

Craigieburn West Precinct Structure Plan Aboriginal Cultural Heritage Impact Assessment

Prepared for Victorian Planning Authority

19 August 2019

Biosis offices

NEW SOUTH WALES

Newcastle

Phone: (02) 4911 4040
Email: newcastle@biosis.com.au

Sydney

Phone: (02) 9101 8700
Email: sydney@biosis.com.au

Wollongong

Phone: (02) 4201 1090
Email: wollongong@biosis.com.au

VICTORIA

Ballarat

Phone: (03) 5304 4250
Email: ballarat@biosis.com.au

Melbourne (Head Office)

Phone: (03) 8686 4800
Fax: (03) 9646 9242
Email: melbourne@biosis.com.au

Wangaratta

Phone: (03) 5721 9453
Email: wangaratta@biosis.com.au

Document information

Report to:	City of Whittlesea
Prepared by:	Aaron Dalla-Vecchia Lucy Amorosi
Biosis project no.:	23287
Date:	19 August 2019
Citation:	Biosis 2019 Craigieburn West Precinct Structure Plan: Aboriginal Cultural Heritage Impact Assessment. Report for Victorian Planning Authority. Authors: A Dalla-Vecchia, L Amorosi, Biosis Pty Ltd, Melbourne. Project no. 28876.

Document control

Version	Internal reviewer	Date issued
Draft version 01	IB	26/11/2018
Draft version 02	KFR	26/02/2019

Acknowledgements

The authors acknowledge the contribution of the following people in undertaking this study:

Shane Nicholson, Gary Galway, Justin Entwistle, Kerrie Xiberras, Naomi Zukanovic and Cathrine La Puma of Wurundjeri La Woi-wurrung Cultural Heritage Aboriginal Corporation

Ella Adams, Ben Weiner of the Victorian Planning Authority.

Kasey Robb, Ilya Berelov and Julian Turner of Biosis Pty Ltd

© Biosis Pty Ltd

This document is and shall remain the property of Biosis Pty Ltd. The document may only be used for the purposes for which it was commissioned and in accordance with the Terms of the Engagement for the commission. Unauthorised use of this document in any form whatsoever is prohibited.

Disclaimer:

Biosis Pty Ltd has completed this assessment in accordance with the relevant federal, state and local legislation and current industry best practice. The company accepts no liability for any damages or loss incurred as a result of reliance placed upon the report content or for any purpose other than that for which it was intended.

Executive summary

Biosis Pty Ltd was commissioned by the Victorian Planning Authority (VPA) to undertake an Aboriginal cultural heritage impact assessment (ACHIA) for the Craigieburn West Precinct Structure Plan (PSP 1068). The aim of the assessment is to identify any Aboriginal cultural heritage constraints on future development of the study area.

Study area

The Craigieburn West Precinct is located within the northern growth corridor, and covers an area of 564 hectares. The precinct is located approx. 30 kilometres north-west of Melbourne's Central Business District, and 4 kilometre west of Craigieburn central.

The study area consists of relatively open pasture land to the west of Craigieburn Central. The study area is located between Mt Ridley Road to the north, Mickleham Road to the west, Frontier Avenue and Ambition Drive to the south and Whites Lane and Debonair Parade to the east. The study area is bisected by Craigieburn Road.

Several waterways exist throughout the study area, including Aitken and Yurokes Creek. The study area is positioned between several areas of high aspect, with Aitken Hill existing to the south-east.

Activity

The overarching activity is development associated with the Craigieburn West Park Precinct Structure Plan in the Northern Urban Growth Corridor. Specific activities likely to be undertaken include residential development, utility installation, development of a local town centre, a community hub, a primary school, roads, parks, a retail precinct and associated ancillary works.

The full range of activities will be subject to a City of Hume planning scheme amendment.

Assessment

A desktop based review was undertaken to provide background information on the study area. The review utilised a geographic region to obtain information on other archaeological studies, previously recorded Aboriginal places and the environment which was utilised to develop a predictive model for the study area.

A targeted ground survey was also undertaken to ground truth the predictive model and inspect the previously recorded Aboriginal places.

Results

The background review identified that the study area is largely located within the volcanic basalt plains landform, characterised by basalt 'floaters' close to the surface. Aitken and Yuroke Creeks and two tributaries, and the western slope of Aitken Hill are all within the study area. Hill slopes and plains in proximity to watercourses have previously been identified as areas of Aboriginal occupation. This is evidenced by the presence of stone artefact scatters and scarred trees on the basalt plains and within 200 metres of Aitken Creek and its tributaries within the geographic region.

Other assessments in the geographic region have been completed in association with residential development. These assessments show stratigraphy on the basalt plain consisting of a shallow silty clay soils over clay or basalt, whilst the alluvial soils adjacent to Aitken Creek is likely deeper in nature.

The background review concluded that the study area has archaeological potential with the predictive model based on the wider patterns of Aboriginal occupation identified in the region extrapolated to the study area.

Aboriginal cultural heritage, in the form of artefact scatters, particularly in association with the current and previous waterways and tributaries including Aitken and Yuroke Creeks, exist within the study area. These waterways would have provided a wealth of resources for Aboriginal people. This is further supported by the identification of the previously recorded Aboriginal artefact scatters within the study area (VAHR 7822-2472, 7822-2935, 7822-2936, 7822-2937, and 7822-2999) and adjacent to the study area (7822-2472).

The targeted survey was undertaken over five days between 21 January and 30 January 2019 and confirmed the predicative model outlined in the desktop assessment. The study area was traversed by vehicle, and a pedestrian survey was undertaken in areas considered to have potential to contain Aboriginal cultural heritage.

It is noted that the entire study area could not be accessed as several landowners at lots 19, 32, 33 and 43 were unavailable to grant access.

The two scar trees Dunhelen 1 VAHR 7822-0682 and Mickleham Road Plain 1 (VAHR 7822-2974) were relocated during the field survey. Further artefacts were located within the extents of previously registered Aboriginal places Whites Lane Aitken Creek 1, Whites Lane Aitken Creek 2 and Whites Lane Aitken Creek 3 (VAHR 7822-2937, 7822-2999 and 7822-3023). A single new Aboriginal place was recorded and given the name Craigieburn West PSP LDAD 1 (VAHR 7822-4348).

Areas of potential were noted in association with Aitken and Yuroke Creeks as well as small unnamed tributaries and ephemeral drainage lines. Areas of high aspect, including Aitken hill as well as smaller local rises were also shown to have potential for Aboriginal cultural heritage. The lava flows from several local eruption points has created undulating land and areas of high aspect land throughout the study area.

Legislative considerations

A review of the requirements of the *Aboriginal Heritage Act 2006* and the *Aboriginal Heritage Regulations 2018* was undertaken. The results of the review, as it relates to cultural heritage approvals for the study area, are shown in Table 1.

Note: those properties that have not been assessed during the field assessment have not been ground trothed. Therefore, conclusions can be made based only on the Desktop Assessment. It is emphasised that a CHMP is the only cultural heritage approval that can be undertaken ahead of development, thereby acting as a risk management strategy ensuring no delays to development activities.

It should be noted that property boundaries may change over time, either as a result of subdivision or consolidation. If so, the statutory trigger for a cultural heritage management plan (CHMP) based on the areas of cultural heritage sensitivity may also change. In this case a review of the legislative requirements for each property or proposed development should be undertaken.

Table 1 Legislative considerations

Land Parcel	Property ID	Address	Area of cultural heritage sensitivity	High impact activity	Archaeological potential	Mandatory CHMP required	Voluntary CHMP recommended
1	Lot 1 TP423679	1880 Mickleham Road, Mickleham, VIC 3064	Yes	Yes	Yes	Yes	N/A
2	Lot 3 PS301908	685 Mt Ridley Road Mickleham VIC 3064	No	Yes	Yes	No	Yes
3	Lot 1 TP951293	1880 Mickleham	No	Yes	Yes	No	Yes

Land Parcel	Property ID	Address	Area of cultural heritage sensitivity	High impact activity	Archaeological potential	Mandatory CHMP required	Voluntary CHMP recommended
4		Road, Mickleham, VIC 3064					
	Lot 2 PS736443	1800 Mickleham Rd, Mickleham VIC 3064	No	Yes	Yes	No	Yes
5	Lot 1 PS736443	1780 Mickleham Rd, Mickleham VIC 3064	No	Yes	Yes	No	Yes
6	Lot 2 PS301908	1760 Mickleham Rd, Mickleham VIC 3064	Yes	Yes	Yes	Yes	N/A
7	Lot 1 LP97698	1720 Mickleham Rd, Mickleham VIC 3064	Yes	Yes	Yes	Yes	N/A
8	Lot 1 PS445746	290 Olivers Rd, Mickleham VIC 3064	Yes	Yes	Yes	Yes	N/A
9	Lot 1 LP37205	250 Olivers Road, Mickleham VIC 3064	No	Yes	Yes	No	Yes
10	Lot 2 PS445746	1690 Mickleham Rd, Mickleham VIC 3064	Yes	Yes	Yes	Yes	N/A
11	Lot 3 LP97698	1660 Mickleham Rd, Mickleham VIC 3064	Yes	Yes	Yes	Yes	N/A
12	Lot 1 TP950200	1630 Mickleham Rd, Mickleham VIC 3064	Yes	Yes	Yes	Yes	N/A
13	Lot 1 TP341413	1630 Mickleham Rd, Mickleham VIC 3064	Yes	Yes	Yes	Yes	N/A
14	Lot 1 LP212349	220 Olivers Rd, Mickleham VIC 3064	No	Yes	Yes	No	Yes
15	Lot 1 TP222329	225 Olivers Rd, Yuroke VIC 3063	Yes	Yes	Yes	Yes	N/A
16	Lot 1 TP558734	125 Whites Lane, Yuroke VIC 3063	Yes	Yes	Yes	Yes	N/A
17	Lot 1 LP39373	1600 Mickleham Rd, Craigieburn West Vic 3064	Yes	Yes	Yes	Yes	N/A
18	Lot 1 LP52310	1570 Mickleham	No	Yes	Yes	No	Yes

Land Parcel	Property ID	Address	Area of cultural heritage sensitivity	High impact activity	Archaeological potential	Mandatory CHMP required	Voluntary CHMP recommended
19		Rd, Mickleham VIC 3064					
	Lot 2 LP53210	1550 Mickleham Rd, Yuroke VIC 3063	No	Yes	Yes	No	Yes
20	Lot 3 LP53210	1540 Mickleham Rd, Yuroke VIC 3063	No	Yes	Yes	No	Yes
21	Lot 1 LP55516	1530 Mickleham Rd, Yuroke VIC 3063	No	Yes	Yes	No	Yes
22	Lot 2 LP55516	1520 Mickleham Rd, Yuroke/Mickleham VIC 3064	No	Yes	Yes	No	Yes
23	Lot 1 PS411432	700 Craigieburn Road, Mickleham VIC 3064	Yes	Yes	Yes	Yes	N/A
24	Lot 2 PS411432	680 - 690 Craigieburn Rd, Mickleham VIC 3064	Yes	Yes	Yes	Yes	N/A
25	Lot 1 TP304316	75 Whites Lane, Mickleham VIC 3064	Yes	Yes	Yes	Yes	N/A
26	Lot1 TP957913	640 Craigieburn Rd. Mickleham VIC 3064	No	Yes	Yes	No	Yes
27	Lot 2 LP129504	1480 Mickleham Rd, Craigieburn VIC	Yes	Yes	Yes	Yes	N/A
28	Lot 1 LP129504	665 Craigieburn Road, Craigieburn VIC 3064	Yes	Yes	Yes	Yes	N/A
29	Lot 3 LP129504	1430 Mickleham Rd, Yuroke VIC 3063	Yes	Yes	Yes	Yes	N/A
30	Lot 4 LP129504	1390 Mickleham Rd, Yuroke VIC 3063	Yes	Yes	Yes	Yes	N/A
31	Lot 6 LP129504	1320 Mickleham Rd, Yuroke VIC 3063	No	Yes	Yes	No	Yes
32	Lot 1	1370 Mickleham	No	Yes	Yes	No	Yes

Land Parcel	Property ID	Address	Area of cultural heritage sensitivity	High impact activity	Archaeological potential	Mandatory CHMP required	Voluntary CHMP recommended
33	TP828863	Road, Craigieburn 3064					
	Lot 2 TP828863	1360 Mickleham Road, Craigieburn 3064	No	Yes	Yes	No	Yes
34	Lot 5 LP129504	1340 Mickleham Rd, Yuroke/Craigieburn	No	Yes	Yes	No	Yes
35	Lot 7 LP129504	1300 Mickleham Rd, Yuroke VIC 3063	No	Yes	Yes	No	Yes
36	Lot 1 3059TP612993	1290 Mickleham Rd, Greenvale VIC 3059	Yes	Yes	Yes	No	Yes
37	Lot 8 LP129504	1240 Mickleham Rd, Greenvale VIC 3059	Yes	Yes	Yes	Yes	N/A
38	Lot 1 PS333257	1240 Mickleham Rd, Greenvale VIC 3059	Yes	Yes	Yes	Yes	N/A
39	Lot 2 PS333257	20 Dunhelen Lane, Yuroke VIC (Aitken Hill) 3063	Yes	Yes	Yes	Yes	N/A
40	PS746051	1170 Mickleham Road, Greenvale VIC 3059	Yes	Yes	Yes	Yes	N/A
41	PS746051	1170 Mickleham Road, Greenvale VIC 3059	Yes	Yes	Yes	Yes	N/A
42	PS746050	1170 Mickleham Road, Greenvale VIC 3059	Yes	Yes	Yes	Yes	N/A
43	PS746051	1170 Mickleham Road, Greenvale VIC 3059	Yes	Yes	Yes	Yes	N/A

Recommendations

Recommendation 1

Areas of archaeological potential identified in the current assessment, plains near waterways, local high points and remnant native vegetation should be included, where possible in public open spaces. This approach eliminates the likelihood that Aboriginal places will be harmed.

Management of these open space reserves should also be based on conserving and enhancing environmental and cultural heritage values and should engage the Wurundjeri Woi-wurrung Cultural Heritage Aboriginal Corporation - Narrap Team. Construction of infrastructure and facilities within the reserves should be designed to minimise impacts and enhance public access and appreciation, through landscaping, indigenous revegetation, interpretation, signage and development of cultural programs.

Recommendation 2

CHMPs should be prepared for the entire study area. This recommendation is based on areas of archaeological potential being identified in the current assessment and presents a methodology that ensures best cultural heritage practice is maintained, regardless of triggers to prepare a mandatory CHMP. This is also consistent with the results of the cultural heritage values assessment that concluded that the wider landscape has importance to Aboriginal people.

Where conservation of areas of Aboriginal cultural heritage is not possible due to conflict with future development, and disturbance has been approved through a CHMP, the process of disturbance should be managed through a program mitigation involving research, analysis and interpretation of the cultural heritage that is disturbed. A research design and methodology should aim to identify the character of Aboriginal occupation of the area, mitigate disturbance, and interpret the heritage.

Abbreviations

CHMP	Cultural Heritage Management Plan
DGPS	Differential Global Positioning System
DPC	Department of Premier and Cabinet
GDA94	Geodetic Datum Australia 1994
LDAD	Low Density Artefact Distribution
MGA	Map Grid of Australia
RAP	Registered Aboriginal Party
VAHR	Victorian Aboriginal Heritage Register
WWCHAC	Wurundjeri Woi-wurrung Cultural Heritage Aboriginal Corporation

Contents

Executive summary	ii
Recommendation 1	vi
Recommendation 2	vii
Abbreviations.....	viii
1 Introduction	1
1.1 Objectives	1
1.2 Location of the study area	1
1.3 Description of the study area.....	3
1.4 The activity.....	3
1.5 Consultation.....	4
2 Background	7
2.1 Search of the Victorian Aboriginal Heritage Register	7
2.2 Geographic region	7
2.3 Aboriginal places in the geographic region.....	1
2.4 Aboriginal places within and near the study area	1
Aboriginal places within the study area	3
Aboriginal places within 200 metres of the study area	4
Summary	6
2.5 Previous work in the geographic region	6
Regional studies	7
Cultural heritage assessments.....	8
Local studies.....	9
CHMPs	11
Summary	16
2.6 Historical and ethno-historical accounts in the geographic region	16
2.6.1 Ethno-historical accounts of Aboriginal people	16
Linguistic boundaries and social organisation	16
Moiety affiliation	18
Religion.....	18
2.6.2 Historical accounts of Aboriginal people	18
2.6.3 Information on cultural values from the RAP	19
2.7 Landforms and/or geomorphology of the study area	20
2.8 Land use history of the study area	21
Summary	31

2.9	Spatial predictive model.....	33
2.10	Conclusions	40
2.10.1	Prediction statement.....	40
3	Targeted survey	42
3.1	Aims	42
3.2	Methods.....	42
3.3	Results	42
3.3.1	Targeted survey consultation.....	42
3.3.2	Survey units	43
3.3.3	Features.....	45
	Unit 1	45
	Unit 2	46
	Unit 3	47
	Previously identified Aboriginal place.	48
	Unit 4	49
	Previously identified Aboriginal place.	49
	Unit 5	50
	Unit 6	51
	Previously identified Aboriginal place	52
	Unit 7	53
	Previously identified Aboriginal place	53
	Unit 8	55
	Unit 9	56
	Unit 10.....	57
	Newly identified Aboriginal place.....	57
	Unit 11	58
	Previously identified Aboriginal place	59
	Unit 12	59
	Previously identified Aboriginal place.	60
	Unit 13.....	61
	Previously identified Aboriginal place.	62
	Unit 14.....	63
	Previously identified Aboriginal place.	63
	Unit 15.....	64

Previously identified Aboriginal place	65
3.3.4 Aboriginal heritage.....	65
3.4 Conclusions	66
3.4.1 Predictive statement	67
4 Legislative considerations	70
4.1 Aboriginal Heritage Act 2006 and Aboriginal Heritage Regulations 2018.....	70
Mandatory CHMP	70
Voluntary CHMP	74
4.2 Conclusions	75
5 Discussion	97
5.1 Summary	97
5.2 Recommendations	97
Recommendation 1	97
Recommendation 2.....	97
6 Bibliography	99
Appendix 1- Notification to undertake a survey.....	102
Appendix 2 - Aboriginal place gazetteer	106

Tables

Table 1 Legislative considerations.....	iii
Table 2 Cadastral information for the study area.....	2
Table 3 Registered Aboriginal places within the study area and within 200 metres of the study area	2
Table 4 Archaeological assessment types within the geographic region	6
Table 5 Land purchasers within the study area	22
Table 6 Current and Previous Land Use and Disturbance by Land Parcel	28
Table 7 Targeted survey participation	42
Table 8 Survey units for the site inspection	43
Table 9 Aboriginal places relocated during the survey.	66
Table 10 CHMP required/recommended	78
Table 11 Aboriginal place gazetteer	106

Figures

Figure 1 Aboriginal place types within the geographic region.....	1
Figure 2 Mickleham Parish, County of Bourke, 1885. Department of Lands and Survey.	23
Figure 3 Yuroke Parish, County of Bourke, 1964. Department of Lands and Survey.	24

Figure 4	1916 War Office Cartographic Map, Sunbury. Prepared by Australian Section, Imperial General Staff.....	25
Figure 5	1938 War Office Cartographic Map, Sunbury. Prepared by Australian Section, Imperial General Staff.....	26
Figure 6	1951 Melbourne and Metropolitan Project No 2 Run 2 Frame 2 Aerial Photograph	27
Figure 7	1963 Melbourne North Project Run 3 Frame 189 Aerial Photograph	27

Maps

Map 1	Extent of the study area.....	5
Map 2	Parcel numbers	6
Map 3	Geographic region including the study area	8
Map 4	Disturbance within the study area.	32
Map 5	Landforms within the study area.....	35
Map 6	Waterways within the study area.	37
Map 7	Overall Predictive Model	39
Map 8	Survey Results	68
Map 9	Refined Predictive Model.....	69
Map 10	Cultural Heriatge Sensitivity	76
Map 11	Recommendations.....	77

1 Introduction

Biosis Pty Ltd was commissioned by the Victorian Planning Authority (VPA) to undertake an Aboriginal cultural heritage impact assessment (ACHIA) for the Craigieburn West Precinct Structure Plan (PSP 1068) (study area). The aim of the assessment is to identify any Aboriginal cultural heritage constraints on future development of the study area.

1.1 Objectives

The objectives are to undertake and prepare an Aboriginal cultural heritage impact assessment. The assessment will consist of but not be limited to the following items:

- Contextualisation of the proposed study area within the relevant regulatory framework ie. determining triggers under the *Aboriginal Heritage Act 2006* for the preparation of a mandatory Cultural Heritage Management Plan (CHMP)
- Background research and review of the environmental and cultural heritage information pertaining to the study area
- Development of predictive modelling for the study area
- Targeted survey of the study area
- Consultation and liaison with the Registered Aboriginal Party (RAP) for the region and other stakeholders as appropriate
- Registration of any newly recorded Aboriginal places, if required
- Developments of recommendations to ensure cultural heritage approvals can be obtained for the study area.

Note this assessment is prepared under Section 34A of the *Aboriginal Heritage Act 2006*. It does not meet requirements for a Desktop and Standard Assessment CHMP. However the information presented in this report can be utilised in the preparation of a CHMP.

1.2 Location of the study area

The study area is located south of Mt Ridley Road and east of Mickleham Road, in Mickleham and Craigieburn, within the local government area of the City of Hume (Map 1). The study area is situated in the Parishes of Mickleham and Craigieburn, in the County of Bourke. Cadastral details for the study area are found in Table 2. The study area has been broken down into parcel numbers. Specific references to parcel numbers will be made where relevant.

The site consists of relatively open pasture land existing to the west of Craigieburn Central. The site is located between Mt Ridley Road to the north, Mickleham Road to the west, Frontier Avenue and Ambition Drive to the south and Whites Lane and Debonair Parade to the east. The site is bisected by Craigieburn Road.

Table 2 Cadastral information for the study area

Land Parcel No.	Lot on plan	Address
1	Lot 1 TP423679	1880 Mickleham Road, Mickleham, VIC 3064
2	Lot 3 PS301908	685 Mt Ridley Road Mickleham VIC 3064
3	Lot 1 TP951293	1880 Mickleham Road, Mickleham, VIC 3064
4	Lot 2 PS736443	1800 Mickleham Rd, Mickleham VIC 3064
5	Lot 1 PS736443	1780 Mickleham Rd, Mickleham VIC 3064
6	Lot 2 PS301908	1760 Mickleham Rd, Mickleham VIC 3064
7	Lot 1 LP97698	1720 Mickleham Rd, Mickleham VIC 3064
8	Lot 1 PS445746	290 Olivers Rd, Mickleham VIC 3064
9	Lot 1 LP37205	250 Olivers Road, Mickleham VIC 3064
10	Lot 2 PS445746	1690 Mickleham Rd, Mickleham VIC 3064
11	Lot 3 LP97698	1660 Mickleham Rd, Mickleham VIC 3064
12	Lot 1 TP950200	1630 Mickleham Rd, Mickleham VIC 3064
13	Lot 1 TP341413	1630 Mickleham Rd, Mickleham VIC 3064
14	Lot 1 LP212349	220 Olivers Rd, Mickleham VIC 3064
15	Lot 1 TP222329	225 Olivers Rd, Yuroke VIC 3063
16	Lot 1 TP558734	125 Whites Lane, Yuroke VIC 3063
17	Lot 1 LP39373	1600 Mickleham Rd, Craigieburn West Vic 3064
18	Lot 1 LP52310	1570 Mickleham Rd, Mickleham VIC 3064
19	Lot 2 LP53210	1550 Mickleham Rd, Yuroke VIC 3063
20	Lot 3 LP53210	1540 Mickleham Rd, Yuroke VIC 3063
21	Lot 1 LP55516	1530 Mickleham Rd, Yuroke VIC 3063
22	Lot 2 LP55516	1520 Mickleham Rd, Yuroke/Mickleham VIC 3064
23	Lot 1 PS411432	700 Craigieburn Road, Mickleham VIC 3064
24	Lot 2 PS411432	680 - 690 Craigieburn Rd, Mickleham VIC 3064
25	Lot 1 TP304316	75 Whites Lane, Mickleham VIC 3064
26	Lot1 TP957913	640 Craigieburn Rd. Mickleham VIC 3064
27	Lot 2 LP129504	1480 Mickleham Rd, Craigieburn VIC
28	Lot 1 LP129504	665 Craigieburn Road, Craigieburn VIC 3064
29	Lot 3 LP129504	1430 Mickleham Rd, Yuroke VIC 3063
30	Lot 4 LP129504	1390 Mickleham Rd, Yuroke VIC 3063
31	Lot 6 LP129504	1320 Mickleham Rd, Yuroke VIC 3063

Land Parcel No.	Lot on plan	Address
32	Lot 1 TP828863	1370 Mickleham Road, Craigieburn 3064
33	Lot 2 TP828863	1360 Mickleham Road, Craigieburn 3064
34	Lot 5 LP129504	1340 Mickleham Rd, Yuroke/Craigieburn
35	Lot 7 LP129504	1300 Mickleham Rd, Yuroke VIC 3063
36	Lot 1 3059TP612993	1290 Mickleham Rd, Greenvale VIC 3059
37	Lot 8 LP129504	1240 Mickleham Rd, Greenvale VIC 3059
38	Lot 1 PS333257	1240 Mickleham Rd, Greenvale VIC 3059
39	Lot 2 PS333257	20 Dunhelen Lane, Yuroke VIC (Aitken Hill) 3063
40	PS746051	1170 Mickleham Road, Greenvale VIC 3059
41	PS746051	1170 Mickleham Road, Greenvale VIC 3059
42	PS746050	1170 Mickleham Road, Greenvale VIC 3059
43	PS746051	1170 Mickleham Road, Greenvale VIC 3059

1.3 Description of the study area

The Craigieburn West Precinct is located within the northern growth corridor, and covers an area of 564 hectares. The precinct is located approximately 30 kilometres north-west of Melbourne's Central Business District, and 4 kilometres west of Craigieburn central.

Several waterways exist throughout the study area, including Aitken Creek, with the study area falling to the south. The study area is positioned between several areas of high aspect, with Aitken Hill existing to the east of south-east.

The study area is currently used as agricultural, pastoral and residential land. There is also a school in the north west of the study area and some buildings/ lots used as a places of worship. All of the lots have been enclosed with fencing.

1.4 The activity

The VPA has commenced a Precinct Structure Planning project for the 'Craigieburn West' precinct in the City of Hume.

The Craigieburn West PSP is located at the edge of Melbourne's Urban Growth Boundary. Development of land within the PSP will complete the Craigieburn growth front and complement existing surrounding development through the provision of residential, recreation, community and employment opportunities.

The overarching activity is development associated with the Craigieburn West Park Precinct Structure Plan in the Northern Urban Growth Corridor. Specific activities likely to be undertaken include residential housing, utility installation, development of a local town centre, parks, a retail precinct and associated ancillary works. The full range of activities will be subject to a City of Hume planning scheme amendment.

1.5 Consultation

In accordance with Section 34A of the *Aboriginal Heritage Act 2006*, written notice of the survey was provided to the Secretary, Department of Premier and Cabinet on 7 January 2019. This report will be lodged with the Victorian Aboriginal Heritage Register (VAHR) at the conclusion of the assessment.

The Wurundjeri Woi-wurrung Cultural Heritage Aboriginal Corporation is the Registered Aboriginal Party (RAP) for the region that includes the study area. As per Section 34A of the *Aboriginal Heritage Act 2006*, the RAP was notified about the project and invited to participate in the targeted survey.

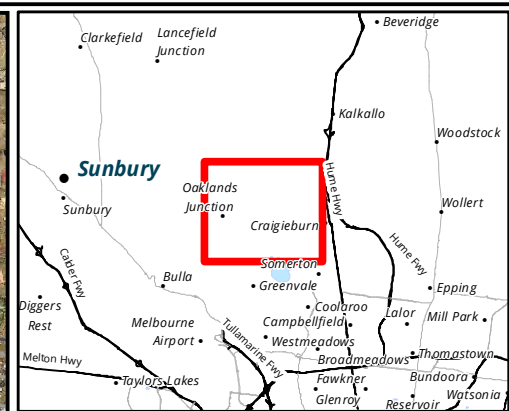
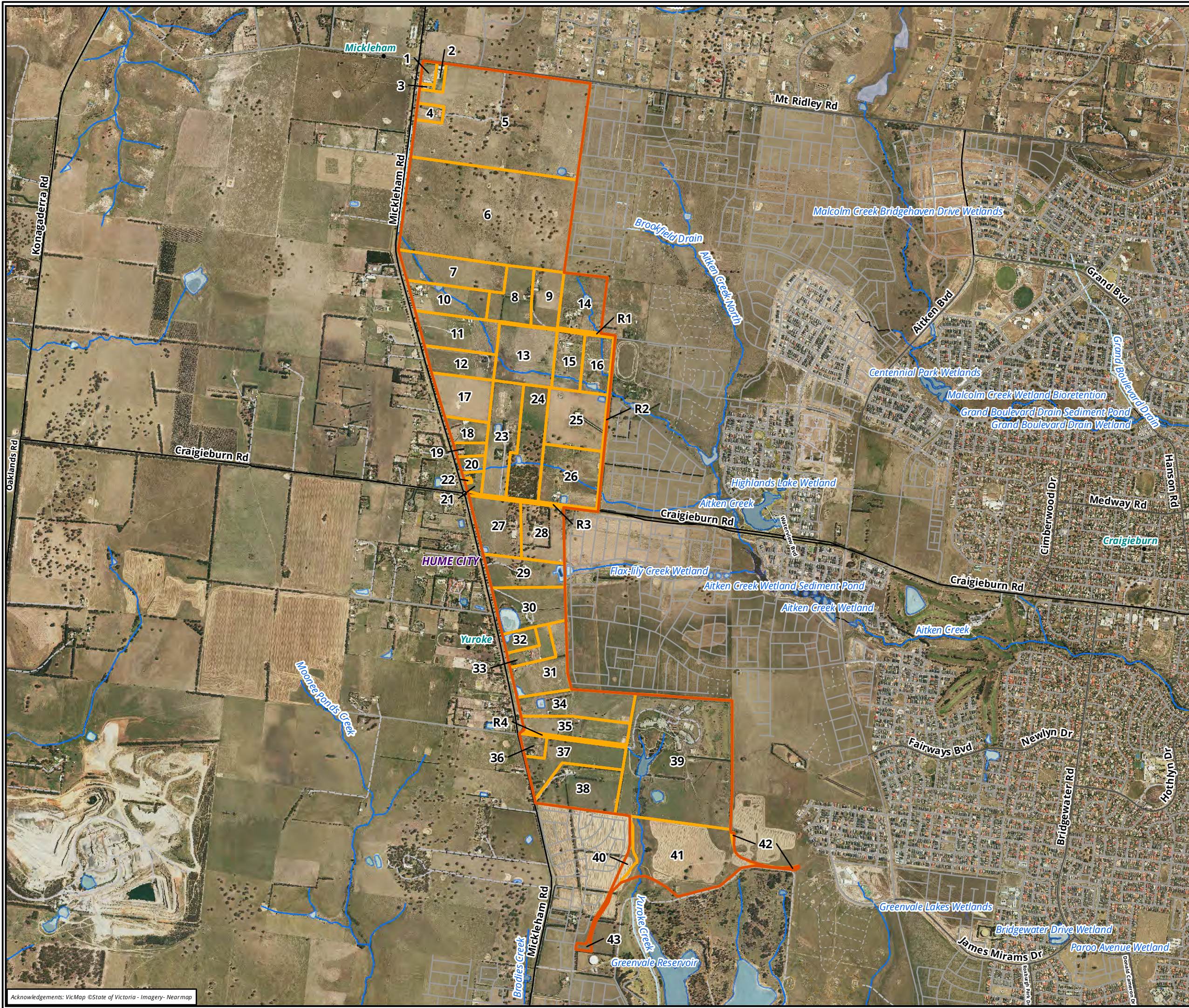
A consultation meeting was also held with the RAP on 15 January 2019. The aim of the meeting was to introduce the project, discuss the predictive modelling and present the results of the background review.

A secondary meeting was held with the RAP on ### to discuss the results of the targeted survey.

Key points that were raised at the meeting by the RAP included the following:

- Preservation of Aboriginal places is a priority with the preference being that they are included in public open spaces
- Flexibility in design so that when developers prepare a CHMP, establishing the extent, nature and significance of Aboriginal places, that those places can be preserved
- A cultural values recording should occur once preliminary design has been developed but before detailed design, so that RAP Elders can provide feedback to the detailed design based on their interpretation of the landscape.

It was recognised that the results of this assessment are a 'snapshot in time' and that once CHMPs are developed for properties within the study area that those results will alter the predictive model presented in this assessment and may also result in additional CHMP triggers.



- Legend**
- Activity Area
 - Parcel boundaries

Map 2 Parcel Boundaries within study area

0 250 500 750 1,000 1,250

Metres

Scale: 1:25,000 @ A3

Coordinate System: GDA 1994 MGA Zone 55

biosis

Biosis Pty Ltd
Albury, Ballarat, Melbourne,
Newcastle, Sydney, Wangaratta & Wollongong

2 Background

2.1 Search of the Victorian Aboriginal Heritage Register

The VAHR contains information on all recorded Aboriginal cultural heritage within Victoria. It is accessed via the Aboriginal Cultural Heritage Register and Information System (ACHRIS), a web based tool with restricted access.

A search of the VAHR was undertaken by Lucy Amorosi, Biosis Pty Ltd on 15 November 2018. An updated search was conducted by Aaron Dalla-Vecchia on 15 February 2019.

2.2 Geographic region

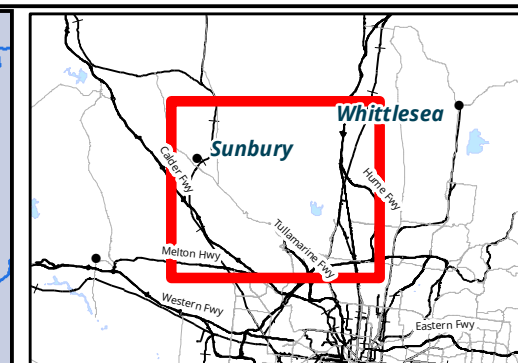
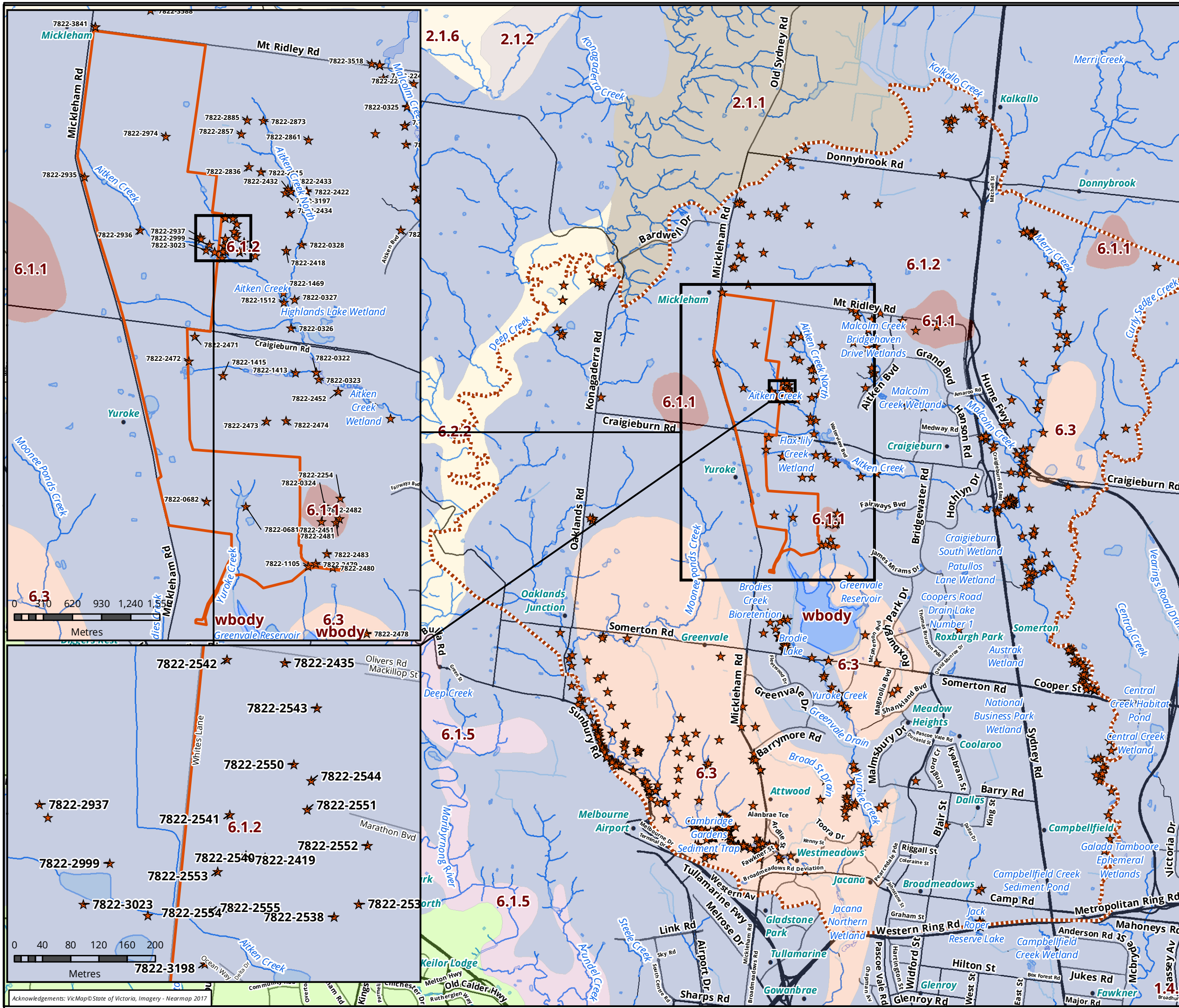
The geographic region for the study area has been selected to represent a range of landforms and resources that would be accessible from the study area. This geographic region has been chosen based on geomorphic units on which the study area is located and waterways that are associated with high archaeological potential for Aboriginal cultural heritage material to be identified. The information on the geomorphic units has been sourced from the State of Victoria Department of Economic Development, Jobs, Transport and Resources.

The geographic region is defined by the following features:

- The northern boundary of the geographic region is defined by the extent of the geomorphological unit (6.1.2), *Stony rises (Mt. Eccles, Pomboineit, Mt. Rouse)*, and follows the western bank of Kalkallo Creek to its junction with Merri Creek, including the western bank of Curly Sedge Creek in the north east.
- The eastern boundary of the geographic region follows watercourses and streams, including the western bank of Curly Sedge Creek, to its junction with Merri Creek, and continuing along Merri Creek to the Western Ring Road in the south east corner.
- The southern extent of the geographic region follows the Western Ring Road, and the geomorphological unit, (6.3) *Hills and low hills (Mt. Kinross, Greenvale, Mt. Emu, Summerhill, Darraweit Guim)* following the western bank of Moonee Ponds Creek.
- The western extent of the geographic region includes catchments from Moonee Ponds Creek, and follows the eastern bank of Deep Creek up to its boundary with the geomorphological unit (2.1.1), *Ridges, escarpments, mountains on non-granitic Palaeozoic rocks (Ararat Colbinabbin, Pyrenees, Tarrangower, Big Hill, Mt. Macedon)*, in the north.

The geographic region includes several natural waterways and waterbodies including Deep Creek, Kalkallo Creek, Merri Creek, Malcolm Creek, Aitken Creek, Curly Sedge Creek, Yuroke Creek, Brodies Creek, Merlynston Creek, Moonee Ponds Creek, Flax-Lily Creek Wetland,.

The geographic region in relation to the study area is shown in Map 3.



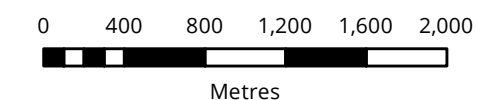
Legend

- Activity Area
- Geographic region
- VAHR Places

Geomorphological units

- 1.4.6 Outlying ridges and hills
- 2.1.1 Ridges escarpments mountains on non-granitic Palaeozoic rocks
- 2.1.2 Hills valley slopes and plains on non-granitic Palaeozoic rocks
- 2.1.6 Eruption points and volcanic plains
- 6.1.1 Eruption points maars scoria cones and lava shields including associated ash and scoria deposits
- 6.1.2 Stony rises
- 6.1.3 Plains with poorly developed drainage and shallow regolith
- 6.1.5 Terraces floodplains and lakes swamps and lunettes and their deposits
- 6.2.2 Dissected plains
- 6.3 Hills and low hills
- Water body

Map 3 Geomorphology of the Geographic region



Scale: 1:80,000 @ A3
Coordinate System: GDA 1994 MGA Zone 55



Matter: 28876,
Date: 18 December 2018,
Checked by: LA, Drawn by: DK, Last edited by: jturner
Location: \\bio-data-01\\matter\\28800s\\28876\\Mapping\\28876_M3_GeographicRegion.mxd

2.3 Aboriginal places in the geographic region

A search of the VAHR identified 400 previously registered Aboriginal places within the geographic region, with a total of 814 place components. Low Density Artefact Distributions (LDADs) are the dominant place type accounting for 49% (n=399) of the total Aboriginal places in the geographic region, with the 37.7% (n=307) of places registered as Artefacts Scatters, 4.9% (n=40) registered as Scarred Trees, 2.5% (n=20) registered as Earth Features and 0.95% (n=7) registered as Quarries (Figure 1).

The majority of Aboriginal places within the geographic region are located in close proximity to waterways. Aitken Creek is the closest waterway to the study area, crossing through the central extent, and has 69 registered Aboriginal places along its banks outside the study area, within the geographic region.

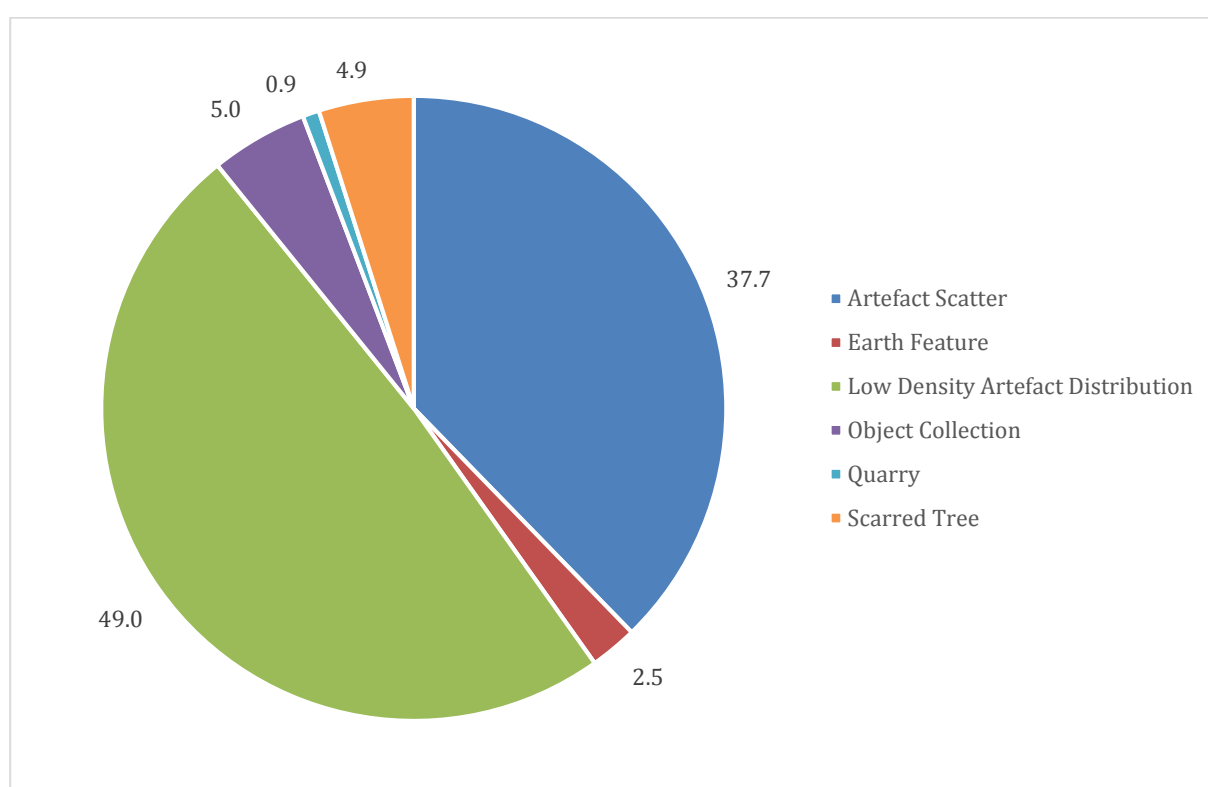


Figure 1 Aboriginal place types within the geographic region

2.4 Aboriginal places within and near the study area

There are 11 Aboriginal places within the study area: Six artefact scatters (three with object collection components) (VAHR 7822-1105, 7822-0681, 7822-2472, 7822-2935, 7822-2936, 7822-2937, and 7822-2999), two Low Density Artefact Distributions (VAHR 7822-4319 and 7822-4318) and two scarred trees (VAHR 7822-0682 and 7822-2974). 19 Aboriginal places are registered within 200 metres of the study area boundary (

Table 3). These places are summarised in detail below.

Table 3 Registered Aboriginal places within the study area and within 200 metres of the study area

Aboriginal Place No.	Aboriginal Place Name	Component No.	Component Type	Location
Aboriginal places within the study area				
7822-0681	Mickleham Rd 1	7822-0681-1	Artefact Scatter	Land Parcel 39 70m east of Aitken Creek
7822-0682	Dunhelen 1	7822-0682-1	Scarred Tree	Land Parcel 38 335m west of Aitken Creek
7822-2935	Mickleham Road Aitken Creek 1	7822-2935-1	Artefact Scatter	Land Parcel 7 40m east of Mickleham Road & 100m west of Aitken Creek
7822-2936	Mickleham Road Aitken Creek 2	7822-2936-1	Artefact Scatter	Land Parcel 12 36m south of Aitken Creek
7822-2974	Mickleham Road Plain 1	7822-2974-1	Scarred Tree	Land Parcel 6 287m west of eastern boundary
7822-2937	Whites Lane Aitken Creek 1	7822-2937-1 & 7822-2937-2	Artefact Scatter & Object Collection	Land Parcel 16 60m north of Aitken Creek, at confluence with drainage line
7822-2999	Whites Lane Aitken Creek 2	7822-2999-1 & 7822-2999-2	Artefact Scatter & Object Collection	Land Parcel 16 43m north of Aitken Creek, at confluence with drainage line
7822-3023	Whites Lane Aitken Creek 3	7822-3023-1 & 7822-3023-2	Artefact Scatter & Object Collection	Land Parcel 16 25m south of Aitken Creek
7822-1105	Brinkley Pk 1	7822-1105	Artefact Scatter	Land Parcel 41 20m north of Greenvale Reservoir
7822-4319	1390 Mickleham Road LDAD 1	7822-4319 1 & 7822-4319 2 & 7822-4319 3	Low Density Artefact Distribution	Land Parcel 29 and Land Parcel 30.
7822-4318	Craigieburn Road Upgrade LDAD	7822-4318-1	Low Density Artefact Distribution	Land Parcel 27. 5m south of Craigieburn Road.
Aboriginal places within 200 metres of the study area				
7822-2419	Whites Lane Track Scatter 2	7822-2419-1 & 7822-2419-2	Artefact Scatter & Object Collection	90m east of Land Parcel 16
7822-2435	Whites Lane Track Scatter 1	7822-2435-1 & 7822-2435-2	Artefact Scatter & Object Collection	13m south of Olivers Road & 120m east of Land Parcel 16
7822-2471	Craigieburn Road West AS1	7822-2471-1	Artefact Scatter	80m east of Land Parcel 26 & 70m south of Land Parcel 26

Aboriginal Place No.	Aboriginal Place Name	Component No.	Component Type	Location
7822-2472	Craigieburn Road West AS2	7822-2472-1	Artefact Scatter	10m east of Land Parcel 28, south of Craigieburn Rd
7822-2479	Greenvale Reservoir IA 1	7822-2479	Artefact Scatter	20m north of Parcel 42
7822-2480	Greenvale Reservoir IA 2	7822-2480	Artefact Scatter	20m north of Parcel 42
7822-2483	Aitken Hill AS 3	7822-2483	Artefact Scatter	150m north of Parcel 42
7822-2540	Davis Langdon 3	7822-2540-1 & 7822-2540-2	Artefact Scatter & Object Collection	120m east of Land Parcel 16
7822-2541	Davis Langdon 4	7822-2541-1 & 7822-2541-2	Artefact Scatter & Object Collection	66m east of Whites Lane & Land Parcel 16
7822-2542	Davis Langdon 5	7822-2542-1 & 7822-2542-2	Artefact Scatter & Object Collection	30m east of Whites lane & Land Parcel 16, 18m south of Olivers Road
7822-2543	Davis Langdon 6	7822-2543-1 & 7822-2543-2	Artefact Scatter & Object Collection	170m east of Whites Lane & Land Parcel 16
7822-2544	Davis Langdon 7	7822-2544-1 & 7822-2544-2	Artefact Scatter & Object Collection	175m east of Whites Lane & Land Parcel 16
7822-2550	Davis Langdon 8	7822-2550-1 & 7822-2550-2	Artefact Scatter & Object Collection	150m east of Whites Lane & Land Parcel 16
7822-2551	Davis Langdon 9	7822-2551-1 & 7822-2551-2	Artefact Scatter & Object Collection	172m east of Whites Lane & Land Parcel 16
7822-2553	Davis Langdon 11	7822-2553-1 & 7822-2553-2	Artefact Scatter & Object Collection	55m east of Whites Lane & Land Parcel 16
7822-2554	Davis Langdon 12	7822-2554-1 & 7822-2554-2	Artefact Scatter & Object Collection	80m east of Whites Lane & Land Parcel 16
7822-2555	Davis Langdon 13	7822-2555-1 & 7822-2555-2	Artefact Scatter & Object Collection	50 m east of Whites Lane & Land Parcel 16
7822-3198	550 Craigieburn Rd 1	7822-3198-1	Artefact Scatter	50m east of Whites Lane & Land Parcel 16
7822-3841	Tamboore 25	7822-3841-1	Artefact Scatter	30m north of Land Parcel 1 and Mt Ridley Road

Aboriginal places within the study area

Mickleham Rd 1 (VAHR 7822-0681) is an artefact scatter of surface silcrete artefacts 70 metres east of Aitken Creek, which is noted on the VAHR to have been collected and lodged with the WWCHAC and the place subsequently destroyed in 1994 (ACHRIS, 2018; Rhodes & Murphy, 1994). Place dimensions were 13.3x 6.4 metres in size.

Dunhelen 1 (VAHR 7822-0682) is a Red Gum scarred tree which was in good preservation at the time of recording in 1994. A single scar was recorded on the tree which is located 335 metres west of Aitken Creek on the basalt plain.

Brinkley Pk 1 (VAHR 7822-1105) is registered as an isolated artefact of four silcrete surface artefacts. The registration was completed in 1999 and records the location as 20 metres north of the cyclone fence boundary of the Greenvale reservoir.

Mickleham Road Aitken Creek 1 (VAHR 7822-2935) is located 100 metres west of Aitken Creek on the floodplain and 40 metres east of Mickleham Road. The place is an artefact scatter with an unknown number of surface artefacts. The place was subsequently destroyed after recording.

Mickleham Road Aitken Creek 2 (VAHR 7822-2936) is located 36 metres south of Aitken Creek on the floodplain. It is an isolated artefact recorded as an artefact scatter with one grey quartzite broken flake recorded on the surface.

Mickleham Road Plain 1 (VAHR 7822-2974) is a scarred tree located 287 metres west of Brookfield Boulevard. The tree is a Box species with one scar measuring 52x25x75 centimetres.

Whites Lane Aitken Creek 1 (VAHR 7822-2937) is an artefact scatter with associated object collection located 225 metres northwest of the confluence of Aitken Creek and a drainage line. A total of 21 artefacts were recorded, comprised 20 silcrete flakes and one quartzite flake. The artefacts were located on a soil mound which had likely been from a dam wall immediately to the south. Artefacts from this place were collected and relocated within the property at 125 Whites Lane, Mickleham by WWCHAC (ACHRIS, 2018).

Whites Lane Aitken Creek 2 (VAHR 7822-2999) is an artefact scatter with associated object collection located 110 metres west northwest of the confluence of Aitken Creek and a drainage line on a dam wall. A total of 66 artefacts were recorded in the artefact scatter and comprised silcrete flakes (n=49), silcrete points (n=4), quartz flakes (n=4), silcrete cores (n=3), quartzite flakes (n=2), and a silcrete blade. As with VAHR 7822-2937, the artefacts were collected by representatives of the WWCHAC and relocated to within the property at 125 Whites Lane, Mickleham (ACHRIS, 2018).

Whites Lane Aitken Creek 3 (VAHR 7822-3023) is an artefact scatter with associated object collection located, approximately 100 metres west of the confluence of Aitken Creek and a drainage line. Three artefacts recorded at this place included two surface silcrete flakes and one quartz flake.

Craigieburn Road Upgrade LDAD (VAHR 7822-4318) is a LDAD is recorded as a single artefact identified within lot 27. The place consists of a silcrete complete flake recorded at a depth of 100 millimetres.

1390 Mickleham Road LDAD 1 (VAHR 7822-4319) is a surface LDAD recorded in two locations. Two of the components are recorded within lot 30 whilst a third component is recorded within lot 29 in association with the western end of Flax Lily Creek Wetlands. The artefact consist of silcrete and quartz.

Aboriginal places within 200 metres of the study area

All Aboriginal places within 200 metres of the study area are artefact scatters, with the majority of these being located east of Whites Lane near a tributary of Aitken Creek. Craigieburn Road West AS2 (VAHR 7822-2472) is located along the eastern boundary of the study area at Land Parcel 28, immediately to the east, and as such, is likely to extend into the current study area. All but four of the artefact scatters (VAHR 7822-02471, 7822-2472, 7822-3198, and 7822-3841) have associated object collections, which generally means that artefacts from the scatter were either collected and removed

for safe keeping or relocated to an area of lesser disturbance in the immediate area. Each of the artefact scatters recorded within 200 metres of the study area are summarised below.

Whites Lane Track Scatter 2 (VAHR 7822-2419) is an artefact scatter located approximately 90 metres east of the study area. It is 63x5 metres in area and comprises one quartz and seven silcrete artefacts in a disturbed location on a disused horse track. It is 95 metres east of the tributary of Aitken Creek.

Whites Lane Track Scatter 1 (VAHR 7822-2435) is an artefact scatter located on a disused gravel surfaced horse track and consists of two silcrete artefacts in a 3x1 metre area. It is 213 metres east of the tributary of Aitken Creek on a disused horse track.

Craigieburn Road West AS1 (VAHR 7822-2471) is an artefact scatter located approximately 70 metres east of the study area, adjacent to Land Parcel 28. A total of 13 silcrete flaked artefacts were recorded consisting of 11 surface and two subsurface artefacts. The two subsurface artefacts were identified at depths of 200 to 250 millimetres. The artefacts were identified on a lowland floodplain that had been used for agricultural purposes.

Craigieburn Road West AS2 (VAHR 7822-2472) is an artefact scatter located approximately 10 metres east of the study area, adjacent to Land Parcel 28. Eight silcrete flaked artefacts were recorded consisting of five surface and three subsurface artefacts. The five subsurface artefacts were identified at depths of 60 to 110 millimetres. The surface artefacts were identified on a lowland floodplain with exotic vegetation that had been used for agricultural purposes. VAHR 7822-2472 is located adjacent to the current study area and is likely to extend into the study area.

Greenvale Reservoir IA 1 (VAHR 7822-2479) is registered as a single surface artefact recorded approximately 200 metres north of the Greenvale Reservoir.

Greenvale Reservoir IA 2 (VAHR 7822-2480) was recorded as a single surface artefact recorded approximately 200 metres north of the Greenvale Reservoir.

Aitken Hill AS 3 (VAHR 7822-2483) is an artefact scatter consisting of two surface artefacts as well as three additional subsurface artefacts. The material is recorded as two quartz and three silcrete artefacts.

Davis Langdon 3 (VAHR 7822-2540) comprises one grey silcrete proximal flake recorded in a disturbed surface context on the basalt plain approximately 300 metres north of Aitken Creek.

Davis Langdon 4 (VAHR 7822-2541) is a quartz angular fragment recorded on a disused horse track on the floodplain/lava plain approximately 150 metres north of Aitken Creek and 75 metres northeast of the tributary of Aitken Creek.

Davis Langdon 5 (VAHR 7822-2542) is an artefact scatter comprising 17 artefacts, including seven angular fragments, three broken flakes, one complete flake and one utilised flake in an area of 25x10 metres. It is located on floodplain/lava plain 130 metres east of the tributary of Aitken Creek on a disused horse track. The artefacts were located on the surface and consisted of silcrete and quartzite.

Davis Langdon 6 (VAHR 7822-2543) is a LDAD of three silcrete surface artefacts recorded on gently sloping basalt plain on a disused horse track.

Davis Langdon 7 (VAHR 7822-2544) is one silcrete core fragment recorded on the surface of a disused horse track.

Davis Langdon 8 (VAHR 7822-2550) is a broken silcrete flake recorded on a disused horse track on the basalt plain.

Davis Langdon 9 (VAHR 7822-2551) is one silcrete core and one silcrete angular fragment recorded on gently sloping basalt plain on a disused horse track 205 metres north northeast of Aitken Creek.

Davis Langdon 11 (VAHR 7822-2553) is a silcrete proximal flake recorded in subsurface dark grey/brown clay loam of the alluvial/colluvial aggrading landform at a depth of 280 millimetres above a clay subsoil. It is 85 metres from the confluence of Aitken Creek and its tributary.

Davis Langdon 12 (VAHR 7822-2554) is a quartzite angular fragment recorded in subsurface in dark brown silty loam over basalt floaters located 40 metres north of Aitken Creek and 85 metres east of the confluence of Aitken Creek and its tributary.

Davis Langdon 13 (VAHR 7822-2555) is two quartz angular fragments recorded 100 millimetres deep on the gently inclined floodplain 30 metres north of Aitken Creek and 50 metres east of the confluence of Aitken Creek and its tributary.

550 Craigieburn Rd 1 (VAHR 7822-3198) is a subsurface artefact scatter of 14 artefacts (13 silcrete, 1 quartz) comprising eight broken and complete flakes, five angular fragments and one broken tool. Located on the mid slope of the plain 43 metres south of Aitken Creek. All artefacts were recorded in the upper unit of weakly cemented silt.

Tamboore 25 (VAHR 7822-3841) is a 35x35 metre artefact scatter of 55 flaked artefacts, including five formal tools (3 scrapers, 2 backed blades) recorded on the upper slope of a low rise on the north east corner of the intersection of My Ridley Road and Mickleham Road. All artefact were located in a subsurface context from between 100 and 350 millimetres in depth.

Summary

There are 11 Aboriginal places (six artefact scatters and two scarred trees) previously recorded within the study area. In addition, 19 artefact scatters have been recorded on lowland plains in close proximity to waterways within 200 metres of the study area. Silcrete being the most prominent raw material recorded within the artefact scatters.

The majority of Aboriginal cultural heritage material was all recorded on land within proximity to waterways. It is noted that there have been low to moderate levels of disturbances due to agricultural practices or activities, such as the horse training track but this does not preclude evidence of Aboriginal occupation being identified. Within the wider geographic region 400 more Aboriginal places are present, predominately located along the waterways. These include LDADs, artefact scatters and associated object collections, scarred tress, earth features and quarries.

2.5 Previous work in the geographic region

A search of the VAHR identified a total of 249 assessments that have previously taken place within the geographic region (Table 4). Complex Assessment CHMPs are the most frequently occurring assessment type, accounting for 36.1% of all assessments (n=90), followed by surveys (29.7%; n=74) and desktop or due diligence assessments (14.5%; n=36).

Table 4 Archaeological assessment types within the geographic region

Report type	Total number	Percentage
CHMP Discontinued	1	0.4
CHMP Complex Assessment	90	36.1

CHMP Standard Assessment	5	2
CHMP Desktop Assessment	3	1.2
Desktop or Paper or Due Diligence or Other	36	14.5
Test Excavation	17	6.8
Salvage Excavation	14	5.6
Survey	74	29.7
Test Excavation and Survey	4	1.6
Heritage Management	3	1.2
Heritage Assessment	2	0.8
Total	249	100

Several cultural heritage assessments have been completed for the surrounding region, principally focussing along the Malcolm, Aitken and Yuroke Creeks. Of these, three regional studies (Murphy, 1995; Murphy, 1996; Schell & Long, 2006), two local investigations (Weaver, 1999; Rhodes & Murphy, 1994), and one Cultural Heritage Impact Assessment for the Craigieburn West Precinct Structure Plan (Vaskos, McMillan, Donati, & Berelov, 2012) have been undertaken within parts of the study area. No CHMPs have been undertaken within the study area. These assessments are summarised below, along with regional and local investigations and CHMPs within 1 kilometre of the study. These aid in developing a predictive statement for the types of Aboriginal cultural heritage likely to be found in the study area.

Regional studies

Murphy (1995) conducted Stage 1 of a regional study of the North Western Wurundjeri area, extending almost to Seymour in the north, Hepburn Springs in the west, Whittlesea in the east and Bacchus Marsh and Melton in the south, the western side of the current study area was included in the region. Prior to the study 94 Aboriginal places had been recorded within the region, with the majority being surface artefact scatters (n=27) and LDADs (n=28) and scarred trees (n=10), with lesser numbers of quarries (n=6), Aboriginal places (it's unclear what this category refers to, possibly historic places) (n=5), mounds, artefact scatter/exposure in bank, artefact scatter/mound, artefact scatter/quarry (each n=3), rock arrangements (n=2) and an artefact collection, a grinding groove, exposure in bank and a burial.

During Stage 1, an archaeological survey was conducted over a sample area where areas of high ground surface visibility were targeted. Eight Aboriginal places, these were, four LDADs (VAHR 7822-0798 & 7822-0799, 7823-0028 & 7823-0032), a scarred tree (VAHR 7823-0029), and three artefact scatters (VAHR 7823-0030, 7823-0031 & 7823-0033) were recorded. The artefact scatters and LDADs were recorded in the Creeks and Rivers and the Volcanic Plains and Hills Landscape Units, and the scarred tree was also recorded in the Volcanic Plains unit (Murphy, 1995, pp. 21-22). The current study area is within Murphy's (1995) Creeks and Rivers Landscape Unit, and while this area was not surveyed, Aitken Creek was identified as an area of high archaeological potential for Aboriginal places.

Murphy (1996) surveyed additional sample areas in Stage 2 of this project, the current study area was not surveyed. In total (Stages 1 & 2) 35 Aboriginal places were recorded, eleven of these were artefact scatters, 21 were LDADs, and three were scarred trees. Sixty two percent of these places were within

100 metres of a water supply, and 84% were located on level to gently inclined ground, 81% of artefacts were manufactured from fine grained silcrete, with 81% also flaked artefacts. Archaeological potential was predicted that is relevant to the current assessment was that areas of gently sloping land on any landform and level areas within 200 metres of an ephemeral or permanent waterway, and any stands of mature trees.

Schell and Long (2006) conducted a desktop study of the Hume Growth Area for the Melbourne 2030 strategy, which included all of the current study area. Shell and Long's (2006) predictive model stated:

- Creek corridors, in particular Merri Creek, have formed the core focus for Aboriginal activities throughout the past, with the majority of archaeological sites located within 200 metres of Merri Creek and 100 metres of other creeks. Artefact scatters, in particular, occur in higher numbers and densities within the Merri Creek corridor, with locations at the confluence of other creeks (i.e., Malcolm Creek, Aitkin Creek) having potential to contain Aboriginal places. The presence of creek terraces within the Merri Creek corridor highlights the potential for cultural heritage material to be preserved in a depositional environment.
- Artefact scatters, many of them small or diffuse, and scarred trees occur widely across the intervening basalt plains and localised granite plutons. Aboriginal place locations appear to extend across a broad range of topographic features, including flat and undulating land, minor drainage lines, swamps, eruption points, hills and other elevated landforms. The plains in the northern half of the Hume Growth Area appear to have sustained far less disturbance from intensive agriculture and urbanisation, than the equivalent area to the south.

Cultural heritage assessments

The current study area between Mt Ridley Road and Craigieburn Road has been previously investigated in a cultural heritage assessment for a Precinct Structure Plan as part of the Urban growth Zone by **Vaskos, et al.** (2012). The desktop assessment indicated that the majority of the study area was dominated by the Newer Volcanics basalt flows and that Aitken Creek and its tributaries were the main waterways.

A survey was carried out which identified that the majority of the study area had poor ground surface visibility (0-20%) due to grassy vegetation. Some areas of greater visibility (60-80%) were encountered around fence lines and under trees. Six Aboriginal places (Mickleham Road Aitken Creek 1, VAHR 7822-2935, Mickleham Road Plain 1, VAHR 7822-2974, Mickleham Road Aitken Creek 2, VAHR 7822-2936, Whites Lane Aitken Creek 1, VAHR 7822-2937, Whites Lane Aitken Creek 2, VAHR 7822-2999 and Whites Lane Aitken Creek 3, VAHR 7822-3023) were recorded during the survey. These findings supported the predictive model that most Aboriginal places would be recorded on terraces of Aitken Creek and on elevated ground associated with the creek line, as four of the Aboriginal places recorded within 200 metres of Aitken Creek. It was also noted that the high ground in the northwest corner of the study area was likely to have Aboriginal cultural heritage (Vaskos, McMillan, Donati, & Berelov, 2012, p. 84). It was assessed that due to the high impact of the proposed activity that it was highly likely that Aboriginal cultural material would be impacted, and therefore, a CHMP would be mandatory in properties where the Aboriginal places had been recorded and where the area of cultural sensitivity within 200 metres of Aitken Creek and its tributaries were located, and a voluntary CHMP could be undertaken in the remaining properties in order to mitigate potential harm to Aboriginal cultural heritage that may occur away from the creek.

Local studies

An archaeological investigation was undertaken by **du Cros** (1991) on the Craigieburn Landholdings Ltd property, which extended from Mt Ridley Road in the north to Aitken Hill in the south, 600 metres east of the current study area. During this survey, seven Aboriginal places were identified, including two subsurface scatters, one surface artefact scatter and four isolated artefacts. Five of the Aboriginal places lie within 50 metres of either Aitken Creek or Malcolm Creek. One of the other two, an isolated artefact occurrence (Silverton 3 VAHR 7822-0324), was located on the northern slopes of Aitken Hill. Based on these Aboriginal places, du Cros (1991) identified areas within 50 metres of Aitken and Malcolm Creeks, and the summit of Aitken Hill as having archaeological potential and recommended that subsurface testing should be conducted prior to development.

Rhodes and Murphy (1994) completed both an archaeological survey and subsurface testing program on the BHP property at Mickleham Road, Greenvale. This study area is located within Land Parcel 39 of the current study area. The property consists of undulating grassy plains and the western shoulder of Aitken Hill. During the ground survey, one Aboriginal place was identified. Mickleham Road 1 (VAHR 7822-0681) is an artefact scatter, consisting of 16 silcrete artefacts and located on the eastern creek bank of a small drainage line running north to south across the property, on the lower western slope of Aitken Hill. Based on their survey results, Rhodes and Murphy (1994) also considered the southern slopes of Aitken Hill as having archaeological potential. Subsurface testing was undertaken on the property because of the limited ground surface visibility, which had been highlighted as an issue during the survey. The subsurface testing was concentrated on the area around Mickleham Road 1 (VAHR 7822-0681). Further artefacts were recorded within VAHR 7822-0681, which indicated that there was potential for subsurface deposits on the western slope of Aitken Hill within the current study area. No other Aboriginal places were recorded. No subsurface testing was completed on the southern slopes of Aitken Hill.

Weaver (1999) conducted an archaeological investigation for a proposed residential development at Brindley Park at 1170 Mickleham Road, Greenvale, which is located directly to the south and southwest of Aitken Hill and includes a portion of the current study area. The report notes that pastoral farming practices and land clearing were common from initial settlement in 1836.

The archaeological assessment consisted of a pedestrian survey. Ground surface visibility was variable with stock and vehicle tracks having the highest visibility. Weaver recorded one new Aboriginal archaeological site: Brindley Park 1 (VAHR 7822-1105), which is an isolated artefact occurrence located on an exposed area of granite near a minor stream valley. Weaver (1999) noted that because of poor ground surface visibility, Aboriginal place identification was generally difficult. Weaver (1999) considered, however, that Aitken Hill, as a very prominent landform, should have archaeological potential, but that this did not seem to be borne out by survey results. Weaver (1999 p.11) suggested, as an alternative that “it is possible that Mount Aitken [Aitken Hill] was not a favoured location for even short duration camps, and that the lower slopes or floodplains of the creeks were more common”. Suggesting that the areas close to waterways within the current survey area have potential for Aboriginal cultural heritage.

Sutherland, et al. (2003) completed an archaeological survey of the Lensworth Craigieburn housing development which includes sections of Malcolm and Aitken Creeks, and is immediately bounded by part of the northern and southern extent of the current study area along Craigieburn Road. Two previously recorded Aboriginal places (VAHR 7822-0325 and 7822-0323) were relocated and two new places were also recorded (VAHR 7822-1469 and 7822-1468). One of the previously recorded places (VAHR 7822-0323) was noted as being further exposed by erosion and cattle trampling from when it was first recorded, extending the previously recorded boundaries of the place. All places recorded in the survey were in exposed areas and therefore subsurface testing was recommended for areas

adjacent to the creeks with poor surface visibility because of vegetation cover. Subsurface testing was also recommended for land adjacent to Aitken Creek to determine the spatial extent of previously identified Aboriginal sites as a result of this survey. Suggesting that the areas close to waterways within the current survey area have potential for Aboriginal cultural heritage.

Chamberlain and Nicholls (2004) completed a test excavation within the Lensworth Craigieburn housing development along Aitken Creek approximately 400 metres east of the study area at Whites Lane and approximately 800 metres north of Craigieburn Road. The testing was recommended following the survey discussed above (Sutherland, Nicholls, & Patterson, 2003), and was designed to sample land adjacent to Aitken Creek. The purpose of the testing was to test the archaeological potential of the landform, and determine the spatial extent of seven previously identified artefact scatters (Aitken Creek IA 1, VAHR 7822-0323, Silvertown 5 to 7, VAHR 7822-0326 to VAHR 7822-0328, Aitken Creek 1C, VAHR 7822-1468, Aitken Creek 1B, VAHR 7822-1469, and Aitken Creek Artefact Scatter, VAHR 7822-1512) along the banks of Aitken Creek. A total of 26 transects were completed, using a combination of auger probes and backhoe scrapes. One grey silcrete waste flake artefact was identified and was assessed as a component of a previously registered place (VAHR 7822-1512). No new Aboriginal cultural heritage was identified as a result of the test excavations and it was concluded that Aboriginal places were confined to areas in the immediate vicinity of the creeks. Further suggesting that the areas close to waterways within the current survey area have potential for Aboriginal cultural heritage.

Murphy and Amorosi (2003) completed an archaeological survey located south of Craigieburn Road and east of and adjacent to the southern end of the study area, encompassing a large section of Aitken Creek. Three Aboriginal places were recorded as a result of this survey; an artefact scatter, PEET SAS 1 (VAHR 7822-1415) and two LDADs, PEET IA 2 (VAHR 7822-1413) and PEET IA 2 (VAHR 7822-1414). The artefact scatter consisted of a flake, core and two tools manufactured from silcrete, and one quartz fragment. The isolated artefacts consisted of one silcrete core, one quartz core and one broken quartz flake. All Aboriginal places were identified on the banks of Aitken Creek. Two areas of archaeological potential were identified within the study area, the first included land within 50 metres of the creek and the second was the ridgeline of Aitken Hill, however these were not confirmed by subsurface testing. Suggesting high points and areas within proximity to waterways have potential for Aboriginal cultural heritage.

Light (2006) carried out a survey of two properties at 1170 Mickleham Road, Greenvale, located immediately south and east of the current study area, including the lands on the southern flanks of Aitken Hill. No Aboriginal places were recorded during the field survey, though the consultant noted the poor surface visibility at the time. The presence of Brinkley Pk 1 (VAHR 7822-1105) was considered to be an indication of the archaeological potential of the Aitken Hill landform, which it was felt may extend to the surrounding surfaces of this prominent rise. The absence of significant ground disturbance to the area suggested that site preservation may be good.

Ford (2006) undertook a survey for the Yuroke Pump Station and two proposed pipelines (M658 and M669). The northern pipeline extended from Yuroke to the south around Greenvale Reservoir northwards through fields and over the shoulder of Aitken Hill (adjacent to the southeast boundary of the current study area) to another pump station, with the southern pipeline extending south from Yuroke Pump Station then bordering Greenvale Reservoir and cutting across Yuroke Creek to Brendan Road, then south to Somerton Road. No Aboriginal places were recorded during field survey, but Ford (2006) noted the poor visibility of much of the route. High potential for Aboriginal cultural heritage was identified along the southern pipeline along Yuroke Creek and a rise adjacent to it, and for the entirety of the northern pipeline a drainage line into Greenvale Reservoir and the western shoulder of Aitken Hill.

CHMPs

Tucker and Athanasiadis (2009) prepared CHMP 10538 for Highlands Estate, south of Mt Ridley Road, 990 metres east of the current study area. Results of the Desktop Assessment determined that the areas with most potential for Aboriginal cultural heritage were within 200 metres of waterways and on the summit of hills, such as Mount Ridley. Waterways were considered to be less likely to have been disturbed by pastoral activity. One stone artefact scatter, Malcolm Creek 4 (VAHR 7822-2245), and two scarred trees, Malcolm Creek 6 (VAHR 7822-2277) and Malcolm Creek 8 (VAHR 7822-2281) were recorded during the Standard Assessment. During the Complex Assessment 170 excavations were carried out and six subsurface Aboriginal places were identified Malcolm Creek IA1 (Silverton) (VAHR 7822-0325), Malcolm Creek 1 to Malcolm Creek 5 and Malcolm Creek 8 (VAHR 7822-2242 to 7822-2246 and 7822-2281). The results of the Complex Assessment indicated that the terraced land adjacent to Malcolm Creek was the most sensitive for Aboriginal places, with the flat plains unlikely to contain Aboriginal places.

Lawler (2009) completed CHMP 10330 for pipeline construction connecting Yuroke Reservoir and Craigieburn Reservoir, immediately east of the southernmost end, and to the south and east of the current study area. A survey had been previously carried out (Ford A. , 2006), which identified an area of high potential for Aboriginal cultural heritage at the crossing of a drainage line of Yuroke Creek and the western shoulder of Aitken Hill. A total of 94 test pits were excavated as part of the Complex Assessment, comprising 64 1x1 metre pits, 21 0.75x1 metre pits and 9 0.75x0.75 metre pits. Each pit was excavated to maximum depths between 150 and 300 millimetres. The Aboriginal cultural heritage material identified was assessed as comprising components of two previously recorded places; one on a stony ridge at Yuroke Creek (VAHR 7822-0681) and the other on the northwest shoulder of Aitken Hill (VAHR 7822-0324). In both cases the artefacts are made of grey and pink silcrete, quarts and some quartzite and chert.

Czastka, et al. (2010) prepared CHMP 11293 for a 15.9 hectare property at 120 Whites Lane, Craigieburn, immediately to the east of Land Parcel 16 in the current study area. Three Aboriginal places (Whites Lane Track Scatter 1, VAHR 7822-2435, Whites Lane Track Scatter 2, VAHR 7822-2419, & Aitken Creek 1C, VAHR 7822-1468) had been previously recorded within their study area. During the standard assessment, ten Aboriginal places (David Langdon 01 to David Langdon 10, VAHR 7822-2538 to 7822-2552) were recorded, all were located on an eroded gently sloping basalt plain around a former trotting track. Based on the survey results in the standard assessment it was determined that there was a high likelihood for artefact scatters to be located on the surface of the basalt plains or within proximity to creek lines. A complex assessment was conducted with two 1x1 metre test pits excavated to determine the stratigraphy and grids of 50 x50 metres over the gently sloping basalt plain and 25x25 metre grid over the archaeologically sensitive alluvial landform and around previously recorded places, with a total of 143 shovel test probes, and an additional 37 shovel probes were excavated. Three Aboriginal places (David Langdon 11 to David Langdon 13, VAHR 7822-2553 to 7822-2555) were recorded during the subsurface testing program. Georacheological test pit 1 was excavated on the alluvial landform, which also had colluvial deposits from upslope, to a depth of 320 millimetres where hard subsoil clay was reached. Three deposits were found in the test pit, a clay loam at the surface, changing to silty loam over a medium to heavy clay. The presence of buckshot gravels in the upper deposits which usually indicates that deposits were seasonally waterlogged. The deposits are interpreted as a colluvial lens represented in the profile by a discontinuous silty loam (Czastka, Ricardi, & Thiele, 2010, pp. 38-39). In total only four artefacts were recorded during the subsurface testing program at three places (VAHR 7822-2553 to 7822-2555), all artefacts were recorded in the alluvial/colluvial landform and likely to have been affected by post depositional processes (Czastka, Ricardi, & Thiele, 2010, pp. 67-68).

MacCulloch and Tucker (2010a) completed CHMP 10971 to a complex assessment level for a combined residential and commercial subdivision, surrounding part of Aitken Creek, 810 metres east of the study area north of Craigieburn Road. The desktop assessment found three Aboriginal cultural heritage places recorded within the study area (VAHR 7822-0326, 7822-0327 and 7822-0328). A transect and opportunistic pedestrian survey were conducted as part of the standard assessment. Two surface artefacts were recorded consisting of one silcrete blade and one silcrete core, identified in association with registered place VAHR 7822-0327. One new Aboriginal place (VAHR 7822-2422) was registered as part of the assessment, despite widespread ground disturbance due to dam construction, land clearance, boulder removal and agricultural use across the study area. A total of 84 test pits were excavated during the complex assessment, comprising five 1x1 metre test pits, 11 50x50 centimetre shovel test pits and 68 25x25 centimetre shovel test pits. No new Aboriginal cultural heritage material was found during this subsurface testing.

MacCulloch and Tucker (2010b) completed CHMP 10972 for a combined residential and commercial subdivision on Aitken Hill, in Greenvale bounded in the north by Conservation Way and 680 metres east of the southern end of the current study area. A desktop assessment found one Aboriginal cultural heritage place recorded within the study area (VAHR 7822-0324) and three places that were identified but not previously registered known as Aitken Hill 1, Aitken Creek 2 and Aitken Creek 3). A transect and opportunistic pedestrian survey were conducted as part of the standard assessment and a total of 27 surface artefacts were recorded. Fourteen artefacts were identified near Aitken Creek in the northern extent; 11 made from silcrete and three from white quartz, consisting of flakes, angular fragments and cores. Thirteen artefacts were identified near Aitken Hill in the southern extent, made from fine to coarse silcrete and white quartz, also consisting of flakes, angular fragments and cores. Two new Aboriginal places were registered (VAHR 7822-2451 and 7822-2452) as a result of the assessment, which, despite widespread ground disturbance due to land clearance, boulder removal and agricultural use across the study area. A total of 164 test pits were excavated during the complex assessment, comprising of three 1x1 metre pits, 40 50x50 centimetre shovel test pits and 121 25x25 centimetre shovel pits. No new Aboriginal cultural heritage material was found during this subsurface testing.

MacCulloch (2011) carried out a salvage excavation of Aitken Creek 2, VAHR 7822-2451, on the south side of Aitken Creek. Thirty two artefacts were recorded on the surface at Aitken Creek 2 (including 14 previously identified artefacts in CHMP 10972). Four strip trenches were excavated (two 4x1 metre & two 3x1 metre). Artefacts were recorded in three trenches (Salvage Pits 1 to 3), typically being recorded between 50 and 200 millimetres with the occasional artefact recorded at 280 millimetres within grey/brown silty clay loam (2011, pp. 7-8). A total of 66 artefacts were recorded, with 34 of these being recorded in subsurface context. The majority of artefacts were silcrete (85%), with the remaining artefacts in quartz (15%). Complete blades (6%) and flakes (21%), broken blades (11%) and flakes (19%), multidirectional (11%) and bidirectional (2%) cores, core fragment (8%), flaked piece (8%) and angular fragments (14%) made up the assemblage (MacCulloch, 2011, p. 9 & 15).

Ford, et al. (2010) completed CHMP 11015 to a complex assessment level for residential subdivision at 575 Craigieburn Road, on the south of Craigieburn Road and immediately east and north of the southern extent of the current study area. The desktop assessment found three Aboriginal cultural heritage places recorded within the study area, Craigieburn Road West AS 3 and Craigieburn Road West AS 4 (VAHR 7822-1413, 7822-1414 and 7822-1415). An additional three Aboriginal places were identified during the standard assessment Craigieburn Road West AS 1, Craigieburn Road West AS 2, Craigieburn Road West IA 1 and Craigieburn Road West IA 2 (VAHR 7822-2471, 7822-2472 and 7822-2473). A total of 942 shovel test pits and eight 1x1 metre test pits were excavated as part of the complex assessment. Testing was conducted on a variety of landforms including between 50 to 180 metres of the tributary of Aitken Creek that extends from the current study area, on the volcanic plain

and on basalt outcrops within the volcanic plain. The soil profile was characterised by shallow silt or silty clay over a silty clay or basalt base (Ford, MacManus, Nicholson, & Verduci, 2010, pp. 43-44). With the exception of VAHR 7822-2473, the extent of all other identified Aboriginal places was expanded due to the identification of further artefacts. VAHR 7822-1414 was found to be a part of site VAHR 7822-1415 (registered as Craigieburn Road West AS 4), as there was a clear spatial link between the sites, identified due to the discovery of additional Aboriginal cultural material. A total of 404 artefacts were recorded consisting of 308 surface and 96 subsurface stone artefacts, with the greatest depth of 400 millimetres. The artefacts were predominately silcrete, but also included basalt, chert, quartz, crystal quartz and quartzite. One additional Aboriginal place was registered as a result of one isolated artefact identified during the sub surface testing program (VAHR 7822-2474). All Aboriginal places recorded were open artefact scatters, and with the exception of two LDADs (VAHR 7822-2473 & 7822-2474), were recorded in close proximity to the tributary of Aitken Creek. Site formation processes include artefact discard, as well as, erosion, agricultural activities, such as ploughing and animal trampling and erosion from the ridge to the tributary and, fluvial sediment movement in the tributary (Ford, MacManus, Nicholson, & Verduci, 2010, p. 91). Craigieburn Road West AS 2 (VAHR 7822-2472) is an artefact scatter with an area of 105x42 metres, which is comprised of eight silcrete artefacts recorded in surface and subsurface deposits of between 60 and 110 millimetres, with the expected land use disturbance from clearance, ploughing, stock use and erosion (Ford, MacManus, Nicholson, & Verduci, 2010, pp. 98-99) immediately east of the eastern boundary of the current study area and as such, is likely to extend into the current study area.

Murphy and Owen (2010 draft) prepared a CHMP 10802 (discontinued) for the R2 Precinct Structure Plan, Craigieburn, which was discontinued. The study area was immediately east of the current study area and south of Mount Ridley Road. There were four previously recorded Aboriginal places (three LDADs VAHR 7822-1468, 7822-1469 & 7822-1512, and one stone arrangement and springs place VAHR 7822-1884). The highest archaeological potential was identified within 100 metres of Aitken Creek and land within 50 metres of the stone arrangement and spring place (VAHR 7822-1884). VAHR 7822-1884 was inspected during the standard assessment and determined the place was not of Aboriginal origin, as a result the place was removed from the VAHR. Complex assessment included 128 test excavations where six Aboriginal artefact scatters were recorded (VAHR 7822-2418, 7822-2419, 7822-2432 to 7822-2435). Only one of these scatters contained subsurface artefactual material (VAHR 7822-2418). Two of these places (VAHR 7822-2419 & 7822-2435) were later excluded from the assessment as the boundary of the study area was altered. All places were low density artefact scatters and thought to typically date to the within last 5,000 to 6,000 years as is typical for artefact scatters that are characteristic of the Australian Small Tool Tradition (ASTT).

Murphy, et al. (2011) prepared CHMP 11635 for a 108 hectare subdivision at 550 Craigieburn Road, Craigieburn, immediately to the east of the current study area at Whites Lane, north of Craigieburn Road. Part of the area had been previously investigated with a complex assessment (Murphy & Owen, 2010 draft). Aboriginal places (VAHR 7822-1469, 7822-1512, 7822-2418, 7822-2432, 7822-2433 & 7822-2434) were noted in the desktop assessment and land within 200 metres of Aitken Creek and its associated drainage line was considered to be sensitive for Aboriginal cultural heritage. VAHR 7822-1469 was relocated during the standard assessment and no new Aboriginal places were recorded. During the subsurface testing program of the complex assessment a total of 91.0975 square metres was excavated and 3.0625 metres square of that contained Aboriginal cultural heritage material. In total, 30 artefacts (29 silcrete & one quartz) were recorded from the surface and in four of the test pits, with the previously recorded Aboriginal places investigated and two additional Aboriginal places (VAHR 7822-3197 & 7822-3198) recorded. The artefacts were predominately flakes (n=20), followed by angular fragments (n=5), core fragments (n=3) and tools (n=2). It was noted that all of the artefact scatters were located within 200 metres of Aitken Creek and 100 metres of its tributary. VAHR 7822-

3198 is recorded less than 50 metres east of the current study area and 45 metres south of Aitken Creek. Aboriginal cultural heritage sensitivity was identified as land within 200 metres of Aitken Creek and the tributary drainage line. All Aboriginal places were assessed as being of very low or low scientific significance. Artefacts were recorded in subsurface context at depths of 50 to 100 millimetres (VAHR 7822-3197 & 7822-3198) and 200 to 250 millimetres (VAHR 7822-7822-2418), the remainder of places were either wholly surface scatters or surface and subsurface (VAHR 7822-1512, no detail provided for depth) (Murphy, Owen, & Rymer, 2011, pp. 91-121).

Tucker (2011) prepared CHMP 11637 for a 76.6 hectare residential subdivision at 415 Mt Ridley Road, Craigieburn DP20B, south of Mt Ridley Road and 420 metres east of the current study area. No Aboriginal places had been previously recorded within Tucker's study area. Aitken Creek and a tributary of the creeks were within the study area. Three Aboriginal places, two artefact scatters (Aitken Creek Tributary 1 & 6, VAHR 7822-2836 & 7822-2915) and a scarred tree with toe holes (Aitken Creek Tributary 3, VAHR 7822-2885) were recorded during the standard assessment (Tucker, 2011, pp. 48-49). A complex assessment was carried out in which nine 1x1 metre test pits, 216 40x40 centimetre shovel probes and 51 2x1 metre mechanical test pits were excavated. The stratigraphic profile of the soils in the study area were considered to be fairly uniform with loams, clays and basalt rock throughout. Along the eastern and western branches of the Aitken Creek tributaries silty clay was also in the soil profile. Excavations extended into the substrate where older sticky black clays deep light brown (decomposing Lower Silurian deposits) and basalt due to the expected redeposition of artefacts due to the processes of ploughing and shrinkage cracks in the clay. Three landform units were present in the study area; flat pastoral land, the Aitken Creek tributary and stony rises either side of Aitken Creek. Despite the extensive subsurface testing, artefacts were only located in a subsurface context in two Aboriginal places, Aitken Creek Tributary 2 (VAHR 7822-2857) and Aitken Creek Tributary 4 (VAHR 7822-2873), in both cases artefacts were recorded at depths of 100 millimetres in loamy soil considered to have been disturbed by farming practises (Tucker, 2011, pp. 52-81). In total five artefacts were recorded from four Aboriginal places, three artefacts were quartz (two broken tools, one broken blade) and two were silcrete (scraper and broken tool) (Tucker, 2011, p. 83).

Orr (2013) prepared CHMP 12306 for a 2.7 kilometre long mains project along Mt Ridley Road immediately north of the current study area. During the desktop assessment, the archaeological potential of Malcolm Creek was noted, and stone artefacts were considered the most likely Aboriginal cultural heritage to be found. No Aboriginal places were recorded during the standard assessment. An area of high archaeological potential in the Malcolm Creek reserve was identified. The entire study area was excavated during the complex assessment, with two 1x1 metre test pits, 28 40x40 centimetre shovel probes, and 49 50x50 centimetre shovel test pits excavated (Orr, 2013, p. 28). One artefact scatter (VAHR 7822-3518), comprising 9 artefacts, comprised of silcrete flakes (n=8) and one bipolar quartz flake, was recorded adjacent to Malcolm Creek (Orr, 2013, pp. 38-40). Despite the entire length of Orr's study area being tested at 50 metre intervals, no Aboriginal cultural material was recorded away from the creek in the road reserve.

Stevens and Ricardi (2015) prepared CHMP 12270 for the proposed Lindum Vale 140 hectare subdivision at 1960-2090 Mickleham Road, Mickleham, immediately north of the current study area. One scarred tree, Cocking (VAHR 7822-0024) had been previously recorded within their study area. During the standard assessment two large gentle rises were identified as areas of potential for archaeological deposits. Cocking (VAHR 7822-0024) could not be relocated and poor ground surface visibility was identified as the reason no surface artefacts were recorded, however five scarred trees were recorded, Lindum Vale 1 to 5, VAHR 7822-3588 to 7822-3592, all were in good health with girths of between 2.45 to 4.17 metres. Four of the trees were River Red Gums (*E. camaldulensis*) and one was a Box species. On reinspection 3 years later, during the complex assessment, it was found that three

of these scarred trees (VAHR 7822-3588, 7822-3589 & 7822-3591) had been destroyed by fires in 2013. The complex assessment was carried out in two phases and a total of five 1x1 metre test pits, 215 40x40 centimetre shovel test pits, and 20 5x1 metre mechanical transects. One artefact scatter of 60 artefacts (Tamboree 25, VAHR 7822-2841) and one LDAD (Tamboree 26, VAHR 7822-2840) were recorded during the complex assessment on a low ridgeline. The artefacts from VAHR 7822-2841 was recorded from three of the 5x1 metre mechanical transects and comprised 13 angular fragments, 16 complete, 9 proximal, 6 distal and three split flakes, three scrapers, two blades, two cores and one distal blade. Of these, the majority were manufactured from silcrete (n=55), with lower quantities of hornfels (n=3), quartzite and quartz (n=1 each). VAHR 7822-2841 is immediately opposite the northwest corner of the current study area and, as such, may extend into it.

Nicholson, et al. (2015) prepared CHMP 11113 for a 60.95 hectare residential development at 1170 Mickleham Road, Greenvale, which is located immediately adjacent to the southernmost part of the current study area. The study area included the southern slope of Aitken Hill from just below the crest to the bottom of the slope. The southern part of their study area included a decommissioned Royal Australian Navy Arms Depot, resulting in subsurface disturbance from the construction and subsequent demolition of buildings and roads. No Aboriginal places were recorded during the desktop assessment. During the standard assessment 20 percent of the study area was surveyed and surface visibility was approximately 46% with a total effective coverage of 9.1 percent. Thirty two artefacts were recorded and two areas of Aboriginal cultural heritage potential were noted on the slopes of Aitken Hill and a crest overlooking Greenvale Reservoir where artefacts had been recorded. Two test trenches of 1x1 metre were excavated to determine the soil profile of the area and 46 transects with a total of 857 shovel probes of 400x400 millimetres were excavated during the complex assessment. The test trenches were located in each of the areas of potential. The soil profile of the test trench on the crest of a rise overlooking Greenvale Reservoir comprised loose, dry humic pale brown silt to 30 millimetres, with compact pale brown/grey silt with small quartz inclusions to 320 millimetres with very compact light brown clayey silt at the base (320 millimetres). The test trench on the slopes of Aitken Hill had a soil profile of dark reddish brown compact silty clay, with fine rootlets with frequent basalt inclusions to a basalt base at 170 millimetres (Nicholson, MacManus, Verduci, Fagan, & Szydzik, 2015, pp. 38-42). A total of 119 artefacts from six Aboriginal places, VAHR 7822-2478 (Greenvale Reservoir AS 1), VAHR 7822-2479 (Greenvale Reservoir IA 1), VAHR 7822-2480 (Greenvale Reservoir IA 2), VAHR 7822-2481 (Aitken Hill AS 1), VAHR 7822-2482 (Aitken Hill AS 2), and VAHR 7822-2483 (Aitken Hill AS 3) were recorded. Five of these places were recorded on the slopes of Aitken Hill and one (VAHR 7822-2478) was recorded on the crest near Greenvale Reservoir. The majority of artefacts were manufactured from silcrete, followed by quartz, with crystal quartz and quartzite recorded in low quantities at a few of the places.

Lawler, et al. (2016) conducted the salvage excavation for Aboriginal places VAHR 7822-2478 (Greenvale Reservoir AS 1), VAHR 7822-2479 (Greenvale Reservoir IA 1), VAHR 7822-2480 (Greenvale Reservoir IA 2), VAHR 7822-2481 (Aitken Hill AS 1), VAHR 7822-2482 (Aitken Hill AS 2), and VAHR 7822-2483 (Aitken Hill AS 3), as well as conducting additional subsurface excavation at VAHR 7822-2478 (Greenvale Reservoir AS 1), VAHR 7822-2482 (Aitken Hill AS 2), and VAHR 7822-2483 (Aitken Hill AS 3). Salvage excavations were placed closest to test pits where the most artefacts have been recorded during the Cultural Heritage Management Plan (CHMP 11113). A total of 109 artefacts were recorded during the salvage excavation from the six Aboriginal places, with the highest number (80) being recovered during surface collection. The highest number of artefacts was recorded at VAHR 7822-2481 (n=49). The majority of artefacts (61% of the assemblage) were silcrete, followed by quartzite (25%) and the remaining artefacts were quartz, crystal quartz and tachylite (15%). Artefact types recorded were primarily complete and broken flakes (72%) blades and utilised tools made up 12%, and angular fragments and cores were found in lower percentages. In total 30 percent of the

assemblage were utilised flakes or tools (geometric microliths, notched tools, & scrapers) which is relatively high and could reflect the activities carried out at the places, discard from food and hunting rather than a primary production place (Lawler, Robb, & Dalla-Vecchia, 2016, pp. 30-33).

Summary

The archaeological assessments within one kilometre of the study area predominately recorded isolated artefacts or artefact scatters, and occasionally scarred trees. They are found mostly within close proximity to waterways, including Aitken Creek and its tributaries which bisect the current study area. Isolated artefacts and small scatters have also been identified on the prominent Aitken Hill and its lower slopes, which is partly within, and to the southwest, of the study area. Previous assessments often included areas with ground disturbance due to agricultural practices, boulder removal and dam construction. Despite this, Aboriginal cultural heritage material was recorded, in both surface and subsurface contexts. Scarred trees have also been recorded where isolated remnant trees are found on the basalt plain. Stone artefacts were most likely to be manufactured from local materials such as silcrete and quartz, with some use of basalt and other materials. Subsurface artefacts were recorded at a maximum depth of 400 millimetres, in deeper soils, with the majority found between 50 to 200 millimetres.

The landforms in the current study area include basalt plains, waterways, and the lower slopes on the west side of Aitken Hill and, as such, the findings from these previous studies can be used to identify the potential for Aboriginal places to occur in similar landforms within the study area.

2.6 Historical and ethno-historical accounts in the geographic region

For the purposes of this assessment, information about Aboriginal Victorian pre and post contact history has been sourced from nineteenth and twentieth century primary and secondary ethnographic/historical records.

2.6.1 Ethno-historical accounts of Aboriginal people

Linguistic boundaries and social organisation

Aboriginal people have occupied the south-eastern area of Australia for at least 30,000 years (Flood 1995: 284-7). The movements of the Aboriginal people through the study area would have had some impact on the natural environment. These people lived a hunter-gatherer lifestyle, subsisting on local and regional resources, within the Melbourne area. However, during the last maximum glacial, the coastline was 150 metres lower than it is today, with the Bass Strait and Port Phillip areas once being dry lands. These were used to travel to what is now Tasmania (Presland 1994: 4). These bays were formed approximately 8,500 years ago as a result of rising sea levels (Presland 1994: 11).

Through the dispossession of land and subsequent loss of oral histories, only partial accounts can be pieced together to describe what Aboriginal life was once like. Much of this was collected by early European ethnographies. Presland (1994) and Goulding (1988 in LCC 1991: 14-34) provide an overview of Aboriginal life at the time of European contact in this region, with more specific information about social and organisational aspects of Aboriginal society being provided by Barwick (1984) and Clark (1990). Prior to European colonisation, the Victorian landscape was delineated by socio-dialectical groups who shared a common language and who as a group identified as owning particular areas of land, with individually owned tracts of country. This was a system of spatial organisation based on land tenure (Clark I., 1990).

The people of the Kulin once occupied the south central Victorian region, and consisted of five different language groups. They were united by intermarriage between clan members; women married outside their clan group. The Kulin clans affiliated themselves with one of two moieties: Bunjil (eaglehawk) or Waa (crow). The affiliation was determined by patrilineal descent. Members of clans had to find a spouse of the opposite moiety. This practice strengthened kinship ties throughout the region.

Aboriginal groups mapped natural features as boundaries for their ranges, estates and economic territories. The *Woi wurrung* language group inhabited land between the Yarra and Maribynong watersheds, bounded by the Dividing Range to the north and Werribee River to the west (Clark I. , 1990, p. 379). The Merri/ Malcolm/ Aitken/ Moonee Ponds Creek region is located within the territory of the *Woi wurrung*, composed of five subgroups or clans who all shared a common language (Clark I. , 1990, p. 364). The boundaries of the *Woi wurrung* territory are described as following natural features within the landscape. These boundaries are defined by the Werribee River in the west, in the north by the dividing range, from Mount Baw Baw to Mount William and Mount Macedon, and then to the Dandenong Ranges in the east and into the Western Port area (Clark I. , 1990, p. 380).

Land ownership and access rights or responsibilities centred on the smaller named groups that formed the broader language grouping. These groups are often called 'clans' or 'local descent groups', however as Wesson (2000, p. 8) reasons, they are better described as 'named groups', as the membership structure of these groups, and their degree of division from other groups, could vary. In most instances, primary allegiance was owed to this named group, although this could vary according to context and location. Commonly, named groups were led by senior elders who exercised internal political and religious authority, as well as being recognised as their spokesperson when dealing with other groups (Atkinson & Berryman, 1983). Particularly influential group leaders could also assume authority over the leaders of other culturally affiliated groups (Wesson, 2000). The named group who occupied the study area were the *Marin Balug*, meaning 'Marin people' from 'Mareingalk' - is at the big water, the Saltwater River. The *Marin Balug* held lands between Kororoit Creek and Saltwater (Maribyrnong) River and Jackson's Creek, with 'headquarters' about Sunbury (Clark I. , 1990, p. 384).

Social activity involving neighbouring named or socio-dialectical groups was usually held in warmer periods, held at the intersection of group boundaries and arranged by a person assigned of the responsibility of travelling between groups to organise the time, place, and events of the meeting. This person could speak a number of different dialects and acted as intermediary in negotiations between the groups. Activities would include sports and dancing, with up to 500 men, women and children attending (Atkinson & Berryman, 1983).

The succession or inheritance of lands and named-group estates could occur in a number of ways. Individuals and groups could inherit land from their father, their mother, through their birthplace, conception place, the burial place of their ancestors, and through totemic connections (Wesson, 2000). Access rights also crossed generations and marriage partners. Howitt (1904, p. 311) wrote that:

The right to hunt and to procure food in any particular tract of country belonged to the group of people born there, and could not be infringed by others without permission. But there were places which such a group of people claimed for some special reason, and in which the whole of the tribe had interest. Such a place was the stone quarry at Mt. William near Lancefield, from which the material for making tomahawks was procured. The family proprietorship in the quarry had wide ramifications... when neighbouring groups wished for some stone they sent a messenger to Bill-billeri saying that they would send goods in exchange for it, for instance, skin-rugs.

People would often travel or reside in the territory of another named-group so that they could fulfil religious or family obligations, or exercise the privilege, granted to them by family or moiety associations, of exploiting the resources of another estate (Barwick, 1984). For daily activities and the exploitation of local estates, people are thought to have travelled in small residential units or extended family groups - often termed bands (Wesson, 2000).

Moiety affiliation

A further level of social organisation was moiety affiliation. The *Marin Balug* were members of the *Waa* moiety (Clark I. , 1990, p. 384).

Membership to a named group is variably defined by a localised matrilineal or patrilineal descent group, with female members of the group partnering with men outside of their group (exogamous) and across moiety lines; however they maintained an identity of belonging to their father's group. Men then had to adhere to certain duties such as providing food to their father-in-law. Social engagement could be influenced by appropriate conduct between family members, for example men had avoidance behaviours they had to adhere to in the presence of their mother-in-law, and there were other speech or special duties which were expected in family relationships (Atkinson & Berryman, 1983).

Religion

Knowledge of Aboriginal religion was recorded and maintained through visual and oral tradition which ensured the maintenance of social structures through generations. Such knowledge was not always readily shared with non-Indigenous social observers and as such limited written versions from early settlers, explorers or government employees exist for Victoria. Ceremonies were occasionally performed to entertain Europeans however the meaning behind these performances was never fully explained (Robinson, 1840). Private ceremonies and locations, such as age initiations were actively kept secret (Presland, 1994).

2.6.2 Historical accounts of Aboriginal people

The rapid spread of European colonisation altered Victorian Aboriginal society. The increased presence of settlers resulted in dispossession of Aboriginal people from their traditional land and diminished access to resources. These factors combined with population decline from introduced diseases and conflict transformed Aboriginal society.

In 1839 an Aboriginal Protectorate Scheme was established in Victoria; the Protectorates provided religious instruction, rations, homes and medical care to Aboriginal people whilst recording population information (Broome, 2005). The Assistant Protector of the Melbourne region was William Thomas. He drew the Aboriginal people away from the Melbourne settlement by setting up a station near Narre Narre Warren and also tried to establish Aboriginal reserves at Mordialloc, Warrandyte and on the Acheron River. A school for Aboriginal children was set up on the Merri Creek, near the junction of the Merri Creek and Yarra River (Presland 1994: 100). The protectorate was disbanded in 1849. Official inquiries into the welfare of Aboriginal people were held in 1849 and again in 1858. Although informants at the inquiries remarked on the rapid fall in the Aboriginal population, it was a number of years before any action was taken. The latter inquiry led to the formation of the Aboriginal Protection Board in 1860 which encouraged Aboriginal people to move onto reserves (Edwards, 1988). In 1869, the Aborigines Act was passed to give the Governor of Victoria power to dictate where Aboriginal people could reside, what activities they could undertake on and off reserves and the authority to take charge of Aboriginal children (Edwards, 1988).

In the 1860s the Coranderrk Mission Station was opened near Healesville. The station was 4,850 acres in size. Earlier attempts were made to establish Aboriginal settlements at the Acheron and Mohican Stations near the Goulburn valley, but were thwarted by powerful local pastoral interests. In 1863, led by two of their leaders, Wonga and Barak, over 40 Aboriginals left the Mohican Station, crossed the Dividing Range and settled what would be Coranderrk Station (Caldere and Goff 1991: 10). With the newly appointed advisor, John Green, the Aboriginal people began building and working their own reserve (Caldere and Goff 1991: 13). Within a short period of time, they had constructed their own huts, a school, and dormitories to accommodate the orphans and deserted children. In 1886, the UAborigines Protection ActU required all half-castes under the age of 35 to leave the station. This heavily affected the efficient running of the station and in 1924 it was closed. A total of nine Aboriginal people remained, with the Healesville Police Constable as their guardian; all other Aboriginals were sent to Lake Tyres (Caldere and Goff 1991: 14). By 1950, most of the Coranderrk land was handed over for soldier settlement.

The descendants of the Woi wurrung are today represented by the WWCHAC who have been appointed as the Registered Aboriginal Party for the area.

2.6.3 Information on cultural values from the RAP

The Wurundjeri people hold many cultural values that are closely tied to the natural landscape. This is especially true of the areas along Merri Creek that contain unique ecological habitats, landforms and the provision of continuing cultural practices that are essential to the identity and wellbeing of the Wurundjeri people. The ability for the community to provide effective means of passing on cultural information and remaining active in Traditional Country is therefore intimately attuned to their responsibility in caring for and engaging with Traditional natural Estates.

Water and waterways form an important part of Indigenous culture, used as a source of creation stories and as traditional resources used by Aboriginal people in the past inhabiting the landscape. Many creation stories are linked to major watercourses throughout the greater Melbourne area such as the Yarra, Port Philip Bay and Darebin and Merri Creeks. The health of these waterways is therefore closely bound to the health and wellbeing of the people, whereby the people can use these sources for recreation, teaching culture and the continued transmission of cultural practices for future generations within a directly relatable, 'experienced' natural environment.

A general statement of Aboriginal Cultural Heritage Significance has also been prepared by the RAP (Wurundjeri Tribe Land and Compensation Cultural Heritage Council Inc., 2012, p. 25) and is as follows:

For Aboriginal people, there are many different kinds of cultural values associated with the landscapes that were once lived in by their ancestors. These include the tangible values normally recorded during archaeological investigation, such as artefact scatters and scarred trees. These places are physical reminders of the cultural lives of the Wurunjuri ancestors and a special connection, therefore, exists between those places and contemporary Wurunjuri people. This special connection underpins the high significance of these places. Once they are destroyed, the connection is largely destroyed.

There are other values that the Wurunjuri people connect to in the landscapes such as the remaining flora & fauna (e.g. Holden Reserve and Galada Tamboore). In such instances, the natural values, including a waterway and remnant vegetation, are all integral to the cultural landscape in which the Wurunjuri ancestors once hunted and gathered and in which they lived their lives for many thousands of years. Characteristics of these landscapes are therefore significant in accordance with Aboriginal tradition. Best practice heritage management, in terms

of harm to cultural heritage and where harm cannot be avoided, proper management of the disturbance of those values, is integral in the management of these significant cultural places.

The statement highlights other various forms of cultural values are manifest, including the management of cultural heritage places, such as lithic artefact scatters and scarred trees, recorded during scientific assessment of landscapes. The practises of ecological and heritage assessments within the region today provides a platform for direct community engagement in the maintenance of recorded Aboriginal cultural places and history. They also involve the identification of cultural values in the aforementioned forms of material culture, natural elements, and landforms as well as from other oral and historic material. It is by these means that the memory of important cultural places are retained and shared for future generations, while being an integral part of the community's identity as Traditional Owners and their relationship with Country. Some of these memories have been expressed by members of the community.

Further information will be supplied in the form of a Traditional Values Recording with the Wurundjeri Elders.

2.7 Landforms and/or geomorphology of the study area

The study area is located on the Western Plains, covering area classified as the Volcanic Plains. Soils on the Western Plains reflect the underlying lithology and comprise deep soils varying from friable gradational to strongly textured contrast soils as a result of earlier lava flows (State of Victoria Department of Economic Development, Jobs, Transport and Resources, 2018). The plains are valuable cropping country due to the volcanic soil and are natural grassland plains.

The study area lies within geomorphological unit (6.1.2) *Stony rises (Mt Eccles, Pomboineit, Mt. Rouse)*. The geographical unit 6.1.2, is known geologically as the Newer Volcanics and was formed from sporadic volcanic eruptions over a period of 5 million years. Lava flows possibly from Mount Ridley and/or Mount Aitken, respectively located northeast and southeast of the study area, form the rocky and undulating landscapes in which the study area lies. The geomorphology of this area is generally characterised by stony mounds, with little or no soil and no surface drainage development. Soils types associated with this area are shallow dark gradational soils (Dermosols) and self-mulching (and cracking) clay soils (Vertosols). The stony rise landscapes developed into plains with poorly developed drainage (geomorphological unit 6.1.3 *Plains with poorly developed drainage and shallow regolith (Wingeeel)*) (State of Victoria Department of Economic Development, Jobs, Transport and Resources, 2018).

Just outside of the study area at Aitken Hill and to the west along Craigieburn Road are pockets of geomorphological unit 6.1.1 *Eruption points: maars, scoria cones and lava shields, including associated ash and scoria deposits (Lake Purrrumbete, Mt. Elephant, Mt. Cottrell)*. The geomorphological unit 6.1.1 commonly features scoria cones, lava shields, composite cones (both of scoria and lava) and maars, and are an indication of the most recent eruptive activity. Soil types associated with this area include shallow to moderately deep friable (black, brown or red) gradational soils (Dermosols and Ferrosols) and are often stony (State of Victoria Department of Economic Development, Jobs, Transport and Resources, 2018).

Geological mapping of the study area on Victorian stage government geology mapping tool GeoVic (Department of Economic Development, Jobs, Transport and Resources, 2017) shows that the majority of the study area is overlying an unnamed basalt sheetflow formation (Qno1), a geological unit from the Newer Volcanic Group (Neo), classified as igneous (extrusive) with a sedimentary subtype. The lithology is described as basalt, minor scoria and ash, which is tholeiitic (sub alkaline) to

alkaline (Vandenberg, 1997). Small pockets in the southwest extents of the study area overlies Dargile Formation (Sxg) sedimentary (marine) deposits made up of siltstone and thin-bedded sandstone (Vandenberg, 1997) and Bulla Granodiorite (G276).

The region would have provided Aboriginal people with a supply of raw stone material suitable for stone tool production. Quartz and quartzite are also common raw materials in the manufacture of stone artefacts and could have been sourced from pebbles in waterways such as Aitken, Malcolm and Merri Creek. Fine-grained siliceous stone material can be found where the volcanic basalts meet sedimentary Silurian deposits, such as the geological contexts that exist along the Merri Creek to the east (Hall, 1989). Exposures of basalt can also be seen along the Merri Creek. This material, especially fine-grained non-vesicular varieties, was used as grinding implements by Aboriginal people.

The natural grassland plains and rocky and undulating landscape with poor surface drainage development would have also assisted in the formation of wetlands and creeks across the geographic region and attracted flora and fauna resources which Aboriginal people could utilise. Aitken Creek, which crosses the study area and is a tributary of Merri Creek, would have been a seasonal fresh water supply for both pre contact and historical exploration.

2.8 Land use history of the study area

Hume and Hovell were part of the early group of settlers to explore the land north of Melbourne. They led an expedition from Sydney to Port Phillip in 1824, which led them southwards towards the junction of Maribyrnong River and Jackson's Creek, past Redstone Hill, then onwards to the western side of Port Phillip Bay (Harcourt, 2001). In 1836 Joseph Gellibrand and party travelled north to begin appraising lands to the north of Melbourne, continuing until they reached the area now known as Craigieburn, where they camped on Merri Creek. Upon his return, Gellibrand declared the land highly suitable for settlement (Harcourt, 2001). European occupation of the region encompassing the Merri, Malcolm, Aitken and Moonee Ponds Creeks commenced shortly after 1836, and by the time the government surveyor Robert Hoddle had surveyed farming selections in 1841, the first European pastoralists were already in possession of preferred holdings along the creek valleys. The Brodie brothers were amongst the first pastoralists, acquiring extensive holdings of some 4000 acres in the area, including land in the southern part of the study area along both Brodies (now Craigieburn) and Mickleham Road, including Mount Aitken.

Land sales in the Parishes of Mickleham and Yuroke, County Bourke, took place in 1848, 1851 and 1852 (Figure 2 and Figure 3). Land owners are summarised in Table 5 below. It was noted by (Vaskos, McMillan, Donati, & Berelov (2012) that while much of the region had been impacted by the Black Friday bushfires were still evident, large tracts of land was still taken up during the land sales. European settlement of Mickleham began in 1855. In 1854 a motel and post office opened on Mickleham Road. A Wesleyan school opened in this year between Deep Creek and Merri Creek. A government school was opened in 1871 (Victorian Places, 2018). Land in Crown Allotment 3 was donated to build a school in 1871 by William Saunders of Riseborough Park and money raised by the community. An accompanying teacher's residence was built in 1884. The school was closed from 1951 for 18 years as a headmaster could not be found, but continues today in the same location (Vaskos, McMillan, Donati, & Berelov, 2012, p. 22). State School #1051 is located within the study area in 1880 Mickleham Road. The bluestone schoolhouse, which is thought to have replaced the 1855 school (Common School 423), is part of Mickleham Primary School is listed on the National Trust Register (B3279) and Hume Heritage Overlay (HO35). The study area was part of Archibald McLachlan's 1848 Dunhelen Estate, with Dunhelen homestead and bluestone barn being built in 1860. The Dunhelen barn was burnt down in 1973 and rebuilt. Both structures are listed on the Hume Heritage Overlay

(HO31). Dunhelen Barn is listed on the Register of the National Estate (RNE 5564) and the National Trust Register (B3080) (Australian Heritage Database, 2018; Victorian Heritage Database, 2018).

Table 5 Land purchasers within the study area

Parish	Section and Parcel	Purchaser	Date
Mickleham	2B	J Bain & c	c. 1852
Mickleham	3	R&D Gibson	c. 1852
Yuroke	12 W	R Brodie	30.3.48
Yuroke	12 T	R Brodie	30.3.48
Yuroke	13 V	R Brodie	30.3.48
Yuroke	17 B	A McLachlan	8.5.51
Yuroke	18 A	A McLachlan	8.5.51
Yuroke	18 B	A McLachlan	8.5.51
Yuroke	18 C	A McLachlan	8.5.51
Yuroke	18 D	A McLachlan	8.5.51
Yuroke	21 A	R Bennet	8.5.51
Yuroke	21 B	J Murphy	8.5.51
Yuroke	21 C	T Henderson	8.5.51
Yuroke	21 D	W Highett	8.5.51

Sydney Road (now the Hume Highway), to the east of the study area, was surveyed in 1838, and Mickleham Road, to the north, by 1840 (Lay, 2003) Malcolm Creek, which is north east of the study area, was forded and a toll booth was built at the intersection of Mt Ridley Road and Mickleham Road in 1854, collecting tolls for access to the Sydney to Melbourne Road, now Hume Highway (Keitel, 2018). Craigieburn Road was named Brodies Road until at least as recently as 1900, however there is limited information available concerning the road development and when the name was changed.



Figure 2 Mickleham Parish, County of Bourke, 1885. Department of Lands and Survey.

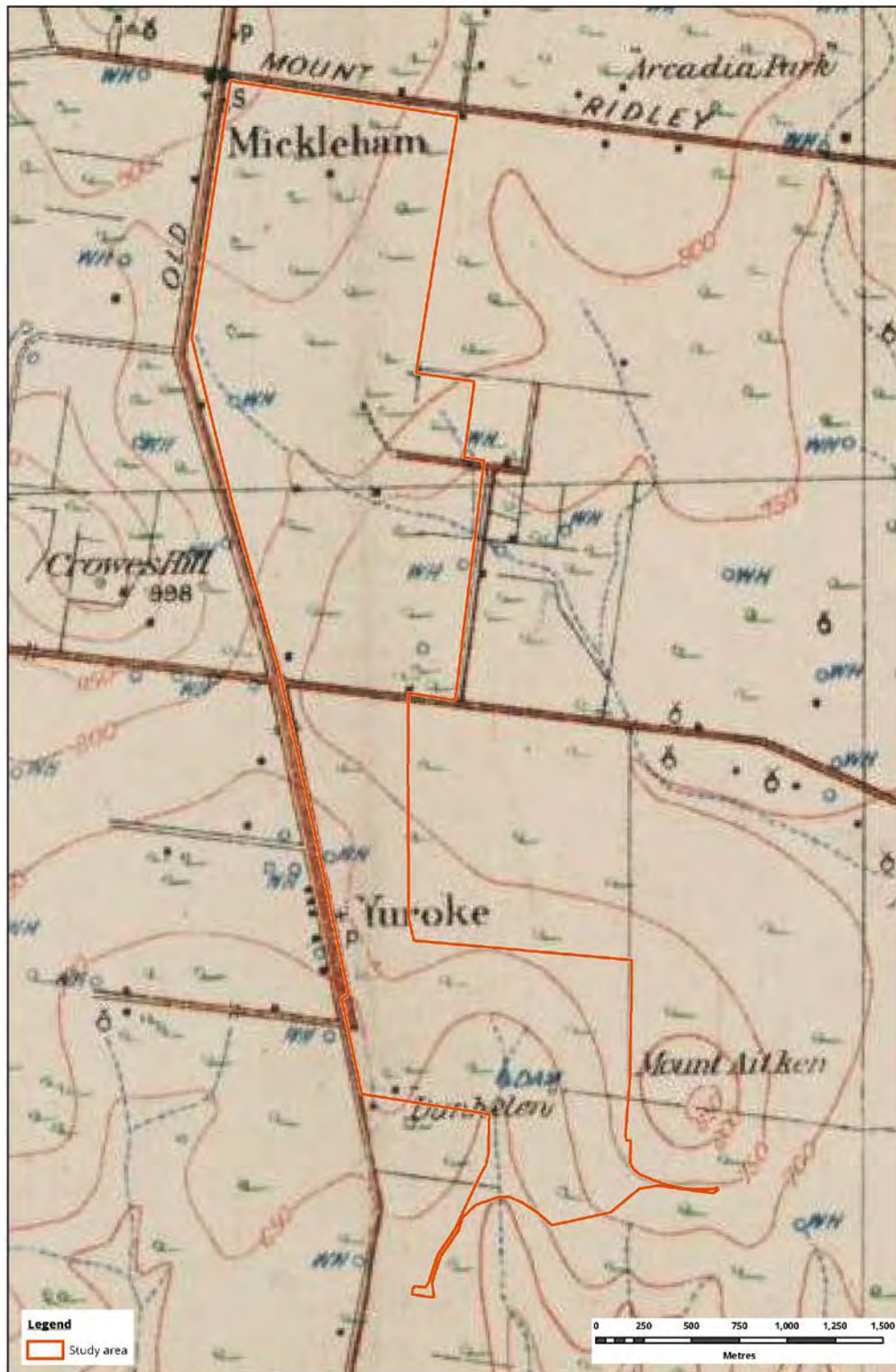


Figure 4 1916 War Office Cartographic Map, Sunbury. Prepared by Australian Section, Imperial General Staff.

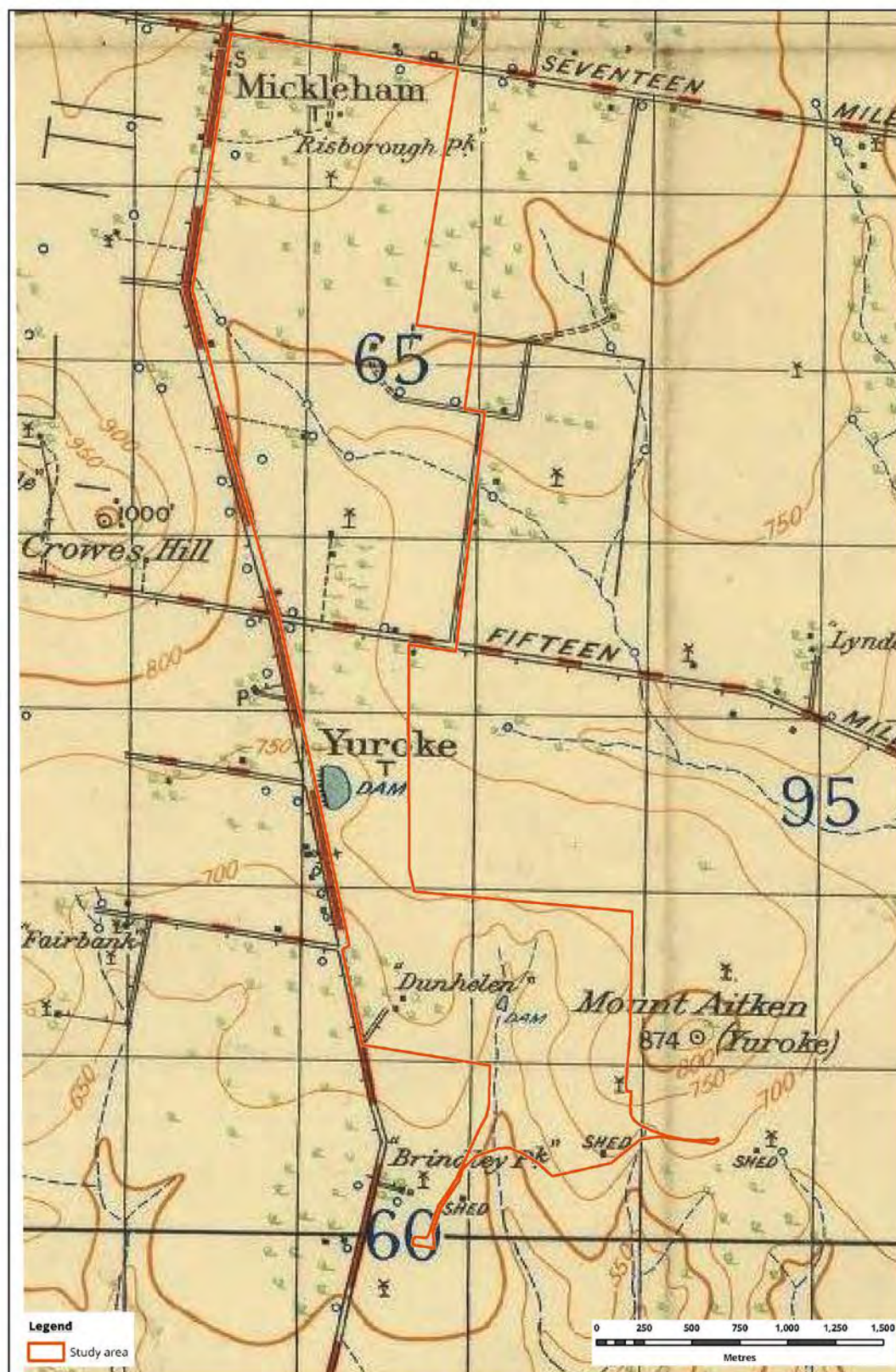


Figure 5 1938 War Office Cartographic Map, Sunbury. Prepared by Australian Section, Imperial General Staff.



Figure 6 1951 Melbourne and Metropolitan Project No 2 Run 2 Frame 2 Aerial Photograph



Figure 7 1963 Melbourne North Project Run 3 Frame 189 Aerial Photograph

In 1961 the first four lane section of the highway was constructed in Craigieburn, and the following year an overpass was built, aiding a better flow of traffic by eliminating the manually operating railway gates.

More recently large parcels of the land to the north and south, and extensively to east of the study area at Craigieburn, has undergone subdivision as part of Northern Urban Growth Corridor. The majority of the study area has not been affected to the same extent by development activity, as urban growth has not yet reached this area.

Current land use and previous land use and associated disturbance is outlined for each Land Parcel in Table 6.

Table 6 Current and Previous Land Use and Disturbance by Land Parcel

Land Parcel No.	Current Land Use	Previous Land Use
1 & 3	Mickleham Primary School (school buildings and facilities) and Mickleham Avenue of Honour	Used as school since 1855, tree clearance, building and grounds construction, utility installations.
2	Mickleham Community Centre and Tennis Courts, building and associated utilities	Tree clearance, utility installation, ploughing, pastoral use.
4	Residential, house and associated buildings, plantings and utilities.	Tree clearance, building construction, utility installation, pastoral use.
5	Agricultural use and driveway to residence in Land Parcel 3.	Dam excavations, driveway grading and construction, pastoral use, tracks, and ploughing.
6	Transmission tower, three dams, and agricultural use.	Transmission tower construction, dam excavations, pastoral use, tracks, and ploughing.
7	Agricultural use.	Pastoral use, tracks, and ploughing.
8	Residential, house and associated buildings, driveway, plantings and utilities.	Tree clearance, building construction, utility installation, pastoral use and ploughing.
9	Residential, house and associated buildings, driveway, plantings and utilities.	Tree clearance, building construction, utility installation, pastoral use and ploughing.
10	Buddhist temple and approximately 10 associated buildings, gardens, driveway, car park, dam on Aitken Creek, plantings, agricultural use, ploughing, and utilities.	Tree clearance, building construction, driveway and parking construction, utility installation, dam excavation, pastoral use, basalt clearance and ploughing.
14	Residential, house and associated buildings, driveway, plantings and utilities.	Tree clearance, building construction, utility installation, pastoral use and ploughing.
11	Residential, house and associated buildings, sealed driveway, agricultural use, ploughing,	Tree clearance, building construction, driveway construction, utility installation, pastoral use, basalt clearance and ploughing.

Land Parcel No.	Current Land Use	Previous Land Use
	plantings and utilities.	
12	Residential, house and associated buildings, driveway, plantings and utilities.	Tree clearance, building construction, utility installation, driveway construction, pastoral use, basalt clearance and ploughing.
13	Rural field.	Tree clearance, pastoral use, basalt clearance and ploughing.
15	Residential, house and associated buildings, driveway, dam, plantings and utilities.	Tree clearance, building construction, utility installation, dam excavation, and pastoral use.
16	Residential, house and associated buildings, swimming pool, sealed driveway, dam/waterhole on Aitken Creek, plantings and utilities.	Tree clearance, building construction, pool excavation and construction, driveway construction, utility installation, dam/waterhole excavation, pastoral use, basalt clearance and ploughing.
17	Ploughed field and dam.	Tree clearance, basalt clearance, pastoral/agricultural use, dam excavation, basalt clearance and ploughing.
18	Residential, house, large sheds and associated buildings, driveway, plantings, dam and utilities.	Tree clearance, building construction, utility installation, dam excavation, pastoral use and ploughing.
19	Residential, house and associated buildings, car park, driveway, dam, ploughed field, plantings and utilities.	Tree clearance, building construction, utility installation, dam excavation, pastoral use, basalt clearance and ploughing.
20	Residential, house and associated buildings, driveway, plantings ploughed field, and utilities.	Tree clearance, building construction, utility installation, pastoral use, basalt clearance and ploughing.
21	Residential, house and associated buildings, driveway, plantings ploughed field, and utilities.	Tree clearance, building construction, utility installation, pastoral use, basalt clearance and ploughing.
22	Residential, house and associated buildings, driveway, plantings and utilities.	Tree clearance, building construction, utility installation, and pastoral use.
23	Residential, houses and associated buildings, sealed driveway, unsealed driveways, dam, plantings ploughed field, and utilities.	Tree clearance, building construction, dam excavation, utility installation, driveway construction, pastoral use, basalt clearance and ploughing.
24	Residential, houses and associated buildings, driveways, dam, plantings, and utilities.	Tree clearance, building construction, dam excavation, utility installation, and pastoral use.
25	St Thomas Syrian Orthodox Church and associated buildings, car park, sealed driveway, dams, plantings,	Tree clearance, building construction, driveway and parking construction, utility installation, dam excavation, pastoral use, basalt clearance and ploughing.

Land Parcel No.	Current Land Use	Previous Land Use
	ploughed field, and utilities.	
26	Residential, houses and associated buildings, driveways, dam, plantings ploughed field, and utilities.	Tree clearance, building construction, dam excavation, utility installation, pastoral use, basalt clearance and ploughing.
27	Residential, house and associated buildings, driveway, dam/wetland, plantings and utilities.	Tree clearance, building construction, dam/wetland excavation, utility installation, pastoral use and ploughing.
28	Residential, house and associated buildings, driveway, dam/wetland, plantings, ploughed field, and utilities.	Tree clearance, building construction, dam/wetland excavation, utility installation, pastoral use, basalt clearance and ploughing.
29	Residential, house and associated buildings, driveway, dam/wetland, plantings and utilities.	Tree clearance, building construction, dam/wetland excavation, utility installation, and pastoral use.
30	Residential, house and associated buildings, driveway, dam, plantings, ploughed field, and utilities.	Tree clearance, building construction, dam excavation, utility installation, pastoral use, basalt clearance and ploughing.
31	Residential, house and associated buildings, driveway, dams, plantings, ploughed field, and utilities.	Tree clearance, building construction, dam excavation, utility installation, pastoral use, basalt clearance and ploughing.
32	Ploughed field and dam.	Tree clearance, dam excavation, pastoral use, basalt clearance and ploughing.
33	Residential, house and associated buildings, driveway, dam, plantings, ploughed field, and utilities.	Tree clearance, building construction, dam excavation, utility installation, pastoral use, basalt clearance and ploughing.
34	Residential, house and associated buildings, driveway, dam, plantings, ploughed field, and utilities.	Tree clearance, building construction, dam excavation, utility installation, pastoral use, basalt clearance and ploughing.
35	Residential, house and associated buildings, driveway, dam, plantings and utilities.	Tree clearance, building construction, dam excavation, utility installation, pastoral use and ploughing.
36	Residential, house and associated buildings, driveway, plantings and utilities.	Tree clearance, building construction, utility installation, pastoral use and ploughing.
37	Ploughed/pasture field and dam.	Tree clearance, tree planting, dam excavation, pastoral use, basalt clearance and ploughing.
38	Residential, houses and associated buildings, historic buildings (Dunhelen Barn), driveways, plantings and utilities.	Tree clearance, building construction, utility installation, pastoral use, basalt clearance and ploughing.

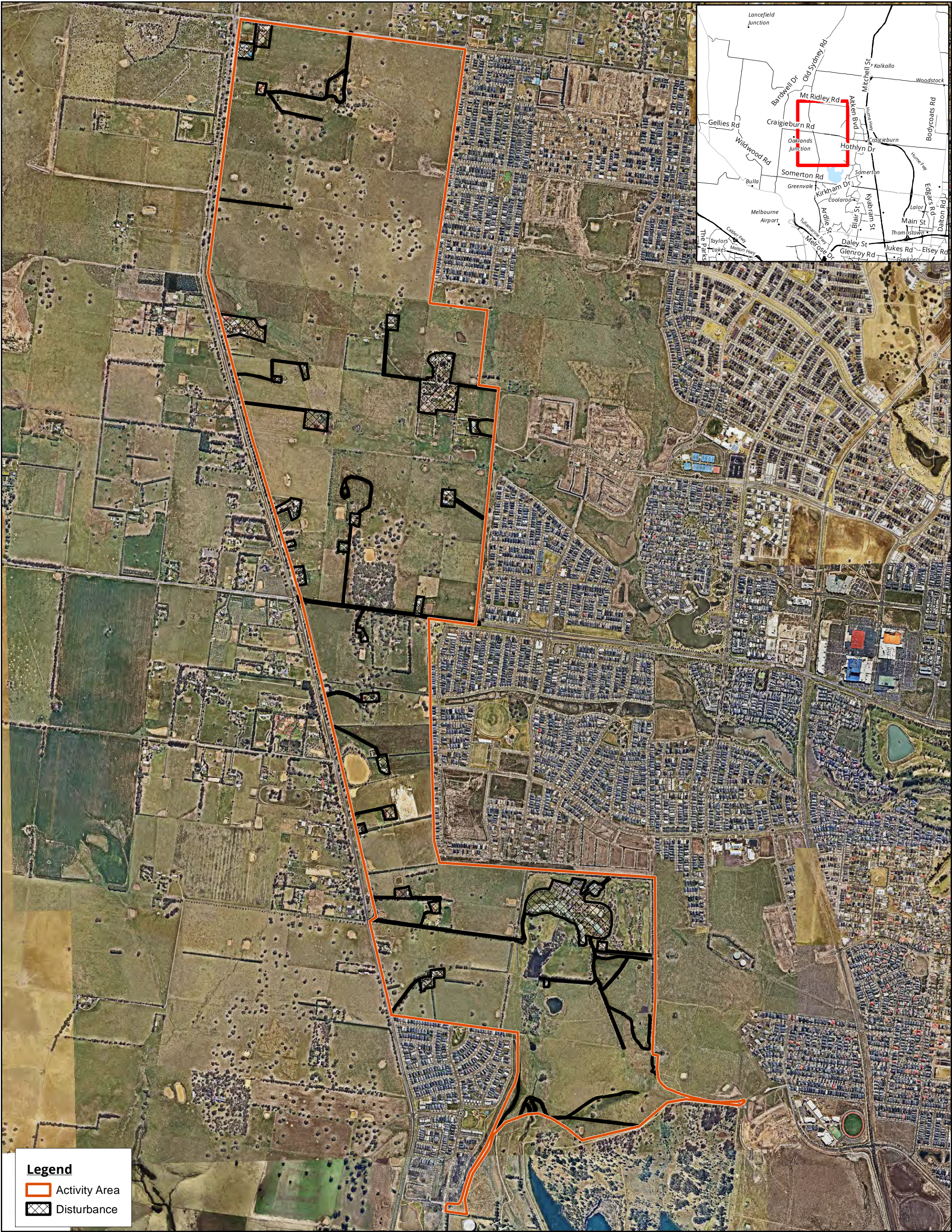
Land Parcel No.	Current Land Use	Previous Land Use
39	Aitken Hill Conference Centre facility and associated buildings, sporting grounds, dam/wetland, car park, utilities	Tree clearance, building construction, road construction, dam/wetland excavation, plantings, sporting facility construction, utility installation, pastoral use, basalt clearance and ploughing.

Summary

The study area has been used for stock grazing and other agricultural use from the early 19th century. With the exception of possible remnant vegetation in Land Parcel 24 and remnant trees across the study area, vegetation removal was likely a feature of farming practises in this area, as recent imagery shows only very sparse tree cover and rows of planted trees along fence lines over much of the study area. Historical documentation suggests the area of Aitken Hill (of which the western slopes are within the study area) may have been an important elevated landmark prior to European settlement.

Whilst parts of the study area have undergone high levels of ground disturbance, such as the Yuroke water main alignment (Lawler, 2009), Aitken Hill Conference Centre, Mickleham Primary School, a number of religious centres and places of worship, residences and associated structures, and farm dams, much of the area has been subject to lesser degrees of disturbance. Land clearing, stock grazing, fencing and smaller structures are likely to have caused disturbance to the upper soil layers within the study area. The presence of dry stone walls along modern fence lines suggests stone removal has occurred within the study area. Depending on the age of the walls and method of removal, this practise is also likely to have caused ground disturbance to the topsoil.

These disturbances may impact the potential for *in situ* Aboriginal cultural heritage to be identified.



Legend

Activity Area

Disturbance

Map 4 Disturbance



2.9 Spatial predictive model

Further to the place predictive model, spatial modelling for Aboriginal cultural heritage in the study area is shown in Map 7. To assess the potential of environmental features and landforms for Aboriginal cultural heritage, this spatial predictive modelling was undertaken in ArcGIS using Spatial Analyst tools to compare, analyse and overlay numerous environmental and topographic datasets. Four main datasets were considered during the modelling process. These include:

1. Proximity to natural water sources
2. Existence of remnant vegetation
3. Slope classes
4. Local high points

All of these layers are weighted and ranked according to an equivalent but arbitrary scale of 0-3, with '3' being areas most likely to support Aboriginal places and '0' being very unlikely to support Aboriginal places. Once all of the four component layers are added together into a single layer, zones of high, moderate and low archaeological potential were developed. Areas of high potential scored between 6-10 (red), moderate potential scores between 3-6 (yellow) and low potential scored between 0-3 (green). In Map 7, areas with a low cumulative score have a lower likelihood of containing Aboriginal places, green being the lowest and red being the highest level of archaeological potential.

It is important to note that the purpose of this model is to make some broad predictions about the study area based on generalisations in order to inform the targeted survey. It cannot account for more specific phenomena which might actively contribute or detract from the areas suitability for Aboriginal places, such as areas which had ceremonial significance.

1. Natural water sources

The model uses the VicMap Hydro 1:25,000 vector watercourse lines and waterbody polygons datasets and applied the following processes:

- Watercourses and waterbodies are filtered to remove any man-made waterways as designated by the 'Origin' field of the VicMap data
- Watercourses and waterbodies are buffered by 200 metres
- Watercourses and waterbodies are merged into a single dataset
- Water dataset is converted to a raster of 25 x 25 metre cell size
- Raster cells are reclassified to an overall 'hydro score' by assigning a score of 5 to rivers, swamps, lakes and sections of streams mapped as an area rather than a centre line; a score of 4 to streams, 3 to pondages and 0 to all other areas.

2. Modelled remnant vegetation

The model uses the Department of Environment, Land, Water and Planning modelled Ecological Vegetation Classes polygon dataset from 2005 as displayed on the Biodiversity interactive mapper. The following processes are applied:

- The polygons are converted to a raster of 25 x 25 metre cell size

- The raster cells are reclassified to a 'Veg score' value by assigning a score 3 to all areas containing remnant vegetation and 0 to all other areas.

3. Unsuitable slopes

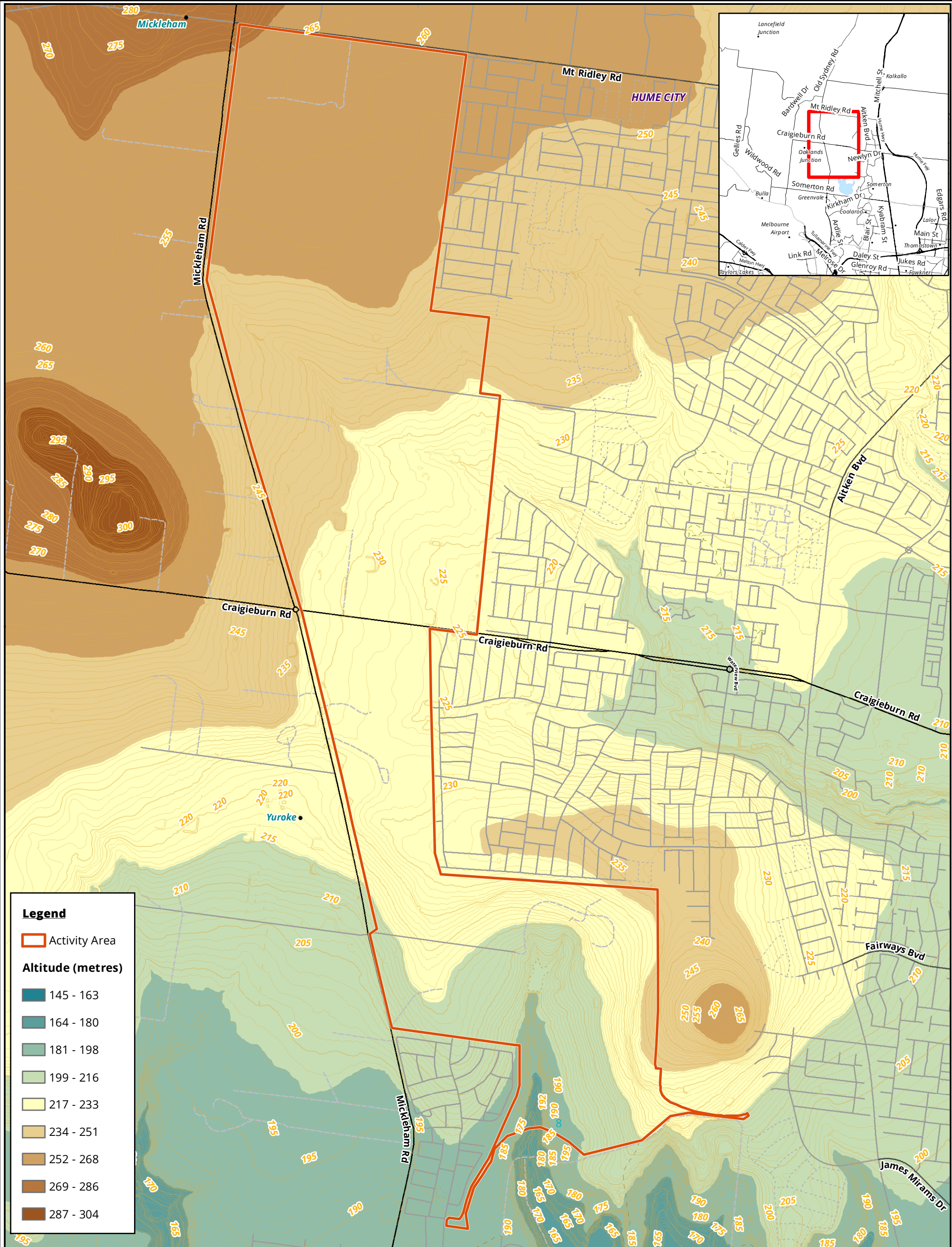
- A slope model was created using a 1 arc second (~30 x 30 metre cell size) Digital Elevation Model (DEM) acquired from Geoscience Australia
- The slope model is reclassified into slope categories according to Speight's (2009) slope classes
- Any slopes classified as being very steep or greater are assigned a negative value as these slopes are likely to be too steep to support Aboriginal places.

4. Local high points

- The DEM is converted into a flow accumulation model, showing the total catchment area for water flow at each point in the landscape
- Areas of 0 flow are extracted into a separate layer. As they have no other land flowing into them, this means they stand above all other land in the immediate area
- The 0 flow areas model is filtered so only a significant amount of connected land is considered to represent hills and ridgelines.

The predictive model acts as a guideline for designing further research strategies and identifies key points for consideration during the targeted inspection.










The results of the review have indicated there is a potential for unidentified Aboriginal cultural heritage material within the study area. Higher potential is attributed to flatter areas of higher relative elevation, compared to the surrounding landscape, such as hills, including Aitken hill, rises and ridgelines. Areas close to water sources (Aitken Creek and tributaries) will have a greater potential than those more distant from these. The presence of remnant vegetation, such as in the central portion and sparsely throughout the study area, will also have the potential for undisturbed deposits, as well as potential for scarred trees to exist. Areas with more of these attributes will be considered to have a higher level of potential than those with fewer.



Legend

 Activity Area

Altitude (metres)

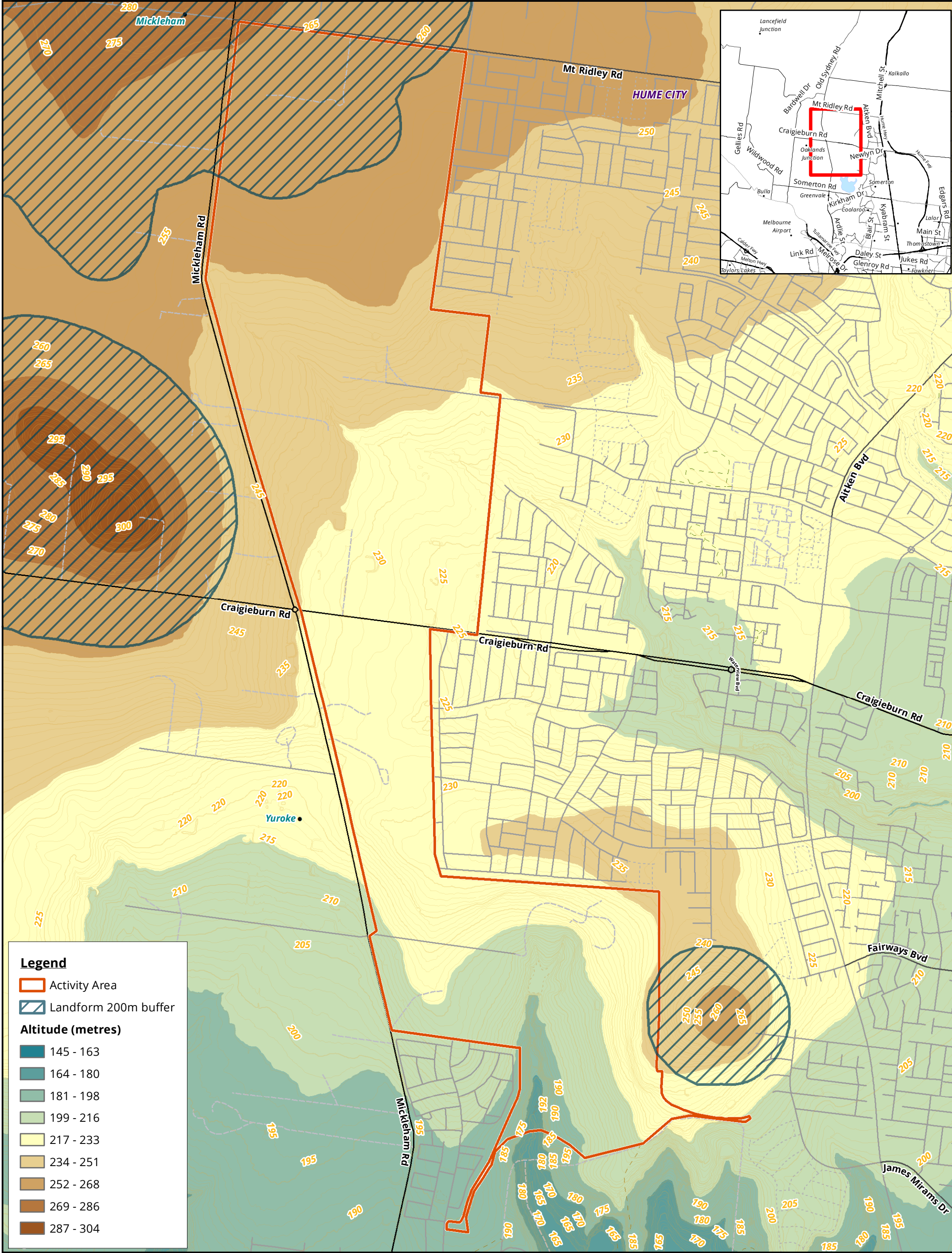
-  145 - 163
-  164 - 180
-  181 - 198
-  199 - 216
-  217 - 233
-  234 - 251
-  252 - 268
-  269 - 286
-  287 - 304

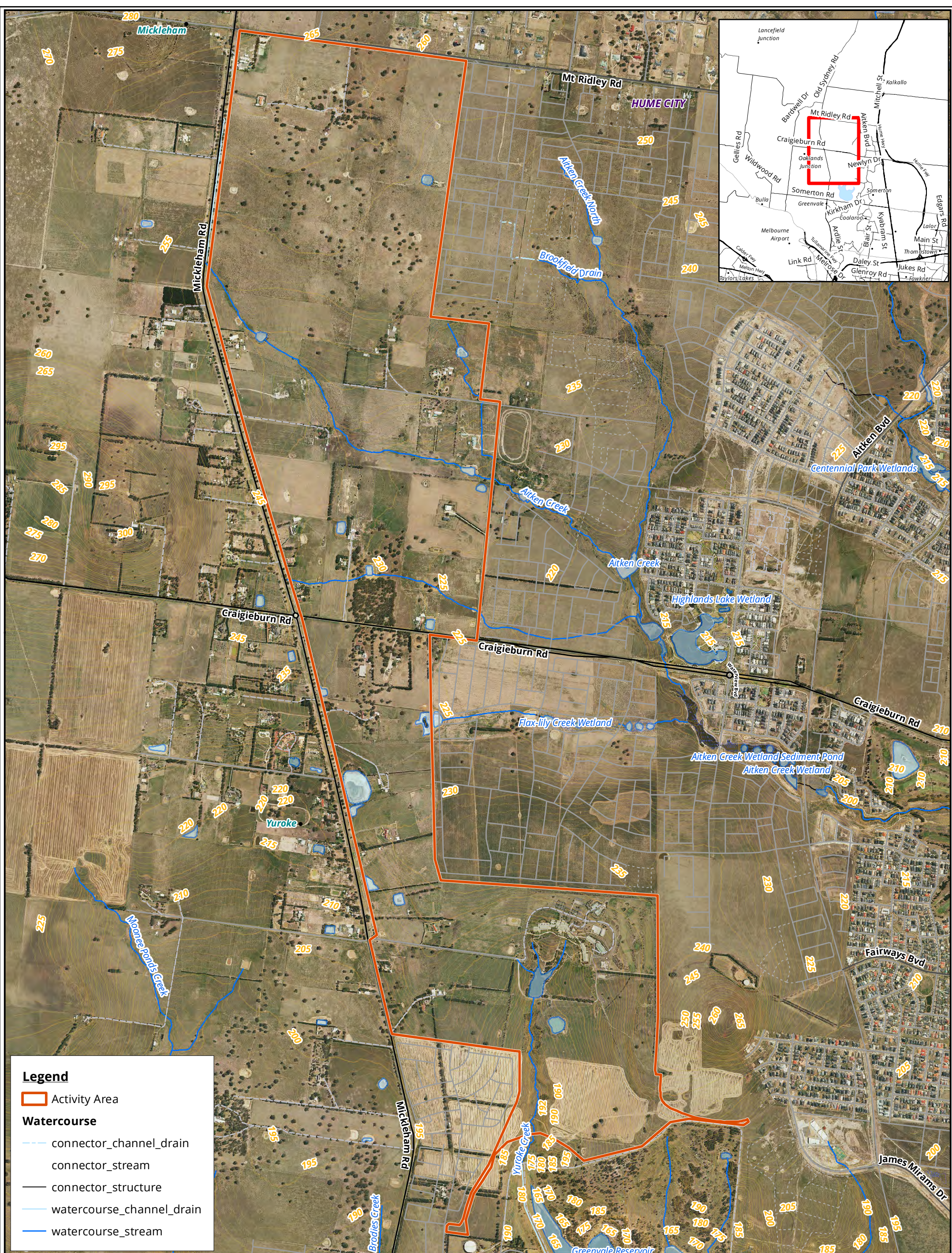
Map 5.1 Landforms

Acknowledgements: Vicmap ©State of Victoria

Matter: 28876,
Date: 18 December 2018,
Checked by: LA, Drawn by: DK, Last edited by: J Turner
Location: \\bio-data-01\\matters\\28800s\\28876\\Mapping\\28876_M5.1_Landforms







Legend

Activity Area

Watercourse

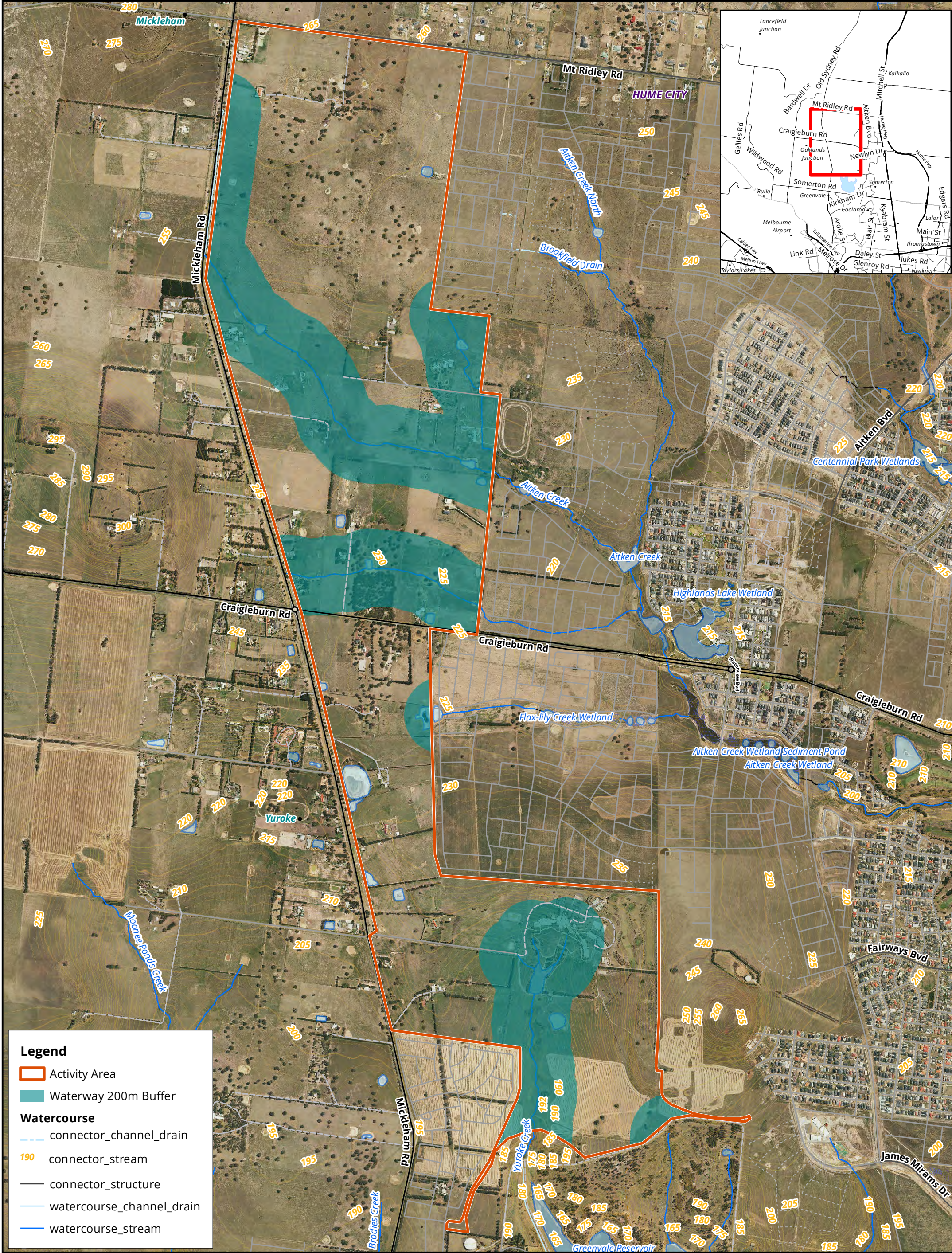
- connector_channel_drain
- connector_stream
- connector_structure
- watercourse_channel_drain
- watercourse_stream

Map 6.1 Waterway

Acknowledgements: Vicmap ©State of Victoria

Matter: 28876,
Date: 18 December 2018,
Checked by: LA, Drawn by: DK, Last edited by: J Turner
Location: \\bio-data-01\\matters\\28800s\\28876\\Mapping\\28876_M6.1_Waterway





Map 6.2 Waterways predicative model

Acknowledgements: Vicmap ©State of Victoria

Matter: 28876,
Date: 12 December 2018,
Checked by: LA, Drawn by: DK, Last edited by: Turner
Location: \\bio-data-01\matters\28800s\28876\Mapping\28876_M6.2_WaterwayPredictiveModel



Legend

- Activity Area
- Predicted sensitivity

Value

- High : 16
- Low : -2

Map 7 Overall prediction model

Acknowledgements: Vicmap ©State of Victoria

Matter: 28876,
Date: 12 December 2018,
Checked by: LA, Drawn by: DK, Last edited by: Jturner
Location: \\bio-data-01\\matters\\28876\\Mapping\\28876_M7_PredictiveModel

2.10 Conclusions

The study area consists mainly of flat volcanic plains, corresponding with the third tier geomorphological unit 6.1.2 *Stony rises (Mt. Eccles, Pomboineit, Mt. Rouse)* (State of Victoria Department of Economic Development, Jobs, Transport and Resources, 2018). These areas of stony rises and exposed volcanic flow lobes, often result in local high points. The bisection of the study area by several waterways (Aitken Creek and tributaries of Aitken and Yuroke Creeks) also increases archaeological potential, as quartz and quartzite pebbles sourced from waterways such as Aitken, Malcolm and Merri Creek could have been used for the manufacture of stone artefacts. Exposures of basalt have also been noted along Merri Creek, which could have been used as grinding implements for Aboriginal people. The local high points provided by the stony rises or volcanic flow lobes coupled with the local waterways have been shown to have potential for Aboriginal cultural heritage.

Numerous artefact scatters and scarred trees have been identified in close proximity to waterways in the geographic region with most Aboriginal places confined to areas in the immediate vicinity of the creeks. Artefacts were generally identified during surface surveys in areas which showed evidence of disturbance due to agricultural practices and residential development. This implies that the cultural heritage in the area is likely subsurface in nature but only identified during disturbance works, resulting in an increase in surface visibility and the movement of sub soil to the surface. These areas should be targeted during the survey. Within the wider geographic region 400 Aboriginal places are present, predominately located along the waterways. Aitken Creek and tributaries of Aitken and Yuroke Creeks are waterways within the study area, crossing through the central and southern parcels and therefore are considered to be areas of archaeological potential.

A large number of archaeological assessments have taken place in the geographic region surrounding the study area with the vast majority concentrated along the banks of waterways. The majority recorded high disturbance in relation to vegetation clearing, basalt clearance for agricultural and pastoral practices and residential development. The previous reports in the area indicate that Aboriginal place extend across a broad range of topographic features, including flat and undulating land, minor drainage lines, swamps, eruption points, hills and other elevated landforms.

A review of the land use history of the study area shows disturbance including major modifications to natural drainage patterns, and major earthworks relating to road development and other underground infrastructure such as utility installations. Information gathered about the study area shows that while much of the study area has remained pastoral and agricultural in nature, a number of residences, places of worship and a conference centre would have impacted the area with the excavation for subsurface amenities, the construction of buildings, driveways, and car parks. These works would have resulted in disturbance of the previously buried land surface.

2.10.1 Prediction statement

Based on the above review of the geographic region, including its environment, recorded Aboriginal places, previous archaeological assessments and information on the activities of Aboriginal people, a place prediction statement has been developed. The place prediction statement utilises the existing regional information in order to target landforms which might have archaeological potential during the survey.

Therefore the Aboriginal place types likely to be found within the study area are:

- **Artefact distributions** consisting of one or more stone artefacts are associated with tool production, domestic activities and resource procurement. Scatters and isolated finds are most likely to occur on river or creek flats, terraces or slopes within 200 metres of water courses, such as Aitken Creek.

- **Scarred trees** represent cultural modifications of trees to obtain the bark for use as shelters, canoes and shields. Despite widespread removal of native forest which has resulted in little remnant vegetation; scarred trees may occur where remnant vegetation exists. As there have been two scarred trees registered within the study area it is possible that there may be potential for scarred trees to be located in parts of the study area which had not previously been subject to survey where mature Box or Red Gum trees survive.
- **Stone arrangements** are places where Aboriginal people have positioned stones deliberately to form shapes or patterns. The purpose of these arrangements is often unknown. One stone arrangement has been recorded in the geographic region, however, this place was reassessed as not being of Aboriginal origin (Murphy & Owen, 2010 draft). These places are relatively rare, but are more likely to occur where stone resources are present, such as on the volcanic plain of the study area which contains outcropping basalt in the form of basalt floaters.

The assessment has shown that it is likely that additional Aboriginal cultural heritage is present in the study area, based on the geology and locations of previous Aboriginal places within the study area, Aboriginal places are likely to occur on the volcanic flow lobes that have resulted in elevated landforms. These landforms would have provided a good aspect and would have likely been drier than the poor draining volcanic plains in other areas of the study area. These landforms can be seen to extend into the study area from Mount Ridley in the north and Aitken Hill from the east. These local high points would have acted as an area of high aspect providing clear sight across the study area and across the existing and pre-existing waterways.

Aboriginal cultural heritage, in the form of artefact scatters, particularly in association with the current and previous waterways and tributaries including Aitken and Yuroke Creeks, exist within the study area. These waterways would have provided a wealth of resources for Aboriginal people. This is further supported by the identification of the previously recorded Aboriginal artefact scatters within the study area (VAHR 7822-2472, 7822-2935, 7822-2936, 7822-2937, and 7822-2999) and adjacent to the study area (7822-2472). Further artefact scatters associated with these waterways will likely exist within the study area.

The remnant vegetation that exists within the study area, particularly in properties 4 and 5 has been shown to be sensitive for scarred trees. The presence of VAHR 7822-2974 in property 5 further supports this, therefore there is potential for further scarred trees will be located within the study area.

3 Targeted survey

3.1 Aims

A targeted survey of the study area was completed. The aims of the survey are to:

- Relocate the previously recorded Aboriginal places
- Examine areas of high, moderate and low archaeological potential
- Examine all landforms within the study area.

It is noted that the entire study area could not be accessed as several landowners at lots 19, 32, 33 and 43 were unavailable to grant access.

3.2 Methods

The study area was traversed by vehicle, and a pedestrian survey was undertaken in areas considered to have potential to contain Aboriginal cultural heritage (stony rises, stands of mature native vegetation), areas of ground disturbance, areas of good ground visibility and other salient features. These locations utilised the predictive model and were informed by consultation with RAP representatives. Any previously registered Aboriginal places located within the study area were attempted to be relocated. It is noted that the Aboriginal places VAHR 7822-4319 was added to ACHRIS after the Desktop Assessment was conducted, as a result no attempts to relocate the artefacts was undertaken.

Information on the surveyed features was documented and provenanced using a Topcon GRS-1 DGPS which was later post-processed to sub one metre accuracy. Photographs were taken to illustrate and document the findings.

3.3 Results

3.3.1 Targeted survey consultation

The targeted survey was undertaken over five days between 21 January and 30 January 2019. Survey participants are listed in Table 7.

Table 7 Targeted survey participation

Date	Name	Organisation	Nature of participation
21 Jan	Shane Nicholson	WWCHAC	Targeted survey
	Gary Galway		
	Aaron Dalla-Vecchia	Biosis Pty Ltd	
22 Jan	Shane Nicholson	WWCHAC	Targeted survey
	Gary Galway		
	Aaron Dalla-Vecchia	Biosis Pty Ltd	
23 Jan	Justin Entwistle	WWCHAC	Targeted survey

Date	Name	Organisation	Nature of participation
29 Jan	Kerrie Xiberras	Biosis Pty Ltd	Targeted survey
	Aaron Dalla-Vecchia		
	Naomi Zukanovic	WWCHAC	
	Gary Galway		
	Aaron Dalla-Vecchia	Biosis Pty Ltd	
30 Jan	Kerrie Xiberras	WWCHAC	Targeted survey
	Gary Galway		
	Aaron Dalla-Vecchia	Biosis Pty Ltd	
13 March	Darcy Mullaney	Biosis Pty Ltd	Place Inspection Forms submitted to Registry

3.3.2 Survey units

The study area was surveyed in units due to its large size, with each property constituting a single unit. The survey units are listed in Table 8.

Table 8 Survey units for the site inspection

Unit Number	Land Parcel No.	Address	Total Area (Hectares)	Date Surveyed
1	1	1880 Mickleham Road, Mickleham, VIC 3064	1.628505739	29 Jan 2019
	2	685 Mt Ridley Road Mickleham VIC 3064	1.359872739	29 Jan 2019
	3	1880 Mickleham Road, Mickleham, VIC 3064	0.415644772	29 Jan 2019
2	4	1800 Mickleham Rd, Mickleham VIC 3064	2.242005336	22 Jan 2019
	5	1780 Mickleham Rd, Mickleham VIC 3064	76.79883302	22 Jan 2019
3	6	1760 Mickleham Rd, Mickleham VIC 3064	79.44031924	30 Jan 2019
4	7	1720 Mickleham Rd, Mickleham VIC 3064	14.80223883	21 Jan 2019
	10	1690 Mickleham Rd, Mickleham VIC 3064	11.33700501	21 Jan 2019
5	8	290 Olivers Rd, Mickleham VIC 3064	10.27619211	21 Jan 2019
	9	250 Olivers Road, Mickleham VIC 3064	8.251425464	21 Jan 2019
	14	220 Olivers Rd, Mickleham VIC 3064	16.97486512	22 Jan 2019
6	11	1660 Mickleham Rd, Mickleham VIC 3064	1.628505739	30 Jan 2019
	12	1630 Mickleham Rd, Mickleham VIC 3064	13.33552458	21 Jan 2019
	13	1630 Mickleham Rd, Mickleham VIC 3064	8.845213917	21 Jan 2019
7	15	225 Olivers Rd, Yuroke VIC 3063	12.30110432	22 Jan 2019
	16	125 Whites Lane, Yuroke VIC 3063	8.229872007	22 Jan 2019

Unit Number	Land Parcel No.	Address	Total Area (Hectares)	Date Surveyed
8	17	1600 Mickleham Rd, Craigieburn West Vic 3064	8.226438825	30 Jan 2019
	18	1570 Mickleham Rd, Mickleham VIC 3064	11.24926259	22 Jan 2019
	19	1550 Mickleham Rd, Yuroke VIC 3063	4.606744995	Not surveyed
	20	1540 Mickleham Rd, Yuroke VIC 3063	2.041134349	22 Jan 2019
	21	1530 Mickleham Rd, Yuroke VIC 3063	2.019548722	23 Jan 2019
	22	1520 Mickleham Rd, Yuroke/Mickleham VIC 3064	1.68196312	23 Jan 2019
9	23	700 Craigieburn Road, Mickleham VIC 3064	0.144013413	23 Jan 2019
	24	680 - 690 Craigieburn Rd, Mickleham VIC 3064	16.39602642	30 Jan 2019
10	25	75 Whites Lane, Mickleham VIC 3064	16.4386136	29 Jan 2019
	26	640 Craigieburn Rd. Mickleham VIC 3064	16.73018449	22 Jan 2019
11	27	1480 Mickleham Rd, Craigieburn VIC	17.18725173	23 Jan 2019
	28	665 Craigieburn Road, Craigieburn VIC 3064	12.78151748	23 Jan 2019
12	29	1430 Mickleham Rd, Yuroke VIC 3063	12.18865628	23 Jan 2019
	30	1390 Mickleham Rd, Yuroke VIC 3063	11.08069568	23 Jan 2019
	31	1320 Mickleham Rd, Yuroke VIC 3063	13.97636047	29 Jan 2019
	32	1370 Mickleham Road, Craigieburn 3064	11.72764931	Not surveyed
	33	1360 Mickleham Road, Craigieburn 3064	3.244671192	Not surveyed
	34	1340 Mickleham Rd, Yuroke/Craigieburn	4.847393426	29 Jan 2019
	35	1300 Mickleham Rd, Yuroke VIC 3063	14.96395714	29 Jan 2019
13	36	1290 Mickleham Rd, Greenvale VIC 3059	10.63286291	30 Jan 2019
	37	1240 Mickleham Rd, Greenvale VIC 3059	2.645901481	21 Jan 2019
	38	1240 Mickleham Rd, Greenvale VIC 3059	13.30518759	21 Jan 2019
14	39	20 Dunhelen Lane, Yuroke VIC (Aitken Hill) 3063	15.75885973	30 Jan 2019
15	40	1170 Mickleham Road, Greenvale VIC 3059	68.44769794	30 Jan 2019
	41	20 Dunhelen Lane, Yuroke VIC (Aitken Hill) 3063	2.284135173	30 Jan 2019
	42	1170 Mickleham Road, Greenvale VIC	33.09442657	30 Jan 2019

Unit Number	Land Parcel No.	Address	Total Area (Hectares)	Date Surveyed
		3059		
	43	1170 Mickleham Road, Greenvale VIC 3059	0.490217662	Not surveyed

3.3.3 Features

Unit 1

Unit 1 currently consists of several buildings associated with Mickleham Primary School and the Mickleham Community Centre. The survey unit has been more developed (Photograph 2 and Photograph 3) compared to that of the abutting survey unit. The landform of the survey unit consists of relatively flat land (Photograph 1).

The area is comparatively high being in the north of the study area, closer to the origin of the basalt flows. Low ground surface visibility hindered the ability to identify any surface artefacts however, parcel 1 is within an area of cultural heritage sensitivity associated with VAHR 7822-3841. The lot, given its location in relation the previously registered Aboriginal place and its elevated nature has potential for unidentified Aboriginal cultural heritage.



Photograph 1 Facing North. Open flat area of unit 1, looking toward Mount Ridley Road.



Photograph 2 Facing south. School buildings and Modgrass.



Photograph 3 Facing East. School oval and play equipment.

Unit 2

Survey unit 2 consists of parcels 4 and 5. Parcel 5 makes up a large portion of the most northern section of the study area. The parcel abuts Mt Ridley Road to the north and Mickleham Road to the west. Parcel 4 and 5 both have residences on them including outbuildings.

Parcel 5 has a high amount of remnant vegetation and is a local high point to the north. The unit has several areas of deflated stony rises as well as lower lying areas that have likely been subject to seasonal, water logging. Several of the stony rises have been subject to rock ripping with introduced fill being deposited to fill cracks in the land surface.

Although the parcels are not in an area of cultural heritage sensitivity, the deflated stony rises have been marked as an area as having potential for Aboriginal cultural heritage. Low ground surface visibility hindered the ability to identify any surface artefacts. The survey unit has potential for unidentified Aboriginal cultural heritage given the existence of the local high points with exposed basalt.



Photograph 4 Facing east from the south west of parcel 5. Deflated stony rise/ volcanic flow.



Photograph 5 Facing west toward Mickleham Road. Deflated stony rise/ volcanic flow.



Photograph 6 Facing east from the north edge of parcel 5. Low lying area lacking exposed basalt.



Photograph 7 Facing east from south eastern section of parcel 5. Edge of stony rise looking toward development abutting study area.



Photograph 8 Facing east. Rock ripped area and backfilled with imported fill.

Unit 3

Survey unit 3 consists of parcel number 6. The landform of survey unit 3 was similar to that identified in survey unit 2 (parcel 5). The survey unit had a high amount of remnant vegetation and has several areas of high aspect to the south west. Several areas of deflated stony rise were identified during the survey juxtaposed by areas of slightly lower land surface.

Low ground surface visibility hindered the ability to identify any surface artefacts. Survey unit 3 is within an area of cultural heritage sensitivity associated with the previously identified Aboriginal place 7822-2974. There is potential for cultural heritage to exist within the survey unit given the areas of high aspect with exposed basalt and the location of the previously registered Aboriginal place.

Previously identified Aboriginal place.

Mickleham Road Plain 1 (VAHR 7822-2974) was relocated as part of the survey. The Aboriginal place was relocated, re-recorded and a place inspection form was submitted to VAHR. The scar tree was in good health at the time of recording.



Photograph 9 Facing north from deflated stony rise/ volcanic flow.



Photograph 10 Facing south deflated stony rise/ volcanic flow.



Photograph 11 Facing west from south west corner of parcel 6. Aspect from high point over low lying Mickleham Road.



Photograph 12 Previously recorded Mickleham Road Plain 1 (VAHR 7822-2974)

Unit 4

Unit 4 consists of parcels 7 and 10. The survey unit is dominated by Aitken Creek floodplain and gentle slopes falling toward the creek line. The creek line has been dammed in several areas, however the creek bed is still visible from some distance. Within parcel 10 the area associated with the residence, Buddhist temple and carpark has seen some disturbance including cut and fill events. There has been a new section of carpark added recently and part of the flood plain has been built up in an attempt to even out the ground surface.

Both parcels in survey unit four are within an area of cultural heritage sensitivity associated with Aitken Creek and the previously identified Aboriginal place 7822-2935. Low ground surface visibility hindered the ability to identify any surface artefacts, however there is potential for cultural heritage to exist within the survey unit.

Previously identified Aboriginal place.

One previously registered Aboriginal place (**Mickleham Road Aitken Creek 1, (VAHR 7822-2935)**), is recorded in the southwest corner of parcel 7, along the fence line. the Aboriginal place could not be relocated at the time of the survey.



Photograph 13 Facing east from parcel 7. View over Aitken Creek and associated floodplains.



Photograph 14 Facing north from the southern most point of parcel 10. View over Aitken Creek and associated floodplains.



Photograph 15 Facing north from within parcel 10. New gravel carpark disturbance.



Photograph 16 Facing north from parcel 10. Looking over large additions of fill. Aitken Creek flood plain in background.

Unit 5

Survey unit 5 consists of parcels 8, 9 and 14. The majority of the survey unit consists of a gentle slope falling south eastward. Within parcel 14 the culmination of a tributary of Aitken Creek exists toward the northern edge of the study area. Although this has been dammed, the area would have been subject to inundation and the higher points to the north and west of the area have high amounts of exposed basalt.

The edge of basalt flows, extending from parcel 6 through parcels 7, 8, 9 and 14 have resulted in local high points with good aspect southward.

Survey unit 5 is not covered by an area of cultural heritage sensitivity. The low ground surface visibility hindered the ability to identify any surface artefacts, however the existence of the ephemeral drainage channel and culmination of the creek tributary coupled with the local high points means there is potential for unidentified Aboriginal cultural heritage.



Photograph 17 Facing north from parcel 14 over the toward the beginning of Aitken Creek and high exposed basalt in background.



Photograph 18 Facing north east from parcel 14. Low lying flood plain of Aitken Creek tributary.



Photograph 19 Facing east from gentle rise toward the beginning of Aitken Creek tributary. High poing on the left.



Photograph 20 Facing north from parcel 9 toward parcel 6 over lava flow.

Unit 6

Survey unit 6 consist of parcels 11, 12 and 13. Within the survey unit the dominant landform is Aitken Creek floodplain as well as the Aitken Creek line. The gentle slopes within the survey unit can be attributed to the direction of volcanic flows. Parcels 11 and 12 fall eastward toward Aitken Creek whilst parcel 13 falls southward toward the bend of Aitken Creek. Parcel 12 has seen a high amount of disturbance associated with the residence. High amounts of fill has been imported or dumped within the parcel and the residence includes several associated pastoral buildings.

All three parcels in survey unit six are is within an area of cultural heritage sensitivity associated with 200 metres of Aitken Creek and parcel 13 is associated with the previously registered Aboriginal place Mickleham Road Aitken Creek 2 (VAHR 7822-2936). The lots within survey unit 6, given their location

in relation to Aitken Creek and the previously registered VAHR places have potential for unidentified Aboriginal cultural heritage.

Previously identified Aboriginal place

One previously registered Aboriginal place (**Mickleham Road Aitken Creek 2, (VAHR 7822-2936)**) exists within parcel 13. The single grey quartzite broken flake could not be relocated at the time of the survey.



Photograph 21 Facing south from parcel 13. Aitken Creek and associated floodplain.



Photograph 22 Facing south from parcel 13. Large amounts of brick and building discard.



Photograph 23 Facing south from parcel 11. Looking over flat land of parcel 12 abutting Mickleham Road.



Photograph 24 Facing east over Aitken Creek from parcel 11.



**Photograph 25 Facing north from
parcel 11. Looking over the
Aitken Creek bed.**

Unit 7

Survey unit 7 consists of parcels 15 and 16. Within the survey unit the dominant landform is Aitken Creek floodplain as well as the Aitken Creek line. Within parcel 16 the ephemeral drainage line that exists that moves toward parcel 14. The slope of the survey unit can be attributed to the direction of volcanic flows that have moved in a south easterly direction.

The creek line has been dammed in several areas within properties 15 and 16. In addition to the development of the residence, disturbance in the form of landscaping has taken place within parcel 15.

Both parcels in survey unit 7 are within an area of cultural heritage sensitivity associated with the 200 metres buffer of Aitken Creek. The previously registered Aboriginal places VAHR 7822-2937, VAHR 7822-2999 and VAHR 7822-3020 and the associated object collections are located within parcel 16. Survey unit 7, given the location of Aitken Creek and the previously registered VAHR places has potential for unidentified Aboriginal cultural heritage.

Previously identified Aboriginal place

Within parcel 16, three previously registered Aboriginal places as well as three object collections (the location of the relocated artefacts) associated with these places exist. The artefacts originally recorded in 2011, associated with **Whites Lane Aitken Creek 1 (VAHR 7822-2937)**, **Whites Lane Aitken Creek 2 (VAHR 7822-2999)** and **Whites Lane Aitken Creek 3 (VAHR 7822-3023)** were moved and relocated within parcel 16. These artefacts could not be relocated at the time of the survey. Further artefacts were located within the extents of the previously registered Aboriginal places. An updated place inspection form was supplied to VAHR.



Photograph 26 Facing west from parcel 16 over the Aitken Creek bed and floodplain.



Photograph 27 Facing east from parcel 15. Looking over the Aitken Creek bed and floodplain. Location of VAHR 7822-2999 in background.



Photograph 28 Facing north from parcel 16. Looking over the ephemeral drainage line/tributary that extends to parcel 14.



Photograph 29 Facing east over the location of VAHR 7822-2999.



Photograph 30 Facing north over the location of VAHR 7822-2937



Photograph 31 A sample of the artefact located within the extent of VAHR 7822-2937

Unit 8

Survey unit 8 consists of parcels 17, 18, 20, 21 and 22. These parcels have been grouped into a single survey unit based on their relatively flat uniform landform. The survey unit falls very slightly eastward as a result of the volcanic flow moving in this direction. Several residences exist within the survey unit. Disturbance in the form of development of the residence, assets, driveways and landscaping exists toward the western portion of the survey unit. Little disturbance (with the exception of small dams) can be seen in the eastern section of the survey unit.

Although there may have been a tributary or ephemeral creek line running through parcel 20, there is no evidence of this on the ground. This maybe a result of previous levelling or agricultural uses. Low ground surface visibility hindered the ability to identify any surface artefacts. Parcel 17 is within an area of cultural heritage sensitivity associated with Aitken Creek, however there is potential for cultural heritage to exist within the entire survey unit, given the location of the former ephemeral drainage line.



Photograph 32 Facing east from parcel 21. Comparatively flat land gently falling eastward.



Photograph 33 Facing south from parcel 21. Comparatively flat land gently falling eastward.



Photograph 34 Facing north from parcel 17. Comparatively flat land gently falling eastward.



Photograph 35 Facing east from parcel 17. Comparatively flat land gently falling eastward.

Unit 9

Survey unit 9 consists of parcels 23 and 24. Both parcels have residences on the property. Parcel 23 however has a large number of outbuildings on the property. A large amount of small eucalypt regrowth exists toward the southern half of parcel 24. Toward the northern end of property 24 there are some larger, possible remnant eucalypt trees and a local high point including exposed basalt.

Although there may have been a tributary or ephemeral creek line running through the southern portion of the survey unit, there is no evidence of this on the ground.

Low ground surface visibility hindered the ability to identify any surface artefacts. The northern section of survey unit 9 is within an area of cultural heritage sensitivity associated with the 200 metres buffer of Aitken Creek. The parcels, given their location in relation to Aitken Creek and the local high points with exposed basalt, have potential for unidentified Aboriginal cultural heritage.



Photograph 36 Facing north from the southern point of parcel 24. Young eucalyptus regrowth.



Photograph 37 Facing east from northern end of parcel 24. View toward low point in parcel 26 from deflated rise.



Photograph 38 Facing west from the northern end of parcel 23. Very low ground surface visibility.



Photograph 39 Facing east from parcel 23 into parcel 24. Young eucalyptus regrowth.

Unit 10

Unit 10 consists of parcels 25 and 26. The parcels consist of relatively flat land with a slight fall eastward. The northern section of parcel 25 falls slightly northward toward Aitken Creek and consists of the Aitken Creek floodplain. Both parcels have disturbance in the form of the development of buildings (residential and religious) as well as several dams throughout the survey unit.

Although there may have been a tributary or ephemeral creek line running through parcel 26, there is no evidence of this on the ground. There was however, a slight gentle rise where the residence is now located and an area of exposed basalt along the northern edge of the parcel.

Low ground surface visibility hindered the ability to identify any surface artefacts except for along the edges of the exposed dam walls. The northern section of survey unit 10 (parcel 25) is within an area of cultural heritage sensitivity associated with the 200 metres buffer of Aitken Creek as well as the location of the new Aboriginal place (VAHR 7822-4348). Parcel 26 however also has potential for unidentified cultural heritage, given the location of the lots in relation to Aitken Creek, the local high point and the newly identified Aboriginal place.

Newly identified Aboriginal place

A single silcrete flake was identified on the edge of a dam wall in the north western edge of the parcel. This artefact was registered as Craigieburn West PSP LDAD1 (**VAHR 7822-4348**).



Photograph 40 Facing south from parcel 26. Comparatively flat land.



Photograph 41 Facing north from parcel 26. Comparatively flat land.



Photograph 42 Facing north. Location of VAHR 7822-4348.



Photograph 43 Silcrete flake registered as VAHR 7822-4348.

Unit 11

Survey unit 11 consists of parcels 27 and 28. The survey unit consists of relatively flat cleared land that falls gently to the east as a result of the lava flows from the west. The south east corner of the survey unit is characterised by the edge of the Flax Lily Creek Wetland. The Aboriginal place VAHR 7822-2472 is associated with this waterway and abuts the eastern edge of the parcel. Although no surface artefacts were located during the survey, the VAHR place likely continues into the survey unit, given the location is relatively undisturbed.

Low ground surface visibility hindered the ability to identify any surface artefacts. Both parcels within survey unit 11 are within an area of cultural heritage sensitivity. Parcel 27 due to the location of VAHR 7822-4318 and parcel 28 due to the locations of the previously registered Aboriginal place VAHR 7822-2472 in the neighbouring property. The parcels, given their location in relation to Aitken Creek and the previously registered VAHR places have potential for unidentified Aboriginal cultural heritage.

Previously identified Aboriginal place

Within parcel 27 a VAHR place has been identified as a result of a CHMP being undertaken for the Craigieburn Road widening (unfinished at the time of this report). The single silcrete artefact was located within the parcel **Craigieburn Road Upgrade LDAD (VAHR 7822-4318)**. No new surface artefacts were located at the time of survey.



Photograph 44 Facing north from parcel 27. Works being undertaken as part of the Craigieburn Road widening



Photograph 45 Facing east from parcel 28. Looking over a gentle fall eastward.



Photograph 46 Facing east from parcel 27. Looking into the southern portion of parcel 28 covered in very high grass.



Photograph 47 Facing south over parcel 27. Showing the gentle slope eastward from Craigieburn Road on the left.

Unit 12

Survey unit 12 consists of parcels 29, 30, 31, 32, 33, 34 and 35. These parcels all consists of a similar landform and have been grouped together as such. The survey unit is dominated by a large rise, the result of lava flows from Mount Atkin to the south east. The exposed southern edge of the flow lobe (located in parcel 34) has resulted in visible basalt with a good aspect over the Yuroke Creek branches

confluence (located in Parcel 39). This local high point would have provided good aspect southward and westward.

Within parcel 29 the culmination of the Flax Lily Creek Wetland is also of interest, given that VAHR 7822-2472 is associated with this waterway in the neighbouring property.

Low ground surface visibility hindered the ability to identify any surface artefacts. Parcels 29 and 30 are however within an area of cultural heritage sensitivity due to the location of VAHR 7822-4319). The remainder of the parcels, given the large rise with good aspect have potential for unidentified Aboriginal cultural heritage.

Previously identified Aboriginal place.

Three components of a previously registered Aboriginal place were recorded within parcels 29 and 30. **1390 Mickleham Road LDAD1 (VAHR 7822-4319)** consists of two silcrete artefacts and a single quartz flake identified in areas of exposed ground associated with the dam in parcel 30 and a track in parcel 29. These were not relocated at the time of the survey, as the place was registered after the completion of the Desktop Assessment.



Photograph 48 Facing north from parcel 35 into parcel 34. Exposed basalt flow creating local high point.



Photograph 49 Facing south from parcel 34. Large aspect from exposed basalt flow.



Photograph 50 **Facing east from parcel 34. Exposed basalt on edge of lava flow.**



Photograph 51 **Facing northeast from parcel 29. The beginning of the Flax Lily Creek Wetland.**



Photograph 52 **Facing west from parcel 31. Aspect eastward from the local high point created by lava flows.**

Unit 13

Unit 13 consists of parcels 36, 37 and 38. The survey unit consists of the continuation of the volcanic flow southward. The slope drops toward the east toward Yuroke Creek and to the west due to the Greenville Reservoir. The high point acts much like a peninsula with good aspect to the east, south and west. The southernmost point has areas of exposed basalt.

Parcel 37 and 38 are located within an area of cultural heritage sensitivity due to the location of the previously registered Aboriginal place Dunhelen 1 (VAHR 7822-0682) as well as the sensitivity associated with the 200 metres buffer of Yuroke Creek. There is potential for further unidentified Aboriginal cultural heritage within all parcels of survey unit 13, given that 7822-0682 is registered and the location of the basalt flow within the survey unit.

Previously identified Aboriginal place.

Dunhelen 1 (VAHR 7822-0682) is a scar tree located between parcels 37 and 38. The Aboriginal place was relocated, re-recorded and a place inspection form was provided to VAHR.



Photograph 53 Facing south from parcel 37. Slight slope falling eastward.



Photograph 54 Facing east from parcel 38. Exposed basalt from lava flows, creating local high point.



Photograph 55 Previously registered Aboriginal place VAHR 7822-0682.

Unit 14

Survey unit 14 consists of parcel 39. Parcel 39 consists of the beginning of Yuroke Creek and the confluence of three drainage channels that run into the creek. The property currently consists of the Aitken Hill Conference Centre. A high amount of landscaping has been done as a result of the conference centre, particularly in the north of the property. The golf course, several dams, conference centre and the various accommodation has impacted the natural landscape. To the south, little development has been done. The mid and lower slopes of Mount Aitken exists in the south-eastern portion of the survey unit. The area has a very high aspect westward toward Yuroke Creek.

Low ground surface visibility hindered the ability to identify any surface artefacts. A single surface artefact was identified within the extent of the previously registered Aboriginal place Mickleham Rd 1 (VAHR 7822-0681).

Parcel 39 is located within an area of cultural heritage sensitivity due to the location of the previously registered Aboriginal place Mickleham Rd 1 (VAHR 7822-0681) as well as the area of sensitivity associated with the 200 metres buffer of Yuroke Creek. There is potential for further unidentified Aboriginal cultural heritage within parcel 39, given the location of Yuroke Creek and VAHR 7822-0681 within the lot.

Previously identified Aboriginal place.

Mickleham Rd 1 (VAHR 7822-0681) is an artefact scatter consisting of silcrete artefacts. A new silcrete flake was located within the extent of the Aboriginal place. A place inspection for was sent to VAHR.



Photograph 56 Facing north from parcel 39. Looking toward Aitken Hill Conference centre over Yuroke Creek floodplain.



Photograph 57 Facing south from bridge within parcel 39. Looking over the Yuroke Creek river bed.



Photograph 58 Facing south west from Aitken Hill. Good aspect toward Yuroke Creek.



Photograph 59 Facing north west from Aitken Hill. Good aspect toward Yuroke Creek.



Photograph 60 New artefact identified within the extent of VAHR 7822-0681

Unit 15

Survey unit 15 consists of parcels 40, 41, 42 and 43. The survey unit consists of high points associated with the lava flows from Aitken hill and falls toward Yuroke Creek. There is a break in the slope between the high points and the creek itself, included in this area is a small drainage channel. The high point provides good aspect westward over Yuroke Creek.

Low ground surface visibility hindered the ability to identify any surface artefacts. All of the parcels within the survey unit are located within an area of cultural heritage sensitivity due to the location of the previously registered Aboriginal place Brindley PK 1 (VAHR 7822-1105) as well as the sensitivity associated with the 200 metres buffer of Yuroke Creek. There is potential for further unidentified Aboriginal cultural heritage within survey unit 15, given the unit includes sections of Yuroke creek and Aitken hill.

Previously identified Aboriginal place

At the time of the survey **Brindley PK 1 (VAHR 7822-1105)** could not be relocated. It was noted that some disturbance was recorded in the area of the Aboriginal place due to grading works from the abutting property.



Photograph 61 Facing south west from Aitken Hill. Exposed basalt and good aspect toward Yuroke Creek.



Photograph 62 Facing west. Channel draining toward Yuroke Creek.



Photograph 63 Facing north from within parcel 41. Looking north along the Yuroke Creek bed and floodplains.



Photograph 64 Facing west from parcel 42. Large area graded from abutting property to the north.

3.3.4 Aboriginal heritage

Eleven Aboriginal places were previously recorded within the study area, seven artefact scatters (VAHR 7822-0681, 7822-1105, 7822-2472, 7822-2935, 7822-2936, 7822-2937, and 7822-2999), two scarred trees (VAHR 7822-0682 & 7822-2974) and two LDADs (7822-4318 and 7822-4319). Place Inspections were completed for these Aboriginal places and submitted to Registry on 4 July 2019

A new Low Density Artefact Distribution was recorded within the study area. The Aboriginal place consisted of a three surface artefacts located within surface exposures. These components were of

sufficient distance from previously recorded places to necessitate a new registration. It was registered as Craigieburn West PSP LDAD 1 (VAHR 7822-4348).

Table 9 Aboriginal places relocated during the survey.

Aboriginal Place No.	Aboriginal Place Name	Component No.	Component Type	Relocated
Aboriginal places within the study area				
7822-0681	Mickleham Rd 1	7822-0681-1	Artefact Scatter	Yes
7822-0682	Dunhelen 1	7822-0682-1	Scarred Tree	Yes
7822-2935	Mickleham Road Aitken Creek 1	7822-2935-1	Artefact Scatter	No
7822-2936	Mickleham Road Aitken Creek 2	7822-2936-1	Artefact Scatter	No
7822-2974	Mickleham Road Plain 1	7822-2974-1	Scarred Tree	Yes
7822-2937	Whites Lane Aitken Creek 1	7822-2937-1 & 7822-2937-2	Artefact Scatter & Object Collection	Artefact Scatter Yes Object collection No
7822-2999	Whites Lane Aitken Creek 2	7822-2999-1 & 7822-2999-2	Artefact Scatter & Object Collection	Artefact Scatter Yes Object collection No
7822-3023	Whites Lane Aitken Creek 3	7822-3023-1 & 7822-3023-2	Artefact Scatter & Object Collection	Artefact Scatter Yes Object collection No
7822-1105	Brinkley Pk 1	7822-1105	Artefact Scatter	No
7822-4319	1390 Mickleham Road LDAD 1	7822-4319 1 & 7822-4319 2 & 7822-4319 3	Low Density Artefact Distribution	Registered after Desktop Assessment.
7822-4318	Craigieburn Road Upgrade LDAD	7822-4318-1	Low Density Artefact Distribution	No

3.4 Conclusions

The study area that was available to be surveyed comprised agricultural, commercial and residential land. The majority of the area was being used for grazing. Areas of disturbance included dams, fences, buildings, tanks and other farming infrastructure.

Generally the ground surface visibility within the study area was poor due to grass and weed coverage. This is a common finding of heritage assessments in the geographic region. Ground surface visibility can be affected by the time of year, sedimentation and land use practices. Low ground surface visibility hinders the ability to identify surface Aboriginal cultural heritage.

Majority of the previously registered Aboriginal places could not be relocated during the survey, likely as a result of the ground surface visibility. Further artefacts were located within the extents of previously registered Aboriginal places VAHR 7822-2937, 7822-2999 and 7822-3023. As a result of the

survey a new Aboriginal place was recorded and given the name Craigieburn West PSP LDAD 1(VAHR 7822-4348).

The survey confirmed much of the hypothesis made by the Desktop Assessment. Areas of potential were noted in association with Aitken and Yuroke Creeks as well as small unnamed tributaries and ephemeral drainage lines. Areas of high aspect, including Aitken hill as well as smaller local rises were shown to have potential for Aboriginal cultural heritage. The lava flows from several local eruption points has created undulating land and areas of high aspect where the lava flow has created a ridge of exposed basalt. Mature Eucalyptus trees were located in the northern part of the study area; therefore there is a possibility that intact archaeological deposits will be located within this section of the study area, as the area has not been cleared for agricultural practices.

There is potential for further Aboriginal heritage to be located in a subsurface context. Local high points and several named and unnamed waterways and tributaries intersect or cut through the study area. It is possible that intact archaeological deposits exist in association with these areas given the strategic value of these landforms.

3.4.1 Predictive statement

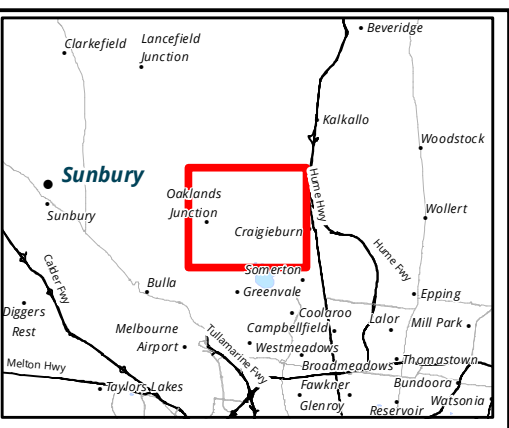
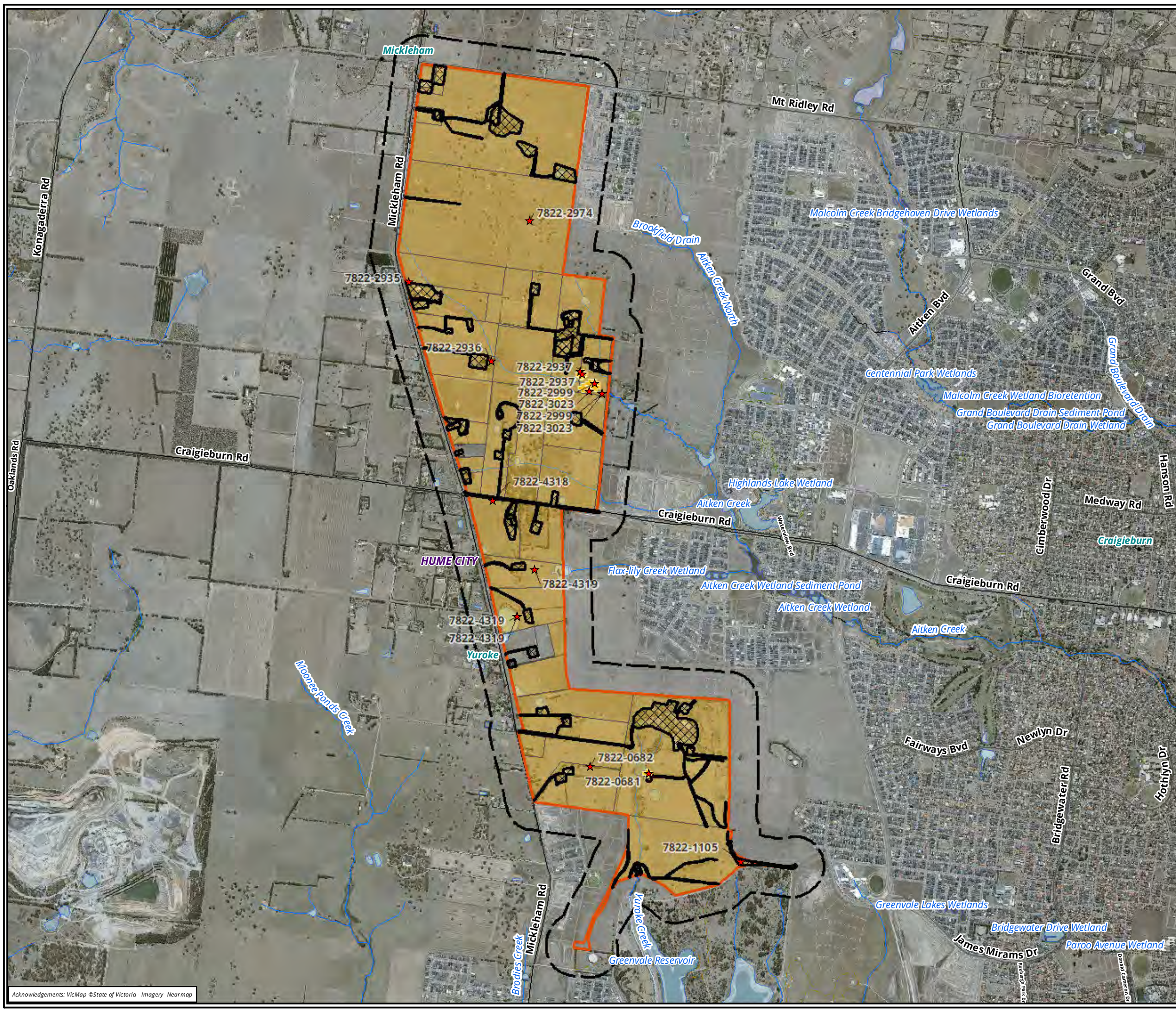
Due to the limited Aboriginal cultural heritage material identified during the site inspection, it is difficult to refine the predictive model for the study area. This was largely due to the lack of ground surface visibility.

The location of one new Aboriginal place located on an exposed dam wall close to Aitken Creek as well as several artefact located within the extent of existing Aboriginal places along the length of Aitken Creek supports the predictive model based on waterways. Exposed basalt flows and areas of high aspect have also been identified as likely to have further potential for Aboriginal cultural heritage.

However it is recognised that poor ground surface visibility was a limitation to the survey and there remains potential for additional Aboriginal cultural heritage to be identified within the study area when ground surface conditions are more conducive to archaeological investigation.

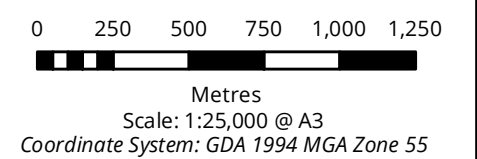
Based on the results of the targeted survey the place predictive model has been updated. It shows areas of ground disturbance as having low archaeological potential (Map 9).

It is important to note that while poor ground surface visibility meant that effective survey coverage was poor, the results of the survey did support the larger pattern identified in the predictive model which showed that Aboriginal places can be identified on local high point and in association with waterways.



- Legend**
- Activity Area
 - Activity Area 200m buffer
 - Area of ground disturbance
 - Area surveyed
 - ★ VAHR place
 - + Surface artefact

Map 8 Results of survey



Matter: 28876, CHMP No.
 Date: 25 February 2019,
 Checked by: ADV, Drawn by: JPT, Last edited by: jturner
 Location: \\BIO-DATA-01\bio-dfs\Matters\28800s\28876\Mapping\28876_M8_SurveyResults.mxd



Legend

Activity area

Predicted sensitivity

Value

High : 16

Low : -2

Map 9 Updated overall prediction model

Acknowledgements: Vicmap ©State of Victoria

Matter: 28876,
Date: 25 February 2019,
Checked by: LA, Drawn by: DK, Last edited by: Jturner
Location:\BIO-DATA-01\BIO-dfs\Matters\28800s\28876\Mapping\28876_M9_UpdatedPredictiveModel



4 Legislative considerations

4.1 Aboriginal Heritage Act 2006 and Aboriginal Heritage Regulations 2018

Mandatory CHMP

Under Section 46 of the *Aboriginal Heritage Act 2006*, it is an offence to commence an activity for which a CHMP is required. Under Regulation 7 of the *Aboriginal Heritage Regulations 2018* a CHMP is required if all or part of the activity is located within an area of cultural heritage sensitivity, and all or part of the activity is a high impact activity.

To determine whether a CHMP is required, relevant sections of the *Aboriginal Heritage Regulations 2018* as they relate to the Activity Area are reproduced below for reference.

5 Definitions

In these Regulations –

...

Significant ground disturbance means disturbance of-

- (a) the topsoil or surface rock layer of the ground; or
- (b) a waterway-

by machinery in the course of grading, excavating, digging, dredging or deep ripping, but does not include ploughing other than deep ripping.

...

25 Registered cultural heritage places

- (1) A registered cultural heritage place is an area of cultural heritage sensitivity.
- (2) Subject to subregulation (3), land within 50 metres of a registered cultural heritage place is an area of cultural heritage sensitivity.
- (3) If part of the land within 50 metres of a registered cultural heritage place has been subject to significant ground disturbance, that part is not an area of cultural heritage sensitivity.

26 Waterways

- (1) Subject to subregulation (2), a waterway or within 200 metres of a waterway is an area of cultural heritage sensitivity.
- (2) If part of a waterway or part of the land within 200 metres of a waterway has been subject to significant ground disturbance, that part is not an area of cultural heritage sensitivity.

...

46 Buildings and works for specified uses

- (1) The construction of a building or the construction or carrying out of works on land is a high impact activity if the construction of the building or the construction or carrying out of the works—
 - (a) would result in significant ground disturbance; and

(b) is for or associated with the use of the land for any one or more of the following purposes—

- (i) aquaculture;
- (ii) a camping and caravan park;
- (iii) a car park;
- (iv) a cemetery;
- (v) a child care centre;
- (vi) a corrective institution;
- (vii) a crematorium;
- (viii) an education centre;
- (ix) an emergency services facility;
- (x) a freeway service centre;
- (xi) a hospital;
- (xii) an industry;
- (xiii) intensive animal husbandry;
- (xiv) a major sports and recreation facility;
- (xv) a minor sports and recreation facility;
- (xvi) a motor racing track;
- (xvii) an office;
- (xviii) a place of assembly;
- (xix) a pleasure boat facility;
- (xx) a research centre;
- (xxi) a retail premises;
- (xxii) a retirement village;
- (xxiii) a service station;
- (xxiv) a transport terminal;

(xxv) a utility installation, other than a telecommunications facility, if—

(A) the works are a linear project that is the construction of an overhead power line with a length exceeding one kilometre or for which more than 10 power poles are erected; or

(B) the works are a linear project that is the construction of a pipeline with a length exceeding 500 metres; or

(C) the works are a linear project with a length exceeding 100 metres (other than the construction of an overhead power line or a pipeline with a pipe diameter not exceeding 150 millimetres); or

(D) the works affect an area exceeding 25 square metres.

(xxiv) a veterinary centre;

(xxv) a warehouse;

(xxvi) land used to generate electricity, including a wind energy facility.

(2) The terms used in subregulation (1)(b) have the same meanings as they have in the Victorian Planning Provisions.

(3) Despite subregulation (1), the construction of a building or the construction or carrying out of works on land is not a high impact activity if it is for or associated with a purpose listed under subregulation (1)(b) for which the land was being lawfully used immediately before the commencement day.

(4) In this regulation, *linear project* has the same meaning as in regulation 68.

47 Constructing specified items of infrastructure

(1) The construction of any one or more of the following is a high impact activity if the construction would result in significant ground disturbance—

(a) an airfield;

(b) a bicycle track with a length exceeding 100 metres;

(c) a helipad;

(d) rail infrastructure, other than—

(i) a railway track with a length of less than 100 metres; or

(ii) a railway track siding with a length of less than 100 metres; or

(iii) a cutting with a length of less than 100 metres; or

(iv) a tunnel with a length of less than 100 metres; or

(v) a bridge with a span of less than 100 metres; or

(vi) a platform with a length of less than 100 metres; or

(vii) a service road with a length of less than 100 metres;

(e) a roadway with a length exceeding 100 metres;

(f) a walking track with a length exceeding 100 metres;

(g) a telecommunications line consisting of an underground cable or duct with a length exceeding 500 metres.

(2) In this regulation, *telecommunications line* has the same meaning as in the Victorian Planning Provisions.

48 Dwellings

(1) The construction of three or more dwellings on a lot or allotment is a high impact activity.

(2) The carrying out of works for three or more dwellings on a lot or allotment is a high impact activity.

(3) This regulation does not apply to the construction of or the carrying out of works for a retirement village within the meaning of the Victorian Planning Provisions.

49 Subdivision of land

(1) The subdivision of land into three or more lots is a high impact activity if—

(a) the planning scheme that applies to the activity area in which the land to be subdivided is located provides that at least three of the lots may be used for a dwelling or may be used for a dwelling subject to the grant of a permit; and

(b) the area of each of at least three of the lots is less than eight hectares.

(2) The subdivision of land into two or more lots in an industrial zone is a high impact activity.

(3) In this regulation, *industrial zone* has the same meaning as in the Victorian Planning Provisions.

Sections of the Activity Area include areas of cultural heritage sensitivity, specifically lots 1, 27, 28, 29, and 30 (Regulation 25), lots 7, 11, 17, 23, 24, 40 and 43 (Regulation 26) and lots 6, 12, 13, 15, 16, 25, 37, 38, 39 and 41 (Regulations 25 and 26).

The Activity Area is likely to include high impact activities such as construction of three or more dwellings (Regulation 48), subdivision of land into 3 or more allotments (Regulation 49), retail premises, education centres (Regulation 46), utility installations, roads and footpaths (Regulation 47), among others.

The two trigger threshold to prepare a mandatory CHMP has been met for sections of the study area. To be exempt from preparing a mandatory CHMP, all of the area of cultural heritage sensitivity must have been subjected to significant ground disturbance (Regulation 5). While the targeted survey noted areas of disturbance within the wider Activity Area, the threshold for significant ground disturbance was not met, given the entire area of cultural heritage sensitivity was not covered by significant ground disturbance.

Therefore the following properties require a mandatory CHMP:

- 1880 Mickleham Road, Mickleham, VIC 3064 (Lot 1)
- 1760 Mickleham Rd, Mickleham VIC 3064 (Lot 6)
- 1720 Mickleham Rd, Mickleham VIC 3064 (Lot 7)
- 290 Olivers Rd, Mickleham VIC 3064 (Lot 8)
- 1690 Mickleham Rd, Mickleham VIC 3064 (Lot 10)
- 1660 Mickleham Rd, Mickleham VIC 3064 (Lot 11)
- 1630 Mickleham Rd, Mickleham VIC 3064 (Lot 12)
- 1630 Mickleham Rd, Mickleham VIC 3064 (Lot 13)
- 225 Olivers Rd, Yuroke VIC 3063 (Lot 15)
- 125 Whites Lane, Yuroke VIC 3063 (Lot 16)
- 1600 Mickleham Rd, Craigieburn West Vic 3064 (Lot 17)
- 700 Craigieburn Road, Mickleham VIC 3064 (Lot 23)
- 680 - 690 Craigieburn Rd, Mickleham VIC 3064 (Lot 24)

- 75 Whites Lane, Mickleham VIC 3064 (Lot 25)
- 1480 Mickleham Rd, Craigieburn VIC (Lot 27)
- 665 Craigieburn Road, Craigieburn VIC 3064 (Lot 28)
- 1430 Mickleham Rd, Yuroke VIC 3063 (Lot 29)
- 1390 Mickleham Rd, Yuroke VIC 3063 (Lot 30)
- 1240 Mickleham Rd, Greenvale VIC 3059 (Lot 37)
- 1240 Mickleham Rd, Greenvale VIC 3059 (Lot 38)
- 20 Dunhelen Lane, Yuroke VIC (Aitken Hill) 3063 (Lot 39)
- 1170 Mickleham Road, Greenvale VIC 3059 (Lot 40)
- 1170 Mickleham Road, Greenvale VIC 3059 (Lot 41)
- 1170 Mickleham Road, Greenvale VIC 3059 (Lot 42)
- 1170 Mickleham Road, Greenvale VIC 3059 (Lot 43)

Voluntary CHMP

It is noted that under Section 27 of the *Aboriginal Heritage Act 2006*, harming Aboriginal cultural heritage is unlawful. Severe penalties apply for unpermitted harm.

This assessment has concluded that there is potential for Aboriginal cultural heritage to be identified outside of the areas of cultural heritage sensitivity, particularly on the escarpment of unnamed/ephemeral drainage channels and waterways and local high points. This is supported by regional information discussed in the background review.

Under Section 29 of the *Aboriginal Heritage Act 2006*, harm to Aboriginal cultural heritage is permitted if the person is acting in accordance with a cultural heritage permit or approved CHMP that applies to the Aboriginal cultural heritage. The only way to provide surety to the development and Aboriginal cultural heritage approval is to undertake a voluntary CHMP under Section 45 of the *Aboriginal Heritage Act 2006*.

Therefore the following properties are recommended to prepare a voluntary CHMP:

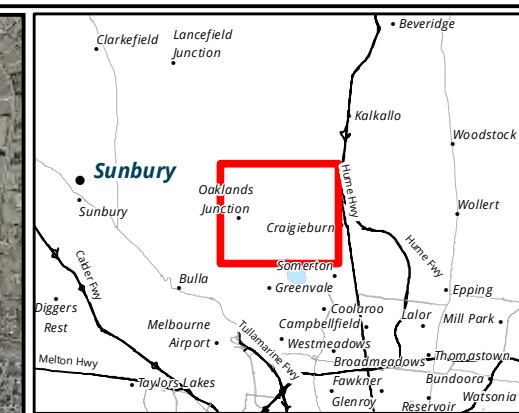
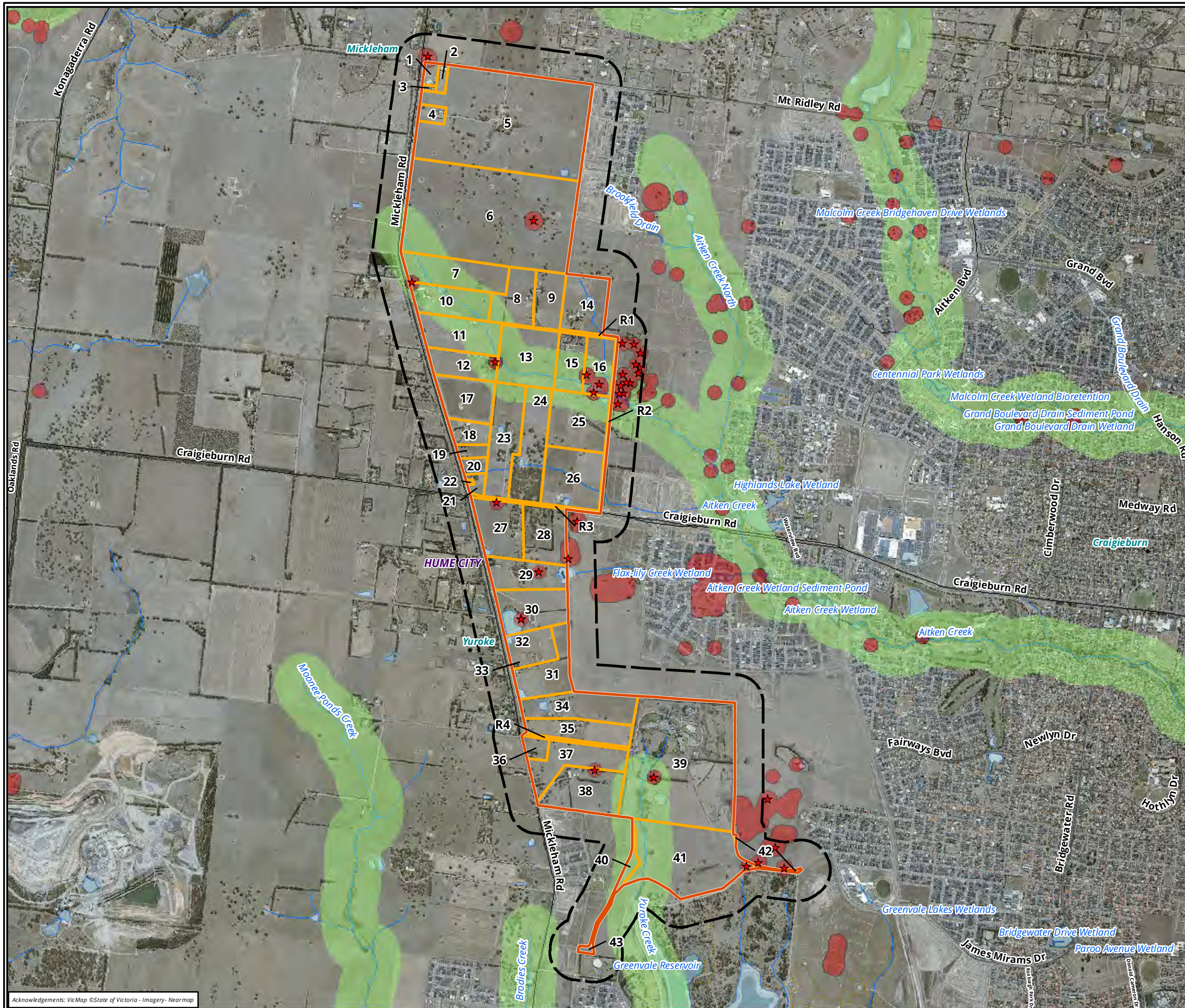
- 685 Mt Ridley Road Mickleham VIC 3064 (Lot 2)
- 1880 Mickleham Road, Mickleham, VIC 3064 (Lot 3)
- 1800 Mickleham Rd, Mickleham VIC 3064 (Lot 4)
- 1780 Mickleham Rd, Mickleham VIC 3064 (Lot 5)
- 250 Olivers Road, Mickleham VIC 3064 (Lot 9)
- 220 Olivers Rd, Mickleham VIC 3064 (Lot 14)
- 1570 Mickleham Rd, Mickleham VIC 3064 (Lot 18)
- 1550 Mickleham Rd, Yuroke VIC 3063 (Lot 19)
- 1540 Mickleham Rd, Yuroke VIC 3063 (Lot 20)
- 1530 Mickleham Rd, Yuroke VIC 3063 (Lot 21)

- 1520 Mickleham Rd, Yuroke/Mickleham VIC 3064 (Lot 22)
- 640 Craigieburn Rd. Mickleham VIC 3064 (Lot 26)
- 1320 Mickleham Rd, Yuroke VIC 3063 (Lot 31)
- 1370 Mickleham Road, Craigieburn 3064 (Lot 32)
- 1360 Mickleham Road, Craigieburn 3064 (Lot 33)
- 1340 Mickleham Rd, Yuroke/Craigieburn (Lot 34)
- 1300 Mickleham Rd, Yuroke VIC 3063 (Lot 35)
- 1290 Mickleham Rd, Greenvale VIC 3059 (Lot 36)

4.2 Conclusions

A review of the *Aboriginal Heritage Act 2006* and the *Aboriginal Heritage Regulations 2018* has shown that sections of the survey area meet the two trigger threshold to prepare a mandatory CHMP while the remainder of the survey area is considered to have archaeological potential and therefore a voluntary CHMP should be considered. These conclusions are summarised in Table 10. It is recognised that the conclusions are current for this assessment only and that the results of CHMPs may change the triggers for those neighbouring properties not currently required preparing a mandatory CHMP.

Note those properties that have been identified as requiring additional assessment before conclusions can be made as to whether a voluntary CHMP is recommended, are the ones that were not accessed during the field assessment. Without confirming assumptions made in the desk based review with observations in the targeted survey, conclusions can only be made on the results of the Desktop Assessment. However it is emphasised that a CHMP is the only cultural heritage approval that can be undertaken that will provide cultural heritage approval for the development, thereby acting as a risk management strategy ensuring no delays to development activities.



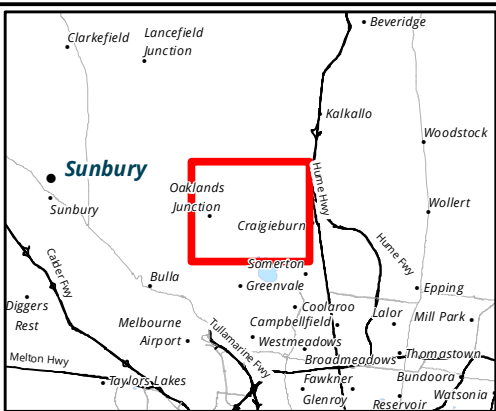
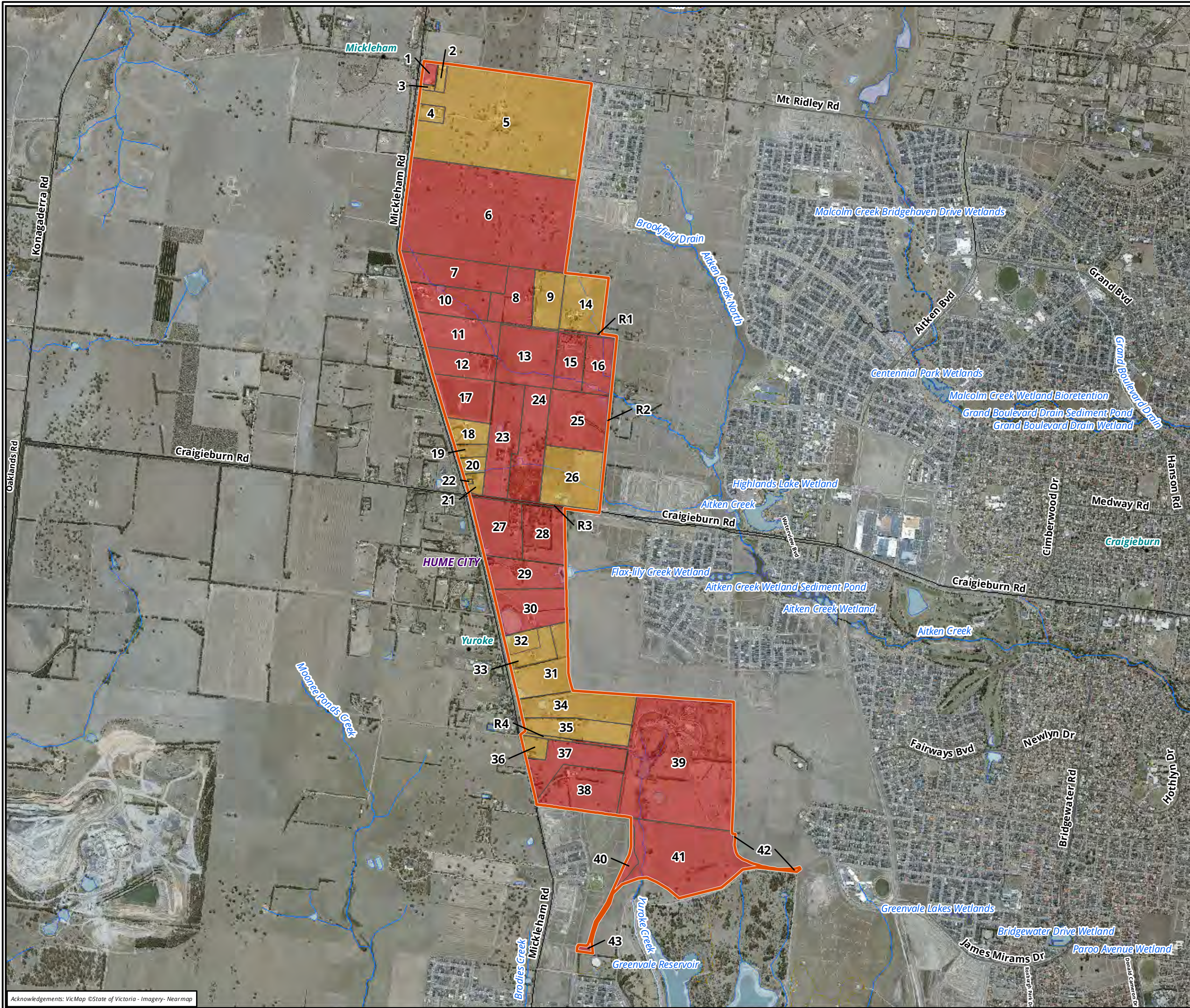
- Legend**
- Activity Area
 - Activity Area 200m buffer
 - Parcel boundaries
 - ★ VAHR place
- Cultural heritage sensitivity**
- Area of cultural heritage sensitivity
 - Registered Aboriginal place

Map 10 Cultural heritage sensitivity

0 250 500 750 1,000 1,250
 Metres
 Scale: 1:25,000 @ A3
 Coordinate System: GDA 1994 MGA Zone 55



Matter: 28876, CHMP No.
 Date: 22 February 2019,
 Checked by: ADV, Drawn by: JPT, Last edited by: jturner
 Location: \\BIO-DATA-01\bio-dfs\Matters\28800s\28876\Mapping\28876_M10_CHSensitivity.mxd



Legend

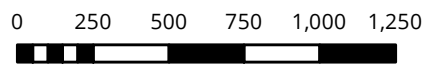
Activity Area

Parcels affected by cultural heritage sensitivity

Yes

No

Map 11 Recommendations



Metres
Scale: 1:25,000 @ A3
Coordinate System: GDA 1994 MGA Zone 55

biosis
Biosis Pty Ltd
Albury, Ballarat, Melbourne,
Newcastle, Sydney, Wangaratta & Wollongong

Matter: 28876, CHMP No.
Date: 25 February 2019,
Checked by: ADV, Drawn by: JPT, Last edited by: jturner
Location: \\BIO-DATA-01\\bio-dfs\\Matters\\28800s\\28876\\Mapping\\
28876_M11_Recommendations.mxd

Table 10 CHMP required/recommended

Lot		Address	Area of cultural heritage sensitivity	High impact activity	Archaeological potential	Mandatory CHMP required	Voluntary CHMP recommended
1	Lot 1 TP423679	1880 Mickleham Road, Mickleham, VIC 3064	Yes. Regulation 25 – proximity to VAHR 7822-3841	Yes Regulation 46 – buildings and works for specified uses Regulation 47 – constructing specified items of infrastructure Regulation 48 – dwellings Regulation 49 – subdivision of land	Yes	Yes	N/A
2	Lot 3 PS301908	685 Mt Ridley Road Mickleham VIC 3064	No	Yes Regulation 46 – buildings and works for specified uses Regulation 47 – constructing specified items of infrastructure Regulation 48 – dwellings Regulation 49 – subdivision of land	Yes	No	Yes
3	Lot 1 TP951293	1880 Mickleham Road, Mickleham,	No	Yes Regulation 46 –	Yes	No	Yes

Lot		Address	Area of cultural heritage sensitivity	High impact activity	Archaeological potential	Mandatory CHMP required	Voluntary CHMP recommended
4		VIC 3064		buildings and works for specified uses Regulation 47 – constructing specified items of infrastructure Regulation 48 – dwellings Regulation 49 – subdivision of land			
	Lot 2 PS736443	1800 Mickleham Rd, Mickleham VIC 3064	No	Yes Regulation 46 – buildings and works for specified uses Regulation 47 – constructing specified items of infrastructure Regulation 48 – dwellings Regulation 49 – subdivision of land	Yes	No	Yes
5	Lot 1 PS736443	1780 Mickleham Rd, Mickleham VIC 3064	No	Yes Regulation 46 – buildings and works for specified uses Regulation 47 – constructing	Yes	No	Yes

Lot		Address	Area of cultural heritage sensitivity	High impact activity	Archaeological potential	Mandatory CHMP required	Voluntary CHMP recommended
6				specified items of infrastructure Regulation 48 – dwellings Regulation 49 – subdivision of land			
	Lot 2 PS301908	1760 Mickleham Rd, Mickleham VIC 3064	Yes. Regulation 25 – proximity to VAHR 7822-2974. Regulation 26 – proximity to Aitken Creek.	Yes Regulation 46 – buildings and works for specified uses Regulation 47 – constructing specified items of infrastructure Regulation 48 – dwellings Regulation 49 – subdivision of land	Yes	Yes	N/A
7	Lot 1 LP97698	1720 Mickleham Rd, Mickleham VIC 3064	Yes. Regulation 25 – proximity to VAHR 7822-2935. Regulation 26 – proximity to Aitken Creek.	Yes Regulation 46 – buildings and works for specified uses Regulation 47 – constructing specified items of infrastructure Regulation 48 – dwellings	Yes	Yes	N/A

Lot		Address	Area of cultural heritage sensitivity	High impact activity	Archaeological potential	Mandatory CHMP required	Voluntary CHMP recommended
8				Regulation 49 – subdivision of land			
	Lot 1 PS445746	290 Olivers Rd, Mickleham VIC 3064	Yes. Regulation 26 – proximity to Aitken Creek.	Yes Regulation 46 – buildings and works for specified uses Regulation 47 – constructing specified items of infrastructure Regulation 48 – dwellings Regulation 49 – subdivision of land	Yes	Yes	N/A
9	Lot 1 LP37205	250 Olivers Road, Mickleham VIC 3064	No	Yes Regulation 46 – buildings and works for specified uses Regulation 47 – constructing specified items of infrastructure Regulation 48 – dwellings Regulation 49 – subdivision of land	Yes	No	Yes
10	Lot 2 PS445746	1690 Mickleham Rd, Mickleham VIC	Yes. Regulation 25 – proximity to	Yes Regulation 46 –	Yes	Yes	N/A

Lot		Address	Area of cultural heritage sensitivity	High impact activity	Archaeological potential	Mandatory CHMP required	Voluntary CHMP recommended
11		3064	VAHR 7822-2935. Regulation 26 – proximity to Aitken Creek.	buildings and works for specified uses Regulation 47 – constructing specified items of infrastructure Regulation 48 – dwellings Regulation 49 – subdivision of land			
	Lot 3 LP97698	1660 Mickleham Rd, Mickleham VIC 3064	Yes. Regulation 25 – proximity to VAHR 7822-2936. Regulation 26 – proximity to Aitken Creek.	Yes Regulation 46 – buildings and works for specified uses Regulation 47 – constructing specified items of infrastructure Regulation 48 – dwellings Regulation 49 – subdivision of land	Yes	Yes	N/A
12	Lot 1 TP950200	1630 Mickleham Rd, Mickleham VIC 3064	Yes. Regulation 25 – proximity to VAHR 7822-2936. Regulation 26 – proximity to Aitken Creek.	Yes Regulation 46 – buildings and works for specified uses Regulation 47 – constructing	Yes	Yes	N/A

Lot		Address	Area of cultural heritage sensitivity	High impact activity	Archaeological potential	Mandatory CHMP required	Voluntary CHMP recommended
13				specified items of infrastructure Regulation 48 – dwellings Regulation 49 – subdivision of land			
	Lot 1 TP341413	1630 Mickleham Rd, Mickleham VIC 3064	Yes. Regulation 25 – proximity to VAHR 7822-2936. Regulation 26 – proximity to Aitken Creek.	Yes Regulation 46 – buildings and works for specified uses Regulation 47 – constructing specified items of infrastructure Regulation 48 – dwellings Regulation 49 – subdivision of land	Yes	Yes	N/A
14	Lot 1 LP212349	220 Olivers Rd, Mickleham VIC 3064	No	Yes Regulation 46 – buildings and works for specified uses Regulation 47 – constructing specified items of infrastructure Regulation 48 – dwellings	Yes	No	Yes

Lot		Address	Area of cultural heritage sensitivity	High impact activity	Archaeological potential	Mandatory CHMP required	Voluntary CHMP recommended
15				Regulation 49 – subdivision of land			
	Lot 1 TP222329	225 Olivers Rd, Yuroke VIC 3063	Yes. Regulation 25 – proximity to VAHR 7822-2937. Regulation 26 – proximity to Aitken Creek.	Yes Regulation 46 – buildings and works for specified uses Regulation 47 – constructing specified items of infrastructure Regulation 48 – dwellings Regulation 49 – subdivision of land	Yes	Yes	N/A
16							
	Lot 1 TP558734	125 Whites Lane, Yuroke VIC 3063	Yes. Regulation 25 – proximity to VAHR 7822-2937, 7822-2999, 7822-3023. Regulation 26 – proximity to Aitken Creek.	Yes Regulation 46 – buildings and works for specified uses Regulation 47 – constructing specified items of infrastructure Regulation 48 – dwellings Regulation 49 – subdivision of land	Yes	Yes	N/A
17	Lot 1 LP39373	1600 Mickleham Rd, Craigieburn	Yes. Regulation 26 – proximity to	Yes Regulation 46 –	Yes	Yes	N/A

Lot		Address	Area of cultural heritage sensitivity	High impact activity	Archaeological potential	Mandatory CHMP required	Voluntary CHMP recommended
18		West Vic 3064	Aitken Creek.	buildings and works for specified uses Regulation 47 – constructing specified items of infrastructure Regulation 48 – dwellings Regulation 49 – subdivision of land			
	Lot 1 LP52310	1570 Mickleham Rd, Mickleham VIC 3064	No	Yes Regulation 46 – buildings and works for specified uses Regulation 47 – constructing specified items of infrastructure Regulation 48 – dwellings Regulation 49 – subdivision of land	Yes	No	Yes
19	Lot 2 LP53210	1550 Mickleham Rd, Yuroke VIC 3063	No	Yes Regulation 46 – buildings and works for specified uses Regulation 47 – constructing	Yes	No	Yes

Lot		Address	Area of cultural heritage sensitivity	High impact activity	Archaeological potential	Mandatory CHMP required	Voluntary CHMP recommended
20				specified items of infrastructure Regulation 48 – dwellings Regulation 49 – subdivision of land			
	Lot 3 LP53210	1540 Mickleham Rd, Yuroke VIC 3063	No	Yes Regulation 46 – buildings and works for specified uses Regulation 47 – constructing specified items of infrastructure Regulation 48 – dwellings Regulation 49 – subdivision of land	Yes	No	Yes
21	Lot 1 LP55516	1530 Mickleham Rd, Yuroke VIC 3063	No	Yes Regulation 46 – buildings and works for specified uses Regulation 47 – constructing specified items of infrastructure Regulation 48 – dwellings	Yes	No	Yes

Lot		Address	Area of cultural heritage sensitivity	High impact activity	Archaeological potential	Mandatory CHMP required	Voluntary CHMP recommended
22				Regulation 49 – subdivision of land			
	Lot 2 LP55516	1520 Mickleham Rd, Yuroke/Mickleham VIC 3064	No	Yes Regulation 46 – buildings and works for specified uses Regulation 47 – constructing specified items of infrastructure Regulation 48 – dwellings Regulation 49 – subdivision of land	Yes	No	Yes
23	Lot 1 PS411432	700 Craigieburn Road, Mickleham VIC 3064	Yes. Regulation 26 – proximity to Aitken Creek.	Yes Regulation 46 – buildings and works for specified uses Regulation 47 – constructing specified items of infrastructure Regulation 48 – dwellings Regulation 49 – subdivision of land	Yes	Yes	N/A
24	Lot 2 PS411432	680 - 690 Craigieburn Rd,	Yes. Regulation 26 – proximity to	Yes Regulation 46 –	Yes	Yes	N/A

Lot		Address	Area of cultural heritage sensitivity	High impact activity	Archaeological potential	Mandatory CHMP required	Voluntary CHMP recommended
25		Mickleham VIC 3064	Aitken Creek.	buildings and works for specified uses Regulation 47 – constructing specified items of infrastructure Regulation 48 – dwellings Regulation 49 – subdivision of land			
	Lot 1 TP304316	75 Whites Lane, Mickleham VIC 3064	Yes. Regulation 25 – proximity to VAHR 7822-3023. Regulation 26 – proximity to Aitken Creek.	Yes Regulation 46 – buildings and works for specified uses Regulation 47 – constructing specified items of infrastructure Regulation 48 – dwellings Regulation 49 – subdivision of land	Yes	Yes	N/A
26	Lot1 TP957913	640 Craigieburn Rd. Mickleham VIC 3064	No	Yes Regulation 46 – buildings and works for specified uses Regulation 47 – constructing	Yes	No	Yes

Lot		Address	Area of cultural heritage sensitivity	High impact activity	Archaeological potential	Mandatory CHMP required	Voluntary CHMP recommended
27				specified items of infrastructure Regulation 48 – dwellings Regulation 49 – subdivision of land			
	Lot 2 LP129504	1480 Mickleham Rd, Craigieburn VIC	Yes. Regulation 25 – proximity to VAHR 7822-4318	Yes Regulation 46 – buildings and works for specified uses Regulation 47 – constructing specified items of infrastructure Regulation 48 – dwellings Regulation 49 – subdivision of land	Yes	Yes	N/A
28	Lot 1 LP129504	665 Craigieburn Road, Craigieburn VIC 3064	Yes. Regulation 25 – proximity to VAHR 7822-2472	Yes Regulation 46 – buildings and works for specified uses Regulation 47 – constructing specified items of infrastructure Regulation 48 – dwellings	Yes	Yes	N/A

Lot		Address	Area of cultural heritage sensitivity	High impact activity	Archaeological potential	Mandatory CHMP required	Voluntary CHMP recommended
29				Regulation 49 – subdivision of land			
	Lot 3 LP129504	1430 Mickleham Rd, Yuroke VIC 3063	Yes. Regulation 25 – proximity to VAHR 7822-4319	Yes Regulation 46 – buildings and works for specified uses Regulation 47 – constructing specified items of infrastructure Regulation 48 – dwellings Regulation 49 – subdivision of land	Yes	Yes	N/A
30	Lot 4 LP129504	1390 Mickleham Rd, Yuroke VIC 3063	Yes. Regulation 25 – proximity to VAHR 7822-4319	Yes Regulation 46 – buildings and works for specified uses Regulation 47 – constructing specified items of infrastructure Regulation 48 – dwellings Regulation 49 – subdivision of land	Yes	Yes	N/A
31	Lot 6 LP129504	1320 Mickleham Rd, Yuroke VIC	No	Yes Regulation 46 –	Yes	No	Yes

Lot		Address	Area of cultural heritage sensitivity	High impact activity	Archaeological potential	Mandatory CHMP required	Voluntary CHMP recommended
32		3063		buildings and works for specified uses Regulation 47 – constructing specified items of infrastructure Regulation 48 – dwellings Regulation 49 – subdivision of land			
	Lot 1 TP828863	1370 Mickleham Road, Craigieburn 3064	No	Yes Regulation 46 – buildings and works for specified uses Regulation 47 – constructing specified items of infrastructure Regulation 48 – dwellings Regulation 49 – subdivision of land	Yes	No	Yes
33	Lot 2 TP828863	1360 Mickleham Road, Craigieburn 3064	No	Yes Regulation 46 – buildings and works for specified uses Regulation 47 – constructing	Yes	No	Yes

Lot		Address	Area of cultural heritage sensitivity	High impact activity	Archaeological potential	Mandatory CHMP required	Voluntary CHMP recommended
34				specified items of infrastructure Regulation 48 – dwellings Regulation 49 – subdivision of land			
	Lot 5 LP129504	1340 Mickleham Rd, Yuroke/Craigieburn	No	Yes Regulation 46 – buildings and works for specified uses Regulation 47 – constructing specified items of infrastructure Regulation 48 – dwellings Regulation 49 – subdivision of land	Yes	No	Yes
35	Lot 7 LP129504	1300 Mickleham Rd, Yuroke VIC 3063	No	Yes Regulation 46 – buildings and works for specified uses Regulation 47 – constructing specified items of infrastructure Regulation 48 – dwellings	Yes	No	Yes

Lot		Address	Area of cultural heritage sensitivity	High impact activity	Archaeological potential	Mandatory CHMP required	Voluntary CHMP recommended
36				Regulation 49 – subdivision of land			
	Lot 1 3059TP612993	1290 Mickleham Rd, Greenvale VIC 3059	Yes	Yes Regulation 46 – buildings and works for specified uses Regulation 47 – constructing specified items of infrastructure Regulation 48 – dwellings Regulation 49 – subdivision of land	Yes	No	Yes
37	Lot 8 LP129504	1240 Mickleham Rd, Greenvale VIC 3059	Yes. Regulation 25 – proximity to VAHR 7822-0682. Regulation 26 – proximity to Yuroke Creek.	Yes Regulation 46 – buildings and works for specified uses Regulation 47 – constructing specified items of infrastructure Regulation 48 – dwellings Regulation 49 – subdivision of land	Yes	Yes	N/A
38	Lot 1 PS333257	1240 Mickleham Rd, Greenvale VIC	Yes. Regulation 25 – proximity to	Yes Regulation 46 –	Yes	Yes	N/A

Lot		Address	Area of cultural heritage sensitivity	High impact activity	Archaeological potential	Mandatory CHMP required	Voluntary CHMP recommended
39		3059	VAHR 7822-0682. Regulation 26 – proximity to Yuroke Creek.	buildings and works for specified uses Regulation 47 – constructing specified items of infrastructure Regulation 48 – dwellings Regulation 49 – subdivision of land			
	Lot 2 PS333257	20 Dunhelen Lane, Yuroke VIC (Aitken Hill) 3063	Yes. Regulation 25 – proximity to VAHR 7822-0681, 7822-2482. Regulation 26 – proximity to Yuroke Creek.	Yes Regulation 46 – buildings and works for specified uses Regulation 47 – constructing specified items of infrastructure Regulation 48 – dwellings Regulation 49 – subdivision of land	Yes	Yes	N/A
40	PS746051	1170 Mickleham Road, Greenvale VIC 3059	Yes. Regulation 26 – proximity to Yuroke Creek.	Yes Regulation 46 – buildings and works for specified uses Regulation 47 – constructing	Yes	Yes	N/A

Lot		Address	Area of cultural heritage sensitivity	High impact activity	Archaeological potential	Mandatory CHMP required	Voluntary CHMP recommended
41				specified items of infrastructure Regulation 48 – dwellings Regulation 49 – subdivision of land			
	PS746051	1170 Mickleham Road, Greenvale VIC 3059	Yes. Regulation 25 – proximity to VAHR 7822-1105, 7822-2479. Regulation 26 – proximity to Yuroke Creek.	Yes Regulation 46 – buildings and works for specified uses Regulation 47 – constructing specified items of infrastructure Regulation 48 – dwellings Regulation 49 – subdivision of land	Yes	Yes	N/A
42	PS746050	1170 Mickleham Road, Greenvale VIC 3059	Yes. Regulation 25 – proximity to VAHR 7822-2479, 7822-2480. Regulation 26 – proximity to Yuroke Creek.	Yes Regulation 46 – buildings and works for specified uses Regulation 47 – constructing specified items of infrastructure Regulation 48 – dwellings	Yes	Yes	N/A

Lot		Address	Area of cultural heritage sensitivity	High impact activity	Archaeological potential	Mandatory CHMP required	Voluntary CHMP recommended
43				Regulation 49 – subdivision of land			
	PS746051	1170 Mickleham Road, Greenvale VIC 3059	Yes. Regulation 26 – proximity to Yuroke Creek.	Yes Regulation 46 – buildings and works for specified uses Regulation 47 – constructing specified items of infrastructure Regulation 48 – dwellings Regulation 49 – subdivision of land	Yes	Yes	N/A

5 Discussion

5.1 Summary

This assessment has shown that the study area contains Aboriginal cultural heritage, and has archaeological potential for additional Aboriginal places to be identified. The study area contains landforms such as local high point, edges of volcanic flows with high aspect surrounding watercourses, and waterways. Based on previous archaeological investigations in the geographic region, and the results of this assessment, the Aboriginal place types likely to be recorded in the study area are artefact scatters and scarred trees.

Artefact scatters are more likely to be found in association with areas of high aspect and waterways within the study area. The high points and edges of basalt flows would have acted as a strategic resource providing people in the area with a dry vantage point to observe long distances. Scarred trees are often found on the deeper soils of the volcanic plain that supports woodland growth, and where mature Eucalypts still exist. These areas of archaeological potential are shown as yellow, orange and red on Map 5 and should be incorporated, where possible in to public open spaces.

Whilst the study area has been subject to various levels of disturbance due to past land practises, these have not been extensive. Farming and residential activities have been undertaken throughout the study area, and these activities have resulted in only small, localised areas of disturbance. Therefore the majority of the study area has the potential to retain surface and subsurface Aboriginal cultural heritage.

The best practice conservation and management of cultural heritage values is where they can be combined with other values. For example Aboriginal places in the region are most often located on elevated rises or along waterways. These areas are also often where remnant native vegetation occurs, and where the landscape and topographic character provides greatest aesthetic values. Creation of conservation reserves, river walks or unstructured open space in these areas can take advantage of the cultural and natural heritage values of the place to benefit planning outcomes. These areas can then be enhanced through landscaping, revegetation, environmental and cultural heritage interpretation.

5.2 Recommendations

Recommendation 1

Areas of archaeological potential identified in the current assessment, plains near waterways, local high points and remanent native vegetation should be included, where possible in public open spaces. This approach eliminates the likelihood that Aboriginal places will be harmed.

Management of these open space reserves should also be based on conserving and enhancing environmental and cultural heritage values and should engage the Wurundjeri Woi-wurrung Cultural Heritage Aboriginal Corporation - Narrap Team . Construction of infrastructure and facilities within the reserves should be designed to minimise impacts and enhance public access and appreciation, through landscaping, indigenous revegetation, interpretation, signage and development of cultural programs.

Recommendation 2

CHMPs should be prepared for the entire study area. This recommendation is based on areas of archaeological potential being identified in the current assessment and presents a methodology that ensures best cultural heritage practice is maintained, regardless of triggers to prepare a mandatory CHMP. This is also

consistent with the results of the cultural heritage values assessment that concluded that the wider landscape has importance to Aboriginal people.

Where conservation of areas of Aboriginal cultural heritage is not possible due to conflict with future development, and disturbance has been approved through a CHMP, the process of disturbance should be managed through a program mitigation involving research, analysis and interpretation of the cultural heritage that is disturbed. A research design and methodology should aim to identify the character of Aboriginal occupation of the area, mitigate disturbance, and interpret the heritage.

6 Bibliography

- ACHRIS. (2018). *ACHRIS*. Retrieved from Aboriginal Victoria | Aboriginal Cultural Heritage Register and Information System (ACHRIS): <https://achris.vic.gov.au>
- Atkinson, W., & Berryman, A. (1983). *Aboriginal Association with the Murray Valley Study Area*. Victoria: La Trobe University.
- Australian Heritage Database. (2018). *Australian Heritage Database*. Retrieved from Australian Heritage Database: <http://www.environment.gov.au/cgi-bin/ahdb/search.pl>
- Barwick, D. (1984). Mapping the Past. An Atlas of Victorian Clans 1835-1904. *Aboriginal History*, 8, 100-131.
- Broome, R. (2005). *Aboriginal Victorians. A History Since 1800*. Crows Nest: Allen and Unwin.
- Chamberlain, M., & Nicholls, C. (2004). *Aboriginal Archaeological Subsurface Testing Aitken Creek, Craigieburn*. Report to WBM Oceanics and Highlands Craigieburn.
- Clark, I. (1990). *Aboriginal Languages and Clans. An Historical Atlas of Western and Central Victoria*. Melbourne: Monash University.
- Clark, I. (1990). *Aboriginal Languages and Clans. An Historical Atlas of Western and Central Victoria*. Melbourne: Monash University.
- Czastka, J., Ricardi, P., & Thiele, F. (2010). *Cultural Heritage Management Plan for 120 Whites Lane, Craigieburn: A CHMP for the Roamn Catholic Archdiocese of Melbourne*. CHMP 11293. Sponsor: Joanne La Spina.
- Department of Economic Development, Jobs, Transport and Resources. (2017). *Earth Resources*. Retrieved 09 2015, from GeoVic - Explore Victoria Online: http://er-info.dpi.vic.gov.au/sd_weave/anonymous.html
- du Cros, H. (1991). *An Archaeological Survey for Aboriginal and Post Contact Sites on the Property of Craigieburn Landholdings, Victoria*. Report to Silverton Pty Ltd.
- Edwards, W. (1988). *An Introduction to Aboriginal Societies*. South Melbourne: Thomson Social Science Press.
- Ford, A. (2006). *An archaeological survey of the Yuroke Pump Station and Pipeline, Yuroke*. Report for GHD Pty Ltd.
- Ford, A., MacManus, T., Nicholson, O., & Verduci, J. (2010). *Housing Subdivision, 575 Craigieburn Road, Craigieburn, Victoria: Aboriginal Cultural Heritage Management Plan*. CHMP 11015. Sponsor: PEET Craigieburn Pty Ltd.
- Hall, R. (1989). *Merri Creek Parklands Aboriginal and Historical Heritage Survey*. Merri Creek Bicentennial Committee.
- Harcourt, R. (2001). *Southern Invasion - Northern Conquest, The Story of the Founding of Melbourne*. Golden Point Press.
- Howitt, A. (1904). *The Native Tribes of South East Australia*. Canberra: Aboriginal Studies Press.
- Keitel, C. (2018, August 22). *Craigieburn Historical Interest Group Inc*. Retrieved from Craigieburn Historical Interest Group Inc: <http://www.chig.asn.au/>
- Lawler, M. (2009). *Proposed M658 Link Water Main, Yuroke, Victoria: Cultural Heritage Management Plan*. CHMP 10330. Sponsor: Yarra Valley Water.

- Lawler, M., Robb, K. F., & Dalla-Vecchia, A. (2016). *1170 Mickelham Road, Greenvale, Victoria. Cultural Heritage Management Plan 11113 Archaeological Salvage*. Prepared for Satterley Property Group.
- Lay, M. (2003). *Melbourne Miles: The Story of Melbourne's Roads*. Australian Scholarly Publishing.
- MacCulloch, J. (2011). *DP8, DP12, DP14 and DP19 Highlands Estate Subdivision, Craigieburn Salvage Excavation - Aitken Creek 2 (VAHR 7822-2451)*. Sponsor: Stockland Development P/L.
- MacCulloch, J., & Tucker, C. (2010a). *Aitken Creek North and DP5B Highlands Estate Subdivision, Craigieburn Cultural Heritage Management Plan. CHMP 10971*. Sponsor: Stockland Development Ltd.
- MacCulloch, J., & Tucker, C. (2010b). *DP8, DP12, DP14 and DP19 Highlands Estate Subdivision, Craigieburn Cultural Heritage Management Plan. CHMP 10972*. Sponsor: Stockland Development P/L.
- Murphy, A. (1995). *North Western Wurundjeri Area: A Regional Archaeological Survey Stage 1*. Report to Wurundjeri Tribe Land Compensation and Cultural Heritage Council.
- Murphy, A. (1996). *North Western Wurundjeri Area Stage 2 Regional Aboriginal Archaeological Heritage Survey*. Report to Wurundjeri Tribe Land Compensation and Cultural Heritage Council. .
- Murphy, A., & Owen, D. (2010 draft). *R2 Precinct Structure Plan, Craigieburn Urban Development. CHMP 10802 (discontinued)*. Sponsor: Grownt Areas Authority.
- Murphy, A., Owen, D., & Rymer, T. (2011). *Subdivision of Land 550 Craigieburn Road, Craigieburn cultural Heritage Management Plan. CHMP 11635*. Sponsor: Places Victoria.
- Nicholson, O., MacManus, T., Verduci, J., Fagan, R., & Szydzik, S. (2015). *Residential Development, 1170 Mickelham Road, Greenvale, Victoria: Cultural Heritage Management Plan. CHMP 11113*. Sponsor: Peet Greenvale No. 2 Pty Ltd.
- Orr, A. (2013). *Mt Ridley Road West Mains Project, Mickelham. CHMP 12306*. Sponsor: Yarra Valley Water.
- Presland, G. (1994). *Aboriginal Melbourne: The Lost Land of the Kulin People*. Ringwood: McPhee Gribble Publishers.
- Rhodes, D., & Murphy, A. (1994). *Report on Archaeological Survey and Sub Surface Testing at the BHP Property, Mickleham Road, Greenvale*. Report to Tract Consultants and BHP.
- Robinson, G. A. (1840). *Journals of George Augsuts Robinson January - March 1840*. (G. Presland, Ed.) Victoria: Records of the Victorian Archaeological Survey.
- Schell, P., & Long, A. (2006). *Melbourne 2030 Hume Growth Area Aboriginal Archaeological Desktop Report*. Report to The Built Environment Group - Department of Sustainability and Environment.
- Speight, J. (2009). Landform. In N. C. Terrain, *Australian soil and land survey field handbook*. Collingwood: CSIRO Publishing.
- State of Victoria Department of Economic Development, Jobs, Transport and Resources. (2018). *Geomorphology of Victoria*. Retrieved July 2016, from Victorian Resources Online: http://vro.agriculture.vic.gov.au/dpi/vro/vrosite.nsf/pages/landform_geomorphology
- Stevens, J., & Ricardi, P. (2015). *Cultural Heritage Management Plan 1960-2090 Mickelham Road, Mickelham residential Suvdivision ("Lindum Vale")*. CHMP 12270. Sponsor: MAB Corporation Pty Ltd.
- Sutherland, P., Nicholls, C., & Patterson, L. (2003). *An Archaeological Survey: Aitken and Malcolm Creeks, Craigieburn*. Report for WBM.
- Tucker, C. (2011). *415 Mt Ridley Road, Craigieburn DP20B: Residential Subdivision. CHMP 11637*. Sponsor: Stockland Development P/L.

- Tucker, C., & Athanasiadis, H. (2009). *Malcolm Creek, DP7, DP11, and DP13 Highlands Estate Subdivision, Craigieburn: Cultural Heritage Management Plan. CHMP 10538*. Sponsor: Stockland Development P/L.
- Vandenberg, A. (1997). *Melbourne SJ 55-5 Edition 2 1:250,000 geological map*. Geological Survey of Victoria.
- Vaskos, V., McMillan, R., Donati, L., & Berelov, I. (2012). *Craigieburn West Cultural Heritage Assessment. PSP: 1068 Craigieburn West*. Report to Growth Areas Authority.
- Victorian Heritage Database. (2018). *Victorian Heritage Database*; Retrieved from Victorian Heritage Database;: <https://www.heritage.vic.gov.au/about-heritage-in-victoria/victorian-heritage-database>
- Victorian Places. (2018). *Victorian Places*. Retrieved from Victorian Places: <http://www.victorianplaces.com.au/>
- Weaver, F. (1999). *Brindley Park 1170 Mickleham Road, Greenvale*. Melbourne: Practical Archaeology Services.
- Wesson, S. (2000). *Historical Atlas of the Aborigines of Eastern Victoria and Far Southeastern New South Wales*. Melbourne: Monash University.
- Wurundjeri Tribe Land and Compensation Cultural Heritage Council Inc. (2012). *Merri Creek Aboriginal Cultural Values*. Melbourne: Melbourne Water.

Appendix 1- Notification to undertake a survey

Notice of Intention to carry out a survey for Aboriginal cultural heritage for the purposes of the *Aboriginal Heritage Act 2006*

This form has been prepared for use by a person intending to carry out a survey for Aboriginal cultural heritage ('Survey') to complete the notification provisions pursuant to s.34A of the *Aboriginal Heritage Act 2006* (the 'Act').

For clarification on any of the following please contact Victorian Aboriginal Heritage Register (VAHR) enquiries on 1800-762-003.

SECTION 1 – Person intending to carry out survey (applicant)

Applicant (*natural person or body corporate seeking to carry out survey*): Victorian Planning Authority

ABN/ACN: 58 651 383 439

Contact name: Ella Adams

Postal Address: Level 25, 35 Collins Street, Melbourne VIC 3000

Telephone Number: 9651 9617

Fax number:

Mobile:

Email Address: ella.adams@vpa.vic.gov.au

SECTION 2 – Survey supervisor

Name: Aaron Dalla-Vecchia

Provide a description of the supervisor's qualifications and experience relevant to surveys for Aboriginal cultural heritage:

Cultural Heritage Advisor currently employed at Biosis

SECTION 3 – Description of proposed activity and Survey location

Project Name: Craigieburn West PSP ACHIA

List the relevant municipal district/s (ie, Local Council or Shire): City of Hume

Clearly identify the proposed **activity** for which the survey relates (ie, cultural heritage or due diligence assessment, preliminary Aboriginal heritage test, research):

Aboriginal Cultural Heritage Impact Assessment and Cultural Values Recording

Clearly identify the **location** (such as listing cadastral information, attaching a copy of a title search, or indicating the street address):

See attached.

Attach a map (to scale, with a north arrow and indicating the municipal district - if any) that clearly identifies the survey area.

- Please ensure the map refers to existing roads and features, rather than proposed roads and features, and includes their names.
- Please ensure the map has the survey area outlined on it.
- The map should have a legend; at least three readily identifiable geographical locations (such as road intersections, parcel boundaries, or road/river crossings) and should state the map's projection.

SECTION 4 – Expected start and finish date for the survey

Start date 21 / 1 / 2019 Finish date 30 / 4 / 2019

SECTION 5 – List any relevant registered Aboriginal party (if any)


This section is to be completed only where there is a registered Aboriginal party in relation to the survey area

Wurundjeri Woi-wurrung Cultural Heritage Aboriginal Corporation

SECTION 6 – Signature of applicant

I certify that to the best of my knowledge and belief that the information supplied is correct and complete.

Signed:



Date: 7 / 01 / 2019

[applicant]

SECTION 7 – Notification checklist

☐ Ensure appropriate attachment/s are completed and attached to this notification (see section 3 of this form).

Please ensure this notice and all attached items are sent to the:

Director Heritage Services
Aboriginal Victoria
Department of Premier and Cabinet
GPO Box 4912
MELBOURNE VIC 3001

OR Email: vahr@dpc.vic.gov.au

Notes:

- Ensure that any relevant registered Aboriginal party is also notified. A copy of this notice may be used for this purpose. (A registered Aboriginal party is allowed up to 14 days to provide a written response to a notification specifying whether or not it intends to participate in the survey).
- In addition to notifying the Director Heritage Services and any relevant registered Aboriginal party, a Sponsor must also notify any owner and/or occupier of any land within the survey area. A copy of this notice may be used for this purpose.
- A copy of any documentation relevant to the survey must be given to the Secretary for recording on the Victorian Aboriginal Heritage Register within 30 days of producing the final report relating to the survey, or within 12 months of submitting this application, whichever is earlier.
- Relevant documentation means any site records, photographs, maps and plans relating to the survey and a copy of any final report.
- The applicant must notify the Secretary if the survey did not occur within 12 months of submitting this application.

From: vahr@dpc.vic.gov.au
To: ella.adams@vpa.vic.gov.au; Aaron Dalla-Vecchia
Cc: rapofficer@wurundjeri.com.au; helen@wurundjeri.com.au
Subject: Notice of Intent to carry out a survey received
Date: Tuesday, 8 January 2019 12:21:44 PM

To whom it may concern,

This is a formal automated response indicating that, on 07-Jan-2019, the Secretary, Department of Premier and Cabinet received a Notice of Intent to carry out a survey for:

Craigieburn West PSP ACHIA

The notification has been allocated the AV Survey Number: 37

Please quote this number when making any future enquiries to AV regarding this project.

If your activity lies within the boundaries of a registered Aboriginal party you must also notify this organisation of your intention to prepare the survey (if you have not already done so). Further information about registered Aboriginal parties can be found at:

<http://www.dpc.vic.gov.au/index.php/aboriginal-affairs/registered-aboriginal-parties>

Please consider the environment before printing this email

Notice: This email and any attachments may be confidential and may contain copyright or privileged material. You must not copy, disclose, distribute, store or otherwise use this material without permission. Any personal information in this email must be handled in accordance with the Privacy and Data Protection Act 2014 (Vic) and applicable laws. If you are not the intended recipient, please notify the sender immediately and destroy all copies of this email and any attachments. Unless otherwise stated, this email and any attachment do not represent government policy or constitute official government correspondence. The State does not accept liability in connection with computer viruses, data corruption, delay, interruption, unauthorised access or use.

Appendix 2 - Aboriginal place gazetteer

Table 11 Aboriginal place gazetteer

Aboriginal place	Location	Type	Landform	Scientific significance
Craigieburn West PSP LDAD 1 (VAHR 7822-4348)	E 313645.482 N 5838337.533	Low Density Artefact Distribution	Volcanic Plains	Low
Mickleham RD 1 (VAHR 7822-0681)	E 314112 N 5835584	Artefact Scatter	Volcanic Plains	Moderate
Dunhelen 1 (VAHR 7822- 0682)	E 313692 N 5835634	Scarred Tree	Volcanic Plains	Moderate
Mickleham Road Aitken Creek 1 (VAHR 7822-2935)	E 312397.74 N 5839090.47	Artefact Scatter	Volcanic Plains	Moderate
Mickleham Road Aitken Creek 2 (VAHR 7822-2936)	E 312987.94 N 5838526.2	Artefact Scatter	Volcanic Plains	Moderate
Mickleham Road Plain 1 (VAHR 7822-2974)	E 313259.48 N 5839526.03	Scarred tree	Volcanic Plains	Moderate
Whites Lane Aitken Creek 1 (VAHR 7822-2937)	E 313636.43 N 5838434.8	Artefact Scatter	Volcanic Plains	Moderate
Whites Lane Aitken Creek 2 (VAHR 7822-2999)	E 313723.57 N 5838369.58	Artefact Scatter	Volcanic Plains	Moderate
Whites Lane Aitken Creek 3 (VAHR 7822-3023)	E 313686.11 N 5838311.65	Artefact Scatter	Volcanic Plains	Moderate
Brinkley Pk 1 (VAHR 7822- 1105)	E. 314771 N5834950	Artefact Scatter	Volcanic Plains	Moderate
Craigieburn Road Upgrade LDAD (VAHR 7822-4318)	E 312996.74 N 5837530.451	Low Density Artefact Distribution	Volcanic Plains	Low
1390 Mickleham Road LDAD1 (VAHR 7822-4319)	E 313170.997 N 5836704.658	Low Density Artefact Distribution	Volcanic Plains	Low