

# **COLLISION ESTATE CRANBOURNE EAST CULTURAL HERITAGE DUE DILIGENCE**

Sponsored by  
City of Casey

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# COLLISON ESTATE, CRANBOURNE EAST DUE DILIGENCE REPORT

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Sponsor	City of Casey
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## 1 INTRODUCTION

This updated due diligence report was prepared in order to identify the known and potential Aboriginal and historic heritage values to inform the preparation of a Development Plan for the Collision Estate, Cranbourne East (**Maps 1 & 2**).

### 1.1 Name of the Commissioning Agency

KLM Spatial (ABN: 94 005 376 125) commissioned this due diligence report while the City of Casey commissioned the updated version.

### 1.2 Aims and Objectives of the Study

This due diligence report includes a review of both Aboriginal and historic cultural heritage values and is a preliminary guide to heritage values within the activity area. It is not a comprehensive cultural heritage assessment or a Cultural Heritage Management Plan. The purpose of this report is to identify formally recorded heritage values, make general statements about the likelihood of the activity area possessing as yet undocumented heritage values, to indicate areas of heritage potential, and to identify heritage obligations pursuant to the *Aboriginal Heritage Act 2006*, *Aboriginal Heritage Regulations 2018* and the historic *Heritage Act 2017*.

No formal ground surface survey was carried out for this due diligence report. A brief inspection of the activity area was conducted on 26th June 2018.

### 1.3 Individuals and Organisations Undertaking the Study

Andrea Murphy, Rhiannon Stammers and Dr Herman Kiriamia (Archaeology At Tardis Pty Ltd (AAT)) prepared this due diligence report. Their summary CVs are presented in **Appendix 1**.

### 1.4 Individuals and Organisations Consulted during the Study

As part of this due diligence report the following databases have been searched:

- Victorian Aboriginal Heritage Register (VAHR),
- First Nations State Relations (FNSR) Aboriginal archaeological and post-Contact historic places;
- Victorian Heritage Database,
- National Heritage List,
- Commonwealth Heritage List,
- National Trust Register, Australian Heritage Database;
- Review of any previous reports which have included the activity area; and
- City of Casey Planning Schemes Heritage Overlay

## EXECUTIVE SUMMARY

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This due diligence report was prepared in order to identify the known and potential Aboriginal and historic heritage values in relation to the proposed Collison Estate, Cranbourne East (**Maps 1 & 2**). This report presents heritage management obligations pursuant to the *Aboriginal Heritage Act 2006* and the historic *Heritage Act 2017*. This report was commissioned by KLM Spatial (ABN 94 005 376 125) while City of Casey commissioned the updated version.

The activity area is approximately 84.44ha area bound and is by Mayfield Road to the west, Linsell Boulevard to the north, Berwick-Cranbourne Road to the south and the rear boundary of properties immediately east of Collison Road (**Maps 1 & 2**). The activity is a subdivision of land for a mixed use development.

Andrea Murphy and Rhiannon Stammers (Archaeology At Tardis Pty Ltd) are the heritage advisors and Andrea Murphy, Rhiannon Stammers and Herman Kiriama are authors of this report. Andrea Murphy holds an Honours degree in archaeology and has over twenty years' experience in all facets of cultural heritage management. Rhiannon Stammers holds an Honours degree in Indigenous Archaeology and Dr. Herman Kiriama holds a PhD in Heritage Management (see **Appendix 1**).

## ABORIGINAL CULTURAL HERITAGE (SECTION 2)

The following information and discussion was presented; relevant triggers to prepare a mandatory cultural heritage management plan (CHMP), high impact activities, statutory areas of sensitivity, geology, geomorphology and landform, registered places and relevant previous assessments. Based on the above information it was concluded that:

- The activity is a high impact activity
- Part of the activity is a legislated area of Aboriginal cultural heritage sensitivity
- Significant ground disturbance cannot be demonstrated across the entire legislated area of Aboriginal cultural heritage sensitivity
- There are no registered Aboriginal sites in the activity area
- The activity area has not been subject to a cultural heritage management plan
- Recorded Aboriginal sites and reports nearby the activity area indicate that in the activity area Aboriginal cultural heritage is likely to be present on elevated land forms in a surface and subsurface context
- An Aboriginal Cultural Heritage Management Plan is required pursuant to Regulations 25, 46, 47 and 49 of the *Aboriginal Heritage Regulations 2018*

## HISTORIC CULTURAL HERITAGE (SECTION 3)

This section reviewed the history of European land use, Heritage Victoria's Online Database (Hermes) and previous historic reports. Based on the above information it was concluded that:

- There are no recorded historic sites in the activity area however there are a number of small historic investigations and historic sites recorded surrounding the proposed Collison Estate
- The activity area has not been subject to a detailed historic archaeological assessment
- The land was primarily used for grazing and agricultural purposes
- The land has been subdivided for hobby farms

## EXECUTIVE SUMMARY

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- Significant historic heritage is unlikely to be present.

### SITE INSPECTION (SECTION 4)

A site inspection of the activity area was carried out by Rhiannon Stammers (AAT) and Wayne Pepper (BLCAC) on the 26th of June 2018. The aim of the site visit was to assess the activity area in terms of archaeological potential for both Aboriginal and historic sites. The activity area comprised sealed, unsealed roads and hobby farm allotments (**Photo 3-6**). The activity area was inspected from public land, no private land holdings were accessed.

The topography of the area consists of low lying former swamp land with three elevated high points (**Map 7**). The most prominent of these is a point where a low ridge runs north to south across Heather Grove (**Photos 1 & 2**). The most northern elevated point is adjacent to the prior swamp (see **Figure 1**).

Low-lying and probably seasonally inundated land is situated between elevated landforms (**Photo 3**). Registered site VAHR 7921-1081 is recorded on an elevated landform to the west of the activity area (**Photos 3 & 4**).

No Aboriginal or historic cultural heritage was identified within the activity area.

### ARCHAEOLOGICAL POTENTIAL (SECTION 5)

Based on the background research and the site visit the activity area is considered to have the following potential heritage values (**Map 7**).

#### Aboriginal Cultural Heritage (Section 5.1)

The follows areas of archaeological potential have been identified (**Map 7**).

- Elevated sandy landforms associated with waterways and former swamps are considered to have moderate to high archaeological potential for surface and subsurface stone artefacts. These areas would have provided dry land surrounding the floodplain and swamps and would have been preferred locations for the production of stone artefacts.
- Floodplain and low-lying land associated with waterways and former swamps are considered to have low archaeological potential for surface and subsurface stone artefacts.
- No other Aboriginal site types are considered likely for the activity area.

#### Historic Heritage (Section 5.2)

Based on the results of the due diligence site inspections, no historic heritage or areas of historic heritage of archaeological potential were identified.

## EXECUTIVE SUMMARY

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### LEGISLATIVE REQUIREMENTS (SECTION 6)

The relevant Aboriginal and historic heritage legislation was reviewed.

### RECOMMENDATIONS (SECTION 7)

#### Aboriginal Cultural Heritage (Section 7.1)

##### 1. When a Mandatory CHMP is Required

If all or part of any proposed activity is a high impact activity pursuant to Division 5, Part 2 of the *Aboriginal Heritage Regulations 2018*, and if all or part of the relevant land parcel(s) in the activity area is a statutory area of cultural heritage sensitivity pursuant to Division 3, Part 2 of the *Aboriginal Heritage Act 2006*, then a mandatory CHMP is required before any statutory authorisation for an activity can be given. Currently, there is insufficient evidence to demonstrate that the entire area of land deemed by the regulations to be of cultural heritage sensitivity has been significantly disturbed. Current statutory areas of cultural heritage sensitivity within the activity area are shown in **Map 3**. The predicted sensitivity for undiscovered Aboriginal cultural heritage in the activity area is presented in **Section 5** and **Map 8**. The future use of the activity area for a mixed use development triggers a mandatory CHMP.

##### 2. Historic Cultural Heritage (Section 7.2)

There are no registered historic sites within the activity area. It is highly unlikely that historic features will be found within the activity area (eg portable artefacts and *in situ* structures). There are no City of Casey Planning Scheme Heritage Overlays located within the activity area.

*There are no obligations to obtain historic heritage consents or permits to undertake the activity. However, it is advisable that a Historic Heritage Assessment Report is commissioned to ensure compliance with the Heritage Act 2017.*

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Tardis Archaeology Pty Ltd would like to thank the following people for their assistance:

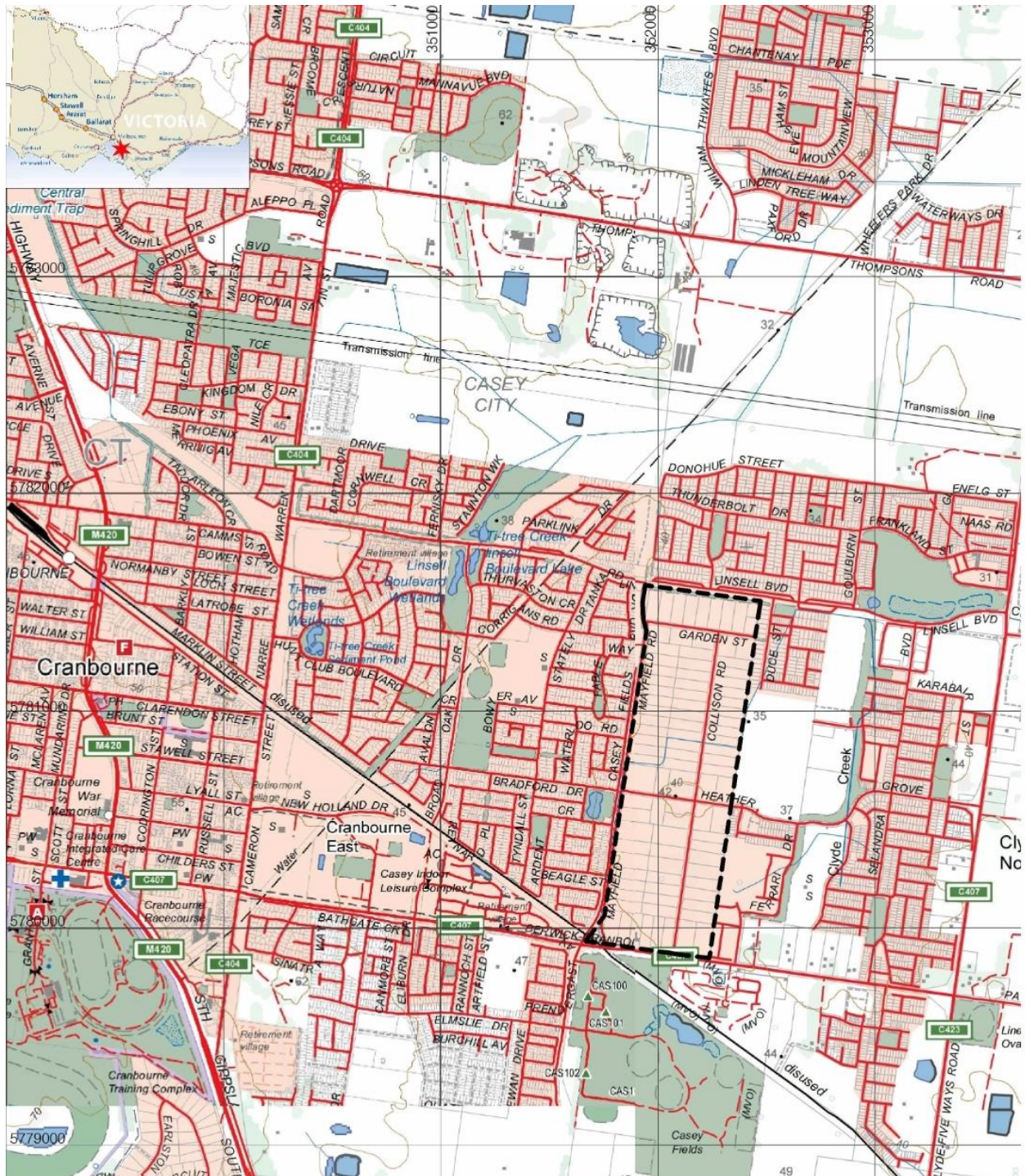
Katelyn Nash, Senior Planner, KLM Spatial.

**ABBREVIATIONS**

AAT	Archaeology at Tardis Pty Ltd
ABN	Australian Business Number
ACHRIS	Aboriginal Cultural Heritage Register and Information Services
AHC	The Australian Heritage Council
AHD	The Australian Heritage Database
AV	Aboriginal Victoria
BP	Before Present
CHL	Commonwealth Heritage List
CHMP	Cultural Heritage Management Plan
CV	Curriculum Vitae
HCO	Holocene Climatic Optimum
LGM	Last Glacial Maximum
NHL	Natural Heritage List
RAP	Registered Aboriginal Party
RNE	Register of the National Estate
SLV	State Library Victoria
TA	Tardis Archaeology Pty Ltd
VAHR	Victorian Aboriginal Heritage Registry
VHR	Victorian Heritage Register
WHL	World Heritage List


*\*Throughout this report several technical terms are used that may not be familiar to some readers. An extensive glossary has been included as Appendix 2 and should be referenced for an explanation of terms.*

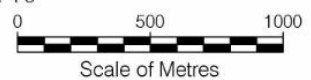
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Topographic map used for Location Plan: 1:30,000 Number T7921-1-4-2 & 7921-1-4-3

### Legend:

-  Activity Area Boundary  
84.44 hectares (approx)
- Parish: Casey
- LGA: Cranbourne





**Map 1 Activity Area Location**



Aerial Photograph: Courtesy of DPI Website 2017

Legend:

-  Activity Area Boundary  
84.44 hectares (approx)
-  Contour Lines

0 100 200  
Scale of Metres



**Map 2      Activity Area Extent**

## **1.5 Location of the Activity Area**

The activity area is bound by Mayfield Road to the west, Linsell Boulevard to the north, Berwick-Cranbourne Road to the south and the rear boundary of properties immediately east of Collison Road, Cranbourne East. (**Maps 1 & 2**).

## **1.6 Project Description**

This report has been prepared to assist in the preparation of a development plan as required under the Development Plan Overlay, Schedule 22. The development plan will provide for the intensification of residential development within the area which may be complemented by other uses. Once a plan is prepared and subsequently submitted and approved by Council, further planning approvals will be required for any subsequent development.

## **2 ABORIGINAL CULTURAL HERITAGE**

### **2.1 Cultural Heritage Management Plan Triggers**

**Regulation 7(a) and (b)** of the *Aboriginal Heritage Regulations 2018* provides that a Cultural Heritage Management Plan is required for an activity if:

- (a) All or part of the activity area for the activity is an area of cultural heritage sensitivity
- (b) All or part of the activity is a high impact activity

If only one of these two conditions apply to the proposal, then the preparation of a mandatory Cultural Heritage Management Plan is not triggered.

A Cultural Heritage Management Plan is also required if the Minister directs a Cultural Heritage Management Plan to be prepared (s48, *Aboriginal Heritage Act 2006*) or if an Environmental Effects Statement is required (s49, *Aboriginal Heritage Act 2006*). Neither of these conditions is known to currently exist.

It is an offence under Section 46 of the *Aboriginal Heritage Act 2006* to carry out an activity for which a mandatory Cultural Heritage Management Plan is required, prior to obtaining an approved Cultural Heritage Management Plan.

## 2.2 High Impact Activities

Division 5 of the Regulations lists high impact activities. Regulation 46 lists a high impact activity as:

### 46 Buildings and works for specified uses

- (1) The construction of a building or the construction or carrying out of works on land is a high impact activity if the construction of the building or the construction or carrying out of the works—
  - (a) would result in significant ground disturbance; and
  - (b) is for, or associated with, the use of the land for any one or more of the following purposes—
    - (iii) a car park;
    - (xiv) a major sports and recreation facility;
    - (xv) a minor sports and recreation facility;
    - (xxiii) a retail premises;
    - (xxiv) a retirement village;
    - (xxv) a service station;

Further, Regulation 47(1) provides that:

### 47 Constructing specified items of infrastructure

- (1) The construction of any one or more of the following is a high impact activity if the construction would result in significant ground disturbance –
  - (f) A roadway with a length exceeding 100 metre

Regulation 48 provides that;

### 48 Dwellings

- (1) The construction of 3 or more dwellings on a lot or allotment is a high impact activity.
- (2) The carrying out of works for 3 or more dwellings on a lot or allotment is a high impact activity.

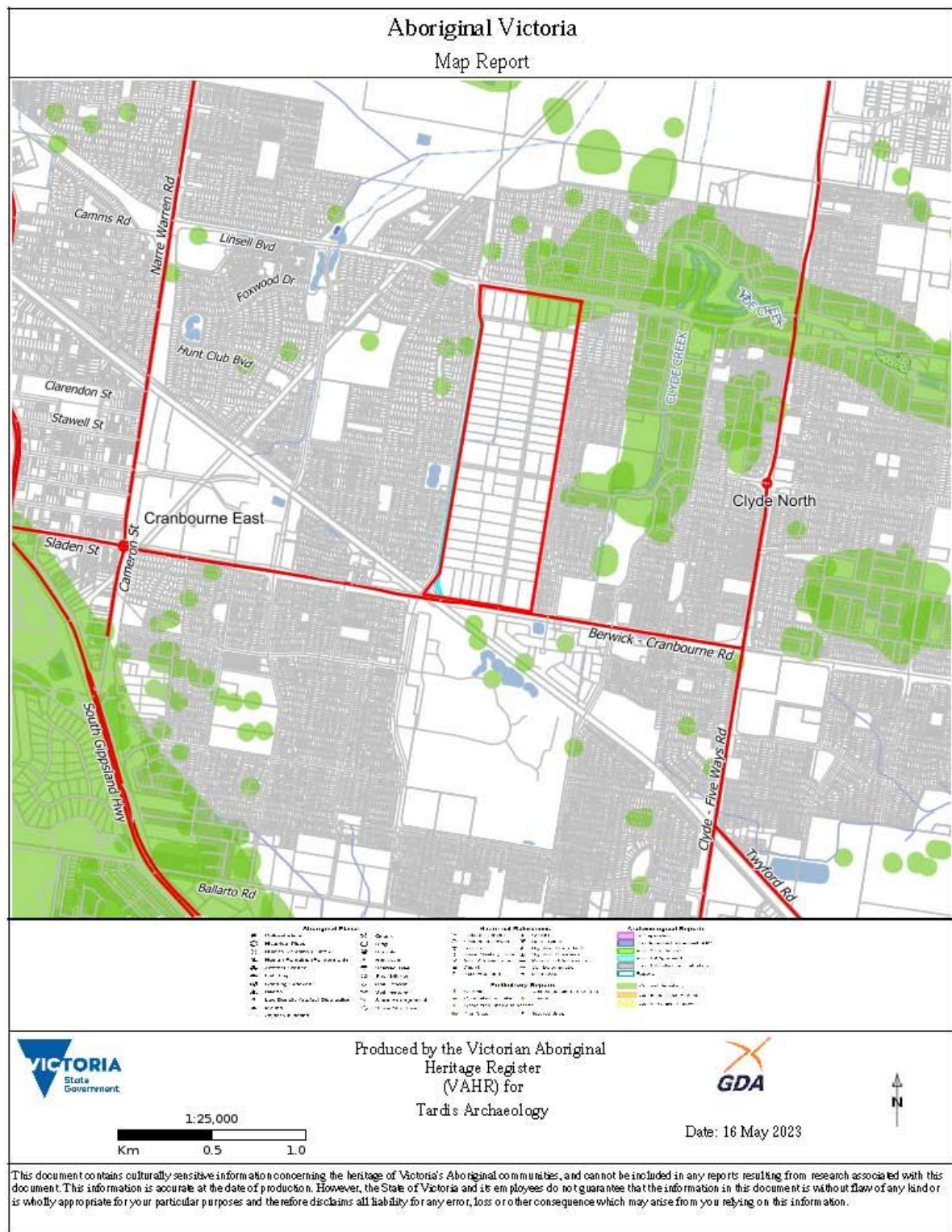
While Regulation 49 provides that,

### 49 Subdivision of land

- (1) The subdivision of land into three or more lots is a high impact activity if—
  - (a) the planning scheme that applies to the activity area in which the land to be subdivided is located provides that at least 3 of the lots may be used for a dwelling or may be used for a dwelling subject to the grant of a permit; and
  - (b) the area of each of at least 3 of the lots is less than eight hectares.
- (2) The subdivision of land into two or more lots in an industrial zone is a high impact activity.
- (3) In this regulation, industrial zone has the same meaning as in the VPP.

Development of the activity area would be considered to be a high impact activity pursuant to Division 5 of the *Aboriginal Heritage Regulations 2018*. The activity will require a

subdivision of land and **will have** development which will include a number of high impact activities **that** would result in significant ground disturbance.



**Map 3      Legislated Areas of Aboriginal Cultural Heritage Sensitivity  
(Green areas)**

## 2.3 Culturally Sensitive Areas

An examination of the Aboriginal Cultural Heritage Register and Information System (ACHRIS) and the *Aboriginal Heritage Regulations 2018* shows that northern part of the activity area is a legislated area of Aboriginal cultural heritage sensitivity (**Map 3**):

Part 2 Division 3 of the *Aboriginal Heritage Regulations 2018* specifies areas of cultural heritage sensitivity as;

### 28 Ancient lakes

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

### 41 Sand sheets

- (1) Subject to subregulation (2), a sand sheet, including the Cranbourne sand, is an area of cultural heritage sensitivity.
- (2) If part of a sand sheet, including the Cranbourne sand, has been subject to significant ground disturbance, that part is not an area of cultural heritage sensitivity.

Therefore, as parts of the activity area are within a legislated area of Aboriginal cultural heritage sensitivity, ancient landforms, the works will require a mandatory Cultural Heritage Management Plan unless significant ground disturbance can be demonstrated for the entire area deemed as culturally sensitive.

## 2.4 Significant Ground Disturbance

Regulation 26(2) of *Aboriginal Heritage Regulations 2018* provides that if part of the waterway or part of the land within 200 metres of a waterway has been subject to significant ground disturbance, then that part is not an area of cultural heritage sensitivity.

Regulation 5 of *Aboriginal Heritage Regulations 2018* define significant ground disturbance as '*disturbance of the topsoil or surface rock layer of the ground; or a waterway by machinery in the course of grading, excavating, digging, dredging or deep ripping, but does not include ploughing other than deep ripping*'.

Topsoil is not a geological term, but rather a common name used in a gardening context. The definition and reference for 'topsoil' is as follows:

*A1 horizon is the surface soil and is generally referred to as topsoil. It has an accumulation of organic matter, a darker colour and maximum biological activity relative to other horizons. This is usually the most useful part of the soil for plant growth and re-vegetation. It is typically from 5 to 30cm thick.*

(Murphy B.W. & Murphy C.L. 2000. The Soil Profile. In: *Soils: Their Properties and Management 2nd Edition*. Edited by: Charman P.E.V & Murphy B.W. Oxford, Oxford University Press. 70-82).

Aboriginal Victoria's Practice Note: *Significant Ground Disturbance* states that the burden of proving significant ground disturbance is the responsibility of the applicant (**Appendix 2**). It outlines four levels of investigation in which significant ground disturbance may be proven, these include:

- 1) Common knowledge,
- 2) Publicly available records,
- 3) Further information from the applicant,
- 4) Expert advice.

Significant ground disturbance would need to be demonstrated for the entire area of land that falls within legislated culturally sensitive areas (**Map 3**) for the activity area to be deemed as not culturally sensitive under the *Aboriginal Heritage Act 2006*.

## 2.5 Geology

*Geological unit:* Baxter Sandstone

*Age:* Miocene - Pliocene (23-2.6 Ma BP)

The Upper Tertiary (Miocene to Pliocene 5-2 Ma BP) Baxter Sandstone dominates the geology of the activity area (**Figure 1**) and is marginal to non-marine in origin deposited in lagoonal conditions (**Wallace et al 2005; Holdgate & Gallagher 2003; Jenkin 1974**). The bedrock is strongly differentiated, poorly sorted, mainly coarse sands with variable amounts of conglomerate, sandstone, and claystone (**Holdgate & Gallagher 2003**). Coarse material tends to occur in lenses, and is frequently cross bedded, with finer particles present in continuous beds (**Jenkin 1974**). There are limited, discontinuous coal seams present (**Holdgate & Gallagher 2003**). The Baxter Formation is typically 12 metres thick but can be up to 24 metres thick in places, particularly inland, away from the coast (**Jenkin 1974; Abele 1976**). The soils on this unit are commonly leached, deep soils with a dark grey brown silty sand A<sub>1</sub> horizon and a pale brown sand A<sub>2</sub> horizon (**Figure 1**) (**Northcote et al. 1975; VRO 2017**). The B horizon commonly features a mid-brown mottled clay, and small ironstone concretions may occur along the interface between the A<sub>2</sub> and B horizons (**Figure 1**) (**Northcote et al. 1975**).

*Geological unit:* Swamp and lake deposits

*Age:* Pleistocene - Holocene (2.6-0.001 Ma BP)

In the northern part of the activity area, Quaternary aged swamp and lake sediments are present (**Welch et al 2011**). These sediments comprise of grey brown to black mud, silt, clay and peat, and were laid down in still-water conditions before the swamp dried out, or was drained for agricultural use (**Welch et al 2011**). Swamp deposition is no longer occurring due to the lack of permanent surface water, although inundation is common in the winter months. Very thin poorly developed soils occur on the surface of these sediments (**Figure 1**).

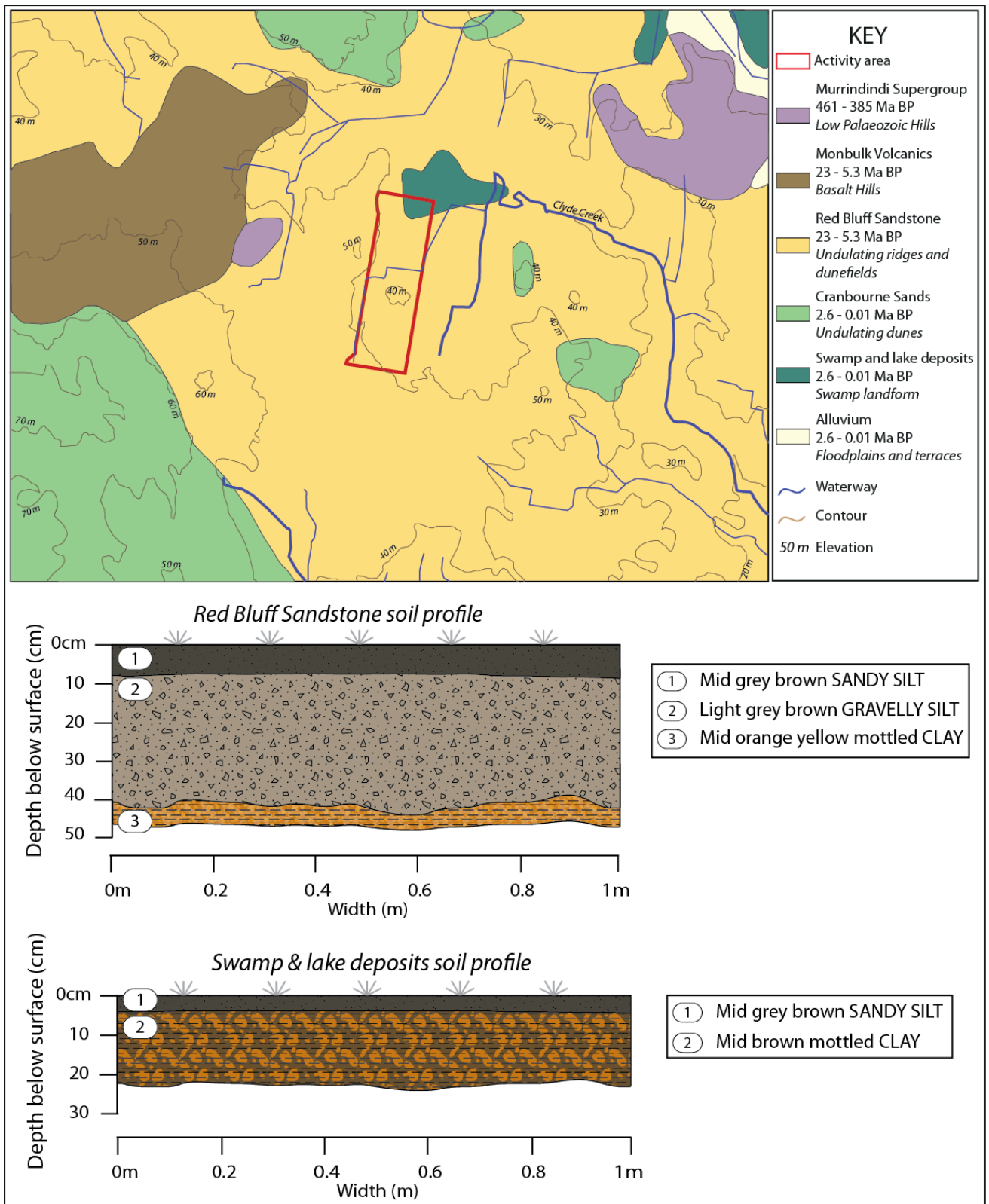
## 2.6 Geomorphology & Landform

The activity area lies across two separate geomorphic units in Victoria; to the north is the Central Sunklands subdivision of the Eastern Plains, and to the south is the Southern Uplands (**Figure 2**) (**Joyce et al 2003**).

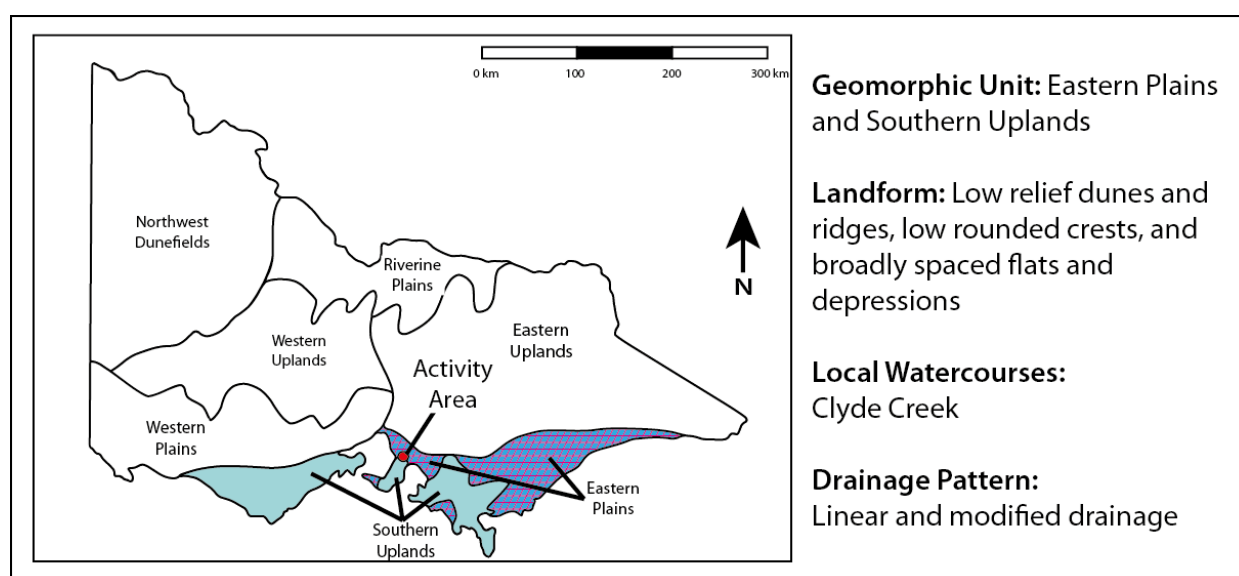
The Central Sunklands subdivision of the Eastern Plains consists of two downthrown, lowlying areas (the Port Phillip Sunkland to the west and the Westernport Sunkland to the east), divided by an upthrown, higher-relief fault block forming the Mornington Peninsula. The activity area resides within the western reaches of the Westernport Sunkland, atop a landscape characterised by gently undulating ridges and dunefields developed on a Neogene-age (23 – 5.5 Ma BP) surface (**VRO 2015**). Younger dunes and sand sheets variably cap this surface, and were deposited intermittently by aeolian processes over the last 2.6 Ma, particularly during the dry and windy conditions of the Last Glacial Maximum (26 – 18 ka BP) (**Cupper et al. 2003; Joyce et al. 2003; Welch et al. 2011**).

For the part of the activity area located within the Southern Uplands geomorphic unit, the landscape demonstrates a very low relief, low elevation land surface, unlike parts of the Mornington Peninsula further south (**Joyce et al. 2003**). The landscape in the activity area is characterised by low rounded crests with broadly spaced flats and depressions made from rocks and sediments of a wide variety of ages (**VRO 2015**). The nearby land surfaces are variably capped by dunes and sand sheets of the Cranbourne Sand that were deposited by past Aeolian (wind) processes. Due to the unconsolidated nature of the Cranbourne Sand, the surface soils are readily disturbed via deflation of the sediments by wind, and high rates of topsoil disturbance from various post-Contact land uses (**Mabbutt 1977**). Destabilisation and mobilisation of large amounts of sand occurred during the Last Glacial Maximum (LGM) as a result of decrease in vegetation cover.

Post-Contact, Carrum Swamp and Koo Wee Rup Swamp were artificially drained with existing channels being modified and new channels created to prevent frequent inundation. As such, the activity area contains engineered drainage channels that drain out to Westernport Bay through the Koo Wee Rup Swamp. Clyde Creek is present to the east, close to the activity area with unnamed engineered drainage channels around and within the activity area. Clyde Creek has been artificially straightened and so the closest natural creek is Cardinia Creek, present over 5km to the northeast of the activity area.



**Figure 1      Geology and Soil Profile of Activity Area**



**Figure 2 Activity Area Geomorphological Information**

**Table 1 Geomorphological History for Activity Area**

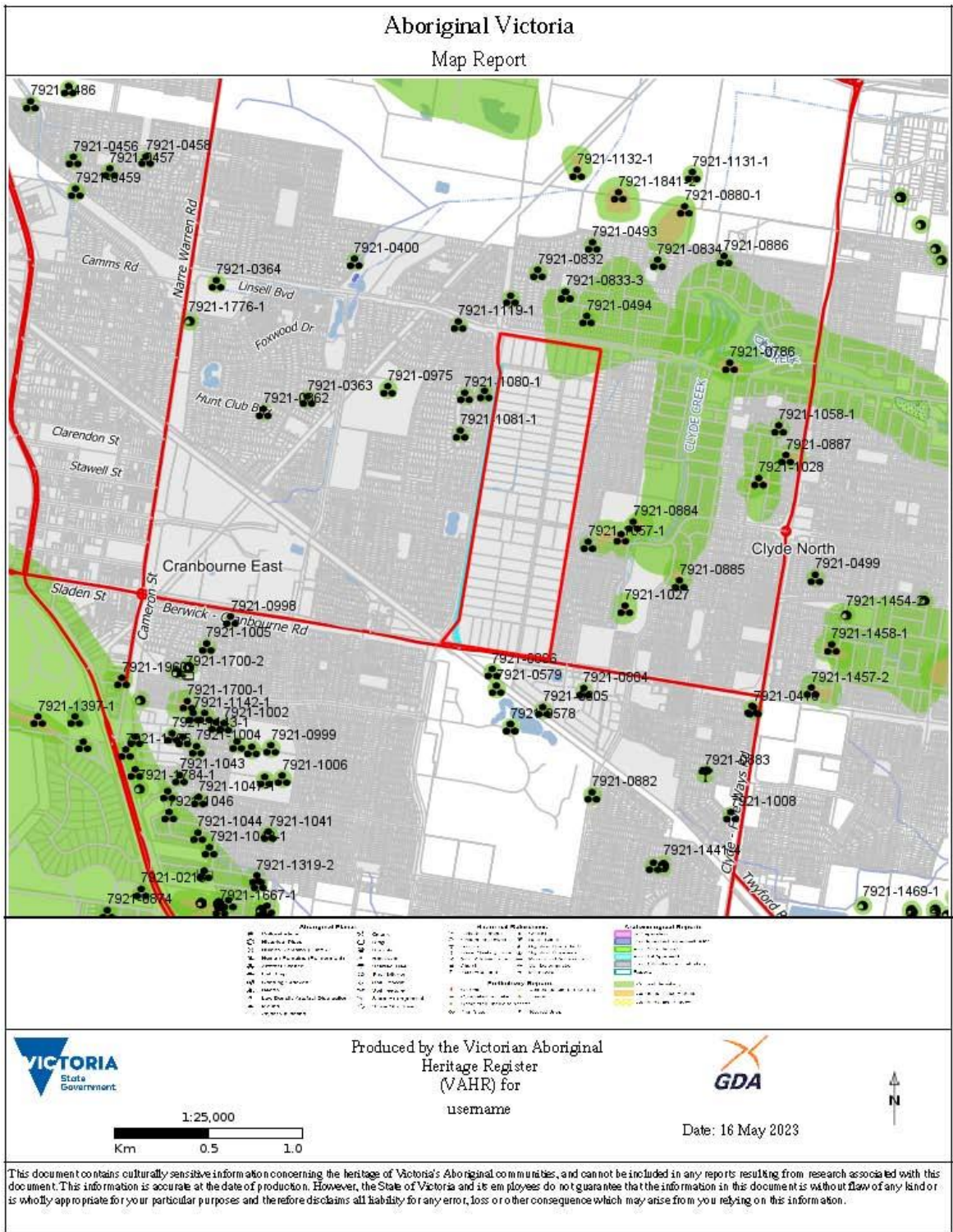
Time period	Geological event/Environmental conditions	Effect
Miocene - Pliocene (23 – 2.6 Ma BP)	<ul style="list-style-type: none"> <li>- Deposition of Red Bluff Sandstone</li> <li>- Sea level fluctuations</li> </ul>	An initial increase in sea level in the Early Miocene promoted continental fluvial deposition of the lower Red Bluff Sandstone strata. Further increases in sea level in Late Miocene – Early Pliocene allowed marginal marine sequences of Red Bluff Sandstone to be deposited in the landscape. Sea level retreat in Mid – Late Pliocene promoted weathering and ferruginisation of the surface rock strata, creating the Neogene surface
Late Pleistocene (128 ka – 16 ka BP)	<ul style="list-style-type: none"> <li>- Sea level retreat</li> <li>- Last Glacial Maximum (LGM)</li> </ul>	After the Last Interglacial, sea levels retreated from approximately 3 – 4 m above current levels. Following this, southeastern Australia experienced a long period of climatic variability in the lead up to Last Glacial Maximum (LGM) at 20 – 16 ka BP. During this period, climates became cool & dry in southeastern Australia. Vegetation cover decreased, allowing for increased river discharge and erosion. Destabilisation of the landscape also mobilised large amounts of sand, resulting in the creation of widespread dunefields. At its lowest extent, sea level was approximately 100 – 120 m lower than present

Early Holocene (10 – 6 ka BP)	– Mid - Holocene Climatic Optimum (HCO)	Following the end of the Last Glacial Maximum, sea levels increased to 1 – 3 m above present levels & climates became warmer and wetter than present. An increase in sedimentation occurred as sea levels rose due to an increase in base-level, and swamps expanded in size
Middle-Late Holocene (5 – 0.02 ka BP)	- Arid expansion	At the end of the HCO, aridification of the environment increased, with a concomitant lowering of sea level to present levels. Erosion and river incision increased in response to climatic and sea-level processes
Recent (0.02 ka BP - Present)	- European settlement	Erosion and coupled sedimentation in response to clearing increased dramatically compared to pre-Contact levels. Fire regimes, drainage patterns & soil organic content also changed substantially as agriculture expanded across the landscape. Efforts to make the land productive for agriculture resulted in the excavation of many drainage channels where ephemeral streams once flowed or where swamps occurred

## 2.7 Aboriginal Cultural Heritage Register and Information System (ACHRIS)

A search of the Aboriginal Cultural Heritage Register and Information System (ACHRIS) database on 16<sup>th</sup> May 2023 has revealed that:

- The Bunurong Land Council Aboriginal Corporation (BLCAC) are the Registered Aboriginal Party (RAP) for the activity area and must be consulted and included in any future Cultural Heritage Management Plan.
- There are no registered Aboriginal heritage places within the activity area (**Map 4**).
- There are nine registered Aboriginal heritage places within 200m of the activity area (**Map 4**). These are VAHR 7921-1080, 7921-1081, 7921-0664, 7921-0492, 7921-0494, 7921-1057, 7921-0806, 7921-0579, and 7921-1056.
- The northern section of activity area is within an area of statutory Cultural Heritage Sensitivity, land., a swampy landform (see **Figure 1 above**).

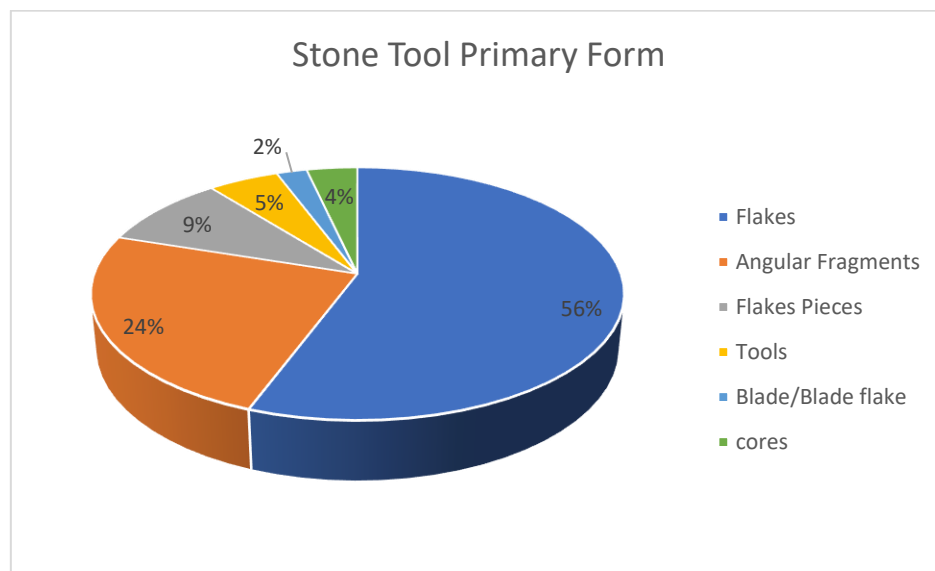


### Map 4 Registered Aboriginal places within 200m of Activity Area

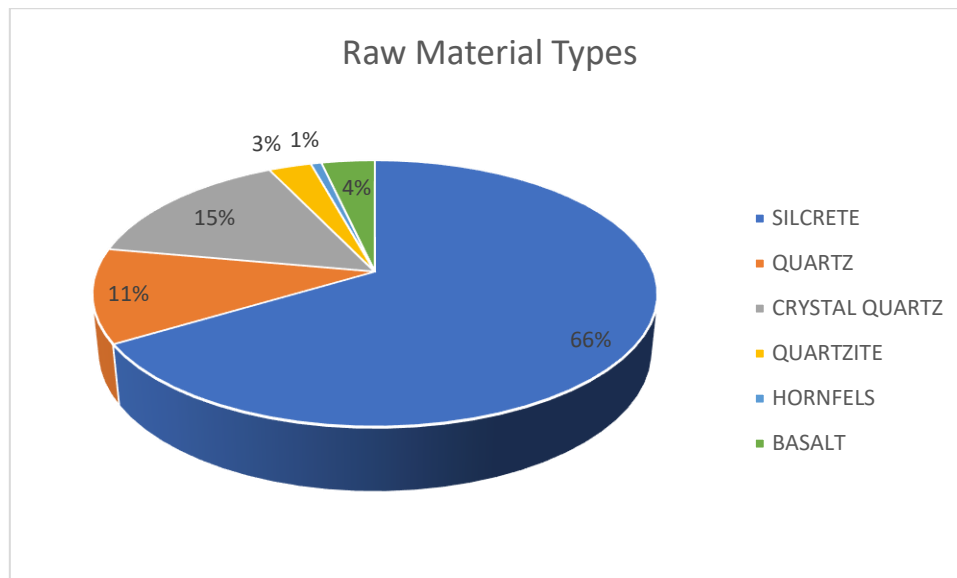
## 2.8 Registered Aboriginal places within 200m of the activity area

There are nine registered Aboriginal heritage places within 200m of the activity area (**Map 4**). These are VAHR 7921-1080, 7921-1081, 7921-0664, 7921-0492, 7921-0494, 7921-1057, 7921-0806, 7921-0579, and 7921-1056. The stone artefact assemblage from these sites can be characterised as follows:

- The stone artefact primary form is dominated by flakes (n=78, 56%), followed by angular fragments (n=34, 24%), flakes pieces (n=13, 9%), tools, including geometric microliths (n=7, 5%), cores (n=5, 4%), and blades (n=3, 2%) (Chart 1).
- Raw materials utilised for stone artefact production is dominated by silcrete (n=93, 66%), followed by crystal quartz (n=21, 15%), quartz (n=16, 11%), basalt (n=5, 4%), quartzite (n=4, 3%) and hornfels (n=1, 1%) (Chart 2).
- Registered Aboriginal places are most commonly found on sandy elevated landforms (78%, n = 7) associated with current or former waterways and swamps. Artefacts have been recovered from surface context but are typically found in subsurface contexts between 5cm – 75cm within silt/silty-sand or clayey-silt.



**Chart 1 Stone Artefact Primary Form**



**Chart 2 Stone Artefact Raw Material**

## 2.10 Previous Cultural Heritage Management Plans

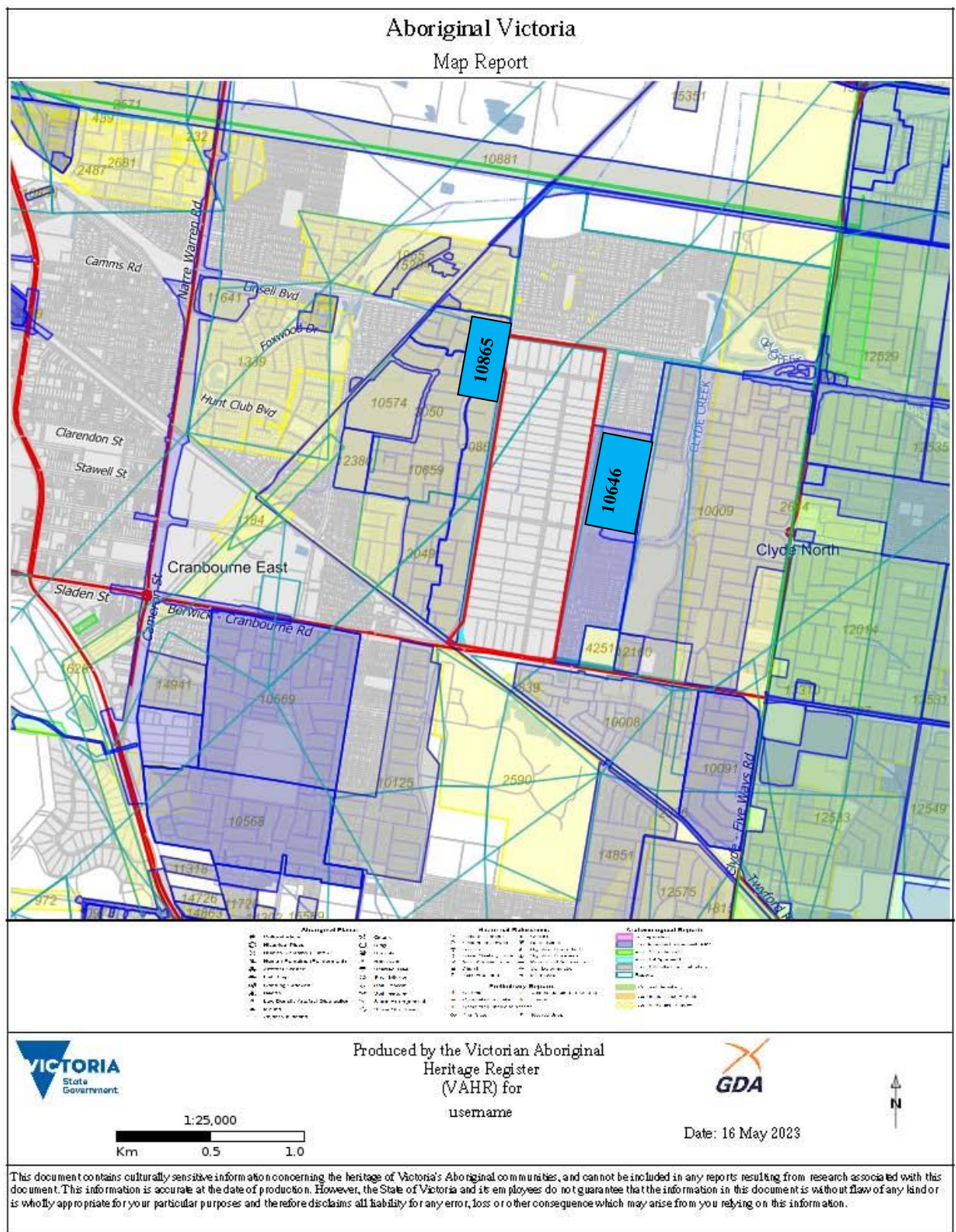
There are no approved Cultural Heritage Management Plans that have included the activity area. There are however, two approved CHMPs adjacent to the activity area. CHMP10865 (Murphy & Rymer 2009), is to the west of the activity area and CHMP10646 (Gilchrist 2001) is to the east of the activity area (Map 5).

Murphy and Rymer (2009) prepared CHMP10865 directly to the west of the activity area, for a residential subdivision. The desktop assessment concluded that the sandy ridgeline within the study area had a high potential for stone artefact scatters while the alluvial plain had a very low archaeological potential for stone artefacts. The standard assessment recorded a single silcrete blade flake on the surface of the ridgeline. The Complex assessment found subsurface stone artefacts and two sites were recorded:

- VAHR 7921-0664 was a stone artefact scatter comprising 54 stone artefacts on remnant sandy sediments localised on the east side of the ridgeline. The artefacts consisted of flakes (n=34) with two tools, one core and 17 angular fragments. The predominant raw material was silcrete (n=39) followed by crystal quartz (n=10) and basalt (n=5). Stone artefacts were found throughout the soil profile to a maximum depth of 95cm comprising grey silty sand (0-20cm), light grey to brown sand (20-100cm) and very strong plastic orange sandy clay (100cm +)
- VAHR 7921-1119 consisted of a single thumbnail scraper on a lower slope adjacent to a floodplain in the west. It was found at a depth of 30cm within very firm dark brown silty clay with (15-50cm) overlying strong plastic mottled yellow and brown clay (50cm +).

Gilchrist (2011) prepared CHMP10646 east of the activity area for a residential subdivision. The desktop assessment identified elevated sandy ground as having archaeological potential for stone artefact scatters. No formal standard assessment was undertaken. The complex assessment identified surface and subsurface stone artefacts and two sites were registered.

- VAHR 7921-1056 was a stone artefact scatter in a plough zone on a low sandy rise. Stone artefacts were found throughout the soil profile to a maximum depth of 30cm within greyish brown silty sand above orange clay (45cm+). A total of 22 stone artefacts were recorded consisting of flaked pieces (n=12), flakes (n=8), and two cores. The predominant raw material was silcrete (n=9) followed by quartz (=7), crystal quartz (n=3) and quartzite (n=3).
- VAHR 7921-1057 consisted of a single silcrete geometric microlith. The artefact was located on alluvial flat land that has been subject to stock trampling and grazing.



Map 5 Approved CHMPs Adjacent to the Activity Area

## **2.11 Aboriginal Cultural Heritage Conclusions**

The desktop due diligence report has concluded the following:

- The activity is a high impact activity
- Part of the activity is a legislated area of Aboriginal cultural heritage sensitivity
- Significant ground disturbance cannot be demonstrated across the entire legislated area of Aboriginal cultural heritage sensitivity
- There are no registered Aboriginal sites in the activity area
- Recorded Aboriginal sites and reports nearby the activity area indicate that in the activity area Aboriginal cultural heritage is likely to be present on elevated land forms in a surface and subsurface context
- An Aboriginal Cultural Heritage Management Plan is required pursuant to Regulations 7 43, 44, 46,47, 48 and 49 of the *Aboriginal Heritage Regulations 2018*

### 3 HISTORIC CULTURAL HERITAGE

#### 3.1 Historic Land Use History

Since settlement of the Cranbourne region in the 1840s, the landscape has dramatically changed because of pastoral and market garden activities (such as the clearing of vegetation, and major drainage works), residential development, road construction, quarrying and the installation of services. Sand extraction has been, and currently still is, a major activity within the ‘Cranbourne Sands’ landform.

The first squatters in the Cranbourne region arrived from Tasmania in 1836. The five Ruffy brothers commenced pastoral Licensees of the ‘Tomaque’ run west of Cranbourne (1836-50), and then the 32,000 acre ‘Mayne’ run (incorporating the activity area) 2 miles east of ‘Tomaque’ in 1840-1845 (**Billis & Kenyon 1974**). Sam Webster initially held the 12,800 acre ‘Towbeet’ run that was created in-between these two runs in 1844. A survey undertaken by Henry Foot in 1852 describes the activity area region as being ‘flat with patches of Tea Tree’ and that the nearby hills were ‘Sandy soil wooded with gum and cherry’.

Once land sales had occurred in the Cranbourne region in 1852, Alexander Cameron became the first European landowner of the present study area, purchasing a 320 acre block (block 32 **Figure 3**). There is no historical evidence to suggest that Cameron lived on this allotment or constructed any substantial structures. At this time, Alexander Cameron was the nearest settler, having established a homestead to the southwest of Cranbourne (**Figure 3**).

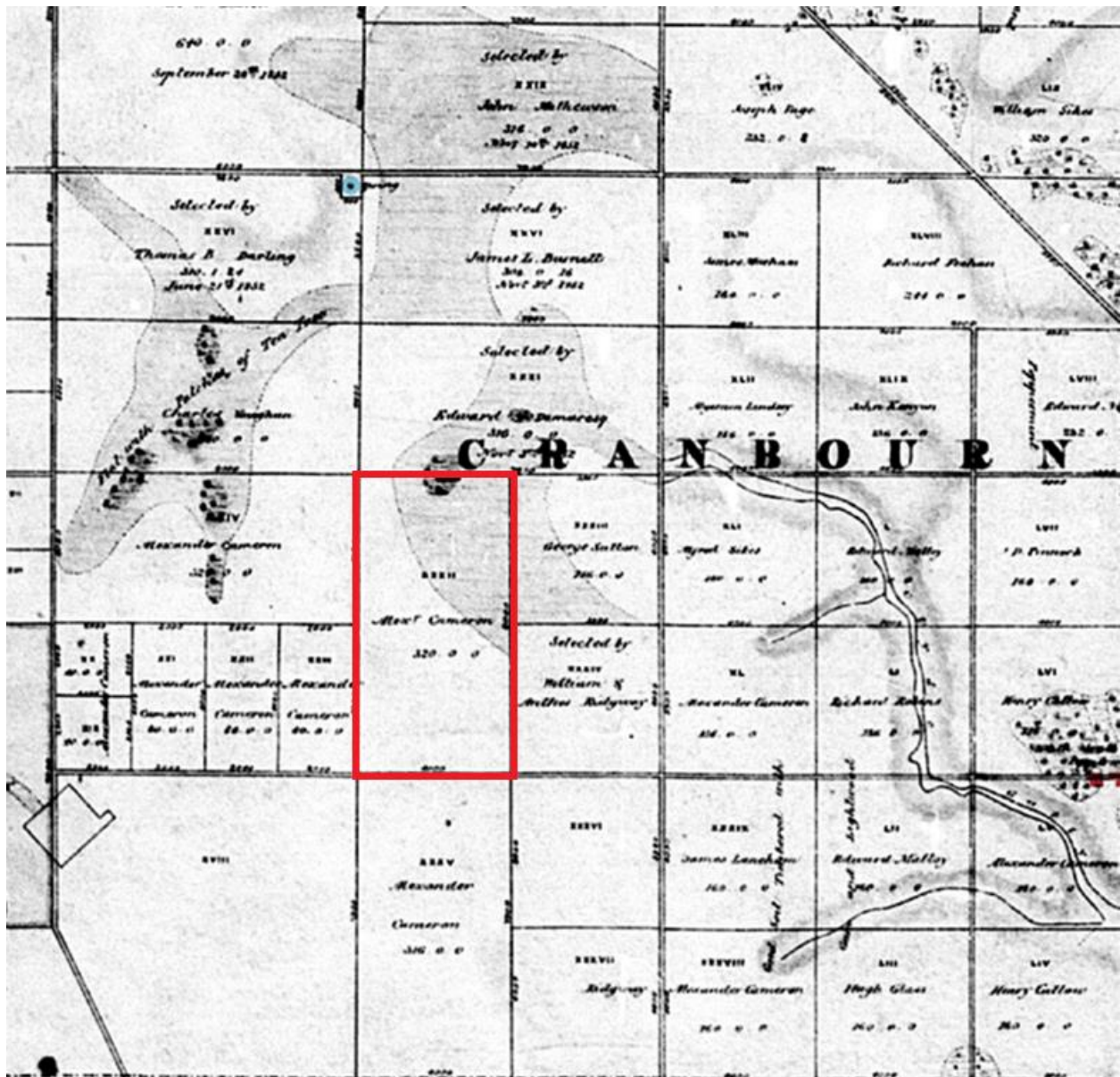
After the land sales of the 1850s, when secure ownership was obtained landowners begun major constructions (such as houses, sheds, dairies) and developed land for pastoral and horticultural activities. Prior to this period homesteads and other farm buildings would have been modest. The main landholders in the district owned several blocks, with the vast majority being subsequently leased to tenant farmers. During this earliest phase of European ownership, roads were restricted to rough tracks between pre-emptive right stations and there was a single major road between Melbourne, Western Port and Gippsland.

Cranbourne became the main market town in the region and remained so from the 1860s to the 1880s (**Gunson 1974: 154**). During this time Alexander Cameron was the principal stock agent and auctioneer for the region. As a consequence of farmers selling their stock in Cranbourne, local business flourished due to farmers obtaining their supplies in the town on market days.

The elevated ‘dune’ within the activity area has not been subject to commercial sand extraction in the past. The remainder of the activity area is low lying and essentially comprises clay/loam deposits. The dominant land use throughout the history of the activity area has been pastoral. Any precontact trees containing cultural scars within the activity area have likely been destroyed by land clearing.

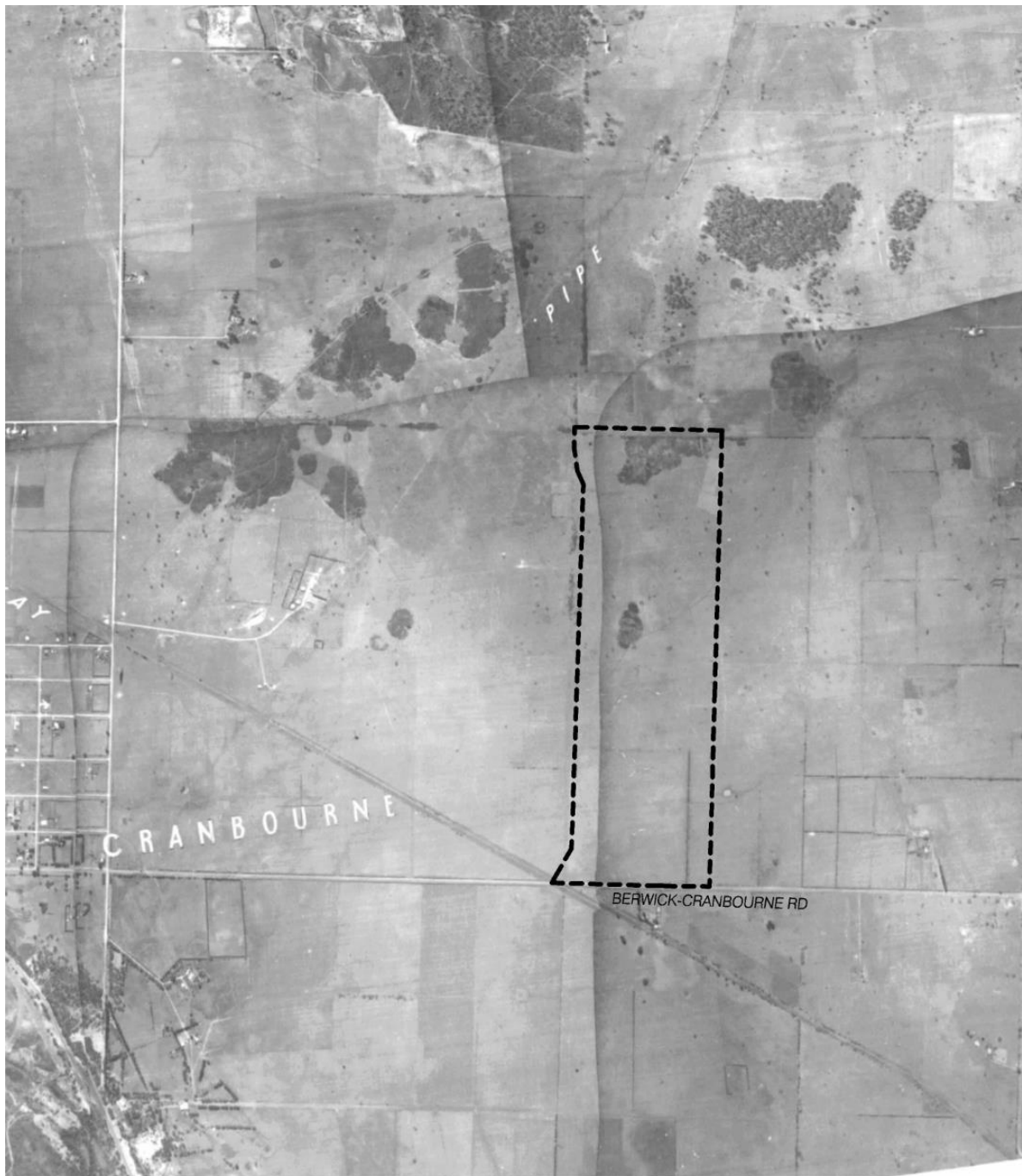
Although the area was settled by Europeans relatively early in Victoria’s history, it has maintained a continual and predominantly pastoral and agricultural existence. Examination of an archival air photograph of the site (**Plate 1**) reveals that the activity area had remained relatively underdeveloped until the late 1940s. Stands of swamp vegetation are still visible

in the northern section of the activity area and Clyde Creek is still a natural body. However, by 1962, Collision Road, Heather Gove, Garden Street and Mayfield Road can be seen, as can the first houses. Vegetation has also been removed (Plate 2).



**Figure 3 . Division of Survey & Mapping (1854) Berwick, Cranbourne, Dandenong, Eumemmerring, Lyndhurst, Pakenham - detail view [Maps Collection, State Library of Victoria 2018].**


Google Earth imagery highlights how the activity area has changed in the previous 15 years. In 2005, most of the housing was localised in the activity area between Berwick-Cranbourne Road and Garden Street in the south and between Mayfield Road and Collision Road. The surrounding areas display native vegetation clearance and the land was mainly used for farming purposes (Plate 3). By 2009, residential subdivision began mainly concentrated to the west and north of the activity area (Plate 4) with further development continuing in 2013 (Plate 5). This saw the development of properties to the east with additional development in the north and west areas. In 2017, the Google Earth Satellite imagery highlights more residential subdivision of land surrounding the activity area and that further native vegetation clearance has occurred (Plate 6).



Cranbourne B3 Zone 7, Date 18-7-1949

0 200 400  
Scale of Metres

Legend:

 Activity Area Boundary  
20.87 hectares (approx)

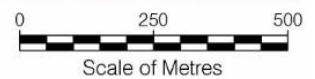
Parish: Cranbourne  
LGA: Casey




**Plate 1      Aerial Photograph 1949**



Project Melbourne, Run 23, Film 7, Photo 700, Date: 1962



**Legend:**

 Activity Area Boundary  
20.87 hectares (approx)

Parish: Cranbourne  
LGA: Casey



**Plate 2      Aerial Photograph 1962**



Aerial Photograph Courtesy of GoogleEarth 2005

0 100 200  
Scale of Metres

Legend:



Activity Area Boundary  
20.87 hectares (approx)



**Plate 3**      **Google Earth Image 2005**



Aerial Photograph Courtesy of GoogleEarth 2009

0 100 200  
Scale of Metres

**Legend:**



Activity Area Boundary  
20.87 hectares (approx)

Parish: Cranbourne  
LGA: Casey




**Plate 4      Google Earth Image 2009**



Aerial Photograph Courtesy of GoogleEarth 2013

0 100 200  
Scale of Metres

**Legend:**

 Activity Area Boundary  
20.87 hectares (approx)

Parish: Cranbourne  
LGA: Casey




**Plate 5**      **Google Earth Image 2013**



Aerial Photograph Courtesy of GoogleEarth 2017

0 100 200  
Scale of Metres

**Legend:**

 Activity Area Boundary  
20.87 hectares (approx)

Parish: Cranbourne  
LGA: Casey



**Plate 6      Google Earth Image 2017**

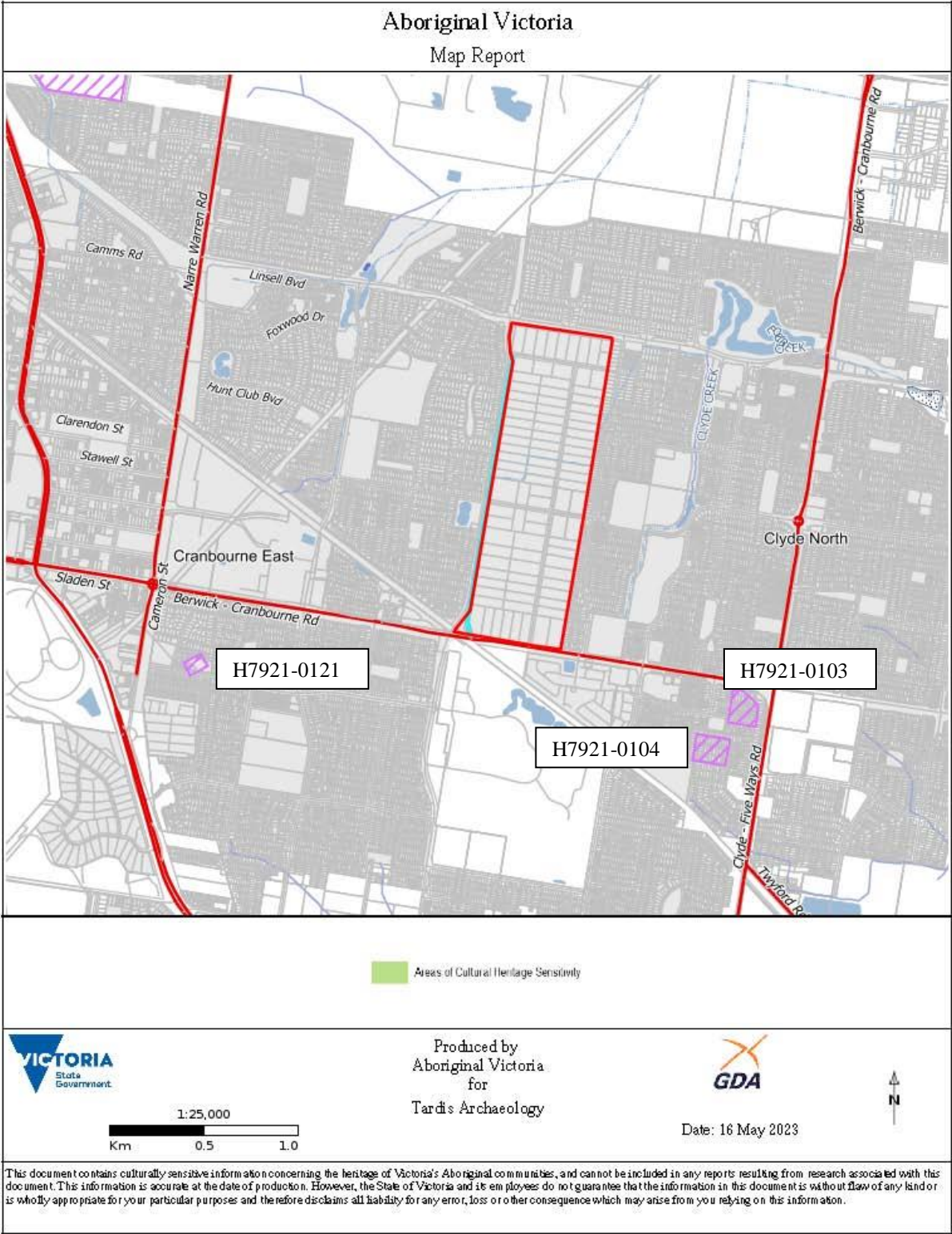
### 3.2 Heritage Victoria's Online Database and ACHRIS

Heritage Victoria's Online Database (HERMES) and ACHRIS (**Map 6**) shows that there are no registered historic heritage places within the activity area. The closest sites are H7921-0103 [Farm Hill 2] and H7921-0104 [Farm Hill 3], which are located approximately 850m to the south east, and H7921-0121 [Cameron Homestead Complex] which is located 1.3km to the southwest.

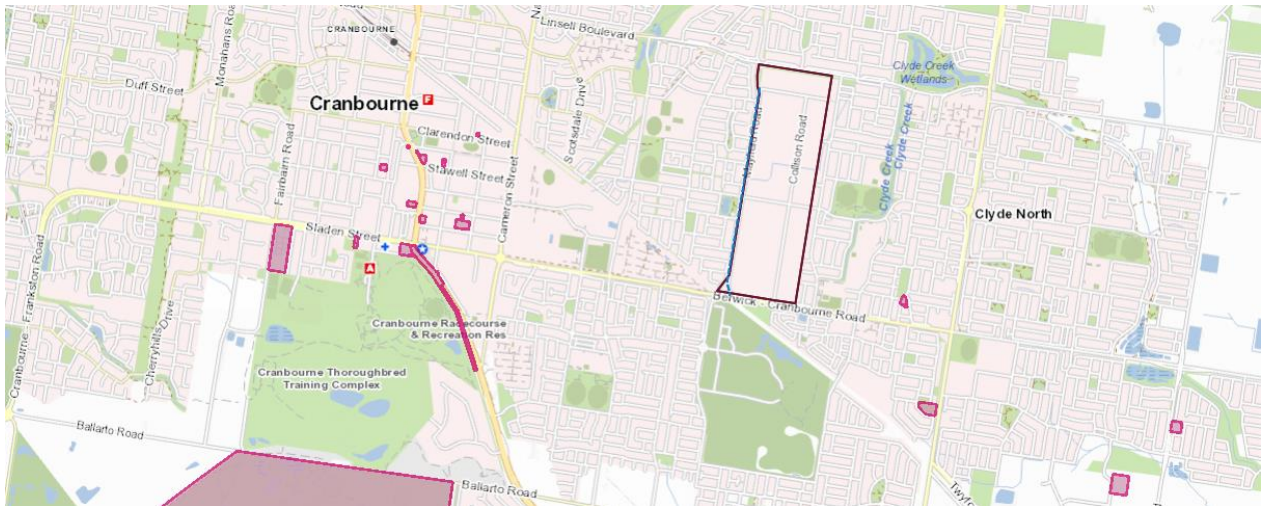
**H7921-0103 [Farm Hill 2]** is a rubble scatter on top of a low hill, in the middle of a paddock, 400m north of a historic cottage. The site consists of a rubble scatter on top of a hill which is spread over an area of 10m<sup>2</sup>. The scatter includes 19<sup>th</sup> century brick, large bluestone blocks and some modern brick. The subsurface material that was uncovered remains in a poor physical condition. H7921-103 is situated in a paddock, which appears to have been grazed since the late 19th century. The site was originally part of the large 'Mayne' pastoral run in the 1840's which was subdivided in the early 1850's. Allotment 36 (152 acres) was purchased by E. Mitchell and J. Close in 1852, who grazed stock on the property. Mitchell and Close leased part of the property to J. Jennings who cultivated part of this land and grazed stock. As Jennings was a bricklayer and may built the cottage around 1885 when it first appears in rate books.

**H7921-0104 [Farm Hill 3]** consists of a large surface scatter of building debris, a well and building rubble. Whilst the function of the site has not been determined, preliminary investigations reveal that it may have been a farm out building or a dump site. It was originally part of the Mayne pastoral run in the 1840's. It is likely that Jennings built these structures as well.

**H7921-0121 [Cameron Homestead Complex]** contains no observable surface historic artefacts. A concrete water feature may conceal a disused well, which may potentially contain deposits dating to the 1850s. The recovery of a small number of artefacts during a subsurface investigation suggests that there is potential for additional historic artefacts to be located in the area. The archaeological significance of the site is moderate as it may contain archaeological deposits relating to the earliest occupation of Cranbourne.



**Map 6      Heritage Inventory Places**



**Map 7 Heritage Overlays Near the Activity Area**

### 3.3 Historic Reports

There are no historic cultural heritage sites that have previously been recorded in the study area. However, within the Cranbourne region there have been a number of historic investigations and a small number of historic sites recorded. Some of which, are near the current activity area. There has also been a heritage study of extant historic features within the Cranbourne region (**Butler & Associates 1996**) with a number of buildings in the township identified as historic places.

An archaeological survey was conducted at the proposed realignment of Clyde-Five Ways Road (**Bell 2002**). The report detailed that no non-Aboriginal historic sites were located; however, the historic site of Hill Farm was located as having some heritage value. This site was situated on the eastern shoulder of the proposed realignment option.

An archaeological survey of Berwick-Cranbourne Road (**Cekalovic 2000**) identified that no historical archaeological or heritage sites were located in the study area. However, the report details the site of Hill Farm located 850m away from the activity area. Two other areas were investigated for historical significance. No building, structure, or its foundations were identified at the St Pauls Church of England site. The railway crossing on Clyde Road near Twyford Road was inspected and it was determined that although the structure was disused, it retained structural integrity and was in a good condition.

**Murphy (2003)** prepared a cultural heritage assessment of Cranbourne East which included a ground survey. This assessment included the current study area. The desktop assessment noted that no historic sites had been previously recorded within the study area, but that no previous survey had been conducted for historic sites. It was noted that a weatherboard house, associated outbuildings, and driveway plantation, some of which dates to around 1900 when property was first developed, was located in the study area. Although the house appeared to be intact, the internal features of this house were modified and there was little resemblance to its original layout. The house and its associated structures did not have any specific cultural heritage value and were not included on the City of Casey Heritage Overlay. The house was assessed as unlikely to have any significant archaeological deposits. No other historic sites were identified in the study area. Based on the background assessment and results of the survey, no areas were assessed as having significant archaeological potential.

825 Cranbourne – Frankston Road is 7.5 km away from Collison Estate, and although there was no evidence for historic occupation during the site survey and background research (Murphy 1999), sub-surface excavation and monitoring (Murphy 2000, 2002) found evidence of a late 1800s occupation at this location (H7921-0037). The site had been subject to redevelopment on top of the earlier occupation, resulting in destruction of much of the structural evidence of the building. However, the small range of glass, hand-made bricks, ceramics, slate and wooden post and rail fence, all indicate that the initial occupation was during the 1870s-80s and that the extant 1920s house had been constructed on the same site (Murphy 2005).

In an assessment of land on Narre-Warren-Cranbourne road to the northwest of Collison Estate, Murphy (2001) recorded the remains of a farm complex (H7921-0044). This was assessed as being of low scientific and local history significance. The remains at this site were considered typical for small scale farm developments dating to the 1920s and 1930s and were to remain preserved with open space of the development.

Thomson (2002) conducted an archaeological survey for Aboriginal and non-Aboriginal archaeological sites on a rural property, south of Merinda Park Station, south of Thompsons Road, Cranbourne. One new non-Aboriginal archaeological site was identified during the survey. The historical complex dated to between 1940 and 1950 and was used primarily as a dairy. Several features were identified including stock yards, an orange brick tank/feeder, several rectangular red brick troughs, a filled-in well, concrete slabs for sheds and a house, a cement tank stand, several mature trees, and a large hay shed. The complex was considered to have potential to contain subsurface archaeological remains. The complex was assessed as having low scientific significance and local cultural heritage significance.

### **3.4 Historic Heritage Conclusions**

The desktop due diligence has concluded the following:

- There are no recorded historic archaeological or overlay sites in the activity area however there are a number of small historic investigations and historic sites recorded surrounding the proposed Collison Estate
- The land was primarily used for grazing and agricultural purposes
- The land has been subdivided for hobby farms
- Significant historic heritage is unlikely to be present

## 4 SITE INSPECTION

A site inspection of the activity area was carried out by Rhiannon Stammers (AAT) and Wayne Pepper (BLCAC) on the 26<sup>th</sup> June 2018. The aim of the site visit was to assess the activity area in terms of its archaeological potential for both Aboriginal and historic sites. This site visit does not constitute a formal ground surface survey.

The activity area comprises sealed and unsealed roads and hobby farm allotments (**Photo 1-6**). The activity area was inspected from public land, no private land holdings were accessed.

The topography of the area consists of low-lying former swamp land with three elevated high points (**Map 5**). The most prominent of these is a point where a low ridge runs north to south across Heather Grove (**Photo 1 & 2**). The most northern elevated point is adjacent to the prior swamp (see **Figure 1**)

Low-lying and probably seasonally inundated land is situated between elevated landforms (**Photo 5**). Registered site VAHR 7921-1081 is recorded on an elevated landform to the west of the activity area (**Photo 3 & 4**)

No Aboriginal or historic cultural heritage was identified within the activity area.



**Photo 7**

Southern high point along Heather Grove, facing east.



**Photo 8**

Crest of elevated landform, facing west, to the low-lying western section of the activity area.



**Photo 9**

Low lying area between two high points. Arrow indicates a high point and the location of VAHR 7921-1081, facing north west.



**Photo 10**

Location of VAHR 7921-1081 and view from the activity area to rise in the west of the activity area, facing west.



**Photo 11**

Hobby farm nature of residences within the activity area, facing east.



**Photo 12**

Unsealed section of Collison Road, facing north to elevated landform.

## **5      ARCHAEOLOGICAL POTENTIAL**

Based on the background research and the site visit the activity area is considered to have the following potential heritage values (**Map 7**).

### **5.1    Aboriginal Cultural Heritage**

The following areas of archaeological potential have been identified (**Map 7**).

- Elevated sandy landforms associated with waterways and former swamps are considered to have moderate to high archaeological potential for surface and subsurface stone artefacts. These areas would have provided dry land surrounding the floodplain and swamps and would have been preferred locations for the production of stone artefacts.
- Floodplain and low-lying land associated with waterways and former swamps are considered to have low archaeological potential for surface and subsurface stone artefacts.
- No other Aboriginal site types are considered likely for the activity area.

### **5.2    Historic Heritage**



Based on the results of the due diligence site inspections, no historic heritage, or areas of significant historic heritage of archaeological potential were identified. However, once the ground is disturbed, there is always some potential for minor historic archaeological sites, such as rubbish dumps. Archaeological deposits older than 75 years are protected by the *Heritage Act 2017*.



Aerial Photograph: Courtesy of DPI Website 2017

0 100 200  
Scale of Metres

Legend:

 Activity Area Boundary  
84.44 hectares (approx)  
 Contour Lines

 Areas of moderate to high Aboriginal Archaeological Potential



**Map 8 Areas of Aboriginal Archaeological Potential**

## 6 LEGISLATIVE REQUIREMENTS

All historic and Aboriginal cultural heritage is protected in Victoria. Following is a summary of relevant legislation. Any breach of this legislation is cause for prosecution.

### 6.1 Aboriginal Cultural Heritage

The Victorian *Aboriginal Heritage Act 2006* was proclaimed and came into effect on 28<sup>th</sup> May 2007, replacing both the State *Aboriginal and Archaeological Relics Preservation Act 1972* and the Victoria Provisions of the Commonwealth Act. *The Aboriginal Heritage Regulations 2018* give effect to the Act. The Regulations prescribe standards, set out the circumstances in which a Cultural Heritage Management Plan should be prepared and set fees and charges. The Regulations should be read in conjunction with the Act.

Principally, the Regulations define high impact activities and areas of cultural heritage sensitivity. High impact activities and areas of cultural heritage sensitivity are described in the *Aboriginal Heritage Regulations 2018 (Part 2, Division 3 & Division 5)*. Where a high impact activity is proposed in an area of cultural heritage sensitivity, Part 2, Division 3 of the Act states a cultural heritage management plan (CHMP) must be prepared to assess the likelihood of, and manage harm to, any Aboriginal cultural heritage in the activity area.

The activity area is currently proposed for redevelopment. This activity is considered a high impact activity under division 5 of the *Aboriginal Heritage Regulations 2018*.

The activity area includes areas that are within legislated cultural heritage sensitivity under Regulations **28** and **41** of the *Aboriginal Heritage Regulations 2018*.

### 6.2 Historic Cultural Heritage

#### Local Government

All Victorian municipalities are subject to land use planning controls governed by the *Planning and Environment Act 1987* which is administered by State and Local Government authorities. These planning controls include historic places which may be listed on the local planning scheme Heritage Overlay. Heritage Overlays include places of local significance and places included in the Victorian Heritage Register. The aim of the Heritage Overlay is to assist in protecting the heritage of municipalities. Municipal Councils are responsible for issuing planning permits for the development of heritage places under the *Planning and Environment Act 1987*.

The City of Casey has a policy framework that requires planning to take into consideration heritage sites and to protect places and sites with significant cultural heritage value. These strategies provide for the conservation and enhancement of places which are of aesthetic, archaeological, scientific, architectural, cultural, scientific, or social significance or otherwise of special cultural values. These criteria respond to those defined in *The Burra Charter* (Australia ICOMOS 1999), an internationally recognised and adopted charter for the identification and assessment of cultural heritage sites.

## State Government

Non-Aboriginal archaeological sites in Victoria are protected by the *Heritage Act 2017*. The following is a summary of the latest statutory obligations regarding non-Aboriginal historic archaeological sites:

- All historical archaeological sites in Victoria (not included on the Heritage Register and are more than 75 years old) are protected under Section 123 of the *Heritage Act 2017*. Under this section it is an offence to excavate, damage or disturb relics and sites whether they are included on the Heritage Inventory or not, unless a consent has been issued under Section 124;
- Under Sections 87 to 89 and 123 of the *Heritage Act 2017* it is an offence to damage, disturb, excavate or alter a place or object on the Heritage Register, unless a permit is granted under Sections 67; or 124
- Under Section 127 of the *Heritage Act 2017* any person discovering or uncovering an archaeological relic is required to report the discovery to the Executive Director of the Heritage Council;
- Section 23 of the Heritage Regulations 2017 prescribes the following fees for application for consents to undertake works or activities in relation to archaeological sites or archaeological artefacts. Subject to regulation 26, for the purposes of section 124(2)(b) of the Heritage Act 2017, the prescribed fees are as follows—
- 

**Table 2 Applicable Consent Fees**

Consent Applications	Fee Units	Fees
<b>One domestic dwelling or extension to one dwelling</b>		
Consent to uncover	20	\$305.8
Consent to excavate	30	\$458.7
Consent to damage or disturb	50	\$764.5
<b>All other Purposes</b>		
Consent to uncover and expose	50	\$764.5
Consent to excavate	72.4	\$1,106.9
Consent to damage or disturb under 50% of the site	200	\$3,058.00
Consent to damage or disturb 50% or more of the site	400	\$6,116.00
<b>Other consents</b>		
<ul style="list-style-type: none"> <li>• To possess or dispose of archaeological artefacts.</li> <li>• To upgrade geotechnical or soil testing, trenching or boring in order to install, maintain or upgrade service utilities.</li> <li>• A test archaeological excavation as part of a cultural heritage management plan or</li> <li>• For all other purposes for which a consent is required in relation to an archaeological artefact, archaeological site or a site recorded in the heritage inventory</li> </ul>	72.4	\$1,106.9

As from 1 July 2022, a fee unit is \$15.29

In addition, Heritage Victoria requires that funds be made available by developers to ensure the responsible management of all significant artefacts that are recovered during an excavation. As a condition on any consent or permit, there will be a requirement that a specified sum of money is submitted to Heritage Victoria prior to the commencement of

works. The funds will be used to ensure the cataloguing and conservation of any significant artefacts that are recovered. Any unexpended funds will be returned to the client, minus a 15% levy that is used for the management of all excavation projects in Victoria.

All archaeological sites in Victoria are protected by the *Heritage Act 2017*. All known archaeological sites are listed in the Heritage Inventory. Regardless of whether they are listed in the Inventory or not, no one can knowingly excavate or disturb an archaeological site without the consent of the Executive Director.

Archaeological sites are protected in two ways. Sites, which were considered to be of significance to the State, are recommended to be placed on the Victorian Heritage Register (VHR). The VHR exists to protect and conserve places and objects. All other archaeological sites are protected through the requirement to gain consent from the Executive Director to disturb, destroy, or excavate an archaeological site.

The Victorian Heritage Register enables Heritage Victoria to preserve and conserve archaeological sites which are of significance to the State of Victoria while the Heritage Inventory enables Heritage Victoria to record and monitor sites which are not considered to be of State significance or where the significance is unknown. Heritage Victoria also registers sites under a 'D' listing, which accommodates sites of very low archaeological value though they may have local historic value. 'D' listed sites are typically those that have little structural or artefactual features such as earthen formations (i.e., dams, railway formations). Sites registered under this system do not require Consent prior to any proposed development, but apart from this are managed in the same way as Heritage Inventory sites. 'D' Listed sites, therefore, may be subject to a variety of conditions prior to impact, such as detailed recording, additional historic research, and archaeological monitoring.

The two levels of protection enable two different principles in issuing consents and permits to be followed. The guiding principal for places on the Register is to protect and conserve as much of the fabric of the place and the relics / artefacts as is possible. While for places listed in the Heritage Inventory recording, excavating, and monitoring are the usual methods of assessing and managing the heritage values of a site.

Consultation with Heritage Victoria, Department of Environment, Land, Water & Planning, should occur at least 4 months prior to lodgement of a permit application to disturb or destroy a historic archaeological site. In the event of a site or relic being uncovered or discovered during works, any works that would damage the relic object or place should cease and either the consulting archaeologist or Heritage Victoria be notified.

## **Australian Government**

Nationally significant heritage places are primarily registered and protected under the *Environment Protection and Biodiversity Conservation Act 1999* which is administered by the Australian Government Department of Climate Change, Energy, the Environment and Water. Other Australian Government Acts dealing with historic heritage include the *Underwater Cultural Heritage Act 2018*, *Protection of Movable Cultural Heritage Act 1986* and the *Australian Heritage Council Act 2003*. The Australian Heritage Council (AHC) is the principal adviser to the Australian Government on heritage matters and assesses nominated places and recommends to the Minister whether or not a nominated place is appropriate for listing on The Australian Heritage Database (AHD). The Minister rejects or approves the

nominated place. The AHD comprises heritage places from the World Heritage List (WHL), Commonwealth Heritage List (CHL), the National Heritage List (NHL), List of Overseas Places of Historic Significance to Australia and the Register of the National Estate (RNE).

## **7 RECOMMENDATIONS**

### **7.1 Aboriginal Cultural Heritage**

#### **7.1.1 When a Mandatory CHMP is Required**

If all or part of any proposed activity is a high impact activity pursuant to Division 5, Part 2 of the *Aboriginal Heritage Regulations 2018*, and if all or part of the relevant land parcel(s) in the activity area is a statutory area of cultural heritage sensitivity pursuant to Division 3, Part 2 of the *Aboriginal Heritage Act 2006*, then a mandatory CHMP is required before any statutory authorisation for an activity can be given. Currently, there is insufficient evidence to demonstrate that the entire area of land deemed by the regulations to be of cultural heritage sensitivity has been significantly disturbed. Current statutory areas of cultural heritage sensitivity within the activity area are shown in **Map 3**. The predicted sensitivity for undiscovered Aboriginal cultural heritage in the activity area is presented in **Section 5** and **Map 8**. The future use of the activity area for a mixed use development triggers a mandatory CHMP.

### **7.2 Historic Cultural Heritage**

There are no registered historic sites within the activity area. It is highly unlikely that significant historic features will be found within the activity area (e.g. portable artefacts and structures). There are no City of Casey Planning Scheme Heritage Overlays located within the activity area.

*There are no obligations to obtain historic heritage consents or permits to undertake the activity. However, it is advisable to commission an Historic Heritage Assessment Report to ensure compliance with the Heritage Act 2017.*

## REFERENCES

- |  |      |   |
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#### Web Sites

Australian Heritage Database	<a href="http://www.environment.gov.au/cgi-bin/ahdb/search.pl">http://www.environment.gov.au/cgi-bin/ahdb/search.pl</a>
Heritage Victoria DSE	<a href="http://www.heritage.vic.gov.au">www.heritage.vic.gov.au</a>
Victoria Planning Schemes Online	<a href="http://www.dse.vic.gov.au/planningschemes/index.html">http://www.dse.vic.gov.au/planningschemes/index.html</a>
Victorian Heritage Database	<a href="http://services.land.vic.gov.au/maps/hermes.jsp">http://services.land.vic.gov.au/maps/hermes.jsp</a>
State Library of Victoria	<a href="https://www.slv.vic.gov.au/">https://www.slv.vic.gov.au/</a>

#### Legislation

*Aboriginal Heritage Amendment Act 2016* (Vic)

*Aboriginal Heritage Regulations 2018* (Vic)

*Heritage Act 2017* (Vic)

*City of Casey Planning Scheme*

## **APPENDIX 1 – CULTURAL HERITAGE ADVISORS CVs**

## Andrea Murphy

Cultural Heritage Project Director

[andream@tardisenterprises.com.au](mailto:andream@tardisenterprises.com.au) | 0419 879 864



### Qualifications

Bachelor of Arts (Prehistory)  
Master of Arts (Historic Archaeology)

### Memberships

Australian Association of Consulting Archaeologist Inc.: President (VIC)  
Australian Anthropological and Archaeological Society: Member  
Australasian Society of Historic Archaeology: State Representative  
International Council on Monuments and Sites: *Full International* Member  
Cultural Heritage Advisor: *Aboriginal Heritage Act 2006*

### Training & Workshop Attendance

First Aid (Level 2)  
4WD Course  
Industry Induction (Red Card)  
2012 Holocene Sand Geomorphology  
2013 Natural and Cultural Scarred Trees  
2014 Human and Animal Skeletal  
2015 Volcanic Plains Geomorphology  
2016 Historic Materials

### Role Responsibilities

Director and Senior Heritage Advisor  
Project Supervision  
Resource Management and Technical Specialist  
Client Liaison  
Stakeholder Engagement  
Quality Controller  
Facilitator

### Career Summary

Andrea Murphy is the Principal Cultural Heritage Advisor and Director at Archaeology At Tardis with extensive experience and qualifications in both indigenous and non-indigenous cultural heritage assessment and management. She has been a heritage professional for more than 26 years and has played a key role in ensuring the successful delivery of over 3000 projects under the company of Archaeology At Tardis. Andrea has authored and co-authored more than 2000 heritage documents and has presented papers at both national and international conferences. Andrea's role includes input and management of all AAT projects, ensuring adequate and appropriate resources are allocated, ensuring quality of draft and final products and project delivery within time and budgetary constraints.

Further reflecting Andrea's standing in the archaeological field, she is the current President (VIC) of the Australian Association for Consulting Archaeologists Inc, the only national organisation which provides accreditation for the consulting industry. She is also the state representative of the Australasian Society for Historic Archaeology. Her position in these organisations includes arranging and facilitating a wide range of professional development workshops.

Under Andrea's direction, the Archaeology At Tardis group specialise in all facets of heritage management, from assistance relating to statutory requirements to the completion of large scale multi-disciplinary heritage projects. Andrea offers expert and informed advice ensuring the most suitable



outcomes for both clients and heritage are achieved. Andrea regularly appears at VCAT and offers expert and informed advice ensuring the most suitable outcomes for both clients and heritage are achieved.

## Relevant Experience

For each Archaeology at Tardis project Andrea's role has included:

- Initial and ongoing client contact;
- Preliminary background research and project familiarisation;
- Project scoping in response to clients development design;
- Principal consultation with all major stakeholders such as Office of Aboriginal Affairs Victoria, Heritage Victoria and Relevant Aboriginal Groups;
- Facilitation and co-ordination of stakeholder meetings;
- Undertake site visit during each component of the project;
- Review of research design and sub-surface testing strategies;
- Allocation of adequate and relevant resources to achieve quality and timeframes;
- Review of draft documents;
- Main participant in solving any issues that may arise; and
- Ensuring final documents have achieved Archaeology At Tardis high standard before submitting to the client/sponsor.



### Qualifications

Bachelor of Archaeology (Hons): La Trobe University.  
PhD candidate Archaeology: La Trobe University

### Memberships

Australian Archaeology Association  
The Society for Archaeological Sciences  
Cultural Heritage Advisor: *Aboriginal Heritage Act 2016*

### Role Responsibilities

- Conducting fieldwork,
- Background research
- Report writing and proofing
- Site survey and excavation
- Identification and analysis of artefacts
- Artefact and stratigraphic drawing

### Career Summary

Rhiannon has recently entered commercial archaeology. In 2013 she completed her honours degree, focused on Indigenous archaeology from the Willandra Lakes (NSW) and since then has been undertaking her PhD. She has extensive field experience both in Australia and in South Africa, working on sites from the late Pliocene/early Pleistocene and Middle Stone Age in South Africa, and Australian Pleistocene and Holocene sites.

### Relevant Experience

#### The Browns Creek Community Archaeology Project (2013)

Excavation and fieldwork supervisor for The Browns Creek Community Archaeology Project, a research and training project initiated and driven by traditional owners focusing on an extensive shell midden in Victoria's southwest. Project partners were the Gadabanud and Gulidjan Traditional Owner Group (GGTOG), Kuuyang Maar Aboriginal Corporation (KMAC), Eastern Maar Aboriginal Corporation (EMAC), Biosis Pty Ltd, La Trobe University (LTU), Otway Coast Care Committee (OCCC) and The Office of Aboriginal Affairs Victoria (OAAV). Browns Creek 3 (VAHR 7620-0077), located near Apollo Bay on Victoria's Otway Coast, is an intact, stratified shell midden containing a broad range of faunal and artefactual material, including potential hearth deposits. The traditional owners initiated the project to explore the research potential of this Aboriginal place, and build an understanding of its Aboriginal cultural values in a regional context.

#### Amber Estate - Education Centre, 380 Vearings Road, Wollert – Due Diligence Report (2017)

Project archaeologist undertaking a due diligence assessment on behalf of ID FLK Amber Developments for the proposed Education Facility in Wollert. Responsibilities included register and database searches, literature reviews and authoring due diligence assessment for Indigenous and historical cultural heritage.