# Appendix J

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# WESTCONNEX M4 WIDENING PITT STREET, PARRAMATTA TO HOMEBUSH BAY DRIVE, HOMEBUSH

Aboriginal Archaeological Survey Report Stage 2 PACHCI

Prepared for Sinclair Knight Merz Pty Ltd on behalf of WestConnex Delivery Authority

July 2014

Ref. 1223

#### KELLEHER NIGHTINGALE CONSULTING PTY LTD Archaeological and Heritage Management ACN 120 187 671

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# **Document Information**

Project Name	WestConnex M4 Widening Pitt Street, Parramatta to Homebush Bay Drive, Homebush Aboriginal archaeological survey, Stage 2 PACHCI		
Project Number	1223		
Status	Final		
Revision	10		
Client Name	Sinclair Knight Merz Pty Ltd		
Recipient	Jonas Ball, Project Manager		
Issue Date	7 July 2014		
Prepared by	Dr Matthew Kelleher; Ben Anderson		
Approved by	Dr Matthew Kelleher; Alison Nightingale		



# **Executive Summary**

WestConnex Delivery Authority (WDA) is proposing to widen and upgrade the M4 Motorway generally between Pitt Street, Parramatta and Homebush Bay Drive, Homebush (the M4 Widening project).

Kelleher Nightingale Consulting Pty Ltd was engaged by Sinclair Knight Merz Pty Ltd on behalf of WDA to undertake an Aboriginal heritage assessment as part of the Environmental Impact Statement (EIS) for the WestConnex scheme and M4 Widening project. The EIS has been prepared in accordance with the (NSW) Roads and Maritime Services *Procedure for Aboriginal Cultural Heritage Consultation and Investigation* 2011 and the EIS requirements of the Director-General of the (NSW) Planning and Environment (the Director General's requirements) issued on 4 November 2013.

No Aboriginal archaeological objects, sites or potential archaeological deposits were identified in the construction footprint or associated compound locations. No Aboriginal cultural features were identified within the M4 Widening project by the Metropolitan Local Aboriginal Land Council or Deerubbin Local Aboriginal Land Council.

No impacts to Aboriginal objects, sites or potential archaeological deposits would occur from the project.

There are no Aboriginal archaeological heritage constraints to the M4 Widening project.



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# 1 Introduction

WestConnex Delivery Authority (WDA) is proposing to widen and upgrade the M4 Motorway generally between Pitt Street, Parramatta and Homebush Bay Drive, Homebush (the M4 Widening project) (Figure 1).



Figure 1. Project location

The project boundary and study area for this assessment includes all existing on-ramps and off-ramps, arterial road approaches, intersections adjacent to the ramps and identified potential compound and ancillary sites locations (refer to Figure 2 for extent of study area).

Kelleher Nightingale Consulting Pty Ltd (KNC) was engaged by Sinclair Knight Merz Pty Ltd (SKM) on behalf of WDA to undertake an Aboriginal heritage assessment as part of the Environmental Impact Statement (EIS) for the M4 Widening project. The EIS has been prepared in accordance with the (NSW) Roads and Maritime Services (Roads and Maritime) *Procedure for Aboriginal Cultural Heritage Consultation and Investigation* (PACHCI 2011) and the EIS requirements of the Director-General of the (NSW) Planning and Environment (the Director General's requirements (DGRs)) issued on 4 November 2013.





Figure 2. Study area extent

#### 1.1 Director-General's Requirements

This assessment addresses the Aboriginal heritage issues identified in the DGRs, as detailed in Table 1.

#### Table 1. Director-General's requirements – Aboriginal heritage

Director-	Director-General's requirements						
impacts	<ul> <li>impacts to Aboriginal heritage (including cultural and archaeological significance), in particular</li> <li>impacts to Aboriginal objects and potential archaeological deposits (PAD), should be assessed.</li> <li>Where impacts are identified, the assessment shall:         <ul> <li>outline the proposed mitigation and management measures (including measures to avoid significant impacts and an evaluation of the effectiveness of the measures)</li> <li>generally consistent with the Draft Guidelines for Aboriginal Cultural Heritage Impact</li> </ul> </li> </ul>						
	Assessment and Community Consultation (Department of Environment and Conservation 2005),	heritage identified)					
0	be undertaken by a suitably qualified heritage consultant(s),						
0	demonstrate effective consultation with Aboriginal communities in determining and assessing impacts and developing and selecting options and mitigation measures (including the final proposed measures),						
0	assess and document the archaeological and cultural significance of cultural heritage values of affected sites, and						
0	develop an appropriate assessment methodology, including research design, in consultation with the Department and the Office of Environment and Heritage, to guide physical archaeological test excavations of the sites and areas of PAD identified in a manner that establishes the full spatial extent and significance of any archaeological evidence across each site/area of PAD, and include the results of these excavations.						

#### 1.2 Summary of findings

No Aboriginal archaeological objects, sites or potential archaeological deposits were identified in the proposed construction footprint within the road corridor or associated compound locations. The study area was found to be highly disturbed and urbanised with minimal natural ground surfaces.

No impacts to Aboriginal objects, sites or potential archaeological deposits would occur from the project.

There are no Aboriginal archaeological heritage constraints to the M4 Widening project.

#### 1.3 Investigator / contributors

A full list of investigator / contributors to the current study is included in Table 2 below.

#### Table 2. Investigator / contributor

Investigator / Contributor	Affiliation	Role
Dr Matthew Kelleher	Kelleher Nightingale Consulting	Reporting, Advisor and Survey
Alison Nightingale	Kelleher Nightingale Consulting	Reporting, Advisor and Review
Ben Anderson	Kelleher Nightingale Consulting	Reporting, GIS
Stirling Smith	Kelleher Nightingale Consulting	Survey
Mark Rawson	Kelleher Nightingale Consulting	Survey
Steve Randall	Deerubbin Local Aboriginal Land Council (DLALC)	Survey
Kevin Telford	Metropolitan Local Aboriginal Land Council (MLALC)	Survey
Adam Madden	Metropolitan Local Aboriginal Land Council (MLALC)	Survey



# 2 Project description

The WestConnex Delivery Authority (WDA) is proposing to widen and upgrade the M4 Motorway generally between Pitt Street, Parramatta and Homebush Bay Drive, Homebush (the M4 Widening project). The location of the project area is provided in Figure 3.

The M4 Widening project would include the following key features:

- Construction of a new two lane viaduct for westbound traffic, on the southern side of the existing viaduct structure between Church Street, Parramatta and Wentworth Street, Granville.
- Reconfiguration of the traffic lanes on the existing viaduct structure to four lanes eastbound and two lanes westbound.
- Construction of a new bridge/viaduct over Duck River at Auburn.
- Widening of the existing motorway to the south of the westbound carriageway between Wentworth Street, Granville and Duck River, Auburn.
- Widening of the at-surface carriageway of the motorway predominantly within the existing motorway corridor (utilising both the existing median and verge areas), between Junction Street, Auburn and Homebush Bay Drive, Homebush to provide four traffic lanes westbound and four traffic lanes eastbound.
- Construction of a new westbound G-loop on-ramp to the M4 Motorway at Homebush Bay Drive, Homebush.
- Construction of a new eastbound on-ramp to the M4 Motorway from Hill Road at Lidcombe.
- Provision of Intelligent Transport Systems (ITS) infrastructure for motorway operations.
- Provision of road infrastructure and services to support the future implementation of Managed Motorway operations.
- Widening and/or lengthening of existing ramps at Church Street, James Ruse Drive, Silverwater Road, Hill Road and Homebush Bay Drive.
- Provision of tolling infrastructure such as gantries and control systems.
- Provision of new and modified noise barriers.
- Provision of new asphalt wearing surface to the existing M4 Motorway.

The project is located approximately 13 kilometres to the west of the Sydney central business district (CBD) and generally follows the alignment of the existing M4 Motorway. Figure 3 shows the project location and key features. The project extends from Pitt Street, Parramatta in the west to east of the Homebush Bay Drive interchange at Homebush in the east.

The project traverses the suburbs of Merrylands, Parramatta, Holroyd, Granville, Silverwater, Auburn, Lidcombe, Sydney Olympic Park, Homebush and Homebush West. The project spans four local government areas (LGAs) being Holroyd, Parramatta, Auburn and Strathfield.





Figure 3. Location of project and key features

# 3 Aboriginal stakeholder consultation

Roads and Maritime has developed the PACHCI to provide a consistent means of effective consultation with Aboriginal communities regarding activities which may impact on Aboriginal cultural heritage and a consistent assessment process for Roads and Maritime activities across NSW.

The Aboriginal archaeological survey of the study area was undertaken in two sessions totalling four days with representatives from both the Deerubbin Local Aboriginal Land Council and Metropolitan Local Aboriginal Land Council in accordance with the PACHCI. A list of participants from Aboriginal organisations and the dates they attended is provided in Table 3.

#### Table 3. Aboriginal organisations

Name	Affiliation	Dates
Steve Randall	Deerubbin Local Aboriginal Land Council	19/07/13 27/02/14
Kevin Telford Adam Madden	Metropolitan Local Aboriginal Land Council	22/07/13 25/02/14

It was noted during field surveys by both Metropolitan Local Aboriginal Land Council and Deerubbin Local Aboriginal Land Council that no Aboriginal objects would be impacted by M4 Widening project. No Aboriginal cultural features were identified within the study are during the survey.

Subsequent to the field survey Deerubbin Local Aboriginal Land Council provided a survey and cultural assessment report for Roads and Maritime in accordance with the PACHCI.

Aboriginal stakeholder comments have been incorporated into the assessment and included in the report (Appendix A).



# 4 Review of previous archaeological investigations

#### 4.1 AHIMS web services

The Aboriginal Heritage Information Management System (AHIMS) is a database operated by the (NSW) Office of Environment and Heritage (OEH) and regulated under section 90(Q) of the (NSW) *National Parks and Wildlife Act 1974* (NPW Act). AHIMS contains information and records related to registered Aboriginal archaeological sites (Aboriginal objects, as defined under the NPW Act) and declared Aboriginal places (as defined under the NPW Act) in NSW.

A search of AHIMS was conducted on 18 March 2014 to identify registered (known) Aboriginal sites or declared Aboriginal places within or adjacent to the study area (Client service ID 128793). Search results are attached as Appendix B.

The AHIMS Web Service database search was conducted within the following coordinates (GDA, Zone 56):

Eastings:	314338 - 322008
Northings:	6251562 - 6256849
Buffer:	0 metres (the search coordinates included a buffer around the study area).

The AHIMS search results showed:

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

The type and distribution of recorded Aboriginal sites within these coordinates are shown in Figure 4. The frequencies of site types within the AHIMS database search area are shown in Table 4.

#### Table 4. Frequency of site types from AHIMS database search

Site Type	Total
Open artefact scatter	12
Midden	2
Isolated Artefact	3
Potential Archaeological Deposit	28
Modified Tree (Carved or Scarred Tree)	1
Total	46

#### 4.2 Other heritage registers and databases

Other sources of information including heritage registers and lists were also searched for known Aboriginal heritage in the vicinity of the study area. These included:

- Auburn Local Environment Plan 2010.
- Holroyd Local Environment Plan 2013.
- Parramatta Local Environment Plan 2011.
- Strathfield Local Environment Plan 2012.
- Roads and Maritime Heritage Register.
- Railcorp Heritage Register.
- Sydney Water Heritage Register.
- State Heritage Register and State Heritage Inventory.
- Commonwealth Heritage List.
- National Heritage List.
- Australian Heritage Places Inventory.
- Historic Heritage Information Management System (HHIMS).

No items of Aboriginal heritage were listed or registered on these databases within the study area.





Figure 4. AHIMS site locations

#### 4.3 Discussion of search results

Results from the combined database searches show no items of Aboriginal heritage registered within the study area. A large number of potential archaeological deposits are concentrated on the sand sheet below the ground surface of the Parramatta CBD. Closer to the M4 Motorway corridor, two sites (AHIMS ID 45-6-2627 and AHIMS ID 45-6-2339) were located within one kilometre of the study area.

Review of 45-6-2627 (HP-1) found this site/object was unlikely to be in context. Site 45-6-2339 located more than 500m south of the M4 Motorway was a small scatter of stone flakes and shell within built up grounds of a playing field.

Review of the available information from heritage register searches showed that the most common site context within the vicinity of the project area was open artefact scatter. Potential archaeological deposit, isolated find and modified tree (carved or scarred tree) site contexts were also present.

The absence of registered Aboriginal heritage items within the study area and the low number of items in the immediate surroundings is the result of the intensive modification of the landscape in the area. Registered Aboriginal heritage items therefore likely represent residual pockets where the landform has not been as extensively modified.

#### 4.4 Previous archaeological investigations

An Aboriginal archaeological survey and assessment of the existing M4 Motorway corridor (this included a section within the current study area) was conducted by Kelleher Nightingale Consulting in 2013 as part of the Stage 2 PACHCI investigation for the M4 Managed Motorway project. No Aboriginal archaeological material or potential Aboriginal archaeological deposits were identified in the M4 Widening project study area. (The M4 Managed Motorway project archaeological survey and assessment included the existing M4 Motorway corridor - as per KNC 2013 - and portions of land outside of the corridor).



# 5 Landscape context

The study area traverses a series of simple slopes, flats and flood plains/channels. The study area is highly developed by urbanisation and much of the landscape has been significantly modified. Waterways include the Duck River System comprising Duck River, Duck Creek and Abecketts Creek and minor creeks of Haslams and Powells.

The western portion of the study area skirts along fine sandstone and humic sands associated with flood deltas related to the Duck River/Creek system (Figure 5). These low lying lands have been largely filled, recontoured and developed with virtually no natural land surfaces remaining. The eastern portion of the study area traverses shale and humic sands which also display high levels of urbanisation. Archaeologically the sands on the margins of waterway are good locations for archaeological material to survive, however the substantial modification to the landscape has virtually eliminated the heritage potential. The Duck River Duck Creek junction displayed some sensitivity, while the Haslams and Powells Creeks displayed no sensitivity due to impacts from infrastructure.



Figure 5. Geology of study area

#### 5.1 Flood modelling

Flood modelling was undertaken by KNC to assess where archaeological deposit may exist intact within the study area. The modelling was used to identify the meeting point between past occupation and flood disturbance (ie the closest point to waterways that archaeology will statistically survive). Digital elevation models (Figure 6) utilising an estimated 1 per cent annual exceedance probability event (roughly four metres Australian Height Datum) indicated significant impact on soil stability within the primary deltas (humic sand areas). The confluence of Duck River and Duck Creek, which geographically would have been advantageous to past Aboriginal people, indicated high energy flood water moving through the system (Figure 7). The effect of this energy would be the total displacement of Aboriginal archaeological objects as energised water moves sediments down the system. Interestingly the abutments at the west end of Martha Street on the south side of the existing M4 Motorway above the cycle track on Duck River, appear above the hydraulic hazards of flood waters. This is likely an artificial result related to construction of the existing M4 Motorway abutment as no lithic geology appears to underlie the result, meaning that the location (the ground on which the current abutments rest) is unlikely to represent a natural raised feature. The existing ground surface was highly modified and assessment of geotechnical borehole logs showed

that a fill layer, generally to a depth of 70cm, covered homogenised clay alluvium (c.2-3 metres deep) indicating disturbance of the upper soil layers and an active soil matrix with low archaeological potential at the Duck River/Duck Creek/M4 Motorway junction.



Figure 6. Digital elevation model of study area



Figure 7. Digital elevation model of confluence of Duck River and Duck Creek showing flood probability, with more darkly shaded areas exhibiting a higher probability of flooding (source KNC 2013)

## 6 Regional character and site predictions

In highly urbanised landscapes, Aboriginal archaeological objects will only survive in situ where the natural surface of the ground remains undisturbed. Aboriginal occupation is statistically more likely to occur where quality raw materials are found in close proximity to major waterways on defined topography such as terraces or creek junctions. Significant archaeological sites will exist where such deposits are situated on elevated (above the 1:100 year flood level), low gradient landforms. The study area exhibited no undisturbed archaeologically significant landforms. The junction point between Duck River and Duck Creek had some sensitivity, however existing development and past flooding have lowered the archaeological potential.

# 7 Sampling strategy

The aim of the archaeological survey was to conduct a full coverage, pedestrian survey of the study area and identify/record any Aboriginal archaeological sites.

Due to the relatively narrow and linear nature of the study area, it was possible for the survey team to conduct one transect on each side of the M4 corridor per survey unit (refer Figure 8).

Based on the archaeological background and landform context of the study area, the survey team closely inspected any areas of surface exposure for artefacts, evidence of intact natural deposit and any mature trees for evidence of Aboriginal bark removal. Assessments of soil disturbance were also made during the survey.

#### 8 Field methods

The route of the entire study area was inspected by pedestrian survey (19 and 22 July 2013). Additional survey was undertaken to assess design refinements and compound locations (25 and 27 February 2014). The study area covered a number of landforms but generally the landscape had been extensively modified and re-landscaped.

The survey team was equipped with maps showing the boundaries of the study area and non-differential global positioning system (GPS). All GPS recordings were made using the Geocentric Datum of Australia (GDA) coordinate system.

Two survey units were selected to reflect the two relevant Aboriginal land council boundaries.

### 9 Survey results

No Aboriginal archaeological objects, sites or potential archaeological deposits were identified within the study area.

The study area exhibited substantial ground disturbance with only minimal potential for natural ground surface or intact buried surfaces.





Figure 8. Survey units with the study area

# 10 Survey coverage analysis

Overall surface visibility and exposure across the study area was low. Many areas were heavily impacted by existing infrastructure and development. Existing vegetated areas were landscaped with only remnant natural vegetation. Details of survey and landform coverage are outlined in the Tables 5 and 6.

#### Table 5. Survey coverage

Survey Unit	Landform	Survey Unit Area (m <sup>2</sup> )	Visibility (%)	Exposure (%)	Effective Coverage (m <sup>2</sup> )	Effective Coverage (%)
1	Slopes/Flats/Floodplain	400000	5	15	3000	0.75
2	Slopes/Floodplain	200000	5	10	1000	0.5

#### Table 6. Landform coverage

Landform Area (m <sup>2</sup> )		Area Effectively Surveyed (m <sup>2</sup> )	% of Landform Effectively Surveyed	# of Sites	# of Artefacts or Features
Floodplain/Flat	100000	750	0.75	0	0
Simple slope	500000	2500	0.5	0	0

Surface visibility across the floodplain/flat landform was low due to high levels of modification covering the ground surface: infrastructure, commercial and residential development, pavement, fill and landscaping. In many instances it was evident that ground surface was highly disturbed below the modification with levelling, cutting and filling visible in sample sections within the study area.

Evidence of high energy flood activity in the past was also evident at the creek crossing where homogenised soils displayed no long term structural integrity indicating poor archaeological survivability for the flood channel and plain.

Survey coverage across slopes also revealed similar levels of disturbance to the flats with landscaping and re-vegetation noticeable on the gradient shifts.

In summary, the study area displayed low archaeological potential due to land modifications and high levels of ground disturbance.



# 11 Discussion

Background research, AHIMS records and field survey identified no Aboriginal archaeological sites within the study area. Archaeologically the study area is a highly disturbed and modified environment exhibiting little potential artefact survivability. The most sensitive locations near the waterways display disturbance from flooding within the channels effecting a hydraulic movement of soils (and any potentially associated archaeology). The margins along the waterways, generally the best location for artefact survivability, were heavily urbanised with substantial disturbance.

# 12 Significance assessment

No Aboriginal archaeological objects, sites or potential archaeological deposits have been identified within the study area. Much of the study area was disturbed and exhibits no archaeological potential.

# 13 Impact assessment

No impact would occur to any identified Aboriginal archaeological object, site or potential archaeological deposit within the study area.

# 14 Management and recommendations

Based on the assessment of the study area detailed within this archaeological survey report, no Aboriginal archaeological sites would be impacted by the proposed M4 Widening project.

No further management of Aboriginal heritage is warranted for the proposed M4 Widening project.



# References

Kelleher Nightingale Consulting Pty Ltd, 2013. M4 Managed Motorway from Lapstone (western end) to Strathfield (eastern end). Review of environmental factors. Aboriginal archaeological survey report Stage 2 PACHCI. Report prepared for SKM on behalf of Roads and Maritime Services.

Roads and Maritime Services, Road Pavement and Geotechnical Engineering, Geotechnical Science Section. Geotechnical investigation report. WestConnex M4 Widening, Pitt Street Parramatta to Homebush Bay Drive Homebush.



Appendix A

# Aboriginal stakeholder comments

Deerubbin Local Aboriginal

Level 2, 9 Tindale Street PENRITH NSW 2750

PO Box 40 Penrith BC NSW 2751 AUSTRALIA

T: (02) 4724 5600 F: (02) 4722 9713 E: Staff@deerubbin.org.au W: http://www.deerubbin.org.au

Westconnex C/- Roads & Marine Services 27-31 Argyle Street PARRAMATTA NSW 2150

Our Ref: 2333a

10 April 2014

#### SUBJECT: PROTECTION OF ABORIGINAL CULTURAL HERITAGE Proposed M4 Widening Project Homebush Bay Drive, Homebush and Pitt Street, Parramatta

#### Attention: Mark Lester,

Two representatives of the Deerubbin Local Aboriginal Land Council inspected the section of the M4 widening project between Pitt Street, Parramatta & Homebush Bay Drive, Homebush on Tuesday, 16<sup>th</sup> April 2013. An Aboriginal cultural heritage assessment was undertaken to evaluate the likely impact the proposed M4 Widening Project has on the cultural heritage of the land.

It was reported, that, because of the impact & disturbance from the initial construction works along this section, no Aboriginal cultural material (in the form of stone artefacts, for example) were found.

Deerubbin Local Aboriginal Land Council therefore, has no objection to the future development along the M4 Widening Project between Pitt Street, Parramatta & Homebush Bay Drive, Homebush.

Yours Faithfully,

1 Kandall

(Steven Randall Senior Aboriginal Cultural Heritage Officer)

C.c. Miranda Morton - Office of Environment & Heritage

C.c. Stirling Smith - Kelleher Nightingale Consulting



Appendix B AHIMS search

NSW	Entraoritione	ervices (AWS)							Ref Number : 122
GOVERNMENT	& Heritage Extensive search	- Site list report						Client Se	ervice ID : 13532
<u>SiteID</u>	SteName	Datum	Zone Easting	Northing	<u>Context</u>	Site Status	SteFeatures	<u>SiteTypes</u>	<u>Reports</u>
45-6-2339	Haslams Ck 1	AGD	56 319810	6251690	Open site	Valid	Artefact : -	Open Camp Site	102196
	<u>Contact</u>	Recorders	Michael Guider				Permits 1 1		
45-6-2344	Duck River 21;Granville South;	AGD	56 316210	6251610	Open site	Valid	Artefact : -	Open Camp Site	102196
	Contact	Recorders	Michael Guider				Permits		
45-6-2347	Duck River 19;	AGD	56 316390	6252610	Open site	Valid	Artefact : -	Open Camp Site	102196
	Contact	Recorders	Michael Guider				Permits		
45-6-2348	Duck River 20;	AGD	56 316290	6253100	Open site	Valid	Artefact : -	Open Camp Site	102196
	Contact	Recorders	Michael Guider				Permits		
45-6-2349	Duck River 22;	AGD	56 316310	6251780	Open site	Valid	Artefact : -	Open Camp Site	102196
	Contact	Recorders	Michael Guider				Permits		
45-6-2627	HP-1	AGD	56 315850	6255210	Open site	Valid	Artefact : -		102196
	Contact	Recorders	Mick Leon				Permits		
45-6-2648	Charles/George 1	AGD	56 315690	6256470	Open site	Valid	Artefact : -		102196
	Contact	Recorders	Doctor.Jo McDo				Permits	1433,1682,2176,2240,	
45-6-2678	SSP1 (formerly Smith Street PAD)	AGD	56 315330	6256150	Open site	Valid	Potential	1455,1002,2170,2240,	102196
13-0-2070	but i formerty biller bacet THD j	ASD	56 515550	0250150	Open site	vanu	Archaeological		101170
							Deposit (PAD): -		
	Contact	Recorders	Doctor Jo McDo	nald			Permits	1848,2561	
45-6-2668	Argyle St	AGD	56 315200	6256060	Open site	Valid	Potential		102196
							Archaeological		
							Deposit (PAD): -		
17 1 2110	<u>Contact</u>	Recorders	Doctor Jo McDo	The State of the S	· ·		Permits Betweet al	1764,2155	100105
45-6-2669	Kendall Street, Harris Park	AGD	56 315525	6256150	Open site	Valid	Potential Archaeological		102196
							Deposit (PAD): -		
	Contact	Recorders	lim Wheeler				Permits	1767	
45-6-2673	RTA-G1	AGD	56 315690	6256470	Open site	Valid	Artefact : -		100552,10219
									6
	<u>Contact</u>	Recorders	and the second se	and the state of t			<u>Permits</u>	1841,2176,3050,3509	WARDING CO.
45-6-2679	Parramatta Children's Court	AGD	56 314900	6256600	Open site	Valid	Potential		102196
							Archaeological		
	Combust	Desendens	Ma Laila Haalan				Deposit (PAD) : -	1000 1072 2117	
45-6-2738	Contact James Ruse Reserve Open Camp 1	Recorders AGD	Ms.Laila Haglui 56 316000	6256000	Open site	Valid	Permits Potential	1850,1973,2117	102196
10-0-2700	James wase weserve oben danih r	UDV.	20 210000	0200000	ohen sne	vanus	Archaeological		102130
							Deposit (PAD): -		
	<u>Contact</u>	Recorders	Jim Wheeler				Permits	2018,2187	
45-6-2863	Cumberland Press Site	AGD	56 315850	6256390	Open site	Valid	Artefact : -		

Report generated by AHIMS Web Service on 20/05/2014 for Benjamin Anderson for the following area at Datum :6DA, Zone : 56, Eastings : 314338 · 322008, Northings : 6251562 · 6256849 with a Buffer of 0 meters. Additional Info : Archaeological Assessment. Number of Aboriginal sites and Aboriginal objects found is 46

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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	& Heritage Extensive search - S			and the second sec						10.00000000	Service ID : 1353:
<u>SiteID</u>	SteName	Datum	Zone	Easting	Northing	<u>Context</u>	<u>Site Status</u>	SteFeat	<u>rres</u>	SteTypes	<u>Reports</u>
	Contact	Recorders	Ms.L	aila Haglund	1				Permits	2865,3307,3509	
15-6-2864	George Kendall Ermington	AGD	56	321020	6255857	Open site	Valid	Shell : -			
	<u>Contact</u>	Recorders	Mr.C	hris Ingrey					<u>Permits</u>		
45-6-2976	George St PAD 1	GDA		315650	6256690	Open site	Valid	Potential Archaeolo Deposit (1	PAD):1		
	Contact	Recorders	and the second se			d,Mr.David Nutley			Permits	3509	
45-6-2977	Macquarie St PAD 3	GDA		315090	6256650	Open site	Valid	Potential Archaeolo Deposit (:	PAD):1	2520	
1 C C 4007	Contact O'Connell St PAD1	GDA Recorders	100000000000000000000000000000000000000	and the second se	State of the second second	d,Mr.David Nutley	17-11-3	Detrovelat	Permits	3509	
45-5-4097				314900	6256695	Open site	Valid	Potential Archaeolo Deposit (:	PAD):1		
	Contact	Recorders			enter de la constante de	d,Mr.David Nutley			<u>Permits</u>	3509	
15-6-2978	41 Hunter Street PAD	GDA	56	315030	6256450	Open site	Valid	Potential Archaeolo Deposit (1			
	<u>Contact</u>	Recorders	Mr.A	lexander Be	ben				Permits	3419	
15-6-1523	George St Parramatta; Family Law Courts;	AGD	56	314950	6256450	Open site	Valid	Artefact :		Open Camp Site	1809,102196
	Contact	Recorders	Val A	Attenbrow, E	dward Higginb	otham			<u>Permits</u>		
45-6-2554	Elizabeth Farmhouse	AGD	56	316420	6255700	Open site	Valid	Artefact :	-	Open Camp Site	102196
	<u>Contact</u>	Recorders	Mich	ael Guider					Permits	2928	
45-6-2559	Sydney Turf Club Carpark; STC Carpark;	AGD		316900	6256020	Open site	Valid	Artefact :		Open Camp Site	102142,10219 6
15 ( 10(1	Contact	Recorders		ael Guider	0050000	0		<b>a</b> . 11 <b>a</b>	Permits	NC 11	102101
5-6-1961	Ermington 1;	AGD		321030	6256060	Open site	Valid	Shell : -, A	rteract : -	Midden	102196
	Contact	Recorders	A REAL PROPERTY.	ael Guider			Washington .		Permits 199		
45-5-2856	Parramatta Park Macquarie Entrance PAD	AGD	56	314500	6256550	Open site	Valid	Potential Archaeolo Deposit (:	PAD):-	1647	102142,10219 6
	Contact	Recorders						A	Permits	1647	and a second state of the second
15-6-2686	Civic Place PAD	AGD	56	315130	6256450	Open site	Valid	Potential Archaeolo Deposit (: Artefact :	PAD):-,		
	<u>Contact</u>	Recorders	Doct	or Jo McDon	ald				Permits	1960	

Report generated by AHIMS Web Service on 20/05/2014 for Benjamin Anderson for the following area at Datum :6DA, Zone : 56, Eastings : 314338 · 322008, Northings : 6251562 · 6256849 with a Buffer of 0 meters. Additional Info : Archaeological Assessment. Number of Aboriginal sites and Aboriginal objects found is 46

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NSW	Office of Environment & Heritage Extensive search - Site									Your Ref Number : 122 Client Service ID : 13532:
SiteID	SteName	Datum	Zone	Easting	Northing	<u>Context</u>	<u>Site Status</u>	SteFeatures	SiteTypes	Reports
45-6-2751	Marsden St Carpark	AGD	56	314900	6256350	Open site	Valid	Artefact : -, Potential Archaeological Deposit (PAD) : -		102196
	Contact	Recorders	Summer Contractor	Laila Haglund				<u>Permits</u>	2243	
45-6-2682	Wanngal Woodland Axe-Marked Tree	AGD	56	321152	6254826	Open site	Not a Site	Modified Tree (Carved or Scarred) : -		
	Contact	Recorders	Paul	l Irish Consul	tant Archaeolo	gist		Permits		
45-6-2683	Wanngal Woodland IF1	AGD	56	321154	6254823	Open site	Valid	Potential Archaeological Deposit (PAD): -		102142,10219 6
in Beneric Water	Contact	Recorders	Paul	l Irish Consul	tant Archaeolo	gist		<u>Permits</u>		
45-6-2684	Wanngal Woodland IF2	AGD	56	321386	6255227	Open site	Valid	Potential Archaeological Deposit (PAD): -		102142,10219 6
	<u>Contact</u>	Recorders	Paul	l Irish Consul	tant Archaeolo	gist		<u>Permits</u>		
45-6-2685	Wanngal Woodland IF3	AGD		321319	6255192	Open site	Valid	Potential Archaeological Deposit (PAD): -		102142,10219 6
	Contact	Recorders	Construction of the local division of the lo	service and the service of the servi	tant Archaeolo	~		<u>Permits</u>		
45-6-2746	Old Hospital Site Parramatta Health SErvcies Precinct	AGD	56	314950	6256650	Open site	Valid	Potential Archaeological Deposit (PAD): -		100551,10055 8,102196
(B)276-53	Contact	Recorders	Ms.I	Laila Haglund	l			<u>Permits</u>	2160,2507	
45-6-2741	Parramatta Transport Interchange PAD	AGD	56	315450	6256250	Open site	Valid	Potential Archaeological Deposit (PAD) : -		102196
	Contact	Recorders	Susa	an (Now Mcli	ntrye-Tamwoy	) McIntyre		<u>Permits</u>	2121	
45-6-2893	95-101 George St (GSP AD)	GDA	56	315720	6256570	Open site	Valid.	Potential Archaeological Deposit (PAD):-, Artefact:-		101078
	<u>Contact</u>	Recorders	Meg	an Mebber so	m			<u>Permits</u>	3509	
45-5-3630	Macquarie St PAD	AGD	56	314800	6256500	Open site	Destroye d	Potential Archaeological Deposit (PAD) : -		
	Contact	Recorders	Con	ber Consulta	ints Pty Limite	i,Comber Consul	tants Pty Limited	<u>Permits</u>	3107,3302	
45-6-3108	42 Bridge Street Rydalmere PAD	GDA	56	317670	6256778	Open site	Valid	Potential Archaeological Deposit (PAD): 1		

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GOVERNMENT	& Heritage Extensive search - Si	te list report								Client Service ID : 13532
<u>siteID</u>	SteName	<u>Datum</u>	Zone	Easting	Northing	<u>Context</u>	Site Status	SteFeatures	SiteTypes	<u>Reports</u>
	<u>Contact</u>	Recorders	Godder	n Mackay I	Logan Heritage	Consultants,Ms.S.	ally MacLennan	<u>Permits</u>		
5-6-3102	Phillip Street PAD 1	GDA		15077	6256250	Open site	Valid	Potential Archaeological Deposit (PAD): 1		
F / 08/0	Contact	Recorders		nini c Steel				Permits		
5-6-3068	GS PAD 1 184-188 George Street	GDA		15750	6256375	Open site	Valid	Potential Archaeological Deposit (PAD) : 1		
	Contact	Recorders		nini c Steel				<u>Permits</u>	3584	
5-6-3065	PHILLIP ST PAD 1	GDA		15500	6256675	Open site	Valid	Potential Archaeological Deposit (PAD): 1		
	Contact	Recorders	and the second second	nini c Steel	No. Construction of the local distance in the			Permits		
5-6-2636	Ermington PAD	AGD	56 3	20000	6255700	Open site	Not a Site	Potential Archaeological Deposit (PAD): -		102142,10219 6
	<u>Contact</u>	Recorders	Mary I	Dallas Cons	sulting Archaeo	logists		<u>Permits</u>	1365	
5-5-3186	Marsden Street	GDA	56 3	14800	6256315	Open site	Valid	Artefact : 4		102196
	Contact T Russell	Recorders	Edwar	d Higginbo	tham			Permits		
5-6-2785	Wanngal Woodland PAD2	GDA		21185	6254699	Open site	Valid	Potential Archaeological Deposit (PAD): 1		102196
	<u>Contact</u> T Russell	Recorders	Mr.Pau					<u>Permits</u>		
5-6-2786	Wanngal Woodland PAD1	GDA		20840	6254603	Open site	Valid	Potential Archaeological Deposit (PAD): 1		102196
	<u>Contact</u> T Russell	Recorders	Mr.Pau	And Personal Distance in the local distance				Permits		
5-6-2795	150 Marsden Street Parramatta PAD	AGD	56 3	14955	6256480	Open site	Valid	Potential Archaeological Deposit (PAD): 1		102196
	<u>Contact</u> T Russell	<u>Recorders</u>	A A STORE AND A STORE	signified producting in a spin-	ogy Pty Ltd			<u>Permits</u>	2404	
5-6-2950	Macquarie St PAD 2	GDA		15850	6256490	Open site	Destroye d	Potential Archaeological Deposit (PAD): -		102144
	Contact	Recorders		a construction of the second second	2240-900-01000-00-0100-020-020-020-	ultants Pty Limite		Permits	3238,3366	
5-6-3118	Clay Cliff Creek Levee	GDA	56 3	15801	6256294	Open site	Valid	Artefact : 1, Potential Archaeological Deposit (PAD): 1		

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Office of Environment & Heritage Extensive search - Site list report									C	Your Ref Number : 1223 Client Service ID : 135323	
teName	]	Datum	Zone	Easting	Northing	<u>Context</u>	<u>Site Status</u>	SiteFeatures	SiteTypes	<u>Reports</u>	
ver Road West		GDA	56	316650	6256450	Open site	Valid	Potential Archaeological Deposit (PAD):-, Artefact:-			
ontact		Recorders	Ms.F	enella Atkin	son			Permits			
te	<b>eName</b> ver Road West	eName rer Road West	eName Datum rer Road West GDA	eName Datum Zone rer Road West GDA 56	eName Datum Zone Easting rer Road West GDA 56 316650	eName Datum Zone Easting Northing rer Road West GDA 56 316650 6256450	eName Datum Zone Easting Northing Context rer Road West GDA 56 316650 6256450 Open site	eName Datum Zone Easting Northing Context Site Status rer Road West GDA 56 316650 6256450 Open site Valid	eName Datum Zone Easting Northing Context Ste Status SteFeatures rer Road West GDA 56 316650 6256450 Open site Valid Potential Archaeological Deposit (PAD):-, Artefact :-	eName Datum Zone Easting Northing Context Ste Status SteFeatures SteTypes rer Road West GDA 56 316650 6256450 Open site Valid Potential Archaeological Deposit (PAD):-, Artefact:-	

Report generated by AHIMS Web Service on 20/05/2014 for Benjamin Anderson for the following area at Datum :6DA, Zone : 56, Eastings : 314338 · 322008, Northings : 6251562 · 6256849 with a Buffer of 0 meters. Additional Info : Archaeological Assessment. Number of Aboriginal sites and Aboriginal objects found is 46 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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