GLISMANN ROAD, BEACONSFIELD
STRUCTURE PLAN

CULTURAL HERITAGE MANAGEMENT PLAN No 11452

Sponsored by Cardinia Shire Council

Completed November 22nd, 2010

Authored by Heritage Advisors

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GLISMANN ROAD, BEACONSFIELD
STRUCTURE PLAN
CULTURAL HERITAGE MANAGEMENT PLAN

Name and Location of Activity:	Glismann Road, Beaconsfield Structure Plan; Glismann Road, Beaconsfield, Victoria 3807
AAV Management Plan Identifier:	11452
Activity:	Urban development
Activity Size:	Medium – more than one hectare but not more than 40 hectares (regulation 68)
Assessment Type:	Desktop and Standard
Sponsor:	Cardinia Shire Council (ABN 32 210 906 807)
Heritage Advisors:	Andrea Murphy & Dale Owen (Tardis Enterprises Pty Ltd)
CHMP Authors:	Andrea Murphy & Dale Owen
Plan Date:	November 22nd, 2010

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ACKNOWLEDGEMENTS

Tardis Enterprises Pty Ltd would like to thank the following people for their assistance during this CHMP:

Donnie Lussier – Cardinia Shire Council
Gary Galway – Wurundjeri Tribe Land and Compensation Cultural Heritage Council Inc.
Cheryl Campbell – Glismann Road resident

ABBREVIATIONS

AAV	Aboriginal Affairs Victoria
BP	Before Present (i.e. before 1960)
CHMP	Cultural Heritage Management Plan
CHP	Cultural Heritage Permit
DSE	Department of Sustainability and Environment
DPCD	Department of Planning and Community Development
RAP	Registered Aboriginal Party

** Throughout this report several technical terms are used that may not be familiar to some readers. An extensive glossary has been included as Appendix 3 and should be referenced for an explanation of terms.*

In addition, it should be noted that the nomenclature for Aboriginal cultural heritage values on the VAHR is 'Places' (e.g. VAHR Place 7822-1234).Under Section 5 of the Aboriginal Heritage Act 2006, an Aboriginal place is "an area in Victoria or the coastal waters of Victoria that is of cultural heritage significance to the Aboriginal people of Victoria". Under sub-section 2(d) of Section 5, 'area' includes an archaeological site, feature or deposit (e.g. artefact scatter, scarred tree, hearth, midden etc.). For the purposes of this CHMP, anywhere where an archaeological site, feature or deposit (or any combination of such) is, or once was located, is referred to as a 'site'. This labelling also conforms to international standards for referring to locations where cultural heritage is, or has been identified.

EXECUTIVE SUMMARY

This voluntary Cultural Heritage Management Plan (CHMP) has been conducted due to the proposed structure plan for land located either side of Glismann Road, Beaconsfield (Map 1). Although the activity is considered as high impact under the *Aboriginal Heritage Regulations* 2007 (regulations 46), the land is not considered sensitive for Aboriginal cultural heritage values under the regulations (*Aboriginal Heritage Regulations* 2007: Part 2, Division 3). However, Cardinia Shire Council (Sponsor; ABN 32 210 906 807) has elected to conduct this voluntary CHMP.

The activity comprises a total of 32.79 hectares (approx.) and consists of 93 parcels of land east and west of Glismann Road, and also includes Glismann Road, Beaconsfield (Map 2). The activity area is within the local Government area of Cardinia Shire Council, Parish of Pakenham, County Mornington (Map 1). This CHMP is part of a feasibility study for re-zoning the activity area from rural riving (RLZ1) to residential (R1Z or LDRZ) zoning within the Cardinia Shire Council Planning Scheme.

The activity includes:

Residential Subdivision

This CHMP is part of a feasibility study for a residential subdivision of the activity area and, at the time of writing, no concept plans are available. Nevertheless, although the activity will not affect the ground surface (i.e. it consists of lines on a plan), all works that are permitted under the Cardinia Shire Council Planning Scheme for R1Z or LDRZ are considered (Appendix 11). The subdivision includes the construction/erection/ installation of:

- Residences;
- Roads (sealed);
- Footpaths;
- Garages/sheds;
- Sporting facilities/parks/open space;
- Schools;
- Landscaping;
- Fencing;
- Swimming pools;
- Advertising and street signage;
- Utilities (i.e. power, sewer, water, telephone, gas, computer cabling *etc*.).

Note: design layout may be subject to change/alteration over the course of preparing the re-development concept plan once the re-zoning has been affected, but the activity (i.e. residential subdivision) will not alter.

The subdivision extends across the entire activity area. Therefore, the entire activity area is considered to be at risk of potential ground disturbing activity.

This CHMP comprises desktop (Sections 5 to 8.1) and standard (Sections 9 to 10) assessments. A summary of the outcomes of these assessments are presented below.

EXECUTIVE SUMMARY

Desktop Assessment (Sections 5 to 8.1)

The desktop assessment included background research into the geographic region of the activity area. This background research included a search of the Victorian Aboriginal Heritage Register, a review of reports and published works and a review of historical and ethno-historical accounts for Aboriginal cultural heritage information relating to the activity area. In addition, a review of the activity area's geology (Figure 6) and geomorphology was conducted to determine the potential resource availability to past Aboriginal populations of the area. In summary, the desktop assessment resulted in identifying the following information specific to the activity area:

- The activity is considered as high impact under the *Aboriginal Heritage Regulations* 2007 (regulations 46);
- The activity area is ***not*** in an area considered sensitive under the *Aboriginal Heritage Regulations* 2007;
- No Aboriginal cultural heritage sites have been previously recorded within the activity area;
- Only three previous assessments have included the activity area within their broader boundaries (Gaughwin 1981; Presland 1983 & Smith 1991), but none included ground surface survey of the activity area;
- The activity area consists of Cardinia Creek prior floodplain/swampland (low-land) at the base of two sections (northeast & northwest corners) of elevated land;
- The activity area is essentially two ridgelines that rise from low-lying plains. These plains were regularly inundated, whilst the ridgelines were grassy woodland;
- The majority of sites within 5km (87.50%) of the activity area as well as the broader region (92.31%) are stone artefact scatters of mostly silcrete and quartz;
- The majority of stone artefact scatter sites are low-density (i.e. <40 artefacts; 59.85%) and only six sites (4.55%; of a total of 132) contain over 70 artefacts;
- The activity area is within an area that would have been of moderate ecological value to past Aboriginal people;
- The majority of the activity area has been subject to ground disturbance via ploughing, vegetation clearance, construction of Glismann Road, construction of a dam, recreational facilities, residential, and commercial properties, development and construction/installation of associated outbuildings and services (Figure 12).

In summary, the areas considered sensitive for Aboriginal cultural heritage (previously disturbed low density artefact scatters; Figure 13) are:

- At the top of the ridgelines and on their upper-most slopes extending from the north-western and north-eastern corners of the activity area as these locations are considered possible localised routes of movement, with adjacent resource zones suitable for low frequency exploitation. The ridgelines may also have served as possible vantage points. These ridgelines would have stayed dry during wetter periods when the low-lying areas were inundated. Only locations that have not been subject to development are considered sensitive on these ridgelines; and

- The balance of the activity area (i.e. mid-lower slopes of the ridgelines & low-lying area) is not considered likely to contain Aboriginal cultural material due to the swampy nature of the area (prior to European settlement).

Note: the upper slopes of the ridgelines are the only area considered likely for Aboriginal cultural heritage (previously disturbed low density artefact scatters) due to such material (if any).

Standard Assessment (Sections 9 to 10)

During ground surface survey of the activity area, mostly poor (<5% per m^2) ground surface visibility was encountered due to heavy grass cover, water inundation and/or development. Nevertheless, the systematic pedestrian survey which was conducted (Map 5) enabled observation of all areas and landforms within the activity area.

In summary, the standard assessment:

- Achieved less than 5% effective survey coverage;

- Was restricted by vegetation cover, water inundation and/or development. However, this is not considered a constraint to the effectiveness of the survey with regard to identifying areas of Aboriginal cultural heritage sensitivity. The landforms affected by vegetation and water inundation are not considered likely for Aboriginal cultural places and, likewise, development has removed/destroyed any potential values that may have existed;

- Identified areas of significant previous ground disturbance throughout the activity area due to residential, recreational and industrial development;

- Did not identify any Aboriginal cultural heritage;

- Refined the desktop Aboriginal cultural heritage sensitivity model (Table 3; Figure 13);

- Has demonstrated the lack of potential for Aboriginal cultural heritage values;

- No part of the activity area is considered likely to contain Aboriginal cultural heritage places.

Conclusion (Section 10)

As a result of the desktop and standard assessments conducted for this CHMP, it can be concluded that:

- There is no previously recorded Aboriginal cultural material within the activity area;
- No Aboriginal cultural heritage was identified during the desktop or standard assessments;
- The activity area has been subject to significant ground surface disturbance via residential, recreational and industrial development;
- Where development has not occurred, the activity area is very steep or swampy;
- The only areas considered to have had sensitivity for potential Aboriginal cultural heritage values have been subject to significant ground disturbance and therefore are no longer considered sensitive;
- As there are no areas considered likely to contain Aboriginal cultural heritage, a complex assessment of the activity area is not required.

CULTURAL HERITAGE MANAGEMENT RECOMMENDATIONS (Part 2)

These recommendations become compliance requirements once the Cultural Heritage Management Plan is approved (Approved Form, p. 6).

SPECIFIC CULTURAL HERITAGE MANAGEMENT REQUIREMENTS (Section 12)

As no Aboriginal cultural heritage and no areas considered likely to contain Aboriginal cultural heritage were identified within the activity area, no *specific* cultural heritage management is required (pursuant to the Approved Form: section 14).

Other recommendations and procedures (Sections 12.1 & 12.2) are summarised as in the following table.

	Recommendation Type	Action Required
Prior to Activity (Section 12.1)		
Recommendation 1	Cultural Awareness Information for Employees and Contractors	Prior to works commencing, all employees and contractors actively involved in the activity be subject to Aboriginal cultural heritage awareness training.
During the Activity (Section 12.2)		
Recommendation 2	Discovery of Unexpected Aboriginal Heritage (Contingency 1)	If any Aboriginal cultural heritage material (e.g. stone artefact deposit, shell midden or hearth remains) is identified, then Contingency 1 must be adopted (Section 13). Additionally, Contingency 2 specifically addresses the requirements that must be followed if **human remains** are identified (Section 13).
Post Activity (Section 12.3)		
As no Aboriginal cultural material has been identified within the activity area, no recommendations for post activity are required. However, if unexpected Aboriginal cultural material is identified during the activity, Contingency 1 must be followed (Section 13).		

Contingency plans are presented in Section 13.

PART 1 – ASSESSMENT

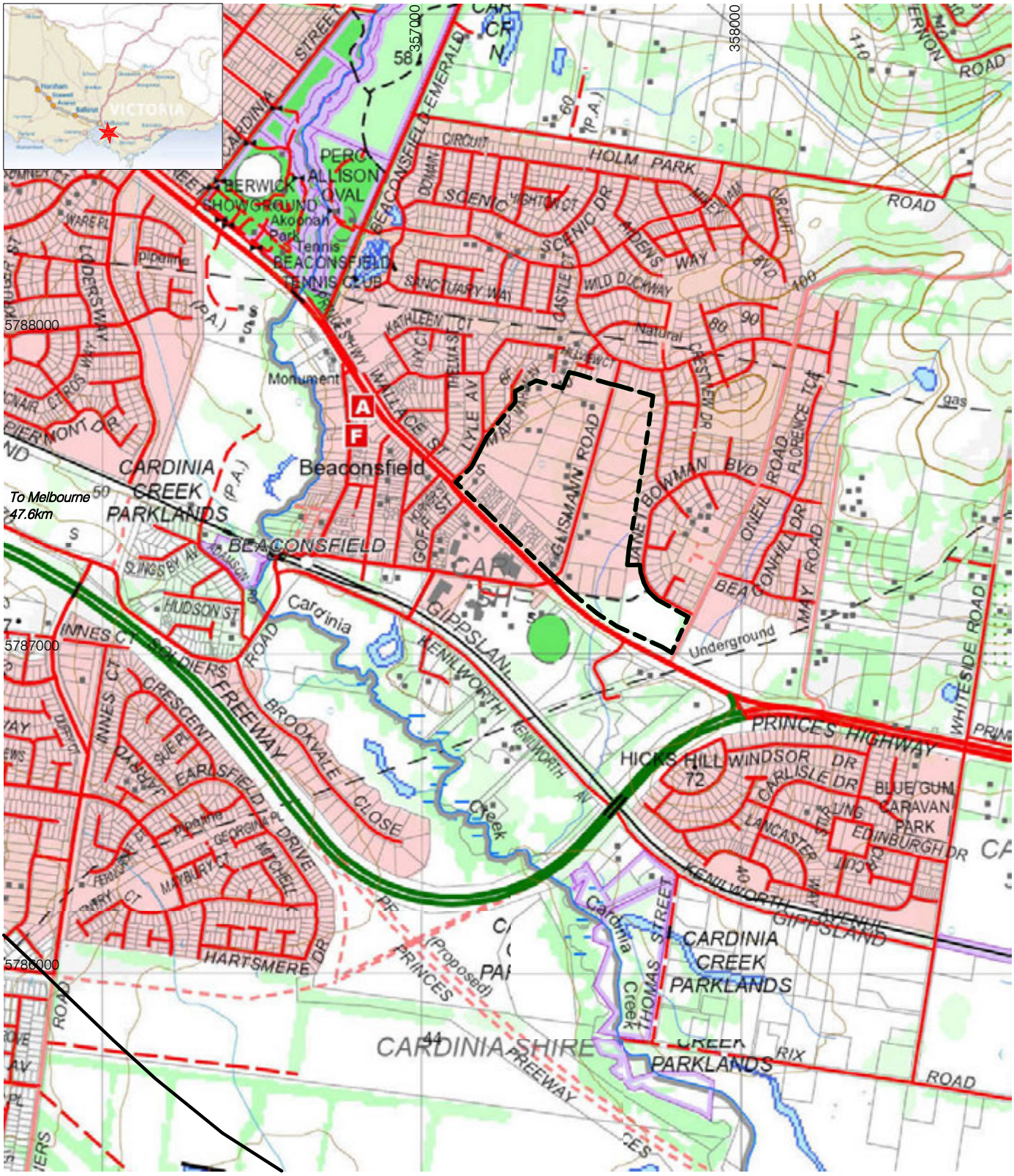
1 INTRODUCTION

This voluntary Cultural Heritage Management Plan (CHMP) has been conducted due to the proposed structure plan for land located either side of Glismann Road, Beaconsfield (*Aboriginal Heritage Act* 2006: Section 45; Map 1). Although the activity is considered as high impact under the *Aboriginal Heritage Regulations* 2007 (regulations 46), the land is not considered sensitive for Aboriginal cultural heritage values under the regulations (*Aboriginal Heritage Regulations* 2007: Part 2, Division 3). However, Cardinia Shire Council (Sponsor; ABN 32 210 906 807) has elected to conduct this voluntary CHMP.

There is no Registered Aboriginal Party (RAP) responsible for the activity area; therefore, as required under Section 54 of the *Aboriginal Heritage Act* 2006 a *Notice of Intent to Prepare a Cultural Heritage Management Plan* was submitted to the Secretary to the Department of Planning and Community Development, Aboriginal Affairs Victoria on 22 September 2010. Aboriginal Affairs Victoria notified of the CHMP number (11452) on 4 October 2010. The activity area is owned and/or occupied by several entities, and advice to each owner/occupier relating to the CHMP being conducted on their property was sent on 11 October 2010 (Appendix 1).

The activity comprises a total of 32.79 hectares (approx.) and consists of 93 parcels of land east and west of Glismann Road, and also includes Glismann Road, Beaconsfield (Map 2). The activity area is within the local Government area of Cardinia Shire Council, Parish of Pakenham, County Mornington (Map 1). This CHMP is part of a feasibility study for re-zoning the activity area from rural riving (RLZ1) to residential (R1Z or LDRZ) zoning within the Cardinia Shire Council Planning Scheme.

Tardis Enterprises Pty Ltd (ABN 45 726 098 396) key personnel Andrea Murphy (project manager) and Dale Owen (project archaeologist) prepared this CHMP (Plan No. 11452). Andrea Murphy holds an Honours degree in archaeology and has over twenty years experience in all facets of cultural heritage management. Dale Owen has an Honours degree in archaeology and over seven years experience in archaeological and heritage management (Appendix 7).



Topographic map used for Location Plan: 1:30,000 Number T7921-1-4-1, T7921-1-4-2,T7921-1-1-4 & T7921-1-1-3

Legend:

0 500 1000
Scale of Metres

Activity Area
32.79 hectares (approx)

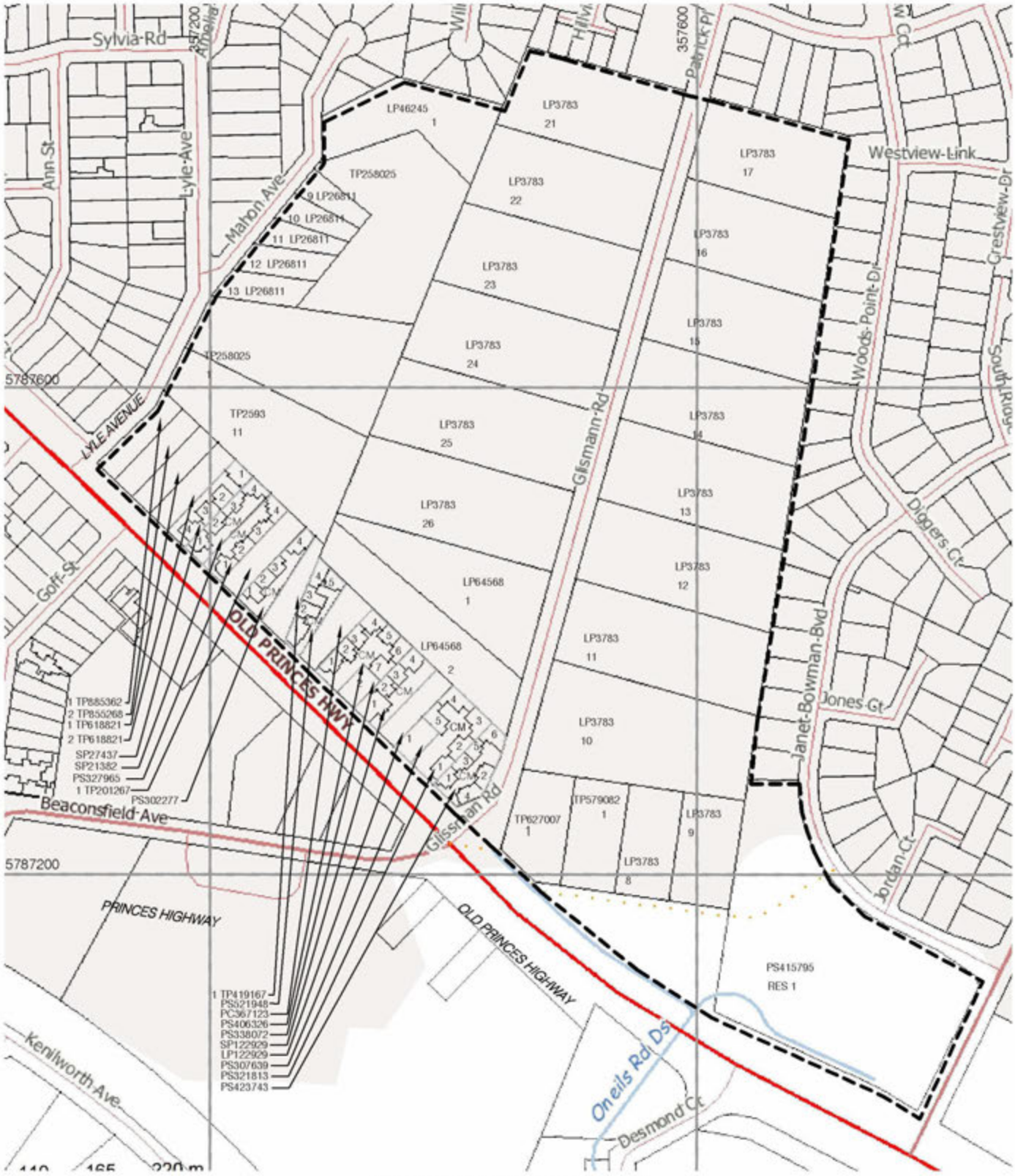
Parish: *Pakenham*
LGA: *Cardinia Shire Council*

N

GDA
Zone 55

Map 1 Activity Area Location

(Melway Ref: 214 A1)



Aerial Photograph Courtesy of DSE Website

Legend:

Activity Area
32.79 hectares (approx)

0 50 100 150 200
Scale of Metres

N

GDA
Zone 55

Map 2 Lot Plan of the Activity Area

2 ACTIVITY DESCRIPTION

In accordance with the Approved Form under clause 64(a) of the *Aboriginal Heritage Regulations* 2007, the following information of the nature, extent and likely impact on the ground surface by the activity area and its ancillary works is presented below in order to assess the scope of potential impact on Aboriginal cultural heritage (pursuant to clause 6.1, schedule 2 of the *Aboriginal Heritage Regulations* 2007).

There is currently no concept structure plan for the activity as this CHMP is part of a feasibility study for re-zoning the activity area from rural riving (RLZ1) to residential (R1Z or LDRZ) zoning within the Cardinia Shire Council Planning Scheme. The permitted uses under the Cardinia Shire Council Planning Scheme, and the Schedule to the Scheme for R1Z and LDRZ is presented in Appendix 11. This CHMP considers the activity area for potential residential subdivision following the re-zoning taking affect.

2.1 Residential Subdivision

Nature of Works

This CHMP is part of a feasibility study for a residential subdivision of the activity area and, at the time of writing, no concept plans are available. Nevertheless, although the activity will not affect the ground surface (i.e. it consists of lines on a plan), all works that are permitted under the Cardinia Shire Council Planning Scheme for R1Z and LDRZ are considered (Appendix 11).

Note: design layout may be subject to change/alteration over the course of preparing the re-development concept plan once the re-zoning has been affected, but the activity (i.e. residential subdivision) will not alter.

Extent of Works

The subdivision extends across the entire activity area. Therefore, the entire activity area is considered to be at risk of potential ground disturbing activity.

Likely Impact on the Ground Surface

Although the subdivision will not affect the ground surface (i.e. it consists of lines on a plan) and no construction plans for potential ground disturbance works are available, future works associated with the subdivision must be considered for the purposes of the CHMP. These works are considered as (but not restricted to) the construction/erection/ installation of:

- Residences;
- Roads (sealed);
- Footpaths;
- Garages/sheds;
- Sporting facilities/parks/open space;
- Schools;
- Landscaping;
- Fencing;
- Swimming pools;
- Advertising and street signage;
- Utilities (i.e. power, sewer, water, telephone, gas, computer cabling *etc*.).

All of the above works will require disturbance to the ground surface to varying degrees with the deepest potential disturbance likely being the future installation of in-ground swimming pools to a possible depth of more than 3m.

Potential Impact on Aboriginal Cultural Heritage

If any Aboriginal cultural heritage exists within the activity area, it has potential to be impacted by future ground disturbing works associated with the subdivision described above.

3 EXTENT OF ACTIVITY AREA COVERED BY THE MANAGEMENT PLAN

The following description of the extent of the activity to be covered by this CHMP is in accordance with Clause 7, Schedule 2 of the *Aboriginal Heritage Regulations* 2007 (pursuant to the Approved Form: section 9).

The activity comprises a total of 32.79 hectares (approx.) and consists of 93 parcels of land east and west of Glismann Road, and also includes Glismann Road, Beaconsfield (Map 2). The activity area is within the local Government area of Cardinia Shire Council, Parish of Pakenham, County Mornington (Map 1).

Salient prominent structures and works in, and natural features of, the activity area (Map 3) include (Google Earth 2006; Department of Sustainability & Environment 2010):

- Formed gravel Glismann Road;
- Grassed open (cleared) spaces, including a sports oval;
- Two ridgelines oriented approximately north/south rising from Old Princes Highway to the north – one located approximately along Glismann Road and the other along the western boundary of the activity area;
- Steep slopes of the two above-mentioned ridgelines;

- A low-lying swampy valley at the base of the two ridgelines between Glismann Road and the western boundary of the activity area (all land below 60m above sea level; Figure 12);

- A low-lying swampy area at the base of the Glismann Road ridgeline at the south-eastern boundary of the activity area (Figure 12);

- Over 70 residences and a school and their associated structures (i.e. sheds/outbuildings), driveways, swimming pools, fencing, dams, manicured lawns and gardens including introduced flora/plantings (one residence also has a tennis court).

Aerial Photograph Courtesy of DSE Website

Legend:

Activity Area
32.79 hectares (approx)

Sporting Oval

Drain

Built Up Area (Residences, School & Associated Structures/Work)

Denotes Direction of Steep Slope

Low Lying Swamp Land

0 50 100 150 200
Scale of Metres

N

GDA
Zone 55

Map 3 Salient Prominent Structures and Works In, and Natural Features of, the Activity Area

4 DOCUMENTATION OF CONSULTATION

As there is no RAP with responsibility for the activity area, no documentation relating to RAP participation or communication with the RAP is required, and therefore not presented here (pursuant to clause 4(3), schedule 2 of the *Aboriginal Heritage Regulations* 2007 & Section 60(c) of the *Aboriginal Heritage Act* 2006).

However, it should be noted that RAP applicant (Wurundjeri Tribe Land and Compensation Cultural Heritage Council) representative Gary Galway participated in the standard assessment conducted as part of this CHMP during which time he was consulted for his observations and opinions relating to Aboriginal cultural heritage of the activity area. Mr Galway was unable to supply any traditional knowledge specific to the activity area.

DESKTOP ASSESSMENT

The following desktop assessment is presented for the purposes of section 53(2) of the *Aboriginal Heritage Act* 2006 and is pursuant to the *Aboriginal Heritage Regulations* 2007: regulation 57.

5 ABORIGINAL CULTURAL HERITAGE ASSESSMENT

As required under regulation 57 and clause 8(1)(2) & (6), schedule 2 of the *Aboriginal Heritage Regulations* 2007 (& pursuant to the Approved Form section 11), the following Aboriginal cultural heritage assessment is presented (pursuant to Approved Form: section 11(a)).

Those involved in the desktop assessment included (*Aboriginal Heritage Regulations* 2007: clause 8(2), schedule 2):

- Andrea Murphy (Tardis Enterprises Pty Ltd Project Manager) – editing, writing;
- Dale Owen (Tardis Enterprises Pty Ltd Project Archaeologist) – background research, writing;
- Alana Doyle (Tardis Enterprises Pty Ltd Archaeologist) – background research; and
- Barry Green (Tardis Enterprises Pty Ltd Archaeologist) – background research;
- Murray Ellis (Tardis Enterprises Pty Ltd Archaeologist) – mapping and graphics.

5.1 Victorian Aboriginal Heritage Register Information Relating to the Activity Area

The Victorian Aboriginal Heritage Register (VAHR) was searched on 27 September 2010 for information relating to the activity area (pursuant to the *Aboriginal Heritage Regulations* 2007: regulation 57(1)(a) & the Approved Form section 11(a)(1)). As a result, it was found that no Aboriginal cultural heritage sites have been previously recorded within the activity area. However, 34 Aboriginal cultural heritage sites have been recorded within 2km of the

activity area (Table 1). Thirty of these sites are stone artefact scatters, two are stone artefact scatter collections, one is a scarred tree and one is an earth feature (Map 3).

Within 2km of the Activity Area

The artefact scatter sites' (n=32 – including artefact scatter collections; Table 1) contents within 2km of the activity area consist of mostly silcrete and quartz, with minor occurrences of basalt, chert, quartzite and ochre, and generally appear to be of a form typical of the Australian Small Tool Tradition (ASTT).

Within 5km of the Activity Area

Within approximately 5km of the activity area, there have been 96 previously recorded Aboriginal cultural heritage sites (including the 34 sites within 2km) consisting of an earth feature (1.04%), five scarred trees (5.21%), six artefact scatter collections (6.25%) and 84 artefact scatters (87.50%); Note: this information has been gathered from a print-out of VAHR listed sites within approximately 5km).

The Broader Region

Further review of sites was made of previous cultural heritage assessments (n=65) in the broader region (see Section 5.3 for review of previous assessments; Table 2). From these assessments, 143 sites were recorded consisting of 132 (92.31%) stone artefact scatters and 11 (7.69%) scarred trees (Table 2).

Of these 143 sites, the majority (n=58 or 40.56%) are on raised landforms, 25 (17.48%) have been recorded as being within the bank of a watercourse, 16 (11.19%) on a watercourse terrace, 15 (10.49%) on a floodplain, 13 (9.09%) on a plain (other than a floodplain), only one site (0.7%) has been recorded within swampland, and 15 (10.49%) have not had the landform details clearly described (Figure 2).

Of the 132 stone artefact scatters, the overwhelming majority (69 sites or 52.27%) are low density scatters containing 10 or less artefacts. It should be noted, however, that not all of these sites have been subject to subsurface investigation and may contain additional artefacts. Only six sites (4.55%) contain over 70 artefacts (Table 3).

The artefacts (n=3,337) that have had their details recorded show that most are flakes/debitage (n=3,009 or 90.17%) followed by cores (n=110 or 3.30%), blades (n=85 or 2.55%), scrapers (n=48 or 1.44%), points (n=40 or 1.20%), geometric microliths (n=30 or 0.90%), unspecified 'tools' (n=9 or 0.27%), hammerstones (n=3 or 0.09%), ochre fragments (n=2 or 0.06%) and there was one chopper recorded (0.03%; Figure 3).

Most of the artefacts were silcrete (n=2,403 or 72.01%) and quartz (n=799 or 23.94%). The remainder were created from quartzite (n=57 or 1.71%), basalt (n=33 or 0.99%), chert (n=10 or 0.33%) and mudstone (n=6 or 0.18%). Twenty-nine artefacts (0.87%) were produced from less common materials (Figure 4).

Based on current site data from the activity area region, typical site dimensions do not extend beyond $5m^2$. However, larger sites have been identified within 100m of Cardinia Creek within aggrading landscapes. Such sites have been recorded at between the

ground surface and 65cm depth (VAHR site 7921-0245). However, most (~80%) recorded Aboriginal stone artefact sites in the activity area region are surface sites.

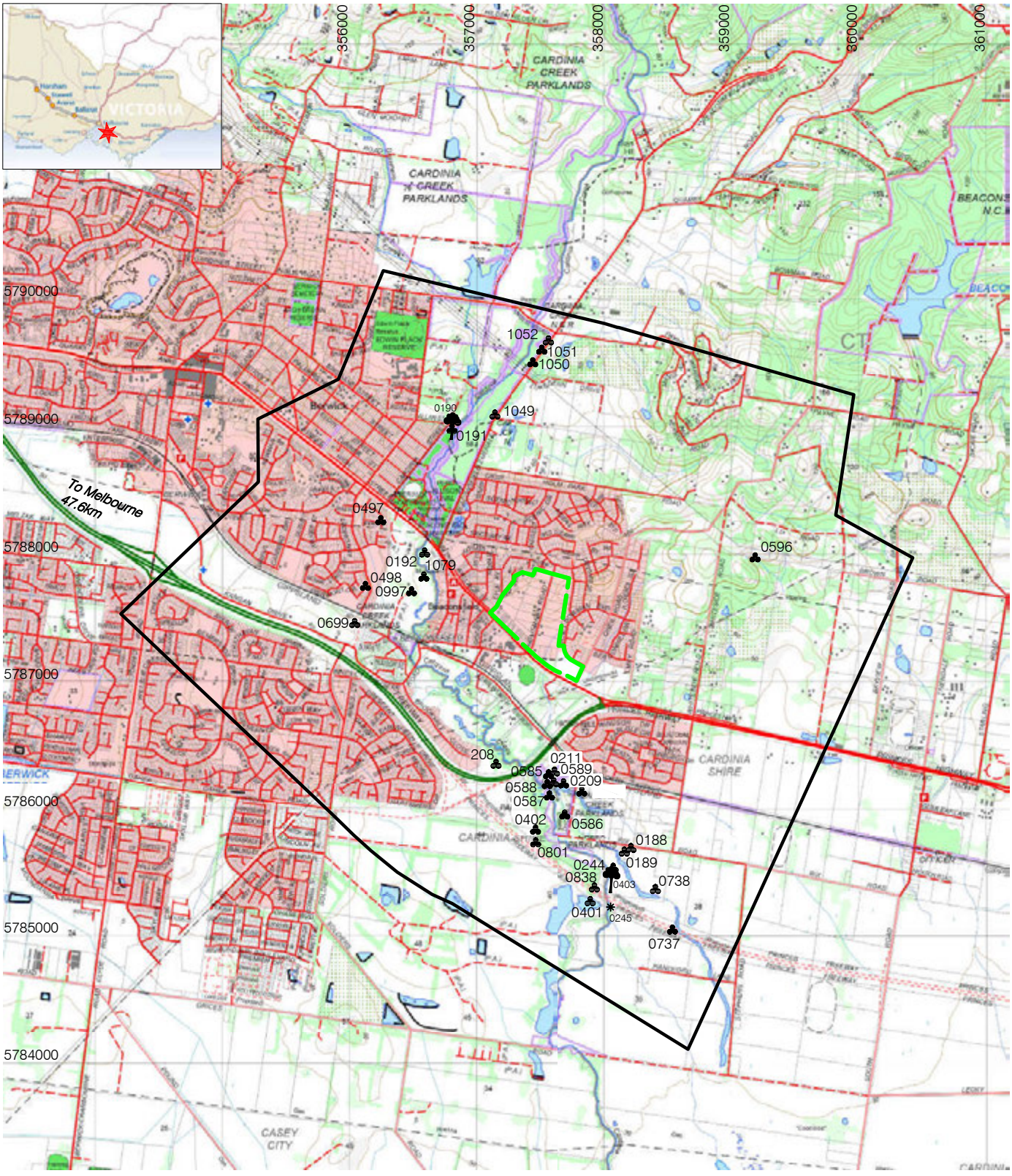
In summary:

- No Aboriginal cultural heritage sites have been previously recorded within the activity area;
- Thirty-four Aboriginal cultural heritage sites have been previously recorded within 2km of the activity area (30 artefact scatters, 2 artefact scatter collections, a scarred tree & an earth feature);
- A total of 96 Aboriginal cultural heritage sites have been recorded within 5km of the activity area (including the 34 within 2km);
- The majority of sites within 5km (87.50%) of the activity area as well as the broader region (92.31%) are stone artefact scatters;
- The majority (~80%) of stone artefact sites in the activity area region have been identified on the ground surface;
- Stone artefact sites identified subsurface can extend to around 65cm depth in aggrading landforms;
- The majority of stone artefacts have been produced from silcrete and quartz; and
- Artefact types are generally of a form typical of the ASTT.

5.2 Geographic Region of the Activity Area

The activity area's geographic region (Map 4) is an arbitrary 2km radius around the activity area. This area encompasses a variety of present and past ecological zones (Figure 5) and geographic and geomorphological formations (Figure 6). Most importantly, this geographic region includes large areas of swampy and grassy woodland of which the activity area consisted prior to European settlement (i.e. the activity area is at the interface of these two ecological zones). Also, previously recorded Aboriginal cultural heritage sites exist within the geographic region, that are relevant to Aboriginal cultural heritage that may be present within the activity area (regulation 57(1)(b)).

Although a geographic region is required to be identified under the *Aboriginal Heritage Regulations* 2007 (regulation 57(1)(b) & the Approved Form section 11(a)(2 & 3)), information beyond this region is also considered and discussed within this CHMP.



Topographic map used for Location Plan: 1:30,000 Number T7921-1-4-1, T7921-1-4-2,T7921-1-1-4 & T7921-1-1-3

Legend:

0 500 1000 1500 2000
Scale of Metres

Activity Area
32.79 hectares (approx)
Geographic Region Boundary

xxxx Artefact Scatter
xxxx Earth Feature
xxxx Scarred Tree
VAHR 7921-xxxx

N

GDA
Zone 55

Map 4 Geographic Region of the Activity Area and Previously Recorded Aboriginal Cultural Heritage Sites

5.3 Review of Reports and Published Works about Aboriginal Cultural Heritage in the Geographic Region

The following review of reports and published works about Aboriginal cultural heritage is required under the *Aboriginal Heritage Regulations* 2007 (regulation 57(1)(c) & pursuant to the Approved Form section 11(a)(5)). It should be noted that relevant information beyond the geographic region is also considered for this CHMP.

Table 2 lists all the literature reviewed for Aboriginal cultural heritage as part of this desktop assessment. This review has demonstrated the following:

- 65 Aboriginal cultural heritage assessments have been conducted within approximately 5km of the activity area;

- Of the previous assessments, one (1.54%) reported on monitoring of mechanical works, two (3.08%) reported on subsurface testing and monitoring, four (6.15%) are of salvage excavations, eight (12.31%) are desktop reviews, 14 (21.54%) are desktop, standard and complex CHMPs, and 27 (41.54%) included desktop review and ground surface survey;

- Only three previous assessments have included the activity area within their broader boundaries (Gaughwin 1981; Presland 1983 & Smith 1991), but none included ground surface survey of the activity area;

- Twenty-nine (44.62%) previous assessments have identified previously non-recorded Aboriginal sites; and

- Of the assessments that identified sites, ten included desktop review and ground surface survey, nine were desktop, standard and complex CHMPs, seven included subsurface testing only, two included subsurface testing and monitoring, and one was salvage excavation only (of a site identified during development – i.e. not previously recorded).

Other literature pertaining to historical and ethno-historical information has been reviewed for Section 5.4 and is referenced in-text where necessary.

5.4 Review of Historical and Ethno-Historical Accounts of Aboriginal Occupation of the Activity Area Region

The following review of historical and ethno-historical accounts of Aboriginal occupation of the activity area is required under the *Aboriginal Heritage Regulations* 2007 (regulation 57(1)(d) & pursuant to the Approved Form section 11(a)(6)).

The information used to establish pre-settlement Aboriginal spatial organisation is mostly based on observations made by Europeans during the initial period of contact and subsequent settlement of the region. Early historical accounts of Aboriginal land use within and surrounding the activity area are scant, with most descriptions by Aboriginal Protector GA Robinson (1837-49), Assistant Aboriginal Protector William Thomas (Thomas Journals 1840-1843) and early European landowners of the area. It was William Thomas who saw the need to provide a settled life for the Aborigines and established protectorate stations,

first at Arthur's Seat (1839-40) and then at Narre Narre Warren (1840-43).

The activity area lies within the traditional lands of the *Bunurong* tribe near to the border of the *Woi wurrung* lands (Figure 7). The *Bunurong* (Western Port) tribes belonged to the inter-marriage network and language ties group known as the *Kulin,* which inhabited areas around Melbourne. At the time of contact the *Kulin* nation was made up of the *Bunurong, Woiworung, Jajowrong, Taunguong* and *Wathaurung* (Presland 1994: 40).

The territory of the *Bunurong* is thought to have extended north from the coast at Western Port to the Dandenong Ranges (Thomas in Gaughwin & Sullivan 1984: 86). The northern boundary was delineated by the source streams in the Dandenong Ranges while the western boundary is thought to have followed a line from the Dandenong Ranges south to Mornington Peninsula on the coast, and the eastern boundary was the Tarwin River (Gaughwin & Sullivan 1984: 87). Early Aboriginal population numbers made by observers are, at best estimates. An 1839 census of the *Bunurong* by Thomas suggested that at the time of colonisation, this tribe comprised of approximately 500 persons or 'six square miles per person' (Thomas ML 9: 47). European contact with the *Bunurong* around Western Port was initially by sealers and whalers frequenting Bass Strait from the late 1790s. Aboriginal women were kidnapped from both Tasmania and the mainland for use as labourers and concubines, often resulting in hostile confrontations. The missionary Langhorne (Thomas ML 61) mentioned that tribes of the Western Port had the 'occasional affray' with sealers and he believed that this contact had greatly reduced their numbers.

The first sightings of *Bunurong* people was by Bass who saw four people at a distance, and by Mr Bowen, first mate of *Lady Nelson*, reported that he encountered a party on 3 January 1802 (Edgecombe 1989: 5). Bowen recalls that, as he approached, the Aboriginals took off their possum skin clothing and signalled him to take off his clothes, which he did. The Aboriginals were astonished by the colour of his skin and indicated that he must have washed himself very thoroughly. The boat crew also stripped and 'got out of the boat stark naked as was desired', but the old man of the tribe grew angry as they approached and ordered them back to their boat. At firing a gun, the Aboriginals vanished into the bush (Edgecombe 1989: 5).

However, most early explorers did not come face to face with any of the Western Port inhabitants (Grant 1803; Murray 1801; Weatherall 1827) although they made observations on their campsites, fires and artefacts. Despite infrequent visits, the effects of early contact with Europeans on Aboriginal tribes of Western Port severely decimated the population. Afflictions such as smallpox, influenza and venereal disease spread rapidly throughout the territory, and by 1835 an entire clan, which once occupied the Western Port area known as the '*Bonkoolawol*', had succumbed to the effects of small pox (Thomas ML 21: 14). Virtually no other information is available within ethnographic sources of this group.

In physical appearance there was little to distinguish the various *Kulin* tribes. There are few descriptions of coastal Aboriginals when still relatively unaffected by European contact. Those seen by Captain Milius of *Le Naturaliste* at Western Port in 1802 could well have been members of the *Bonkoolawol* or a war party from Gippsland, with whom the *Bunurong* often clashed. Captain Milius described these people as 'different from many of the Aboriginals whom we had previously seen. They had white paint over their faces, around their eyes and over their bodies. Some members also had their nostrils pierced to allow the passing through of a dry straw, which they regarded as an ornament' (Scott

1917).

Intermarriage and exchange of goods between the *Kulin* tribes is known to have occurred (Sullivan 1981: 36). *Kulin* people often met for inter-clan gatherings such as that recorded in 1844 when groups of *Woi wurrung* people were camped on the site of the future MCG, and a group of *Bunurong* were camped on the site of the future Government House (Presland 1994: 47). The *Bunurong* held meetings every three months and corroborees were held at full and new moons (Thomas ML 21: 97). Notices of planned gathering were distributed to neighbours via message sticks, and during these inter-tribal gatherings marriages were arranged, and disputes settled. Greenstone from the Mt William quarries in the *Woi wurrung* territory was transported or traded into the *Bunurong* territory (McBryde 1984). Within the *Kulin*, some tribes were more likely to exchange wives or hold corroborees with certain other tribes. The *Bunurong* had ceremonial links with, and most often married, members of *Taungurong* and *Wathaurung* tribes (Gaughwin 1981: 59). However, these alignments did not prevent warfare between the tribes (Thomas ML 1: 23 March 1839).

Assistant Aboriginal Protector Thomas and early settlers in the Western Port region have recorded aspects of the seasonal movements by the Bunurong through their territory. Gaughwin (1981) considers that the *Bunurong* continued their seasonal exploitation in a circular pattern from Melbourne and the Mornington Peninsula during the early contact period. This trip was thought to take about one month with an average stay of one to two nights at each campsite while the resources within a 10 kilometre radius were exploited (Sullivan 1981: 37). During these travels Thomas observed that 'Blacks seldom travel more than 8 or 9 miles per day' (Thomas PRO Letter 3 July 1840). It must be noted that, ethno-historical information on seasonal movements made during this time, apart from reflecting an already disrupted population, would also be dependent on the seasonal exploitation of resources.

Early settler James Dawson lived among *Bunurong* people for 40 years, and met parties of up to 100 people on Mornington Peninsula. He described them as 'fine, amiable, healthy, good-looking people', and 'in general intelligence, commonsense, integrity and the absence of anything repulsive in their conduct, they are at least equal to if not superior to the general run of white men' (Edgecombe 1989: 5).

Another European to spend considerable time with local Aboriginals was Mr. O'Grady, who apparently lived with the Mornington tribe from about 1835 to 1842 (Gliddon 1968: 67). 'He won the confidence of the *Warwoonong* (variant of *Bunurong*) tribe, and earned their friendship' (Gliddon 1968: 67). The government of the day also offered to appoint him Chief Protector of the Aborigines.

Relationships with *Bunurong* people were mostly tranquil during the early years of European settlement. Robert Jamieson (in Gliddon 1968), owner of the Cape Schanck Station wrote in 1839:

> 'The tribe of Aboriginal natives known as the Western Port blacks numbered, I should imagine, when I knew them first, upwards of 300. During the seven years of my residence in the bush, I saw a great deal of the natives, and invariably found them quiet, inoffensive, and willing, in their way to be useful.

> They never did me any harm intentionally, and on many occasions really helped me, although any attempt to induce one or more to settle to any work, however light, even for a single day, was utterly vain.
>
> I believe I may safely say that the settlers south of the Yarra were invariably kind to the natives, and there are I believe few if any instances of ingratitude in return on record' (Gliddon 1968: 144).

Georgiana and Andrew McCrae, living at Arthur's Seat at the same time as Jamieson, also made similar comments.

During the initial period of contact, it was considered that ex-convicts employed by squatters were the worst offenders to local Aboriginal people. 'They bribed the blacks with alcohol and tobacco or took by force and murder if necessary what they coveted – the companionship of native women' (Gliddon 1968: 145). However, review of Robinson's journals suggests that sealers may have also been prime offenders, particularly of Aboriginal women. The period of 1790s to 1844 saw the complete disintegration of local Aboriginal groups. The combination of land and resource deprivation, social disintegration, disease, infanticide, murder and kidnap reduced local clans to just a few members.

During the early period of European settlement numerous scarred trees were seen in the Western Port including 6m long wooden canoes that were used to cross the Bay on egg collecting expeditions to French Island (Gunson 1974: 3). Similar trips would also have been made to Phillip and French Islands. Camp sites with bark huts were noted by early settlers and explorers throughout the Western Port area, and these were always found on the banks of rivers and creeks (Sullivan 1981: 33). Extensive middens (Glossary - Appendix 3) were found both inland and adjacent to the coast indicating intensive exploitation of shellfish species in the Bay and along Bass Strait.

There are very few recorded Aboriginal burial sites located in the region. The only recorded burial sites in the Western Port and Port Phillip region are located within coastal fore dunes. There is historical evidence that burial sites within the Western Port region were both common and conspicuous. Besides the location near Tooradin noted by Clow, there were others along the coast. Thomas saw a burial location near the Lang Lang Creek in 1840 (Gunson 1974: 10). Several Aboriginal people are known to have been buried at Jamieson's 'Yallock Station' on Yallock Creek during the early contact period (Gunson 1974). Members of the *Kulin* were known to both bury their dead, as well as place them in tree hollows that were often burnt. Thus based on this scant information, burial sites, although a rarity within the region, may still exist in undisturbed sandy locations.

The ethnohistorical information provides evidence that the *Bunurong* tribe occupied Western Port and its surrounds in an organised manner and exploited all areas of their estate. Clans generally had areas in which they spent much of their time and which provided the basis for all their needs.

Aboriginal population numbers decreased rapidly after white settlement in the Western Port area due to dispossession of land and associated resources, and the spread of diseases brought into the area by Europeans settlers. By 1856 the remaining *Bunurong* lived mostly at 'Moody Yallock' (Mordialloc), exploiting the swamp and adjacent coastline.

The RAP applicant (Wurundjeri Tribe Land and Compensation Cultural Heritage Council) have not provided any additional information regarding occupation or exploitation of the activity area.

5.4.1 Resources Available to Aboriginal People

The resources available within the activity area region for Aboriginal subsistence in the past would have been rich. The region contains an array of productive ecological zones such as riverine (e.g. Cardinia Creek to the west), mountainous (the foothills to the north), swamp (the prior 'Great Swamp' to the south & swampy land within the activity area) and terrestrial (woodland & grasslands to the east & within the activity area) that would have been attractive for past Aboriginal people (Figure 5).

It would be expected then, that areas associated with water bodies and drainage systems would be the focus of Aboriginal exploitation within and near the activity area (e.g. Cardinia Creek). Within each of the above mentioned ecological zones, there would have been variations in staple species diversity and abundance, and this would have in turn influenced site location (Walsh 1987). It is beyond the scope of this study to reconstruct the resource structure at a local scale; however, some of the food resources which may have been utilised by Aboriginal people are wetland root crops (such as *Typa, Triglochin*), dry land root crops (such as *Microseris scaigera*), fresh water fish and crustaceans, waterfowl and land mammals (such as possums, kangaroos, wallabies, koalas, emu, echidnas). The silver banksia, first referred to as honeysuckle by early European settlers was '"full of sweet liquid like honey, which was sucked by the natives", (Smith 1882 in McDougall 1987: 17). Most resources had several uses. For example austral bracken is known to have been used for medicinal purposes. The juice of the stem was used for both nourishment and applied to relieve insect bites.

Specifically, the soils of the activity area supported mountain grey, manna and occasional swamp gum timber species as well as tea-tree, paperbark and dogwood shrub species in the low-lying area. The soils of the raised land within the activity area predominantly supported messmate and silver-leaf stringybark, longleaf box, narrow-leaf peppermint and occasional manna gum species (Sargeant 1975). All of these floral species may have been utilised by past Aboriginal people.

Some stone resources used by Aboriginal people in the past would have been available within the surrounding area. Basalt, often used for grindstones and axes, was obtainable from surface outcrops at Berwick and possibly Cranbourne (Thomas *et al* 1967: 55). Most of these larger deposits have now been quarried for road metal. Quartz, like basalt, is readily available within the region (Queenscliff & Warragul 1:250,000 Geological Series Mapsheet). Quartz pebbles are located within most creeks and drainage lines, and quartzite is exposed throughout hills. Siltstone and mudstone, two other materials occasionally used for the manufacture of stone artefacts, readily occur within the foothills to the north of the activity area. Granite, a stone type sometimes utilised for axes and grindstones is also found throughout the region. However, neither silcrete nor chert occurs naturally within the region. These highly utilised stone materials occur 10-50km to the south and south-west of the activity area along the coast and on the Mornington Peninsular (Gaughwin 1981; McConnell 1981: 159).

Swamp gum (*Eucalyptus ovata*) was common along watercourses and within flood plain areas. Remnant stands of these trees are still found along Cardinia Creek. Because of their relatively smooth bark and large size, they were commonly used for the manufacture of bark implements by Aboriginal people (Edwards 1972: 31). A large canoe tree was once located on the edge of Grasmere Swamp to the north of the activity area. To a lesser extent, remnant stands of messmate gum trees that are still found within Berwick hills would also have been utilised for the manufacture of wooden implements. Apart from the manufacture of wooden implements and access to food resources, the bark from these trees would also have been removed for other non-utilitarian purposes such as for ceremonial and social activities.

For pre-contact Aboriginal people, an access route along Cardinia Creek via Koo-wee-rup (Great) Swamp to Westernport would have been relatively feasible and has been suggested by Smith (1989). The number and density of sites previously recorded along Cardinia Creek to the north, south and west (approx. 400m) of the present activity area, suggest that this creek may have been a major pre-contact Aboriginal pathway of the region and focus of occupation.

Specifically, the activity area was, prior to European settlement, mostly swampy woodland associated with Cardinia Creek's floodplain. This ecological zone would have provided swamp resources (e.g. eels, birds *etc*.) during wetter periods. During drier periods, this area may have been traversed to reach the riverine resources of Cardinia Creek, though it is unlikely that past Aboriginal people would have occupied this swampy area on any permanent basis. However, the north-eastern and north-western corners of the activity area are ridgelines (Figure 5). These ridgelines consisted of grassy woodland prior to European settlement and would have been a more attractive place to camp for past Aboriginal people; particularly as it overlooks the swampland and river to the south and west. Additionally, to the north and east, woodland and grassland existed where terrestrial resources could be obtained.

In summary, the activity area is located within a rich resource area that would have been attractive to past Aboriginal people. Therefore, it is possible that evidence of past Aboriginal occupation in the form of cultural material (e.g. stone artefacts) may be present within the activity area, particularly on the raised landforms at the north-western and north-eastern corners; though much of these locations have been subject to significant disturbance due to residential development which may have affected any cultural values that may exist.

6 LANDFORMS/GEOMORPHOLOGY OF THE ACTIVITY AREA

The most extensive geological feature of the activity area is of low-lying (Cardinia Creek) floodplain, mostly Holocene age, and comprises fluvial (i.e. produced by or found in a river or stream) alluvium, gravel, sand and silt (1:250,000 Geological Maps Series: Queenscliff SJ 55-9, Edition 2, 1997; Qa1 on Figure 6). At the north-western and north-eastern corners of the activity area, ridgelines extend southerly through approximately half of the activity area where they steeply descend to the low-lying areas. The north-eastern corner consists of the geological formation called the Murrindindi Supergroup (Sm on Figure 6) and it is likely that the north-western corner consist of the same (though is not indicated on Figure 6 which may not be entirely accurate). The Murrindindi Supergroup is of Middle Devonian

(c. 397 million years) to Silurian (c. 416 Million years) age (Geoscience Australia 2010) and consists of marine mudstone and sandstone (1:250,000 Geological Maps Series: Queenscliff SJ 55-9, Edition 2, 1997).

The soils associated with the Holocene fluvial deposits are known as the Tynong Association which generally occurs on "comparatively narrow valley floors fingering into the uplands. The sediments from which these soils are derived are Quaternary (c. 2.5 million years to the present) alluvium (i.e. deposited by flowing water)". These soils consist of "dark brownish grey clay loam surfaces about 20cm deep, often with slight amounts of grit, overlying a bleached layer of similar texture. Mottled yellow-brown and light grey medium or heavy clays, often gritty, occur from about 50cm, and apart from variations in grittyness, continue with little change to 180cm" (Sargeant 1975).

The soils associated with the Murrindindi Supergroup are described by Sargeant as follows:

> 'The surface soils are generally brownish grey or grey very fine sandy clay loam to silty clay loams, and at about 10cm a bleached zone occurs, similar in texture to the above layer. Yellow-brown mottled with light [in colour] heavy clays occur at 40 to 60cm with a zone of ironstone concentrations above clay. Variations in colour and texture of the surface soils, as well as depth to rock, occur with landscape position' (Sargeant 1975).

Sargeant (1975) does, however, state that "the underlying rock…usually mudstone, generally occurs at between 1 and 2m depth'.

Early maps of the activity area show the low-lying area to be swampy land and where the land rises to the northeast, the hills are 'moderately well grassed' and 'heavily timbered white gums, ?Box, wiry grass and Native hop' (Figures 8 & 9).

An aerial photograph taken in 1960 (Photo 1) shows the activity area to have been mostly cleared (virtually no remnant native vegetation remains) with some structures, a tree-lined driveway, and other driveways/tracks (Glismann Road is yet to have been constructed). The obvious paddock divisions indicate that the activity area has been repeatedly ploughed and/or likely used for grazing by 1960. Photo 1 also shows that the activity area has been subject to some drainage works by this time. Since then, rural subdivision has occurred and the activity area currently consists of multiple allotments with many structures, though expanses of grassed paddocks still exist (Photo 2).

7 LAND USE HISTORY OF THE ACTIVITY AREA

The activity area was part of the 1,920 acre sheep run known as 'Panty Gurn Gurn'. This run was occupied by Thomas Jackson from 1841 to 1850. Following Jackson, William Bowman (1850-1853), David Bowman (1853-1856), James and Charles Anning (1856-1863) and Charles Ferguson Henry occupied the run to its forfeiture in 1873 Billis & Kenyon 1974: 30, 88, 263; Speadborough & Anderson 1983: 178).

During this period, it is likely that the activity area was mostly utilised as pasture for sheep, particularly as the swampy nature of the majority of the activity area would not have been ideal for much else (Figure 8). Nevertheless, early plans of the activity area (Figure 8)

show an 'old hut' near the south-eastern corner of the activity area, as well as a 'Homestead' (Figure 10) or 'Jackson's Cattle Station' (Figure 9). This indicates that Jackson (c. 1840 to 1850) utilised the land to graze cattle prior to it being used for sheep. As part of the same run (west of the activity area), by 1856 (Figure 8) a 'Public House' with a stable existed at the location of the present Beaconsfield Hotel. This establishment was called the Gippsland Hotel and was owned and managed by David and Janet Bowmen who were granted the licence in 1855 (Casey-Cardinia Library Corporation 2010).

At around this time (mid-1850s), subdivision of the Parish of Pakenham into smaller lots occurred (Proc Roads P9 – Parish Pakenham, 1854, Foot). In the 1870's, gold was discovered "in the gullies north of Beaconsfield" which brought prospectors and timber cutters to through the area, some of which found the foothills in the area suitable for orchards. The area steadily grew, particularly following the installation of the Beaconsfield Railway Station which opened in 1881 enabling the dispatch of local commodities and easier access to Melbourne (Monash University 1999). By the 1960s, the activity area consisted of small private holdings used fro grazing. More recently, the activity area has been further sub-divided into Rural Living, Residential, Public Use (education) and Public and Recreation Zones (Figure 11).

8 DESKTOP CONCLUSION

In summary, the desktop assessment has identified the following information specific to the activity area:

- The activity is considered as high impact under the *Aboriginal Heritage Regulations* 2007 (regulations 46);
- The activity area is ***not*** in an area considered sensitive under the *Aboriginal Heritage Regulations* 2007;
- No Aboriginal cultural heritage sites have been previously recorded within the activity area;
- Only three previous assessments have included the activity area within their broader boundaries (Gaughwin 1981; Presland 1983 & Smith 1991), but none included ground surface survey of the activity area;
- The activity area consists of Cardinia Creek prior floodplain/swampland (low-land) at the base of two sections (northeast & northwest corners) of elevated land;
- The majority of sites within 5km (87.50%) of the activity area as well as the broader region (92.31%) are stone artefact scatters of mostly silcrete and quartz;
- The activity area is within an area that would have been of moderate strategic value to past Aboriginal people;

- The majority of the activity area has been subject to ground disturbance via ploughing, vegetation clearance, construction of Glismann Road, construction of a dam, recreational facilities, residential, and commercial properties, development and construction/installation of associated outbuildings and services (Figure 12);

- Highest archaeological values are recorded on the banks of Cardinia Creek approximately 400m to the west of the activity area.

Implications

Although ground disturbance has occurred throughout the activity area, Aboriginal cultural heritage sites have been identified in the geographic region, mostly consisting of stone artefact scatters. This, together with the location being within what would have been an area of moderate strategic value to past Aboriginal people suggests that it is possible that Aboriginal cultural material may exist within the activity area.

Therefore, based on the desktop information, it is possible that similar Aboriginal cultural heritage (i.e. low-density stone artefact scatters) is present within the activity area. The most likely location for such cultural heritage to exist is on the ridgelines at the north-eastern and north-western corners of the activity area. However, if present, such cultural heritage will likely be in a disturbed context due to historic land-use activities such as vegetation clearance, residential/industrial development *etc*. Also, based on soil profiles within the activity area, cultural material is not likely to exist beyond a maximum of 60cm below the ground surface.

Larger, more complex sites with greater density and variety of artefacts are found along the banks of Cardinia Creek to the west of the activity area. The activity area is unlikely to contain similar archaeological resources as this area.

Table 4 and Figure 13 presents areas considered to potentially contain Aboriginal cultural heritage based on the desktop assessment results (i.e. sensitivity model). Other than Aboriginal cultural heritage presented in Table 4, no other site types are considered likely to exist within the activity area and no other locations within the activity area are considered sensitive for cultural material.

In summary, the areas considered sensitive for Aboriginal cultural heritage (previously disturbed low density artefact scatters) are:

- At the top of the ridgelines and on their upper-most slopes extending from the north-western and north-eastern corners of the activity area as these locations are considered possible localised routes of movement, with adjacent resource zones suitable for low frequency exploitation. The ridgelines may also have served as possible vantage points. These ridgelines would have stayed dry during wetter periods when the low-lying areas were inundated. Only locations that have not been subject to development are considered sensitive on these ridgelines; and

- The balance of the activity area (i.e. mid-lower slopes of the ridgelines & low-lying area) is not considered likely to contain Aboriginal cultural material due to the swampy nature of the area (prior to European settlement).

Note: the upper slopes of the ridgelines are the only area considered likely for Aboriginal cultural heritage (previously disturbed low density artefact scatters) due to such material (if any).

8.1 Obstacles Encountered during the Desktop Assessment

No obstacles were encountered that affected completion of this desktop assessment (*Aboriginal Heritage Regulations* 2007: clause 8(6), schedule 2).

STANDARD ASSESSMENT

As the results of the desktop assessment show that it is reasonably possible that Aboriginal cultural heritage is present in the activity area a standard assessment was conducted as part of this CHMP (pursuant to *Aboriginal Heritage Regulations* 2007: regulation 58(1)).

Ground surface survey of the activity area was conducted on 29 October 2010 by the authors, Andrea Murphy and Dale Owen, and RAP applicant representative Gary Galway. Mr Galway was consulted for his opinion during the survey and was requested to make comment on any observations he made in relation to Aboriginal cultural heritage (pursuant to the *Aboriginal Heritage Regulations* 2007: schedule 2, clause 8(3) & (4)).

It should be noted that the conclusions made of Aboriginal cultural heritage potential for the activity area following the desktop and standard assessments have been made in consultation with Mr Galway who verbally endorsed them immediately following the survey (Galway, G. 2010, personal communication, 29 October).

The following methodology indicates that the ground surface survey was conducted in a systematic manner in accordance with proper archaeological practice (pursuant to the *Aboriginal Heritage Regulations* 2007: regulation 59(3) & the Approved Form: section 11(b)).

9 GROUND SURVEY METHODOLOGY

The methodology of the ground surface survey was designed taking into consideration the desktop assessment Aboriginal cultural heritage sensitivity model and likely ground surface visibility. The survey also considered the potential for all Aboriginal cultural heritage site types to exist (e.g. scarred tree, quarry, earth feature *etc*.) regardless of the sensitivity model in case of the unexpected presence of such sites.

Due to the extensive residential and industrial development within the activity area, it was decided that the survey proceed in a systematic manner via pedestrian reconnaissance which enabled observation of all areas and landforms within the activity area (Burke & Smith 2004: 65-67). Where necessary and/or possible, residents were approached for permission to access their properties and queried as to their environmental and cultural knowledge of the area. It should be noted that residents were informed of the standard assessment via mail prior to it being conducted (Appendix 1) and no objections or access restrictions were encountered prior to or during the survey.

During the survey, photographs and notes were taken, and where good ground surface visibility was encountered, such areas were inspected thoroughly.

9.1 Ground Survey Results

At the time of the ground surface survey conducted for this CHMP, ground surface visibility was mostly poor (<5% per m^2) due to heavy grass cover, water inundation and/or development (Photos 3, 5 to 9; Map 5). Areas of improved ground surface visibility were inspected more thoroughly (Photo 4). Overall, less than 5% ground surface visibility was available.

However, regardless of the poor ground surface visibility, it became evident that the large majority of the activity area has been subject to extensive modification due to residential, recreational, industrial and road development (Photos 3, 6 to 8). Where such disturbance has not occurred, steep slopes and low-lying swamp are present (Photos 6, 8 & 9).

The most likely areas to have sensitivity for potential Aboriginal cultural values are along the ridgelines of the two hills within the activity area (Map 3). However, these are also the areas where development and significant ground disturbance has taken place (Photos 6 to 8). The significant ground disturbance along the ridgelines and upper slopes comprise:

- 5-6m wide gravel road (Glismann Rd);
- 2-3m earthen drain;
- Underground services;
- Yard levelling works;
- Tennis court construction.
- Excavation for residence/business construction;
- Excavation for sheds/garages;
- Formed driveways;
- Significant landscaping;

As a result, any potential Aboriginal cultural values have been removed/destroyed.

The balance of the activity area is not considered likely for Aboriginal cultural heritage due to the steep nature of the hill slopes (Photos 6, 8 & 9) and the swampy nature of the land at the base of the slopes (Photo 5), neither of which would have been conducive to Aboriginal occupation. Evidence of the difficulties in occupying the steep terrain was observed during the survey as extensive excavation and earthworks which have been conducted to allow for historic development (Photos 6 to 8).

Information pertaining to the swampy areas at the base of the slopes was also obtained during the course of the ground surface survey. Long-time resident (i.e. 20 years) of Glismann Road, Mrs Cheryl Campbell, informed Dale Owen (Tardis Enterprises Pty Ltd) that these low-lying areas were inundated on a yearly basis prior to residential development and associated drains being constructed in the area (Campbell, C 2010, personal communication, 29 October). During the standard assessment, despite recent relatively dry weather, these low-lying areas were observed to be swampy and not conducive to easy access (Photo 5).

There are no trees within the activity area that are considered to be of sufficient age to possess Aboriginal cultural scarring (due to extensive historic clearing & development) and, as such, none were observed to possess any. Additionally, there are no caves or rock shelters within the activity area and no other Aboriginal cultural heritage values were identified or are considered to potentially exist.

Although within a region of moderate strategic value, the activity area would not have been an easy location to traverse (apart from the ridgelines) for past Aboriginal people, due to the steep slopes and wet terrain. Evidence of Aboriginal occupation is shown to be closer to Cardinia Creek to the west (Map 4). These areas are flatter landscapes with the same or greater resources which would have been more accessible and therefore more attractive habitational locations. Due to these factors, the activity area is not considered likely to contain Aboriginal cultural heritage sites.

In summary, the standard assessment:

- Achieved less than 5% effective survey coverage;
- Was restricted by vegetation cover, water inundation and/or development. However, this is not considered a constraint to the effectiveness of the survey with regard to identifying areas of Aboriginal cultural heritage sensitivity. The landforms affected by vegetation and water inundation are not considered likely for Aboriginal cultural places and, likewise, development has removed/destroyed any potential values that may have existed;
- Identified areas of significant previous ground disturbance throughout the activity area due to residential, recreational and industrial development;
- Did not identify any Aboriginal cultural heritage;
- Refined the desktop Aboriginal cultural heritage sensitivity model (Table 4; Figure 13);
- Has demonstrated the lack of potential for Aboriginal cultural heritage values;
- No part of the activity area is considered likely to contain Aboriginal cultural heritage places.

Aerial Photograph Courtesy of DSE Website

Legend:

Activity Area
32.79 hectares (approx)

Area Surveyed
(5% Effective Ground Surface Surveyed)

0 50 100 150 200
Scale of Metres

N

GDA
Zone 55

Map 5 Ground Survey Areas and Effective Survey Coverage

(Melway Ref: 214 A1)

9.2 Obstacles Encountered during the Standard Assessment

Although poor ground surface visibility and water inundation restricted ground surface visibility, it is not considered to have affected the effective completion of this standard assessment (*Aboriginal Heritage Regulations* 2007: clause 8(6), schedule 2).

10 GROUND SURFACE SURVEY CONCLUSIONS

The following conclusions have been made in light of the desktop assessment results pursuant to the Approved Form: Section 11(b)(5).

As a result of the desktop and standard assessments conducted for this CHMP, it can be concluded that:

- There is no previously recorded Aboriginal cultural material within the activity area;
- No Aboriginal cultural heritage was identified during the desktop or standard assessments;
- The activity area has been subject to significant ground surface disturbance via residential, recreational and industrial development;
- Where development has not occurred, the activity area is very steep or swampy;
- The only areas considered to have had sensitivity for potential Aboriginal cultural heritage values have been subject to significant ground disturbance and therefore are no longer considered sensitive;
- As there are no areas considered likely to contain Aboriginal cultural heritage, a complex assessment of the activity area is not required.

11 CONSIDERATION OF SECTION 61 MATTERS – IMPACT ASSESSMENT

The following considerations are made in accordance with Section 61 of the *Aboriginal Heritage Act* 2006 (pursuant to the *Aboriginal Heritage Regulations* 2007: schedule 2, clause 12 & Approved Form: section 13).

11.1 Harm to Aboriginal Cultural Heritage

The activity will not harm known Aboriginal cultural material as none has been identified within the activity area.

Additionally, the desktop and standard assessments conducted for this CHMP have found that the activity area is not likely to contain any Aboriginal cultural heritage.

11.2 Minimising Harm to Aboriginal Cultural Heritage

As there is no known Aboriginal cultural heritage within the activity area, harm minimisation measures are not required.

11.3 Specific Measures Required for the Management of Aboriginal Cultural Heritage Likely to be Affected by the Activity

As there is no known Aboriginal cultural heritage within the activity area, no specific management measures are required for existing cultural heritage.

PART 2 – CULTURAL HERITAGE MANAGEMENT RECOMMENDATIONS

These recommendations become compliance requirements once the Cultural Heritage Management Plan is approved (Approved Form, p. 6).

12 SPECIFIC CULTURAL HERITAGE MANAGEMENT REQUIREMENTS

As no Aboriginal cultural heritage and no areas considered likely to contain Aboriginal cultural heritage were identified within the activity area, no *specific* cultural heritage management is required (pursuant to the Approved Form: section 14).

The following recommendations are presented in accordance with section 42 (1)(b)(ii) of the *Aboriginal Heritage Act* 2006 (& pursuant to the Approved Form: section 13) and take into account the likely ground disturbing works.

12.1 Recommendations for Prior to Activity

Recommendation 1 Cultural Awareness Information for Employees and Contractors

Although not required under legislation, prior to works commencing, it is recommended that all employees and contractors actively involved in the activity be subject to Aboriginal cultural heritage awareness training. Such information enables the identification of unexpected cultural heritage by the employees and contractors, minimising harm to cultural heritage values within the activity area and ensuring appropriate reporting and management of those values.

Cultural heritage information must be provided by the Sponsor. In the first instance, the Sponsor should approach the RAP to arrange collation of relevant documentation. If the RAP declines, then the Sponsor's heritage advisor can arrange collation of relevant documentation.

12.2 Recommendations for During the Activity

Recommendation 2 Discovery of Unexpected Aboriginal Heritage

During the activity, the possibility for unexpected Aboriginal cultural heritage being unearthed must be managed. If any material such as a stone artefact deposit, shell midden or hearth remains is identified, then Contingency 1 must be adopted (Section 13). Additionally, Contingency 2 specifically addresses the requirements that must be followed if human remains are identified (Section 13).

12.3 Recommendations for Post Activity

As no Aboriginal cultural material has been identified within the activity area, no recommendations for post activity are required.

However, if unexpected Aboriginal cultural material is identified during the activity, Contingency 1 must be followed (Section 13).

13 CONTINGENCY PLANS

Contingency Plans are required under the *Aboriginal Heritage Act* 2006: Section 61(d) and the *Aboriginal Heritage Regulations* 2007: Schedule 2, Clause 13 in relation to disputes, delays, CHMP compliance, management of Aboriginal cultural heritage found during the activity and notification of discovery of Aboriginal cultural heritage. The Contingency Plans must also address how each lot within the subdivision is intended to be used or developed by the Sponsor. In this instance, this CHMP considers the activity area for residential subdivision as permitted by the Cardinia Shire Council's Planning Scheme, and the Schedule to the Scheme for R1Z and LDRZ (Appendix 11). The sponsor must ensure that the relevant Contingency Plan is followed. To assist in this aim, a checklist has been provided (Appendix 6).

The following Contingency Plans take into consideration whether the activity will be conducted in a way that avoids harm to Aboriginal cultural heritage and, where this is not possible, whether the activity will be conducted in a way that avoids harm to Aboriginal cultural heritage. They also take into consideration specific measures required for the management of Aboriginal cultural heritage likely to be affected by the activity, both during and after the activity (pursuant to *Aboriginal Heritage Act* 2006: Section 61(a) to (c), the *Aboriginal Heritage Regulations* 2007: Schedule 2, Clause 13(1)(a) and the Approved Form: section 13.4.6).

The following contingency plans refer to the involvement only of a RAP(s) under the *Aboriginal Heritage Act* 2006. There is currently no RAP responsible for the activity area.

Contingency 1 Contingency for the Discovery and Notification of Aboriginal Cultural Heritage during Any Activity

This contingency plan must be followed if any unexpected cultural heritage is discovered during the activity. In the activity area any Aboriginal cultural heritage is considered to be unexpected.

A person making such a discovery will immediately suspend any relevant works at the location and within a 15m radius of the relevant site extent. If not already in attendance, that person shall immediately notify the Project Delegate for the Sponsor who, in turn will contact the nominated Project Heritage Advisor;

Sponsor – Project Delegate Donnie Lussier
Strategic Planner
Cardinia Shire Council
PO Box 7
Pakenham VIC 3810
Phone: 1300 787 624
Email: d.lussier@cardinia.vic.gov.au

If necessary, to prevent any further disturbance, the location will be isolated by a fence, safety webbing or other suitable barrier, and works may recommence outside this 15m area of exclusion.

The heritage advisor will evaluate the Aboriginal cultural heritage. The heritage advisor will determine if it is part of an already known site or should be registered as a new site. The heritage advisor must report the discovery to the Secretary by updating and/or completing site records and advise on possible management strategies.

The heritage advisor will facilitate the involvement of RAPs in the onsite investigation and assessment of significance of the Aboriginal cultural heritage.

If the Aboriginal cultural heritage is assessed by the heritage advisor, in consultation with the RAP as archaeological material with below moderate scientific significance, then after recording the material, no further management is required and works may proceed. However, relocating the activity to avoid any cultural heritage must be considered and adopted where possible. The heritage advisor must submit relevant documentation to Site Registry, AAV.

If other more significant Aboriginal cultural heritage is discovered, the heritage advisor in consultation with the RAP and the Sponsor should explore all options to avoid impact to the Aboriginal cultural heritage. If impact is unavoidable, then it should be minimised where possible and salvage excavation of the Aboriginal cultural heritage undertaken to mitigate impact if this will assist the salvage research design. In consultation with the RAP, salvage excavation methodology should be carried out in accordance with proper archaeological practice taking into account occupational health and safety issues. After salvage works are complete, activity works may recommence. The heritage advisor must complete the appropriate Victorian Aboriginal Heritage Registry forms and submit a report to AAV detailing the results of excavations. If human remains are discovered then Contingency 2 of this CHMP must be followed.

Within a period not exceeding three (3) working days a decision must be made by the heritage advisor in consultation with the RAP and the Sponsor as to the process to be followed for culturally appropriate management of the Aboriginal cultural heritage, and how to proceed with the works.

Failure of parties to reach an agreed course of action in this manner will be classed as a Dispute under this agreement.

Work may recommence within the 15m radius exclusion zone:

- When the appropriate protective measures have been taken;
- Where the relevant Aboriginal cultural heritage records have been updated and/or completed;
- Where all parties agree there is no prudent or feasible course of action; or
- Once any relevant disputes have been resolved.

Where relevant, the cultural heritage advisor, Sponsor and RAP will ensure that the above steps are followed and that legal obligations and requirements are complied with at all times.

Custody and management of any artefactual material discovered during the activity needs to be arranged by the heritage advisor in consultation with the RAP. All artefacts will be appropriately recorded and labelled by the heritage advisor prior to the custody and management arrangements.

Where the RAP cannot or will not exercise their right to custody of the cultural heritage, or in the event that no RAP exists for the activity area, custody can be ascribed in the following order:

- Any relevant Native Title holder;
- Any current RAP applicant for the activity area;
- Any relevant person(s) with traditional or familial links;
- Any relevant Aboriginal body with historical or contemporary interests;
- The land owner;
- The Museum of Victoria (s.61(e)).

Where there are two or more potential custodians of cultural heritage, these potential custodians must agree to an appropriate management outcome for the cultural heritage within 14 days from notice of their option to be custodians of the cultural heritage material. If appropriate management has not been agreed to within 14 days, the cultural heritage advisor will store the cultural material until such time as:

- The potential custodians agree to an appropriate management outcome for the cultural material; or
- A RAP is appointed for the activity area after which time the RAP will be ascribed custody of the material (whichever occurs first).

If neither of the above two actions presented above are able to be completed within 6 months from notice of their option to be custodians of the cultural heritage material, then the heritage advisor will proceed to the next potential custodian of the cultural material.

Contingency 2 Discovery of Skeletal Remains

The following contingency plan for the discovery of skeletal remains has been developed by Aboriginal Affairs Victoria (2007) and is reproduced below:

Discovery

- If suspected human remains are discovered, all activity in the vicinity must stop to ensure minimal damage is caused to the remains; and,
- The remains must be left in place, and protected from harm or damage.

Notification

- Once suspected human skeletal remains have been found, the Coroner's Office (1300 309 519) and the Victoria Police must be notified immediately;

- If there is reasonable grounds to believe that the remains could be Aboriginal, the Department of Sustainability and Environment's Emergency Coordination Centre must be immediately notified on 1300 888 544; and

- All Details of the location and nature of the human remains must be provided to the relevant authorities;

- If it is confirmed by these authorities that the discovered remains are Aboriginal skeletal remains, the person responsible for the activity must report the existence of the human remains to the Secretary, Department of Planning and Community Development (DPCD), in accordance with Section 17 of the *Aboriginal Heritage Act* 2006;

- There is to be no contact with the media;

- No photographs are to be taken without appropriate authorisation.

Impact Mitigation or Salvage

- The Secretary, after taking reasonable steps to consult with any Aboriginal person or body with an interest in the Aboriginal human remains, will determine the appropriate course of action as required by Section 18(2)(b) of the *Aboriginal Heritage Act* 2006.

- An appropriate impact mitigation or salvage strategy as determined by the Secretary must be implemented (This will depend on the circumstances in which the remains were found, the number of burials and type of burials, and the outcome of consultation with any Aboriginal person or body).

Note: In consultation with the RAP, a Sponsor may consider incorporating a contingency plan to reserve an appropriate area for reburial of any recovered human remains that may be discovered during the activity. This may assist the Secretary in determining an appropriate course of action.

Curation and Further Analysis

- The treatment of salvaged Aboriginal human remains must be in accordance with the direction of the Secretary.

Reburial

- Any reburial site(s) must be fully documented by an experienced and qualified archaeologist, clearly marked and all details provided to AAV; and

- Appropriate management measures must be implemented to ensure that the remains are not disturbed in the future.

Contingency 3 Dispute Resolution – CHMP Not Approved

As there is no RAP appointed for the activity area, the Sponsor applied to the Secretary (DPCD) for approval of this CHMP (Appendix 1).

If the Secretary (DPCD) does not approve this CHMP under Section 65(2) of the *Aboriginal Heritage Act* 2006, then the Sponsor may apply to the Victorian Civil Administrative Tribunal (VCAT) to review the decision under Section 116(2).

An application for a review to VCAT must be made within 28 days after the later of: (1) the day on which the applicant is notified of the decision not to approve the CHMP; (2) if, under the *Victorian Civil and Administrative Tribunal Act* 1998, the applicant requests a statement of reasons for the decision, the day on which the statement of reasons is given to the applicant or the applicant is informed under section 46(5) of that Act that a statement of reasons will not be given (*Aboriginal Heritage Act* 2006: Section 116(3)).

The parties to a proceeding in VCAT under Section 116(2) will be the sponsor and the Secretary (DPCD; *Aboriginal Heritage Act* 2006: Section 117(2)).

Under Section 118 of the *Aboriginal Heritage Act* 2006*,* VCAT has the power to: approve the CHMP, approve the CHMP with amendments, or refuse to approve the CHMP. Before approving a CHMP, VCAT must be satisfied that the CHMP makes sufficient provision for the activity to avoid harm to Aboriginal cultural heritage or where harm cannot be reasonably avoided, harm is minimised (*Aboriginal Heritage Act* 2006: Section 120).

Contingency 4 Dispute Resolution – Implementation of the CHMP or Conduct of the Activity

As a RAP is not responsible for evaluating this CHMP, there can be no dispute between the RAP and the Sponsor in relation to what is agreed to in the implementation of the CHMP or the conduct of the activity.

Contingency 5 Reviewing Compliance with this CHMP and Mechanisms for Remedying Non-Compliance

Review of this CHMP can be undertaken at any time by project delegates representing the Sponsor and AAV or an agreed independent reviewer to ensure that all parties are complying with the terms of this CHMP. Appendix 6 presents a checklist to assist in this aim. Under section 81 of the *Aboriginal Heritage Act* 2006, the Minister may order a cultural heritage audit to be carried out if there is reason to believe that the sponsor has contravened, or is likely to contravene, the recommendations contained in this CHMP.

The implications and penalties for not complying with this CHMP are presented in Appendix 5 (Summary of Legislation).

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APPENDIX 1
NOTICE OF INTENTION TO PREPARE A MANAGEMENT PLAN

Our Ref: 95-45-180

Date: 11/10/2010

«Owner_Details»

CARDINIA

Dear Sir/Madam,

RE: GLISMANN ROAD STRUCTURE PLAN
CULTURAL HERITAGE MANAGEMENT PLAN (CHMP) STANDARD ASSESSMENT

Cardinia Shire has commissioned a Cultural Heritage Management Plan for the Glismann Road Structure Plan, to be carried out by Tardis Enterprises Pty Ltd under the direction of Andrea Murphy.

As required under the Aboriginal Heritage Act 2006, please find attached a copy of the notice of intent to prepare the Cultural Heritage Management Plan.

The Cultural Heritage Management Plan comprises a two-stage study:

- Stage One: Desktop and Standard assessment, involving the compilation of existing data and field survey of the ground surface of the precinct.
- Stage Two: Complex assessment, which is a detailed investigation of the area including sub-surface testing of areas likely to contain Aboriginal cultural heritage items, as well as development of a management plan. This stage may not be necessary and you will be advised if access is required.

Tardis will be visiting properties in the Glismann Road Structure Plan area from the date of this letter to the end of October 2010. They may approach you about gaining access to your land as part of the project, which is being undertaken on behalf of Council in accordance with legislative requirements.

If you have any queries, please contact me on 5945 4438 or at d.lussier@cardinia.vic.gov.au.

Yours Sincerely,

Donnie Lussier
Strategic Planner

INVESTOR IN PEOPLE

Cardinia Shire Council
ABN 32 210 906 807
Municipal Offices
Henty Way
Pakenham

PO Box 7
Pakenham 3810
(DX 81006)

Tel 1300 787 624
Fax (03) 5941 3784
Email mail@cardinia.vic.gov.au
Website www.cardinia.vic.gov.au

Notice of Intent to prepare a Cultural Heritage Management Plan for the purposes of the *Aboriginal Heritage Act* 2006

This form can be used by the Sponsor of a Cultural Heritage Management Plan to complete the notification provisions pursuant to s.54 of the *Aboriginal Heritage Act* 2006 (the "Act").

SECTION 1 – Sponsor Information

Name of Sponsor: Cardinia Shire Council

Business Name: Cardinia Shire Council (Donald Lussier - Strategic Planner)

Postal Address: PO Box 7, Pakenham, Vic, 3810

Telephone Number: 03 5945 4438 Fax number: 03 59413784

Mobile: NA

Email Address: d.lussier@cardinia.vic.gov.au

SECTION 2 – Description of proposed activity and location

- Provide a project name: Glismann road Structure Plan, Beaconsfield
- List the relevant municipal district/s (ie. Local Council or Shire): Cardinia Shire Council
- Clearly identify the proposed activity for which the cultural heritage management plan is to be prepared (ie. mining, road construction, housing subdivision):
  Residential subdivision
- Clearly identify the area (such as listing cadastral information, attaching a copy of a title search, or indicating the street address):
  Land bound by Old Princes Hwy, Lyle Ave and O'Neil Road. Map Attached
- **Attach a map** (to scale, with a north arrow and indicating the municipal district - if any) that clearly identifies the area and boundaries in respect of which the cultural heritage management plan is to be prepared.
  - Please ensure the map refers to existing roads and features, rather than proposed roads and features.
  - Please ensure the map has the activity area outlined on it.
  - The map should have a legend, north arrow, scale, at least 3 readily identifiable geographical locations (such as road intersections, parcel boundaries, or road/river crossings), and should state the map's projection.

SECTION 3 – Cultural Heritage Advisor

If you would like a Cultural Heritage Advisor (a person who has the qualifications or experience [or both] required under section 189 of the Act) notified of the status of this Cultural Heritage Management Plan, please provide the following details for that person:

Andrew Morris	Tardis Enterprises Pty Ltd	amorris@tardisenterprises.com.au
Name	*Company (if any)*	*Email address*

SECTION 4 – Expected start and finish date for the cultural heritage management plan

Start date: 21.09.2010 Finish date: 30.11.2010

SECTION 5 – Why are you preparing this Cultural Heritage Management Plan?

☐ A Cultural Heritage Management Plan is required by the Aboriginal Heritage Regulations 2007

What is the High Impact Activity listed in the regulations? _____

Is any part of the activity in an area of cultural heritage sensitivity, as listed in the regulations? **YES / NO**

Please Circle

☑ Other reasons (Voluntary)

☐ An Environmental Effects Statement is required

☐ A Cultural Heritage Management Plan is required by the Minister for Aboriginal Affairs

SECTION 6 – List the relevant registered Aboriginal parties (if any)

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

NA

SECTION 7 – Signature of Sponsor

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

Signed: _____ Date: 21/09/10

[Sponsor or assign]

SECTION 8 – Notification Checklist

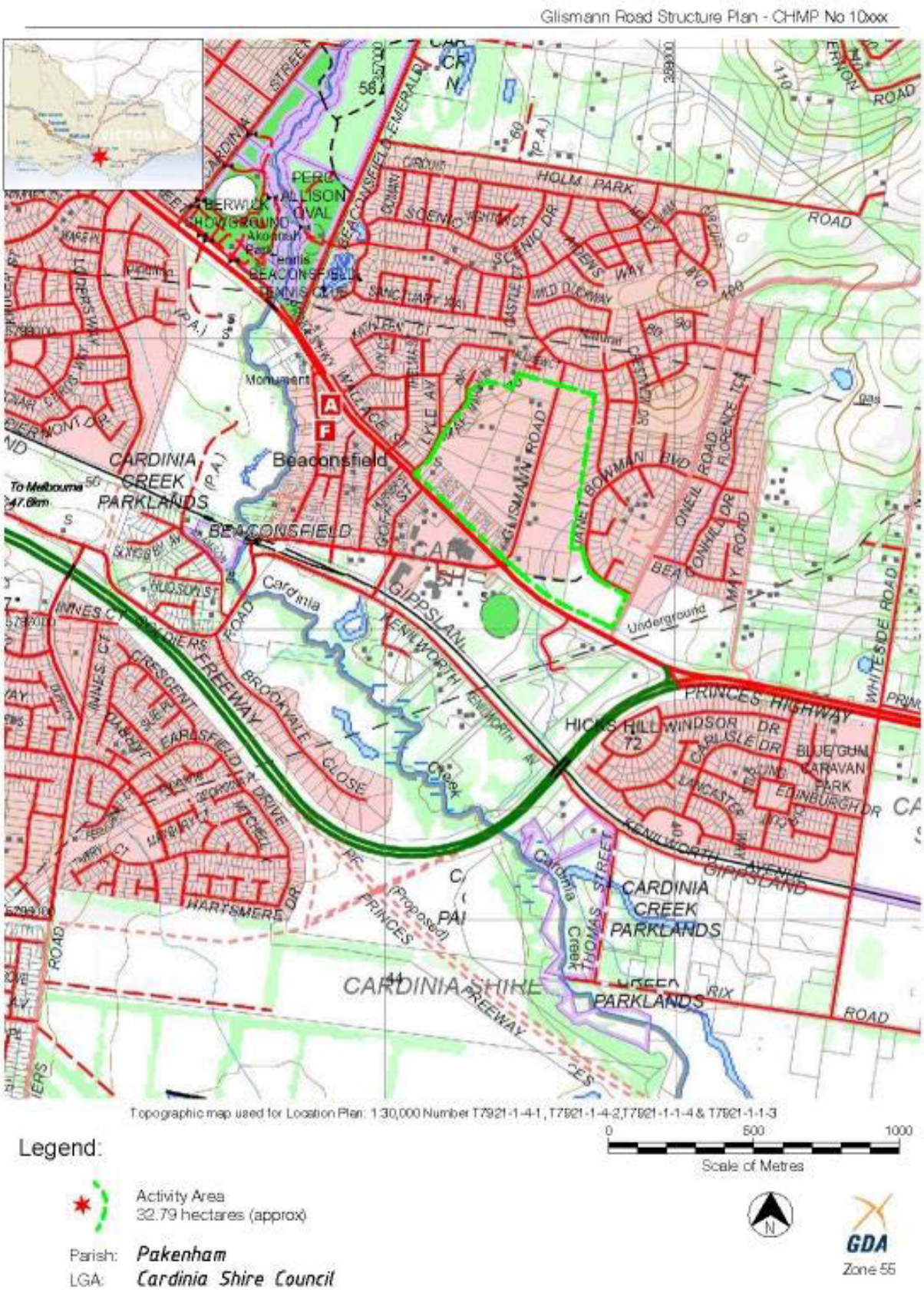
☑ Ensure appropriate attachment/s are completed and attached to this notification (see section 2 of this form).

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

Deputy Director
Aboriginal Affairs Victoria
Department of Planning and Community Development
GPO Box 2392
MELBOURNE VIC 3001

Notes:

- **Ensure that any relevant registered Aboriginal party/s 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 evaluate the management plan)**
- **In addition to notifying the Deputy Director and any relevant registered Aboriginal party/s, a sponsor must also notify any owner and/or occupier of any land within the area to which the management plan relates. A copy of this notice may be used for this purpose.**



Map 1 Activity Area Location

(Melway Ref: 214 A1)

Tardis Enterprises Pty Ltd, ***archaeologists & heritage advisors***

Glismann Road Structure Plan - CHMP No 10xxx

Aerial Photograph Courtesy of DSE Website

Legend:

Activity Area
32.79 hectares (approx)

0 50 100 150 200
Scale of Metres

N

GDA
Zone 55

Map 2 Aerial 2006

(Melway Ref: 214 A1)

Tardis Enterprises Pty Ltd, *archaeologists & heritage advisors*

APPENDIX 2
NOTIFICATION OF THE CHMP NUMBER

Gmail by Google

Andrew Morris <amorris@tardisenterprises.com.au>

Notice of Intent to Prepare CHMP

1 message

Liz.Kilpatrick@dpcd.vic.gov.au <Liz.Kilpatrick@dpcd.vic.gov.au> **Mon, Oct 4, 2010 at 11:17 AM**
To: d.lussier@cardinia.vic.gov.au, amorris@tardisenterprises.com.au, darren@wurundjeri.com.au, info@wurundjeri.com.au

To whom it may concern,

This email is the formal response. This is an automated response indicating that, on 22-Sep-2010, the Secretary, Department of Planning and Community Development received a Notice of Intent to Prepare a Cultural Heritage Management Plan (CHMP) for:

Cardinia Shire Council - Subdivision - Glismann Rd, Beaconsfield

The notification has been allocated the AAV Project Number:

CHMP Plan ID. 11452

Please quote this number when making any future enquires to AAV 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 CHMP (if you have not already done so). Further information about registered Aboriginal parties can be found at:

http://www1.dpcd.vic.gov.au/aav/heritage/registered

Please do not reply to this email.

APPENDIX 3 GLOSSARY

TYPES OF ABORIGINAL ARCHAEOLOGICAL SITES

Artefact Scatter: A surface scatter of stone artefacts is defined as being the occurrence of five (5) or more items of cultural material within an area of about 100 square metres (AAV 1993). Artefact scatters are often the only physical remains of places where Aborigines have camped, prepared and eaten meals and worked stone material.

Burials: Burial sites may occur in association with campsites, in mounds or shell middens or in specific burial grounds that lack any other cultural material. Softer ground was chosen for burials, and any sandy area can be expected to contain burials. Burial sites can contain one or a number of individuals. Burials sites and cemeteries are a common archaeological site type in the sand country adjoining the Murray River, though are a rare feature in the southern part of Victoria.

Ceremonial Site: An area used as a meeting place where large groups gathered for feasts, ceremonies or settlement of disputes, but they are difficult or impossible to identify from material evidence. In some instances they are mentioned in historical sources, or may be known to Aboriginal people through oral tradition. These sites will be highly significant to Aboriginal communities.

Contact Site: These are sites relating to the period of first contact between Aboriginal and European people. These sites may be associated with conflict between Aborigines and settlers, mission stations or reserves, or historic camping sites. The artefact assemblage of contact sites will often include artefacts manufactured from glass.

Grinding Grooves: These sites generally occur on sandstone outcrops and to a lesser extent granite outcrops and result from the sharpening of ground stone hatchets/axe heads. Grinding grooves are often located on prominent hilltops.

Hearth: Usually a sub-surface feature found eroding out of a river or creek bank or in a sand dune – it indicates a place where Aboriginal people cooked food. The remains of a hearth are usually identifiable by the presence of charcoal and sometimes clay balls (like brick fragments) and hearth stones. Remains of burnt bone or shell are sometimes preserved within a hearth.

In Situ: Refers to cultural material that is discovered as being undisturbed and considered to be in its original context. That is, material which, when identified is considered to be in the same location when the site was abandoned.

Isolated Artefact Occurrence: An isolated artefact is defined as being the occurrence of four (4) or less items of cultural material within an area of about 100 metres (AAV 1993: 1). It/they can be evidence of an ephemeral (or one off) activity location, the results of an artefact being lost or discarded during travel or evidence of an artefact scatter which is otherwise obscured by poor ground surface visibility.

Midden Sites: 'Midden' is a term borrowed from the Danish. It originally applied to the accumulations of shell and other food remains left by Mesolithic man in that country. Australian Midden sites are an accumulation of hearth and food debris, which has built up a deposit on the ground surface over a length of time. Middens are generally comprised of charcoal and either freshwater or coastal shell species, depending on the site's location. Midden sites may also contain stone artefacts, and the food refuse of other native animals such as small mammals. Their thick deposit of burnt shells and dark grey/black deposit can distinguish midden sites within the landscape. Coastal shell middens are often found in close association with rock platforms. Freshwater shell middens are found in close proximity to areas that provided freshwater mussels.

Mound Sites: Mound sites are accumulation of hearth (fire place) debris, which has over time built a thick deposit on the ground's surface. Mounds are generally comprised of charcoal; burnt clay balls and burnt food refuse such as native animal bones. Mound sites may also contain stone artefacts. On rare occasions mound sites may also contain human burial remains. Mound sites can be distinguished in the landscape by their characteristic dark grey/black deposit and height above surrounding land. Mounds that have been utilised over long periods can obtain dimensions of over 100 metres in length and 1 metre in height. Mound sites are generally situated close to major streams, and large water bodies. In times of flood, mound sites are often become marooned, and provide dry land points from which surrounding resources could have been exploited.

Rock Shelter/Cave: These are sites that are located within a rock shelter/overhang or caves. The archaeological deposits within such sites can vary considerably but are often predominantly lithic. Depending on their location, the archaeological deposit may also include midden deposits of shellfish, fish or terrestrial fauna. Due to the often undisturbed deposits at these sites, they are potentially very valuable sites and are generally considered of high scientific significance. Instances where rock shelter sites also possess art work on the stone walls are considered as rock shelter/art site combined.

Rock Wells: Rock Wells are natural cavities in rock outcrops that hold water. They are characterised by relatively narrow openings that limit evaporation. These water sources were commonly known to Aboriginal people and were kept clean and maintained by them. Since they are natural features, they are difficult to identify as Aboriginal sites. The most reliable indicator is the existence of a strong local oral tradition of Aboriginal use.

Scarred Tree: Scars on trees may be the result of removal of strips of bark by Aborigines for the manufacture of utensils, canoes or for shelter; or resulting from small notches chopped into the bark to provide toe and hand holds for climbers after possums, koalas and/or views of the surrounding area. A scar made by humans as opposed to naturally made by branches falling off, *etc*. is distinguished by the following criteria: symmetry and rounded ends, scar does not extend to the ground, some re-growth has occurred around the edges of the scar, and no holes or knots present in the heartwood.

Stone Arrangements: These sites are specifically patterned rocks located on the ground's surface. It is often difficult to identify these sites within the field and even more difficult to define their function unless Aboriginal oral tradition exists.

ABORIGINAL ARTEFACT TYPES

Anvil: A portable flat stone, usually a river pebble, which has been used as a base for working stone. Anvils that have been used frequently have a small circular depression in the centre where cores were held while being struck. An anvil is often a multifunctional tool used also as a grindstone and hammer stone.

Artefact: Any product made by human hands or caused to be made through human actions.

Axe: A stone artefact that has been ground on one or more sides to produce a sharp edge.

Backed Blade (Geometric Microlith): A blade flake that has been abruptly retouched along one or more margins opposite an acute (sharp) edge. Backed pieces include backed blades and geometric microliths. Flakes that have been backed along one lateral margin and that come to a point at their distal end; they have a length of less than 80mm and are asymmetrical around the longitudinal axis. They are thought to have been hafted onto wooden handles to produce composite cutting tools or spears. Backed blades are a feature of the 'Australian Small Tool

Tradition' dating from between 5,000 and 1,000 years ago in southern Australia (Mulvaney 1975).

Bipolar: A core or a flake, which, presumably, has been struck on an anvil. That is, the core from which the flake has been struck has been rotated before the flake has been struck off. Bifacial platforms tend to indicate that the flake has come off a heavily worked core.

Blade: A long parallel sided flake from a specially prepared core. Blade flakes are twice as long as they are wide.

Broad Platform: This a term used to describe the shape of the platform on a flake. A broad platform is wider than the body of a flake. Broad platform flakes are produced when flakes are struck off back from the edge of the platform on a core.

Broken Flake: Defined by the part of the flake remaining, i.e. proximal (where the platform is present), medial (where neither the platform nor termination is present), or distal (where the termination is present).

Bulb of Percussion: This is the conchoidal protuberance (percussion rings) formed under the point of impact when a flake is struck off the core.

Burin: A truncated flake (truncated either by snapping or retouch) whose resulting flat end is used as a platform from which to strike a single flake from one of its corners, forming a triangular scar that runs down the margin of the original flake. This forms a chisel-like working edge.

Complete Flake: An artefact exhibiting a ventral surface (where the flake was originally connected to the core), dorsal surface (the surface that used to be part of the exterior of the core, platform, termination and bulb of percussion.

Core: An artefact from which flakes have been detached using a hammer stone. Core types include blade, single platform, multi-platform and bipolar forms. These artefacts exhibit a series of negative flake scars, each of which represents the removal of a flake.

Core Types:
Unidirectional cores – These cores have scars originating from a single platform, and all the flakes struck from the core have been struck in the same direction from that platform.
Bi-directional cores – These cores have two platforms, one opposite the other; flakes have been struck from each of the platforms, and thus from opposite directions.
Bifacial cores – These kinds of core have a single platform, but the flakes struck from it have been detached from two core faces.
Multidirectional cores – These cores have two or more platforms and there is no clear pattern, either in the orientation of the platforms or in the orientation of the scars resulting from the striking of flakes from those platforms.
Bipolar Core – Nodules or cobbles that are flaked using an anvil. The resulting artefacts exhibit crushing on their proximal, distal and often their lateral margins, where they have been rotated.

Cortex: Original or natural (non-flaked) surface of a stone.

Flaked Piece/Waste Flake/Debitage: A piece of stone with definite flake surfaces that cannot be classified as a flake or core. These artefact types are generally refuse materials discarded during the working of stone material.

Focal Platform: This is a term used to describe the shape of the platform on a flake. A focal platform is narrower than the body of the flake. Focal platform flakes are produced when flakes are struck off near the edge of the platform on a core.

Geometric Microlith: Artefacts less than 80mm in maximum dimension which are backed at one or their end, sometimes at both ends, and sometimes on one lateral margin as well, the result being a form that is symmetrical around its transverse axis.

Hammerstone: A cobble or cobble fragment exhibiting pitting and abrasion as a result of percussion.

Implement: A general term for tools, weapons, *etc*. made by people.

Lithic: Anything made of stone.

Microlith: Small (1-3cm long) stone tools with evidence of retouch that includes 'Bondi Points', segments, scrapers, backed blades, triangle and trapezoid.

Mortar: The lower stone associated with grinding plants for food and medicine and/or ochre for painting. These stones are usually large and flat, and when well used show deep grooves from repeated grinding.

Notched tool: Flakes that exhibit a small area of retouch, forming a concave edge, on their lateral or distal margins.

Pestle: The "upper stone", used to grind plants for food and medicine and/or ochre for painting. A pestle stone often doubles as a hammer stone and/or anvil

Piercer: Artefacts with projections that have been created by retouch and extend up to 15mm beyond the body of the flake.

Primary Flake: The first flakes struck off a core in order to create a platform from which other flakes can then be struck.

Scraper: A flake with one or more margins of continuous retouch used as a tool for scraping.

Secondary Flaking/Retouch: Secondary working of a stone artefact after its manufacture. This was often done to re-sharpen stone tools after use, or in the production of formal tool types such as blade flakes and scrapers.

Thumbnail Scraper: A small flake with a convex scraper edge shaped like a thumbnail and located opposite the flake's platform.

OTHER TERMS

Archaeological Site: A place/location of either Aboriginal or non-Aboriginal origin. Aboriginal archaeological sites have been formed prior to the European settlement of Australia, and may be in any of the forms outlined in section 1. It should be noted that the nomenclature for Aboriginal cultural heritage values on the VAHR is 'Places' (e.g. VAHR Place 7822-1234).Under Section 5 of the *Aboriginal Heritage Act* 2006, an Aboriginal place is "an area in Victoria or the coastal waters of Victoria that is of cultural heritage significance to the Aboriginal people of Victoria". Under sub-section 2(d) of Section 5, 'area' includes an archaeological site, feature or deposit (e.g. artefact scatter, scarred tree, hearth, midden *etc*.). For the purposes of this CHMP, anywhere where an archaeological site, feature or deposit (or any combination of such) is, or once was located, is referred to as a 'site'. This labelling also conforms to international standards for referring to locations where cultural heritage is, or has been identified.

Artefact Horizon: A discernable horizontal distribution of artefacts within natural soil horizon. An artefact horizon has generally suffered a degree of post depositional disturbance that has affected the spatial and temporal integrity of the deposits and associated artefact assemblage.

B.P.: Before present. The 'Present' is defined as 1950.

Coffee Rock: A compacted, cemented or indurated layer within the profile that is comprised of humus and iron oxides.

Continuous Monitoring: Continuously on site during clear, cut, grade and level to record sites.

Cultural Heritage: Something that is inherited or passed down because it is appreciated and cherished. Categories of cultural heritage include; built structures and their surrounds, gardens, trees; cultural landscapes; sites; areas; precincts; cemeteries; ruins and archaeological sites; shipwrecks; sites of important events; commemorative sites; contents of buildings and significant relics, objects artefacts and collections of objects.

Cultural Landscape Integrity: The level of which the local landscape reflects the environment in which pre-contact Aboriginal people or early European settlers lived. The integrity includes all relevant aspects such as level and type of vegetation cover, hydrology, landforms and structures. A site located in a landscape of high cultural integrity has greater heritage value as it remains in context, and is therefore able to impart a greater level of information to the broader community.

Ethnography: The scientific description of living cultures.

Heritage Site: An area or region of land that represents a particular focus of past human activity or concentration of *in situ* cultural material. A heritage site includes any structures, buildings or works upon or integral with the land, and any artefacts or other physical relic associated with the land, or it may have no visible evidence of human activity, being rather the site of a past event of importance or the embodiment of a particular belief or legend. Examples might range from an Aboriginal ceremonial ground, a pioneers house and contents, a shop, the remains of an early whaling station or a recent fish farm, Captain Cook's landing place, a 40,000 year old Aboriginal campsite or a 1990s brick-veneer house, a shipwreck, an industrial or mining landscape, a bus stop, a Macassan trepanger campsite or the Surfer's Paradise Caravan Park, a garbage dump, the local war memorial, a garden, an Aboriginal rock painting or a band rotunda.

It should be noted that the nomenclature for Aboriginal cultural heritage values on the VAHR is 'Places' (e.g. VAHR Place 7822-1234).Under Section 5 of the *Aboriginal Heritage Act* 2006, an Aboriginal place is "an area in Victoria or the coastal waters of Victoria that is of cultural heritage significance to the Aboriginal people of Victoria". Under sub-section 2(d) of Section 5, 'area' includes an archaeological site, feature or deposit (e.g. artefact scatter, scarred tree, hearth, midden etc.). For the purposes of this CHMP, anywhere where an archaeological site, feature or deposit (or any combination of such) is, or once was located, is referred to as a 'site'. This labelling also conforms to international standards for referring to locations where cultural heritage is, or has been identified.

Historic Archaeological Site: These are locations where non-Aboriginal activities have occurred, and which little extant (standing) features remain. The bulk of evidence for historic occupation/utilisation is comprised of remains (artefacts/foundations etc) that are located on the ground's surface or in a sub-surface context. The primary heritage value of an archaeological site is scientific.

Historic Site: Sites/Areas that contain extant (standing) remains of pre-1950 non-Aboriginal occupation. Historic sites may or may not also contain archaeological remains (Aboriginal and/or historic).

Holocene, Recent or Postglacial Period: The time from the end of the Pleistocene Ice Age (c. 10,300 BP) to the present day.

Horizon: A term used to describe a layer of archaeological material that is *in situ*.

Integrity: The completeness of the site. Sites of high integrity will adequately demonstrate the significance of a site. Integrity is reduced by the disturbance of fabric/deposits or the introduction of unrelated materials/sediments.

0%	No Integrity
0-10%	Very Poor
11-30%	Poor
31-50%	Fair
51-75%	Good
76-95%	Very Good
96-100%	Excellent

Mechanical Salvage: Controlled mechanical removal of ground surface by excavator and trimming bucket in 5 to 10cm layers to record sites using at a minimum a handheld GPS.

Natural Soil Horizon: A stratigraphic layer formed by the laying down of deposits by environmental agents such as wind and water. These may bury human artefacts to form stratigraphic layers but do not form occupation deposits.

Obtrusiveness: refers to how conspicuous a site is within a particular landscape, and thus the possibility of positive identification within a field environment. Some site types are more conspicuous than others are. Thus a surface stone artefact scatter is generally not obtrusive, especially in areas of low ground surface visibility, while a scarred tree is (Bird 1992).

Occupation Deposit: The laying down of deposits (artefacts and/or sediments) by human activities that bury artefacts to form distinct stratigraphic entities such as layers (e.g. dense lens of stone artefacts & bone between natural soil horizons, stratified shell deposits) or features (hearths, occupation mounds). Occupation deposits have a high degree of spatial and temporal integrity.

Occupation Surface: A distinct layer or interface between depositional strata upon which human activities were carried out and artefacts/features deposited. Most commonly this may be a prior land surface (e.g. soil horizon) that has been subsequently buried by later natural soil horizons (e.g. dune deposits).

Ordovician: The geological time period dating from 439-510 million years ago.

Place: See archaeological site.

Pleistocene: The geological period corresponding with the last or Great Ice Age. The onset of the Pleistocene is marked by an increasingly cold climate, by the appearance of *Calambrian mollusca* and *Villafranchian* fauna with elephant, ox, and horse species, and by changes in foraminifera. The oldest form of man had evolved by the Early Pleistocene, and in archaeological terms the cultures classed as Palaeolithic all fall within this period. The date for the start of the Pleistocene is not well established, and estimates vary from 3.5 to 1.3 million years ago. The period ends with the final but gradual retreat of the ice sheets, which reached their present conditions around 10,300 BP.

Post-Contact Aboriginal Site: Also referred to as Historic Aboriginal Site. These are sites/localities that indicate contact has been made with European culture during the period of initial European settlement (glass in tool assemblage, massacre sites), or where activities culturally significant to Aboriginal people has occurred (camping, employment, travelling routes).

Potential: Based on collated existing data and site inspection an area or specific site may contain the potential for extant or archaeological deposits. Background research will present the most likely site types, contents and state of preservation. Relative levels of potential are described as Low (10-30% probability), Moderate (40-60% probability) and High (70% and above probability).

Raw Material: Organic or inorganic matter that has not been processed by people.

Retain Site: Site is to be retained in open space with strict management controls on the future use of the land to prevent damage to subsurface archaeological deposits. For sites rated moderate to high some of the less significant portions of the site may be destroyed in conjunction with continuous monitoring, mechanical salvage and salvage excavation.

Salvage Excavation: Salvage excavation involves controlled hand excavation to recover a representative sample of sites.

Siliciclastics: clastic non-carbonate sedimentary rocks that are almost exclusively silica-bearing, either as forms of quartz or other silicate minerals. All siliciclastic rocks are formed by inorganic processes, or deposited through some mechanical process, such as stream deposits that are subsequently lithified. They are broken from pre-existing rocks, transported elsewhere, and re-deposited before forming another rock.

Silurian: A geological time period from 408 to 439 million years ago.

Site Inspection: Weekly or fortnightly site visits during clear, cut, grade and level.

Slope Wash: A term used to describe a specific process of re-deposition of cultural material. Cultural material (most often stone artefacts) that is situated on any sloping land is vulnerable to the affects of slope wash. The term relates to the downward movement of cultural material primarily due to erosion of their original context. This downward movement is most often caused by clearing of vegetation that exposes the ground surface to the affects of water erosion. The result is that cultural material will move down the slope over a period of time. How far material may move is dependent on the gradient and the intensity of the erosion.

Stratigraphy: Layering

Use Wear: Tiny flakes or chips that have been broken off the edges of a stone artefact during use.

Visibility: Refers to the degree to which the surface of the ground can be observed. This may be influenced by natural processes such as wind erosion or the character of the native vegetation, and by land use practices, such as ploughing or grading. It is generally expressed in terms of the percentage of the ground's surface visible for an observer on foot (Bird 1992). For example 10% visibility equates to 10cm^2 per 1m^2 of ground surface that is not covered by vegetation or soil deposit. The following applies to descriptions of ground surface visibility within this report.

0%	No visible ground surface
0-10%	Very Poor
11-30%	Poor
31-50%	Fair
51-70%	Good

71-90%	Very Good
91-100%	Excellent

REFERENCES

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APPENDIX 4 CORRESPONDENCE

Date	Type	Sender	Recipient	Regarding	Action	Outcome
19.7.2010	email	Cardinia Shire Council (CSC)	Tardis	Project brief	CSC forwarded the project brief to Tardis for a fee proposal	Tardis submitted a fee proposal on 27.7.2010
27.7.2010	email	Tardis	CSC	Fee proposal	Tardis forwarded CSC a fee proposal for the project	CSC accepted the fee proposal on 20.9.2010
20.9.2010	email	CSC	Tardis	Fee proposal	CSC accepted the fee proposal from Tardis	Tardis to conduct a standard CHMP
21.9.2010	email	Tardis	CSC	Notice of Intent (NOI)	Tardis forwarded the NOI to CSC for signing	CSC signed and returned the NOI to Tardis for submission
22.9.2010	email	CSC	Tardis	NOI	CSC signed and returned the NOI to Tardis for submission	Tardis forwarded the NOI to AAV
22.9.2010	email	Tardis	AAV	NOI	Tardis forwarded the NOI to AAV	
4.10.2010	phone	Tardis	AAV	CHMP number	Tardis phoned Liz (AAV) enquiring as to the progress of the NOI and when a CHMP number may be submitted	Liz informed that a number has been allocated (11452) and that the notice of the number had been sent to the wrong person. Liz advised that she will forward the notice to Tardis.
4.10.2010	email	AAV	Tardis	CHMP number	AAV forwarded the CHMP number (11452)	Tardis to use number for CHMP
11.10.10	email	Tardis	CSC	Concept Plans & NOI to owner/ occupiers	Tardis requested activity concept plans if available	CSC phoned and advised that owner/occupier letters are being sent today (11.10.10) and tomorrow, and that no concept plans are available as it is a feasibility study at this stage

Date	Type	Sender	Recipient	Regarding	Action	Outcome
11.10.2010	Phone	CSC	Tardis	Concept Plans & NOI to owner/ occupiers	CSC phoned and advised that owner/occupier letters are being sent today (11.10.10) and tomorrow, and that no concept plans are available as it is a feasibility study at this stage	Tardis to arrange ground surface survey following owner/occupier letters being sent (survey conducted 29.10.2010)
25.10.2010	email	Tardis	WTLCCHC	Representative request	Tardis invited a representative from Wurundjeri Tribe Land Compensation and Cultural Heritage Council to attend the ground surface survey	Gary Galway attended the survey
29.10.2010	verbal	C Campbell - resident	Tardis	Inundation of low-lying areas	Cheryl Campbell (Glismann Rd Resident for 20 years) informed that the low-lying areas were inundated yearly prior to drainage works associated with residential development	Tardis to consider information in relation to the CHMP
29.10.10	verbal	G Galway (RAP applicant rep.)	Tardis	Cultural information and perceived cultural sensitivity	Gary Galway was asked for cultural information pertaining to the activity area and consulted on the sensitivity of the activity area fro the purposes of this CHMP	Gary Galway voiced his opinion that the activity area is not sensitive for potential Aboriginal cultural heritage sites

Date	Type	Sender	Recipient	Regarding	Action	Outcome
9.11.2010	email	Tardis	WTLCCHC	Cultural information specific to the activity area	Tardis requested that WTLCCHC volunteer any cultural information that may be available relating specifically to the activity area	No response
12.11.2010	email	Tardis	CSC	Draft CHMP	Draft sent to CSC for review	CSC accepted draft with minor changes on 15.11.2010
15.11.2010	email	CSC	Tardis	Draft CHMP	CSC accepted draft with minor changes	Tardis to make changes and finalise the CHMP for submission

APPENDIX 5 SUMMARY OF LEGISLATION

STATUTORY REQUIREMENTS

This section relating to the statutory requirements associated with archaeological sites has been included to inform users of this report of the legal obligations regarding heritage sites. Any breach of this legislation is cause for prosecution.

Aboriginal Heritage Legislation

The following is a summary of the *Aboriginal Heritage Act* 2006 as described in the *Aboriginal Heritage Regulations 2007 Regulatory Impact Statement*. The Act commenced operation on 28 May, 2007.

> In 2006 the Victorian Government passed the *Cultural Heritage Act* 2006, to provide more effective protection of Aboriginal cultural heritage and broaden Aboriginal community involvement in decision-making arrangements.
>
> The *Aboriginal Heritage Act* 2006:
>
> - Replaces outdated State and Federal legislation governing the protection and management of Aboriginal cultural heritage in Victoria;
> - Ensures that the protection of Aboriginal cultural heritage is an integral part of planning and land development processes;
> - Provides increased certainty for developers and land managers in relation to the types of developments that require cultural heritage management plans;
> - Establishes an Aboriginal Heritage Council, comprised of traditional owners, to provide a state wide voice for Aboriginal people in the management of cultural heritage. The council will register Aboriginal parties as cultural heritage decision makers for areas in Victoria, and advise the Minister for Aboriginal Affairs in relation to the protection of Aboriginal cultural heritage;
> - Gives Registered Aboriginal Parties responsibility for protecting and maintaining Aboriginal places and objects of cultural heritage significance within their areas, through providing cultural heritage management plans, advising on heritage permits, entering into heritage agreements and negotiating the repatriation of Aboriginal human remains;
> - Provides dispute resolution and review mechanisms through mediation and the Victorian Civil and Administrative Tribunal;
> - Provides a range of measures to improve compliance with, and enforcement of, the legislation, including cultural heritage audits, stop orders, modernised offences and penalties, and increased responsibility and accountability for inspectors;
> - Retains the power of the Minister for Aboriginal Affairs to make interim and ongoing protection declarations over significant Aboriginal places or objects;
> - Broadens Aboriginal community involvement in heritage protection to include traditional owners (The Allen Consulting Group 2007: 2-3).

Further information regarding the Act can be obtained from the AAV website at: http://www.aboriginalaffairs.vic.gov.au/

Aboriginal Heritage Regulations

Regulations have been developed to support the operation of the *Aboriginal Heritage Act* 2006. They provide further information on aspects of the Act, clarifying roles and expected standards that are required under the Act to:

- Maximise certainty about when and how to prepare a cultural heritage management plan, thereby better protecting Aboriginal cultural heritage and reducing delays to development;
- Ensure that fair payment is made for the evaluation of a cultural heritage management plan and that Government receives appropriate payment for assessing applications for permits and advice on the Register (The Allen Consulting Group 2007: 4).

The regulations also specify:

- The circumstances in which a cultural heritage management plan is required;
- The standards for the preparation of a cultural heritage management plan and for a map in a cultural heritage agreement;
- Fees for evaluating a cultural heritage management plan;
- Fees for an application for a cultural heritage permit;
- Fees for an application to the Secretary for advice as to whether a record exists on the Register in relation to a nominated area of land (The Allen Consulting Group 2007: 3).

Further information regarding the Regulations can be obtained from the AAV website at: http://www1.dpcd.vic.gov.au/aav/

In summary, All Aboriginal cultural heritage is protected under the *Aboriginal Heritage Act* 2006.

Part 4, Division 2 of the *Aboriginal Heritage Act* 2006 states that certain activities will require a Cultural Heritage Management Plan (CHMP) to be prepared. A CHMP is required for an activity if all or part of the activity area is deemed as culturally sensitive and that the activity is of high impact to the area. High impact activities are described in the *Aboriginal Heritage Regulations* 2007 Part 2, Division 5 and include utility installation (regulation 43(1)(a)(b)(xxiii)).

If the activity is not in a sensitive area or is not a high impact activity, the proponent may prepare a voluntary CHMP. A voluntary CHMP will instruct on appropriate management of any cultural material found during works regardless of whether the works are within or outside of a legislated Aboriginal cultural heritage sensitive area. The benefit of voluntary CHMPs is that they avoid potential delays of acquiring a Cultural Heritage Permit (CHP). CHPs are required if an activity that is not a high impact activity as described in the *Aboriginal Heritage Regulations* 2007 will harm, or is likely to harm, Aboriginal cultural

heritage and can be applied for from the Department of Planning and Community Development (DPCD). This process can take over 30 days to finalise.

APPENDIX 6 CHECKLIST

CHECKLIST FOR COMPLIANCE WITH CHMP 11452			
Recommendations:		Yes	No
1	Have the recommendations been followed?		
Discovery of cultural material:			
2	Has all activity within 5m ceased?		
3	Has the Heritage Advisor been advised?		
4	Has the find/s been left in place?		
5	Has the find/s been protected (e.g. with fencing) if required?		
6	In relation to suspected human remains, has the Coroner's Office been notified?		
7	Has an appropriate mitigation/salvage strategy been developed?		
8	Has the mitigation/salvage works been implemented?		
9	Have the salvaged finds/remains been treated in accordance with the direction of the RAP?		
Reburial:			
10	Has a suitably qualified archaeologist and physical anthropologist been engaged to fully document the remains and reburial?		
11	Has the reburial site been clearly marked?		
12	Have all details been provided to AAV?		
13	Has a strategy been developed to ensure no further disturbance will occur to the remains (such as Section 173 in the Planning and Provision Act)?		
Changes to Activity:			
14	Has statutory approval been obtained for any changes to the activity?		

APPENDIX 7 CULTURAL HERITAGE ADVISORS' CURRICULUM VITAE'S

ANDREA MURPHY
cultural heritage consultant

AWARDS

Winner of the 2003 UNESCO Asia-Pacific Cultural Heritage Conservation Award

QUALIFICATIONS

Bachelor of Arts (Prehistory) – La Trobe University

Masters Preliminary of Arts (Historic Archaeology) – La Trobe University

AFFILIATIONS

Member of:
Australian Society of Historic Archaeology

Australian Association of Consulting Archaeologists (Office Bearer)

Australian Anthropological and Archaeological Society

Historic Gardens Society

National Trust

Royal Historical Society

Andrea Murphy is a Senior Cultural Heritage Consultant with extensive experience and qualifications in both indigenous and non-indigenous cultural heritage assessment and management, including EES and EIS projects, major urban excavations, desktop assessments, site survey, excavation, monitoring and production of site management strategies. Andrea has been the manager of Tardis Enterprises Pty Ltd, cultural heritage consultants for over 10 years and a heritage professional for more than 20 years. Andrea has personally authored more than 350 cultural heritage assessment reports.

RECENT RELEVANT EXPERIENCE

MAJOR CULTURAL HERITAGE PROJECTS IN VICTORIA

- Pipeline Routes
- Telco Cable Routes
- Road and Highway/Freeway Infrastructure
- Rail Infrastructure – Urban and Regional Fast Rail
- Urban Developments
- Waterway Rehabilitation Works
- Wind Farms
- Archaeological Excavations
- Local Government Advisor and Project Manager
- Defence Advisor and Project Manager
- Parks Advisor and Project Manager

DALE OWEN
cultural heritage consultant

QUALIFICATIONS

Bachelor of Archaeology, Honours – La Trobe University, 2006

Victorian Construction Industry Induction – Red Card

AFFILIATIONS

Member of:

Australian Archaeological Association

The Archaeological and Anthropological Society of Victoria

Dale Owen is an archaeologist having graduated with an Honours Degree in Archaeology*. Dale has extensive experience in excavation, survey, archaeological testing, archaeological research, and artefact analysis. Dale has been actively involved in cultural heritage fieldwork and laboratory work from 2002 to the present. Dale has previously worked with the Archaeology Department at LaTrobe University as a research assistant and has experience in managing large teams in both historic and Aboriginal cultural heritage projects. Dale has developed an array of excavation, survey and laboratory experience, having worked on projects in Tasmania, New South Wales, Victoria, Western Australia, Queensland and China.*

RECENT RELEVANT EXPERIENCE

MAJOR CULTURAL HERITAGE PROJECTS

- Toxic Harvest Research Project, Far North Queensland (2003 – 2006)
- Cloudbreak Mine Site Survey, Western Australia
- Mitcham-Frankston Freeway (Eastlink) Project, Victoria
- Herrnhut Historical Excavation, Penshurst, Victoria
- Cowpasture Road Salvage Excavation, Western Sydney
- Hunter Street Excavation, Hobart
- 'Little Lon' Excavation, Melbourne
- Cuddie Springs Excavation, New South Wales
- Lancefield Swamp Excavation, Victoria
- Armistead Archaeological Project, Sheffield, Tasmania
- Titans Rock Shelter Excavation, South West Tasmania
- St Philips Church Excavation, Melbourne
- Port Arthur Historic Site Excavation, Tasmania
- College of Surgeons Excavation, Melbourne
- Chinese Bronze Age Stone Spade Research Project
- 'The Sisters' Aboriginal and Historic Site Excavations, Sorrento
- Macarthur Wind Farm Project, Western Victoria
- Lion Mountain Rock Shelter Excavation, Far North Queensland

SUMMARY OF EXPERIENCE

- Site Survey, Excavation and Recording
- Archaeological Fieldwork Supervision
- Archaeological Testing
- Archaeological Photography, Planning & Mapping
- Artefact Conservation, Cataloguing & Analysis
- Archaeological Background Research
- Excavation & Analysis of Faunal Assemblages
- Excellent Written & Communication Skills
- High Level of Computer Literacy

APPENDIX 8 FIGURES

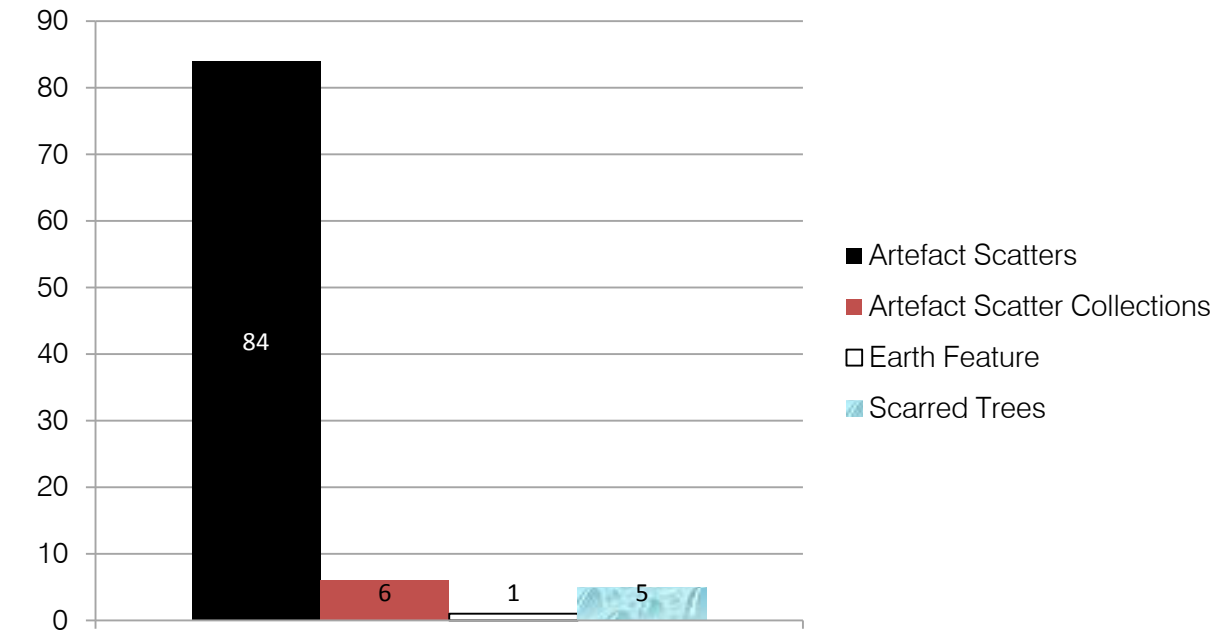


Figure 1 Site Types within 5km of the Activity Area

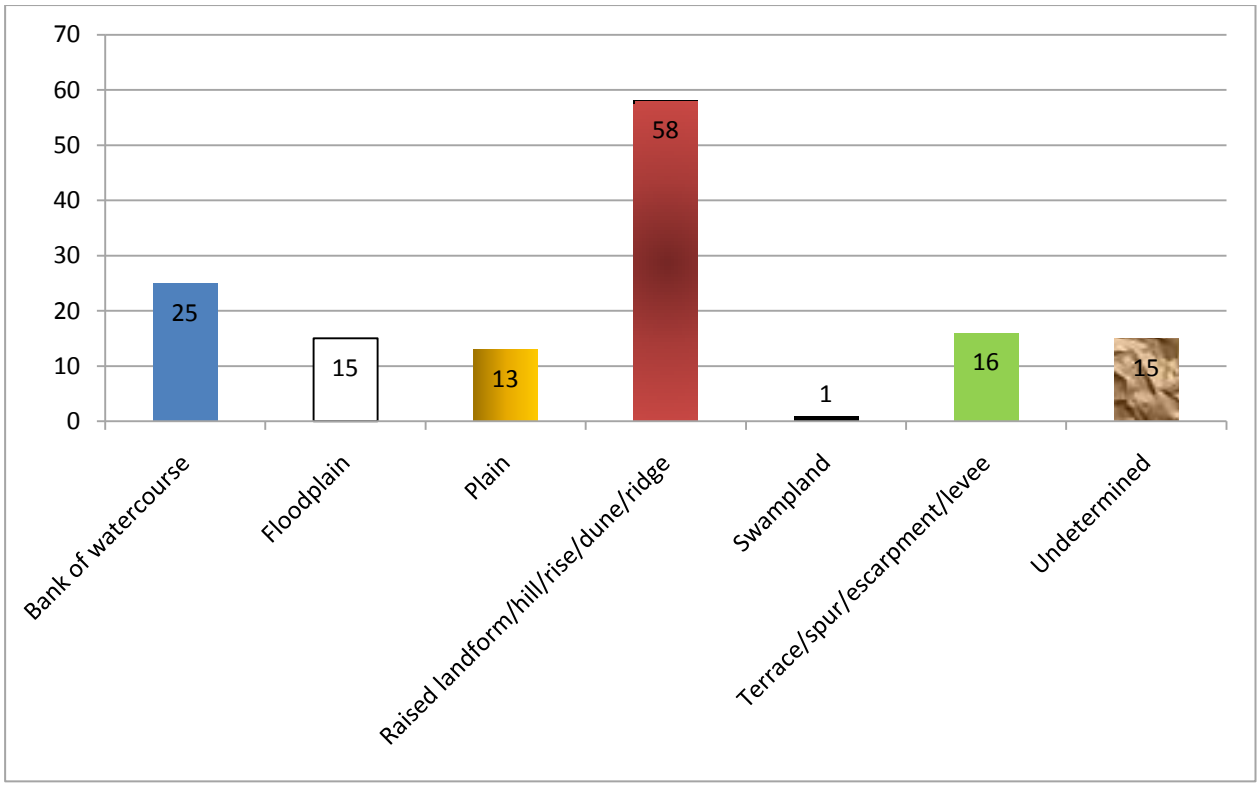


Figure 2 Landforms of Previously Recorded Aboriginal Sites in the Broader Region

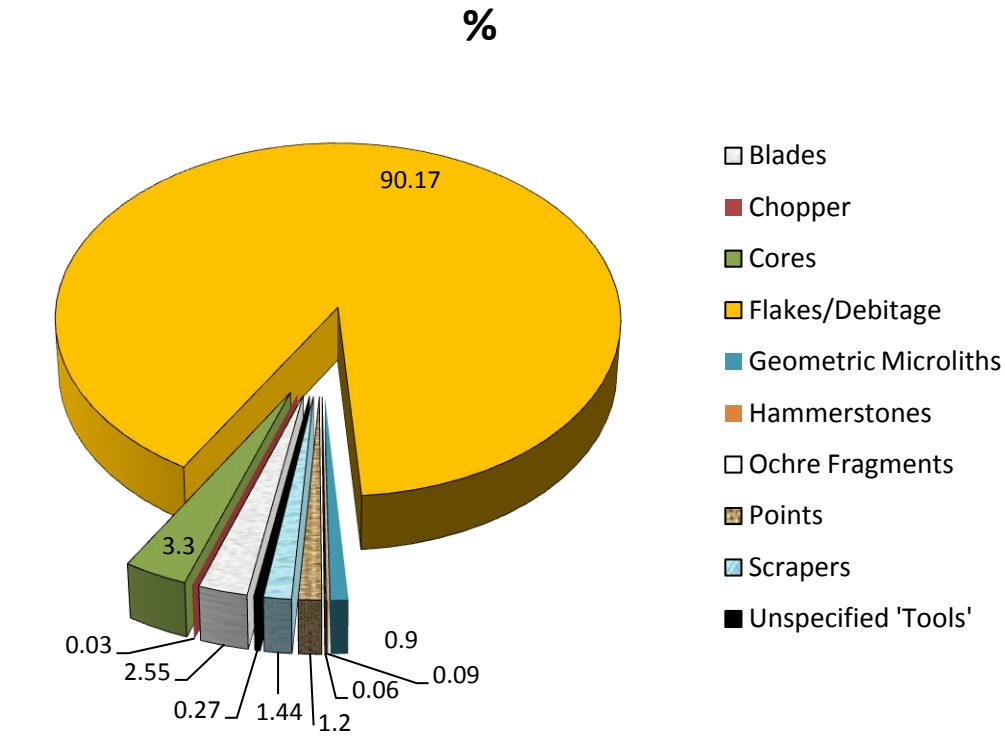


Figure 3 Artefact Types within Sites in the Broader Activity Area Region

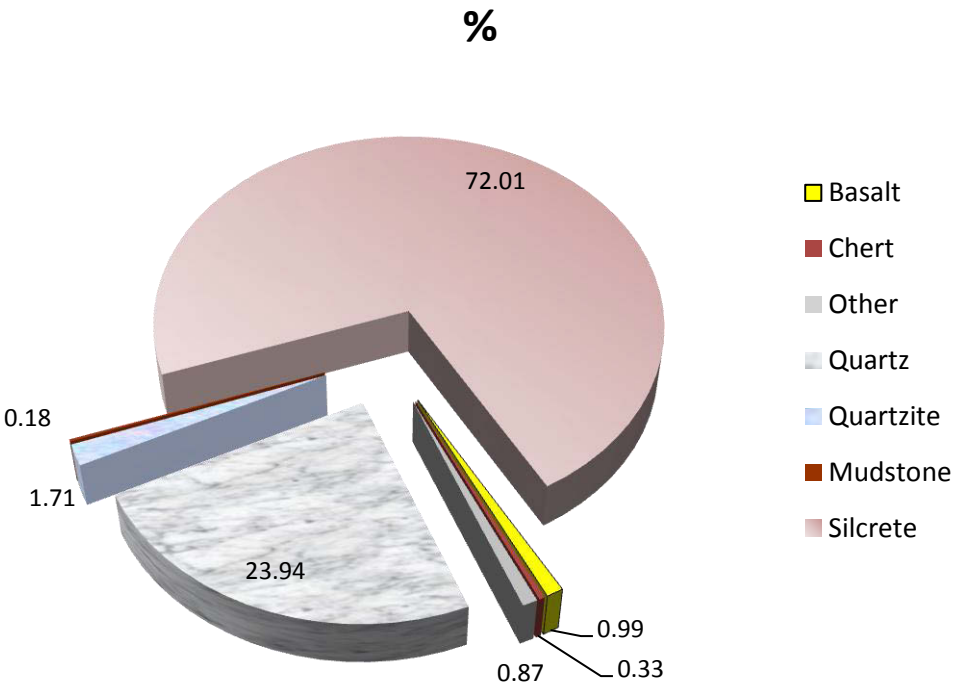
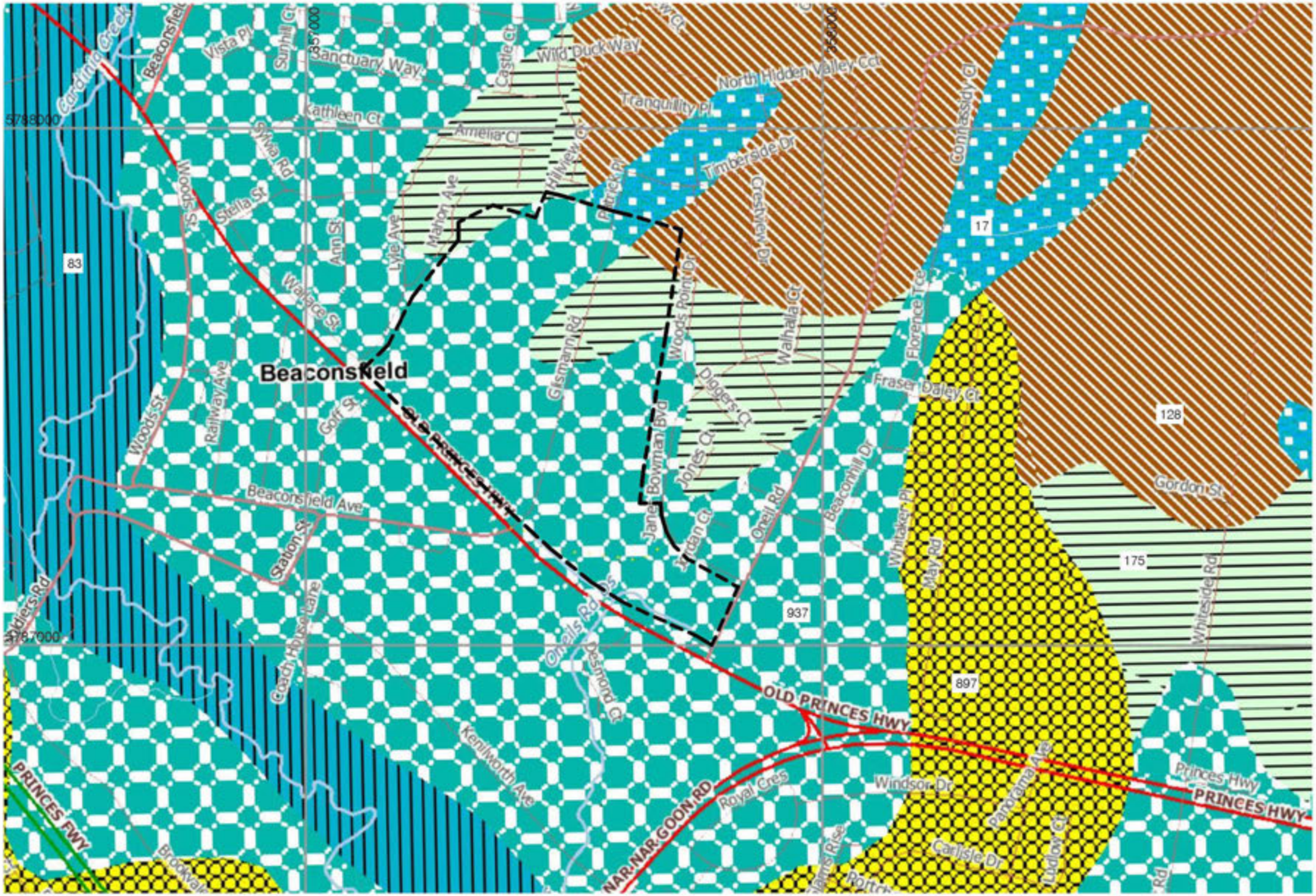


Figure 4 Materials of Artefacts from Sites in the Broader Activity Area Region



Legend:

Denotes Activity Area

83	Swampy Riparian Scrub/Swampy Riparian Woodland Complex	897	Plains Grassyland/Plains Grassy Woodland Mosaic
937	Swampy Woodland	175	Grassy Woodland
128	Grassy Forest	17	Riparian Scrub/Swampy Riparian Woodland Complex

0 250 500

Scale of Metres

GDA

Figure 5 1750 Ecological Vegetation Classes within the Activity Area

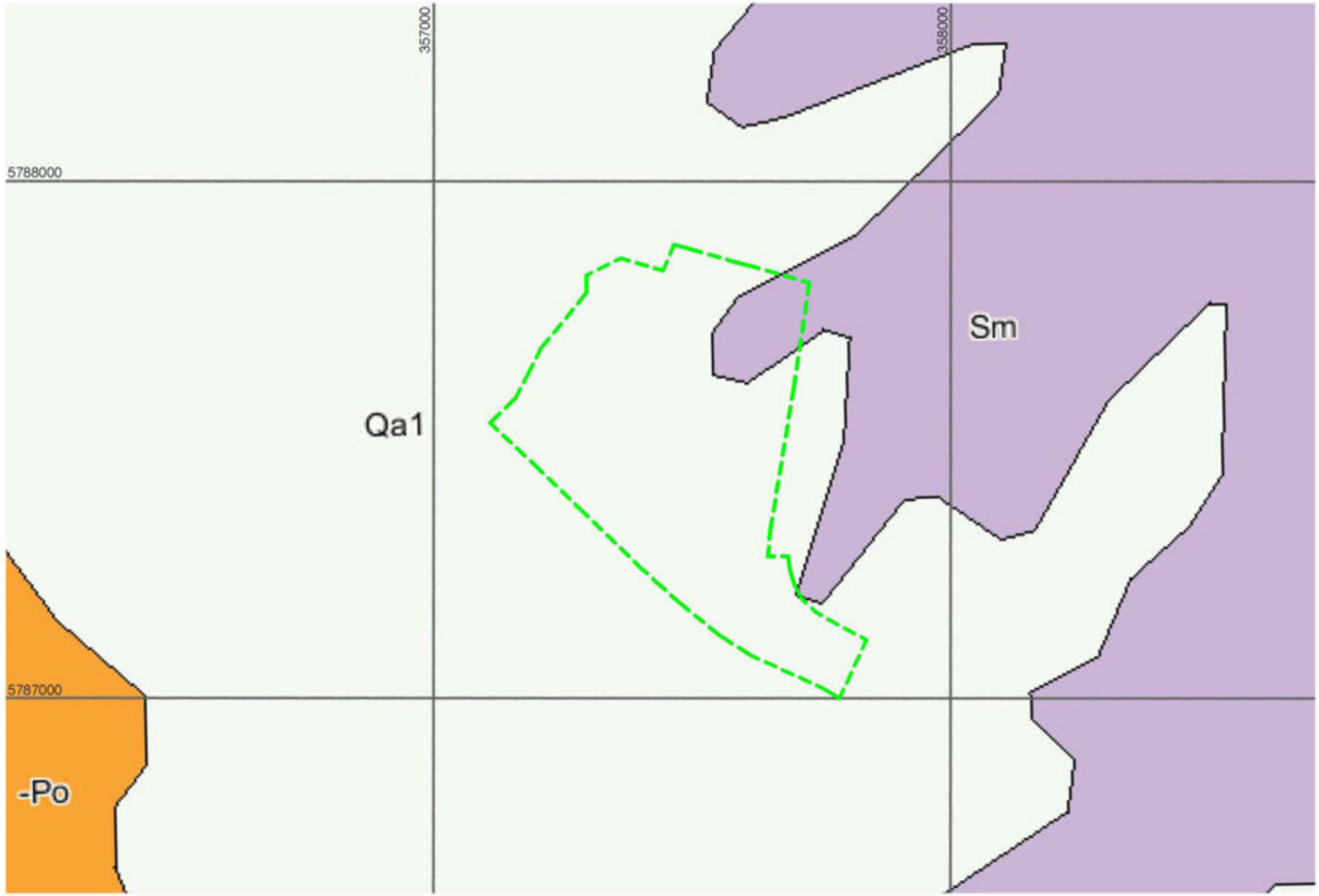


Figure 6 Geology of the Activity Area

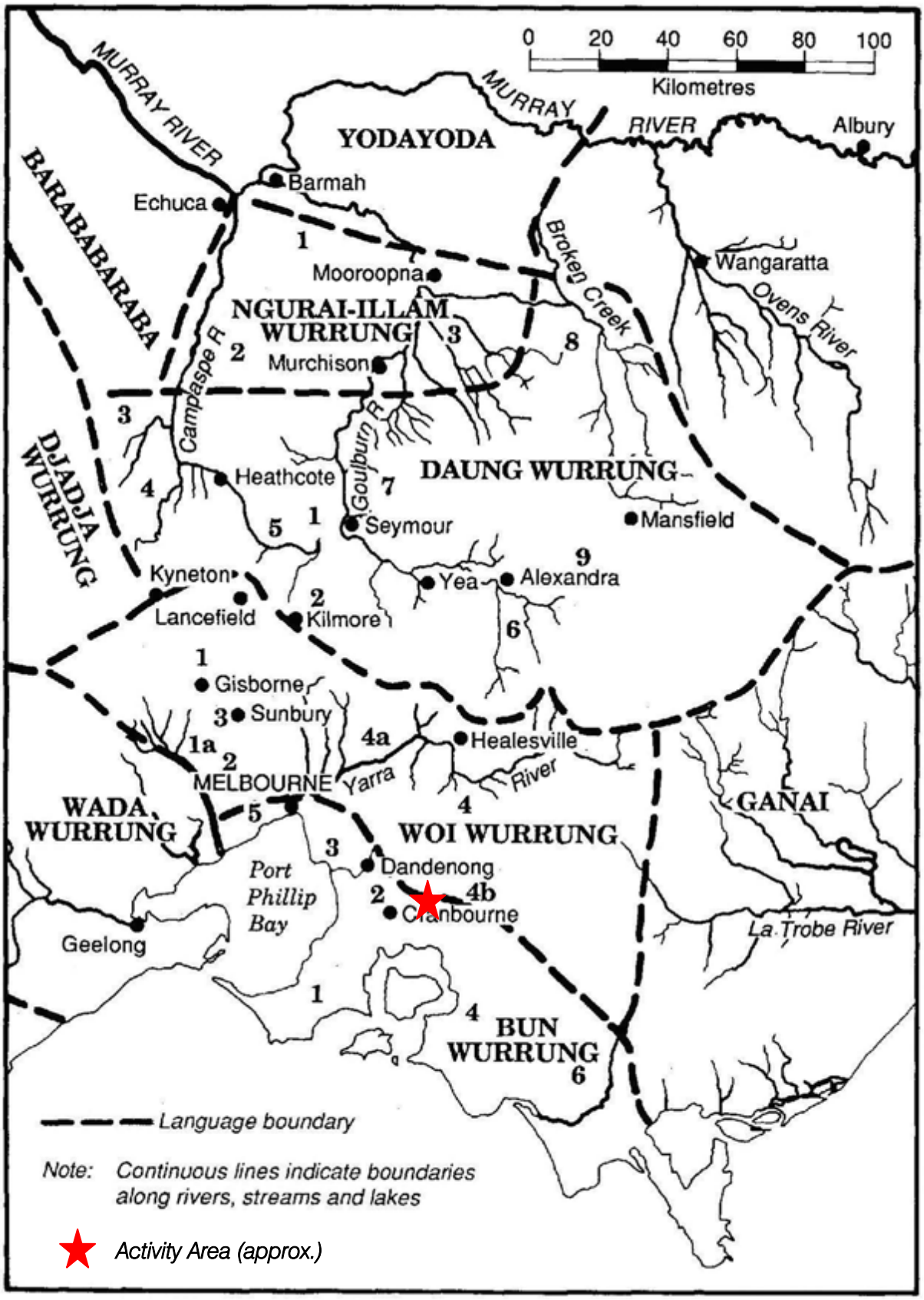


Figure 7 Pre-Settlement Aboriginal Language and Clan Areas (Clark 1990: 364)

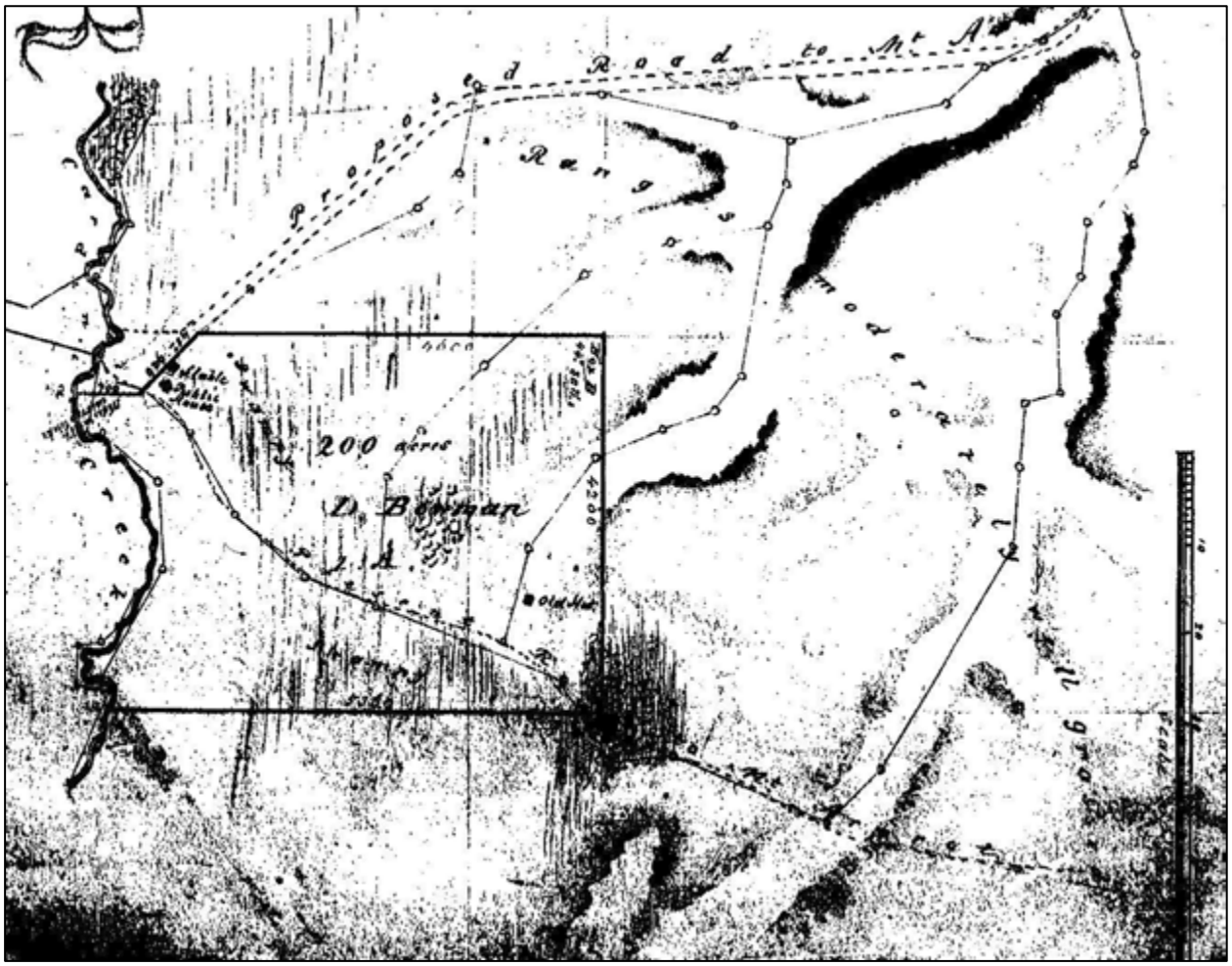


Figure 8 1858 Survey of David Bowman's 200 Acres (PR P 36 – Callanan)

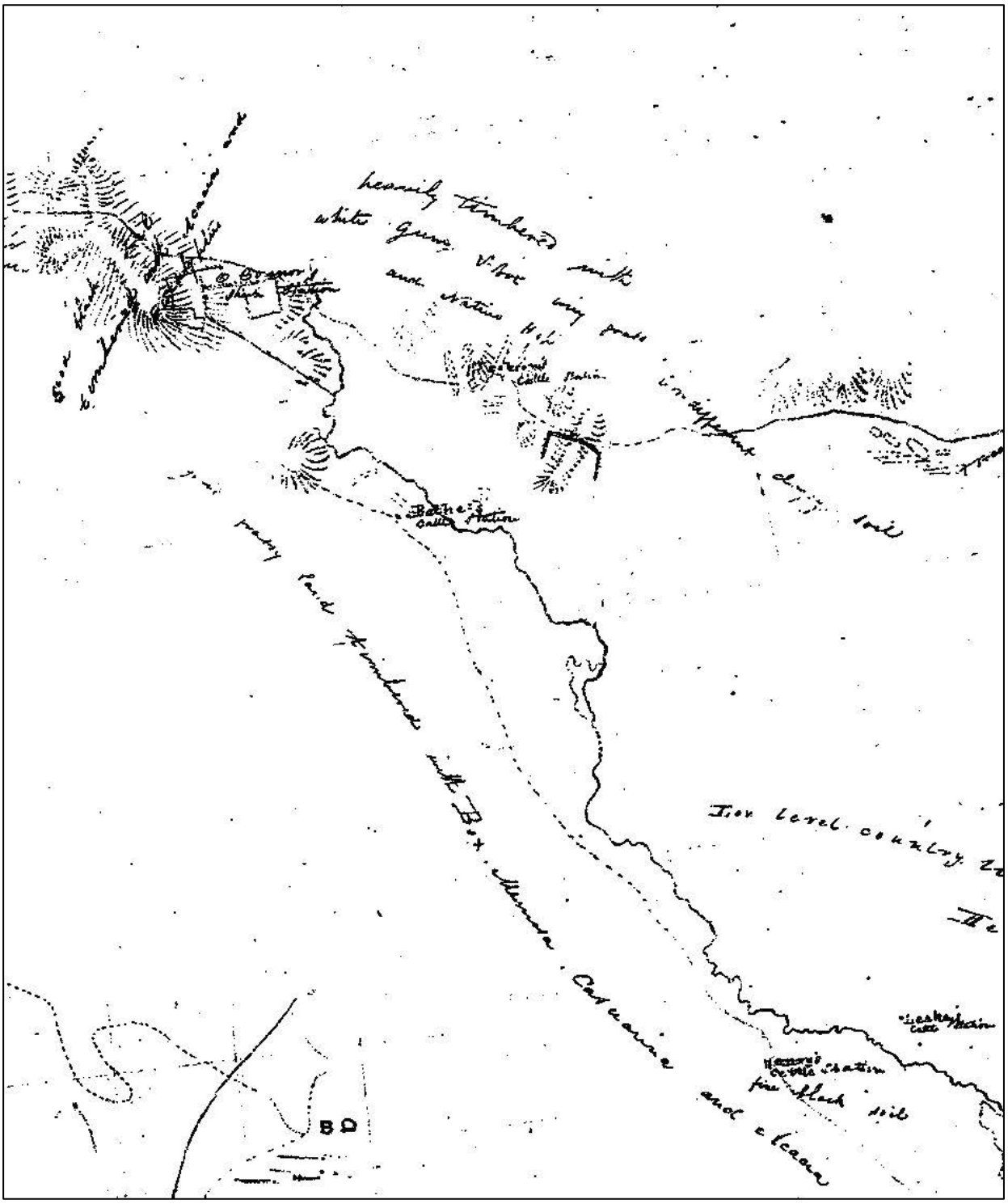


Figure 9 Gipps Rivers 57E – Parish Pakenham (n.d.)

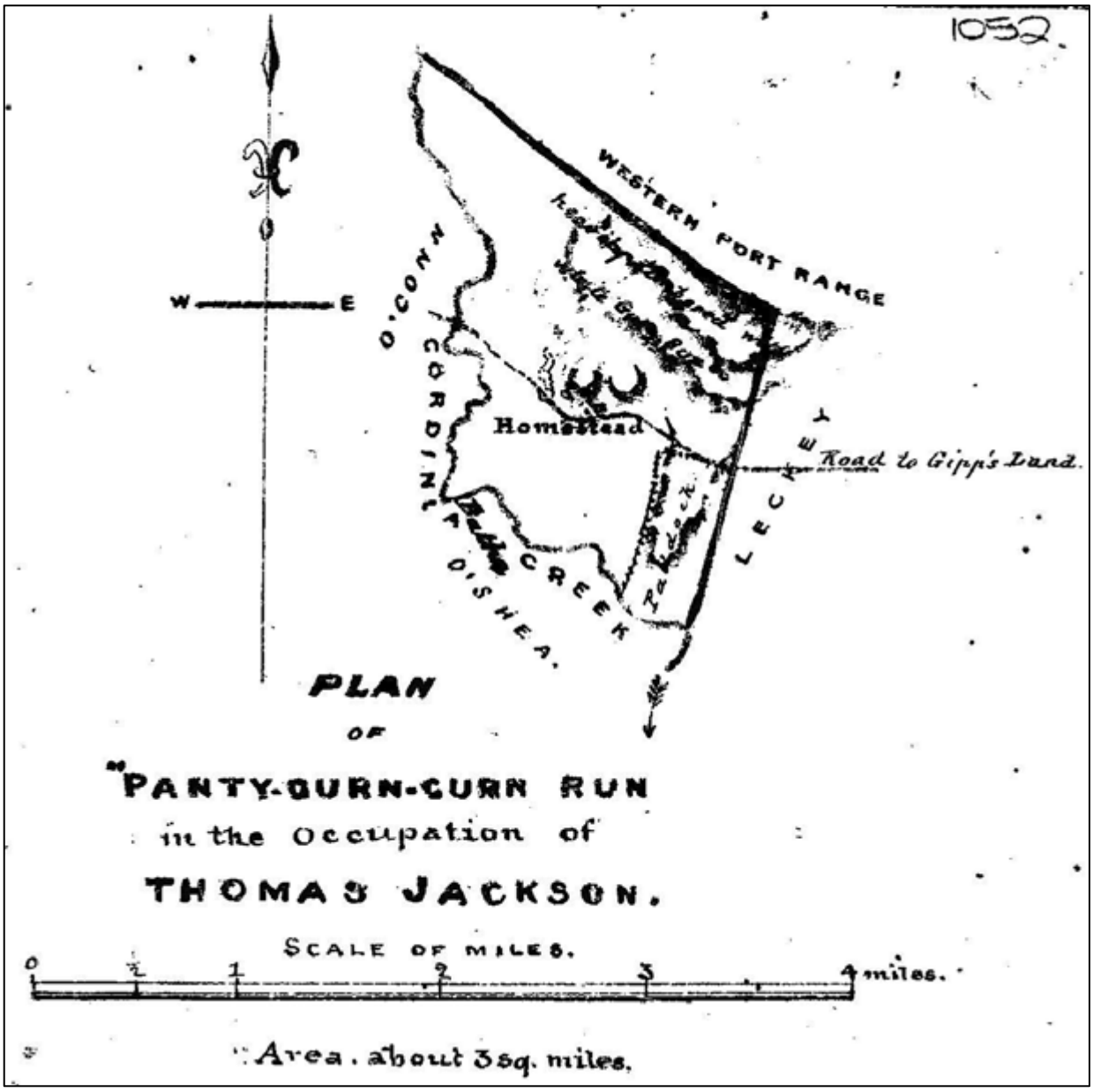
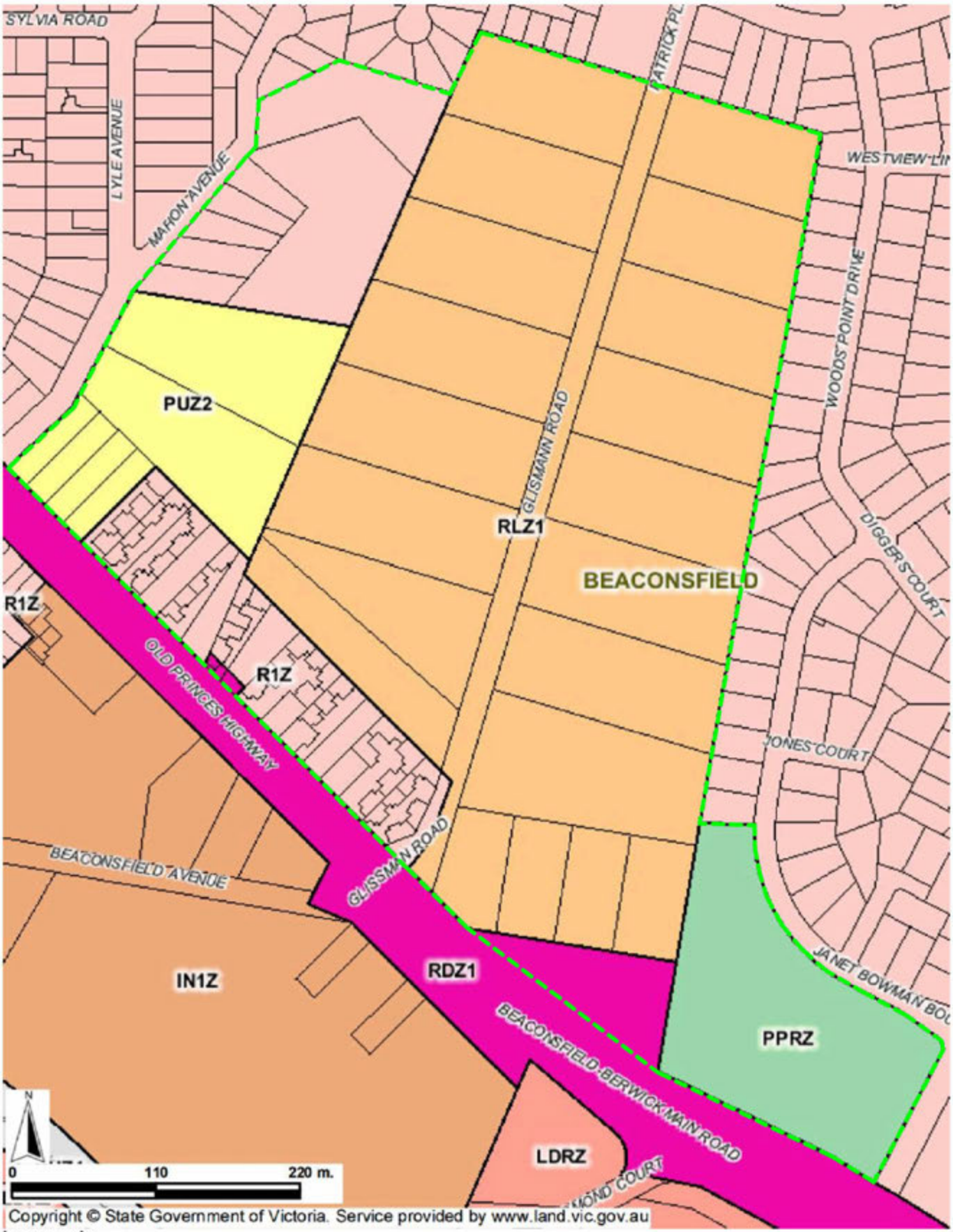


Figure 10 Thomas Jackson's Run 1052 – Panty Gurn Gurn (n.d.)



Legend:

Activity Area
32.79 hectares (approx)

IN1Z	Industrial 1	PPRZ	Public Park & Recreation
RDZ1	Road Category 1	PUZ2	Public Use - Education
LDRZ	Low Density Residential	R1Z	Residential 1

Figure 11 Cardinia Shire Council Planning Scheme Zoning within the Activity Area

Aerial Photograph Courtesy of DSE Website

Legend:

Activity Area
32.79 hectares (approx)

Dams

Drainage Works

Recreational Reserve Development

Residential/Commericial Development
and Associated Works

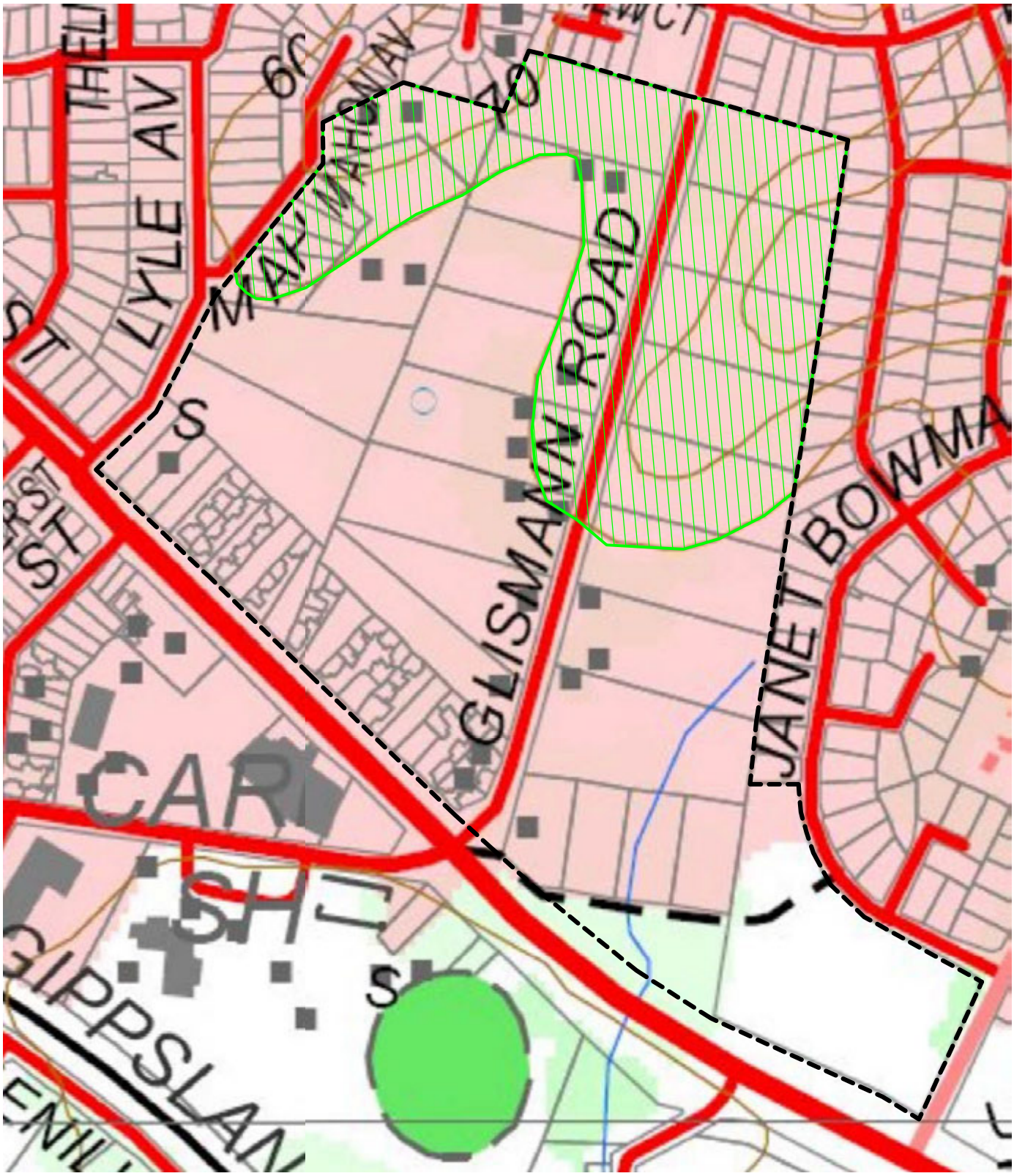
Balance- Cleared of Vegetation/Repeatedly Ploughed
(Steep or Low-lying Swampy Areas)

0 50 100 150 200
Scale of Metres

N

GDA
Zone 55

Figure 12 Previous Disturbance within the Activity Area



Aerial Photograph Courtesy of DSE Website

Legend:

Activity Area
32.79 hectares (approx)

Areas of Potential

0 50 100 150 200
Scale of Metres

N

GDA
Zone 55

Figure 13 Areas of Potential for Aboriginal Cultural Heritage

APPENDIX 9 PHOTOGRAPHS

Legend:

Activity Area
32.79 hectares (approx)

0 50 100 150 200
Scale of Metres

N

GDA

Photo 1 1960 Aerial Photograph of the Activity Area

(Melb & Metropolitan Area (1959) Project M13 360, Run 34, Film 1085, Photo 37)

Legend:

Activity Area
32.79 hectares (approx)

0 50 100 150 200
Scale of Metres

N

GDA

Photo 2 2006 Aerial Photograph of the Activity Area

(Melb & Metropolitan Area (1959) Project M13 360, Run 34, Film 1085, Photo 37)

Photo 3

Heavily modified area (sporting oval & playground) and example of poor ground surface visibility; facing southeast.

Photo 4

Area of improved ground surface visibility – albeit heavily modified; facing west.

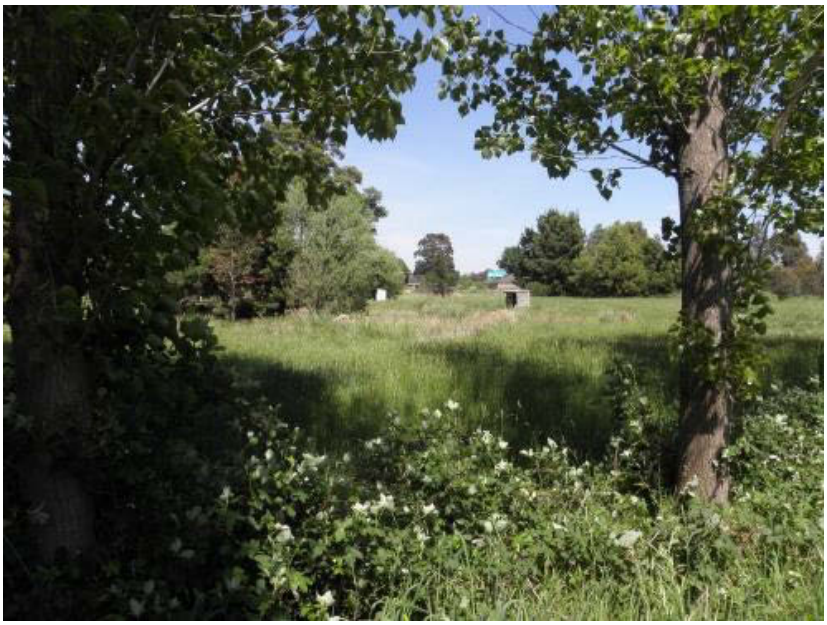


Photo 5

Swampy area west of Glismann Road within the activity area; facing south.

Photo 6

View showing heavily modified area for residences (foreground & top of hill in the background) and the steeply sloping hillside; facing west.

Photo 7

View along Glismann Road showing residences and their driveway entrances; facing north.

Photo 8

View over residence roof indicating steepness and modification of slope; facing southwest.

Photo 9

View from the top of the eastern ridgeline overlooking low-lying cleared ground and indicating the steep slope; facing southeast.

APPENDIX 10 TABLES

Table 1 Aboriginal Cultural Heritage Sites within 2km of the Activity Area

VAHR Site # 7921-	Site Name	Site Type	Contents	Environmental Context
0188	Cardinia Creek 1	Artefact scatter	1 quartz flake & 1 silcrete flake	Creek terrace
0189	Cardinia Creek 2	Artefact scatter	3 flakes, 2 cores of silcrete, quartz & chert & 3 ochre fragments	Creek terrace
0190	Cardinia Creek 3	Scarred tree	6 toe hold scars	Creek bank
0191	Cardinia Creek 4	Artefact scatter	20+ artefacts of quartz & silcrete (inc. 1 backed blade)	Creek terrace
0192	Cardinia Creek 5	Artefact scatter	Single quartz flake	Creek terrace
0208	Cardinia Creek 13	Artefact scatter	2+ chert flakes	Creek terrace
0209	Cardinia Creek 14	Artefact scatter	11+ quartz, quartzite, silcrete & chert flakes	Creek bank
0210	Cardinia Creek 15	Artefact scatter	Single quartz flake	Creek bank
0211	Cardinia Creek 16	Artefact scatter	5+ quartz, basalt & unspecified stone flakes	Creek terrace
0244	Cardinia Ck Bypass 1	Artefact scatter	Single silcrete core	River bank
0245	Cardinia Ck Bypass 2	Earth feature	130 flakes, 4 core & 4 blade of quartz, silcrete & chert	Lake bank
0401	Pakenham Bypass 3	Artefact scatter	1 quartz flake	Floodplain
0402	Pakenham Bypass 4	Artefact scatter	3 flakes & 2 blades of silcrete & quartz	Floodplain
0403	Pakenham Bypass 6	Scarred tree	340 x 60cm scar	River bank
0497	Bryn Mawr IA 1	Artefact scatter	2 silcrete flakes & 1 basalt unspecified 'tool'	Undulating terrain
0498	Turun 1	Artefact scatter	2 cores & 1 unspecified 'tool' of silcrete	Undulating terrain
0585	CHS 1	Artefact scatter	1 chert flake	Undulating terrain
0586	CHS 2	Artefact scatter	3 quartz & 2 silcrete flakes	Undulating terrain
0587	CHS 3	Artefact scatter	2 silcrete flakes	Rise
0588	CHS 4	Artefact scatter	2 quartz flakes	Creek bank
0589	CHS 5	Artefact scatter	1 unspecified stone material & 1 silcrete cores, & 4 silcrete flakes	Creek terrace
0596	CHS 12	Artefact scatter	1 quartz core	Hill
0699	Bryn Mawr AS1	Artefact scatter	1 core & 1 blade of silcrete, 2 quartz flakes, 1 quartzite flake & 1 hornfels flake	Lower slope of hill
0737	PB1 N2	Artefact scatter collection	34 flakes & 1 core of silcrete & quartz	Creek escarpment
0738	PB1 N4	Artefact scatter	1 quartz flake	Floodplain
0739	PB1 N5	Artefact scatter	122 flakes, 5 blades & 2 unspecified 'tools' of silcrete, quartz & basalt	Creek escarpment

VAHR Site # 7921-	Site Name	Site Type	Contents	Environmental Context
0801	PB7	Artefact scatter collection	1 chopper, 1 blade & 1 core of silcrete, 12 silcrete flakes, 3 quartz flakes & 3 chert flakes	Floodplain
0838	PBCCB SS3	Artefact scatter	6 silcrete & 4 quartz flakes	Floodplain
0997	Haileybury 1	Artefact scatter	4 silcrete scrapers	Upper slope of hill
1049	Beaconsfield Pipeline 1	Artefact scatter	5 silcrete flakes	Hill
1050	Beaconsfield Pipeline 2	Artefact scatter	9 silcrete flakes, 1 quartz flake, 1 hornfels flake & 1 quartzite blade	Hill
1051	Beaconsfield Pipeline 3	Artefact scatter	3 silcrete flakes	Hill
1052	Beaconsfield Pipeline 4	Artefact scatter	1 silcrete flake	Hill
1079	Haileybury 2	Artefact scatter	6 quartz flakes	Floodplain

'Flake' includes all flake types (e.g. complete, medial, proximal *etc*.) & angular fragments; 'quartz' includes crystal quartz.

Table 2 Reports and Published Works About Aboriginal Cultural Heritage Reviewed for this CHMP

Author(s) & Date	Investigation Type	Landform(s) & Watercourses	Cultural Material Types Identified													Site Location	Lithic Material							VAHR Site #'s	*Scientific Significance
			Flakes	cores	blades	scrapers	points	Scarred trees	Geometric microliths	Piercers	Grindstone frags	Hammerstone frags	Ochre frags	choppers	Tools?		silcrete	quartz	quartzite	chert	basalt	mudstone	other		
Gaughwin 1981	*Desktop & ground surface survey*	*(Note: Only Lowland Plains – Landscape Unit 8 which included the activity area is presented here)* *Various - Westernport Catchment*	*1*													*Side of hill on inland plain*	*1*							*7921-0148*	*Very low*
Presland 1983	*Desktop & ground surface survey*	*(Note: Only Flat Plains – Landscape Unit 1 on mapsheet 7921 which is relevant to the activity area is presented here)* *Various – Melbourne Metropolitan Area*						*1*								*Plain*								*7921-0175*	
								1								*Plain*								*7921-0176*	
								1								*Plain*								*7921-0177*	
								1								*Plain*								*7921-0178*	
								1								*Plain*								*7921-0179*	
								1								*Plain*								*7921-0180*	
			?						*?*							*Sand dune ridge*	*?*	*?*						*7921-0181*	
			?													*Plain*	*?*							*7921-0182*	

Author(s) & Date	Investigation Type	Landform(s) & Watercourses	Cultural Material Types Identified													Site Location	Lithic Material							VAHR Site #'s	*Scientific Significance
			Flakes	cores	blades	scrapers	points	Scarred trees	Geometric microliths	Piercers	Grindstone frags	Hammerstone frags	Ochre frags	choppers	Tools?		silcrete	quartz	quartzite	chert	basalt	mudstone	other		
Goulding 1988	Desktop	Coast, coastal plains, various rivers & creeks, Upper Yarra Ranges & Great Dividing Range														NA								Nil	
Wood & Lance 1990	Desktop	Cumberland Plain, south coast, coastal ranges, Monaro, Victorian Highlands, Gippsland Plains, Southwest Gippsland, Various watercourses														NA								Nil	

Author(s) & Date	Investigation Type	Landform(s) & Watercourses	Cultural Material Types Identified												Site Location	Lithic Material							VAHR Site #'s	*Scientific Significance
			Flakes	cores	blades	scrapers	points	Scarred trees	Geometric microliths	Piercers	Grindstone frags	Hammerstone frags	Ochre frags	choppers	Tools?		silcrete	quartz	quartzite	chert	basalt	mudstone	other		
Smith 1991	*Desktop, sample ground surface survey*	***(Note: Only Lowland Plains – Landscape Unit 2 which included the activity area is presented here)*** *Lowland plains within the Western Port catchment*	*?*	*?*		*?*		*1* *1* *1* *1*	*?*							*Cardinia, Gum Scrub, Ararat and Toomuc Creeks banks (16), terraces (10); Toomuc Creek flat (1), Hilltop (1), swamp margin (1); Bunyip River hilltop and/or slope (2), terrace (1)*	*21*	*104*	*4*	*65*	*2*	*8*	*2*	*7921-0188* *7921-0189* *7921-0190* *7921-0191* *7921-0192* *7921-0194* *7921-0195* *7921-0196* *7921-0198* *7921-0199* *7921-0200* *7921-0201* *7921-0202* *7921-0208* *7921-0209* *7921-0210* *7921-0211* *7921-0223* *7921-0224* *7921-0229* *7921-0230* *7921-0231* *7921-0232* *7921-0233* *7921-0234* *7921-0235* *8021-0007* *8021-0008* *8021-0009* *8021-0010* *8021-0011* *8021-0014*	*High* *High* *Very high* *Very high* *Low* *High* *Low* *Low* *High* *Low* *High* *Low* *Low* *High* *High* *High* *Very high* *Not assessed* *Low* *Low* *High* *High* *High* *Very high* *Very high* *Very high* *Very high* *Very high* *High* *Very high* *High* *High*

Author(s) & Date	Investigation Type	Landform(s) & Watercourses	Cultural Material Types Identified													Site Location	Lithic Material							VAHR Site #'s	*Scientific Significance
			Flakes	cores	blades	scrapers	points	Scarred trees	Geometric microliths	Piercers	Grindstone frags	Hammerstone frags	Ochre frags	choppers	Tools?		silcrete	quartz	quartzite	chert	basalt	mudstone	other		
Clark & Gardiner 1992	Desktop & sample ground surface survey	Undulating land between swampy lowlands and Dandenong Ranges foothills														NA								Nil	
Williams & Barber 1993	Desktop	Various – Dandenong to NSW border														NA								Nil	
Bird 1993	Desktop	Central Highlands														NA								Nil	
Barber & Williams 1995	Desktop & sample ground surface survey	Low hills, alluvial plains, dunes, prior swamp land, various watercourses														12 sites identified but no site numbers or specific details given								Not supplied	Not assessed
Brown 1996	Desktop & ground surface survey	Foothills of Dandenong Ranges, plains, swamps, Cardinia & Toomuc Creeks & tributaries														NA								Nil	

Author(s) & Date	Investigation Type	Landform(s) & Watercourses	Cultural Material Types Identified													Site Location	Lithic Material							VAHR Site #'s	*Scientific Significance
			Flakes	cores	blades	scrapers	points	Scarred trees	Geometric microliths	Piercers	Grindstone frags	Hammerstone frags	Ochre frags	choppers	Tools?		silcrete	quartz	quartzite	chert	basalt	mudstone	other		
Murphy 1996	Desktop & vehicle reconnaissance	Foothills of Dandenong Ranges, various waterways	1													Creek bank				1				7922-0563	Low
Sciusco 1996	Desktop & ground surface survey	Low hills, prior swampland														NA								Nil	
Marshall 1997	Subsurface testing	Low hills, prior swampland														NA								Nil	
Costello, Nicolson & Timewell 1998	Desktop	Swampland, undulating plains, sandy rises, Cardinia Creek														NA								Nil	
Debney 1999	Desktop	Southern Victorian Uplands, river deltas with sand ridges, various waterways														NA								Nil	
Webb & Marshall 2000	Desktop & ground surface survey	Prior low-lying, swampy land														NA								Nil	

Author(s) & Date	Investigation Type	Landform(s) & Watercourses	Cultural Material Types Identified												Site Location	Lithic Material							VAHR Site #'s	*Scientific Significance
			Flakes	cores	blades	scrapers	points	Scarred trees	Geometric microliths	Piercers	Grindstone frags	Hammerstone frags	Ochre frags	choppers	Tools?		silcrete	quartz	quartzite	chert	basalt	mudstone	other		
Tulloch 2001	Desktop & ground surface survey	North to north-western portion of the South Victorian Uplands, undulating plains, sandy rises, various waterways	1													Plain		1						8021-0040	Low
			3	2									2			Creek bank	3	2					2	Previously recorded site 7921-0189	Moderate
			?													Eastern side of Cardinia Creek		?						Previously recorded site 7921-0245	Moderate
			1													Flood plain		1						7921-0401	Low
			3		2											Within 100m of Cardinia Creek	3	2						7921-0402	Moderate
								1								Cardinia Creek bank								7921-0403	High
Marshall & Webb 2001	Desktop & vehicle reconnaissance	Cranbourne Sands, swampy land														NA								Nil	
Murphy 2001	Desktop & ground surface survey	Gently undulating land, Grasmere Creek bank	1													Undulating land				1				7921-0415	Low
Bell 2001a	Desktop & ground surface survey	Cranbourne Sands, swampy land	4													Hill slope	3	1						7921-0426	Low
			3	1												Hill slope	2	2						7921-0427	Low
			3													Hill slope	1	2						7921-0428	Low
				3												Hill slope	2	1						7921-0429	Low
				1												Hill slope	1							7921-0430	Low
			3													Hilltop		3						7921-0431	Low
			3	1		1										Hilltop	1	3				1		7921-0432	Low
			6	1					1							Hilltop	1	5	1				1	7921-0433	Low

Author(s) & Date	Investigation Type	Landform(s) & Watercourses	Cultural Material Types Identified													Site Location	Lithic Material							VAHR Site #'s	*Scientific Significance
			Flakes	cores	blades	scrapers	points	Scarred trees	Geometric microliths	Piercers	Grindstone frags	Hammerstone frags	Ochre frags	choppers	Tools?		silcrete	quartz	quartzite	chert	basalt	mudstone	other		
Bell 2001b	Subsurface testing	Cranbourne Sands, swampy land	?	?					?							Sand dune	?	?		?				7921-0442	Low
			?			?										Plain	?	?		?				7921-0443	Low
Bell 2002	Desktop & ground surface survey	Cranbourne Sands, swampy land														NA								Nil	
Murphy 2002	Desktop & ground surface survey	Gently sloping land, prior wetland														NA								Nil	
Webb & Chamberlain 2002	Desktop & ground surface survey	Hill, low-lying land/prior swamp	1													Hill			1					7921-0462	
Muir & Nicolson 2002	Desktop	Undulating land														NA								Nil	
Chamberlain, Marshall & Webb 2003	Salvage excavation	Sandy rise	50	3	5											Sandy rise	36	19	2	1				7921-0507	Low
Murphy & Amorosi 2003	Subsurface testing and monitoring	Gently sloping land, prior wetland	2												1	Slope of rise	2				1			7921-0497	Low
			21	2											1	Rise	22	2						7921-0498	Low
Murphy 2003	Desktop & ground surface survey	Low foothills and alluvial plain, Gum Scrub Creek														NA								Nil	
Kajewski & Matthews 2003	Desktop & ground surface survey	Prior swampland														NA								Nil	

Author(s) & Date	Investigation Type	Landform(s) & Watercourses	Cultural Material Types Identified													Site Location	Lithic Material							VAHR Site #'s	*Scientific Significance
			Flakes	cores	blades	scrapers	points	Scarred trees	Geometric microliths	Piercers	Grindstone frags	Hammerstone frags	Ochre frags	choppers	Tools?		silcrete	quartz	quartzite	chert	basalt	mudstone	other		
Feldman & Long 2004	Desktop assessment	South Victorian Uplands and Riverine Plains, East Victorian Uplands														NA								Nil	
Rhodes 2004	Subsurface testing	Low foothills and alluvial plain, Gum Scrub Creek	13													Upper slope of hill	5	4		4				7921-0612	Low
			4													Crest of hill	1		2				1	7921-0613	Low-moderate
Murphy 2004	Desktop & ground surface survey	Floodplain														NA								Nil	
Bell 2004	Subsurface testing	Gentle-moderate rise	19	2		2						1				Top of rise & upper slopes	9	7	7		1			7921-0655	Low-moderate
Bell 2005	Salvage excavation	Gentle-moderate rise	37	2	1	2										Top of rise & upper slopes	26	11	5					Previously recorded site 7921-0655	Not re-assessed
Thomson & Nicolson 2005	Desktop & ground surface survey	Central Lowlands, riverine plains, Gum Scrub Creek	1													Bank of Gum Scrub Creek	1							7921-0603	Low
			12			1										On the side of a small ridgeline	3	10						7921-0604	Moderate
Thomson & Muir 2005	Subsurface testing	Central Lowlands, riverine plains, Gum Scrub Creek	24	1												Rise	16	3	1		3	2		7921-0629	Low
			2													Rise adjacent to creek		1	1					7921-0630	Low
			1													Floodplain close to creek	1							7921-0631	Low

Author(s) & Date	Investigation Type	Landform(s) & Watercourses	Cultural Material Types Identified												Site Location	Lithic Material							VAHR Site #'s	*Scientific Significance
			Flakes	cores	blades	scrapers	points	Scarred trees	Geometric microliths	Piercers	Grindstone frags	Hammerstone frags	Ochre frags	choppers	Tools?		silcrete	quartz	quartzite	chert	basalt	mudstone	other		
Thomson & Muir 2005 (cont.)			1												Between rise and drainage line	1							7921-0632	Low
					1										Alluvial deposit adjacent to farmhouse	1							7921-0633	Low
			1												Ridgeline adjacent to creek	1							7921-0634	Low
			1												Ridgeline adjacent to creek		1						7921-0635	Low
			1												Ridgeline adjacent to creek	1							7921-0636	Low
			1		1										Rise	2							7921-0637	Low
			1												Between drainage line and small alluvial deposit		1						7921-0638	Moderate
Thomson 2005	Subsurface testing	Undulating land, rises	4	1	1										Mid-slope of rise	2	2	1				1	7921-0699	Moderate

Author(s) & Date	Investigation Type	Landform(s) & Watercourses	Cultural Material Types Identified												Site Location	Lithic Material							VAHR Site #'s	*Scientific Significance
			Flakes	cores	blades	scrapers	points	Scarred trees	Geometric microliths	Piercers	Grindstone frags	Hammerstone frags	Ochre frags	choppers	Tools?		silcrete	quartz	quartzite	chert	basalt	mudstone	other		
Howell-Meurs & Long 2006	Subsurface testing	High ground, floodplains, Cardinia Creek	3													Cardinia Creek terrace	1	2						7921-0737	Low
			1													Floodplain		1						7921-0738	Low
			46													On low spur overlooking Cardinia Creek	23	22			1			7921-0739	Moderate
			1													On levee on anabranch of creek	1							7921-0740	Low
			1													Low rise		1						7921-0741	Low
			80	2	11	1										Rise	56	37	1					8021-0147	Moderate
			1													Low rise		1						8021-0148	Low
			23		3											Ridgeline	11	14	1					8021-0149	Moderate
			1													Floodplain	1							8021-0150	Low
Bell 2006	Monitoring	Gentle-moderate rise	1	1												Top of rise & upper slopes		2						Previously recorded site 7921-0655	Not re-assessed
Murphy & Rymer 2006	Subsurface testing	Rise														NA								Nil	
Murphy & Dugay-Grist 2007	Desktop & ground surface survey	Rise														NA								Nil	
Murphy, Thomson & Rymer 2007	Subsurface testing and monitoring	Cardinia Creek, floodplain, escarpment	1,310	32	16	14	8		16			2		1		Floodplain	1,221	148	18	3	8		1	7921-0801	Not assessed
			10													Floodplain on east bank of Cardinia Creek	6	4						7921-0838	Low

Author(s) & Date	Investigation Type	Landform(s) & Watercourses	Cultural Material Types Identified												Site Location	Lithic Material							VAHR Site #'s	*Scientific Significance
			Flakes	cores	blades	scrapers	points	Scarred trees	Geometric microliths	Piercers	Grindstone frags	Hammerstone frags	Ochre frags	choppers	Tools?		silcrete	quartz	quartzite	chert	basalt	mudstone	other		
Murphy, Thomson & Rymer 2007 (Cont.)			126	3	3										Eastern bank of Cardinia Creek	67	65						Previously recorded site 7921-0245	Moderate
			32	1											2	Western Cardinia Creek escarpment	29	6						Previously recorded site 7921-0737	Moderate
			80		1										2	Eastern escarpment of Cardinia Creek	63	20						Previously recorded site 7921-0739	Moderate
Ward, Griffin & Nicolson 2007	Desktop & ground surface survey	On boundary of East Victorian Uplands and South Victorian River Plains														NA								Nil	
Griffin & Ward 2007	Subsurface testing	On boundary of East Victorian Uplands and South Victorian River Plains	1	1												Top of ridgeline	2							7921-0826	Moderate
			2													Top of ridgeline	1	1						7921-0827	Moderate
			2													Top of ridgeline	1	1						7921-0828	Moderate
			1													Top of ridgeline	1							7921-0829	Moderate

Author(s) & Date	Investigation Type	Landform(s) & Watercourses	Cultural Material Types Identified												Site Location	Lithic Material							VAHR Site #'s	*Scientific Significance
			Flakes	cores	blades	scrapers	points	Scarred trees	Geometric microliths	Piercers	Grindstone frags	Hammerstone frags	Ochre frags	choppers	Tools?		silcrete	quartz	quartzite	chert	basalt	mudstone	other		
Duncan 2007	Desktop & ground surface survey	On boundary of East Victorian Uplands and South Victorian River Plains, Gum Scrub Creek terraces, ridgelines													NA								Nil	
Murphy & Rymer 2007	Desktop & ground surface survey	Cardinia Creek, creek anabranch, plain, hillcrest													NA								Nil	
Vines *et al* 2008	Desktop, standard & complex CHMP	Central Lowlands, riverine plains, Gum Scrub Creek, hills	6												In heavily disturbed bank of a drain					6			7921-0876	Low
Nicolson & Burch 2008	Desktop, standard & complex CHMP	Undulating hills													NA								Nil	
Murphy & Rymer 2008	Desktop, standard & complex CHMP	Alluvial plain, Cardinia Creek, tributary	128	2	19	1	4		2						Cardinia Creek Escarpment – 100m from escarpment edge	114	41	1					**Previously recorded site** 7921-0739	Moderate
			39	3	2		1								West bank of Cardinia Creek tributary	44				1			7921-0866	Low
			1												Floodplain	1							7921-0867	Low

Author(s) & Date	Investigation Type	Landform(s) & Watercourses	Cultural Material Types Identified												Site Location	Lithic Material							VAHR Site #'s	*Scientific Significance
			Flakes	cores	blades	scrapers	points	Scarred trees	Geometric microliths	Piercers	Grindstone frags	Hammerstone frags	Ochre frags	choppers	Tools?		silcrete	quartz	quartzite	chert	basalt	mudstone	other		
Mialanes *et al* 2008	Desktop & standard CHMP	Low hills													NA								Nil	
Mathews & Long 2008	Desktop, standard & complex CHMP	Undulating land	1												Within introduced fill	1							7921-0918	Low
Vines *et al* 2008	Desktop, standard & complex CHMP	Rises, floodplains, prior swamp, Gum Scrub Creek	1												Creek bank	1							7921-0603	Low
			7												In the bank of a dam on a ridgeline	3	4						7921-0604	Low
			25	1											Rise	16	4	1		3	2		7921-0629	Low-moderate
			2												Floodplain		2						7921-0632	Low
			1												Floodplain	1							7921-0633	Low
			3												Ridgeline	2	1						7921-0634	Low
			1												Ridgeline		1						7921-0635	Low
			1												Ridgeline	1							7921-0636	Low
			2												Floodplain	1	1						7921-0638	Low
			6												In drain within prior swampy area					6			7921-0876	Low
Murphy & Dugay-Grist 2008	Desktop, standard & complex CHMP	Rise													NA								Nil	
Stone 2008	Desktop & standard CHMP	Former swamp													NA								Nil	

Author(s) & Date	Investigation Type	Landform(s) & Watercourses	Cultural Material Types Identified												Site Location	Lithic Material							VAHR Site #'s	*Scientific Significance
			Flakes	cores	blades	scrapers	points	Scarred trees	Geometric microliths	Piercers	Grindstone frags	Hammerstone frags	Ochre frags	choppers	Tools?		silcrete	quartz	quartzite	chert	basalt	mudstone	other		
Jenkins & Paterson 2009	Desktop, standard & complex CHMP	Floodplain, low rise	99	8		3										Hill	12	98						Previously recorded site 7921-0601	Moderate
Debney *et al* 2009	Desktop, standard & complex CHMP	*(Note: Only sites identified within mapsheet 7921 which is relevant to the activity area is presented here)* Eastern Plains, Southern Uplands, Central Sunklands, various watercourses	1													Plain	1							7921-0934	Moderate
			1		1											Plain	2							7921-0936	Very low
									1							Sandy rise	1							7921-0949	Very low
			2													Sandy rise	1		1					7921-0968	Very low
			7													Drainage channel	7							7921-0969	Moderate
			1													Drainage channel	1							7921-0970	Low
			3													Sandy rise	3							7921-0971	Low
			21		2	1			1							Sandy rise	22	1					2	7921-0972	Moderate
			2													Plain		2						7921-1037	Very low
			8													Sandy rise		8						7921-1038	Moderate
			1													Sandy rise	1							7921-1039	Moderate
			5													Sandy rise	2	3						7921-1053	Moderate
			2													Plain	2							7921-1054	Very low
			9													Sandy rise	6	3						7921-1055	Moderate
			135	4	4	2			3						1	Sandy rise	115	26	2		3	1	2	7921-1118	High
Murphy & Rymer 2009	Desktop, standard & complex CHMP	Cardinia Creek Floodplain	12	1												Floodplain	6	7						7921-1137	Very low
Allia & Vines 2009	Desktop, standard & complex CHMP	Floodplain														NA								Nil	

Author(s) & Date	Investigation Type	Landform(s) & Watercourses	Cultural Material Types Identified													Site Location	Lithic Material							VAHR Site #'s	*Scientific Significance
			Flakes	cores	blades	scrapers	points	Scarred trees	Geometric microliths	Piercers	Grindstone frags	Hammerstone frags	Ochre frags	choppers	Tools?		silcrete	quartz	quartzite	chert	basalt	mudstone	other		
Barker 2009	Desktop, standard & complex CHMP	Floodplain, hills, Stoney Creek, drainage lines	5													Rise	5							7921-1049	Low
			3													Rise	3							7921-1051	Low
			1													Rise	1							7921-1052	Low
			8													Rise	7	1						7922-1123	Low
Stone & Defteros 2009	Desktop, standard & complex CHMP	Prior swampland, raised areas														NA								Nil	
Murphy & Amorosi 2009	Salvage excavations	Undulating hills, alluvial plain	16	1		1	1									Rise	16	3						Previously recorded site 7921-1049	Extremely low
Tucker, Hyett & Myers 2010	Desktop, standard & complex CHMP	Cardinia Creek, Cranbourne Sands, marshy areas, flat to gently sloping land	51	3	2	1			1							Rise / escarpment	36	20	2					7921-0997	Medium
			6													Sandy rise		6						7921-1079	Low
Jenkins *et al* 2010	Salvage excavations	Floodplain, low rise	432	27	10	18	26		5						2	Hill	336	156	9				19	Previously recorded site 7921-0601	Moderate-high
Day 2010	Desktop, standard & complex CHMP	Cranbourne Sands, rises, floodplain	2													Hill crest		2						7921-1158	Low
Totals	65 investigations		3009	110	85	48	40	11	30			3	2	1	9	NA	2403	799	57	10	33	6	29	143 sites	NA
			(3337 artefact + 11 scarred trees)														(3337 artefacts)								

Note: * - As assessed by original recorder; *Italics* – Includes the activity area; *Blades* includes artefacts recorded as: blades, broken blades, micro blades, blade fragments (& similar); *Cores* includes artefacts recorded as: cores, core fragments, core tools (& similar); *Flakes* includes artefacts recorded as: flakes (broken, complete, medial, split *etc*.), angular fragments, debitage & fragments (& similar); *Frags* – fragments; NA – Not applicable; *Points* includes artefacts recorded as: points, Bondi points, Woakwine points, broken points (& similar); *Quartz* includes artefacts recorded as: quartz, crystal quartz, milky quartz (& similar); *Scrapers* includes artefacts recorded as: scrapers, side scrapers, end scrapers, notched scrapers, scraper fragments (& similar, inc. eloura's);
Tools? are artefacts listed by assessors as (formal) tools but with no tool type given, or less common tool types (e.g. anvil, manuport); *?* indicated where information has not been supplied; Where 'previously recorded sites' are indicated, all materials listed are additional materials identified upon re-identification of the site.

Table 3 Artefact Quantities within Sites in the Broader Activity Area Region

Artefact Quantity Range	Site Numbers with Quantity Range	Percentage of sites (%)
0-10	69	52.27
11-20	3	2.27
21-30	6	4.55
31-40	1	0.76
41-50	1	0.76
51-60	2	1.52
61-70	1	0.76
71-90	0	-
91-100	1	0.76
101-150	2	1.52
150+	3	2.27
Undetermined	43	32.58
Total	132	100.02

Note: percentages are rounded to the nearest second decimal place

Table 4 Areas of Aboriginal Cultural Heritage Sensitivity within the Activity

Location	Potential Aboriginal Heritage	Level of Sensitivity
Raised landforms/hills and upper slopes	Low density previously disturbed stone artefact scatters	Low - Moderate

APPENDIX 11 CARDINIA SHIRE COUNCIL PLANNING SCHEME - R1Z &LDRZ

32.01 RESIDENTIAL 1 ZONE

18/06/2010
VC62

Shown on the planning scheme map as **R1Z**.

Purpose

To implement the State Planning Policy Framework and the Local Planning Policy Framework, including the Municipal Strategic Statement and local planning policies.

To provide for residential development at a range of densities with a variety of dwellings to meet the housing needs of all households.

To encourage residential development that respects the neighbourhood character.

In appropriate locations, to allow educational, recreational, religious, community and a limited range of other non-residential uses to serve local community needs.

32.01-1 Table of uses

18/06/2010
VC62

Section 1 - Permit not required

USE	CONDITION
Animal keeping (other than Animal boarding)	Must be no more than 2 animals.
Apiculture	Must meet the requirements of the Apiary Code of Practice, May 1997.
Bed and breakfast	No more than 6 persons may be accommodated away from their normal place of residence. At least 1 car parking space must be provided for each 2 persons able to be accommodated away from their normal place of residence.
Carnival	Must meet the requirements of A 'Good Neighbour' Code of Practice for a Circus or Carnival, October 1997.
Circus	Must meet the requirements of A 'Good Neighbour' Code of Practice for a Circus or Carnival, October 1997.
Dependent person's unit	Must be the only dependent person's unit on the lot.
Dwelling (other than Bed and breakfast)	
Greenhouse gas sequestration	Must meet the requirements of Clause 52.08-6.
Greenhouse gas sequestration exploration	
Home occupation	
Informal outdoor recreation	
Mineral exploration	
Mining	Must meet the requirements of Clause 52.08-2.
Minor utility installation	
Natural systems	

USE	CONDITION
Place of worship	Must be no social or recreation activities. The gross floor area of all buildings must not exceed 180 square metres. The site must not exceed 1200 square metres. The site must adjoin, or have access to, a road in a Road Zone.
Railway **Residential aged care facility** **Road**	
Search for stone	Must not be costeaning or bulk sampling.
Telecommunications facility	Buildings and works must meet the requirements of Clause 52.19.
Tramway	

Section 2 - Permit required

USE	CONDITION
Accommodation (other than Dependent person's unit, Dwelling and Residential aged care facility) **Agriculture (other than Animal keeping, Animal training, Apiculture, Horse stables, and Intensive animal husbandry)**	
Animal keeping (other than Animal boarding) – if the Section 1 condition is not met	Must be no more than 5 animals.
Car park	Must be used in conjunction with another use in Section 1 or 2.
Car wash	The site must adjoin, or have access to, a road in a Road Zone.
Community market	
Convenience restaurant	The site must adjoin, or have access to, a road in a Road Zone.
Convenience shop	The leasable floor area must not exceed 80 square metres.
Food and drink premises (other than Convenience restaurant and Take away food premises) **Leisure and recreation (other than Informal outdoor recreation and Motor racing track)** **Medical centre** **Mineral, stone, or soil extraction (other than Extractive industry, Mineral exploration, Mining, and Search for stone)**	

USE	CONDITION
Place of assembly (other than Amusement parlour, Carnival, Circus, Nightclub, and Place of worship)	
Plant nursery	
Service station	The site must either: ▪ Adjoin a business zone or industrial zone. ▪ Adjoin, or have access to, a road in a Road Zone. The site must not exceed either: ▪ 3000 square metres. ▪ 3600 square metres if it adjoins on two boundaries a road in a Road Zone.
Store	Must be in a building, not a dwelling, and used to store equipment, goods, or motor vehicles used in conjunction with the occupation of a resident of a dwelling on the lot.
Take away food premises	The site must adjoin, or have access to, a road in a Road Zone.
Utility installation (other than Minor utility installation and Telecommunications facility)	
Any other use not in Section 1 or 3	

Section 3 - Prohibited

USE
Amusement parlour
Animal boarding
Animal training
Brothel
Cinema based entertainment facility
Extractive industry
Horse stables
Industry (other than Car wash)
Intensive animal husbandry
Motor racing track
Nightclub
Office (other than Medical centre)
Retail premises (other than Community market, Convenience shop, Food and drink premises, and Plant nursery)
Saleyard
Transport terminal
Warehouse (other than Store)

32.01-2 Subdivision

09/10/2006
VC42

Permit requirement

A permit is required to subdivide land.

An application to subdivide land, other than an application to subdivide land into lots each containing an existing dwelling or car parking space, must meet the requirements of Clause 56 and:

- Must meet all of the objectives included in the clauses specified in the following table.
- Should meet all of the standards included in the clauses specified in the following table.

CLASS OF SUBDIVISION	OBJECTIVES AND STANDARDS TO BE MET
60 or more lots	All except Clause 56.03-5.
16 – 59 lots	All except Clauses 56.03-1 to 56.03-3, 56.03-5, 56.06-1 and 56.06-3.
3 – 15 lots	All except Clauses 56.02-1, 56.03-1 to 56.03-4, 56.05-2, 56.06-1, 56.06-3 and 56.06-6.
2 lots	Clauses 56.03-5, 56.04-2, 56.04-3, 56.04-5, 56.06-8 to 56.09-2.

Exemption from notice and review

An application to subdivide land into lots each containing an existing dwelling or car parking space is exempt from the notice requirements of Section 52(1)(a), (b) and (d), the decision requirements of Section 64(1), (2) and (3) and the review rights of Section 82(1) of the Act.

Decision guidelines

Before deciding on an application, in addition to the decision guidelines in Clause 65, the responsible authority must consider, as appropriate:

- The State Planning Policy Framework and the Local Planning Policy Framework, including the Municipal Strategic Statement and local planning policies.
- The objectives and standards of Clause 56.

32.01-3 Construction and extension of one dwelling on a lot

15/09/2008
VC49

Permit requirement

A permit is required to construct or extend one dwelling on:

- A lot of less than 300 square metres.
- A lot of between 300 square metres and 500 square metres if specified in the schedule to this zone.

A permit is required to construct or extend a front fence within 3 metres of a street if:

- The fence is associated with one dwelling on:
  - A lot of less than 300 square metres, or

- A lot of between 300 and 500 square metres if specified in a schedule to this zone, and

- The fence exceeds the maximum height specified in Clause 54.06-2.

A development must meet the requirements of Clause 54.

No permit required

No permit is required to:

- Construct or carry out works normal to a dwelling.
- Construct or extend an out-building (other than a garage or carport) on a lot provided the gross floor area of the out-building does not exceed 10 square metres and the maximum building height is not more than 3 metres above ground level.

Decision guidelines

Before deciding on an application, in addition to the decision guidelines in Clause 65, the responsible authority must consider, as appropriate:

- The State Planning Policy Framework and the Local Planning Policy Framework, including the Municipal Strategic Statement and local planning policies.
- The objectives, standards and decision guidelines of Clause 54.

32.01-4 **Construction and extension of two or more dwellings on a lot, dwellings on common property and residential buildings**

15/09/2008 VC49

Permit requirement

A permit is required to:

- Construct a dwelling if there is at least one dwelling existing on the lot.
- Construct two or more dwellings on a lot.
- Extend a dwelling if there are two or more dwellings on the lot.
- Construct or extend a dwelling if it is on common property.
- Construct or extend a residential building.

A permit is required to construct or extend a front fence within 3 metres of a street if:

- The fence is associated with 2 or more dwellings on a lot or a residential building, and
- The fence exceeds the maximum height specified in Clause 55.06-2.

A development must meet the requirements of Clause 55. This does not apply to a development of four or more storeys, excluding a basement.

A permit is not required to construct one dependent person's unit on a lot.

Decision guidelines

Before deciding on an application, in addition to the decision guidelines in Clause 65, the responsible authority must consider, as appropriate:

- The State Planning Policy Framework and the Local Planning Policy Framework, including the Municipal Strategic Statement and local planning policies.
- The objectives, standards and decision guidelines of Clause 55.

32.01-5 Requirements of Clause 54 and Clause 55

19/01/2006
VC37

The schedule to this zone may specify the requirements of:

- Standards A3, A4, A5, A10, A17 and A20 of Clause 54 of this scheme.
- Standards B6, B7, B8, B17, B28 and B32 of Clause 55 of this scheme.

If a requirement is not specified in the schedule to this zone, the requirement set out in the relevant standard of Clause 54 or Clause 55 applies.

32.01-6 Buildings and works associated with a Section 2 use

19/01/2006
VC37

A permit is required to construct a building or construct or carry out works for a use in Section 2 of Clause 32.01-1.

32.01-7 Advertising signs

19/01/2006
VC37

Advertising sign requirements are at Clause 52.05. This zone is in Category 3.

Notes: *Refer to the* State Planning Policy Framework *and the* Local Planning Policy Framework, *including the* Municipal Strategic Statement, *for strategies and policies which may affect the use and development of land.*

Check whether an overlay also applies to the land.

Other requirements may also apply. These can be found at Particular Provisions.

19/01/2006
VC37

SCHEDULE TO THE RESIDENTIAL 1 ZONE

Is a permit required to construct or extend one dwelling on a lot of between 300 square metres and 500 square metres?
No

	Clause 54 and Clause 55 Standard	Requirement
Minimum street setback	Standard A3 and Standard B6	None specified
Building height	Standard A4 and Standard B7	None specified
Site coverage	Standard A5 and Standard B8	None specified
Side and rear setbacks	Standard A10 and Standard B17	None specified
Private open space	Standard A17 Standard B28	None specified None specified
Front fence height	Standard A20 and Standard B32	None specified

32.03 LOW DENSITY RESIDENTIAL ZONE

18/06/2010
VC82

Shown on the planning scheme map as **LDRZ** with a number (if shown).

Purpose

To implement the State Planning Policy Framework and the Local Planning Policy Framework, including the Municipal Strategic Statement and local planning policies.

To provide for low-density residential development on lots which, in the absence of reticulated sewerage, can treat and retain all wastewater.

32.03-1 Table of uses

18/06/2010
VC82

Section 1 - Permit not required

USE	CONDITION
Animal keeping (other than Animal boarding)	Must be no more than 2 animals.
Apiculture	Must meet the requirements of the Apiary Code of Practice, May 1997.
Bed and breakfast	No more than 6 persons may be accommodated away from their normal place of residence. At least 1 car parking space must be provided for each 2 persons able to be accommodated away from their normal place of residence.
Carnival	Must meet the requirements of A 'Good Neighbour' Code of Practice for a Circus or Carnival, October 1997.
Circus	Must meet the requirements of A 'Good Neighbour' Code of Practice for a Circus or Carnival, October 1997.
Dependent person's unit	Must be the only dependent person's unit on the lot. Must meet the requirements of Clause 32.03-2.
Dwelling (other than Bed and breakfast)	Must be the only dwelling on the lot. Must meet the requirements of Clause 32.03-2.
Greenhouse gas sequestration	Must meet the requirements of Clause 52.08-6.
Greenhouse gas sequestration exploration	
Home occupation **Informal outdoor recreation** **Mineral exploration**	
Mining	Must meet the requirements of Clause 52.08-2.
Minor utility installation **Natural systems** **Railway**	

USE	CONDITION
Road	
Search for stone	Must not be costeaning or bulk sampling.
Telecommunications facility	Buildings and works must meet the requirements of Clause 52.19.
Tramway	

Section 2 - Permit required

USE	CONDITION
Accommodation (other than Dependent person's unit and Dwelling) Agriculture (other than Animal keeping, Apiculture and Intensive animal husbandry)	
Animal boarding	
Animal keeping (other than Animal boarding) – if the Section 1 condition is not met	Must be no more than 5 animals.
Car park	Must be used in conjunction with another use in Section 1 or 2.
Car wash	The site must adjoin, or have access to, a road in a Road Zone.
Community market	
Convenience restaurant	The site must adjoin, or have access to, a road in a Road Zone.
Convenience shop	The leasable floor area must not exceed 80 square metres.
Dependent person's unit – if the Section 1 condition is not met	Must meet the requirements of Clause 32.03-2.
Dwelling (other than Bed and breakfast) - if the Section 1 condition is not met	Must result in no more than two dwellings on the lot. Must meet the requirements of Clause 32.03-2.
Food and drink premises (other than Convenience restaurant and Take away food premises) Leisure and recreation (other than Informal outdoor recreation and Motor racing track) Medical centre Mineral, stone, or soil extraction (other than Extractive industry, Mineral exploration, Mining, and Search for stone) Place of assembly (other than Amusement parlour, Carnival, Circus, and Nightclub) Plant nursery	

USE	CONDITION
Service station	The site must either: • Adjoin a business zone or industrial zone. • Adjoin, or have access to, a road in a Road Zone. The site must not exceed either: • 3000 square metres. • 3600 square metres if it adjoins on two boundaries a road in a Road Zone.
Store	Must be in a building, not a dwelling, and used to store equipment, goods, or motor vehicles used in conjunction with the occupation of a resident of a dwelling on the lot.
Take away food premises	The site must adjoin, or have access to, a road in a Road Zone.
Utility installation (other than Minor utility installation and Telecommunications facility)	
Any other use not in Section 1 or 3	

Section 3 – Prohibited

USE
Amusement parlour
Brothel
Cinema based entertainment facility
Extractive industry
Industry (other than Car wash)
Intensive animal husbandry
Motor racing track
Nightclub
Office (other than Medical centre)
Retail premises (other than Community market, Convenience shop, Food and drink premises, and Plant nursery)
Saleyard
Transport terminal
Warehouse (other than Store)

32.03-2 **Use for one or two dwellings or a dependent person's unit**

19/01/2006
VC37

A lot may be used for one or two dwellings provided the following requirements are met:

- Each dwelling must be connected to reticulated sewerage, if available. If reticulated sewerage is not available, all wastewater from each dwelling must be treated and

retained within the lot in accordance with the State Environment Protection Policy (Waters of Victoria) under the Environment Protection Act 1970.

- Each dwelling must be connected to a reticulated potable water supply or have an alternative potable water supply, with appropriate storage capacity, to the satisfaction of the responsible authority.
- Each dwelling must be connected to a reticulated electricity supply or have an alternative energy supply to the satisfaction of the responsible authority.

These requirements also apply to a dependent person's unit.

32.03-3 **Subdivision**

09/10/2006
VC42

Permit requirement

A permit is required to subdivide land.

Each lot must be at least the area specified for the land in a schedule to this zone. Any area specified must be at least 0.4 hectare. If no area is specified, each lot must be at least 0.4 hectare.

A permit may be granted to create lots smaller than 0.4 hectare if the subdivision:

- Excises land which is required for a road or a utility installation.
- Provides for the re-subdivision of existing lots and the number of lots is not increased.

Application requirements

An application must be accompanied by a site analysis, documenting the site in terms of land form, vegetation coverage and the relationship with surrounding land, and a report explaining how the proposed subdivision has responded to the site analysis. The report must:

- In the absence of reticulated sewerage, include a land assessment which demonstrates that each lot is capable of treating and retaining all wastewater in accordance with the State Environment Protection Policy (Waters of Victoria) under the Environment Protection Act 1970.
- Show for each lot:
  - A building envelope and driveway to the envelope.
  - Existing vegetation.
  - In the absence of reticulated sewerage, an effluent disposal area.
- Show how the proposed subdivision relates to the existing or likely use and development of adjoining and nearby land.
- If a staged subdivision, show how the balance of the land may be subdivided.

Decision guidelines

Before deciding on an application, in addition to the decision guidelines in Clause 65, the responsible authority must consider, as appropriate:

- The State Planning Policy Framework and the Local Planning Policy Framework, including the Municipal Strategic Statement and local planning policies.

- The protection and enhancement of the natural environment and character of the area including the retention of vegetation and faunal habitat and the need to plant vegetation along waterways, gullies, ridgelines and property boundaries.
- The availability and provision of utility services, including sewerage, water, drainage, electricity, gas and telecommunications.
- In the absence of reticulated sewerage:
  - The capability of the lot to treat and retain all wastewater in accordance with the State Environment Protection Policy (Waters of Victoria) under the Environment Protection Act 1970.
  - The benefits of restricting the size of lots to the minimum required to treat and retain all wastewater in accordance with the State Environment Protection Policy (Waters of Victoria).
  - The benefits of restricting the size of lots to generally no more than 2 hectares to enable lots to be efficiently maintained without the need for agricultural techniques and equipment.
- The relevant standards of Clauses 56.07-1 to 56.07-4.

32.03-4 Buildings and works

19/01/2006
VC37

A permit is required to construct or carry out any of the following:

- A building or works associated with a use in Section 2 of Clause 32.03-1.
- An outbuilding which has dimensions greater than those specified in the schedule to this zone.

32.03-5 Advertising signs

19/01/2006
VC37

Advertising sign requirements are at Clause 52.05. This zone is in Category 3.

Notes: *Refer to the* State Planning Policy Framework *and the* Local Planning Policy Framework, *including the* Municipal Strategic Statement, *for strategies and policies which may affect the use and development of land.*

Check whether an overlay also applies to the land.

Other requirements may also apply. These can be found at Particular Provisions.

CARDINIA PLANNING SCHEME

19/01/2006
VC37

SCHEDULE TO THE LOW DENSITY RESIDENTIAL ZONE

Shown on the planning scheme map as LDRZ.

	Land	Area
Minimum Subdivision area (hectares).	L1 PS5006930, 280 Westernport Road and LA PS500693C, Westernport Road, Lang Lang.	2 hectares

Dimensions above which a permit is required to construct an outbuilding
None specified