

Armstrong Creek Urban Growth Area

Marshall Employment Precinct

Aboriginal Heritage and Post Contact Archaeological Assessment

Prepared for the City of Greater Geelong

Prepared by [REDACTED]

Date: 15th July 2013



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Executive Summary

Introduction and Study Aims

TerraCulture Pty Ltd has been engaged by the City of Greater Geelong (COGG) to provide cultural heritage advice to assist in the preparation of a Precinct Structure Plan (PSP) for the Marshall and Western Employment Precincts. The specific tasks are:

1. to identify and assess the known (registered) Aboriginal places and European (Post Contact Historic Sites);
2. identify any surface Places and Historic Sites by means of a pedestrian archaeological survey;
3. to produce detailed maps of all areas of Aboriginal potential and identify areas where subsurface testing should take place.

COGG also require:

4. Advice on best practice for conservation and interpretation of any features, sites, places areas or landforms of significance as stated in relevant policies and guidelines;
5. Advice on process for on going consultation between Council, AAV, RAPS, Aboriginal communities and government agencies on Aboriginal heritage values.

Statutory Heritage Authorities

The ACUGA is within the Registered Aboriginal Party (RAP) boundaries of the Wathaurung Aboriginal Corporation (the WAC or Wada wurrung). Under Part 10 of the Aboriginal Heritage Act 2006, this group has rights and responsibilities for Aboriginal cultural heritage in the Geelong region.

The WAC was not notified of this assessment and it is not a statutory requirement to do so. As part of any future Aboriginal cultural heritage investigations within either precinct the COGG are advised to make the results of this assessment available to the WAC (see Recommendations)

Aboriginal Affairs Victoria (AAV) administers the Aboriginal Heritage Act 2006. AAV were notified of this assessment during an application to access the Victorian Aboriginal Heritage Register online.

Heritage Victoria (HV) administers the Heritage Act 1995. HV have not been notified of this assessment and it is not a requirement to do so under the Act.

Environmental Setting

The Marshall Precinct lies at the north western end of the Bellarine Peninsula between the southern shore of Corio Bay and Mount Duneed. The Barwon River lies directly to the east and together with Waurin Ponds Creek are the main features of the local landscape. This part of the Bellarine Peninsula is part of the Moolap Lowlands and has little relief. Geologically speaking the quaternary sediments that underlie Marshall are relatively recent in age; the sediments are mapped as '*high level alluvium deposits, outwash sand gravel and clay*' and are late Pleistocene.

Previous Heritage Assessments

Previous assessments of Aboriginal heritage within the Marshall Employment Precinct have been limited to small subdivisions in cleared paddocks and linear infrastructure developments on road reserves or within the railway easement. No Aboriginal heritage was discovered during these early assessments which were mostly based on surface evidence, as this was determined during pedestrian surveys. Therefore there are no registered Aboriginal heritage places within the Marshall Employment Precinct; a conclusion confirmed by the recent search of the VAHR.

Other than the investigation of the former pipe factory, previous assessments of post contact archaeological heritage within the Marshall Employment Precinct have been limited to pedestrian surveys which typically accompany assessments of Aboriginal heritage. These investigations have been restricted to areas within the precinct which have undergone some type of development.

Search of the VAHR for registered Aboriginal Heritage Places.

The VAHR was accessed electronically on the 10th May and again on the 3rd of July 2013. A separate register contains details of Aboriginal historic places and this was also consulted. The Table presents the results of this register search.

VAHR No	Name	Component Type	Easting (GDA94)	Northing (GDA94)
7721-0501	BREAKWATER IA 1	Artefact Scatter	269308	5771037
7721-0676	BAILEYS PARK ESTATE 1	Artefact Scatter	268013	5770657
7721-0679	GROVES ROAD 1	Artefact Scatter	267641	5769498
7721-0830	BARWARRE ROAD 1	Artefact Scatter	267760	5766352
7721-0905*	JENDES LANE MARSHALL 1	Artefact Scatter	270298	5769082
7721-0906*	JENDES LANE MARSHALL 2	Artefact Scatter	270486	5768873
7721-0933*	KEYSTONE 1	Artefact Scatter	270204	5767974
7721-0934*	KEYSTONE 2	Artefact Scatter	270182	5767827
7721-0936*	KEYSTONE 3	Artefact Scatter	269559	5768126
7721-0976	Tucker St	Artefact Scatter	269347	5770872
7721-1012	2/141 Grove Rd AS	Artefact Scatter	267075	5769479
7721-1190	Grove Road 01	Artefact Scatter	266713	5769488
7721-1191	Grove Road 02 IA	Artefact Scatter	266684.6	5769494
7721-1192	Grove Road 03 IA	Artefact Scatter	266682.6	5769485
7721-1193	Grove Road 04 IA	Artefact Scatter	266634.9	5769500

Registered Aboriginal cultural heritage places within 2.0 km of the Marshall Employment Precinct. * denotes places mentioned in text.

The VAHR search indicates that there are no registered Aboriginal heritage places within the Marshall Employment Precinct.

Mapped Areas of Sensitivity for Aboriginal Heritage Places

In the absence of any registered Aboriginal heritage places or named waterways there are no mapped areas of sensitivity within the Marshall Employment Precinct.

Search of the Heritage Register and Inventory for Historical Archaeological Sites

The HV register search indicated that there are four listed places on the Heritage Inventory; three of these recorded during the assessment of the cement pipe factory including the factory itself and a fourth place registered as the former Racecourse Hotel, which was located on the corner of Marshalltown and Horseshoe Bend Road and which has been destroyed.

HV Inventory No	Name	Type	Current Status
H7721-0010	Horseshoe Bend Road 1	Former Racecourse Hotel and associated fabric at the corner of Marshalltown Road and Horseshoe Bend Road	Destroyed
H7721-0119	Drews Road 1	Cement Pipe making Factory	Adjacent to the Marshall Railway Station carpark
D7721-0120	Drews Road 2	Cypress pine windbreak	Unknown
D 7721-0121	Drews Road 3	Post and wire fence	Appears to have been

			destroyed
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Registered archaeological heritage places within Marshall Employment Precinct (see Map 3).

Field Inspection

The Marshall Employment Precinct was inspected by [REDACTED] on the 27th May 2013 and then again on the 28th with [REDACTED] (Senior Planner COGG). The purpose of the inspection was to determine the sensitivity of the precinct for Aboriginal heritage and post contact archaeological heritage according to landform type and current use. Any landforms or other features considered to be sensitive for Aboriginal heritage were noted.

The field inspection indicated that there are no obvious Aboriginal heritage places within the Marshall Employment Precinct or distinctive landforms sensitive for Aboriginal heritage. There is a probability of Aboriginal heritage places in the form of low density stone artefact in properties to the northeast, along Reserve Road and Barwon Heads Road where there is higher ground. At the same time, parts of the Marshall Employment Precinct appear to have been subject to significant ground disturbance as this is defined in the Aboriginal Heritage Regulations 2007 and technically are not sensitive for Aboriginal heritage.

Post Contact Historical Archaeology

The reserve of the former racecourse railway is currently the only known unregistered place within the precinct. There is a probability of other unrecorded archaeological sites and features associated with the extant historic buildings recorded by Rowe and Jacobs (2013).

Recommendations for further Cultural Heritage Assessments

- Assessments of Aboriginal cultural heritage are recommended for future development activities on all properties within the Marshall Employment Precinct. These assessments will ensure compliance with the *Aboriginal Heritage Act 2006* and the *Aboriginal Heritage Regulations 2007*.
- The requirement for a CHMP for any property or group of properties within the Marshall Employment Precinct can be determined through a due diligence assessment from a cultural heritage advisor (CHA) which, among other things, would consider the cultural heritage sensitivity of the parcel of land and the type of activity and its potential impact on Aboriginal cultural heritage.
- Any individual property owner or group of property owners should seek advice from a CHA on how best to define activity areas for the purposes of undertaking a CHMP.
- Even if a mandatory CHMP is not required a sponsor (land owner or developer) should consider undertaking a voluntary CHMP to ensure compliance with the Act.
- Assessments of post-contact archaeological heritage are recommended for future development activities on all properties within the Marshall Employment Precinct. These assessments will ensure compliance with the *Heritage Act 2005*.
- Assessments should take the form of stand alone reports, written and presented to HV standards.

Recommendations for the Registration of Heritage Places with AAV and HV

- There are no recommendations for the registration of Aboriginal Heritage Places within the Marshall Employment Precinct as none are currently known.
- The Cement Pipe Factory is on the Heritage Inventory and registered as Drews Road 1. This place has been assessed to be of State Significance and should be nominated for the Victorian Heritage Register.

- The Former Racecourse Railway Reserve should be registered on the Heritage Victoria Inventory. The extent and form of this place should be determined during the historical archaeological survey of the relevant properties.

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1. Introduction

TerraCulture Pty Ltd has been engaged by the City of Greater Geelong (COGG) to provide cultural heritage advice to assist in the preparation of a Precinct Structure Plan (PSP) for the Marshall and Western Employment Precincts. The Marshall and Western Employment Precincts are part of the Armstrong Creek Urban Growth Area (ACUGA). Located south of the Geelong CBD the ACUGA is the primary growth area for Geelong and includes parts of Grovedale, Marshall, Connewarre and Mount Duneed (Appendix 1).

This report investigates the Aboriginal heritage and the post-contact archaeological heritage for the Marshall Employment Precinct.

2. Aims and Scope

As stated in the Brief (Appendix 1) *'The assessment is required to inform the preparation of the Marshall and the Western Employment Precinct PSPs with regard to heritage protection and constraints to development in these Precincts.* The specific tasks are:

1. to identify and assess the known (registered) Aboriginal places and European (Post Contact Historic Sites);
2. identify any surface Places and Historic Sites by means of a pedestrian archaeological survey;
3. to produce detailed maps of all areas of Aboriginal potential and identify areas where subsurface testing should take place.

With regards to the second task it was decided not to undertake a pedestrian survey of Aboriginal or post contact archaeological heritage due primarily to budget and time restraints. Rather the precincts would be inspected by the consultant to confirm existing place registrations and landform sensitivity as mapped by AAV. The inspection would also provide an opportunity to nominate new areas of sensitivity based on landform type, degree of ground disturbance, history of use and existing place registration. COGG also require:

4. Advice on best practice for conservation and interpretation of any features, sites, places areas or landforms of significance as stated in relevant policies and guidelines;
5. Advice on process for on going consultation between Council, AAV, RAPS, Aboriginal communities and government agencies on Aboriginal heritage values.

COGG requires that this report complies with the relevant legislation and guidelines of the *Aboriginal Heritage Act 2006*, the *Aboriginal Heritage Regulations 2007*, the *Heritage Act 1995* and any relevant local or Commonwealth heritage legislation.

This assessment will follow the standards of a Cultural Heritage Management Plan (CHMP) for a Desktop Assessment as closely as possible.

This assessment does not include post contact heritage that is in a built form as this category of heritage is being dealt with by ██████████ in a separate study (Rowe and Jacobs 2013). ██████████ report also includes post contact heritage places that are described as ruinous and therefore may have an archaeological component and/or have been the subject of archaeological investigations. ██████████ report should be read in conjunction with this report.

3. Activity Description

Following the Brief, the Armstrong Creek Urban Growth Area is the primary urban growth area of Geelong. The Armstrong Creek Urban Growth Plan outlines the proposed development framework for the area and defines the urban growth boundary. It aims to concentrate the majority of Geelong's projected urban growth into a comprehensive community located to the south of the Melbourne-Warrnambool railway line. As noted above The Growth Area includes parts of the suburbs and localities of Grovedale, Marshall, Connewarre and Mount Duneed. The City of Greater Geelong has adopted the Armstrong Creek Urban Growth Plan and this will form the basis of the Marshall and Western Employment Precinct PSPs.

This assessment will inform the COGGs master plan for the Marshall and Western Employment Precincts and there are no specific plans on the form or extent of any activity at this stage.

4. Location and Extent of the Marshall Employment Precinct.

The extent of the assessment is all land identified in Appendix 1 of the Brief which shows maps of the Marshall Employment Precinct. Also, as stated in the Brief, the assessment should include *both sides of road reserves where roads form the boundary of the Activity Area, and where heritage assessments have not already been undertaken for the adjoining road side.*

Marshall Employment Precinct

The Marshall Employment Precinct is located in Geelong's southern outskirts between Grovedale to the west and St Albans Park to the east.

The Marshall Employment Precinct is triangular in shape and is bordered by the Melbourne-Warrnambool Railway line to the west, Reserve Road to the south and the Barwon Heads Road to the south-east. The precinct's north-east boundary straddles the Barwon Heads Road. As noted in the Brief (Appendix 1) *In the case of the Marshall Precinct, includes the entirety of the Melbourne-Warrnambool Railway rail reserve including all the land identified for the future expansion of the Marshall Rail Station.*

The northern third of the Marshall precinct has already undergone residential development and retains little potential for any new (unregistered) Aboriginal heritage places or historical archaeology relating to the non-indigenous settlement of the area.

5. Consultation with Statutory Heritage Authorities

Wathaurung Aboriginal Corporation

The ACUGA is within the Registered Aboriginal Party (RAP) boundaries of the Wathaurung Aboriginal Corporation (the WAC or Wada wurrung). Under Part 10 of the Aboriginal Heritage Act 2006, this group has rights and responsibilities for Aboriginal cultural heritage in the Geelong region.

The WAC was not notified of this assessment and it is not a statutory requirement to do so.

As recommended below, Cultural Heritage Management Plans should precede any development within the precinct which will engage the RAP in the assessment of Aboriginal heritage.

Aboriginal Affairs Victoria

Aboriginal Affairs Victoria (AAV) administers the *Aboriginal Heritage Act 2006*. AAV were notified of this assessment during an application to access the Victorian Aboriginal Heritage Register online.

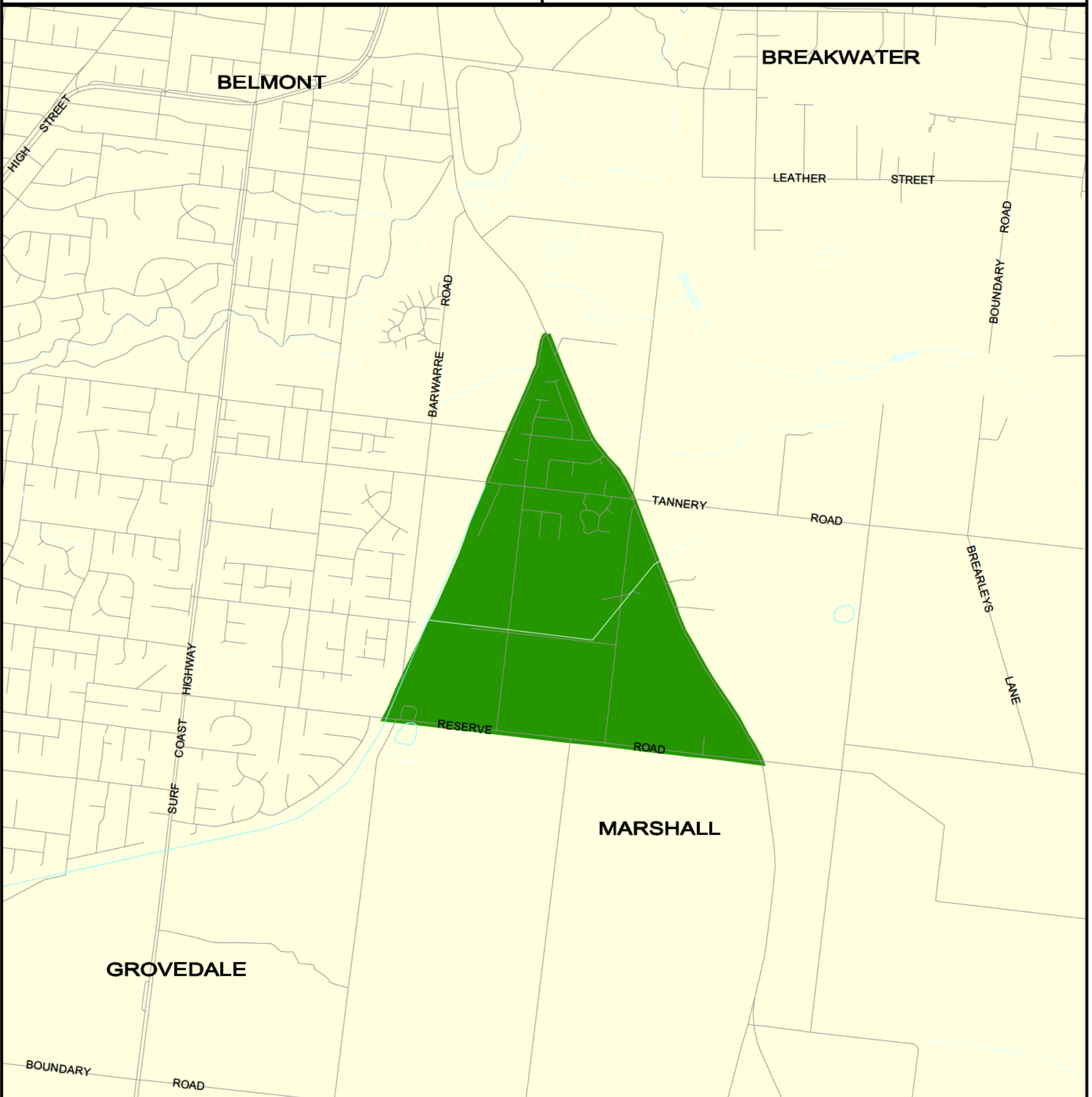
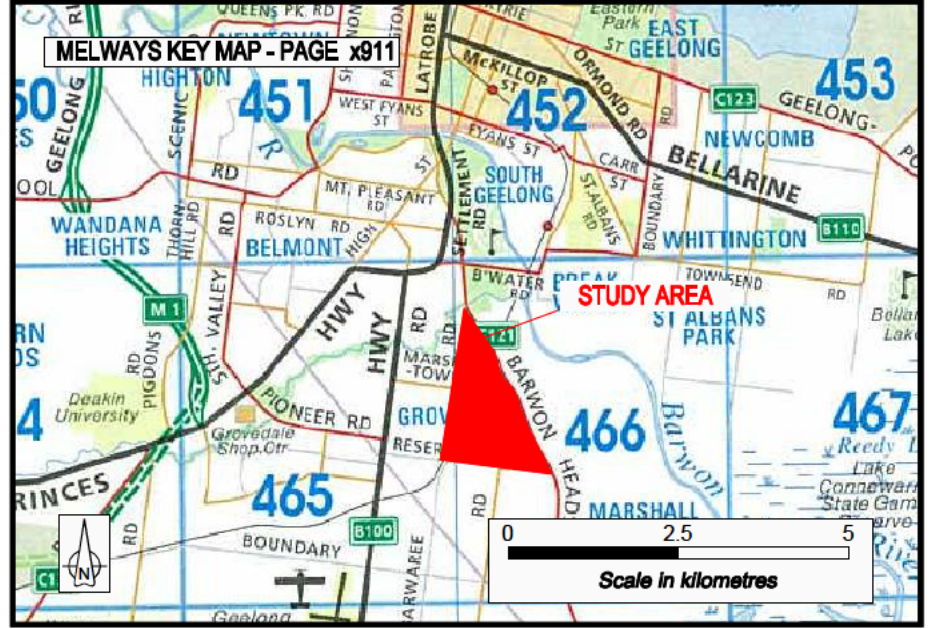
Heritage Victoria

Heritage Victoria (HV) administers the *Heritage Act 1995*. HV have not been notified of this assessment and is not a requirement to do so under the Act.

6. Development Plan Description

As this assessment is intended to inform the master plan for the Marshall Employment Precinct there are no development plans against which any impact on any Aboriginal or post contact archaeological heritage can be accurately assessed.

The context of both Aboriginal cultural heritage and non-indigenous or historic archaeology is typically on or beneath the ground's surface. Aboriginal scarred trees would be an exception to this general rule. Unless the locations of heritage places are reserved, any ground disturbance at or within the vicinity of these places will have an impact causing the destruction or displacement of artefacts and the deposits from which they originate. As the Marshall precinct will see a major change in land use and the development of areas necessitating substantial earthworks, the potential for the land use change to cause harm to cultural heritage is high. As discussed below, under the State's heritage legislation it is illegal to harm Aboriginal cultural heritage and non-indigenous or historic archaeology without the appropriate permits or consents.



	<p>KEY</p> <p> Study Area</p>	<p>Scale in Kilometers</p>	<p>TERRACULTURE</p> <p>Heritage Consultants 340 Separation St, Northcote, VIC 3070 Ph. 03 9486 4524 Fax. 03 9481 2078</p>	<p>Drawn: R.M.</p>	<p>ARMSTONG CREEK GROWTH CORRIDOR MARSHALL EMPLOYMENT PRECINCT</p>
	<p>Datum: GDA94</p> <p>Date: 8/7/2013</p> <p>Heights: AHD</p> <p>Format: A3</p>			<p>Drawing No.: Marshall.dwg</p>	

Map 1: Location of the Marshall Employment Precinct.

7. Desktop Assessment

The Desktop component was completed by [REDACTED] (Senior Project Archaeologist) with assistance from [REDACTED] (Researcher), [REDACTED] (Cartographer) and [REDACTED] (Historian). Historical and other relevant background information was obtained from published and unpublished documents. Background research on known heritage was undertaken by searching relevant Commonwealth, State and local registers. These searches were conducted via the register web sites.

The following section provides background information on the physical context of the precinct and includes information that would be required for a CHMP. This information is used to model past human use of the landscape and the potential for archaeological remains or other types of heritage in the area but may not be relevant to the current assignment.

7.1 Environmental and Historical Background

7.1.1 Geographical and Geomorphological Setting

The Bellarine Peninsula is an uplifted landmass bounded by the Barrabool Fault to the north and the Bellarine Fault along the east and forms the southern and part of the western boundary of the Port Phillip Sunkland.¹

The southern side of the Bellarine Peninsula fronts the Bass Strait coast and Point Lonsdale at its south-eastern end forms the western heads of the entrance to Port Phillip Bay (see Bird 1993). The northern side of the Peninsula fronts Port Phillip Bay and the western end is the location of Corio Bay and the City of Geelong. Topographically, the landforms vary from vast areas of shallow lake and low-lying estuaries to an up lifted Tertiary Plain and basalt hills between Drysdale and Portarlington (see Wright 1973; Bird 1993).

7.1.2 The Marshall Employment Precinct

The Marshall Precinct lies at the north western end of the Bellarine Peninsula between the southern shore of Corio Bay and Mount Duneed. The Barwon River lies directly to the east (ca 700m) and together with Waurn Ponds Creek (ca 1.3 km) are the main features of the local landscape. This part of the Bellarine Peninsula has little relief and between Geelong and Reedy Lake the Barwon River cuts through a broad and relatively flat alluvial plain which is usually flooded when the river is in flood.

The Barwon River flows into two major lakes Reedy Lake and Lake Connearre, before reaching the sea at Barwon Heads. Its setting and course has been described by Bird *'downstream from Geelong the River Barwon flows across a former lake basin now occupied by extensive rush and reed swamp. This is known as Reedy Lake, and is underlain by Late Pleistocene sediments containing marine shells, deposited when this area was submerged by a higher sea and later covered by Holocene peaty deposit. The Barwon enters Lake Connearre by way of a small marshy delta, built where the reeds have trapped river silt...The estuary of the Lower Barwon winds for nearly 10 kilometres downstream from Lake Connearre through salt marshes to reach the sea at Barwon Heads* (Bird 1993: 119, 121). In its course across much of the Bellarine Peninsula the Barwon River is tidal and the water is brackish.

7.1.3 The Moolap Lowland and Quaternary Sediments

The Marshall Employment Precinct samples a small area of Quaternary sediments that extend from or form part of what's been termed the Moolap Lowland. This lowland extends

¹ The Port Phillip Sunkland was formed through subsidence during the Tertiary period between two major faults – the Rowsley and Selwyn Faults (Jenkin 1988: 383; Abele 1988: 263). As stated by Bird (1993): *Port Phillip Bay thus occupies part of a fault-bounded structural depression or sunkland....between Rowsley Fault, to the west, and Selwyn Fault to the east. Recurrent subsidence since early Tertiary times has produced a broad lowland, the north-western part of which is covered by the plain of Newer (Plio-Pleistocene) Volcanics which extends between Geelong and Melbourne; the south eastern part, submerged by the sea now forms Port Phillip Bay* (Bird 1993: 124-125).

across the area between Leopold to the east and Belmont to the west and between Corio Bay to the north and the edge of the Mount Duneed lava flow (Map 2). Its formation has also been summarized by Bird: *Near Leopold the coastal bluff declines across a north-south fault and swings inland beside the Moolap Lowland and down the eastern side of Reedy Lake. The existence of Pleistocene marine fossils around this lake led Gill and Collins (1983) to suggest that a seaway extended through to Lake Connewarre and Barwon Heads about 125,000 years ago when the sea stood about 7.5 metres above its present level and the Bellarine Peninsula was an island* (Bird 1993: 140)

Geologically speaking the quaternary sediments that underlie Marshall are relatively recent in age; the sediments are mapped as 'high level alluvium deposits, outwash sand gravel and clay' and are late Pleistocene in age (see Spenser Jones 1970 and Map 2 this report).

7.1.4 Late Pleistocene Sea Level Changes

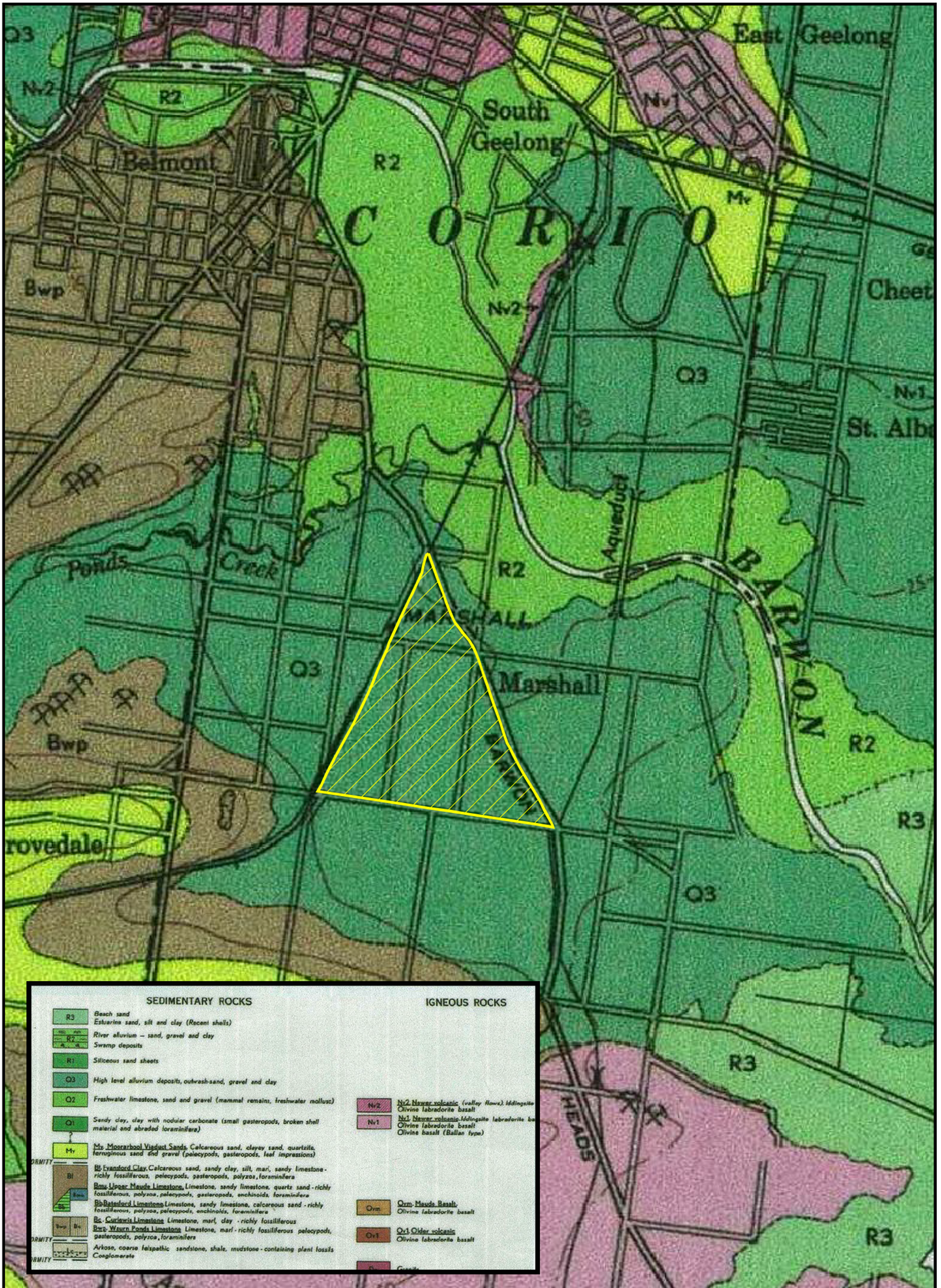
Since its formation during the Tertiary, the area occupied by Port Phillip Bay has altered according to tectonic and eustatic events, which have determined the relative changes in land and sea levels. Bird suggests that the former are often local in extent whilst the latter are regional and global (Bird 1993: 8). In the context of Aboriginal settlement, the marine transgressions associated with late glacial and interglacial periods are particularly relevant having changed the outline of Port Phillip Bay including the Bellarine Peninsula and the associated coastline. The sea level varied dramatically during the last glacial from about 75,000 years ago, and was at its lowest at the height of the last glacial maximum (LGM) at 18,000 years BP. At this time, the mainland and Tasmania were linked by the Bassian Plain, (the coastline was hundreds of kilometres from its present position) the area occupied by Port Phillip Bay, at its northern end. As Keble (1945) describes '*... the floors of Port Phillip Bay and Bass Strait were formerly portions of a continuous land surface joining Victoria with Tasmania* (Keble 1945: 69, also see J. Chappell and B.G. Thom 1977).

As noted by Bird *... about 18,000 years ago when the glaciers and ice sheets reached their maximum extent, the sea was 120 to 140 metres below its present level, and the continental shelves were exposed as wide coastal plains...* (1993: 8). At this time the Bellarine Peninsula was well inland from the nearest coast. The end of the Pleistocene and early Holocene saw a reversal of previous trends with coastal waters replacing land to the south, and east. The warming of the climate and the diminution of the glaciers and ice sheets caused a rise in the sea level which continued until the mid Holocene about 6000 years ago; an event known as the late Quaternary marine transgression. Sometime around 4,000 years BP the sea level stabilized and the form of the Bellarine Peninsula was set until modern times. (Bird 1993: 9, also see J. Chappell and B.G. Thom 1977).

7.1.5 Late Pleistocene Aboriginal Settlement

By at least 40,000 BP all parts of the Australian continent (Sahul) had been colonized by Aboriginal people. This colonization included the south-eastern corner of the continent and covers time ranges known as the late Pleistocene (40,000 to 10,000 years BP) and Holocene periods (10,000 years BP to Recent) (see Smith, M.A., M. Spriggs and B. Fankhauser eds. 1993). There are no Pleistocene dated Aboriginal archaeological places on the Bellarine Peninsula and the relatively young age of many of the local landforms, especially around the coast, indicates that there is limited opportunity of discovering any early evidence of Aboriginal settlement.

The oldest dated evidence for the occupation of the Bellarine Peninsula is from a shell midden on Campbell Point, Lake Connewarre mid Holocene. Gill and Lane report a series of radiocarbon dates between 3,620 years BP and 5,270 years BP. The shell midden consists primarily of *Anadara* and oyster shell which no longer occur in the lake and are considered to represent more brackish conditions. There is other good evidence of Aboriginal occupation in the late Holocene period along much of the coastline in the form of shell middens. There are now a series of dates from shell midden deposits along the coast particularly at Barwon Heads that demonstrate the exploitation of local shellfish populations and by inference other local resources of the coast during the last 3,000 years (pers. obs.).



SEDIMENTARY ROCKS		IGNEOUS ROCKS	
R3	Beach sand Estuarine sand, silt and clay (Recent shells)	Nv2	Nv2. Newer volcanic (valley flows) Idingsite Olivine labradorite basalt
R2	River alluvium - sand, gravel and clay Swamp deposits	Nv1	Nv1. Newer volcanic Idingsite labradorite ba Olivine labradorite basalt Olivine basalt (Ballan type)
R1	Siliceous sand sheets	Orm	Orm. Older volcanic Olivine labradorite basalt
O3	High level alluvium deposits, outwash-sand, gravel and clay	Ov1	Ov1. Older volcanic Olivine labradorite basalt
O2	Freshwater limestone, sand and gravel (mammal remains, freshwater mollusc)		
O1	Sandy clay, clay with nodular carbonate (small gasteropods, broken shell material and abraded foraminifera)		
Mv	Mv. Moorabool Volcanic Sands. Calcareous sand, clayey sand, quartzite, ferruginous sand and gravel (paleocypods, gasteropods, leaf impressions)		
DRMITY	B1 Eyansford Clay. Calcareous sand, sandy clay, silt, marl, sandy limestone - richly fossiliferous, pelecypods, gasteropods, polyzoa, foraminifera		
	Bmu Upper Maude Limestone. Limestone, sandy limestone, quartz sand - richly fossiliferous, polyzoa, pelecypods, gasteropods, echinoids, foraminifera		
	Bb Batesford Limestone. Limestone, sandy limestone, calcareous sand - richly fossiliferous, polyzoa, pelecypods, echinoids, foraminifera		
	Bs Curlew Limestone. Limestone, marl, clay - richly fossiliferous		
	Bwp Waurn Ponds Limestone. Limestone, marl - richly fossiliferous pelecypods, gasteropods, polyzoa, foraminifera		
DRMITY	Arkose, coarse felspathic sandstone, shale, mudstone - containing plant fossils		
DRMITY	Conglomerate		

	KEY Study Area	 Scale in meters	Drawn: R.M. Datum: GDA94	ARMSTONG CREEK GROWTH CORRIDOR MARSHALL EMPLOYMENT PRECINCT
			Date: 8/7/2013 Heights: AHD Format: A3	

MAP 2: Geology of the Marshall Employment Precinct.

7.1.6 Implications of the physical setting for the Aboriginal Settlement

The ways Aboriginal people adapted to climatic and sea-level changes affecting the Bellarine Peninsula during the late Pleistocene and Holocene are difficult to determine without detailed chronological, paleoenvironmental and archaeological evidence. Certainly, these changes affected the area of traversable land which in turn is likely to have influenced the demography of Aboriginal groups and the timing, duration and reasons for occupying different parts of the peninsula. Some aspects of the local landscape may have remained constant, such as the local hydrology, whilst features like vegetation would have evolved with changes in climate and sea levels.

The close proximity of the Barwon River, the low topography and flood prone surrounds would have influenced the nature of the area's past use by Aboriginal peoples during the late Holocene. The river itself and associated lakes and wetlands would have been significant sources of food and water and places of habitation. At least in part, camp site location would have been determined by the occurrence of high ground.

The archaeologically significant place known as Jerringot (7721-0142) at Belmont is perhaps the best local evidence for this model. Jerringot was a large and complex archaeological site first reported by Louis Lane who documented its destruction during the development of a former Sizzlers Restaurant. Located to the north of Marshall on the corner of Settlement and Barwon Heads roads, the site occupied high ground which overlooked the Belmont Common and was rich in stone artefacts and other evidence of Aboriginal use. Marshall's more recent assessment of Jerringot concluded that there was little chance that any part of the archaeology remained and *that 'possibly disturbing the last remnants of the site for the purposes of demonstrating the presence of archaeological material would be inappropriate'* (Marshall *et al.* 2002).

A final implication of the geological setting is that the Marshall precinct is part of a relatively stoneless environment, at least relative to other parts of the Bellarine Peninsula, such as the volcanic areas to the south and east. This being the case the former Aboriginal occupants are likely to have imported stone from a number of sources to be used as part of their technology.

7.1.7 Historical and ethno-historical accounts of Aboriginal people in the Geelong region

Geelong was one of two locations within Port Phillip (the other being Melbourne) from where Europeans colonized much of Victoria, and there are a small number of written and illustrated historical accounts on the Aboriginal people of the area. Europeans first made written observations on the Aboriginal people of the Bellarine Peninsula from 1802, when explorers began to chart the entrance of Port Phillip Bay. Most of the accounts however relate to 1836 onwards when there was a permanent European presence which also influenced Aboriginal culture.

Clark (1990) collated the primary sources of this ethnohistory in his reconstruction of traditional language boundaries in western Victoria (also see Barwick 1984). These sources include journal entries and government correspondence produced by explorers such as Matthew Flinders and Charles Grimes, as well as settlers and missionaries, particularly G.A. Robinson, the Chief Aboriginal Protector. The following is based on Clark's reconstruction of the Aboriginal language group and clan that occupied Geelong at the time of European settlement.

7.1.8 The Wada wurrung Language Group

According to Clark (1990), at the time of European contact Geelong was part of the *Wada wurrung* language area. The *Wada wurrung* territory extended along the coast from Painkalac Creek at Aireys Inlet east into Port Phillip Bay to the Werribee River. It extended north as far as Fiery and Mt Emu creeks.

Following Clark, Aboriginal clans were the 'landowning, land renewing and land sustaining unit of Aboriginal society'; occupied estates or home country and hunted and gathered over a range (Clark 1990: 4, 5). As explained by Clark;

'...the tract or stretch of country identifiable as the economic range, normally included the estate and was thus owned by clans. The band seasonally occupied and utilised various parts of the range in a settlement pattern that was a response to the group's habitat' (Clark 1990: 4, 5).

He goes on to state that;

'the clans within a language grouping are capable of being distinguished on the basis of differing linguistic and cultural characteristics (Clark 1990: 9).

Clark suggests there were twenty-seven *Wada wurrung* clans at the time of European contact.

I have been able to reconstruct 27 Wada wurrung clans. Using Lourandos' (1977) estimates that clan sizes ranged from between 40 to 60, this would give a Wada wurrung population of between 1080 and 1620 at the time of contact. Dawson (1991) estimated clan sizes were 120, and this would give Wada wurrung a population of 3240. The real figure was probably somewhere between 1620 and 3240 (Clark 1990: 307).

Wada wurrung clans were patrilineal and organised into moieties belonging to either the *Waa* (crow) or *Bunjil* (eaglehawk) moiety – marriage partners were required to belong to different moieties (Clark 1990: 276-7, also see Barwick 1984: 105).

Clark noted that:

Clan heads were known as either Nourenit/Narenit or Arweet. The Wada wurrung were the most powerful and influential people in the western district. During his 1841 tour Robinson met with many Wada wurrung clan heads.

The *Wada wurrung* clans who lived on the coast were the first to come into direct contact with the 'ngamadjig/amerjig' or white man. As noted above, this occurred by at least 1802 '*...when Lieut. John Murray in the Lady Nelson, charted part of Indented Head and named Swan Bay' (Clark 1990: 227).* The clan that occupied the areas around Geelong, the *Wada wurrung balug*, was probably the next to have direct contact with the white explorers and continued to have the same between 1802 and 1835.

Wada wurrung balug

The clan that most likely occupied the Geelong area was the *Wada wurrung balug*, who 'frequented river Moorabool' (Koenig 1985: 3 in Clark 1990: 331). The clan moiety was *Bunjil*. It is thought that the *Wada wurrung balug* were the clan who adopted William Buckley in 1803 (Clark 1990:331). Robinson considered that the *Wada wurrung balug* exercised considerable influence over other clans in the eastern section of the Western District (Clark 1990: 331).

Located around Geelong, the *Wada wurrung balug* were highly exposed to Europeans in the early days of Colonial settlement, and members of the clan were being employed by European settlers to collect stray stock and cut wood from as early as about 1839 (Clark 1990: 332). This contact led to the rapid demise of traditional ways of life and indeed to the *Wada wurrung balug* themselves. Recorded as numbering 300 people in 1837, by 1853 there were only 17 surviving clan members. The survivors refused to occupy a reserve set up along the Barwon River at Buntingdale, as it was not in their territory (Clark 1990: 293, 332). The last full-blood male of the clan reportedly died in 1885 (Brownhill 1955, in Clark 1990: 333). William Buckley, an escaped convict from an aborted 1803 settlement at Sorrento, was adopted by the *Wada wurrung* and lived with them until July 1834. As recorded by Morgan (1852), Buckley's reminiscences have become an important source of historical data on the Aboriginal clans of the *Wada wurrung* area. However, these reminiscences do not inform the archaeological record of the Bellarine Peninsula which is the main data source on its Aboriginal past.

Excluding Morgan (1852), most of the historical accounts of the early contact period refer to specific events, usually involving contact and conflict between settlers and the local Aboriginal clan. There is little historic data from this period, when it could be assumed that at least some clans continued to live in traditional ways, and which could be useful for understanding how

the *Wada wurrung* peoples lived in earlier pre-contact times. As with Buckley's reminiscences though, these accounts do not inform the archaeological record which is the primary data source of pre-contact Aboriginal settlement.

Corris (1968) cited in Clarke (1990) believes '(that) there is so little known about the social organisation of the *Wada wurrung* bespeaks the rapidity with which they were physically destroyed by settlers seeking undisputed possession of their land' (Clark 1990: 277). As noted by Clark:

By the end of 1836, the sheep runs of the 'ngamadjig' spread round Geelong within a semi-circle of twenty-five miles radius. In the following year streams of squatters from Melbourne and Geelong met and thrust westwards towards the Colac district. The Bacchus Marsh lands were next to be occupied, and then the head-waters of the Leigh and Buninyong.

7.1.9 Aboriginal Settlement of Marshall during the contact period.

Clark (1990) does not document any direct observations of Aboriginal people within the Marshall Employment Precinct during the contact period 1802-1836, or during the early years of European settlement. The nearby Aboriginal Reserves at Mount Duneed and on Armstrong Creek demonstrate a historical connection to these two locations. These significant places have been previously described in detail and whilst historically important they are outside of the study area.

7.1.10 Implications of Aboriginal ethnography for the Marshall Employment Precinct

Rarely do the ethnographic details on traditional Aboriginal groups contained in Clark's synthesis inform the archaeology of an area within the Geelong region and this is no exception. This is not a fault of Clark's synthesis but reflects the paucity of the archaeology and its general coarseness and disparateness as a record of past Aboriginal culture. At the same time, given the rapid usurpation of land and demise of traditional ways of life, and in the absence of written records or oral histories, the local archaeology is often the only direct evidence of past Aboriginal settlement. The probable time range of this settlement of 40,000 years means that this archaeological evidence is often widespread.

7.2 Previous Archaeological investigations within the Marshall Employment Precinct

The Bellarine Peninsula in general and the Armstrong Creek Growth Corridor in particular (eg Rhoads, J 1986, Weaver 1994, Bell and Rhodes 2003, Kaskadanis 2007) has been the subject of heritage reviews which have, among other things, discussed the potential for Aboriginal heritage places according to the underlying geology, landform and land use history. Previous reviews also present predictions of the likely form of heritage places and make recommendations for further assessment. Previous field assessments have demonstrated the sensitivity of the Barwon River and Armstrong Creek for pre contact archaeology and the former for post-contact heritage as well. The following is a summary of cultural heritage assessments that are relevant to this present report, i.e. those dealing with land within or adjacent to the Marshall Precinct.

7.2.1 Planning Studies

In 1994 Weaver reported on an assessment of the archaeological heritage in the Mount Duneed -Armstrong Creek growth corridor based on a review of registered heritage places and a windscreen survey. This is a relatively early report which does not list any known Aboriginal heritage places within the area but does highlight Armstrong Creek and its tributaries as archaeologically sensitive land forms. Her survey included the Marshall Employment Precinct which she didn't map as being particularly sensitive for Aboriginal heritage. Her assessment included built heritage and places which had potential for historic archaeological features and deposits. Within the Marshall Employment Precinct she recorded a single place registered with HV as Horseshoe Bend Road 1.

Horseshoe Bend Road 1 H7721-0010

Weaver's HV site card noted that this place was partly demolished/ruins and that it was 'the location of the Racecourse Hotel since the late 1800's. Hotel closed in 1950s. Then owned by Miss Margaret Rice and Mrs Hannah Mayland who were (Sisters). The sisters died in 1969, they left the property 4.8 ha to the church. Under present threats, Weaver records that development of the site is imminent as an aged care facility development owned by the Catholic Church was due to commence in October 1994. Weaver cites a Geelong News article for the 26th July 1994.

By all indications this place was destroyed during the development of the aged care facility (see site inspection results below).

7.2.2 Assessments of Infrastructure

Bellarine Transfer Main Duplication

The impact of the 12.5 kilometre Bellarine Transfer Main Duplication was assessed by Marshall (2001). This alignment extended from the corner of Marshalltown Road and Station Road eastwards along Tannery Road to cross the Barwon River and then continue northeast following the power easement to Townsend Road and then on to Ash Road. The first section along Marshalltown Road samples the northern third of the Marshall Employment Precinct, albeit in the road reserve. East of the Barwon River the alignment skirts the northern side of Reedy Swamp. The survey was a combination of windscreen and pedestrian surveys. As there was little or no ground visibility no new Aboriginal heritage was discovered. The recommendations included monitoring of any ground disturbance by the then statutory Aboriginal community. North of Reedy Lake, preparation for the pipeline resulted in the stripping of a ca 30m wide easement across and ground visibility was 100%. These works exposed a soil profile which consisted mostly of grey sandy loams that were effectively stoneless. No Aboriginal heritage was discovered during this monitoring (B. Marshall pers. obs.).

Replacement of the Geelong to Barwon Heads Water mains.

Marshall 2007 prepared a Cultural Heritage Management Plan (10147) for the construction of a 250-metre section of water pipeline at Marshall, on the eastern side of Barwon Heads Road, opposite the Marshall Employment Precinct. Part of the water mains between Geelong and Barwon Heads, the existing pipeline was above ground and within a pipe easement between Woolscour Lane and Barwon Heads Road. Barwon Water was planning to bury this section of pipeline and being in an area of cultural heritage sensitivity (within 200m of the Barwon River) required a CHMP.

The pipeline easement sampled the Barwon River floodplain near the junction between the Barwon River and Waurm Ponds Creek. The easement was found to extend through a flat and low lying area adjacent to high earthen embankments that retain water that would otherwise drain across the area. The survey was inconclusive due to the high grass and lack of ground visibility. Test excavations were limited but revealed a stratigraphic sequence of paudal sediments and heavy and wet clays that indicated regular flooding.

No Aboriginal heritage or deposits potentially sensitive for such heritage were discovered during the assessment. It was concluded that the area was not sensitive for Aboriginal cultural heritage as, prior to drainage, the area was probably inundated due to flooding of the nearby Waurm Ponds Creek and Barwon River.

Marshall Railway Station

The Marshall Railway Station is located between the Melbourne to Warrnambool Railway Line and Drews Road and falls within the Marshall Employment Precinct. The impact of the construction of the station was initially assessed by Myers, Collins and Marshall in 2003 who undertook surveys for both Aboriginal and post contact heritage. This report was followed by a detailed history and archaeological excavation of the former cement pipe making factory by Myers and Rowe (2004).

The assessment area for the proposed station was a narrow strip of railway reserve (300m in length and up to 50m wide) adjacent to the existing track. With its close proximity to the railway track, the survey area was found to have experienced previous ground disturbance. No Aboriginal heritage was discovered during the survey and subsequent assessment. Whilst survey conditions were poor due to grass cover the authors conclude that area was unlikely to retain any Aboriginal heritage due to its flat topography, distance for potable water, its small size and intensive use during historical times.

The assessment of historical archaeology resulted in the registration with Heritage Victoria of three heritage places: the Cement Pipe Factory (Drews Roads 1 H7721/0119); a Cypress Pine Windbreak (Drews Road 2 D7721-0120) and a post and wire fence (Drews Road 3 D7721/0121). As described in the report the cement pipe factory, the most significant of these historic sites, consisted of:

- an *insitu* reinforced concrete frames (gantries), rectangular in plan and one rising several metres from the ground;
- 18 or so large pipe moulds made from reinforced concrete. The moulds occur in half sections, each measuring up to 10ft long by 3ft 8in wide and are of two types: (1) an angular shaped cover and (2) semicircular shaped base. When fitted together the pipe moulds form an ovoid shaped cavity with a smooth internal finish. Threaded bolts protrude from the ends and sides of the moulds and a series of metal lined holes occur along their sides. Shallow indentations on the external surface show that the moulds had been formed using metal and or timber planks as boxing. The moulds are scattered around the above mentioned concrete frame; most of them prostrate and several standing upright
- Mould ends made from reinforced concrete measuring 4ft 8in by 6ft 3in with an ovoid hole in their centre
- Concrete slabs and pavements underlying and located to the north of the above noted frame.

The subsequent archaeological excavations (reported in Myers and Rowe 2004) uncovered cement floors, pavements and machine stands that were part of the pipe factory building. As well as factory building remnants the site consisted of 28 reinforced pipe moulds, and 4 reinforced pipe ends. One of the gantries was *insitu* and the second, which had collapsed, was found to be near its original position. A number of artefacts associated with the pipe factory, mainly fasteners such as nails and bolts were also recovered during the excavation.

The pipe factory was determined to have cultural heritage value at a State level and recommended for nomination to the VHR. It was registered with HV and placed on the Inventory.

7.2.3 Existing or Planned Subdivision

Marshalltown Road and Drews Lane

In 2004 Collins and Marshall investigated an area that is currently part of the existing residential subdivision within the Marshall Employment Precinct. This assessment was for some 4 ha of land on the corner of Marshalltown Road and Drews Lane where the construction of 44 houses was planned. Described as a flat and grassed paddock with few notable features and surrounded by deep drainage, the survey focused on the few patches of bare ground where the underlying sediments were visible. No Aboriginal heritage was discovered during the survey and Collins and Marshall concluded that prior to post-contact settlement and artificial drainage the paddock was probably subject to regular inundation. None of the vegetation was considered to point towards any sensitive areas and no scarred trees were present. They concluded that it was unlikely that the area was suitable for the types of pre-contact Aboriginal use that would have generated archaeological material discoverable during a pedestrian survey....and that while survey conditions were poor, it was unlikely that the area retained Aboriginal heritage in the form of stone artefact scatters in high densities.

232-270 Barwon Heads Road Marshall

A similar assessment was reported by Wackett, Walker and Tseng, who in 2010 prepared a Cultural Heritage Management Plan (AAV number 11400) for a proposed sub-division of a 4.2ha parcel of land located at 232-270 Barwon Heads Road. This study area is to the north of the Marshall Employment Precinct but sampled a comparable landform which was described as a low flat rise overlooking alluvial flood plain associated with the confluence of the Barwon River and Waurn Ponds Creek, but also included part of this floodplain itself. Unlike Collins and Marshall, this assessment extended to the excavation of deposits and fourteen 50cm x 50cm shovel test pits and two 1m x 1m test pits were dug to investigate any buried Aboriginal heritage. For much of the area the profile of the underlying sediment was consistent and consisted of a dark brown to black clayey silt grading to variegated silty clay. The profiles were found to be either disturbed or introduced and no Aboriginal heritage was identified during either the survey or excavations.

7.2.4 The Keystone Business Park

The Keystone Business Park is located between Barwon Heads Road and the Barwon River and samples a large area of the Barwon River floodplain. Sections of the business park lie opposite the Marshall Employment Precinct and sample the underlying alluvial landform.

In 2008 Di Fazio undertook a desktop and survey during which two Aboriginal heritage places were found. During 2009 the cultural heritage of this area was further investigated through two cultural heritage management plans and a preliminary assessment of post-contact heritage. A summary of these assessments and its implications for the proposed development was discussed in a further 2009 report by Toscano and Webb. These reports are reviewed below.

The above mentioned survey by Di Fazio covered approximately 125 Ha of land. The two Aboriginal heritage places (Jendes Lane Marshall 1 VAHR 7721-0905 and Jendes Lane Marshall 2 VAHR 7721-0906) were both single and isolated artefacts found on the surface in disturbed contexts. VAHR 7721-0905 was described as a glass flake from a market garden area and VAHR 7721-0906 was a core made on chert. Tools made from glass are uncommon and difficult to verify and indicate Aboriginal use of foreign material during post-contact times. The report also refers to an aeolian sand dune in the south east corner which was considered to have considerable potential for buried archaeological deposits.

The presence of isolated stone artefacts or low density stone artefact scatters within the Keystone Park development area was confirmed by Toscano during her assessment of Stage 1 of the proposed development. CHMP 10598 involved a survey and subsurface testing during which a single Aboriginal heritage place Keystone 3 VAHR 7721-0936 was discovered. The subsurface testing program was intensive and consisted of eight 1m x 1m test pits, four 50cm x 50cm test pits and 43 mechanical trenches roughly 1.8 metres wide each. The single stone artefact was one small silcrete artefact found within the plough zone at a depth of 10cm.

CHMP 10599 investigated four potential alignments for the arterial road between Barwon Heads Road and the Barwon River. As with the previous assessment a survey and subsurface testing were conducted across the proposed alignments; the latter as twelve 1 x 1m test pits, eight 50 x 50cm pits and fifty-two mechanical trenches. Two Aboriginal heritage places were identified; Keystone 1 and 2. VAHR 7721-0933 (Keystone 1) was found within a paddock that had been recently ploughed and consisted of two quartz flaked pieces and a single silcrete flake. A further artefact was discovered during the subsurface testing at this location. Elsewhere VAHR 7721-0934 (Keystone 2) was discovered during the subsurface testing and consisted of a small silcrete flake at a depth of 5cm. A large amount of European material was found underlying this artefact, indicating that the location was heavily disturbed.

7.2.5 Post Contact Heritage Values at Keystone Park

Post contact heritage values within the Keystone Park development area were recently assessed for their archaeological potential by Stanin (2009). The known places are mostly built structures or ruins associated with the former tanneries, the Barwonside Tannery (H7721-0439) and the Australian Tanneries Complex (H7721-0440) and the Sparrowvale

Farming Complex (H7721-0443). Other places had been recommended for the VHR and the COGG Overlay and include the Greenbank Homestead, Barwonside House and the Sparrowvale Managers House and Stables. Whilst the registered extent of some of the places is widespread such as Sparrowvale, all appear to fall on the eastern side of Barwon Heads Road. For many of these places the built fabric component is tied closely to the Barwon River and therefore well outside the Marshall Employment Precinct. Although based on a field survey, Stanin's report was primarily an inventory which provided advice on statutory protection and assessed the potential for these places to yield archaeological deposits.

Collectively these places represent a significant component of Geelong's industrial and rural heritage.

7.3 Summary of the results of previous heritage assessments

7.3.1 Aboriginal Heritage Places

Previous assessments of Aboriginal heritage within the Marshall Employment Precinct have been limited to small subdivisions in cleared paddocks and linear infrastructure developments on road reserves or within the railway easement. No Aboriginal heritage was discovered during these early assessments, which were mostly based on surface evidence, as this was determined during pedestrian surveys. Therefore there are no registered Aboriginal heritage places within the Marshall Employment Precinct; a conclusion confirmed by the recent search of the VAHR (see below).

Adjacent to the precinct though on the eastern side of Barwon Heads Road, the Keystone Business Park and arterial road were extensively surveyed on foot and tested for buried archaeological deposits. Only a small number of low density archaeological sites were discovered, all in disturbed contexts. Following these results it is likely that the precinct retains a similar archaeological record consisting predominantly of low density stone artefact scatters in surface or shallow buried contexts. Parts of the Marshall Employment Precinct are low lying and artificially drained and are best described as former swamp (see inspection results below). It is likely that low density artefact scatters will be restricted to areas of high ground.

Scarred trees are a second potential type of Aboriginal heritage place and in the Geelong region the confirmed examples occur on remnant river red gums greater than 200 years old (per obs). On the basis of the site inspection (see below) there are no such trees in the Marshall Employment Precinct but this will need to be confirmed during a survey proper (see Recommendations).

7.3.2 Post Contact Archaeological Heritage Places and Sites

Other than the investigation of the former pipe factory, previous assessments of post contact archaeological heritage within the Marshall Employment Precinct have been limited to pedestrian surveys which typically accompany assessments of Aboriginal heritage. These investigations have been restricted to areas within the precinct which have undergone some type of development. The registered archaeological places are listed below (Table 2).

7.4 Search of the VAHR for registered Aboriginal Heritage Places

7.4.1 Registered Aboriginal Heritage Places

Aboriginal Affairs Victoria (AAV) maintains a register (VAHR) of all recorded Aboriginal heritage places and a library of all published and unpublished reports describing investigations of Aboriginal archaeological sites in Victoria. The VAHR was accessed electronically on the 10th May and again on the 3rd of July 2013 and a map generated showing the location and type of registered Aboriginal Heritage Places within 2 kilometres or so of the Marshall Employment Precinct. A separate register contains details of Aboriginal historic places and this was also consulted. Table 1 below presents the results of this register search.

VAHR No	Name	Component Type	Easting (GDA94)	Northing (GDA94)
7721-0501	BREAKWATER IA 1	Artefact Scatter	269308	5771037
7721-0676	BAILEYS PARK ESTATE 1	Artefact Scatter	268013	5770657
7721-0679	GROVES ROAD 1	Artefact Scatter	267641	5769498
7721-0830	BARWARRE ROAD 1	Artefact Scatter	267760	5766352
7721-0905*	JENDES LANE MARSHALL 1	Artefact Scatter	270298	5769082
7721-0906*	JENDES LANE MARSHALL 2	Artefact Scatter	270486	5768873
7721-0933*	KEYSTONE 1	Artefact Scatter	270204	5767974
7721-0934*	KEYSTONE 2	Artefact Scatter	270182	5767827
7721-0936*	KEYSTONE 3	Artefact Scatter	269559	5768126
7721-0976	Tucker St	Artefact Scatter	269347	5770872
7721-1012	2/141 Grove Rd AS	Artefact Scatter	267075	5769479
7721-1190	Grove Road 01	Artefact Scatter	266713	5769488
7721-1191	Grove Road 02 IA	Artefact Scatter	266684.6	5769494
7721-1192	Grove Road 03 IA	Artefact Scatter	266682.6	5769485
7721-1193	Grove Road 04 IA	Artefact Scatter	266634.9	5769500

Table 1: Registered Aboriginal cultural heritage places within 2.0 km of the Marshall Employment Precinct. * denotes places mentioned in text.

The VAHR search indicates that there are no registered Aboriginal heritage places within the Marshall Employment Precinct. As noted in Table 1 all of the nearby registered places are stone artefact scatters. The Grove Street series are associated with Waurn Ponds Creek and are not relevant to this report. The remaining places lie further to the north and are close to Settlement Road or the Barwon River and are also not relevant to this assessment.

7.4.2 Mapped Areas of Sensitivity for Aboriginal Heritage Places

In the absence of any registered Aboriginal heritage places or named waterways there are no mapped areas of sensitivity within the Marshall Employment Precinct.

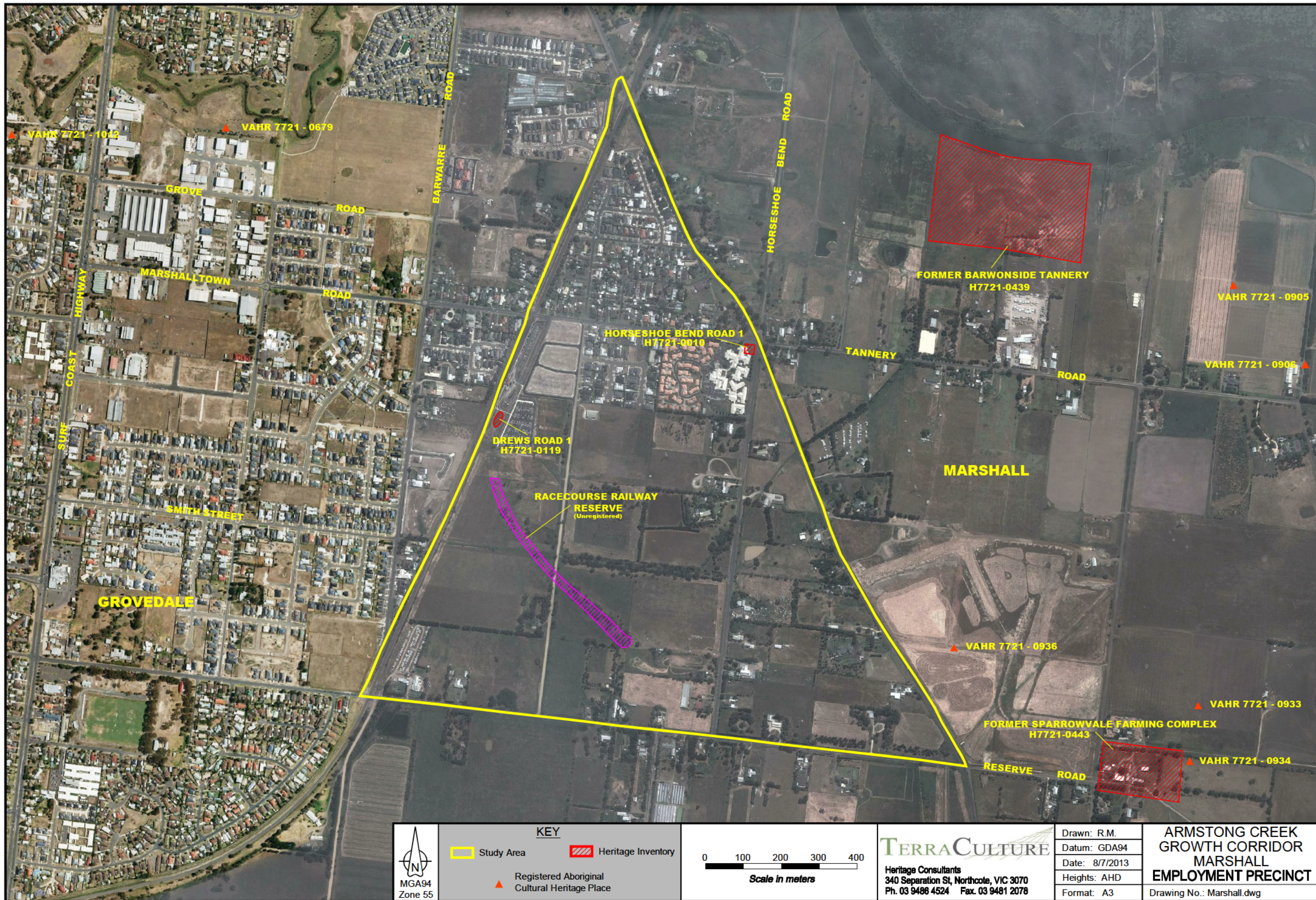
7.5 Search of the Heritage Register and Inventory for Historical Archaeological Sites

HV Inventory No	Name	Type	Current Status
H7721-0010	Horseshoe Bend Road 1	Former Racecourse Hotel and associated fabric at the corner of Marshalltown Road and Horseshoe Bend Road	Destroyed
H7721-0119	Drews Road 1	Cement Pipe making Factory	Adjacent to the Marshall Railway Station carpark
D7721-0120	Drews Road 2	Cypress pine windbreak	Unknown
D 7721-0121	Drews Road 3	Post and wire fence	Appears to have been destroyed

Table 2: Registered archaeological heritage places within Marshall Employment Precinct. (see Map 3).

The HV register search indicated that there are four listed places on the Heritage Inventory; three of these recorded during the assessment of the cement pipe factory including the factory itself and a fourth place registered as the former Racecourse Hotel which was located on the corner of Marshalltown and Horseshoe Bend Road which has been destroyed.

Although registered, two of these places Drews Road 1 and 2 have been D listed by HV and therefore do not require a permit from HV to be disturbed or destroyed.



MAP 3: Showing Registered Heritage places.

8. Results of the Field Inspection of the Marshall Employment Precinct

8.1 Personnel and Timing

The Marshall Employment Precinct was inspected by [REDACTED] on the 27th May 2013 and then again on the 28th with [REDACTED] (Senior Planner COGG). The purpose of the inspection was to determine the sensitivity of the precinct for Aboriginal heritage according to landform type and current use. Any landforms or other features considered to be sensitive for Aboriginal heritage were noted. Any obvious significant ground disturbance i.e. disturbance caused by machinery, or general land use that was likely to have had an impact on the potential for Aboriginal heritage was also noted (see plates 1 – 4 below).

The properties are relatively small in size and the boundaries are usually contained within any one landform or area. There was no requirement to visit each property separately although a more complete understanding of how the landscape has been altered during historical times and the potential to retain Aboriginal heritage would possibly be gained from a closer inspection. At this stage however, a property-by-property inspection is unlikely to cancel out the need for additional Aboriginal heritage investigations such as due diligence assessments to establish the need for a CHMP or an actual CHMP (see Recommendations below).

8.2 Existing Urban Development

At the northern end of the Marshall Employment Precinct the existing residential development cancels out the need to consider Aboriginal heritage values. The previous Aboriginal cultural heritage investigations in this area were discussed above. This development is relatively recent and covers a large area from the intersection of the Geelong Warrnambool Railway Line and Barwon Heads Road southwards to the Marshall Railway Station car park.

8.3 Open Paddocks (plates 1 & 3)

The balance of the precinct consists of small farm holdings which are divided into paddocks and have presumably been used for grazing livestock and cropping. Other than residences and outbuildings these properties retain sufficient and undeveloped open space to be considered potentially sensitive for Aboriginal places. Much of the development on these parcels is at or near the existing house and outbuildings where there are driveways and formal gardens.

8.4 Vegetation and Drainage (plate 2)

The vegetation within the precinct ranges from planted tree rows (wind rows) along paddock boundaries and small areas of plantation to scattered individual native trees which are possibly remnant, in the sense that they have seeded naturally. Not all native trees were inspected. Those visible from the public land or roadside are insufficient in size or age to be contemporaneous with Aboriginal settlement prior to or at the time of European settlement and therefore are unlikely to be scarred.

The low lying nature of the precinct was discussed in relation to the Moolap lowlands, the Barwon River floodplain and the underlying alluvial sediments which are late Quaternary in age. There is extensive artificial drainage across the Marshall Employment Precinct and without drainage many of the paddocks to the north and west would periodically be covered in water. This drainage takes the form of channels and dams. The most notable drain runs west to east along Smith Street and adjacent to the pedestrian trail.

Conversely several of the paddocks in the north west are covered in fill, which has obscured the natural lie of the land and created artificial elevations (plate 4). Clearly, the purpose of this fill is to mitigate the effects of local flooding and indicate that there have been significant earthworks.

The local drainage is extensive and suggests that much of the area was former swamp or wetland. The paddocks adjacent to low lying areas were often covered in swamp grasses and other vegetation which suggested that they too retained surface water.

8.5 Aboriginal Heritage Places and Sensitive Landforms

As noted above, there are no known (registered) Aboriginal Heritage Places within the Marshall Employment Precinct and none were discovered during the inspection.

There were no sensitive landforms with obvious boundaries that could be accurately mapped such as a stony rise or sandy ridge and because of its low lying nature much of the precinct was probably unsuitable for the types of Aboriginal use that would result in an archaeological record.

The southeastern properties, those along Reserve Road to its intersection with Horseshoe Bend Road and along Barwon Heads Road heading north, occupy the highest ground in the precinct and are probably sensitive for Aboriginal heritage places in the form of low density stone artefact scatters. This is the most common place type locally. These artefacts are likely to occur in disturbed and shallow contexts due to ploughing and other ground disturbance activity. There is a possibility of undisturbed (*in situ*) archaeological deposits beneath the plough zone. The likelihood that the elevated and potentially sensitive areas retain an archaeological record that is undisturbed and therefore significant in scientific terms is low. At the same time and more importantly all Aboriginal heritage places retain significance for the statutory Aboriginal community (RAP).

8.6 Historical (Non-indigenous) Archaeology

The Marshall Employment Precinct lies well beyond any of Geelong's *main* centres of historical settlement and for this reason no one property is likely to retain multiple and substantial historical archaeological sites and features relating to its European history. However, due to its proximity to Geelong Township, Marshall has a long history of European use and therefore has considerable potential for historical archaeology relating to its rural, farming and industrial history.

As with Aboriginal cultural heritage, there was no formal survey for historical archaeology as this was outside of the scope of the project. HV has an expectation that an assessment of historical archaeology will be conducted during any assessment of Aboriginal cultural heritage and it is often the case that both assessment types are conducted concurrently. During this current assessment there was one new recording of an unregistered historical archaeological place and this is described below.

Former Racecourse Railway Reserve (Map 3)

The Marshall Employment Precinct retains a curvilinear line of trees and other vegetation that corresponds to a small section of the former racecourse railway reserve, described in detail by [REDACTED] and [REDACTED] (2013). As mentioned in [REDACTED] and [REDACTED], this alignment is also slightly raised above the level of the paddock. The track has been dismantled but it is unknown whether or not there are built remnants such as sleepers, ballast, steel tracks or any other original fabric relating to its construction and use. This would need to be determined during a survey proper (see Recommendation for historical archaeology below).

Former Racecourse Hotel

Weaver's report records the location of the former Racecourse Hotel and the HV site card mentions some of the extant buildings and other fabric. It appears that there were no additional investigations into the history or archaeology of this place. The recorded location of the hotel is currently occupied by the aged care facility and there was no indication that any part of this historic site survived this development.



Plate 1: View from Drews Road, showing low lying area with standing water.



Plate 2: Drews Road looking north, showing drainage ditch.



Plate 3: Showing open undeveloped paddocks covered in grass.



Plate 4: North western paddocks showing significant ground disturbance.

9. Conclusions of the Assessment

9.1 Aboriginal Cultural Heritage

- The Marshall Employment Precinct samples a geologically recent (quaternary) landform which consists of late Pleistocene and Holocene alluvial sediments.
- According to the VAHR there are no registered Aboriginal heritage places within or adjacent (on the other side of the road) to the Marshall Employment Precinct.
- According to the VAHR there are no mapped areas of sensitivity for Aboriginal heritage within or adjacent to the Marshall Employment Precinct.
- The nearest registered Aboriginal heritage places is VHAR 7721-0936 150m to the east in the Keystone Industrial Park development.
- Previous heritage assessments have established that the Marshall area can be sensitive for Aboriginal heritage in the form of scarred trees and low density stone artefact scatters.
- As part of the Armstrong Creek Growth Corridor the Marshall Employment Precinct has been previously assessed for Aboriginal Heritage. These previous assessments have been mostly desktop based and outside the current Aboriginal heritage legislation.
- The field inspection indicates that there are no obvious Aboriginal heritage places within the Marshall Employment Precinct or distinctive landforms sensitive for Aboriginal heritage.
- There is a probability of Aboriginal heritage places in the form of low density stone artefact scatters in properties to the northeast, along Reserve Road and Barwon Heads Road where there is higher ground. This prediction for Aboriginal heritage is based on the local pattern of past Aboriginal settlement of elevated areas close to creeks or water bodies. This is also the Victorian state-wide model and which has named waterways as sensitive landforms.
- Parts of the Marshall Employment Precinct appear to have been subject to significant ground disturbance as this is defined in the *Aboriginal Heritage Regulations 2007* and technically are not sensitive for Aboriginal heritage (see Legislative Advice and interpretation of significant ground disturbance below).

9.2 Post Contact Historical Archaeology (Non-indigenous)

- The Marshall Employment Precinct is located outside the area where the majority of local historical places are currently registered for Marshall, this being to the east of Barwon Heads Road closer to the Barwon River.
- According to the Heritage Victoria Register, the Marshall Employment Precinct contains the Cement Pipe Factory (registered as Drews Road 1 (H7721-0119) and associated features and Drews Road 2 (D7721-0120), Drews Road 3 (D7721-0121) and the former Racecourse Hotel (H7721-0010).
- The reserve of the former racecourse railway is currently the only known unregistered place within the precinct
- There is a probability of other unrecorded archaeological sites and features associated with the extant historic buildings recorded by Rowe and Jacobs, especially 28 Marshalltown Road, 375 Barwon Heads Road (Bluestone Cottage) and 1 Tannery Road, Charlemont.

10. Legislative Advice on Cultural Heritage

10.1 Aboriginal Cultural Heritage

The *Aboriginal Heritage Act* 2006 ‘the Act’ serves to protect and manage Aboriginal cultural heritage in Victoria. The Act specifies provisions for the custody and ownership of Aboriginal cultural heritage, the protection of Aboriginal cultural heritage (including cultural heritage permits), cultural heritage agreements, audits, stop orders and disputes. The Act’s administration provisions allows for the establishment of the Victorian Aboriginal Heritage Council who counsels the Minister for Aboriginal Affairs on heritage issues and Registered Aboriginal Parties (RAPs) who provide advice on the management of Aboriginal cultural heritage within a nominated area. A major function of the RAP is to participate in and evaluate cultural heritage management plans (CHMP).

Parts of the Act are implemented through the *Aboriginal Heritage Regulations* 2007 ‘the Regulations’, which amongst other things provides advice on the requirement for and preparation and standards of CHMPs.

It is an offence under the Act to harm Aboriginal cultural heritage (Part 3 Division 1). Part 3 section 29 of the Act specifies when harm is permitted which includes: ‘in accordance with a cultural heritage permit or approved cultural heritage management plan that applies to the Aboriginal cultural heritage and the person does the act in the course of preparing a cultural heritage management plan in accordance with this Act’.

10.1.1 Cultural Heritage Management Plans

Division 2 of the Act states that a CHMP is required for a proposed activity if the regulations require the preparation of the plan for the activity. Part 2 Division 1 Regulation 6 of the Regulations states 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; and (b) all or part of the activity is a high impact activity.’

The Act allows for the preparation of CHMPs that are mandatory and triggered by the Regulations, requested by the Minister or as part of an EES or are voluntary. A CHMP can occur as a single assessment covering the entire development area, or as multiple assessments covering parcels of land as part of staged development applications.

Division 5 Section 61 of the Act specifies matters to be considered by the RAP in relation to the approval of a CHMP. These matters include whether the activity will be conducted in a way that avoids harm to Aboriginal cultural heritage and if harm cannot be avoided, whether the activity can be conducted in a way that minimizes harm and any specific management requirements during and after the activity.

Section 53 of the Act relates to the prescribed standards of a CHMP and the activities undertaken during the preparation of the plan.

The RAP can refuse to approve a CHMP if they believe that Section 53 matters and Section 61 matters have not been adequately addressed (Part 4 Section 63).

10.1.2 Areas of Cultural Heritage Sensitivity

Division 3 of the Regulations specifies areas of cultural heritage sensitivity which include a registered cultural heritage place, land within 50 metres of a registered cultural heritage place, a waterway or land within 200 metres of a waterway.

10.1.3 High Impact Activities

Division 5 of the Regulations specifies High Impact Activities which require the mandatory preparation of a CHMP. High impact activities include the subdivision of land into three or more lots.

10.1.4 Mandatory CHMPs

A CHMP is mandatory when the Activity Area is an area of cultural heritage sensitivity and when the activity is a high impact activity.

10.1.5 Significant Ground Disturbance.

Significant ground disturbance is defined in the Regulations as ‘disturbance of — (a) the topsoil or surface rock layer of the ground; or (b) a waterway— by machinery in the course of grading, excavating, digging, dredging or deep ripping, but does not include ploughing other than deep ripping’.

The meaning of significant ground disturbance has been discussed in several VCAT decisions, principally *Mainstay Australia Pty Ltd v Mornington Peninsula SC (Red Dot)*, which led to the Dept of Planning and Community Development preparing a Practice Note on the subject; and *Azzure Investment Group Pty Ltd v Mornington Peninsula SC (Red Dot)*. The inference in the Practice Note, and in the VCAT decision (*Mainstay Australia Pty Ltd v Mornington Peninsula SC & Ors*) is that all areas of cultural heritage sensitivity need to have been subject to significant ground disturbance in order for the activity area to be considered not an area of cultural heritage sensitivity.

Significant ground disturbance means that an Activity Area is not an area of cultural heritage sensitivity and a demonstration of significant ground disturbance avoids the need for a mandatory CHM.P. Importantly though, a demonstration of significant ground disturbance does not mean that an Activity Area is devoid of Aboriginal Heritage and under the Act it is an offence to harm Aboriginal heritage.

10.2 Implications of the Aboriginal Heritage Act 2006 for the future development of the Marshall Employment Precinct.

No part of the Marshall Employment Precinct is in an area of cultural heritage sensitivity, although, as outlined above, some parts of the precinct are likely to retain Aboriginal heritage in the form of low density stone artefact scatters. This absence of sensitivity would change with the discovery of Aboriginal heritage within the precinct or within 50 metres of the precinct. *Importantly, the registration of Aboriginal heritage on any one property within the precinct could have implications for the need for a CHMP on adjacent properties.*

Other parts of the precinct appear to have been subject to significant ground disturbance and may therefore be exempt from a mandatory CHMP.

With the discovery of any Aboriginal heritage places Section 61 matters will need to be addressed to the satisfaction of the RAP. This may require harm avoidance and retention of Aboriginal heritage and therefore necessitate changes to the planned activity. These changes may require the appropriation of land from development for the purposes of preserving Aboriginal heritage.

10.3 Historical (Non-Indigenous) Archaeological sites and features

10.3.1 The Heritage Act and State Protection

The *Heritage Act* 1995 ‘the Act’ protects all types of historic cultural heritage relating to the non-indigenous settlement of Victoria, including historic buildings, shipwrecks and archaeological sites. Its main functions are to provide for the protection and conservation of places and objects of cultural heritage significance and the registration of such places and objects; to establish a Heritage Council; and to establish a Victorian Heritage Register.

The Act defines an archaeological relic as:

- *Any archaeological deposit*
- *Any artefact, remains or material evidence associated with an archaeological deposit which*

- *Relates to the non-Aboriginal settlement or visitation of ... Victoria; and is more than 50 years old.*

Under Section 127 of the Act, it is an offence to disturb or destroy an archaeological site or relic. The Act provides for two categories of listing 1) the Heritage Register (Section 18) and 2) the Heritage Inventory (Section 120).

The Heritage Register

The Heritage Register is a register of all heritage places, relics, buildings, objects or shipwrecks deemed to be of outstanding cultural significance within the State of Victoria. Section 23 of the Act sets out procedures for nomination of a place or object to the Heritage Register. Section 23(4) of the Act states that nominations are required to clearly specify why the place or object must be included in the Heritage Register and are to include an assessment of cultural significance against the criteria published by the Heritage Council. Nominations are assessed by the Executive Director of Heritage Victoria; if accepted, the Executive Director may then recommend to the Heritage Council that the nomination be accepted for inclusion in the Heritage Register. The notice of the recommendation must be published in a newspaper within the area where the place or object is located. Submissions in relation to a recommendation for inclusion in the Heritage Register can be made within 60 days after notification of a decision by the Executive Director. A person with a specific interest in the place or object, such as a property owner or local historical society, may request a hearing by the Heritage Council into a recommendation by the Executive Director for nomination. Archaeological sites or places and relics from any such sites or places can be nominated for the heritage register.

Section 64 of the Heritage Act (1995), states that it is an offence under the Act to disturb or destroy a place or object on the Heritage Register. Under Section 67 of the Act, a person may apply to the Executive Director for a 'Permit to carry out works or activities in relation to a registered place or a registered object'. Permit applications within the classes of works identified in Section 64 must be referred to the heritage Council. They must also be publicly advertised and formal notification provided to local government authorities by the Executive Director. The Heritage Council will state, within 30 days of receiving a permit application, whether it objects to the issue of a permit after a period of 30 days. Permit fees apply.

The Heritage Inventory

Section 121 of the Acts states that the Heritage Inventory is a listing of all:

1. Places or objects identified as historic archaeological sites, areas or relics on the register under the *Archaeological and Aboriginal Relics Preservation Act 1972*;
2. All known areas where archaeological relics are located;
3. All known occurrences of archaeological relics; and
4. All persons known to be holding private collections of artefacts or unique specimens that include archaeological relics

Consent from Heritage Victoria is required to disturb or destroy historic archaeological sites, places, buildings or structures listed on the Victorian Heritage Inventory. An application may be made to the Executive Director for a Consent to disturb or destroy an archaeological site or relic listed on the Heritage Inventory under Section 129. Consent application fees apply.

D Classification

Heritage Victoria has introduced a 'D' classification for places of low historical or scientific significance. Sites assigned a 'D' classification are listed on the Heritage Inventory but there is no requirement to obtain a Consent from Heritage Victoria to allow the removal of these sites.

10.3.2 Commonwealth Protection for Historic Cultural Heritage

In August 2003 the Federal Parliament passed three new sets of legislation that identify, conserve and protect cultural and natural heritage places of national significance. The legislation also creates an independent body to advise the relevant Minister on the registration and management of significant heritage places. These acts are:

1. *Environment and Heritage Legislation Amendment Act (No. 1) 2003*
2. *Australian Heritage Council Act 2003*; and
3. *Australian Heritage Council (Consequential and Transitional Provisions) Act 2003*

The Environment and Heritage Legislation Amendment Act (No. 1) 2003:

This Act replaces the *Australian Heritage Commission Act 1975* and amends the *Environment Protection and Biodiversity Conservation Act 1999*. It sets out steps for entering places on the National Heritage List and Commonwealth Heritage List and prescribes criteria for the nomination of places on these lists and sets out management principals for listed places. Under this Act, Australia's National Heritage '...will be protected using the Commonwealth's constitutional powers and managed co-operatively with State and Territory governments and private owners where appropriate'.

The Australian Heritage Council (Australian Heritage Council Act 2003)

As of 1 January 2004, the Australian Heritage Council Act 2003 establishes the Australian Heritage Council (AHC). The AHC replaces the Australian Heritage Commission and as stated in the Act its functions are to:

- Assess nominations in relation to the listing of places on the National Heritage List and the Commonwealth heritage List
- Advise the Minister on specified matters relating to heritage
- Promote the identification, assessment and conservation of heritage.
- Keep the Register of the National Estate; and,
- Perform any other functions conferred on the Council by the EPBC Act.

National Heritage List

This list consists of '...natural, historic and indigenous places that are of outstanding national heritage value to the Australian nation'. 'Each place in the List would be assessed by the Australian Heritage Council (see below) as having National heritage values which can be protected and managed under a range of Commonwealth powers. Listed places are protected under the *Environment Protection and Biodiversity Act 1999* (EPBC Act).

Commonwealth Heritage List

This list consists of natural and cultural heritage places '...owned or controlled by the Australian Government'. 'These include places connected to defense, communications, customs and other government activities that also reflect Australia's development as a nation. As with the National Heritage List, heritage places on the Commonwealth Heritage List are protected by the EPBC Act, which means that '...no-one can take an action that has, will have or is likely to have, a significant impact on the environment of a listed place, including its

heritage values, without the approval of the Minister' and '...that it is a criminal offence not to comply with this legislation'.

Register of the National Estate

The Register of the National Estate (RNE) is a statutory register that was established under the Australian Heritage Commission Act 1975. While this Act has been repealed the RNE has been '...retained under the Australian Heritage Council Act 2003. The Council will compile and maintain the register'

10.4 Implications of the Heritage Act 2006 for the future development of the Marshall Employment Precinct

It is illegal to disturb or destroy archaeological heritage in the State of Victoria without the requisite permits from Heritage Victoria.

Other than the places listed in Table 2 above and the former Racecourse Railway Reserve, there are no other registered or recorded archaeological sites within the Marshall Employment Precinct.

As there have been no formal assessments of historical archaeology involving historical research and a field survey, this absence does not mean there are no additional sites to those listed. The extant and former historic properties listed by Rowe and Jacobs (2013) have the potential to retain significant archaeological features and artefacts and should be investigated through a formal assessment process which requires notification to Heritage Victoria.

Other parts of the precinct which consist of open paddocks are unlikely to be sensitive for historical archaeology.

11.0 Recommendations for further Cultural Heritage Assessments

11.1 Aboriginal Cultural Heritage

- Assessments of Aboriginal cultural heritage are recommended for future development activities on all properties within the Marshall Employment Precinct.
- The requirement for a CHMP for any property or group of properties within the Marshall Employment Precinct can be determined through a due diligence assessment from a cultural heritage advisor (CHA) which, among other things, would consider the cultural heritage sensitivity of the parcel of land and the type of activity and its potential impact on Aboriginal cultural heritage.
- Any individual property owner or group of property owners should seek advice from a CHA on how best to define activity areas for the purposes of undertaking a CHMP.
- Even if a mandatory CHMP is not required a sponsor (land owner or developer) should consider undertaking a voluntary CHMP to ensure compliance with the Act.

11.2 Post Contact Archaeological Heritage

- Assessments of post-contact archaeological heritage are recommended for future development activities on all properties within the Marshall Employment Precinct.
- Assessments should take the form of stand alone reports and written and presented to HV standards.

12 Recommendations for the Registration of Heritage Places with AAV and HV

12.1 Aboriginal Cultural Heritage

- There are no recommendations for the registration of Aboriginal Heritage Places within the Marshall Employment Precinct as none are currently known.

12.2 Post Contact Archaeological Heritage

- The Cement Pipe Factory is on the Heritage Inventory and registered as Drews Road 1. This place has been assessed to be of State Significance and should be nominated for the Victorian Heritage Register.
- The Former Racecourse Railway Reserve should be registered on the Heritage Victoria Inventory. The extent and form of this place should be determined during the historical archaeological survey of the relevant properties.

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