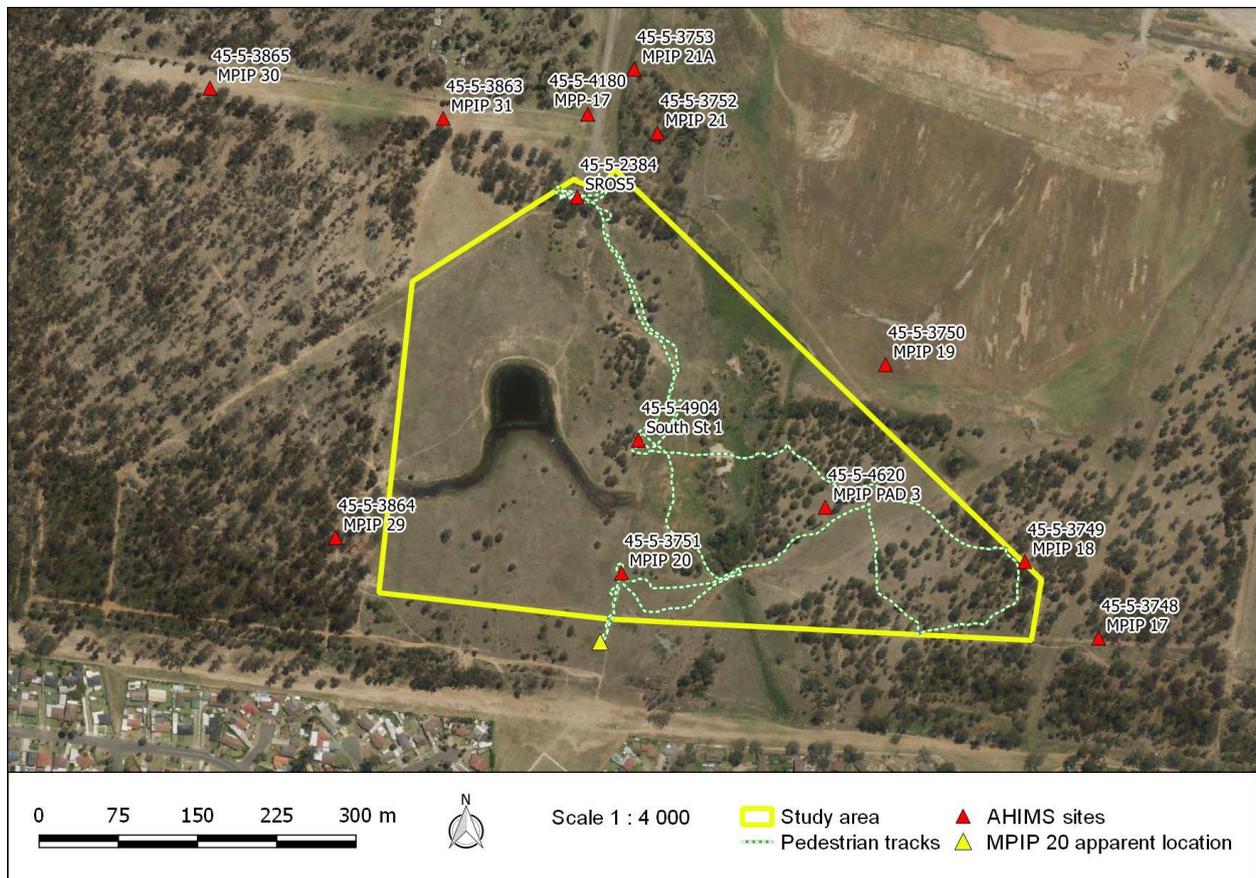
Yes. The visual inspection of the study area was undertaken by OzArk Director and Archaeologist, Dr Jodie Benton, on Wednesday 13 December 2017. Standard archaeological field survey and recording methods were employed (Burke and Smith 2004). The locations of

previously identified sites and features of low or unknown disturbance intensity were selectively targeted. Emphasis was placed upon areas with adequate exposure and GSV, and landforms identified as having greater Aboriginal archaeological potential.

Exposures across the study area were uncommon (5%) primarily afforded by sheet wash erosion, vehicle tracks, contour banks, ant hills and animal burrows (**Plate 1**). Visibility within exposures was impeded by leaf litter, bark, branches and small rocks, resulting in an average GSV of approximately (10%). Outside areas of exposure, the study area was largely comprised of moderate to thick grass cover or patches of open forest (**Plate 2**). No mature trees were identified within the study area, which primarily contained regenerating vegetation (**Plate 3**).

Pedestrian track data and site data were captured via handheld GPS as shown in **Figure 2-5**.

Figure 2-5: Survey coverage in relation to study area.



Discussion

The physical inspection of the study area succeeded in re-recording three of the five sites previously recorded as being located in the study area, SROS5 (45-5-2384), South St 1 (45-5-4904), and MPIP PAD 3 (45-5-4620). Notes on the other sites are also included below.

At SROS5, the single red silcrete flake was located and re-photographed, with its context found to be in a similar condition to that previously described (Plates 4 & 5).

At South St 1, the single red silcrete core fragment was located, however the recorded non-artefactual angular fragment could not be re-identified (Plate 6). The site context was found to be in a similar condition to that described (Plate 7).

At MPIP PAD 3, the extent of the deposit and previous test pitting was confirmed. With the exception of evidence of excavation related to this past work, the site was found to be in a similar condition to that described (Plate 8). The test excavations carried out at this site by Eco Logical in 2017 recorded 17 artefacts recovered from the excavation of 13 pits – a very low density. The conclusions of this assessment in regards to this site were that it had low archaeological significance and would suffer total impact from the stormwater project (Eco Logical 2017: 60). As a result an AHIP without salvage was recommended over it.

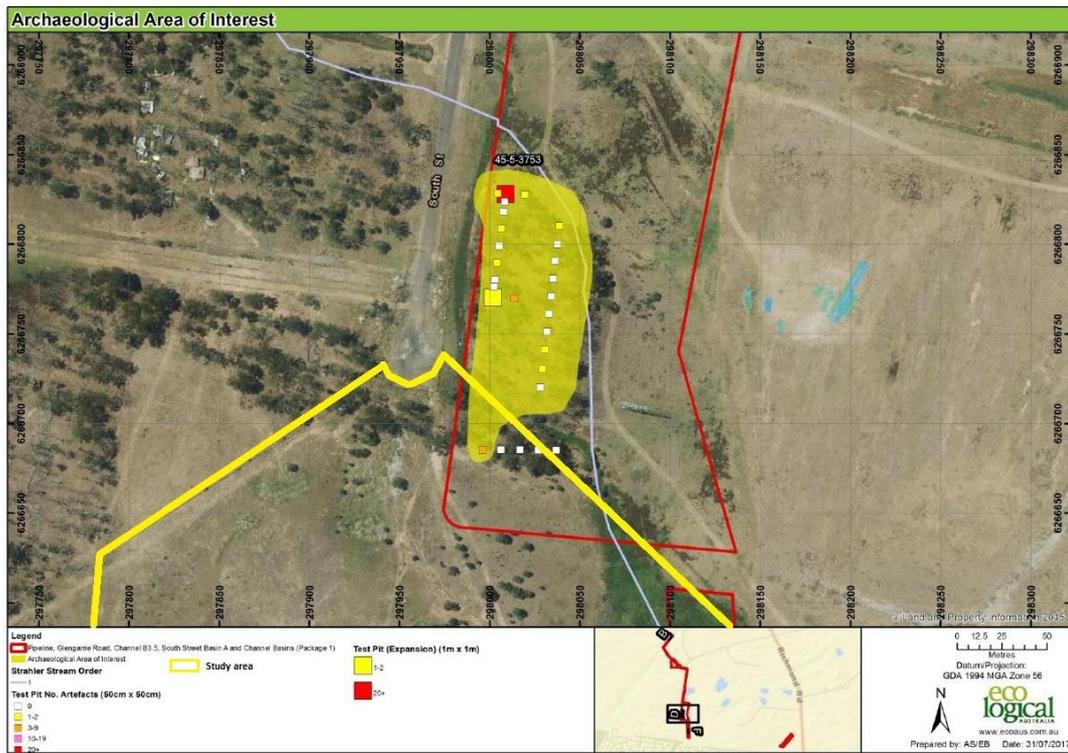
The coordinates of MPIP 20 (45-5-3751) were visited, however the recorded single red silcrete distal flake could not be located. In addition, when utilising the context photography attached to the AHIMS site card, the apparent location of the site was found to be over 70m away to the south, outside of the study area on the opposite side of the fence (**Figure 2-5, Plates 8, 10 and 11**). This suggests that the coordinates recorded with AHIMS may be in error, however the site's artefact could not be located to confirm this.

During this survey, MPIP 18 (45-5-3749) was also visited and confirmed to be located outside of the study area on the opposite side of the fence on a vehicle track (**Figure 2-2, Plate 12**).

Figure 2-6 shows the proposed stormwater project impact footprint (red) in relation to the results of test excavations at MPIP 21 (coloured squares) and to the current study area (yellow). The portion of MPIP 21 reported to extend into the study area was visited, however clear evidence of past excavation squares could only be partially identified and the extent of subsurface deposits could obviously not be visually confirmed.

The test excavation programme over this site by Eco Logical in 2017 excavated a transect of five pits within the current study area (transect E). This transect comprised 5 test excavation pits from which 3 artefacts only were retrieved, a very low density. Like MPIP PAD 3, Eco Logical deemed this site to have low archaeological significance and that it would be totally impacted by the proposed stormwater project (Eco Logical 2017: 60). As a result an AHIP without salvage was recommended over it.

Figure 2-6: MPIP 21 archaeological area of interest in relation to study area (adapted from Eco Logical 2017).



3 SUMMARY AND CONCLUSIONS

The undertaking of the Due Diligence process resulted in five previously recorded Aboriginal sites being reassessed. No new Aboriginal sites were recorded.

To date there is no specific impact footprint for the proposed subdivision although overall, subdivision of the land is likely to result in impacts to the recorded sites.

Where the Due Diligence assessment indicates that there are (or are likely to be) Aboriginal objects in the area of the proposed activity that may be harmed, then more detailed investigation and impact assessment will be required. This assessment will take the form of an Aboriginal Cultural Heritage Assessment Report (ACHAR) and is required to support any AHIP application.

If after this detailed investigation and impact assessment it is clear that harm will occur to Aboriginal objects then an AHIP application must be made. All AHIP applicants must undertake Aboriginal community consultation in accordance with clause 80C of the *NPW Regulation*, which is described in the guiding document *Aboriginal cultural heritage consultation requirements for Proponents 2010* (DECCW 2010).

Based on the previous assessment reports as summarised in this document and the result of the current Due Diligence assessment, it is anticipated that the AHIP application required for the Marsden Park Industrial subdivision of Lots 37 and 38 would include:

- All sites not previously subject to an AHIP. This would include SROS5 (45-5-2384) and South St 1 (45-5-4904).
- There would need to be consultation with OEH or Blacktown Council as to the progress of the AHIP for MPIP PAD 3 (45-5-4620) and MPIP 21(45-5-3752) to determine whether they will be destroyed prior to the subdivision project or will need to be included in the AHIP required for this project.
- Consultation will be required with OEH and AHIMS as to whether they will accept the altered coordinates for site MPIP 20, which place it outside the current study area. If not, this site will also need to be included in the AHIP application.

REFERENCES

- Burke and Smith 2004 Burke, Heather and Claire Smith. 2004. *The Archaeologist's Field Handbook*. Allen & Unwin, Sydney.
- DECCW 2010 Department of Environment, Climate Change and Water, Sydney (now OEH). *Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW*.
- DECCW 2010b Department of Environment, Climate Change and Water, Sydney (now OEH). *Aboriginal Cultural Heritage Consultation Requirements for Proponents*.
- Eco Logical Australia 2017 Eco Logical Australia Pty Ltd. 2017 Aboriginal Cultural Heritage Assessment Report: *Marsden Park Industrial Precinct S94 Stormwater Infrastructure Works, Package 1*. Report to Blacktown City Council.
- Kelleher Nightingale 2012 Kelleher Nightingale Consultants Pty Ltd. 2012 *Aboriginal Heritage Assessment: Marsden Park Precinct North West Growth Centre*. Report to Winten Property Group and Department of Planning and Infrastructure.
- Mitchell 2002 Mitchell, Dr. Peter. 2002. *Description for NSW (Mitchell) Landscapes Version 2*. Department of Environment and Climate Change NSW.
- OEH 2011 Office of Environment and Heritage. 2011. *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in New South Wales*. Department of Environment, Climate Change and Water, Sydney.
- OzArk 2006 OzArk EHM. 2006. *Aboriginal Heritage Study: Dubbo Local Government Area*. Report to: Dubbo City Council.
- OzArk 2007 OzArk EHM. 2007. *Aboriginal Heritage Study: Dubbo Local Government Area, Stage 2: Field Survey*. Report to: Dubbo City Council.
- OzArk 2014 OzArk EHM. 2014. *Aboriginal Heritage Management: GIS layers as planning tools, Dubbo Local Government Area*. Report to Dubbo City Council.
- OzArk 2016 OzArk Environmental & Heritage Management Pty Ltd. *Central West Local Land Services Travelling Stock Reserves Study*. Report for Central West Local Lands Service.

PLATES



Plate 1: Representative area of exposure



Plate 2: Representative area of grassland. Note restricted visibility



Plate 4: View of the location of site SROS5 (45-5-2384)



Plate 5: Silcrete artefact at SROS5.



Plate 6: Artefact at South St 1 (45-5-4904).



Plate 7: Location of artefact at South St 1 (45-5-4904).



Plate 8: View of woodland with MPIP PAD3 (45-5-4620).



Plate 9: Alternate view of woodland with MPIP PAD3 (45-5-4620), with power easement in the foreground.

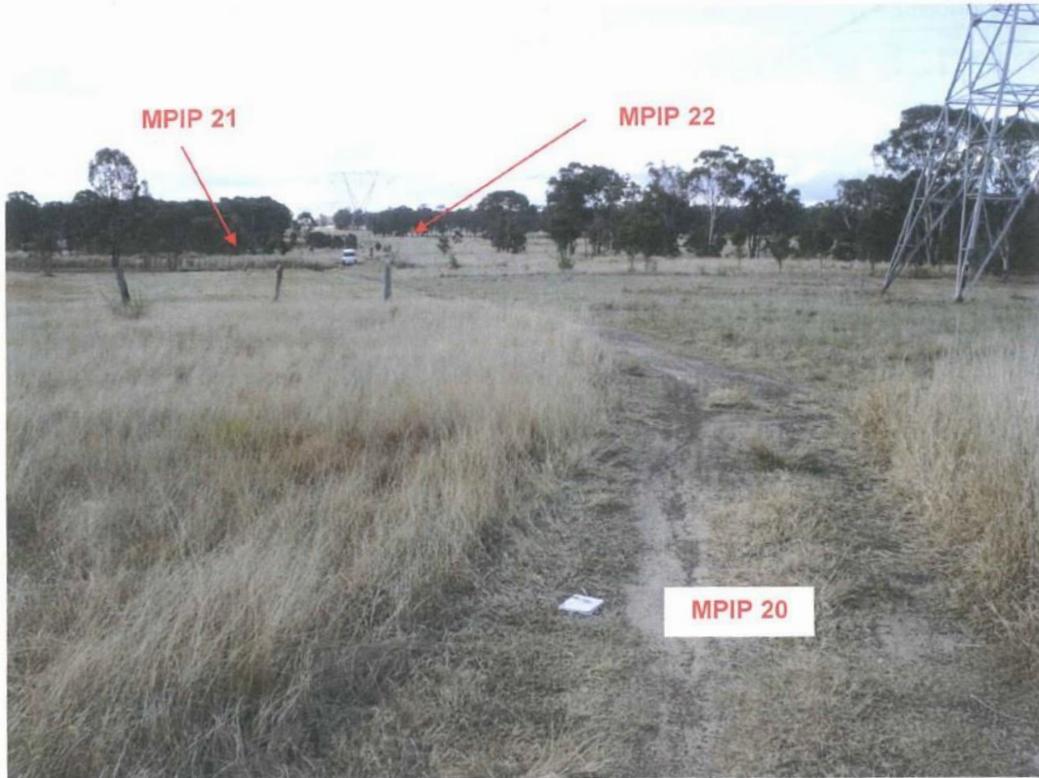


Plate 10: View north across MPIP 20 towards MPIP 21 and MPIIP 22 (from site card)



Plate 11: Our photo trying to frame same location for MPIIP 20.



Plate 12: Location of coordinates that AHIMS site card places MPIP 20 (as opposed to location shown in Plate 11)

APPENDIX 1: AHIMS SEARCH RESULTS



Office of
Environment
& Heritage

AHIMS Web Services (AWS) Extensive search - Site list report

Your Ref/PO Number : #1870 marsden park
Client Service ID : 317000

SiteID	SiteName	Datum	Zone	Eastings	Northings	Context	Site Status	SiteFeatures	SiteTypes	Reports
45-5-4179	MPP-16	GDA	56	297789	6266917	Open site	Valid	Artefact : 3		
	Contact	Recorders				Kelleher Nightingale Consulting Pty Ltd		Permits		
45-5-2384	SR055	GDA	56	297944	6266709	Open site	Valid	Artefact : -	Open Camp Site	3759
	Contact	Recorders				Mr.Neville Baker,Central West Archaeological and Heritage Services Pty Ltd		Permits	892	
45-5-4180	MPP-17	GDA	56	297954	6266788	Open site	Valid	Artefact : 1		
	Contact	Recorders				Kelleher Nightingale Consulting Pty Ltd		Permits		
45-5-3751	MPIP 20	GDA	56	297986	6266350	Open site	Valid	Artefact : 1		
	Contact	Recorders				Kelleher Nightingale Consulting Pty Ltd		Permits		
45-5-3753	MPIP 21A	GDA	56	297998	6266831	Open site	Valid	Artefact : 4		
	Contact	Recorders				Kelleher Nightingale Consulting Pty Ltd		Permits		
45-5-4904	South St 1	GDA	56	298002	6266477	Open site	Valid	Artefact : 1		
	Contact	Recorders				Fco Logical Australia Pty Ltd - Sydney,Beebe Tyler		Permits		
45-5-3752	MPIP 21	GDA	56	298020	6266770	Open site	Valid	Artefact : 1		
	Contact	Recorders				Kelleher Nightingale Consulting Pty Ltd		Permits		
45-5-4620	MPIP PAD 3	GDA	56	298179	6266413	Open site	Valid	Potential Archaeological Deposit (PAD) : -		
	Contact	Recorders				Kelleher Nightingale Consulting Pty Ltd		Permits		
45-5-3750	MPIP 19	GDA	56	298236	6266549	Open site	Valid	Artefact : 2		
	Contact	Recorders				Kelleher Nightingale Consulting Pty Ltd		Permits	3928	
45-5-3749	MPIP 18	GDA	56	298368	6266361	Open site	Valid	Artefact : 9		
	Contact	Recorders				Kelleher Nightingale Consulting Pty Ltd		Permits		
45-5-3748	MPIP 17	GDA	56	298438	6266288	Open site	Valid	Artefact : 2		
	Contact	Recorders				Kelleher Nightingale Consulting Pty Ltd		Permits		
45-5-3865	MPIP 30	AGD	56	297491	6266623	Open site	Valid	Artefact : -		
	Contact	Recorders				Kelleher Nightingale Consulting Pty Ltd		Permits		
45-5-3864	MPIP 29	AGD	56	297610	6266194	Open site	Valid	Artefact : 5		
	Contact	Recorders				Kelleher Nightingale Consulting Pty Ltd		Permits		
45-5-3863	MPIP 31	AGD	56	297712	6266594	Open site	Valid	Artefact : 4		
	Contact	Recorders				Kelleher Nightingale Consulting Pty Ltd		Permits		

Report generated by AHIMS Web Service on 08/12/2017 for Jodie Benton for the following area at Datum :GDA, Zone : 56, Eastings : 297400 - 298500, Northings : 6266200 - 6266900 with a Buffer of 50 meters. Additional Info : Impact assessment. Number of Aboriginal sites and Aboriginal objects found is 14
This information is not guaranteed to be free from error omission. Office of Environment and Heritage (NSW) and its employees disclaim liability for any act done or omission made on the information and consequences of such acts or omission.

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