

# Cultural Heritage Management Plan

Proposed Residential Development, 335 Rutherford Rd,  
Toolamba Victoria: Desktop, Standard and Complex  
Assessments

AAV Management Plan Identifier: 11389

Date: 20 July 2012



**Sponsor: Herdstown Pty Ltd (ABN 79 079 708 724)**  
**Cultural Heritage Advisors: Matthew Barker and Maya  
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ABN: 73 116 621 884 ACN: 116 621 88

## Title page

ACTIVITY: Proposed Residential Development  
LOCATION: 335 Rutherford Rd, Toolamba, Victoria  
SIZE OF ACTIVITY Large  
AAV PLAN IDENTIFIER: 11389  
DATE OF COMPLETION: 20 July 2012  
SPONSOR: Herdstown Pty Ltd (ABN 79 079 708 724)  
CULTURAL HERITAGE  
ADVISOR: Matthew Barker and Maya Barker  
AUTHORS: Matthew Barker

## Acknowledgements

Heritage Insight P/L would like to acknowledge and thank the following people for their assistance and participation in this study:

### Heritage Insight Staff:

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Kathleen Hislop – Background Research  
Lauren Prossor – Mapping and GIS

### Planner

Andrea Henderson, Chris Smith & Associates.



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*Aboriginal Heritage Act 2006*  
Section 65

**Cultural Heritage Management Plan - Notice of  
Approval**

I, Gary Nelson Cultural Heritage Coordinator, Yorta Yorta  
Nation Aboriginal Corporation, hereby approve the  
Cultural Heritage Management Plan referred to below:

**Cultural Heritage Management Plan number:11389**

**Sponsor: Herdstown Pty Ltd- 335 Rutherford Rd, Toolamba**

**Cultural Heritage Advisor: Matthew Barker & Maya Baker**

**Author: Matthew Barker**

**20/07/2012**

Pursuant to s.65(6) of the Act this cultural heritage management plan takes effect  
upon the granting of this approval.\*

Signed:



**Gary Nelson**

Dated: 29/08/2012

*\* This notice of approval should be inserted after the title page and bound with the  
body of the management plan.*



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## Disclaimer

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## **Executive Summary**

### **E1 Introduction**

The proposed activity to be conducted on the land is a multi-sized residential development comprising 355 house blocks. These lots will comprise 15 lots of 2000sq.m (average size), 65 lots of 1500sq.m (average size); and 275 lots of 1200sq.m. (average size) (see Map 2). There are no specific details as to the use of each lot, only the subdivision plan shown below in Map 2.

This Cultural Heritage Management Plan (CHMP) is a mandatory CHMP, because:

- The proposed activity occurs within an area of Cultural Heritage Sensitivity (*Aboriginal Heritage Regulations 2007, Division 1, 6(a)*); and
- The proposed activity is a high impact activity (*Aboriginal Heritage Regulations 2007, Section 40(1)*).

The proposed activity occurs within an area of Cultural Heritage Sensitivity, because it is situated within 200m of a named waterway; the Goulburn River (*Aboriginal Heritage Regulations, 2007, Division 3, Section 4*).

The proposed activity is a high impact activity because it involves the subdivision of land into three or more lots (*Aboriginal Heritage Regulations 2007, Division 5, 46, Part 1 (a) and (b)*). It is a high impact activity involving excavation and filling of the land surface for the purpose of constructing house-lots, roads, driveways, deep excavation for associated service infrastructure, as well as more superficial landscaping works (see Section 2.0).

The Activity Area covered by the CHMP comprises approximately 56.89ha of land situated in the township of Toolamba, Parish of Murchison North, Parent Title Volume 5499, Folio 735 Title Plan 825016W in the City of Greater Shepparton (see Map 1). The area is situated approximately 160km north of Melbourne. The activity area is bounded to the north, east and west by agricultural land and to the south by the northern bank of the Goulburn River.

The activity area is situated on the east side of Rutherford Road, Toolamba (Map 1). It extends approximately 1.6km south from the intersection of Rutherford Road and Wren Street (see Map 1). The Goulburn River flows immediately south of the southern boundary of the activity area.

Definitions of the terminology used in this report can be found in the Glossary (see Appendix 3).

### **E2 Results of Desktop Assessment**

Although there has been limited survey coverage within the local area, the archaeological record indicates that Aboriginal people occupied and used all landforms within and adjacent to the Goulburn River valley.

It is likely that the focus of Aboriginal settlement in the local area would have been around the wetland resources along the Goulburn River. These resource-rich areas could also form the basis for large seasonal gatherings of Aboriginal clans for ceremonial or trading purposes.

The activity area is located adjacent to the Goulburn River and would have been ideally placed to exploit the resource rich environment. Occupation sites within the activity area are more likely to have been short-term campsites, associated with foraging and hunting expeditions. An example of this would be food preparation sites, such as oven mounds. Therefore, the overall density and size of archaeological sites could be expected to decrease with increasing distance from the Goulburn River.

The local archaeological record also indicates that evidence of past Aboriginal campsites and occupation, can occur at distances of >1km from recent floodplains within the Goulburn River Valley, and, therefore, potentially within the activity area.

A site prediction model is intended to be used as a guideline to designing the field survey and as an indication of the types of archaeological sites which may occur in a given area. The site prediction model is tested against the results of the field survey.

A generalised archaeological site prediction model for the activity area can be developed from the archaeological and environmental data, but is not informed by any specific ethnographic or historical references for the region. The site prediction model is outlined below.

(1) There is a moderate probability that Aboriginal archaeological sites would have occurred within the current activity area. This majority of the activity area was formerly dry grassland plain of low fertility, lacks natural sources of permanent freshwater and was not likely to have been occupied on a long-term or intensive basis. There is still some potential for remains of campsites to occur on the banks of the Goulburn River. Remains of any such campsites are likely to consist of small surface or near surface scatters of stone artefacts or small oven mounds.

(2) It is highly unlikely that ancient or deeply buried archaeological sites, or human burials will occur within the activity area. There is no geological or geomorphological data which suggests that ancient landforms, such as prior stream channels, stream levees or sandhills exist within the activity area. These are the types of landforms which are likely to contain ancient sites or human burials, because of the soft sandy soil found within them.

(3) It is likely that any Aboriginal archaeological sites (apart from scarred trees) within the activity area will be near-surface or surface remains of past campsites. This is because the topsoil of the Shepparton Formation generally has a shallow A horizon up to 400mm in depth and overlying clay. Also the topsoil has most likely been subject to wind erosion due to vegetation removal.

(4) It is highly likely that any Aboriginal archaeological sites within the activity area have been significantly impacted on by past land use. Scarred trees are most likely to survive in the southern end of the Activity Area, but most mature eucalypts have been cleared from the balance of the land. The activity area has been largely cleared of native vegetation, and there has been considerable soil erosion as a consequence of vegetation

clearance, There are several dams within the activity area that have undergone severe ground disturbance. Land clearance and agricultural land use have possibly removed any material evidence of small and short-term occupation sites on remainder of the activity area.

(5) Taking into consideration the discussion in points 1-5 above, it is likely that archaeological sites within the activity area, if they survive, will comprise the following;

- Surface or near-surface scatters of stone artefacts, which have been dispersed across a wider area of land than their original location by activities such as vegetation clearance or soil erosion. It has been noted by Gaynor that artefacts within topsoil could be scattered up to 268m in 30 years within an Australian context (Gaynor, 2004: 21). Low density stone artefact scatter sites could be found anywhere within the activity area, and reflect archaeological background rather than areas of focused activity. Small numbers of stone artefacts are ubiquitous over the Victorian landscape. These types of archaeological remains reflect transient use of the general landscape over the past 1,000 to 2,000 years rather than locations of focused activity. Low density stone artefact scatters are generally assessed as being of low scientific significance.
- Scarred trees, if they survive on the property, are most likely to be found adjacent to the Goulburn River.

### **E3 Results of Standard Assessment**

The results of the standard assessment indicate that the activity area comprises land that has been disturbed by land clearance and ploughing, as well as by the construction of existing dams.

These ground disturbance activities would likely have resulted in the removal of topsoil and the destruction of any surface or near surface Aboriginal cultural materials.

The deposits of the Shepparton Formation appear to be extremely shallow, and therefore the majority of the Activity Area is considered to have very low potential to contain *in-situ* Aboriginal archaeological sites.

The land located within 200m of the Goulburn River south of the proposed VicRoads Shepparton Bypass alignment (this location comprises the location of 15 x 2000sq.m lots) is located on elevated land and may contain deeper soil deposits and therefore has the potential to contain undisturbed Aboriginal cultural material.

All the remnant trees were examined and three Aboriginal scarred trees: VAHR 7925-0617 to 0619 (335 Rutherford Road, Toolamba Scarred Trees 1-3) (see Section 6.4) were located in the north east corner of the Activity Area.

### **E4 Results of Complex Assessment**

Owing to low ground surface visibility as a consequence of dense grass coverage across the entire Activity Area, it was not possible to assess the archaeological sensitivity of the Activity Area comprehensively by surface survey. It was also not possible to comprehensively assess the level of ground disturbance which had occurred. Therefore, it



was considered necessary that the Activity Area be investigated by means of a complex assessment.

Thus, a complex assessment comprising hand excavation and machine excavation was carried out as part of this CHMP. The aim of the subsurface testing/excavation was to establish if the proposed activity is likely to cause harm to Aboriginal cultural heritage.

The complex assessment was conducted by Matthew Barker and Maya Barker from Heritage Insight Pty Ltd and Kyle Wright and Tahnee Day representing the YYNAC, all of whom have considerable experience in the conduct of archaeological excavations and subsurface testing.

A total of 1 test pit was excavated along with 1 x 120m and 9 x 60m shovel test pit transects and 17 x 2m mechanical transects, to establish the soil stratigraphy of the Activity Area, and to assess the likelihood of subsurface Indigenous cultural material being located within the Activity Area.

The site prediction model for the Activity Area stated that while there was some probability of locating *in-situ* surface or subsurface remains of Indigenous archaeological sites within the Activity Area the likelihood was reduced by the level of disturbance caused by the land use history and thin soils found on the Shepparton Formation.

The level of disturbance and modification was confirmed by the results of the complex assessment. The disturbance of the soils was likely caused by initial tree clearance and farming practices. The soils within the Activity Area were found to be extremely shallow and did not exceed 200mm depth. In all instances these shallow soils were consistently followed by deep and dense clays. In most transects clays were located in the upper layers.

The results indicate that any Aboriginal Cultural remains, if they existed within the Activity Area, would likely have been located within the top soil profile as dense clay was consistently found below this level. A thorough investigation of the Activity Area was completed through extensive subsurface testing, however no Aboriginal cultural heritage sites were identified.

## **E5 Recommendations**

Based on the results of the archaeological assessment, the following management recommendations are made for land comprising the Activity Area. Please note that once this CHMP is approved these recommendations become compliance requirements.

### **VAHR 7925-0617 (VAHR) (335 Rutherford Road, Toolamba Scarred Tree 1)**

#### **Recommendation 1 – VAHR 7925-0617 (335 Rutherford Road, Toolamba Scarred Tree 1)**

Scarred tree VAHR 7925-0617 (335 Rutherford Road, Toolamba Scarred Tree 1) has been assessed as being of high cultural value, and should be retained within the development. It is therefore recommended that:

- a) An area of land around the tree be excluded from development, extending out to the drip line of the tree (see Map 7).
- b) Once the area of land around the tree has been determined, it should be securely fenced with a post and wire fence.
- c) Signage should be placed on the fence, advising all workers that the fenced area is protected and that no construction works or machinery are to operate within this area.
- d) An arborist should be engaged, in consultation with an archaeologist and relevant Aboriginal community or RAP representative, to develop a longer term conservation plan for the tree. This plan should be submitted to the RAP or AAV as appropriate for approval and included as part of the works plan for the site. The conservation plan should involve minimal disturbance to the tree.

**VAHR 7925-0618 (VAHR) (335 Rutherford Road, Toolamba Scarred Tree 2)**

**Recommendation 1 – VAHR 7925-0618 (335 Rutherford Road, Toolamba Scarred Tree 2)**

Scarred tree VAHR 7925-0618 (335 Rutherford Road, Toolamba Scarred Tree 2) has been assessed as being of high cultural value, and should be retained within the development. It is therefore recommended that:

- a) An area of land around the tree be excluded from development, extending out to the drip line of the tree (Map 8).
- b) Once the area of land around the tree has been determined, it should be securely fenced with a post and wire fence.
- c) Signage should be placed on the fence, advising all workers that the fenced area is protected and that no construction works or machinery are to operate within this area.
- d) An arborist should be engaged, in consultation with an archaeologist and relevant Aboriginal community or RAP representative, to develop a longer term conservation plan for the tree. This plan should be submitted to the RAP or AAV as appropriate for approval and included as part of the works plan for the site. The conservation plan should involve minimal disturbance to the tree.

**VAHR 7925-0619 (VAHR) (335 Rutherford Road, Toolamba Scarred Tree 3)**

**Recommendation 1 – VAHR 7925-0619 (335 Rutherford Road, Toolamba Scarred Tree 3)**

Scarred tree VAHR 7925-0619 (335 Rutherford Road, Toolamba Scarred Tree 3) has been assessed as being of high cultural value, and should be retained within the development. It is therefore recommended that:

- a) An area of land around the tree be excluded from development, extending out to the drip line of the tree (Map 9).
- b) Once the area of land around the tree has been determined, it should be securely fenced with a post and wire fence.
- c) Signage should be placed on the fence, advising all workers that the fenced area is protected and that no construction works or machinery are to operate within this area.
- d) An arborist should be engaged, in consultation with an archaeologist and relevant Aboriginal community or RAP representative, to develop a longer term conservation plan for the tree. This plan should be submitted to the RAP or AAV as appropriate for approval and included as part of the works plan for the site. The conservation plan should involve minimal disturbance to the tree.

#### **General Activity Area (Other than above)**

There was no Aboriginal cultural heritage recorded during the standard and complex assessments and consequently no specific cultural heritage recommendations are necessary.

The contingency plans contained in Section 10 of this report form part of the Cultural Heritage Management Plan and *must* be incorporated into the development or Environmental Management Plan for the project. A copy of this management plan must be held on-site at all times.

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## **Part 1 - Assessment**

### **1.0 Introduction**

#### **Reasons for Preparing a CHMP**

This Cultural Heritage Management Plan (CHMP) is a mandatory CHMP, because:

- The proposed activity occurs within an area of Cultural Heritage Sensitivity (*Aboriginal Heritage Regulations 2007, Division 1, 6(a)*); and
- The proposed activity is a high impact activity (*Aboriginal Heritage Regulations 2007, Section 40(1)*).

The proposed activity occurs within an area of Cultural Heritage Sensitivity, because it is situated within 200m of a named waterway; the Goulburn River (*Aboriginal Heritage Regulations, 2007, Division 3, Section 4*).

The proposed activity is a high impact activity because it involves the subdivision of land into three or more lots (*Aboriginal Heritage Regulations 2007, Division 5, 46, Part 1 (a) and (b)*). It is a high impact activity involving excavation and filling of the land surface for the purpose of constructing house-lots, roads, driveways, deep excavation for associated service infrastructure, as well as more superficial landscaping works (see Section 2.0).

In accordance with Section 61 of the Aboriginal Heritage Act (2006), the following mandatory matters are considered by this CHMP:

- Whether the activity will be conducted in a way that avoids harm to Aboriginal cultural heritage;
- If it does not appear to be possible to conduct the activity in a way that avoids harm to Aboriginal cultural heritage, whether the activity will be conducted in a way that minimises harm to Aboriginal cultural heritage;
- Any specific measures required for the management of Aboriginal cultural heritage likely to be affected by the activity, both during and after the activity;
- Any contingency plans required in relation to disputes, delays and other obstacles that may affect the conduct of the activity.

#### **Sponsor for the CHMP**

The sponsor for the CHMP is Herdstown P/L (ABN 79 079 708 724).

#### **Notice of Intention to Prepare a CHMP**

A notice of intention to prepare a CHMP was submitted to the Deputy Director of Aboriginal Affairs Victoria (AAV), pursuant to Section 54 of the Act (Appendix 1).



### **Names, Qualifications and Experience of Cultural Heritage Advisors**

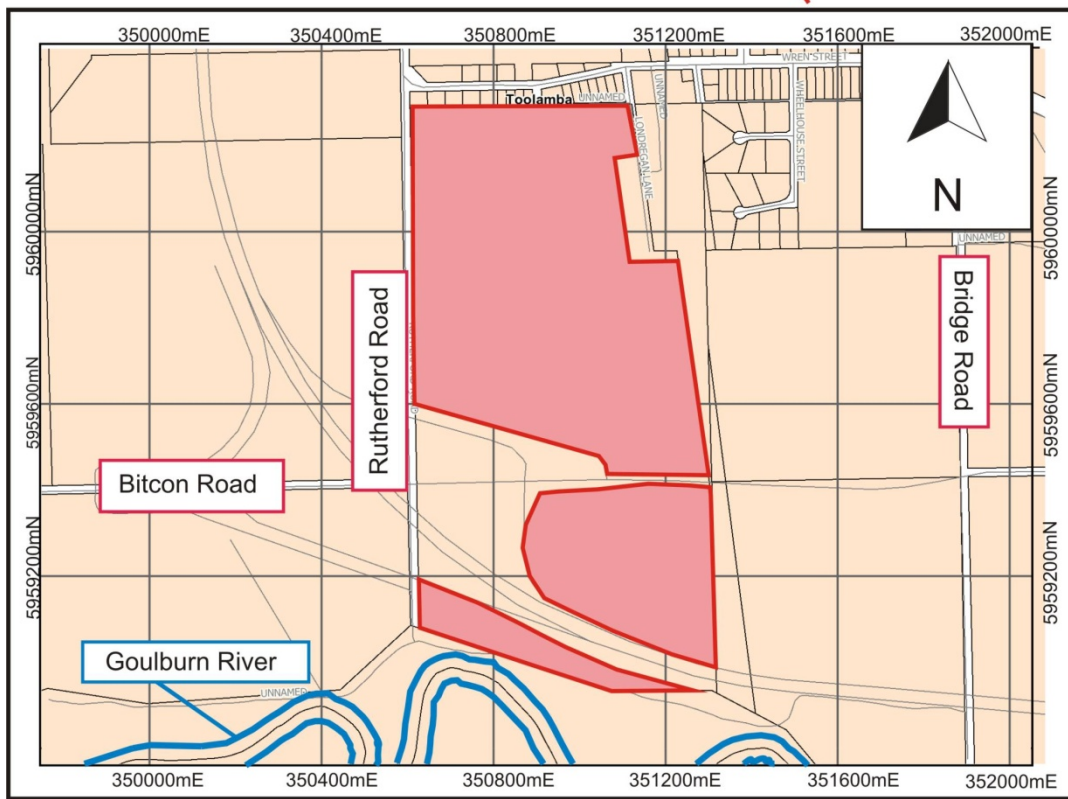
The Cultural Heritage Advisor who has prepared this CHMP is Matthew Barker, (BA Hons Archaeology in Aboriginal Prehistory and Historic Archaeology from LaTrobe University). Matthew Barker has conducted a range of Aboriginal and historic archaeological assessments in Victoria over the past five years, which have involved archaeological survey and exploratory excavation for Aboriginal archaeological sites.

Maya Barker BSc/BA with Honours (Archaeology) participated in the standard assessment. Maya has formal archaeological qualifications from both Monash University and La Trobe University and has had six years' experience working in the field of Aboriginal archaeology.

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

The Activity Area covered by the CHMP comprises approximately 56.89ha of land situated in the township of Toolamba, Parish of Murchison North, Parent Title Volume 5499, Folio 735 Title Plan 825016W in the City of Greater Shepparton. The area is situated approximately 160km north of Melbourne. The activity area is bounded to the north, east and west by agricultural land and to the south by the northern bank of the Goulburn River.

The activity area is approximately 56.89ha in area. It is situated on the east side of Rutherford Road, Toolamba (Map 1). It extends approximately 1.6km south from the intersection of Rutherford Road and Wren Street (see Map 1). The Goulburn River flows immediately south of the southern boundary of the activity area.



**Map 1: Location of the activity area which is the subject of this CHMP.**

### **Land Owners**

The activity area is the property of Herdstown P/L

### **RAP's with Responsibility for the Activity Area**

At the time the Notification of Intent was submitted there was no RAP or RAP(s) with responsibility for the activity area and the Activity Area was within the RAP claimant boundaries of the Yorta Yorta Nations Aboriginal Corporation (YYNAC).

The YYNAC were contacted by email and phone and provided two representatives for the standard assessment.

### **Evaluation of the CHMP**

YYNAC has elected to evaluate the plan under s.65 (1)(b)(i) of the *Aboriginal Heritage Act 2006* (see Appendix 2).

## 2.0 Activity Description

The proposed activity to be conducted on the land is a multi-sized residential development comprising 355 house blocks. These lots will comprise 15 lots of 2000sq.m (average size), 65 lots of 1500sq.m (average size); and 275 lots of 1200sq.m. (average size) (see Map 2). There are no specific details as to the use of each lot, only the subdivision plan shown below in Map 2.

The Activity Area covered by the CHMP comprises approximately 56.89ha of land situated in the township of Toolamba, Parish of Murchison North, Parent Title Volume 5499, Folio 735 Title Plan 825016W in the City of Greater Shepparton. The area is situated approximately 160km north of Melbourne. The activity area is bounded to the north, east and west by agricultural land and to the south by the northern bank of the Goulburn River.

### 2.1 Statement of Potential Impacts

It is proposed that the area be subdivided for residential development. The proposed development will involve some degree of soil disturbance to both surface and buried land surfaces. Activities which will occur during the course of the development are:

- Soil excavation for construction of houses;
- Deep excavation for service trenches (gas, electricity, water);
- Soil excavation for landscaping works;
- Road construction.

All of the above activities will involve the removal of topsoil. The proposed activities would therefore have some potential to harm Indigenous cultural heritage if it was found to exist on the property.

The following activities will occur during the development of the land:

- Stripping (removing) of the topsoil, utilising heavy machinery, to a depth of 75-100mm. The topsoil is stockpiled for later use in landscaping.
- Excavation for foundations of the houses
- Installation of services (electricity, telecommunications) utilising heavy machinery. As the trench excavations are relatively shallow and narrow, disturbance either side of the trench is of minimal impact.
- Landscaping works using excess spoil from deep excavations

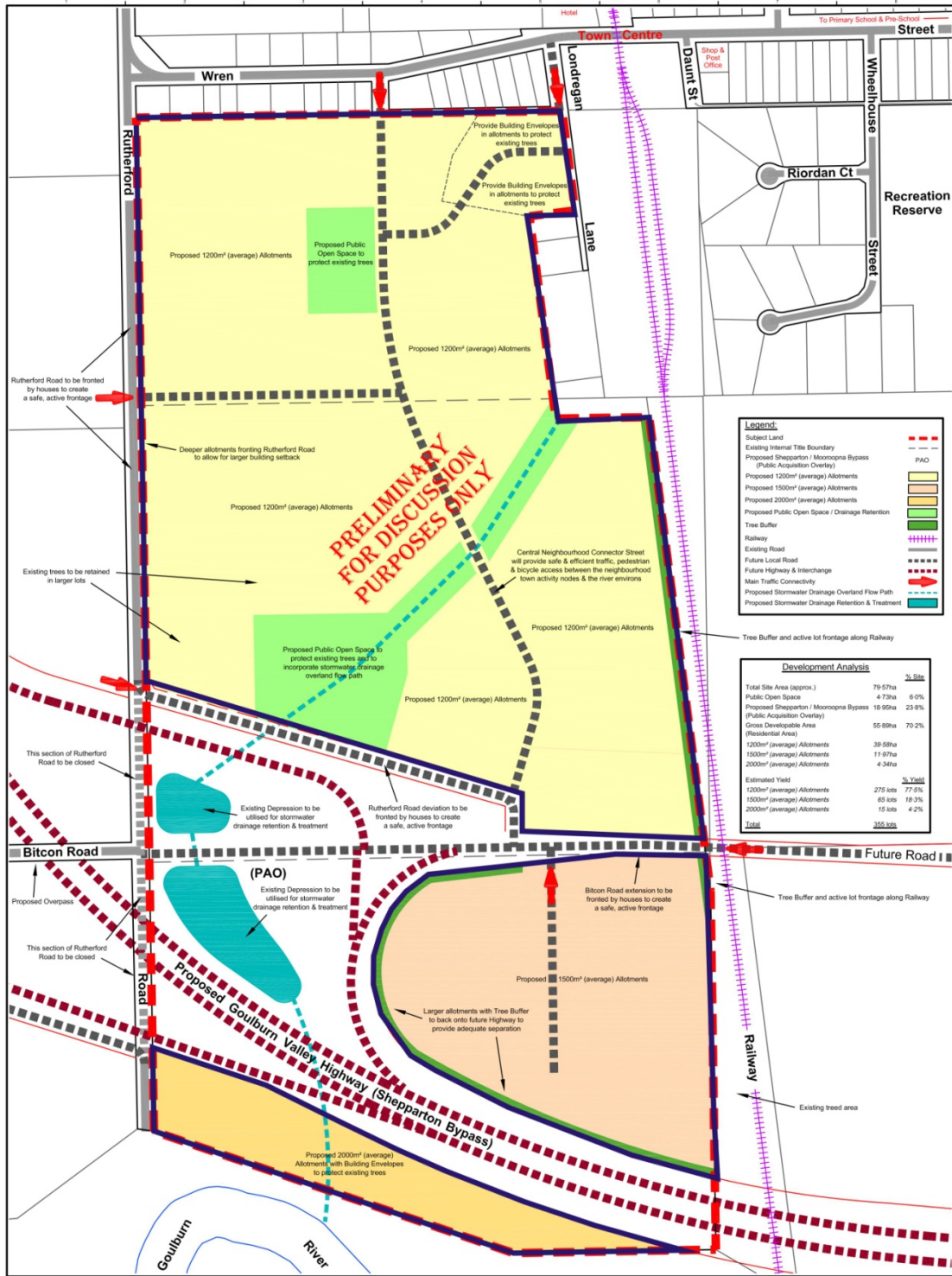
A summary of typical trench widths and depths of excavation of each construction activity are provided below:

Activity	Width of Trench (m)	Depth Range (m)
Roads	Road width	0.4-0.6m
Footpaths	1-2m	0.2m
Drainage	0.6-0.9m	0.8 – 1.2
Sewer reticulation	0.9 – 2.0m	0.8 – 1..2

Water reticulation	0.3 – 1.0	0.8 – 1.0
Electricity/gas	0.20m	0.6m
Telecommunications	0.20m	0.3m

All of the above activities will involve the removal of topsoil. The proposed activities would therefore have some potential to harm Aboriginal cultural heritage if it was found to exist on the property. Construction works will involve the excavation of soils of between 0.1 – 1.2m (based on standard depths of construction).

It has been stated that construction works will impact upon surface and subsoils which is where Aboriginal cultural material *may* be located. Below the soil is layer of dense clay derived from the Shepparton Formation. Thus, anything below the topsoils is considered to be a sterile layer and disturbance of these sterile soils will not impact upon Aboriginal cultural heritage in any way.



**Chris Smith & ASSOCIATES**  
 SPECIALISTS IN SUBDIVISION PROJECT MANAGEMENT AND DESIGN  
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 Designed: Col Rogers 22nd March, 2010  
 Drawn: Col Rogers 22nd March, 2010  
 Checked: Gary Steigemberger  
 Approved:

 Activity Area



Map 2: Development Plan.

## **3.0 Extent of Activity Area Covered by the CHMP**

### **3.1 Extent of Activity Area**

The Activity Area covered by the CHMP comprises approximately 56.89ha of land situated in the township of Toolamba, Parish of Murchison North, Parent Title Volume 5499, Folio 735 Title Plan 825016W in the City of Greater Shepparton. The area is situated approximately 160km north of Melbourne. The activity area is bounded to the north, east and west by agricultural land and to the south by the northern bank of the Goulburn River.

### **3.2 Description of Existing Conditions in the Activity Area**

The activity area (Map 3) is a gently undulating to level plain, incised by shallow drainage channels. There are several low rises in the southwestern corner of the Activity Area which rise above the level of the flat plain overlooking the Goulburn River and drainage lines. The Goulburn River bank forms the southern boundary of the activity area.

The majority of the activity area is level treeless pasture, but small areas of remnant eucalypt woodland with no understorey vegetation remain. The largest area of eucalypt woodland encompasses approximately 1ha of land in the far south of the activity area. The activity area has been highly degraded by soil erosion resulting from prolonged grazing and has been dammed in two locations.



Map 3: Aerial of Activity Area



## **4.0 Documentation of Consultation**

A Notice of Intention to Prepare a CHMP was submitted by the Sponsor to the RAP and the Deputy Director of AAV, in accordance with Clause 4, Schedule 2 of the *Aboriginal Heritage Regulations 2007* (see Appendix 1). Yorta Yorta Nation Aboriginal Corporation responded and advised of their intent to evaluate the CHMP on the 23<sup>rd</sup> August, 2010.

### **4.1 Participation in the Conduct of the Assessment**

Representatives of the YYNAC participated in the standard assessment and complex assessments. Simon Nicholson and Freddie Firebrace participated in the standard assessment. The two representatives participated in all aspects of the assessment. Tahnee Day and Kyle Wright participated in the complex assessment. The two representatives participated in all aspects of the assessment.

### **4.2 Community Comments: Standard Assessment**

The results of the assessment were discussed on site with both representatives who agreed that the areas bordering the Goulburn River and natural drainage lines, in elevated areas and small rises within the Activity Area would be sensitive to Aboriginal cultural material and should be subject to investigation by means of a complex assessment.

### **4.3 Community Comments: Complex Assessment**

Both representatives stated that the scarred trees in the northeast corner should be retained and protected within the development. In relation to the sub-surface excavations both representatives considered that the entire Activity Area had been thoroughly examined with a particular emphasis on the rises along the Goulburn River along the southern border and were of the opinion that the Activity Area was of low archaeological potential.

## **5.0 Report on the Results of the Desktop Assessment**

This section contains the results of the desktop assessment.

### **5.1 Methodology for Desktop Assessment**

The aim of the desktop assessment was to produce an archaeological site prediction model, which would assist in the design of the fieldwork, the interpretation of the fieldwork results, the assessment of cultural significance and the design of the management recommendations. The desktop assessment involved a review of:

- Standard ethnographic sources to identify the likely traditional owners and a review of any written and oral local history regarding Aboriginal people in the Toolamba area;
- Environmental resources available to Aboriginal people within the region of the activity area;
- The site registry at AAV and previous archaeological studies, to identify any previously registered Aboriginal archaeological sites either within or surrounding the activity area and the results of previous archaeological assessments; and
- The land-use history of the Activity Area, particularly evidence for the extent and nature of past land disturbance.

This information was used to produce an archaeological site prediction model (Section 5.8). The site prediction model assists in determining the type of archaeological sites which may potentially occur within the Activity Area, the possible contents of these sites, the possible past use of the landscape by Aboriginal people and the likely impact of past land use on archaeological sites. The information provided by the site prediction model is used constructively to design a survey strategy for the Activity Area, by, for example, allowing the field team to target areas which have a high probability of containing archaeological sites. However, areas or landforms which were assessed as having a low probability of containing Aboriginal archaeological sites were also assessed, in order to test the effectiveness of the site prediction model.

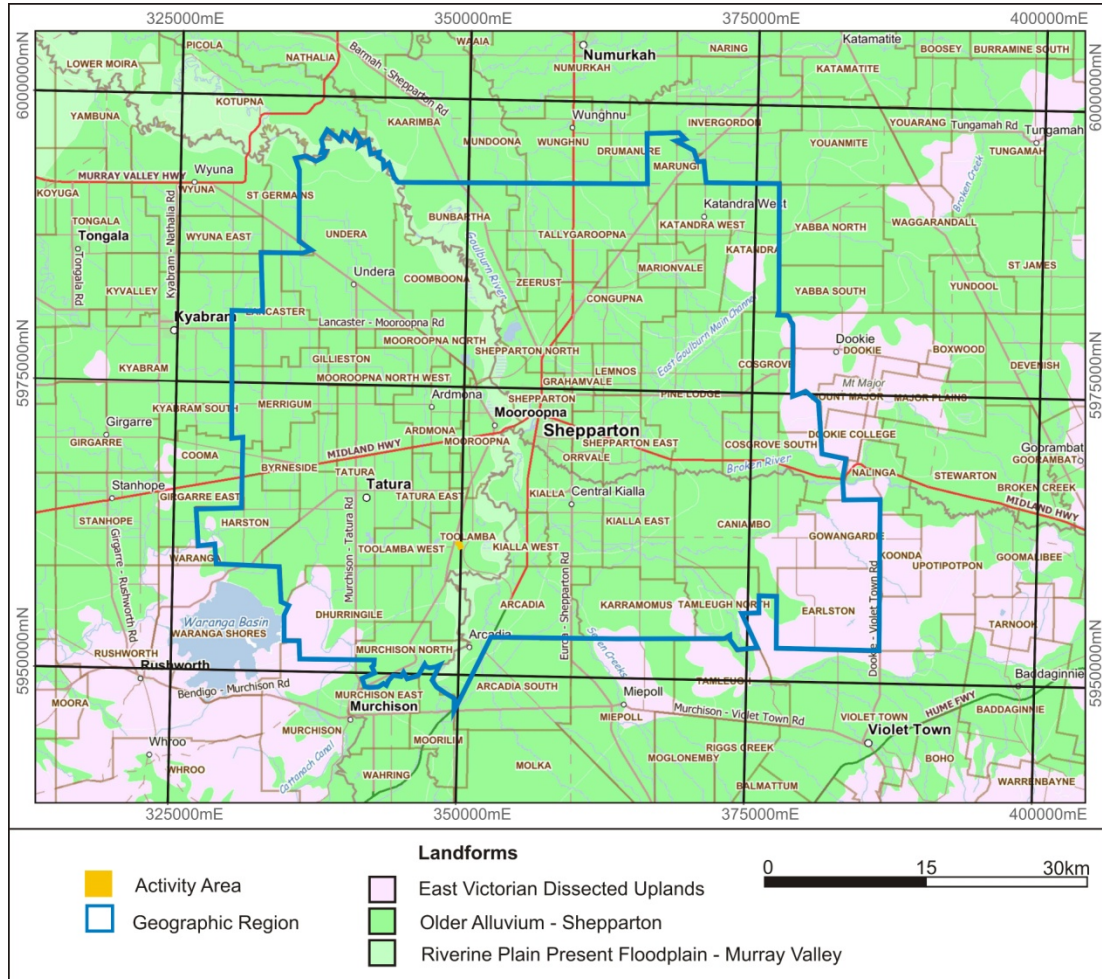
### **5.2 Results of Desktop Assessment**

#### **5.2.1 Search of the Victorian Aboriginal Heritage Register**

The Victorian Heritage Register held at Aboriginal Affairs Victoria was searched to identify any previously registered Aboriginal archaeological sites within the Activity Area and surrounding geographic region, as well as the results of previous archaeological assessments. The Register was accessed in August 2010.

## 5.2.2 Geographic Region

The geographic region that is the subject of this assessment is defined by the Greater Shepparton region (see Map 4). Only information relevant to the local region of the activity area has been included in the following assessment.



**Map 4: Geographic Region.**

## 5.2.3 Geography and Geology of the Activity Area

There is one broad landsystem within the activity area. A summary of relevant information about the geology, geomorphology, soils, pre-contact vegetation, climate and water sources in the landsystem is contained in Table 1.

**Table 1: Summary of the landsystem within activity area.**

Landsystem Code - Landsystems of Victoria at 1: 250,000	Landsystem	Landsystem Description
4.2PfQ5-2	<b>Geomorphic Unit:</b>	Older Alluvium – Shepparton

	<p><b>Landform</b></p> <p><b>Lithology</b></p> <p><b>Soils</b></p> <p><b>Pre-1750 EVC's</b></p> <p><b>Climate</b></p> <p><b>Water Sources:</b></p>	<p>Formation</p> <p>Plain above flood level – (relative relief &lt;9m)</p> <p>Fine textured unconsolidated non-marine alluvial deposits (Shepparton Formation)</p> <p>(1) Yellow duplex soils, moderately firm/strong – rigid, PH&lt; 5.5</p> <p>(2) Grey clays, moderately firm/strong. Thin layer of topsoil &lt; 200mm depth, PH 5.5 – 6.5</p> <p>EVC 55 Plains Grassy Woodland entire activity area except EVC 125 Plains Wetland along a drainage in north of Wormangal Creek</p> <p>Temperate, mean maximum temperature 28.9<sup>0</sup>C (January), mean minimum temperature 3.5<sup>0</sup>C (July), mean annual temperature 20.4<sup>0</sup>C, mean annual rainfall 131mm, highest mean rainfall (June) 61mm, lowest mean rainfall (December to January) 33.1 – 33.0.</p> <p>Ephemeral Wormangal creek extending approximately 820m across centre of activity area.</p>
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Sources: DPI Catchment Mapper, DPI Geovic Geological Mapper Interactive Map, DPI Biodiversity Interactive Map. All sites accessed in September 2010.

The Shepparton region consists entirely of riverine plains, comprising the active flood plains of the Goulburn River and Broken River and the more extensive surrounding alluvial plain containing numerous prior and ancestral stream channels. The dominant sediments that make up the plains are of sand, gravel and clay deposited in the area by an older river system ('prior stream' system) as alluvium in the Quaternary period; from approximately 1.6 million years ago to recent geological times (DPI 2010; Cochrane et al 1995:77). These deposits are called the Shepparton Formation on geological maps and are mainly derived from rivers and streams, but also include Aeolian (i.e. windblown) deposits. These Aeolian deposits consist of fine calcareous soil material which spread over much of Northern Victoria during drier climatic periods. The Shepparton Formation deposits vary from about 50 to 125 metres in depth across much of the Northern Victorian plains and cover the older alluvial (Tertiary) and marine (Ordovician) sediments (DPI 2008). The area of this floodplain on which the geographic region is located is topographically flat and relatively featureless. The only topographical variation

is the occasional low sand dunes adjacent to current or prior streams and lunettes on the eastern side of dry lake basins. The rivers usually flow within a belt of incised or terraced alluvium the surface of which lies a few metres below that of the surrounding plain (Bowler 1978: 74). The alluvial plain through which the Goulburn River flows is a geological feature of incised or terraced alluvium deposited by prior river courses, and comprises an extensive series of low relief floodplains, associated rivers, tributaries, lake systems, ephemeral channels, palaeo-channels and prior streams (Pels 1971). From Echuca (elevation 96m) to Shepparton, a distance of 60 kilometres, elevation varies by only 18 metres. Such extremely low gradients maintained throughout the Plain (Bowler 1978), have led directly to the Lower Goulburn's meandering course, extensive floodplain and complex of surrounding wetlands, billabongs and flood paths (Sinclair Knight Merz 1998).

The Goulburn River itself has a near channel floodplain approximately 2 kilometres wide, which corresponds generally to the meander belt of an ancestral course of the Goulburn River, having occupied its present course only for the past 10,000 – 15,000 years (Craigie & Brizga 1998). The modern Goulburn River is reworking sediments left behind by its ancestral streams carrying predominately silt and clay, and is tightly sinuous, although with occasional straight reaches (Bowler 1978 & Sinclair, Knight Merz 1998). The near channel floodplain is generally forested. Beyond this are broader floodplains and terraces which have generally been cleared and developed for agriculture (Craigie & Brizga 1998). Soils on the Riverine Plain are red, weakly developed calcareous and red-brown earths. Closer to the river these soils grade into red-brown and grey clays (Bowler 1986).

The activity area itself is entirely situated on the Widgelli Pedoderm of the Shepparton Formation (Geological Society of Australia, 1993: 355). The Shepparton Formation is derived from non-marine alluvial deposits originating from prior streams, and aeolian parna from the Riverine Plain. The Widgell Pepodern is dated from around 32,000 – 26,000 years BP (Geological Society of Australia, 1993: 353). The A soil horizon is loose reddish-brown to dark grey loam, generally up to 400mm in depth. The B horizon is reddish-brown to dark grey, has a higher clay content and large amounts of calcium carbonate, which is absent in the A horizon (Geological Society of Australia, 1993: 355). The A and B soil horizons are up to 1.8m in depth (Geological Society of Australia, 1993: 355).

No geological evidence of prior streams associated with the Shepparton Formation is indicated within the activity area (DPI Geovic Geological Mapper Interactive Map, accessed March 2009).

The soil formation and soil types indicate that deeply buried Aboriginal archaeological sites will not occur within the activity area, since the A horizon of the Shepparton Formation is typically shallow, and there are no geological formations or soil types which are likely to contain deeply buried sites. The lack of ancestral landforms within the activity area (eg. prior streams) also indicates that the activity area is unlikely to contain ancient archaeological sites.

### 5.3 Environmental Resources within the Geographic Region

#### Plant Resources

The Goulburn River corridor is listed as a Heritage River under the Victorian Rivers Act (1992). Its significant values include its terrestrial habitat significance for vulnerable or threatened wildlife, its native fish diversity and provision of water conditions conducive to seasonal spawning by Murray Cod. The Goulburn River corridor provides a continuous remnant of vegetation in and otherwise relatively cleared landscape, being the most intact surviving swathe of native vegetation in the Shepparton region. The corridor is a reminder of what the landscape was like immediately prior to European settlement and land clearance in the Shepparton region. In addition the vegetation corridor of the Goulburn River provides important habitat linkages for native fauna, and also contains numerous native flora species which are extinct in surrounding rural landscapes. In addition to their ecological values many of the flora and fauna species present in these corridors represent food resources used by local Aborigines, with Curr (1883) noting that the clans in the region hunted/harvested numerous faunal resources from kangaroo to ant larvae, as well as berries and other medicinal plants. Vegetation primarily consists of open River Red Gum (*Eucalyptus camaldulensis*) forest, on and adjoining the banks of the river, with a grassy understorey of rushes, sedges and herbs. Grey Box (*Eucalyptus macrocarpa*) dominate the adjacent flood plains (Atkinson & Berryman 1983).

The Department of Sustainability and Environment (DSE) maintains a pre-1750 Ecological Vegetation Class (EVC) program for the State of Victoria (DSE website-Biodiversity Interactive Map, accessed 25/3/09). According to the mapping, the activity area predominantly comprised Plains Grassy Woodland (EVC 55). However, the current EVC mapping for the activity area (1994) shows only agricultural land within the study area. Appendix 3 provides a list of plant resources, which would have been found in the activity area and utilised by Aboriginal people in the past.

The native vegetation within the region has been significantly altered and diminished by intensive land use over the past 150 years, and it is not possible to reconstruct a list of all plant resources which would have been used by Aboriginal people and which would have potentially been available within the activity area. The vegetation in the region would also have changed significantly with fluctuations in climate over the long period of human occupation in Australia, and the discussion of Aboriginal plant resources available in the local area, is confined to those known to have been used around the time of European occupation in Victoria.

The yam daisy (*Murnong*), a staple plant food, was probably widespread within and around the activity area and in all EVC's in the past, but has not been recorded locally since records commenced in 1980.

There are no vegetation records for plants on the area formerly covered by Plains Grassy Woodland. The latter EVC has largely been replaced with introduced grasses in the local area.

Grasses such as *Themeda spp.* and *Poa spp.* were used to make string that was used in a range of technological items and as a source of seeds for flour (Zola & Gott, 1990: 58). These grasses would have been widespread in the Plains Grassy Woodland within and

around the activity area. Flax lilies, which are also available locally (see Appendix 3) were also used to manufacture string.

Wattles were important sources of gum, used for food, technological items and some medicines (Zola & Gott, 1990: 51). Golden wattle, which is widespread across all EVC's in the region, was one of the wattles used for this purpose. Bark from trees, particularly red gums in wetland areas and grey box on the plains, was used for the manufacture of canoes, shelters, containers and other technological items. Aboriginal 'scarred trees' are the result of bark being cut from the tree for these and other purposes. Burls were also cut out of eucalypts for use as bowls.

In many cases, the open grasslands which existed on the Plains Grassy Woodland were maintained by regular firing, which removed undergrowth and assisted in soil fertilisation (Zola & Gott, 1990: 41).

### **Animal Resources**

The native fauna in the region of the activity area is significantly diminished, largely as a result of the loss of habitat, with many animal species once present now locally or regionally extinct.

A list of mammals still present in the region is contained in Appendix 3. These include wallabies, eastern grey kangaroo, brush and ringtail possums, koalas, fat tailed dunnart and echidna. The fur of possums was also used for the manufacture of possum skin cloaks and echidna quills were used to make necklaces (Kath Edwards, pers. comm. 1995).

There are some 127 species of native birds recorded in the region of the activity area (Viridans Biological Databases 2005), and some of these may have been hunted or trapped, or their eggs used. Emus were hunted extensively by Aboriginal people and were once likely to have been present within the region of the activity area.

The Plains Grassy Woodland is likely to have been a fertile environment for grazing mammals and larger birds, such as bush turkey and emus (Zola & Gott, 1990: 3). Many smaller mammals and birds would have been present in the riverine environments of the nearby Goulburn River system. The riverine environments would also have been exploited for marine animals, including fish, eels, amphibians, yabbies and possibly shellfish. There are numerous wetland bird species in the region, particularly ducks, which would also have been hunted.

### **Stone**

The deposits of the Shepparton Formation do not contain any stone, which is suitable for the manufacture of stone tools.

### **Water**

The only current naturally occurring source of water in the activity area is the ephemeral Wormangal Creek that traverse the centre of the activity from east to west. Freshwater may also have been retained after periods of heavy rain, in deep depressions on the surface after periods of heavy rain.

## **Discussion**

Although there would have been a wide range of resources that were/are used by Aboriginal people in the region of the activity area, there is no specific resource which would have served as the focus of more intensive settlement or gathering of large numbers of people. The most likely location for past Aboriginal campsites, may have been dry, well drained land along the banks of the Goulburn River.

People camping in this area, would have had easy access to the Plains Grassy Woodland, and, during wetter seasons of the year, to freshwater in the Goulburn River that traverses south of the activity area. The banks of the Goulburn River would have been a logical location for small and activity specific campsites to exploit the resources on the open plains.

### **5.4 Aboriginal places in the geographic region**

A review of the site registry at AAV (accessed 21/9/2010), found that there were a considerable number of Aboriginal Places situated near the activity area. Within 5 km of the activity area, there are 21 recorded sites comprising 8 scarred trees and 13 artefact scatters). The majority of these sites have been recorded within 200m of the Goulburn Valley Highway. The clustering of previously recorded archaeological sites near the Goulburn Valley Highway is more likely to be a product of the recent archaeological surveys in connection with the duplication of the highway, than a indication of the distribution of Aboriginal archaeological sites through the region. Nevertheless, the large numbers of Aboriginal archaeological sites near the Goulburn Valley Highway are indicative of considerable past activity in the area surrounding the town.

Within 10km of the study area there 155 registered Aboriginal sites, 90% of which are located over 1km from the Goulburn River. This is significant, as it demonstrates that Aboriginal people in the region utilised a wide area of the landscape and resources around the Goulburn River and that occupation was not confined to areas close to the river and the river valley.

There are two sites within 200m of the Activity both of which are located just outside the boundary fence. These are 7924-0418 and 0456 both of which are scarred trees (see Map 5)





**Map 5: Aboriginal Places within 200m of the Activity Area**

## 5.5 Previous work in the geographic region

### 5.5.1 Regional Studies

There has been one regional study that has included the Toolamba region.

In 1992, Bird conducted a major background study of the Goulburn River basin, to assist planners, developers and land managers in identifying areas of archaeological sensitivity. Bird divided the basin into three landsystem areas; the Riverine Plains, the Plains and Hills and the Central Victorian Uplands (Bird 1992: 2-30). The activity area is located on the Riverine Plains unit. Bird suggests that the Riverine Plains unit should be rich in sites, with particular high densities and diversity close to the Goulburn River and wetlands where food resources would have been varied and abundant. Well drained

location would have been preferred. Higher ground and source bordering dunes are thus likely to be preferred site locations.

Surviving areas of mature native forest and woodland are likely to contain scarred trees. Mounds are likely to be common, especially close to rivers and creeks and associated wetlands. Artefact scatters are likely to be buried by alluvial deposits.

### **5.5.2 Localised Studies**

There have been several smaller surveys in the immediate locale of the activity area (see Table 2), the majority of which are associated with upgrades to the Goulbourn Valley Highway. Overall, there has been relatively little survey archaeological survey coverage within the region, so that the data yielded by previous assessments can only provide limited information on the occupation of the area by Aboriginal people.

Project & Author	Investigation Type	Results
<p>(Lomax 1992)</p> <p>Loch Garry Archaeological Survey: Report Prepared for Rumbalara Aboriginal Co-Operative Ltd &amp; Aboriginal Heritage Unit, Aboriginal Affairs Victoria</p>	<p>Field Survey</p>	<p>Loch Gary wetland is 18kms down stream of Shepparton. A total of 43 aboriginal cultural heritage sites were recorded (13 scarred trees, 3 scarred trees of unknown origin, 10 Type B mounds (definite cultural origin), 11 stone artefact scatters, 4 Type A mounds (created mostly by natural purposes), 2 isolated artefacts and 1 redeposited surface scatter). Less than 5% of the area was surveyed due to surface visibility and this means the survey was biased towards areas with high ground surface visibility. There is almost a continuous occurrence of artefacts eroding out of the levee bank surrounding Loch Garry; only one site did not have stone artefacts present.</p> <p>Future Predictions based on findings:</p> <p>Scar trees – anticipated in all areas of forest with remnant grey box and red gum</p> <p>Mounds- likely around the main swamp margins</p> <p>Stone artefact scatters – will be present in wetland and grassland areas</p>
<p>(Russell 1992a)</p> <p>Archaeological Predictive Assessment of the Impact of the Tallygaroopna to Cobram OFC Route</p>	<p>Desktop</p>	<p>Russell (1992a) predicts that Scarred Trees, mounds, shell middens, open artefact scatters and burial sites could be found in the OFC route. She identifies one large area of Aboriginal Cultural sensitivity on the route between Yarroweyah and the Yarroweyah exchange. Archaeological survey is recommended in sensitive areas.</p>
<p>(Russell 1992b)</p> <p>Field Survey between Tallygaroopna and Cobram, A Report to Telecom Australia</p>	<p>Field Survey</p>	<p>The survey was undertaken at the following locations:</p> <ul style="list-style-type: none"> <li>• Nine Mile Creek and Associated Drains near Wunghnu</li> <li>• Water courses and depressions near Katunga</li> <li>• 3km route from Yarroweyah to Yarroweyah exchange</li> <li>• Creeks south east of Cobram</li> </ul>

Project & Author	Investigation Type	Results
<p>(Lomax &amp; Lusty 1994) Goulburn River Archaeological Survey: A Report to the Department of Agriculture and Aboriginal Affairs Victoria DRAFT</p>	<p>Field and Sub- surface Survey</p>	<p>Poor visibility and rain storms hampered the effectiveness of the field survey. One Scarred Tree was located and recorded during the survey (VAHR 7926-184). Activity did not impact this site.</p> <p>Lomax and Lusty (1994) predict that stone artefacts, scarred trees, hearths and oven mounds could be present in the study area.</p> <p>The area was sample tested due to size (Nathalia Plain, Nathalia River, Kanyapella River, Mooroopna River, Deep Lagoon, Murchison survey block, Long Lagoon, Loch Garry). Small test excavations were carried out at VAHR 7925-126, 7925-109 (material dated0 and 7925095 (material dated).</p> <p>Lomax and Lusty (1994, pp.25-33) compared their results to their predictions and found that the predictions in most cases were reflected in the results and only needed minor tweaking.</p> <p>The Floodplain land system is characterised by:</p> <ul style="list-style-type: none"> <li>• Low stone artefact scatters;</li> <li>• Small mounds (if present) located near drainage features and comprising a grey, black matrix of sediment, burnt clay and charcoal and sometimes containing small amounts of stone artefacts and fresh water mussel shell;</li> <li>• Scarred trees predominately on Grey Box with a smaller number on Red Gums;</li> <li>• Scarred tree density along the banks of the Goulburn River as high as 7/Km</li> <li>• Stratified sub-surface archaeological materials in the vicinity of lagoon and swamp margins away from the current action of the Goulburn River.</li> </ul>
<p>(N. Clark 1994) Telecom OFC Route: Murchinson to</p>	<p>Desktop and Field Inspection</p>	<p>Clark (1994) suggests that the general area of the cable route has very strong associations with Aboriginal past – not just the recorded archaeological sites. The Goulburn Aboriginal</p>

Project & Author	Investigation Type	Results
Kialla Exchange (Via Arcadia and Dhurringile: Assessment of Potential Impact on Archaeological Sites		<p>Protectorate Station was located on the southern extent of the cable route and at the north end of the route was <i>The Flat</i>, an area where Aboriginal people set up camp after the strike at Cummeragunga in 1839.</p> <p>None of the previously recorded sites would be impacted by the installation of the cable. However, there are two areas that Clark (1994, p.2) identified as being sensitive and recommended that an Aboriginal representative be onsite for any works in these sensitive areas.</p>
(Long 1995) Shepparton Bypass Planning Study Phase 2: Cultural Heritage. Volume 1: An Archaeological Survey of the Western Corridor and Eastern Corridor	Field Survey	<p>Six previously recorded scarred trees are present within the activity area. A total of 63 Aboriginal cultural heritage sites were recorded during the field survey (24 isolated artefacts, 25 scarred trees, 12 artefact scatters and 2 vertical exposures of cultural material). The majority of these sites were located on or adjacent to the Goulburn and Broken rivers. Most of these sites are considered to be of low to moderate scientific significance.</p> <p>Areas identified as being of high archaeological sensitivity are:</p> <ul style="list-style-type: none"> <li>• Slopes defining the edges of the Goulburn and Broken River flood plains</li> <li>• Source bordering sand dunes adjacent to flood plain corridors</li> <li>• Sand drifts on flood plain floors</li> <li>• Silt ridges, levee banks and the raised edges of minor billabongs and creeks on flood plain floor</li> <li>• Seven creeks flood plain</li> <li>• Raised edges on flatland adjacent to, or at a distance from, the flood plains</li> <li>• Prior and ancestral channels of the Goulburn and Broken Rivers</li> </ul>
(Brown 1996)	Field Survey	A total of 26 sites were recorded during the field survey (6 artefact scatters, 10 isolated

Project & Author	Investigation Type	Results
Shepparton Bypass Planning Study Phase 2: Cultural Heritage. Volume 2: An Archaeological Survey of the Central and Amended Western Corridor and a Comparative Assessment of the Western, Central, Eastern and Goulburn Valley Highway Alignments		artefacts, 1 artefact collection, 8 scarred trees and 1 Aboriginal historic site ( <i>The Flat</i> ). A total of 15 of the sites were located on river flood plains. Sites were predominately made up of quartz flakes but other raw materials were present such as quartzite, chert, silcrete, mudstone, sandstone, mudstone shell and glass.
(Lane 1997) Goulburn Valley Highway Arcadia Section. Preliminary Archaeological Report: Report to VicRoads	Field Survey	A total of 6 sites were recorded over the course of the field survey (4 isolated artefacts VAHR 7924-254 to 256, 1 small artefact scatter VAHR 7924-257 and 1 scarred tree VAHR 7924-258). It was found that the western route would impact upon fewer sites. Ground surface visibility over the area was variable. Recommended sub-surface testing is undertaken on the chosen route.
(Stocks 1997) An Archaeological Survey of Telstra Cable Route: Pan 127 Along Central Kialla, Mitchell & Armstrong Streets, Central Kialla - East Kialla, Victoria: Final Report: Report to Compliance Support Group, Telstra Corporation Limited	Field Survey	A total of 4 aboriginal sites were recorded as a result of the field survey of the Cable route; 1 isolated artefact, 1 artefact scatter and 2 possible scarred trees (VAHR 7925-384 to 7925-386 and 8025-198). Ground surface visibility was variable but generally poor (0-10%). Entire cable route has been highly disturbed by clearing of the forest, ploughing, orcharding, road construction and drainage ditches. Dominant raw material was white milky quartz. The land form upon which these sites are located is an alluvial plain with ancestral stream channels of both the Goulburn and Broken Rivers.
(Debney 1997) Sub-surface Investigation of Goulburn Valley Highway, Arcadia Section: Final Report	Sub-surface Survey	Sites within study area are: 3 isolated artefacts VAHR 7924-255 to 256, 1 small artefact scatter VAHR 7924-257 and 1 scarred tree VAHR 7924-258. A total of 46 probes were excavated at 5m intervals along 9 transects of varying length. No Aboriginal Cultural Heritage was recorded during the sub-surface investigations.

Project & Author	Investigation Type	Results
(Wood 1998) An Archaeological Survey of Three Proposed TC Alignments in the Toolamba, Boosey & Eldarado Areas, Northern Victoria	Field Survey	Toolamba Study Area One scarred tree was recorded within this study area VAHR 7925-418. The scarred tree is located 180m east of the alignment on Rutherford Rd. as at 1998 this was a living Grey Box and the scar faces south west. Four other Scarred trees in the vicinity of the activity area were investigated and found that two had been destroyed VAHR 7925-0033 and VAHR 7925-0035 appear to have been cut down and perhaps burnt. No site was affected by cable installation.
(Edmonds 2000) An Indigenous Archaeological Assessment of the Proposed Mooroopna-Sheparton Effluent Transfer Pipeline, North East Victoria: A Report to Goulburn Valley Water	Desktop and Field Survey	No new Aboriginal cultural heritage was located during the field survey however, 2 previously recorded sites were revisited (VAHR 7926-330 and 331) and were assessed as poor and fair, respectively. The study area has been highly disturbed.
(Edmonds 2001) An Indigenous Heritage Assessment of the Shepparton Shared Paths, Mooroopna, North East Victoria: A Report to the City of Greater Shepparton	Field Survey	No Aboriginal Cultural Heritage was located during the field survey of the activity area. Edmonds (2001, p.3) states that this supports the predictive model for site distribution on the flood plain landsystem of the Goulburn River at Mooroopna (see (Lomax & Lusty 1994).
(Tulloch & Vines 2002)	Field Survey	During the Field Survey 13 previously unrecorded sites were located and recorded (VAHR 7925-483, 7925-485 to 496). Of these ten were scarred trees and three were isolated artefacts. VAHR 7925-316 and 7925-319, scarred trees were revisited and their condition reassessed. It was recommended that all sites be avoided during works. The ground surface visibility was 0% due to thick grass. There were small areas of increased visibility around vehicle tracks, dam margins, stock pads or around trees. The majority of the sites recorded were assessed as being of high to moderate scientific significance. There are two areas of

Project & Author	Investigation Type	Results
(P. Sutherland et al. 2003) Desktop Archaeological Assessment for a Raw Water Storage Facility at Tatura, North Central Victoria: A Report Prepared for GHD Pty Ltd	Desktop Study	<p>remnant sand dune were considered potentially sensitive fro aboriginal cultural heritage.</p> <p>Site prediction model</p> <p>Artefact Scatters might be found in the study area due to:</p> <ul style="list-style-type: none"> <li>• Area contained favourable floral and faunal resources and a creek</li> <li>• Stone will still be found in upper levels of soil profile as it is durable</li> <li>• Archaeological material may have been covered over by alluvial sedimentation processes which created the Shepparton formation.</li> </ul> <p>Further, the number of artefact scatters will increase exponentially as you get closer to water.</p>
(P. Sutherland & Wright 2003) An Archaeological Survey of a Water Storage Facility in Tatura, Victoria: Prepared for GHD Pty Ltd	Field Survey	<p>No Aboriginal Cultural Heritage sites were located during field survey. Sutherland and Wright (2003) suggest that maybe this reflects the study area was not intensively used by Aboriginal People in the past. Ground surface visibility is greatly hampered by thick grass. They recommend sub-surface testing to ascertain which reason is correct.</p>
(Murphy & Amorosi 2003) Proposed Residential Estate Kalimna Derive and Dennison Street Mooroopna: Cultural Heritage Assessment: A Report to The Dennis Family Corporation	Desktop and Field Survey	<p>The desktop indicated that the study area has a low to moderate potential for small artefact scatters. No aboriginal cultural heritage sites were located as a result of the field survey. The effectiveness of the survey was greatly hampered by very poor ground surface visibility.</p>
(Light 2003) Seven Creeks Estate Kialla, Archaeological Desktop Assessment: A Report for Coomes Consulting	Desktop Study	<p>No previously recorded sites a within the activity area. On the basis of landforms present and previously tested site prediction models Light (2003) suggests that the activity area has a low to moderate sensitivity for Aboriginal Cultural Heritage.</p>



Project & Author	Investigation Type	Results
<p>Group (Debney 2004) An Archaeological Survey of the Proposed Goulburn Freight Logistics Centre, Mooroopna, Victoria: Final Report for Coomes Consulting Group</p>	<p>Field Survey</p>	<p>Four sites were recorded during the field survey VAHR 7925-0589 to 7925-0592; very high ground exposure enabled an effective coverage. All of the sites were located on the east side of Toolamba Road and were assessed as having low scientific significance. No indigenous sites were recorded on the west side of Toolamba Road, however further investigation is likely to result in more sites being recorded.</p> <p>A number of areas of archaeological potential for indigenous sites were identified. These areas were associated with former routes/channels of the Goulburn River. Local and regional archaeological evidence points to such locations being typical site locations.</p>
<p>(Edmonds 2004) Cultural Heritage Assessment The Boulevard Rezoning Proposal, Shepparton, North East Victoria: A Report for Coomes Consulting Group and Shepparton &amp; City of Greater Shepparton</p>	<p>Field Survey</p>	<p>One archaeological site was recorded during the survey (VAHR 7925-0588). The site comprised a dead but standing scarred grey box tree located in the northern section of the study area east of Kittles Road. The nature and landsystem (floodplain) upon which the site is located is consistent with the predictive model. There is extremely low likelihood of undetected sub-surface archaeological deposit occurring anywhere in the study area due to the extensive nature of earthworks previously undertaken there.</p>
<p>(Bell 2006) Archaeological Assessment of Three Properties in the Shepparton North Growth Corridor: Final Report prepared for EarthTech Pty. Ltd. on behalf of SS Urban Pty.Ltd.</p>	<p>Field Survey</p>	<p>The subject land has incurred considerable ground disturbance in the past, including ploughing and cropping, grazing by hard-hoofed stock, construction of dwellings and associated outbuildings, excavation of dams and rubbish dumps and construction of irrigation and drainage channels. The majority of the Ford Road properties had been ploughed and sown with oats. As the crop was very young, these areas provided excellent ground surface visibility. Other paddocks, which had not been recently ploughed provided variable degrees of ground surface visibility. No Indigenous archaeological sites were identified during the field assessment. It is unlikely that any material, which may have existed on the property, would remain in an undisturbed context. Furthermore, no landforms were identified within the subject land, which have a high potential to contain surface exposures or buried deposits of Indigenous cultural material.</p>

Project & Author	Investigation Type	Results
(Edmonds 2006) Indigenous Heritage Assessment Tatura Wastewater Management Facility, North East Victoria: A Report to Sinclair Knight Merz, Tatura And Goulburn Valley Water	Field Survey	No indigenous cultural heritage sites were found during the survey of the study area. The study area landscape is heavily disturbed through past and present agricultural activities and almost completely cleared of mature native trees. Most importantly, no archaeologically sensitive landforms were identified in the study area landscape.
(Chamberlain & Myers 2007) Housing Subdivision, Shepparton North Cultural Heritage Management Plan 10050	Standard CHMP	No sites were found during the field survey; no native trees are left on the property. The study area has been heavily impacted by orcharding activities and it is expected to be of low potential for Aboriginal cultural heritage sites.
(Kaskadanis 2008) Katandra Gravity Pipeline Scheme, City of Greater Shepparton: Standard Cultural Heritage Management Plan 10561	Standard CHMP	No Aboriginal Places were recorded during the standard assessment. In addition to the absence of Aboriginal Places, there were no areas assessed sensitive for Aboriginal archaeological sites or features, nor were there any areas of potential archaeological deposits.
(Griffin et al. 2008) Goulburn Freight Logistics Centre, Mooroopna, Victoria: Cultural Heritage Management Plan10024	Complex CHMP	<p data-bbox="967 925 2112 1117">During the survey the Aboriginal archaeological sites 7925-0589 VAHR and 7925-0590, and the non-Aboriginal historical archaeological site, Pykes Road Historical Site (H7925-0046) were relocated and inspected. One new site 7925-0601 was recorded during the field survey. The areas of Aboriginal archaeological sensitivity identified by Biosis (Debney 2004) were further refined during the survey.</p> <p data-bbox="967 1123 2112 1283">During the sub-surface testing program a total of 59 transects were completed, 643 probe holes were excavated and a total of three Aboriginal artefacts were recovered - three new Aboriginal archaeological sites VAHR 7925-0602 to 7925-0604. These new sites were all isolated artefacts in disturbed locations.</p> <p data-bbox="967 1289 2112 1334">Harm to Aboriginal cultural heritage was either avoided or minimised for the seven</p>

Project & Author	Investigation Type	Results
<p>(Paterson 2009)</p> <p>Gemmills Swamp Constructed Wetland Mooroopna, North East Victoria. Complex Cultural Heritage Management Plan 10509</p>	<p>Complex CHMP</p> <p>Site Prediction Model</p>	<p>Aboriginal sites so no program of salvage excavation was required for these sites. The proposed activity could not avoid harming the Aboriginal archaeological site VAHR 7925-0602. The sub-surface testing program was focused upon the western part of the activity area and only one flaked stone artefact VAHR7925-0602 was identified. This artefact was collected during the sub-surface testing.</p> <ul style="list-style-type: none"> <li>• “The activity area is of low to moderate archaeological potential - the landforms with the highest archaeological potential around Gemmills Swamp are prior terraces, levees, and margins of waterways;</li> <li>• Artefact scatters and scarred trees will be the most common site types found in the activity area;</li> <li>• Scarred trees may only be present where suitably mature native vegetation occurs;</li> <li>• There is potential for mounds and freshwater shell middens to occur;</li> <li>• The detection of stone artefact scatters will rely on ground surface visibility;</li> <li>• Stone artefact scatters are likely to be highly disturbed through past agricultural and landscaping activities and utility installations” (Paterson 2009, p.iii).</li> </ul> <p>No Aboriginal cultural heritage material was noted during the desktop or the field survey within the activity area. However, several sources of existing ground disturbance were noted.</p> <p>The results of the sub-surface testing indicated that the area has suffered significant ground disturbance. In Test Pit 1, a total of 9 stone artefacts were excavated from a compact shallow sedimentary deposit. All spits excavated also contained fragments of glass indicating disturbance at the site. Further, rounded gravels were found in Spit 3, indicating fluvial processes acting on the deposit. Most Shovel Test Pits excavated included</p>

Project & Author	Investigation Type	Results
(Kaskadanis et al. 2008) East Shepparton Pressurised Pipeline Scheme, City of Greater Shepparton Standard Cultural Heritage Management Plan 10521	Standard CHMP	<p>glass, ceramic, brick, or other modern materials, indicating previous disturbance across the majority of the activity area. All of the artefacts recovered during sub-surface testing were considered to be one Aboriginal site, VAHR7925-0607.</p> <p>The most likely Aboriginal Places predicted to be found within the activity area are Box and River Red Gum scarred trees and low density artefact scatters.</p> <p>No Aboriginal cultural heritage material was noted during the desktop or the field survey within the activity area, therefore, no Aboriginal Places may be impacted on by the proposed activity. There were no areas assessed as sensitive within the activity area.</p>
(Orr 2008) Kialla Landfill Site, Shepparton, Victoria: Cultural Heritage Management Plan 10590	Complex CHMP	<p>There were seven previously recorded Aboriginal archaeological sites recorded within the study area (three artefact scatters (VAHR 7925/358, 361 &amp; 363) and four isolated artefact sites (VAHR 7925/359, 360, 362 &amp; 364) as part of a previous study (Brown 1996). All of these are located on the perimeter of the quarry area, on the banks of the quarry itself. Four of these (7925/0358, 7925/0359, 925/0361, and 7925/0362) were re-identified and mapped as part of the CHMP.</p> <p>No new Aboriginal archaeological sites were identified during the survey. However, as a result of the field survey, three areas of Aboriginal archaeological potential were identified: Quarry area, Woodland area and Paddock area.</p> <p>Sub-surface testing was carried out at sites VAHR 7925/0358, 7925/0359, 7925/0361, and 7925/0362, in order to clarify the extent and nature of these sites. Investigations not carried out in landfill area. No new Aboriginal artefacts or features were identified during the sub-surface testing.</p>
(Orr 2009) Victoria Park Lake, Shepparton, Victoria: Cultural Heritage Management Plan 10667	Complex CHMP	<p>Desktop assessment indicates that no Aboriginal archaeological sites or Aboriginal Cultural heritage places have previously been identified from within the activity area. The standard assessment did not identify any new Aboriginal archaeological sites. The lake edge was assessed as having very low archaeological potential. The complex assessment (a program of sub-surface testing using both manual and mechanical methods) was carried out in</p>

Project & Author	Investigation Type	Results
(Orr 2009) Goulburn Valley Freight Logistic Centre Drainage Outfall, Mooroopna, Victoria: Cultural Heritage Management Plan 10828	Complex CHMP	<p>order to assess this potential. No Aboriginal archaeological sites were identified. The activity area has been assessed as having low cultural heritage potential.</p> <p>The desktop assessment revealed that a quartz core (VAHR 7925-0211) had previously been recorded in the vicinity of the southern extent of the activity area. This area is common to both pipeline options, however this artefact or any associated material was not relocated during the field survey and sub-surface testing. It appears likely that this site has effectively been destroyed due to disturbance from recent land-use activity.</p> <p>One new Aboriginal archaeological site, a sandstone anvil (VAHR 7925-0608), was identified during the surface survey of the Option 1 alignment and no Aboriginal cultural material was identified during the survey of the Option 2 alignment. On the basis of the results of the standard assessment, sub-surface testing was undertaken in all identified areas of archaeological potential. No additional archaeological sites or artefacts were identified during Complex Assessment.</p>
(Bell 2009) Installation of Monitoring Equipment on the Broken River System, North East Victoria: Cultural Heritage Management Plan 10886	Complex CHMP	<p>A standard assessment was undertaken for the Casey's Weir and Samaria activity area locations. A complex assessment was carried out for the Orrvale, Lima and Kilfeera activity area locations. The results of the standard assessment identified no surface evidence of Aboriginal cultural heritage. Of the five activity area locations, Casey's Weir was found to be highly disturbed. Samaria was found to be situated on too great a gradient to have contained Aboriginal cultural heritage. Of the three activity area locations that were investigated during the complex assessment, none were found to contain any evidence for Aboriginal cultural heritage. It is unlikely that the proposed activity will impact on any Aboriginal cultural heritage within any of the activity area locations.</p>
(G. Sutherland 2010) Extension of Yarna Gurtji Shared Path Goulburn River, Shepparton: Cultural Heritage Management Plan 11112	Standard CHMP	<p>No Aboriginal cultural heritage material was noted during the desktop or the field survey within the activity area, therefore, no Aboriginal Places may be impacted on by the proposed activity. There were no areas assessed as sensitive within the activity area. Due to the linear nature of the pathway and the shallow depth of excavation it was determined that the highest probability for archaeological material would be in the form of sub-surface</p>

Project & Author	Investigation Type	Results
		isolated artefacts.

**Table 2: Summary of the Archaeological Reports within the Region of the Activity Area.**

In 2002 (Clark), 2002 (Clark et al) and 2003 (George). Vincent Clark & Associates assessed the cultural heritage and archaeological values associated with the Goulburn Valley Highway Planning Study. This involved the investigation of a number of route options east of the township. The study identified that all eight different route options would adversely affect six archaeological sites. Clark et al recommended that sub-surface testing should further explore the archaeological values of these sites. Sub-surface testing revealed stone artefacts located at a depth of 300mm

IN 2008 Rhodes and Barker undertook a complex assessment of a property fronting Lake Nagambie at Blayneys Lane; located approximately 5.5km west of the current activity area. Three Aboriginal archaeological sites were found within the activity area. Site AAV 7924/0423 is a surface scatter of stone artefacts, found near the fenceline adjacent to Buckley Park. Site AAV 7924/0424 is a scarred tree, located adjacent to the east bank of an un-named creek, approximately 188m south of the shore of Lake Nagambie. Site AAV 7924/0425 is an unstratified deposit of stone artefacts. The artefacts are contained within a small deposit of grey alluvium, approximately 32m N-S x 120m E-W, on the North Shore of Lake Nagambie. Recent plastic and bottle glass recovered from the same level as the artefacts, demonstrate that the artefacts and alluvium have most likely been washed into a depression on the shoreline of Lake Nagambie during flooding.

The results of the standard and complex assessments supported the site prediction model, which suggested that:

- The former alluvial plain, now flooded by Lake Nagambie, was the focus of Aboriginal activity in the past;
- That Aboriginal archaeological sites on the plain situated on the Shepparton Formation are likely to be more sparsely distributed and highly disturbed as a result of past agricultural land use;
- That archaeological sites on the Shepparton Formation were more likely to be found in close proximity to the existing shoreline of Lake Nagambie and the un-named creek.

## **5.6 Historical and ethno-historical accounts in the geographic region**

Few written published descriptions of ‘traditional’ Aboriginal lifeways’ for the current activity area exist, but a detailed account is provided by Edward M. Curr who established the ‘Tongala’ Station on the lower Goulburn in 1841 (Curr 1883) Curr made detailed recordings of Aboriginal culture along the Murray Valley. Other researchers have considered his accounts be consistent with Aboriginal people living in a resource rich environment (Craib 1999, p.67).

The *Yorta Yorta* were reportedly located at a place, which is now Echuca and went ‘out to join some of the Goulburn River tribes’ (Morgan 1952: 3 cited in Clark 1990: 398, Curr 1883, 1887a). This is supported by Robinson’s account of the *Yorta Yorta* occupying ‘the country extending east from the junction of the Goulburn with the Murray Rivers for 20 miles’ (In Clark 1990: 399).

The activity area is situated within the clan estates of the *Yorta Yorta* language group (Clark 1990, p.398). The *Yorta Yorta* all spoke related dialects and were thought to number around 1200 people in 1841 (Curr 1883, p.234).

It is believed the *Yorta Yorta* language group was comprised of 15 clans, and although the earliest reference to the group dates from 1839, most of the information does not include specific locational data for clans (Clark 1990: 398).

George Augustus Robinson, Chief Protector of Aborigines in the Port Phillip District made several journeys to northeast Victoria. He concluded that at least five tribal groups occupied the region: the *Bangerang*, *Duduroa*, *Jaitmathang*, *Waveroo* and *Kwat Kwat* (Robinson 1840-7, cited in Clark 1990: 157). Associating the *Waveroo* tribe with the Ovens River, Robinson described them as consisting of four clans: the *Ballingo-yallum* (whos lands encompassed the Activity Area), the *Tarrer-mittung*, the *Worarer-mittung* and the *Peer.ing.ile* (Clark 1990: 157).

Curr's ethnographic accounts of the traditional owners of the Echuca region indicate that subsistence activities were variable, drawing on riverine and terrestrial resources. Curr did not comment on the *Wollithiga* people specifically, but noted that the neighbouring *Towroonban* were mostly 'opossum hunting people', while the *Wongatpan* 'lived chiefly on fish and roots', and rarely left the banks of the Murray and the swamps and reed beds in the immediate vicinity. It is likely therefore that the primary subsistence activity of different groups was influenced by environmental setting. The emphasis on fish for riverine groups is also emphasised by Locke (1878: 290). Curr noted that fish were speared, poisoned or trapped in weirs (1883: 240-241), and kangaroo, emu, a wide range of birds, reptiles, amphibians and insects were also eaten (Curr 1883: 240-266).

The first white contact with Aboriginal people in the Activity Area is thought to have occurred in January 1838 when Joseph Hawdon and Charles Bonney passed through the Shepparton area en-route to Adelaide (Wallace 1979). European settlement had a sudden and profoundly disruptive effect on traditional Aboriginal society in the region, with the introduction of sheep and cattle, and land clearing, resulting in the rapid destruction of native plants, and native animal populations used as resources by Aboriginal people (Christie 1979). In addition Aboriginal populations decreased because of the introduction and spread of European diseases, such as deadly small pox epidemics, which killed many Aboriginals (Twentyman 2003).

As a result the Goulburn Aboriginal Protectorate started a centre for the protection of local Aborigines in Murchison 1839, which operated to approximately 1850, when the system of protection was abolished (Massola 1969). Similar centres opened in NSW with David Mathews establishing a mission in 1874 at his Maloga property on the banks of the Murray, where many Aboriginal people from the surrounding regions resettled. In 1883 the NSW government established the Cummerajunga Protectorate, adjacent to Maloga mission and in 1889 the majority of the Maloga residents moved into the new Protectorate. Here they enjoyed comparative freedom and there was a great deal of movement between Cummerajunga, as people visited relatives or established new homes. However, this independence was significantly curtailed in 1909/1915 when NSW enacted legislation virtually identical to earlier amendments to the Victorian Aboriginal Act – which brought into effect a new policy of assimilation, particularly of those considered of mixed blood or half castes. During this period 150 people were dismissed from the



mission, with most of them moving south into the Barmah region and eventually dispersing through a number of Victorian towns (Massola 1969).

In 1939 following a period of organised protest against the antagonistic management and plans to lease mission land to white farmers there was a mass migration away from Cummerajunga back across the border mostly into Mooroopna, Shepparton, Echuca and other smaller centres. Many of the people who moved into Mooroopna lived in tin sheds on a bend of the Goulburn River known as the Flats, this part of the river regularly flooded often forcing the residents to move to high ground (LCC 1983). It was not until 1957 that the Victorian Welfare Board established a housing estate at Rumbalara near Mooroopna (Newby & Muir 1999).

The majority of the members of the current Rumbalara Aboriginal Co-operative at Mooroopna are Yorta Yorta people, descendants of the people who walked off Cummerajunga mission Station in 1939 to live on the River Flats (Long 1995). The YYNAC was incorporated under the Commonwealth Aboriginal Councils and Associations Act 1976 on 27 November 1998. The organisation was created to represent all Yorta Yorta Clans and Family Groups including those representing the, Kailtheban, Wollithiga, Moira, Ulupna, Kwat Kwat, Yalaba Yalaba, Nguaria-iliam-wurrung and Bangerang clans (Seidel & Hetey 2004).

### **Oral History relating to the Activity Area**

No oral history from the Yorta Yorta has been provided in relation to the specific activity area or immediate surrounds which is the subject of this CHMP.

### **5.7 History of European Land Use and Disturbance in the Activity Area**

The activity area has been used for agriculture, principally grazing, since the 1840's, which has resulted in considerable land disturbance.

In October 1836, Major Thomas Mitchell with an advanced party homeward bound from his third exploratory expedition, crossed the Goulburn River near Majors Creek. Mitchell found himself among a series of lagoons filled by high floods and noted sheets of water upon which wildfowl were plentiful.

It is evident that between 1865-1890, most of the land surrounding the activity area had been taken up as smaller farming or grazing allotments.

It is evident from the land use history of the activity area, that there has been considerable land disturbance since the 1840's. Stock grazing has occurred since the 1840's and large-scale clearance of native vegetation has probably occurred since the 1860's. Although there are some mature eucalypts left within the activity area, all of the understorey vegetation, except along the southern boundary, has been removed and replaced by pasture. Land clearance and grazing has also resulted in considerable soil erosion within the activity area.

Combined with vegetation clearance, ploughing and agricultural land use, it is highly unlikely that any near surface Aboriginal archaeological sites would remain undisturbed within the activity area, and it is likely that any cultural materials present in near-surface archaeological sites, would have been probably re-distributed over a wider area than they

originally occupied. However, the land within close proximity to the Goulburn River may comprise deep soils that potentially contain undisturbed cultural material.

If archaeological sites were present they are likely to be near surface or surface exposures of cultural materials, principally stone artefacts.

## **5.8 Site Prediction Model**

Although there has been limited survey coverage within the local area, the archaeological record indicates that Aboriginal people occupied and used all landforms within and adjacent to the Goulburn River valley.

It is likely that the focus of Aboriginal settlement in the local area would have been around the wetland resources along the Goulburn River. These resource-rich areas could also form the basis for large seasonal gatherings of Aboriginal clans for ceremonial or trading purposes.

The activity area is located adjacent to the Goulburn River and would have been ideally placed to exploit the resource rich environment. Occupation sites within the activity area are more likely to have been short-term campsites, associated with foraging and hunting expeditions. An example of this would be food preparation sites, such as oven mounds. Therefore, the overall density and size of archaeological sites could be expected to decrease with increasing distance from the Goulburn River.

The local archaeological record also indicates that evidence of past Aboriginal campsites and occupation, can occur at distances of >1km from recent floodplains within the Goulburn River Valley, and, therefore, potentially within the activity area.

A site prediction model is intended to be used as a guideline to designing the field survey and as an indication of the types of archaeological sites which may occur in a given area. The site prediction model is tested against the results of the field survey.

A generalised archaeological site prediction model for the activity area can be developed from the archaeological and environmental data, but is not informed by any specific ethnographic or historical references for the region. The site prediction model is outlined below.

(1) There is a moderate probability that Aboriginal archaeological sites would have occurred within the current activity area. This majority of the activity area was formerly dry grassland plain of low fertility, lacks natural sources of permanent freshwater and was not likely to have been occupied on a long-term or intensive basis. There is still some potential for remains of campsites to occur on the banks of the Goulburn River. Remains of any such campsites are likely to consist of small surface or near surface scatters of stone artefacts or small oven mounds.

(2) It is highly unlikely that ancient or deeply buried archaeological sites, or human burials will occur within the activity area. There is no geological or geomorphological data which suggests that ancient landforms, such as prior stream channels, stream levees or sandhills exist within the activity area. These are the types of landforms which are likely to contain ancient sites or human burials, because of the soft sandy soil found within them.

(3) It is likely that any Aboriginal archaeological sites (apart from scarred trees) within the activity area will be near-surface or surface remains of past campsites. This is because the topsoil of the Shepparton Formation generally has a shallow A horizon up to 400mm in depth and overlying clay. Also the topsoil has most likely been subject to wind erosion due to vegetation removal.

(4) It is highly likely that any Aboriginal archaeological sites within the activity area have been significantly impacted on by past land use. Scarred trees are most likely to survive in the southern end of the Activity Area, but most mature eucalypts have been cleared from the balance of the land. The activity area has been largely cleared of native vegetation, and there has been considerable soil erosion as a consequence of vegetation clearance. There are several dams within the activity area that have undergone severe ground disturbance. Land clearance and agricultural land use have possibly removed any material evidence of small and short-term occupation sites on remainder of the activity area.

(5) Taking into consideration the discussion in points 1-5 above, it is likely that archaeological sites within the activity area, if they survive, will comprise the following;

- Surface or near-surface scatters of stone artefacts, which have been dispersed across a wider area of land than their original location by activities such as vegetation clearance or soil erosion. It has been noted by Gaynor that artefacts within topsoil could be scattered up to 268m in 30 years within an Australian context (Gaynor, 2004: 21). Low density stone artefact scatter sites could be found anywhere within the activity area, and reflect archaeological background rather than areas of focused activity. Small numbers of stone artefacts are ubiquitous over the Victorian landscape. These types of archaeological remains reflect transient use of the general landscape over the past 1,000 to 2,000 years rather than locations of focused activity. Low density stone artefact scatters are generally assessed as being of low scientific significance.
- Scarred trees, if they survive on the property, are most likely to be found adjacent to the Goulburn River.

## **6.0 Report on the Results of the Standard Assessment**

This section contains the results of the standard assessment.

### **6.1 Methodology for Standard Assessment**

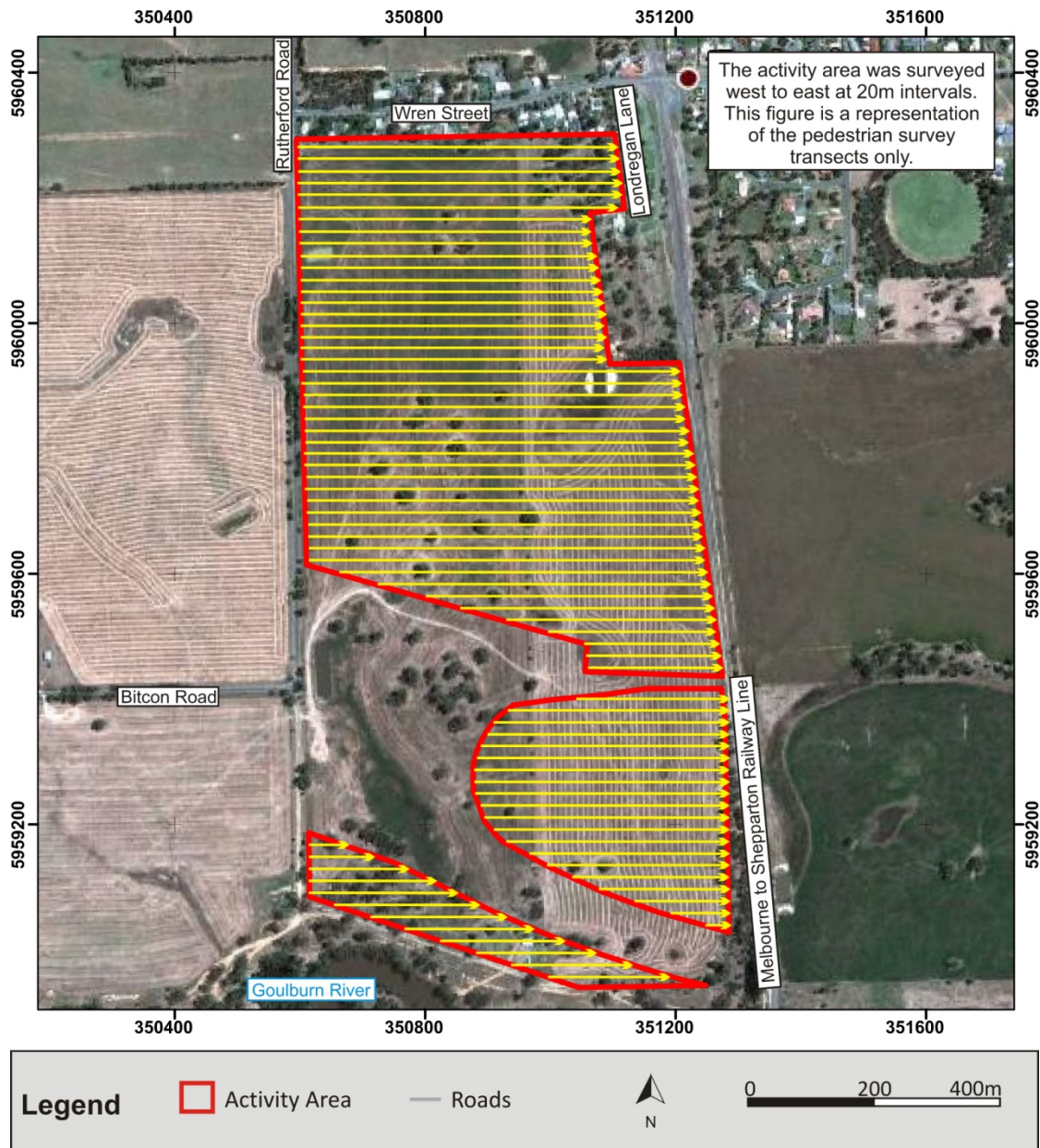
The entire Activity Area was inspected by the field team on August 19<sup>th</sup> 2010, walking regularly spaced transects (see Map 6).

The field assessment was undertaken by Matthew Barker and Maya Barker (Heritage Insight Pty. Ltd). The YYNAC were contacted by email and phone and provided two representatives; Simon Nicholson and Freddie Firebrace. The archaeological survey was carried out on foot by the field team.

Ground disturbance has occurred through vegetation clearance; ploughing, stock grazing and the excavation of dams (see Map 3).

The activity area has been generally cleared of native vegetation, with the exception of several mature river red gums along the banks of the Goulburn River and several isolated mature trees scattered throughout the activity area.

All eucalyptus trees within the area were examined for the presence of scars produced by cultural activities, such as the removal of bark for shelters, shields or containers. Several natural scars were identified and three were considered to be cultural.



**Map 6: Survey Transects.**

## 6.2 Results of Standard Assessment

### 6.2.1 Ground Surface Visibility and Effective Survey Coverage

Ground surface visibility within the activity area was very poor as the bulk of the paddocks were covered in dense grass (Table 3, Plates 1-2, 4). It was estimated that ground surface visibility within the paddocks varied from 0-10% and overall ground surface visibility was estimated at 0-5% with the exception of areas of stock rubbing, access tracks and excavated dams on which ground surface visibility was 100% (see Plates 1-6).

Effective survey coverage is an estimate of the amount of bare ground surface actually seen, as opposed to the size of the actual survey area. Overall it is estimated that approximately 2-4% of the activity area was effectively surveyed and is considered

adequate for effective field assessment. This means that probability of locating surface remains of Aboriginal archaeological sites, particularly in areas considered to have high potential to contain such sites was high. It is more likely that exposures of surface scatters of cultural material would have been located in this survey.

## 6.2.2 Survey Results

### **No caves, rock shelters, or cave entrances were noted within the Activity Area.**

Three Aboriginal scarred trees were identified within the activity area during the surface survey (Section 6.4). No surface scatters of stone artefacts were identified within the proposed activity area. The absence of any evidence for Aboriginal cultural sites (other than scarred trees) is likely to be due to the low ground surface visibility. Secondly; the activity area was formerly dry grassland plain of low fertility; and soil disturbance caused by land clearance and ploughing. A number of factors observed during the survey indicated that sections of the activity area have been subject to ground disturbance. These factors are:

- **Clearance of native vegetation and stock grazing**  
The majority of the activity area has been cleared of native vegetation with the exception of the mature eucalypts along the south of the activity area and a cluster in the northeast corner which contains three Aboriginal scarred trees (Section 6.4); and several scattered throughout the property (Plates 1-6). This would have contributed to soil erosion and the movement of any Aboriginal cultural material that may have existed on the ground surface. Clearance of native vegetation and the impact of stock grazing within the activity area has resulted the erosion of much of the surface soil, leaving compact clay soils exposed on the surface (see Plates 1-6).
- **Construction of Dams**  
The survey also concluded that the location of the several dams within the activity area have been subject to severe ground disturbance and would necessarily have involved deep excavation (see Plate 5).




Although much of the activity area has been cleared of native vegetation (Plates 1-6), this activity does not constitute significant ground disturbance as defined in the Aboriginal Heritage Regulations 2007. All these ground disturbance activities would likely have resulted in the removal of topsoils and the destruction of any surface or near surface Aboriginal cultural materials across the entire activity area.

The activity area is situated on Quaternary alluvial sediments of the Shepparton Formation (Cochrane *et al* 1995), which appears to be very shallow with the underlying clay exposed in several areas (Plates 1-6). Therefore, although the property comprises an area of cultural sensitivity, it is considered that the activity area has low potential for *in-situ* deposits of stone artefacts, given the land use history and the shallow, infertile soils.

The survey has indicated that the activity area has been subject to ground disturbance, resulting from vegetation removal, ploughing and grazing. There is most likely only a shallow topsoil horizon, not more than 200mm in depth (based on sub-surface testing by Rhodes at Lake Nagambie in 2008). Therefore, it is likely that almost all of the 'A' horizon in the soil formation has been ploughed on this property. Overall, it is

considered that there is very little probability that the development will impact on any previously undocumented or significant Aboriginal archaeological sites with the exception of the rises in the southwestern corner of the Activity Area.

**Table 3: Activity Area: Existing Conditions**

<p><b>Plate 1: Swampy waterlogged pasture in north of Activity Area (M. Barker 19/8/10), facing west</b></p>	 A photograph showing a wide, flat expanse of green pasture. In the foreground, there is a shallow pool of water reflecting the sky. A red and white striped survey pole stands in the water. The background shows a line of trees under a clear blue sky.
<p><b>Plate 2: Flat pasture with isolated trees in centre west of activity area (M. Barker 19/8/10) facing south</b></p>	 A photograph of a flat green pasture. Two large, mature trees with dense foliage are the central focus. A red and white striped survey pole is positioned in the foreground. The sky is clear and blue.
<p><b>Plate 3: Low rise on southern boundary with remnant eucalypts (M. Barker 19/8/10), facing north</b></p>	 A photograph showing a low rise or ridge in the landscape. The foreground is covered in dense green grass. A line of mature eucalypt trees runs across the middle ground. A red and white striped survey pole is visible in the foreground. The sky is bright and clear.



**Plate 4: View of crest of low rise in centre south looking toward natural drainage line in left of photo. (M. Barker 19/8/10), facing west**



**Plate 5: View of crest of low rise in centre south looking toward natural drainage line and rise adjacent to Goulburn River. (M. Barker 19/8/10), facing southwest**



**Plate 6: Flat pasture forming eastern half of the activity area (M. Barker 19/8/10), facing north**



## 6.4 Details of Cultural Heritage within the Activity Area

### 6.4.1 Indigenous Cultural Heritage in the Activity Area

Three Indigenous archaeological sites were located during the standard assessment; VAHR 7925-0617 to 0619 (335 Rutherford Road, Toolamba Scarred Trees 1-3). The following section comprises the scarred tree details compiled from the standard assessment.

Summary detail of the sites is contained in the Site Gazetteers (Tables 4-6) and Appendix 4) below. Map co-ordinates can be found in Tables 4-6.

The scarred trees locations are shown in Maps 7-10. Context plan of the sites within the Activity Area are shown below in Map 7. Site plans are shown in Maps 8-10.



Map 7: VAHR 7925-0617 to 0619 (335 Rutherford Road, Toolamba Scarred Trees 1-3) Context Plan

### **Cadastral and Zone Details:**

Township of Toolamba, Parish of Murchison North, Parent Title Volume 5499, Folio 735 Title Plan 825016W in the City of Greater Shepparton, Zone 55.

#### **6.4.2 Assessment of the Indigenous cultural heritage: 7925-0671 to 0619 (335 Rutherford Road, Toolamba Scarred Trees 1-3).**

This section contains details of each Aboriginal Cultural Heritage Place located during the complex assessment.

#### **6.4.3 VAHR 7925-0617 (335 Rutherford Road, Toolamba Scarred Tree 1)**

##### **6.4.3.1 Extent and Nature**

Site VAHR 7925-0617 (335 Rutherford Road, Toolamba Scarred Tree 1) was located in the northeast corner of the Activity Area within a cluster of remnant trees (Photos in Table 4). The scar was probably a shield or shelter scar, cut from a live river red gum. The tree appeared to be in good health. It was situated close to several mature eucalypts. Data on the scarred tree is provided in the site gazetteer in Appendix 4.

##### **6.4.3.2 Significance**

Site VAHR 7925-0617 (335 Rutherford Road, Toolamba Scarred Tree 1) is assessed as having high scientific value, because the scar is cut into a live river red gum in good health. There are few scarred trees within 10km of the activity area, and sites of this type are becoming progressively rarer within the region. The tree appears to be in good health and the scar is in good condition.

**Table 4: VAHR 7925-0617 (335 Rutherford Road, Toolamba Scarred Tree 1) Site Gazetteer**

<b>Name</b>	VAHR 7925-0617 (335 Rutherford Road, Toolamba Scarred Tree 1)
<b>GDA 94 Coordinates</b>	3170856.606E, 5739970.712N (primary differential GPS point as per site card)
<b>Site Extent</b>	100m <sup>2</sup>
<b>Dimensions N-S (m)</b>	10m
<b>Dimensions E-W (m)</b>	10m
<b>Aspect</b>	Open
<b>Condition and Integrity</b>	Good
<b>Tree Species</b>	River Red Gum
<b>Dimensions Girth</b>	426cm
<b>Length</b>	130cm
<b>Width</b>	27cm

<b>Height above Ground</b>	51cm
<b>Regrowth Aspect</b>	Top 10cm, centre 27cm, bottom 10cm 180 degrees
<b>Landform</b>	Floodplain
<b>Landform Element</b>	Flat land
<b>Vegetation</b>	Grass, Eucalypts
<b>Nearest Distance to Potable Water</b>	1km south; Goulburn River

**Site  
Photograph  
showing  
general  
location**

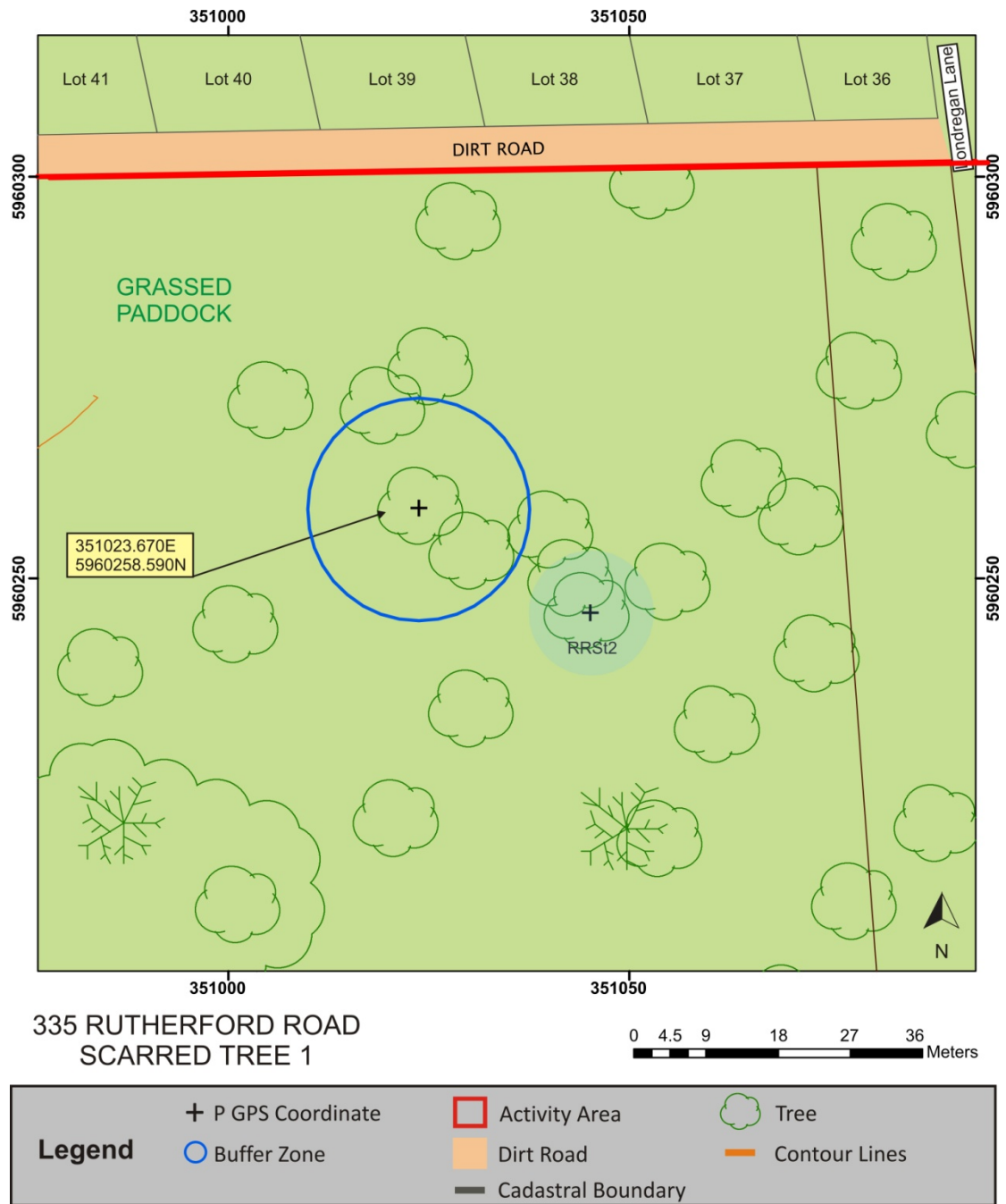
**Photo by M.  
Barker  
(24/8/11)  
facing  
southwest**



**Scar detail**

**Photo by M.  
Barker  
(20/6/11)**





## Map 8: VAHR 7925-0617 (335 Rutherford Road, Toolamba Scarred Tree 1) Site Plan

### 6.4.4 VAHR 7925-0618 (335 Rutherford Road, Toolamba Scarred Tree 2)

#### 6.4.4.1 Extent and Nature

Site VAHR 7925-0618 (335 Rutherford Road, Toolamba Scarred Tree 2) was located in the northeast corner of the Activity Area within a cluster of remnant trees (Photos in Table 5). The scar was probably a shield or shelter scar, cut from a live river red gum. The tree appeared to be in good health. It was situated close to several mature eucalypts. Data on the scarred tree is provided in the site gazetteer in Appendix 4.

### 6.4.3.2 Significance

Site VAHR 7925-0618 (335 Rutherford Road, Toolamba Scarred Tree 2) is assessed as having high scientific value, because the scar is cut into a live river red gum in good health. There are few scarred trees within 10km of the activity area, and sites of this type are becoming progressively rarer within the region. The tree appears to be in good health and the scar is in poor to average condition and is missing some of the heartwood.

**Table 5: VAHR 7925-0618 (335 Rutherford Road, Toolamba Scarred Tree 2) Site Gazetteer**

<b>Name</b>	VAHR 7925-0618 (335 Rutherford Road, Toolamba Scarred Tree 2)
<b>GDA 94 Coordinate s</b>	3170856.606E, 5739970.712N (primary differential GPS point as per site card)
<b>Site Extent</b>	100m <sup>2</sup>
<b>Dimensions N-S (m)</b>	10m
<b>Dimensions E-W (m)</b>	10m
<b>Aspect</b>	Open
<b>Condition and Integrity</b>	Good
<b>Tree Species</b>	River Red Gum
<b>Dimensions Girth</b>	234cm
<b>Length</b>	162cm
<b>Width</b>	27cm
<b>Height above Ground</b>	42cm
<b>Regrowth Aspect</b>	Top 10cm, Centre 15.5cm, Bottom 16cm 95 degrees
<b>Landform</b>	Floodplain
<b>Landform Element</b>	Flat land
<b>Vegetation</b>	Grass, Eucalypts
<b>Nearest Distance to Potable Water</b>	1km south; Goulburn River

**Site  
Photograph  
showing  
general  
location**

**Photo by  
M. Barker  
(24/8/11)  
facing  
southwest**

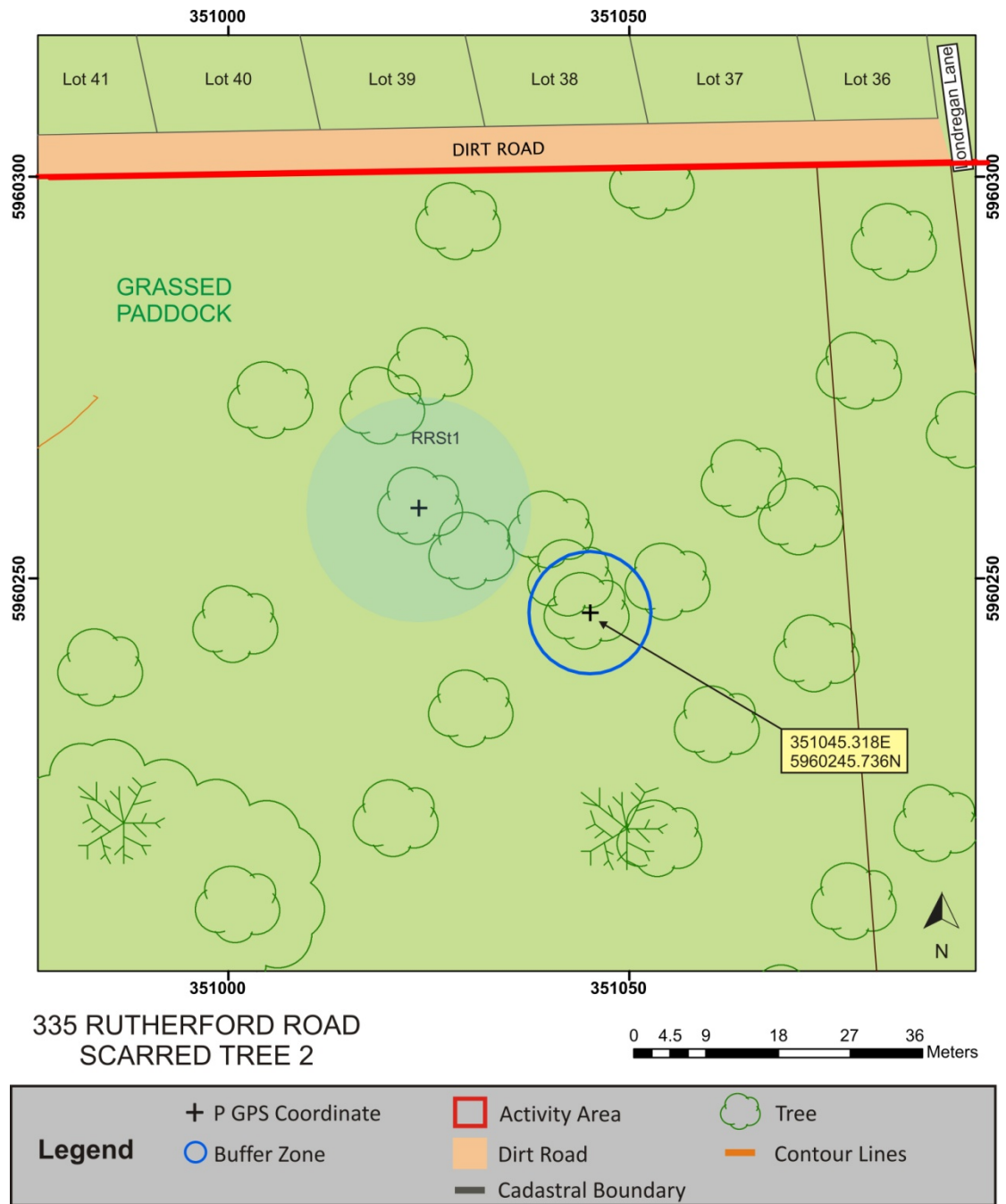


**Scar detail**

**Photo by  
M. Barker  
(20/8/11)**







## Map 9: VAHR 7925-0618 (335 Rutherford Road, Toolamba Scarred Tree 2) Site Plan

### 6.4.5 VAHR 7925-0619 (335 Rutherford Road, Toolamba Scarred Tree 3)

#### 6.4.5.1 Extent and Nature

Site VAHR 7925-0619 (335 Rutherford Road, Toolamba Scarred Tree 3) was located in the northeast corner of the Activity Area within a cluster of remnant trees (Photos in Table 6). The scar was probably a shield or shelter scar, cut from a live river red gum. The tree appeared to be in good health. It was situated close to several mature eucalypts. Data on the scarred tree is provided in the site gazetteer in Appendix 4.

### 6.4.5.2 Significance

Site VAHR 7925-0619 (335 Rutherford Road, Toolamba Scarred Tree 1) is assessed as having high scientific value, because the scar is cut into a live river red gum in good health. There are few scarred trees within 10km of the activity area, and sites of this type are becoming progressively rarer within the region. The tree appears to be in good health and the scar is in good condition.

**Table 6: VAHR 7925-0619 (335 Rutherford Road, Toolamba Scarred Tree 3) Site Gazetteer**

<b>Name</b>	VAHR 7925-0619 (335 Rutherford Road, Toolamba Scarred Tree 3)
<b>GDA 94 Coordinate s</b>	3170856.606E, 5739970.712N (primary differential GPS point as per site card)
<b>Site Extent</b>	100m <sup>2</sup>
<b>Dimensions N-S (m)</b>	10m
<b>Dimensions E-W (m)</b>	10m
<b>Aspect</b>	Open
<b>Condition and Integrity</b>	Good
<b>Tree Species</b>	River Red Gum
<b>Dimensions Girth</b>	348cm
<b>Length</b>	257cm
<b>Width</b>	55cm
<b>Height above Ground</b>	35cm
<b>Regrowth Aspect</b>	Top 10cm, centre 15cm, bottom 10cm 90 degrees
<b>Landform</b>	Floodplain
<b>Landform Element</b>	Flat land
<b>Vegetation</b>	Grass, Eucalypts
<b>Nearest Distance to Potable Water</b>	1km south; Goulburn River

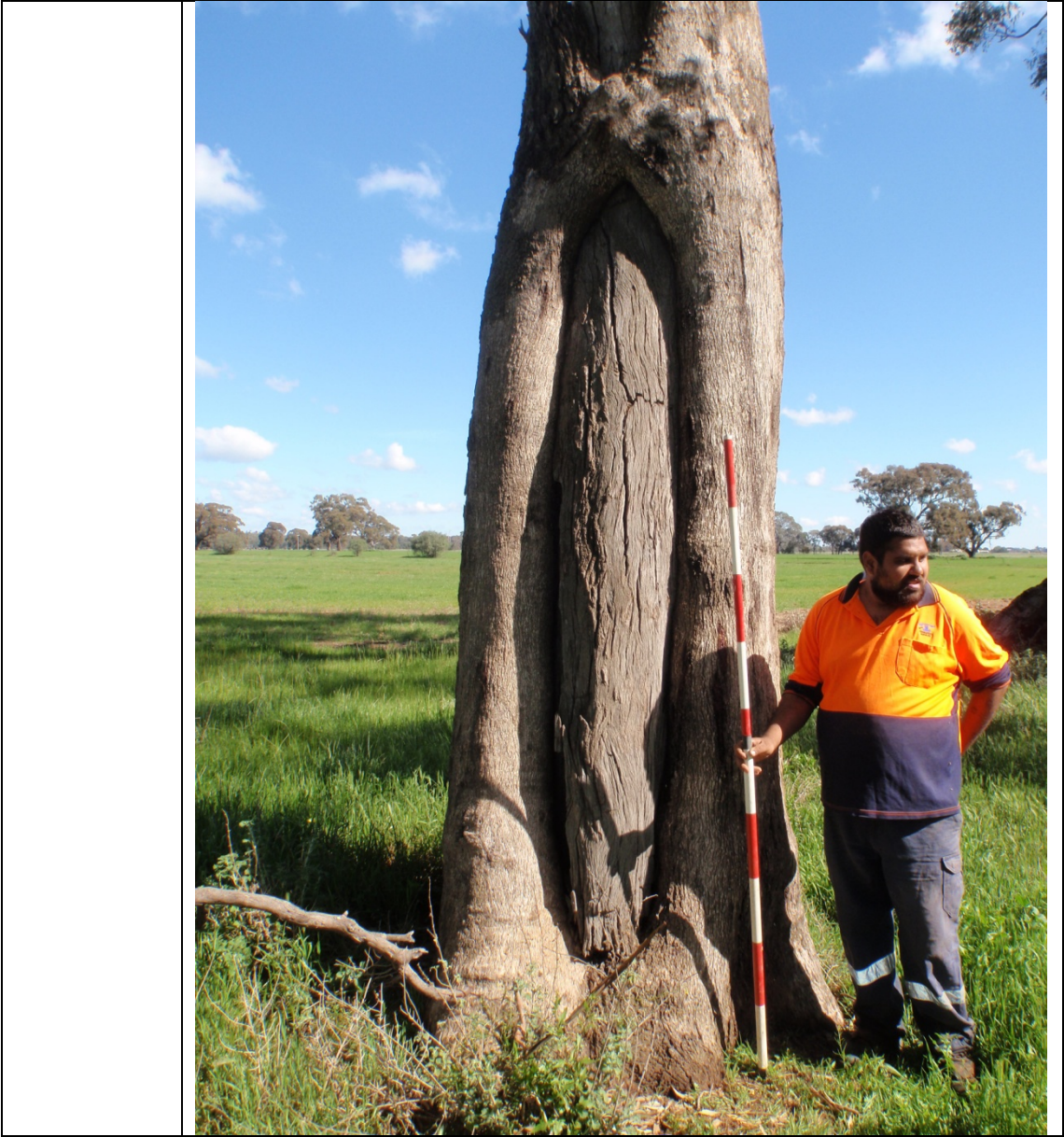
**Site  
Photograph  
showing  
general  
location**

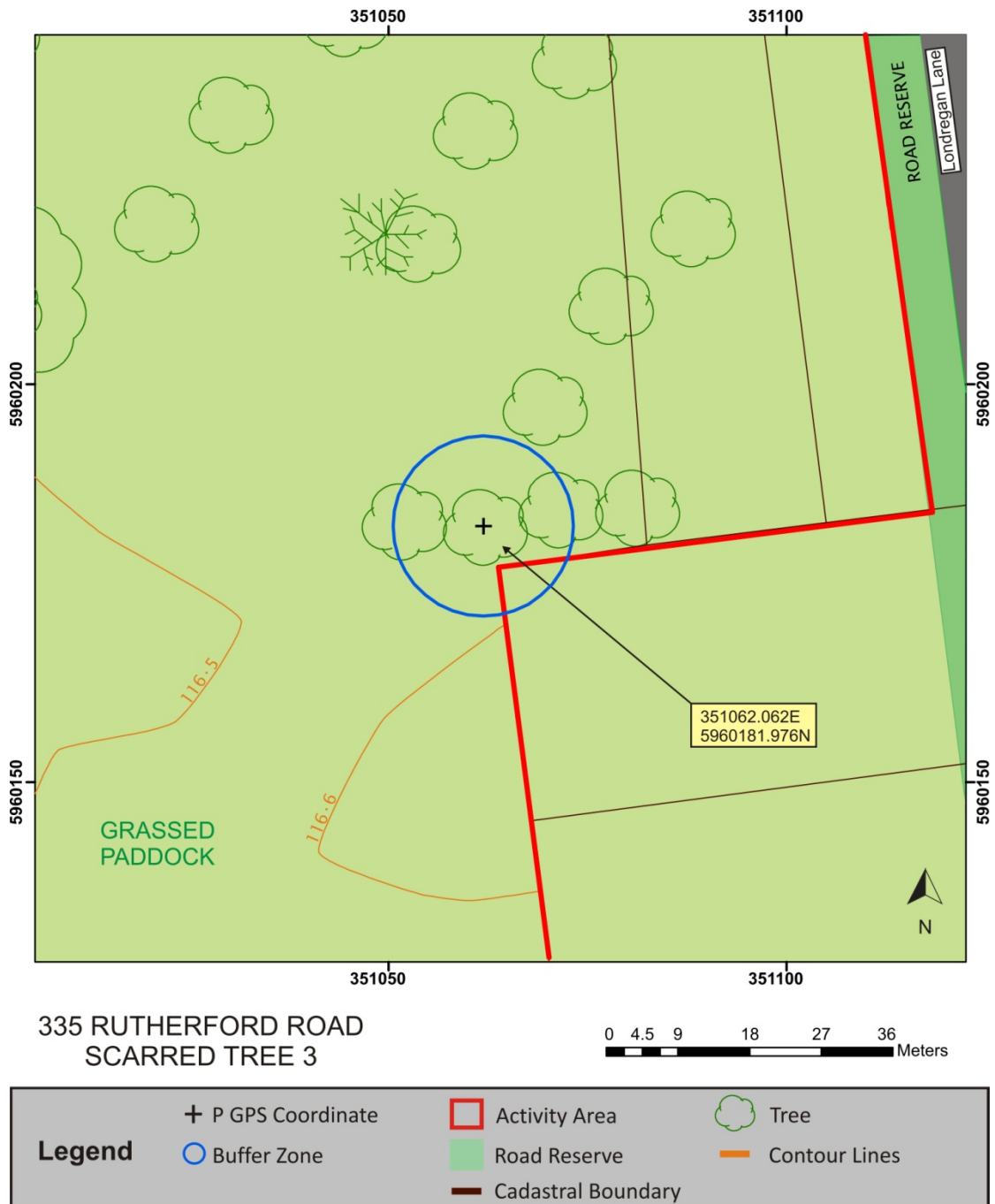
**Photo by  
M. Barker  
(24/8/11)  
facing  
southwest**



**Scar detail**

**Photo by  
M. Barker  
(20/6/11)**





**Map 10: VAHR 7925-0619 (335 Rutherford Road, Toolamba Scarred Tree 3) Site Plan**

### 6.5 Conclusions

The results of the standard assessment indicate that the activity area comprises land that has been disturbed by land clearance and ploughing, as well as by the construction of several existing dams.

These ground disturbance activities would likely have resulted in the removal of topsoil and the destruction of any surface or near surface Aboriginal cultural materials.

The deposits of the Shepparton Formation appear to be extremely shallow, and therefore the majority of the Activity Area is considered to have very low potential to contain *in-situ* Aboriginal archaeological sites.

The land located within 200m of the Goulburn River south of the proposed VicRoads Shepparton Bypass alignment (this location comprises the location of 15 x 2000sq.m lots) is located on elevated land and may contain deeper soil deposits and therefore has the potential to contain undisturbed Aboriginal cultural material

## **6.6 Assessment of Archaeological Site Significance**

The significance of the Aboriginal archaeological sites located during the sub-surface testing, has been assessed against the Australia ICOMOS Burra Charter criteria for the assessment of cultural significance (Australia ICOMOS, 1999).

In the Burra Charter, Cultural Significance is defined as “...aesthetic, historic, scientific, social or spiritual value for past, present or future generations. Cultural significance is embodied in the place itself, its fabric, setting, use, associations, meanings, records, related places and related objects. Places may have a range of meanings for individuals or groups.” (Australia ICOMOS, 1999).

Aesthetic value is defined as “...aspects of sensory perception for which criteria can and should be stated. Such criteria may include consideration of the form, scale, colour, texture and material of the fabric; the smells and sounds associated with the place and its use.”

Historic value is defined as the history of aesthetics, science and society “...A place may have historic value because it has influenced, or has been influenced by, an historic Map, event, phase or activity. It may also have historic value as the site of an important event. For any given place the significance will be greater where evidence of the association or event survives *in situ*, or where the settings are substantially intact, than where it has been changed or evidence does not survive. However, some events or associations may be so important that the place retains significance regardless of subsequent treatment.”

Scientific value is defined as relying “...upon the importance of the data involved, on its rarity, quality or representativeness, and on the degree to which the place may contribute further substantial information.”

Social value is defined as “...the qualities for which a place has become a focus of spiritual, political, national or other cultural sentiment to a majority or minority group.”

The Burra Charter states that “...cultural significance may change as a result of the continuing history of the place. Understanding of cultural significance may change as a result of new information.”

Although the Burra Charter is more applicable to non-Indigenous sites and structures, it may be adapted to assess Aboriginal heritage significance. In particular, the views of contemporary Aboriginal people must be taken into consideration when assessing all of the values described above. Ratings for archaeological site contents and condition are given below.

## Criteria for Scientific Significance Assessment – Archaeological Sites

Scientific significance is assessed by examining the research potential and representativeness of archaeological sites (see Table 12). The scientific significance assessment methodology outlined below is based on scores for research potential (divided into site contents and site condition) and for representativeness. This system is refined and derived from Bowdler (1981) and Sullivan and Bowdler (1984).

**Research potential** is assessed by examining site contents and site condition. Site contents refers to all cultural materials and organic remains associated with human activity at a site. Site contents also refers to the site structure – the size of the site, the patterning of cultural materials within the site, the presence of any stratified deposits and the rarity of particular artefact types. Site condition refers to the degree of disturbance to the contents of a site at the time it was recorded.

The site contents ratings used for archaeological sites are:

- 0 No cultural material remaining.
- 1 Site contains a small number (e.g. 0–10 artefacts) or limited range of cultural materials with no evident stratification.
- 2 Site contains:
  - (a) a larger number, but limited range of cultural materials; and/or
  - (b) some intact stratified deposit remains; and/or
  - (c) rare or unusual example(s) of a particular artefact type.
- 3 Site contains:
  - (a) a large number and diverse range of cultural materials; and/or
  - (b) largely intact stratified deposit; and/or
  - (c) surface spatial patterning of cultural materials that still reflect the way in which the cultural materials were deposited.

The site condition ratings used for archaeological sites are:

- 0 Site destroyed.
- 1 Site in a deteriorated condition with a high degree of disturbance; some cultural materials remaining.
- 2 Site in a fair to good condition, but with some disturbance.
- 3 Site in an excellent condition with little or no disturbance. For surface artefact scatters this may mean that the spatial patterning of cultural materials still reflects the way in which the cultural materials were laid down.

**Representativeness** refers to the regional distribution of a particular site type. Representativeness is assessed by whether the site is common, occasional, or rare in a given region. Assessments of representativeness are subjectively biased by current knowledge of the distribution and number of archaeological sites in a region. This varies from place to place depending on the extent of archaeological research. Consequently, a site that is assigned low significance values for contents and condition, but a high significance value for representativeness, can only be regarded as significant in terms of



knowledge of the regional archaeology. Any such site should be subject to re-assessment as more archaeological research is undertaken.

Assessment of representativeness also takes into account the contents and condition of a site. For example, in any region there may only be a limited number of sites of any type that have suffered minimal disturbance. Such sites would therefore be given a high significance rating for representativeness, although they may occur commonly within the region.

The representativeness ratings used for archaeological sites are:

- 1 common occurrence
- 2 occasional occurrence
- 3 rare occurrence

Overall scientific significance ratings for sites, based on a cumulative score for site contents, site integrity and representativeness are:

- 1-3 low scientific significance
- 4-6 moderate scientific significance
- 7-9 high scientific significance

The assessment of significance is presented below and in Table 7.

### **Aesthetic Value**

The Aboriginal sites recorded have some aesthetic value. This is largely because of the significant alteration of the landscape context of the sites, which includes modifications to the landforms on which the archaeological sites are located. However, in keeping with the Burra Charter's principle that "...cultural significance may change as a result of the continuing history of the place." it may be possible to enhance the aesthetic values of some sites by sympathetic landscape treatment in future.

### **Historic Value**

The archaeological sites are of little value to the history of the local region generally and to descendants of traditional Aboriginal owners. All archaeological sites illustrate aspects of the past use of the landscape by Aboriginal people. The site has little potential to provide information on changes in Aboriginal economic and technological practices in the local area, prior to the arrival of Europeans.

### **Scientific Value**

Site VAHR 7925-0617 to 0619 (335 Rutherford Road, Toolamba Scarred Trees 1-3) are assessed as having high scientific value. There are few scarred trees within 10km of the activity area, and sites of this type are becoming progressively rarer within the region. The trees appear to be in good health and the scars are in good condition.

## **Social Value**

Many Aboriginal people regard archaeological sites as holding considerable social and cultural value, irrespective of their scientific significance. This arises not only from the material remains which represent a connection to their ancestors, but also from beliefs in the association of archaeological sites and land or 'country'. Protection of archaeological sites and remnant sections of landscape form part of their traditional obligations to looking after country, which were handed down to them by their ancestors.

The scarred trees are likely to be regarded as being of high social and cultural value to the Aboriginal community in general. No indication of any spiritual values attached to the site have been expressed by Aboriginal community representatives to date.

**Table 7: Scientific Assessment of Indigenous Archaeological Sites**

<b>VAHR NO</b>	<b>Site Contents</b>	<b>Site Condition</b>	<b>Representativeness</b>	<b>Overall Scientific Significance</b>
VAHR 7925-0617 (335 Rutherford Road, Toolamba Scarred Tree 1)	3	2	2	7 (high)
VAHR 7925-06178(335 Rutherford Road, Toolamba Scarred Tree 2)	3	1	2	6 (high)
VAHR 7925-0619 (335 Rutherford Road, Toolamba Scarred Tree 3)	3	2	2	7 (high)

## **Definitions**

Cultural significance means aesthetic, historic, scientific, social or spiritual value for past, present or future generations

## **Criteria**

Aesthetic value includes aspects of sensory perception for which criteria can and should be stated. Such criteria may include consideration of the form, scale, colour, texture and material of the fabric; the smells and sounds associated with the place and its use.

Historic value encompasses the history of aesthetics, science and society, and therefore to a large extent underlies all of the terms set out in this section.

A place may have historic value because it has influenced, or has been influenced by, an historic map, event, phase or activity. It may also have historic value as the site of an important event. For any given place the significance will be greater where evidence of

the association or event survives *in situ*, or where the settings are substantially intact, than where it has been changed or evidence does not survive. However, some events or associations may be so important that the place retains significance regardless of subsequent treatment.

The scientific or research value of a place will depend upon the importance of the data involved, on its rarity, quality or representativeness, and on the degree to which the place may contribute further substantial information.

Social value embraces the qualities for which a place has become a focus of spiritual, political, national or other cultural sentiment to a majority or minority group.

### **6.6.1 Statement of Significance in Accordance with Aboriginal Tradition**

A request for a statement of significance was made on the 28/9/2011.

The following statement was provided.

The Yorta Yorta people occupy a unique stretch of forest-wetlands that are located in what is now known as the central Murray - Goulburn region. Our lifestyle and culture was based on hunting, fishing and collecting food from the variety of food sources provided by the ancestral lands.

Being river based people however, most of our time was occupied by fishing, as the majority of food that was provided came from the rich network of rivers, lagoons, creeks, and wetlands which are still regarded as the life source and the spirit of the Yorta Yorta Nation. The now irregular floods that occur in this region are regarded by Yorta Yorta people as necessary for the replenishment of the natural food sources and for the survival of the forest-wetlands for the enjoyment of future generations. The survival of the ancestral lands is equally important for the continuity of Yorta Yorta peoples timeless connections with what they believe is theirs by inherent right and with what they continue to assert is something that 'always was and always will be Yorta Yorta land' - nothing will ever change that reality for the Yorta Yorta.

## 7.0 Report on the Results of the Complex Assessment

In accordance with Clause 8, Schedule 2 and Clause 9, Schedule 2 of the *Aboriginal Heritage Regulations 2007*, this section contains the results of the complex assessment.

### 7.1 Aims of the subsurface testing/excavation

Owing to low ground surface visibility as a consequence of dense grass coverage across the entire Activity Area, it was not possible to assess the archaeological sensitivity of the Activity Area comprehensively by surface survey. It was also not possible to comprehensively assess the level of ground disturbance which had occurred. Therefore, it was considered necessary that the Activity Area be investigated by means of a complex assessment.

Thus, a complex assessment comprising hand excavation and machine excavation was carried out as part of this CHMP. The aim of the subsurface testing/excavation was to establish if the proposed activity is likely to cause harm to Aboriginal cultural heritage.

### 7.2 Methodology for Complex Assessment

A complex assessment (excavation and sub-surface testing) was also carried out as part of this assessment and was supervised by qualified archaeologists (Matthew Barker and Maya Barker of Heritage Insight Pty Ltd. The methodology employed during the complex assessment is described below.

#### Excavation of Test Pits

As required by the *Aboriginal Heritage Regulations 2007*, one 1m<sup>2</sup> test pit was first excavated within the Activity Area to determine the soil stratigraphy within this location and to explore the possibility of cultural materials existing within a subsurface context.

The test pit was excavated stratigraphically (in soil type spits) according to the stratigraphy of soil encountered. Excavation ceased when a new soil layer was encountered. The new soil layer was then excavated separately in units of 100mm depth (where the depth made this feasible), in order to provide a good profile of the vertical distribution of cultural remains through the different soil layers. Levels were taken on the surface and at the base of each spit excavated with a dumpy level. A surface plan and plans of the base of each spit were made during the excavation. Soil sections were drawn of the north section of the test pit once excavation was completed. A photographic record of the surface, base of each spit and the soil section was made. Soil descriptions and other natural and cultural features were recorded on standard excavation forms. Soil descriptions were based on the standard Munsell Soil Chart and pH levels were taken at the surface and base of each test pit using a standard garden variety test kit.

All of the soil from the test pit was passed through a sieve with a 5mm mesh. In the event that any cultural material was recovered, the procedure was to place the artefacts in bags with labels identifying the context of the artefacts, and that, with agreement with the Indigenous community representatives, any artefacts recovered from the excavation were to be retained for later analysis at the office of Heritage Insight Pty Ltd.

### Excavation of Mechanical Transects

After the excavation of the test pit, a total of 17 machine transects were excavated across the Activity Area.

The mechanical transects were excavated in order to examine the soil stratigraphy and determine whether there were sub-surface deposits of cultural materials. The backhoe transects were excavated using the following methodology:

- The location and length of the backhoe transects was indicated on the ground by laying out a tape measure across the ground surface.
- The grass was then stripped across the surface of each transect and the underlying ground surface inspected for evidence of Indigenous cultural remains by the field team.
- Soil was then stripped by the backhoe in approximately 10cm increments until clay was reached. After each scrape, the base of the transect was inspected for evidence of Aboriginal cultural remains.
- If Aboriginal cultural remains were found in context within the transect, machine excavation would cease and the base of the transect would be hand excavated to establish if the artefact was part of a feature.
- If a feature was encountered within the transect it was hand excavated in its entirety.
- At least one member of the field team walked behind the backhoe as each scrape was conducted to observe the underlying soil being exposed and to note any cultural features which were uncovered. The remaining members of the field team sieved 100% of the excavated soil through a 0.5cm mesh.
- Data for each backhoe transect was recorded on transect record sheets. PH levels were taken of each spit and a Munsell Chart was consulted to provide soil colour descriptions. A grid reference was taken with a GPS at either end of each transect and the orientation of each backhoe transect was noted. Soil sections were drawn of one wall of the backhoe transect once excavation was completed. A photographic record of the backhoe transects and any cultural features observed within them was also kept.

In the event that any cultural material was recovered, the procedure was to place the artefacts in bags with labels identifying the context of the artefacts, and that, by agreement with the Indigenous community representatives, any artefacts recovered from the excavation were to be retained for later analysis at the office of Heritage Insight Pty Ltd. The excavated backhoe transect locations are shown in Maps 11-14. A stratigraphic section for the backhoe transects is shown in Table 9. The depths, soil pH and soil descriptions of the spits from the backhoe transects are shown in Table 9.

No *in situ* features requiring hand excavation were located in any of the mechanical transects.

### Excavation of Shovel test pits

The shovel test pits tested the higher ground and rises in the south of the Activity Area.

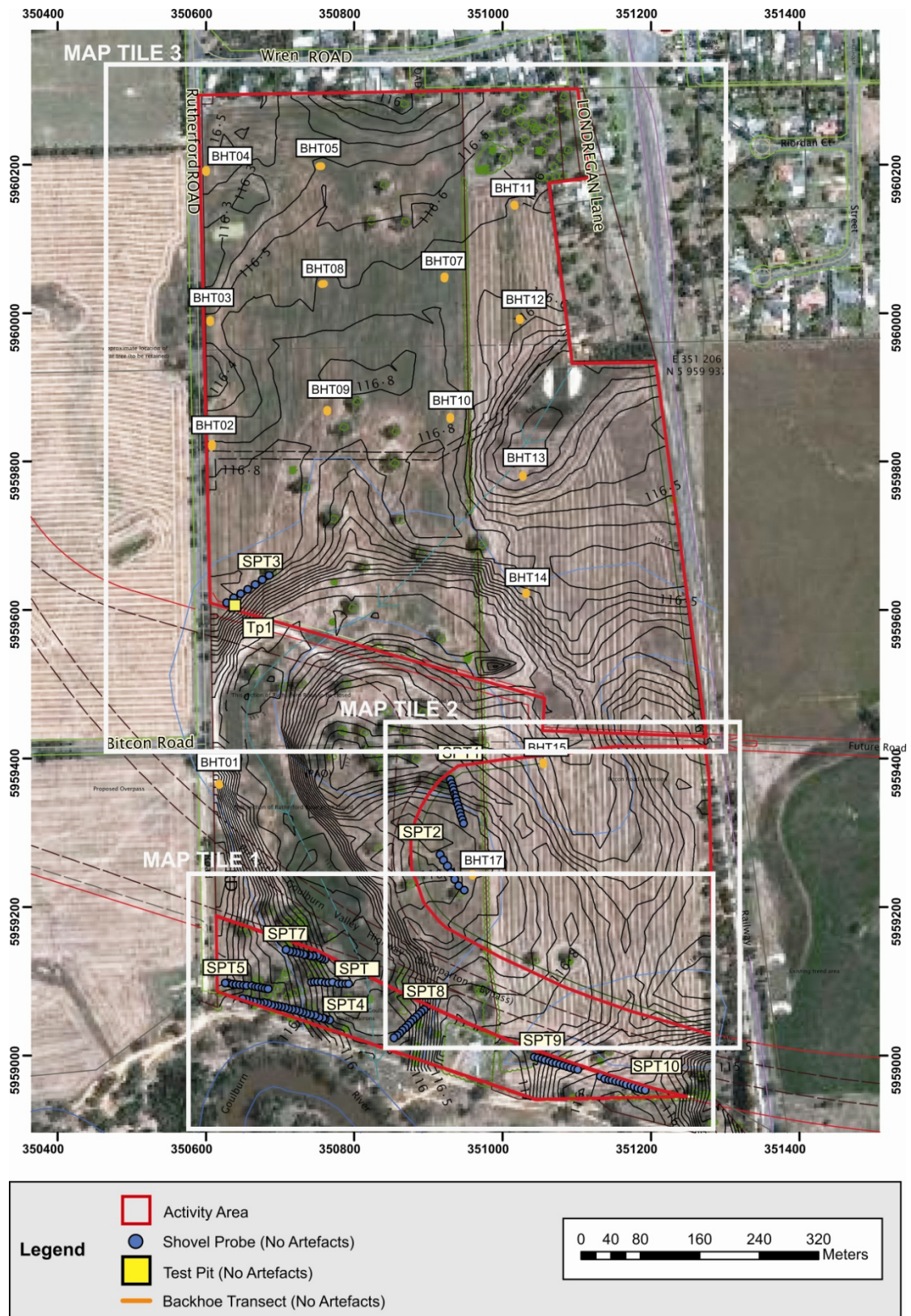
The shovel test pits were 400mm x 400mm in size and were dug using a shovel with a 30cm blade and holes were placed at distances of 4m apart. Initially, the grass and surface soil was stripped off each hole to a depth of approximately 0.5cm. Soil within the shovel test pit hole was then excavated in increments of 10cm until the basal layer was reached.

The soil from each shovel test pit was sieved by the field team using hand sieves with a 5mm mesh. As the soil stockpiles were kept small, it was possible to sieve 100% of each stockpile.

Soil data and the location of any cultural materials were recorded on field forms. A section of the vertical soil profile of each shovel test pit was recorded. A range pole with increments of 20cm was included in all photographs of excavation. The outlined procedure for dealing with cultural materials, if found, was to place any cultural material in bags with labels identifying their context. A photographic record of each shovel test pit was also made. By agreement with the Indigenous community representatives, any artefacts recovered were to be retained for later analysis at the office of Heritage Insight Pty Ltd.

As the excavation of the shovel test pits was carried out in contexts and the soil from each context were sieved separately, it was possible to assess both the vertical and horizontal distribution of cultural materials within the soil profile.

The excavated shovel test pit locations are shown in Maps 11-14. The stratigraphy of the shovel test pits is shown in Table 10.



Map 11: Location of Shovel Test Pit Transects and Test Pits: Key Map

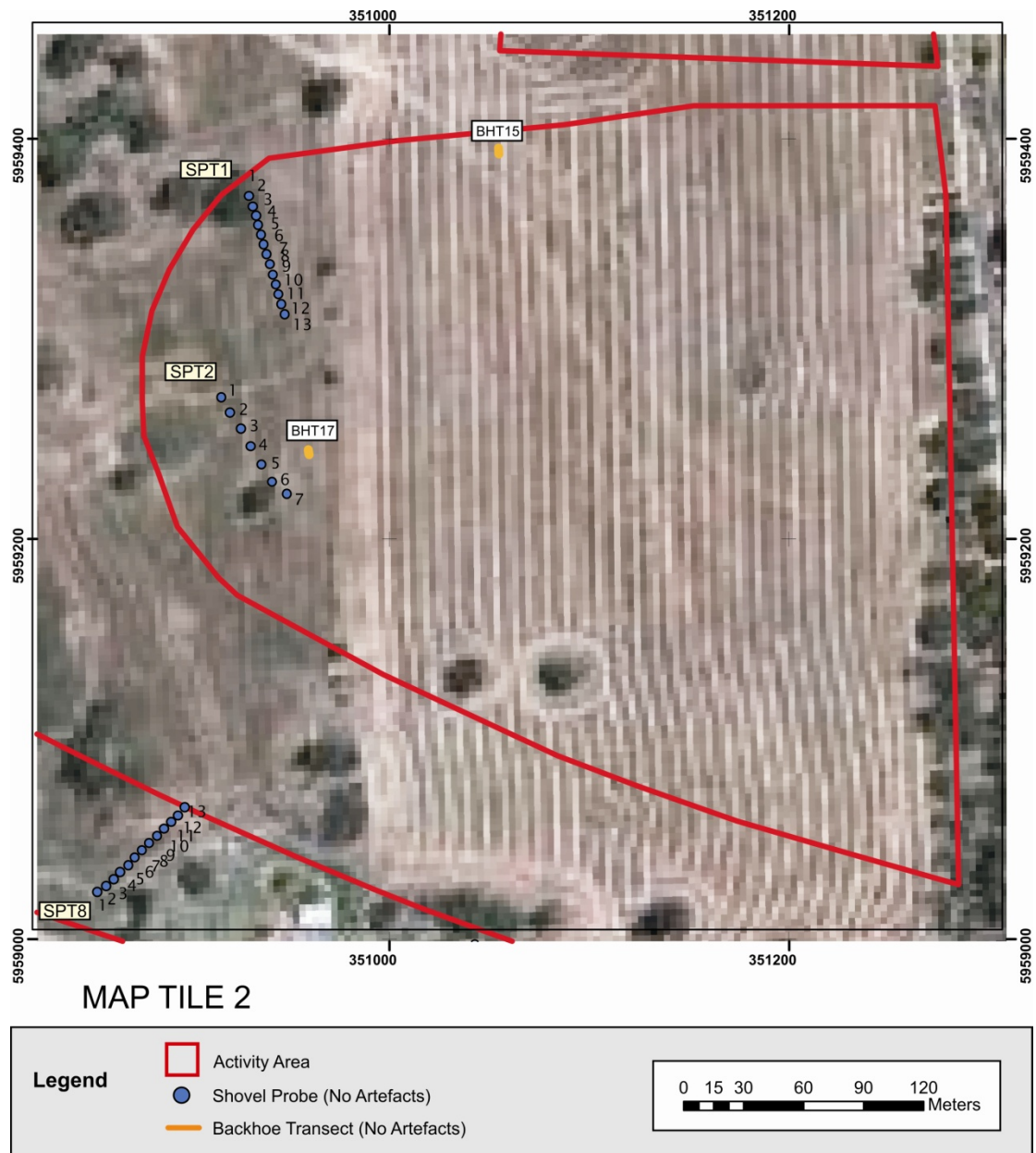


MAP TILE 3

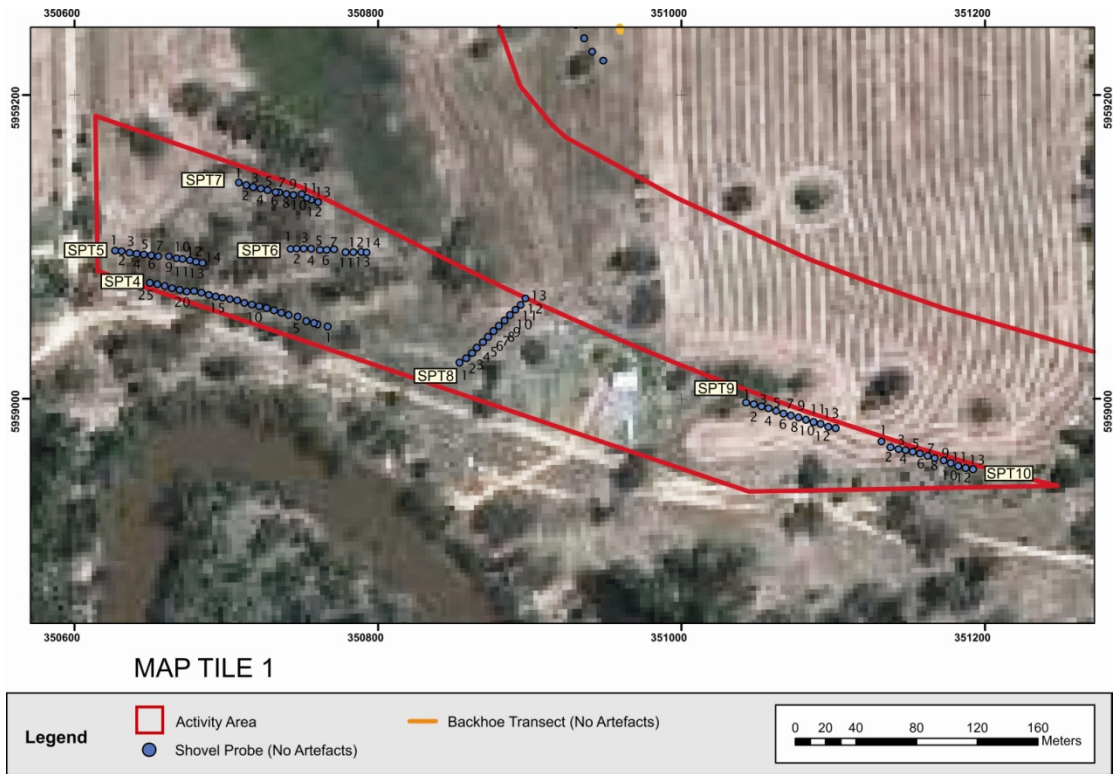


Map 12: Location of Shovel Test Pit Transects and Test Pit: Northern Section of Activity Area





**Map 13: Location of Shovel Test Pit Transects and Test Pit: Middle Section**



Map 14: Location of Test Pit Transects and Test Pit: Southern Section

### **7.3 Results of Complex Assessment**

The complex assessment was conducted by Matthew Barker and Maya Barker from Heritage Insight Pty Ltd and Kyle Wright and Tahnee Day representing the YYNAC, all of whom have considerable experience in the conduct of archaeological excavations and subsurface testing.

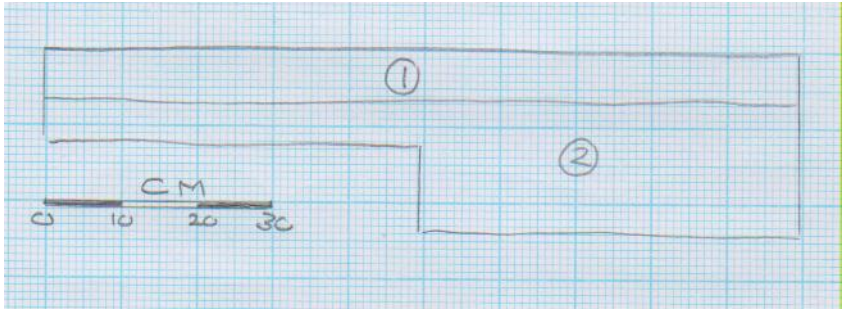

A total of 1 test pit was excavated along with 1x 120m, 9 x 60m shovel test pit transects and 17 x 2m mechanical transects, to establish the soil stratigraphy of the Activity Area, and to assess the likelihood of subsurface Indigenous cultural material being located within the Activity Area. The details of the results of the excavation of the test pit, shovel test pit transects and mechanical transects is outlined below.

#### **Excavation of Test Pit**

The test pit was excavated on a high point in the southwest of the Activity Area. This Test Pit was 1m x 1m in size and was excavated in the first instance, prior to the excavation of the shovel probes. This test pit was excavated in two spits to a depth of 240mm. At a depth of only 70mm; a highly compacted dense reddish brown clay was encountered and excavation ceased. The clay layer was excavated from 70mm to 220mm depth and was considered the sterile layer.

No Indigenous cultural material was located in the test pit or the sieves. Summary data of Test Pit 1 is located in Table 8.


**Table 8: Summary excavation data from Test Pit 1**



<b>Test Pit</b>	1
<b>GDA 94 Coordinates</b>	325856.4E 5816139.7N Zone 55
<b>Site Datum</b>	1.25
<b>Stratigraphy</b>	
<b>Context 1</b>	0-70mm: compact red brown clay loam with grass root inclusions (7.5 YR 5/4; pH of 6)
<b>Context 2</b>	2: 70-240mm: Reddish brown clay (5YR 5/4, pH 6) No coarse fragments. pH 5
<b>Depth of Excavation</b>	240mm
<b>Evidence of Disturbance</b>	Ploughing in upper 200mm
<b>Section Drawing</b>	 <p style="text-align: center;">South profile    scale 1cm:10cm</p>
<b>Photo by M. Barker (25/08/2011) after excavation showing base of Test Pit 1</b>	
<b>Vertical artefact distribution</b>	None


**Excavation of Mechanical Transects**

In order to try and determine the extent of soil disturbance in the Activity Area and to provide a more extensive sample of the surface and subsurface soils, a series of short 2m long mechanically excavated transects were excavated within the Activity Area. The transects were excavated to further assess the likelihood of Indigenous cultural material being located within the Activity Area. The co-ordinates for each transect is contained within the summary table below (see Table 9). No Indigenous cultural materials was identified within either the transects themselves or the sieved materials.



**Table 9: Summary of Machine Transects 1-17**


Transect	Soil Stratigraphy	Photo
<p><b><u>Transect 1</u></b></p> <p>Length: 2m Orientation: E - W</p>	<p>0-60mm: compact red brown clay loam with grass root inclusions (7.5 YR 5/4; pH of 6)</p> <p>2: 60-240mm: Reddish brown clay (5YR 5/4, pH 6) No coarse fragments. pH 5</p> <p>Aboriginal Cultural Material: NONE</p>	 <p>Photo: BT 1: North wall</p>



Transect	Soil Stratigraphy	Photo
<p><b><u>Transect 2</u></b></p> <p>Length: 2m Orientation: S - N</p>	<p>0-70mm: compact red brown clay loam with grass root inclusions (7.5 YR 5/4; pH of 6)</p> <p>2: 70-220mm: Reddish brown clay (5YR 5/4, pH 6) No coarse fragments. pH 5</p> <p>Aboriginal Cultural Material: NONE</p>	 <p>Photo: BT 2: South wall</p>
<p><b><u>Transect 3</u></b></p> <p>Length: 2m Orientation: SW - NE</p>	<p>0-70mm: compact red brown clay loam with grass root inclusions (7.5 YR 5/4; pH of 6)</p> <p>2: 70-300mm: Reddish brown clay (5YR 5/4, pH 6) No coarse fragments. pH 5</p> <p>Aboriginal Cultural Material: NONE</p>	


Transect	Soil Stratigraphy	Photo
<p><b><u>Transect 4</u></b></p> <p>Length: 2m Orientation: SE - NW</p>	<p>0-70mm: compact red brown clay loam with grass root inclusions (7.5 YR 5/4; pH of 6)</p> <p>2: 70-200mm: Reddish brown clay (5YR 5/4, pH 6) No coarse fragments. pH 5</p> <p>Aboriginal Cultural Material: NONE</p>	<p data-bbox="1435 277 1727 304">Photo: BT 3: North wall</p>  <p data-bbox="1435 823 1727 850">Photo: BT 4: North wall</p>





Transect	Soil Stratigraphy	Photo
<p><b>Transect 5</b></p> <p>Length: 2m Orientation: NE - SW</p>	<p>0-70mm: compact red brown clay loam with grass root inclusions (7.5 YR 5/4; pH of 6)</p> <p>2: 70-160mm: Reddish brown clay (5YR 5/4, pH 6) No coarse fragments. pH 5</p> <p>Aboriginal Cultural Material: NONE</p>	 <p>Photo: BT 5: North wall</p>
<p><b>Transect 6</b></p> <p>Length: 2m Orientation: W - E</p>	<p>0-50mm: compact red brown clay loam with grass root inclusions (7.5 YR 5/4; pH of 6)</p> <p>2: 50-290mm: Reddish brown clay (5YR 5/4, pH 6) No coarse fragments. pH 5</p> <p>Aboriginal Cultural Material: NONE</p>	



Transect	Soil Stratigraphy	Photo
		Photo: BT 6: West wall
<p><b><u>Transect 7</u></b></p> <p>Length: 2m Orientation: W - E</p>	<p>0-70mm: compact red brown clay loam with grass root inclusions (7.5 YR 5/4; pH of 6)</p> <p>2: 70-240mm: Reddish brown clay (5YR 5/4, pH 6) No coarse fragments. pH 5</p>	 <p>Photo: BT 7: West wall</p>


Transect	Soil Stratigraphy	Photo
<p><b>Transect 8</b></p> <p>Length: 2m Orientation: W - E</p>	<p>0-70mm: compact red brown clay loam with grass root inclusions (7.5 YR 5/4; pH of 6)</p> <p>2: 70-230mm: Reddish brown clay (5YR 5/4, pH 6) No coarse fragments. pH 5</p> <p>Aboriginal Cultural Material: NONE</p>	 <p>Photo: BT 8: West wall</p>
<p><b>Transect 9</b></p> <p>Length: 2m Orientation: W - E</p>	<p>0-80mm: compact red brown clay loam with grass root inclusions (7.5 YR 5/4; pH of 6)</p> <p>2: 80-170mm: Reddish brown clay (5YR 5/4, pH 6) No coarse fragments. pH 5</p> <p>Aboriginal Cultural Material: NONE</p>	

Transect	Soil Stratigraphy	Photo
		Photo: BT 9: West wall
<p><b><u>Transect 10</u></b></p> <p>Length: 2m Orientation: W - E</p>	<p>0-60mm: compact red brown clay loam with grass root inclusions (7.5 YR 5/4; pH of 6)</p> <p>2: 60-230mm: Reddish brown clay (5YR 5/4, pH 6) No coarse fragments. pH 5</p> <p>Aboriginal Cultural Material: NONE</p>	 <p>Photo: BT 10: West wall</p>



Transect	Soil Stratigraphy	Photo
<p><b><u>Transect 11</u></b></p> <p>Length: 2m Orientation: W - E</p>	<p>0-70mm: compact red brown clay loam with grass root inclusions (7.5 YR 5/4; pH of 6)</p> <p>2: 70-220mm: Reddish brown clay (5YR 5/4, pH 6) No coarse fragments. pH 5</p> <p>Aboriginal Cultural Material: NONE</p>	 <p>Photo: BT 11: West wall</p>
<p><b><u>Transect 12</u></b></p> <p>Length: 2m Orientation: W - E</p>	<p>0-60mm: compact red brown clay loam with grass root inclusions (7.5 YR 5/4; pH of 6)</p> <p>2: 60-200mm: Reddish brown clay (5YR 5/4, pH 6) No coarse fragments. pH 5</p> <p>Aboriginal Cultural Material: NONE</p>	


Transect	Soil Stratigraphy	Photo
		Photo: BT 12: West wall
<p><b><u>Transect 13</u></b></p> <p>Length: 2m Orientation: W - E</p>	<p>0-70mm: compact red brown clay loam with grass root inclusions (7.5 YR 5/4; pH of 6)</p> <p>2: 70-210mm: Reddish brown clay (5YR 5/4, pH 6) No coarse fragments. pH 5</p> <p>Aboriginal Cultural Material: NONE</p>	 <p>Photo: BT 13: West wall</p>

Transect	Soil Stratigraphy	Photo
<p><b>Transect 14</b></p> <p>Length: 2m Orientation: W - E</p>	<p>0-70mm: compact red brown clay loam with grass root inclusions (7.5 YR 5/4; pH of 6)</p> <p>2: 70-220mm: Reddish brown clay (5YR 5/4, pH 6) No coarse fragments. pH 5</p> <p>Aboriginal Cultural Material: NONE</p>	 <p>Photo: BT 14: West wall</p>
<p><b>Transect 15</b></p> <p>Length: 2m Orientation: W - E</p>	<p>0-90mm: compact brown clay loam with grass root inclusions (7.5 YR 5/4; pH of 6)</p> <p>2: 90-240mm: Brown clay (5YR 5/4, pH 6) No coarse fragments. pH 5</p> <p>Aboriginal Cultural Material: NONE</p>	

Transect	Soil Stratigraphy	Photo
		Photo: BT 15: West wall
<p><b><u>Transect 16</u></b></p> <p>Length: 2m Orientation: W - E</p>	<p>0-70mm: compact red brown clay loam with grass root inclusions (7.5 YR 5/4; pH of 6)</p> <p>2: 70-290mm: Reddish brown clay (5YR 5/4, pH 6) No coarse fragments. pH 5</p> <p>Aboriginal Cultural Material: NONE</p>	 <p>Photo: BT 16: West wall</p>



Transect	Soil Stratigraphy	Photo
<p><b><u>Transect 17</u></b></p> <p>Length: 2m Orientation: W - E</p>	<p>0-70mm: compact red brown clay loam with grass root inclusions (7.5 YR 5/4; pH of 6)</p> <p>2: 70-210mm: Reddish brown clay (5YR 5/4, pH 6) No coarse fragments. pH 5</p> <p>Aboriginal Cultural Material: NONE</p>	 <p>Photo: BT 17: West wall</p>
<p><b><u>Transect 18</u></b></p> <p>Length: 2m Orientation: W - E</p>	<p>0-70mm: compact red brown clay loam with grass root inclusions (7.5 YR 5/4; pH of 6)</p> <p>2: 70-240mm: Reddish brown clay (5YR 5/4, pH 6) No coarse fragments. pH 5</p> <p>Aboriginal Cultural Material: NONE</p>	

Transect	Soil Stratigraphy	Photo
<p><b><u>Transect 19</u></b></p> <p>Length: 2m Orientation: W - E</p>	<p>0-70mm: compact red brown clay loam with grass root inclusions (7.5 YR 5/4; pH of 6)</p> <p>2: 70-240mm: Reddish brown clay (5YR 5/4, pH 6) No coarse fragments. pH 5</p> <p>Aboriginal Cultural Material: NONE</p>	




### **Excavation of Shovel Test Pit Transects 1-10**



In order to try and determine the extent of soil disturbance in the Activity Area and to provide a more extensive sample of the surface and sub-surface soils, a series of 400mm x 400mm shovel test pits were excavated where possible depending on the vegetation. The shovel test pits were excavated to:




1. Further assess the likelihood of Indigenous cultural material being located on the rises within the Activity Area.
2. To determine the extent of ground disturbance caused by land clearance.



The provenance and stratigraphic data from the shovel test pits is contained in Table 10. The locations of the shovel test pits can be found in Maps 10-12. Table 10 summarises the details of each shovel test pit.

**Table 10: Summary of Shovel Test Pit Transects**

Transect	Soil Stratigraphy	Photo
<p><b>Transect 1</b></p> <p>Length: 60m</p> <p>Orientation: N-S</p> <p>Probe Interval 5m</p>	<p>0-40mm: compact red brown clay loam with grass root inclusions (7.5 YR 5/4; pH of 6)</p> <p>2: 40-100mm: Reddish brown clay (5YR 5/4, pH 6) No coarse fragments. Extremely hard and compact. pH 5</p> <p>Aboriginal Cultural Material: NONE</p>	 <p>Photo: STPT 1: 0m</p>
<p><b>Transect 2</b></p> <p>Length: 60m</p> <p>Orientation: S – N</p> <p>Probe Interval 10m</p>	<p>0-45mm: compact red brown clay loam with grass root inclusions (7.5 YR 5/4; pH of 6)</p> <p>2: 45-120mm: Reddish brown clay (5YR 5/4, pH 6) No coarse fragments. Extremely hard and compact. pH 5</p> <p>Aboriginal Cultural Material: NONE</p>	 <p>Photo: STPT 2: 10m</p>
<p><b>Transect 3</b></p> <p>Length: 60m</p> <p>Orientation: SW - NE</p> <p>Probe Interval 10m</p>	<p>0-40mm: compact red brown clay loam with grass root inclusions (7.5 YR 5/4; pH of 6)</p> <p>2: 40-80mm: Reddish brown clay (5YR 5/4, pH 6) No coarse fragments. Extremely hard and compact. pH 5</p> <p>Aboriginal Cultural Material: NONE</p>	 <p>Photo: STPT 3: 20m</p>

Transect	Soil Stratigraphy	Photo
<p><b>Transect 4</b></p> <p>Length: 120m</p> <p>Orientation: SE - NW</p> <p>Probe Interval 5m</p>	<p>0-40mm: compact red brown clay loam with grass root inclusions (7.5 YR 5/4; pH of 6)</p> <p>2: 40-190mm: Reddish brown clay (5YR 5/4, pH 6) No coarse fragments. Extremely hard and compact. pH 5</p> <p>Aboriginal Cultural Material: NONE</p>	 <p>Photo: STPT 4: 0m</p>
<p><b>Transect 5</b></p> <p>Length: 60m</p> <p>Orientation: NE - SW</p> <p>Probe Interval 5m</p>	<p>0-40mm: compact red brown clay loam with grass root inclusions (7.5 YR 5/4; pH of 6)</p> <p>2: 40-200mm: Reddish brown clay (5YR 5/4, pH 6) No coarse fragments. Extremely hard and compact. pH 5</p> <p>Aboriginal Cultural Material: NONE</p>	 <p>Photo: STPT 5: 0m</p>

Transect	Soil Stratigraphy	Photo
<p><b>Transect 6</b></p> <p>Length: 60m</p> <p>Orientation: W - E</p> <p>Probe Interval 5m</p>	<p>0-50mm: compact red brown clay loam with grass root inclusions (7.5 YR 5/4; pH of 6)</p> <p>2: 40-220mm: Brown clay (5YR 5/4, pH 6) No coarse fragments. Extremely hard and compact. pH 5</p> <p>Aboriginal Cultural Material: NONE</p>	 <p>Photo: STPT 6: 0m</p>
<p><b>Transect 7</b></p> <p>Length: 60m</p> <p>Orientation: W - E</p> <p>Probe Interval 5m</p>	<p>0-40mm: compact red brown clay loam with grass root inclusions (7.5 YR 5/4; pH of 6)</p> <p>2: 40-200mm: Reddish brown clay (5YR 5/4, pH 6) No coarse fragments. Extremely hard and compact. pH 5</p> <p>Aboriginal Cultural Material: NONE</p>	 <p>Photo: STPT 7: 0m</p>
<p><b>Transect 8</b></p> <p>Length: 60m</p> <p>Orientation: W - E</p> <p>Probe Interval 5m</p>	<p>0-60mm: compact red brown clay loam with grass root inclusions (7.5 YR 5/4; pH of 6)</p> <p>2: 60-180mm: Reddish brown clay (5YR 5/4, pH 6) No coarse fragments. Extremely hard and compact. pH 5</p> <p>Aboriginal Cultural Material: NONE</p>	 <p>Photo: STPT 8: 0m</p>

Transect	Soil Stratigraphy	Photo
<p><b>Transect 9</b></p> <p>Length: 60m Orientation: W - E Probe Interval 5m</p>	<p>0-40mm: compact red brown clay loam with grass root inclusions (7.5 YR 5/4; pH of 6)</p> <p>2: 40-200mm: Reddish brown clay (5YR 5/4, pH 6) No coarse fragments. Extremely hard and compact. pH 5</p> <p>Aboriginal Cultural Material: NONE</p>	 <p>Photo: STPT 9: 30m</p>
<p><b>Transect 10</b></p> <p>Length: 60m Orientation: W - E Probe Interval 5m</p>	<p>0-40mm: compact red brown clay loam with grass root inclusions (7.5 YR 5/4; pH of 6)</p> <p>2: 40-210mm: Reddish brown clay (5YR 5/4, pH 6) No coarse fragments. Extremely hard and compact. pH 5</p> <p>Aboriginal Cultural Material: NONE</p>	 <p>Photo: STPT 10: 30m</p>

#### 7.4 Conclusions from the subsurface testing/excavation

The site prediction model for the Activity Area stated that while there was some probability of locating *in-situ* surface or subsurface remains of Indigenous archaeological sites within the Activity Area the likelihood was reduced by the level of disturbance caused by the land use history and thin soils found on the Shepparton Formation.

The level of disturbance and modification was confirmed by the results of the complex assessment. The disturbance of the soils was likely caused by initial tree clearance and farming practices. The soils within the Activity Area were found to be extremely shallow and did not exceed 200mm depth. In all instances these shallow soils were consistently followed by deep and dense clays. In most transects clays were located in the upper layers.

The results indicate that any Aboriginal Cultural remains, if they existed within the Activity Area, would likely have been located within the top soil profile as dense clay was consistently found below this level. A thorough investigation of the Activity Area was completed through extensive subsurface testing, however no Aboriginal cultural heritage sites were identified.





## **8.0 Consideration of Section 61 Matters – Impact Assessment**

### **8.1 Section 61 matters in relation to site VAHR 7925-0617 (VAHR) (335 Rutherford Road, Toolamba Scarred Tree 1)**

#### **8.1.1 Can Harm to Site VAHR 7925-0617 (VAHR) (335 Rutherford Road, Toolamba Scarred Tree 1) be Avoided or Minimised?**

Section 3(a) of the *Aboriginal Heritage Act 2006* states that the principal objective of the legislation is to recognise, protect and conserve Aboriginal cultural heritage in Victoria.

During the standard assessment of the Activity Area, scarred tree VAHR 7925-0617 (335 Rutherford Road, Toolamba Scarred Tree 1) in the northeast corner of the Activity Area.

The evaluation undertaken as part of this CHMP has determined that the activity can be undertaken without harm to Aboriginal cultural heritage

#### **8.1.2 Are Specific Measures Needed for the Management of Site VAHR 7925-0617 (VAHR) (335 Rutherford Road, Toolamba Scarred Tree 1)?**

There are measures needed for the management of site VAHR 7925-0617 (335 Rutherford Road, Toolamba Scarred Tree 1), identified during the complex assessment of the Activity Area.

These management measures are discussed in detail in Section 9.1., Recommendation 1.

### **8.2 Section 61 matters in relation to site VAHR 7925-0618 (VAHR) (335 Rutherford Road, Toolamba Scarred Tree 2)**

#### **8.2.1 Can Harm to Site VAHR 7925-0618 (VAHR) (335 Rutherford Road, Toolamba Scarred Tree 2) be Avoided or Minimised?**

Section 3(a) of the *Aboriginal Heritage Act 2006* states that the principal objective of the legislation is to recognise, protect and conserve Aboriginal cultural heritage in Victoria.

During the standard assessment of the Activity Area, scarred tree VAHR 7925-0618 (335 Rutherford Road, Toolamba Scarred Tree 2) in the northeast corner of the Activity Area.

The evaluation undertaken as part of this CHMP has determined that the activity can be undertaken without harm to Aboriginal cultural heritage

#### **8.2.2 Are Specific Measures Needed for the Management of Site VAHR 7925-0618 (VAHR) (335 Rutherford Road, Toolamba Scarred Tree 2)?**

There are measures needed for the management of site VAHR 7925-0618 (335 Rutherford Road, Toolamba Scarred Tree 2), identified during the complex assessment of the Activity Area.

These management measures are discussed in detail in Section 9.2., Recommendation 1.

### **8.3 Section 61 matters in relation to site VAHR 7925-0619 (VAHR) (335 Rutherford Road, Toolamba Scarred Tree 3)**

#### **8.3.1 Can Harm to Site VAHR 7925-0619 (VAHR) (335 Rutherford Road, Toolamba Scarred Tree 3) be Avoided or Minimised?**

Section 3(a) of the *Aboriginal Heritage Act 2006* states that the principal objective of the legislation is to recognise, protect and conserve Aboriginal cultural heritage in Victoria.

During the standard assessment of the Activity Area, scarred tree VAHR 7925-0619 (335 Rutherford Road, Toolamba Scarred Tree 3) in the northeast corner of the Activity Area.

The evaluation undertaken as part of this CHMP has determined that the activity can be undertaken without harm to Aboriginal cultural heritage

#### **8.3.2 Are Specific Measures Needed for the Management of Site VAHR 7925-0619 (VAHR) (335 Rutherford Road, Toolamba Scarred Tree 3)?**

There are measures needed for the management of site VAHR 7925-0619 (335 Rutherford Road, Toolamba Scarred Tree 3), identified during the complex assessment of the Activity Area.

These management measures are discussed in detail in Section 9.3., Recommendation 1.

### **8.4 Necessary Contingency Plans**

There are several contingency plans that may be necessary during the project. In particular, it is necessary to have a contingency in place for the unexpected discovery of cultural material and for the unexpected discovery of a burial. These and other contingency plans are discussed in detail in Section 10.

## **PART 2 – CULTURAL HERITAGE MANAGEMENT RECOMMENDATIONS**

### **9.0 Specific Cultural Heritage Management Recommendations**

Based on the results of the archaeological assessment, the following management recommendations are made for land comprising the Activity Area. Please note that once this CHMP is approved these recommendations become compliance requirements.

#### **9.1 VAHR 7925-0617 (VAHR) (335 Rutherford Road, Toolamba Scarred Tree 1)**

##### **Recommendation 1 – VAHR 7925-0617 (335 Rutherford Road, Toolamba Scarred Tree 1)**

Scarred tree VAHR 7925-0617 (335 Rutherford Road, Toolamba Scarred Tree 1) has been assessed as being of high cultural value, and should be retained within the development. It is therefore recommended that:

- e) An area of land around the tree be excluded from development, extending out to the drip line of the tree (see Map 7).
- f) Once the area of land around the tree has been determined, it should be securely fenced with a post and wire fence.
- g) Signage should be placed on the fence, advising all workers that the fenced area is protected and that no construction works or machinery are to operate within this area.
- h) An arborist should be engaged, in consultation with an archaeologist and relevant Aboriginal community or RAP representative, to develop a longer term conservation plan for the tree. This plan should be submitted to the RAP or AAV as appropriate for approval and included as part of the works plan for the site. The conservation plan should involve minimal disturbance to the tree.

#### **9.2 VAHR 7925-0618 (VAHR) (335 Rutherford Road, Toolamba Scarred Tree 2)**

##### **Recommendation 1 – VAHR 7925-0617 (335 Rutherford Road, Toolamba Scarred Tree 2)**

Scarred tree VAHR 7925-0618 (335 Rutherford Road, Toolamba Scarred Tree 2) has been assessed as being of high cultural value, and should be retained within the development. It is therefore recommended that:

- e) An area of land around the tree be excluded from development, extending out to the drip line of the tree (Map 8).

- f) Once the area of land around the tree has been determined, it should be securely fenced with a post and wire fence.
- g) Signage should be placed on the fence, advising all workers that the fenced area is protected and that no construction works or machinery are to operate within this area.
- h) An arborist should be engaged, in consultation with an archaeologist and relevant Aboriginal community or RAP representative, to develop a longer term conservation plan for the tree. This plan should be submitted to the RAP or AAV as appropriate for approval and included as part of the works plan for the site. The conservation plan should involve minimal disturbance to the tree.

### **9.3 VAHR 7925-0619 (VAHR) (335 Rutherford Road, Toolamba Scarred Tree 3)**

#### **Recommendation 1 – VAHR 7925-0619 (335 Rutherford Road, Toolamba Scarred Tree 3)**

Scarred tree VAHR 7925-0619 (335 Rutherford Road, Toolamba Scarred Tree 3) has been assessed as being of high cultural value, and should be retained within the development. It is therefore recommended that:

- e) An area of land around the tree be excluded from development, extending out to the drip line of the tree (Map 9).
- f) Once the area of land around the tree has been determined, it should be securely fenced with a post and wire fence.
- g) Signage should be placed on the fence, advising all workers that the fenced area is protected and that no construction works or machinery are to operate within this area.
- h) An arborist should be engaged, in consultation with an archaeologist and relevant Aboriginal community or RAP representative, to develop a longer term conservation plan for the tree. This plan should be submitted to the RAP or AAV as appropriate for approval and included as part of the works plan for the site. The conservation plan should involve minimal disturbance to the tree.

### **9.4 General Activity Area (Other than above)**

There was no other Aboriginal cultural heritage recorded during the standard and complex assessments and consequently no specific cultural heritage recommendations are necessary.

The contingency plans contained in Section 10 of this report form part of the Cultural Heritage Management Plan and *must* be incorporated into the development or Environmental Management Plan for the project. A copy of this management plan must be held on-site at all times.



## 10.0 Contingency Procedures

The contingency procedures contained in Section 10 of this report form part of the Cultural Heritage Management Plan and *must* be incorporated into the development or Environmental Management Plan for the project. A copy of this management plan should be held on site at all times.

The approved format for a CHMP states that, in accordance with Clause 13(1) Schedule 2 of the *Aboriginal Heritage Regulations 2007*, a management plan must also include specific contingency plans for:

- (a) the resolution of any disputes between the sponsor and the YYNAC in relation to the implementation of the plan or the conduct of the activity;
- (b) reviewing compliance with the cultural heritage management plan and mechanisms for remedying non-compliance;
- (c) the management of Aboriginal cultural heritage found during the activity;
- (d) the notification, in accordance with the Act, of the discovery of Aboriginal cultural heritage during the carrying out of the activity.
- (e) reviewing compliance with the Management Plan and mechanisms for remedying non-compliance.

Contingency plans are required, even in situations where it has been assessed that there is a low probability of Aboriginal archaeological sites being located within an activity area.

### 10.1 Section 61 Matters

Section 61 of the *Aboriginal Heritage Act 2006* is concerned with the avoidance and/or minimisation of harm to Aboriginal cultural heritage, and any specific measures required for the management of Aboriginal cultural heritage during and following the activity. Section 61 matters pertaining to the sites discovered during this CHMP are discussed in Section 10. Section 61 matters pertaining to undiscovered cultural heritage that may become exposed during the activity are discussed in Section 10.7.

### 10.2 Dispute Resolution

In the event of a dispute between the Sponsor and the YYNAC. over the implementation of this CHMP, the following should occur:

- Details of the dispute should be documented by both the YYNAC and the Sponsor;
- Representatives of the Sponsor and the YYNAC. should organise a meeting as soon as possible to attempt to resolve the dispute;
- The understanding of the issue by both parties should be clearly stated by the relevant representatives during the course of the meeting;

- If desired by both parties, external mediation by a third party may occur during the meeting;
- The objective of the meeting should be to discuss and arrive at an understanding of the matter being disputed and reach a negotiated settlement of the dispute. This may include a formal protocol between the Sponsor and the YYNAC; and
- The resolution to the dispute should be recorded in writing and signed off on by both parties.

### **10.3 Discovery of Indigenous cultural heritage during works**

#### **10.3.1 Unexpected discovery of Human Remains**

Although it is highly unlikely that Indigenous human burials will occur within the activity area, the consultants are obliged to provide advice in the event that a human burial is discovered.

If any suspected human remains are found during any activity, works must cease. The Victoria Police and the State Coroner's Office should be notified immediately. If there are reasonable grounds to believe that the remains are Aboriginal, the Department of Sustainability and Environment's Emergency Coordination Centre must be contacted immediately on 1300 888 544.

Any such discovery at the activity area must follow these steps.

##### 1. Discovery:

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

##### 2. Notification:

- Once suspected human skeletal remains have been found, the Coroners Office and the Victoria Police must be notified immediately;
- If there is reasonable grounds to believe that the remains could be Aboriginal, the DSE Emergency Co-ordination Centre must be immediately notified on 1300 888 544; and
- The YYNAC has requested that they also be independently informed of the discovery.
- All details of the location and nature of the human remains must be provided to the relevant authorities.
- If it is confirmed by these authorities that the discovered remains are Aboriginal skeletal remains, the person responsible for the activity must report the existence of the human remains to the Secretary, DVC in accordance with s.17 of the Act.

##### 3. Impact Mitigation or Salvage:

- The Secretary, after taking reasonable steps to consult with any Aboriginal person or body with an interest in the Aboriginal human remains, will determine the appropriate course of action as required by s.18(2)(b) of the Act.
- An appropriate impact mitigation or salvage strategy as determined by the Secretary must be implemented (This will depend on the circumstances in which the remains were found, the number of burials found and the type of burials and the outcome of consultation with any Aboriginal person or body);

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

#### 4. Curation and further analysis:

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

#### 5. Reburial:

- Any reburial site(s) must be fully documented by an experienced and qualified archaeologist, clearly marked and all details provided to AAV;
- The YYNAC should be involved in any reburial process

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

### **10.3.2 Unexpected discovery of isolated or dispersed Indigenous cultural heritage**

The following procedure must occur in the event of the discovery of isolated or dispersed cultural heritage:

- The YYNAC should be contacted in the first instance. The cultural heritage advisor should facilitate the involvement of the RAP. This would include an on-site investigation and assessment of the significance of the cultural heritage. In the event that cultural heritage is identified, the following should occur:
- The location of the suspected Aboriginal cultural heritage should be fenced off with temporary webbing.
- All works should cease within 10m of the general area where the suspected Aboriginal cultural heritage is located and a cultural heritage advisor notified of the discovery as soon as possible.
- Work may continue in other parts of the Activity Area, away from the 10 metre buffer around the webbing.
- The suspected Aboriginal cultural heritage should be examined by a qualified cultural heritage advisor, a relevant representative of the



YYNAC and a representative of the sponsor. The cultural heritage advisor should complete site records and advise on management strategies for the feature in consultation with the YYNAC;

- Within a period of 3 working days a decision/recommendation must be made by the cultural heritage advisor, in consultation with the YYNAC and the sponsor, on a process to be followed to manage or salvage the Aboriginal cultural heritage in a manner which complies with the *Aboriginal Heritage Regulations 2007* and which is culturally appropriate.
- Works may recommence within the area of exclusion:
  - When the appropriate protective measures have been taken;
  - When the relevant Aboriginal cultural heritage records have been updated and/or completed;

If the site cannot be retained within the development, then the site should be salvaged using an appropriate methodology as defined in the AAV Guide to Preparing Cultural Heritage Management Plans 2007.

### **10.3.3 Unexpected discovery of stratified occupation deposits**

The following procedure must occur in the event of the discovery of stratified occupation deposits:

- In the event that a RAP has been appointed, the RAP should be contacted in the first instance. The cultural heritage advisor should facilitate the involvement of the RAP. This would include an on-site investigation and assessment of the significance of the cultural heritage. In the event that a RAP has not yet been appointed, the following should occur:
  - The location of the suspected Aboriginal cultural heritage should be fenced off with temporary webbing.
  - All works should cease within 10m of the general area where the suspected Aboriginal cultural heritage is located and a cultural heritage advisor notified of the discovery as soon as possible.
  - Work may continue in other parts of the Activity Area, away from the 10 metre buffer around the webbing.
  - The suspected Aboriginal cultural heritage should be examined by a qualified cultural heritage advisor, a relevant Aboriginal community representative and a representative of the sponsor. The cultural heritage advisor should complete site records and advise on management strategies for the feature;
  - Within a period of 3 working days a decision/recommendation must be made by the cultural heritage advisor, in consultation with the sponsor

and relevant Aboriginal community representative, on a process to be followed to manage or salvage the Aboriginal cultural heritage in a manner which complies with the *Aboriginal Heritage Regulations 2007* and which is culturally appropriate.

- Works may recommence within the area of exclusion:
  - When the appropriate protective measures have been taken;
  - When the relevant Aboriginal cultural heritage records have been updated and/or completed;

If the site cannot be retained within the development, then the site should be salvaged using an appropriate methodology as defined in the *AAV Guide to Preparing Cultural Heritage Management Plans 2007*.

#### **10.3.4 Unexpected discovery of a coastal shell midden**

Given the Activity Area is not located on any part of the Victorian coastline it is extremely unlikely that coastal shell middens will be located during works. Nevertheless the consultants are obliged to provide advice in the event that such a site is discovered.

The following procedure must occur in the event of the discovery of a coastal shell midden:

- In the event that a RAP has been appointed, the RAP should be contacted in the first instance. The cultural heritage advisor should facilitate the involvement of the RAP. This would include an on-site investigation and assessment of the significance of the cultural heritage. In the event that a RAP has not yet been appointed, the following should occur:
  - The location of the suspected midden should be fenced off with temporary webbing.
  - All works should cease within 10m of the general area where the suspected midden is located and a cultural heritage advisor notified of the discovery as soon as possible.
  - Work may continue in other parts of the activity area, away from the 10 metre buffer around the webbing.
  - The suspected Aboriginal cultural heritage should be examined by a qualified cultural heritage advisor, a relevant Aboriginal community representative and a representative of the sponsor. The cultural heritage advisor should complete site records and advise on management strategies for the feature;
  - Within a period of 3 working days a decision/recommendation must be made by the cultural heritage advisor, in consultation with the sponsor and relevant Aboriginal community representative, on a process to be

followed to manage or salvage the Aboriginal cultural heritage in a manner which complies with the *Aboriginal Heritage Regulations 2007* and which is culturally appropriate.

- Works may recommence within the area of exclusion:
  - When the appropriate protective measures have been taken;
  - When the relevant Aboriginal cultural heritage records have been updated and/or completed;

If a coastal shell midden was located within the Activity Area it would be considered an extremely rare occurrence and as such should be retained within the development.

### **10.3.5 Unexpected discovery of a fresh water shell midden**

Although it is unlikely that fresh water shell middens will occur within the Activity Area, the consultants are obliged to provide advice in the event that such a site is discovered.

The following procedure must occur in the event of the discovery of a fresh water shell midden:

- In the event that a RAP has been appointed, the RAP should be contacted in the first instance. The cultural heritage advisor should facilitate the involvement of the RAP. This would include an on-site investigation and assessment of the significance of the cultural heritage. In the event that a RAP has not yet been appointed, the following should occur:
  - The location of the suspected midden should be fenced off with temporary webbing.
  - All works should cease within 10m of the general area where the suspected midden is located and a cultural heritage advisor notified of the discovery as soon as possible.
  - Work may continue in other parts of the activity area, away from the 10 metre buffer around the webbing.
  - The suspected Aboriginal cultural heritage should be examined by a qualified cultural heritage advisor, a relevant Aboriginal community representative and a representative of the sponsor. The cultural heritage advisor should complete site records and advise on management strategies for the feature;
  - Within a period of 3 working days a decision/recommendation must be made by the cultural heritage advisor, in consultation with the sponsor and relevant Aboriginal community representative, on a process to be followed to manage or salvage the Aboriginal cultural heritage in a manner which complies with the *Aboriginal Heritage Regulations 2007* and which is culturally appropriate.

- Works may recommence within the area of exclusion:
  - When the appropriate protective measures have been taken;
  - When the relevant Aboriginal cultural heritage records have been updated and/or completed;

If a fresh water shell midden was located within the Activity Area it would be considered an extremely rare occurrence and as such every effort should be made to retain the site within the development. If the site cannot be retained within the development, then the site should be salvaged using an appropriate methodology as defined in the AAV Guide to Preparing Cultural Heritage Management Plans 2007.

### **10.3.6 Unexpected discovery of a mound site**

Neither the standard or complex assessment identified any mound sites within the Activity Area. Although it is highly unlikely that a mound site will occur within the Activity Area, the consultants are obliged to provide advice in the event that such a site is discovered.

The following procedure must occur in the event of the discovery of a mound site:

- In the event that a RAP has been appointed, the RAP should be contacted in the first instance. The cultural heritage advisor should facilitate the involvement of the RAP. This would include an on-site investigation and assessment of the significance of the cultural heritage. In the event that a RAP has not yet been appointed, the following should occur:
  - The location of the suspected mound site should be fenced off with temporary webbing.
  - All works should cease within 10m of the general area where the suspected mound is located and a cultural heritage advisor notified of the discovery as soon as possible.
  - Work may continue in other parts of the activity area, away from the 10 metre buffer around the webbing.
  - The suspected Aboriginal cultural heritage should be examined by a qualified cultural heritage advisor, a relevant Aboriginal community representative and a representative of the sponsor. The cultural heritage advisor should complete site records and advise on management strategies for the feature;
  - Within a period of 3 working days a decision/recommendation must be made by the cultural heritage advisor, in consultation with the sponsor and relevant Aboriginal community representative, on a process to be followed to manage or salvage the Aboriginal cultural heritage in a

manner which complies with the *Aboriginal Heritage Regulations 2007* and which is culturally appropriate.

- Works may recommence within the area of exclusion:
  - When the appropriate protective measures have been taken;
  - When the relevant Aboriginal cultural heritage records have been updated and/or completed;

If a mound site was located within the Activity Area it would be considered a rare occurrence and as such every effort should be made to retain the site within the development. If the site cannot be retained within the development, then the site should be salvaged using an appropriate methodology as defined in the AAV Guide to Preparing Cultural Heritage Management Plans 2007.

### **10.3.7 Unexpected discovery of a quarry**

Neither the standard or complex assessment identified any quarry sites within the Activity Area. Although it is highly unlikely that quarry sites will occur within the Activity Area, the consultants are obliged to provide advice in the event that such a site is discovered.

The following procedure must occur in the event of the discovery of a quarry site:

- In the event that a RAP has been appointed, the RAP should be contacted in the first instance. The cultural heritage advisor should facilitate the involvement of the RAP. This would include an on-site investigation and assessment of the significance of the cultural heritage. In the event that a RAP has not yet been appointed, the following should occur:
  - The location of the suspected quarry site should be fenced off with temporary webbing.
  - All works should cease within 10m of the general area where the suspected mound is located and a cultural heritage advisor notified of the discovery as soon as possible.
  - Work may continue in other parts of the Activity Area, away from the 10 metre buffer around the webbing.
  - The suspected Aboriginal cultural heritage should be examined by a qualified cultural heritage advisor, a relevant Aboriginal community representative and a representative of the sponsor. The cultural heritage advisor should complete site records and advise on management strategies for the feature;
  - Within a period of 3 working days a decision/recommendation must be made by the cultural heritage advisor, in consultation with the sponsor and relevant Aboriginal community representative, on a process to be

followed to manage or salvage the Aboriginal cultural heritage in a manner which complies with the *Aboriginal Heritage Regulations 2007* and which is culturally appropriate.

- Works may recommence within the area of exclusion:
  - When the appropriate protective measures have been taken;
  - When the relevant Aboriginal cultural heritage records have been updated and/or completed;

If a quarry site was located within the Activity Area it would be considered a significant occurrence and as such every effort should be made to retain the site within the development. If the site cannot be retained within the development, then the site should be salvaged using an appropriate methodology as defined in the *AAV Guide to Preparing Cultural Heritage Management Plans 2007*.

### **10.3.8 Unexpected discovery of a stone arrangement**

Neither the standard or complex assessment identified any stone arrangements within the Activity Area. Although it is highly unlikely that stone arrangement sites will occur within the Activity Area, the consultants are obliged to provide advice in the event that such a site is discovered.

The following procedure must occur in the event of the discovery of a stone arrangement site:

- In the event that a RAP has been appointed, the RAP should be contacted in the first instance. The cultural heritage advisor should facilitate the involvement of the RAP. This would include an on-site investigation and assessment of the significance of the cultural heritage. In the event that a RAP has not yet been appointed, the following should occur:
  - The location of the suspected stone arrangement site should be fenced off with temporary webbing.
  - All works should cease within 10m of the general area where the suspected mound is located and a cultural heritage advisor notified of the discovery as soon as possible.
  - Work may continue in other parts of the Activity Area, away from the 10 metre buffer around the webbing.
  - The suspected stone arrangement should be examined by a qualified cultural heritage advisor, a relevant Aboriginal community representative and a representative of the sponsor. In addition, an anthropologist should be engaged to provide, if possible, further information pertaining to the stone arrangement. The cultural heritage advisor should complete site records and advise on management strategies for the feature;

- Within a period of 3 working days a decision/recommendation must be made by the cultural heritage advisor, in consultation with the sponsor and relevant Aboriginal community representative, on a process to be followed to manage the site in a manner which complies with the *Aboriginal Heritage Regulations 2007* and which is culturally appropriate.
- Works may recommence within the area of exclusion:
  - When the appropriate protective measures have been taken;
  - When the relevant Aboriginal cultural heritage records have been updated and/or completed;

If a stone arrangement was located within the Activity Area it would be considered a rare and significant occurrence and as such should be retained within the development.

### **10.3.9 Unexpected discovery of other Indigenous cultural heritage**

The following procedure must occur in the event of the discovery of any other suspected Aboriginal Cultural Heritage:

- In the event that a RAP has been appointed, the RAP should be contacted in the first instance. The cultural heritage advisor should facilitate the involvement of the RAP. This would include an on-site investigation and assessment of the significance of the cultural heritage. In the event that a RAP has not yet been appointed, the following should occur:
  - The location of the suspected Aboriginal cultural heritage should be fenced off with temporary webbing.
  - All works should cease within 10m of the general area where the suspected Aboriginal cultural heritage is located and an cultural heritage advisor notified of the discovery as soon as possible.
  - Work may continue in other parts of the Activity Area, away from the 10 metre buffer around the webbing.
  - The suspected Aboriginal cultural heritage should be examined by a qualified cultural heritage advisor, a relevant Aboriginal community representative and a representative of the sponsor. The cultural heritage advisor should complete site records and advise on management strategies for the feature;
  - Within a period of 3 working days a decision/recommendation must be made by the cultural heritage advisor, in consultation with the sponsor and relevant Aboriginal community representative, on a process to be followed to manage or salvage the Aboriginal cultural heritage in a manner which complies with the *Aboriginal Heritage Regulations 2007* and which is culturally appropriate.

- Works may recommence within the area of exclusion:
  - When the appropriate protective measures have been taken;
  - When the relevant Aboriginal cultural heritage records have been updated and/or completed;

If the feature cannot be retained within the development, then the feature should be salvaged using an appropriate methodology as defined in the AAV Guide to Preparing Cultural Heritage Management Plans 2007.

## **10.8 Reporting discovery of Indigenous cultural heritage during works**

In order to provide a system for notification of the discovery of Aboriginal cultural heritage during construction works, it will first be necessary to provide an induction to any future project managers and construction workers about the discovery of Aboriginal cultural heritage on site. There will also need to be a system of reporting any possible Aboriginal cultural heritage items which are discovered which must be built into any development or environmental management plan (EMP) for the site. Some recommendations for notifying the discovery of Aboriginal cultural heritage are contained below.

- A site induction or inductions should be held with project managers and any construction workers on site. The purpose of the inductions will be to describe items of Aboriginal cultural heritage to personnel engaged in construction, to create an awareness of their cultural value and to inform personnel about the procedure for reporting suspected Aboriginal cultural heritage.

This induction could be presented by a cultural heritage advisor in association with a relevant Aboriginal person or a RAP representative, if a RAP has been appointed by the time works commence.

- The project manager should appoint a qualified cultural heritage advisor for the duration of the project, who will be available to advise and act on the discovery of suspected Aboriginal cultural heritage. The cultural heritage advisor will need to:
  - Be available to visit the site and inspect any items of suspected Aboriginal cultural heritage that may be found during any development.
  - Document any items of Aboriginal cultural heritage that are found during any development and report the sites to AAV by means of completing an AAV site card and registering the site.
  - Complete the site documentation in association with a representative of the Registered Aboriginal Party (RAP), should one exist for the Activity Area at the time of works.
  - Advise on appropriate treatment or salvage of any Aboriginal cultural heritage.



- Provide adequate reporting on the treatment of any Aboriginal cultural heritage to standards required by AAV.

### 10.9 Management of Aboriginal Cultural Heritage discovered during works

In any case where previously unrecorded Aboriginal cultural material is located during the assessment, it will be the responsibility of the Cultural Heritage Advisor to:

- Catalogue the Aboriginal cultural heritage;
- Label and package the Aboriginal cultural heritage with reference to provenance; and
- With the relevant community representative, arrange storage of the Aboriginal cultural heritage in a secure location with copies of the catalogue and assessment documentation.
- Custody of any Aboriginal cultural heritage material identified during the activity should be ascribed in the following order of priority: the RAP (if one has been appointed); registered Native Title Holder; Native Title party; relevant Aboriginal persons with traditional or familiar links; relevant Aboriginal body or organisation with historical or contemporary links; the owner of the land; Museum Victoria.

### 10.10 Reviewing Compliance with the Plan

The sponsor must ensure that compliance with this plan is reviewed. A review process must be incorporated in the Environmental Management Plan or similar document for the project. It is recommended that each of the management actions recommended in Section 10 above be listed in the Environmental Management Plan. There should be a mechanism included in the plan (such as a checklist or database) to indicate when the recommended actions for Aboriginal cultural heritage have been carried out. The project manager should be responsible for maintaining this list. Any associated documentation which accompanies the actions should be recorded on the checklist or database.

The record of compliance must be maintained by the project manager at all times and must be available for inspection by either an Inspector under the Act or other representative of the Secretary.

It is illegal to harm cultural heritage outside of the recommendations contained within this management plan. Inspectors from Aboriginal Affairs Victoria may conduct CHMP compliance audits.

A checklist is provided below that specifies what measures will be undertaken to review compliance with the CHMP. The site manager must verify that the measures specified below have been undertaken.

<b>CHECKLIST FOR REVIEWING COMPLIANCE</b>		
	<b>Yes</b>	<b>No</b>
<b>Prior to works occurring</b>		
1: Have the contingency plans contained in Section 10 of this		

report been be incorporated into the development or JEHA (Job Environment & Heritage Assessment) for the project?		
<b>Identification of Aboriginal Cultural Heritage</b>		
1: Has all activity within 10m ceased if 1-5 artefacts have been located or within the general area if a dense artefact scatter, <i>in situ</i> deposits, shell midden, hearth feature, stone or earth feature has been located?		
2: Has the Secretary been notified?		
3: Has a Cultural Heritage Advisor been notified?		
4: Have the artefacts been left in place?		
5: Has the find/s been protected (e.g. with fencing) if required?		
6: In relation to suspected human remains, have the Coroner's Office and Victoria Police been notified?		
7: Has an appropriate mitigation/salvage strategy been developed?		
8: Has the mitigation/salvage works been implemented?		
9: Have the salvaged finds/remains been treated in accordance with the direction of the RAP?		
<b>Reburial Procedure: Human Remains</b>		
1: Has a suitably qualified archaeologist been engaged to fully document the reburial site?		
2: Has the reburial site been clearly marked?		
3: Have all details been provided to AAV?		
4: Has a strategy been developed to ensure no further disturbance (such as Section 173 in the Planning and Provision Act)?		
<b>Changes to Activity</b>		
1: Has statutory approval been obtained for any changes to the activity?		

Review of this CHMP can be undertaken at any time by project delegates representing the Sponsor, or an agreed independent reviewer, to ensure that all parties are complying with the terms of this CHMP.

To ensure compliance with the terms of this CHMP The site manager must verify that the measures specified in the above checklist have been undertaken. If any of the following breaches occur the site manager must action the relevant remedy. The aim of this process should be to resolve non-compliance issues by immediately actioning processes to remedy non-compliance through consultation with the Indigenous representatives, and the cultural heritage advisor.

If mechanisms for remedying non-compliance are not actioned and resolution cannot be reached then ultimately, the Minister may order a cultural heritage audit to be carried out. Details of cultural heritage audits can be obtained from Part 6, Division 1 of the Aboriginal Heritage Act 2006.

Potential Breach	Remedy
<b>Prior to works occurring</b>	
1: Contingency plans contained in Section 9 of this report have not been incorporated into the development or	The site manager must ensure that the Contingency plans are incorporated within 48 hours. All employees must be made aware of

JEHA (Job Environment & Heritage Assessment) for the project.	the contingency requirements.
<b>During Development</b>	
1: Activity has not ceased within 10m if Aboriginal cultural heritage has been located.	Activity should cease immediately within 10m of the find and the Secretary notified within 48 hours. A cultural heritage advisor should immediately be notified to assess the find.
2: The Secretary has not been notified of any Aboriginal cultural heritage	Notify the Secretary within 48 hours
3: Harm to Aboriginal cultural heritage has occurred?	<p>Work within 10m of the Aboriginal cultural heritage must cease immediately. The sponsor must notify the Secretary with 48 hours. The sponsor must immediately notify a cultural heritage advisor to assess the level of harm and Aboriginal representatives in the following order of priority: the RAP (if one has been appointed); registered Native Title Holder; Native Title party; relevant Aboriginal persons with traditional or familiar links; relevant Aboriginal body or organisation with historical or contemporary links. The sponsor and the RAP or Aboriginal representatives should undertake the following process:</p> <ul style="list-style-type: none"> <li>• Details of the harm should be documented by the sponsor, the cultural advisor and Indigenous representatives;</li> <li>• A meeting should be held within 48 hours to attempt to mitigate further harm;</li> <li>• The understanding of the issue by both parties should be clearly stated by the relevant representatives during the course of the meeting;</li> <li>• The parties should reach a resolution;</li> <li>• The objective of the meeting should be to discuss and arrive at an understanding of the matter being disputed and reach a negotiated settlement of the dispute. This may include a formal protocol between the Sponsor and Aboriginal representatives ; and</li> <li>• The resolution to the dispute should be</li> </ul>

	recorded in writing and signed off on by both parties.
4. Activity has not ceased if potential skeletal remains have been located.	Work within 10m of the Aboriginal cultural heritage must cease immediately. The sponsor must immediately action the procedure outlined in Contingency 10.3.1.

It is illegal to harm cultural heritage outside of the recommendations contained within this management plan. Inspectors from Aboriginal Affairs Victoria may conduct CHMP compliance audits.

## **11.0 Other Considerations**

### **11.1 Communication**

The Project Manager and any personnel involved with supervision of future construction must read the CHMP, and be aware of the legal requirements of the CHMP and contingency procedures concerning Indigenous heritage within the Activity Area. The Project Manager (or other relevant supervisory staff) must be responsible for implementing any conditions contained in the CHMP.

The Project Manager should set in place internal processes of communication, which ensure that they are notified prior to any contractors conducting works (including archaeological contractors) at any of the archaeological sites on the property.

## Bibliography

Aboriginal Heritage Act 2006

Aboriginal Heritage Regulations 2007

Aboriginal Affairs Victoria 2007a

Guide to Preparing Aboriginal Cultural Heritage Management Plans.

Australia ICOMOS 1999

Australia ICOMOS Charter for the Conservation of Cultural Significance (The Burra Charter).

Barwick, D. 1984

'Mapping the Past: An Atlas of Victorian Clans' *Aboriginal History*, 8. 1-2: 101-131.

Bird, C.F.M. 1992

Archaeology of the Goulburn River Basin. Unpublished report to AAV.

Blake, B.J. 1991

'Woiworong. The Melbourne Language' in R.M.W Dixon & B.J. Blake *The Handbook of Australian Languages Vol 4*: 31-105. Oxford University Press: Australia.

Blake, B.J., and Dixon, R.M.W 1991

*The Handbook of Australian Languages, Volume 4*. Oxford University Press, Melbourne.

Bowdler, S. 1981

'Unconsidered trifles? Cultural resource management, environmental impact statements and archaeological research in New South Wales', *Australian Archaeology* 12, pp. 123-133.

Clark, I.D. 1990

*Aboriginal Languages and Clans: an Historical Atlas of Western and Central Victoria*. Monash Publications in Geography No. 7.

Clark, I D. 1997

*Box Ironbark Forests and Woodlands Special Investigation*. Report for Land Conservation Council. Heritage Matters.

Clark, V. 2002

Goulburn Valley Highway, Nagambie Bypass, Stage 1 Cultural heritage Study, Unpublished Report to VicRoads

Clark, V, M. Thomson and F. George 2002

Goulburn Valley Highway, Nagambie Planning Study Bypass, Stage 2 Cultural heritage Study, Unpublished Report to VicRoads.

**Cochrane, G.W, G. W. Quick & D. Spencer-Jones 1995.**

***Introducing Victorian Geology* Geological Society of Victoria (Victorian Division), Melbourne.**

Cotter, R. 2001

Boon wurrung: People of the Port Phillip District. Lavender Hill Multimedia, Red Hill, Victoria.

Du Cros, H. and P. Watt 1993a

A Preliminary Assessment of Archaeological and Historical Values of Two Proposed Route Options for the Goulburn Valley Highway, Victoria. A report to VicRoads.

Du Cros, H. and P. Watt 1993b

An Archaeological Survey of the Goulburn Valley Highway Locksley Road to Seymour Exit, Victoria. A report to VicRoads.

Gaynor, P.J 2004

'Three Seasons of Cultivating Stone Artefacts with Farming Implements in Northwest NSW'. <http://www.archeo.biz/fxp.html>, accessed 1/4/2009.

Geological Society of Australia, Victorian Division 1993

Geology of Victoria. Eds. J. G. Douglas & J.A. Ferguson. McPherson's Printing Group, Melbourne.

George, F. 2003

Goulburn Valley Highway, Nagambie Planning Study, Stage 3 Cultural heritage Study: Sub-surface Investigations of Aboriginal Cultural Heritage Sites AAV 7924/374, 376, 387 and 388, Unpublished Report to VicRoads.

Reed, J.1993

Aboriginal Myths, Legends and Fables. Reed/William Heinemann, Chatswood.

Rhodes, D. and M. Barker 2008.

Blayneys Lane Residential Development. Unsubmitted CHMP 10344.

Russell, L. 1995

Nagambie to Seymour and Winton to Winton T.O. Optical Cables: An Assessment of Potential Impact on Cultural Heritage Sites. A Report to Telecom Australia.

Smith, I.G. W. 1970

Accent on Axedale. Centenary and Back to Axedale Committee.

State Library of Victoria

Plan of Allotments in the Parish of Tabilk 1891

Sullivan, S. and S. Bowdler (eds.) 1984

Site surveys and Significance Assessment in Australian Archaeology, Proceedings of the 1981 Springwood conference on Australian Prehistory, Research School of Pacific Studies, Australian National University, Canberra.

Viridians Biological Databases 2005

Atlas of Victorian Plants and Animals

Zola, N. & B. Gott 1990  
Koorie Plants, Koorie People. Koorie Heritage Trust, Melbourne.

### **Websites**

DSE Geovic Geological Mapper (Accessed April 2009)  
<http://nremap-sc.nre.vic.gov.au/MapShare.v2/imf.jsp?site=em>

DSE Biodiversity Interactive Mapper (Accessed April 2009)  
[http://nremap-sc.nre.vic.gov.au/MapShare.v2/imf.jsp?site=bim\\_external](http://nremap-sc.nre.vic.gov.au/MapShare.v2/imf.jsp?site=bim_external)

DSE Catchment Information Mapper (Accessed April 2009)  
<http://nremap-sc.nre.vic.gov.au/MapShare.v2/imf.jsp?site=cim>



## **Appendix 1: CHMP Notification**

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

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

## SECTION 1 – Sponsor Information

Name of Sponsor: Mr. Stuart Red  
Business Name: Herdstown P/L  
Postal Address: 255 Toolamba - Rushworth Rd, Toolamba  
Telephone Number: \_\_\_\_\_ Fax number: \_\_\_\_\_  
Mobile: 0418 135 058  
Email Address: herdsto@bigpond.net.au

## SECTION 2 – Description of proposed activity and location

- Provide a project name: \_\_\_\_\_
- List the relevant municipal district/s (i.e. Local Council or Shire): Greater Shepparton City Council
- Clearly identify the proposed activity for which the cultural heritage management plan is to be prepared (i.e. mining, road construction, housing subdivision):  
residential subdivision
- Clearly identify the area (such as listing cadastral information, attaching a copy of a title search, or indicating the street address):  
335 Rutherford Rd. Toolamba  
copy of Certificate of Title attached.
- Attach a map (to scale, with a north arrow and indicating the municipal district - if any) that clearly identifies the area and boundaries in respect of which the cultural heritage management plan is to be prepared.
  - Please ensure the map refers to existing roads and features, rather than proposed roads and features.
  - Please ensure the map has the activity area outlined on it.
  - The map should have a legend, north arrow, scale, at least 3 readily identifiable geographical locations (such as road intersections, parcel boundaries, or road/river crossings), and should state the map's projection.

## SECTION 3 – Cultural Heritage Advisor

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

Matthew Barber Heritage Insight P/L matthewbarber@heritageinsight.com  
Name Company (if any) Email address

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

Start date: 4/8/2010 Finish date: 1/12/2010

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

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

What is the High Impact Activity listed in the regulations? multi lot residential subdivision

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

- Other reasons (Voluntary)
- An Environmental Effects Statement is required
- A Cultural Heritage Management Plan is required by the Minister for Aboriginal Affairs

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

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

Yorta Yorta Nation Aboriginal Corporation

**SECTION 7 – Signature of Sponsor**

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

Signed: [Signature]  
[Sponsor]

Date: 218/2010

**SECTION 8 – Notification Checklist**

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

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

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

**Notes:**

- Ensure that any relevant registered Aboriginal party/s is also notified. A copy of this notice may be used for this purpose.  
(A registered Aboriginal party is allowed up to 14 days to provide a written response to a notification specifying whether or not it intends to evaluate the management plan)
- In addition to notifying the Deputy Director and any relevant registered Aboriginal party/s, a sponsor must also notify any owner and/or occupier of any land within the area to which the management plan relates. A copy of this notice may be used for this purpose.

**REGISTER SEARCH STATEMENT**

Land Victoria

Page 1 of 1

Security no : 124025344920B

Volume 05499 Folio 735  
Produced 14/03/2008 03:41 pm

**LAND DESCRIPTION**

Lots 1,2,3,4,5 and 6 on Title Plan 825016W (formerly known as part of Crown Allotment 232 Parish of Murchison North, Crown Allotments 2 and 6A, part of Crown Allotment 7, Crown Allotment 32, part of Crown Allotment 59 Parish of Toolamba).  
PARENT TITLE Volume 02993 Folio 581  
Created by instrument 1359302 12/07/1928

**REGISTERED PROPRIETOR**

Estate Fee Simple  
Sole Proprietor  
HERDSTOWN PTY LTD of 180 BITCON ROAD TOOLAMBA VIC 3614  
AE312021W 26/04/2006

**ENCUMBRANCES, CAVEATS AND NOTICES**

MORTGAGE AE312022U 26/04/2006  
NATIONAL AUSTRALIA BANK LTD

Any encumbrances created by Section 98 Transfer of Land Act 1958 or Section 24 Subdivision Act 1988 and any other encumbrances shown or entered on the plan set out under DIAGRAM LOCATION below.

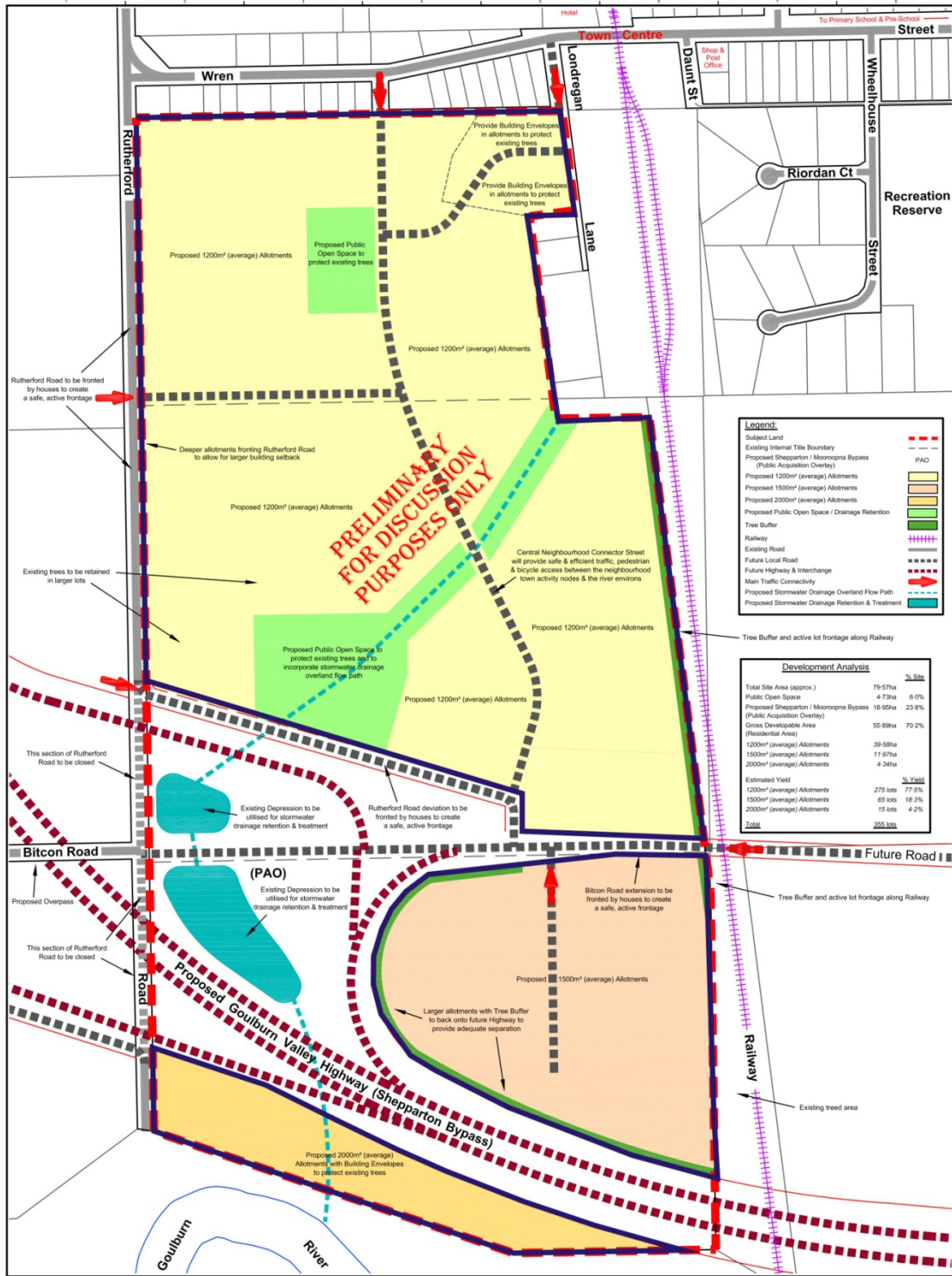
**DIAGRAM LOCATION**

SEE TP825016W FOR FURTHER DETAILS AND BOUNDARIES

**ACTIVITY IN THE LAST 125 DAYS**

NIL

STATEMENT END



**Legend:**

- Subject Land
- Existing Internal Title Boundary
- Proposed Shepparton / Monopina Bypass (Public Acquisition Overlay)
- Proposed 1200m<sup>2</sup> (average) Allotments
- Proposed 1500m<sup>2</sup> (average) Allotments
- Proposed 2000m<sup>2</sup> (average) Allotments
- Proposed Public Open Space / Drainage Retention
- Tree Buffer
- Railway
- Existing Road
- Future Local Road
- Future Highway & Interchange
- Main Traffic Connectivity
- Proposed Stormwater Drainage Overland Flow Path
- Proposed Stormwater Drainage Retention & Treatment

**Development Analysis**

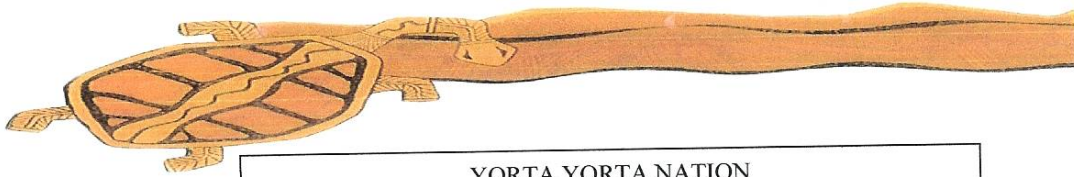
	% Site
Total Site Area (Approx.)	79.57ha
Public Open Space	4.73ha 6.0%
Proposed Shepparton / Monopina Bypass (Public Acquisition Overlay)	18.95ha 23.9%
Gross Developable Area (Residential Area)	55.89ha 70.2%
1200m <sup>2</sup> (average) Allotments	39.58ha
1500m <sup>2</sup> (average) Allotments	11.97ha
2000m <sup>2</sup> (average) Allotments	4.34ha
Estimated Yield	% Total
1200m <sup>2</sup> (average) Allotments	275 lots 77.5%
1500m <sup>2</sup> (average) Allotments	65 lots 18.3%
2000m <sup>2</sup> (average) Allotments	15 lots 4.2%
<b>Total</b>	<b>355 lots</b>

**Chris Smith & ASSOCIATES**  
 SPECIALISING IN SUBDIVISION PROJECT MANAGEMENT AND DESIGN  
 11 GLENDAL STREET SHEPPARTON Ph: 0373297730 Fax: 0373297495  
 Designed: Col Rogers 22nd March, 2010  
 Drawn: Col Rogers 22nd March, 2010  
 Checked: Gary Steigpenberger  
 Approved:

Activity Area



**Appendix 2: YYNAC Notice of Intent to Evaluate**



YORTA YORTA NATION  
ABORIGINAL CORPORATION.

CRN MALONEY & SHIER STREET, BARMAH, 3639.  
P.O. BOX 27, NATHALIA, 3638,  
VICTORIA, AUSTRALIA.

TELEPHONE: (03) 5869 3353, (03) 5869 3380  
FAX: (03) 5869 3352  
EMAIL: [chcoordinator@yynac.com.au](mailto:chcoordinator@yynac.com.au)

Stuart Rea  
Herdtown P/L  
255 Toolamba-Rushworth Rd  
TOOLAMBA

23rd August 2010

Dear Mr Rea,

Notice of Intent to prepare a Cultural Heritage Management Plan for the  
**Rutherford Rd Residential Subdivision**

Yorta Yorta Nation Aboriginal Corporation has received the Notice of Intent to prepare a Cultural Heritage Management Plan for proposed residential subdivision on 9<sup>th</sup> August 2010.

The Yorta Yorta Nation Aboriginal Corporation is the Registered Aboriginal Party under the Victorian Aboriginal Cultural Act 2006. It will evaluate the management plan for the proposed residential subdivision.

The cost for the evaluation of the management plan is as prescribed in the Victorian Aboriginal Cultural Act 2006 Regulations; costs for consultations will need to be negotiated with the Yorta Yorta Nation Aboriginal Corporation.

Attached is the Yorta Yorta Nation Aboriginal Corporations' Cultural Heritage Protocols, Conditions and Fees for Service.

The Yorta Yorta Nation Aboriginal Corporation would request a meeting with the Project Sponsor and the Heritage Advisor before any works are to commence.

Yours Sincerely,

**KEICHA DAY**  
Cultural Heritage Coordinator  
Email: [chcoordinator@yynac.com.au](mailto:chcoordinator@yynac.com.au)  
Phone: 03) 58 69 33 53  
Mobile: 0488 213 111

## Appendix 3: Glossary



## GLOSSARY

**Archaeology** The study of cultural remains from past cultures and generations.

**Artefact Scatter** The material remains of past Aboriginal people's activities. Usually contain stone artefacts, but other material may also be present, including charcoal, animal bone, shell and ochre. An artefact scatter is usually represented by a single stone flake or a concentration of flaked stone pieces (or fragments).

**Assemblage** A collection of artefacts that are derived from the same site.

**Backed Blade** forms part of the small tool tradition. They and are characterised by unidirectional or bidirectional retouch found along a lateral margin, thought to be blunt for hafting (Holdaway & Stern 2004: 260).

**Blade** A flake that is twice as long as it is wide.

**Burial Human** remains, normally found as concentrations of human bones or teeth, exposed by erosion or earthworks. They are sometimes associated with charcoal or ochre, although shell, animal bone and stone tools may also be present. Tend to be located in soft soils and sand, although can occur in rock shelters, caves and dead trees.

**Chert** compact, fine-grained rock made of crypto-crystalline silica and can occur in a variety of colours, usually red, green or black.

**Core** a specimen of rock that has undergone a process of reduction through the removal of a number of flakes and as a result they have negative flake scars. Cores can contain a single platform, have two platforms or have had flakes removed in multi-directions.

**Cortex** the original surface of a mineral or rock that has been subject to weathering by the elements.

**Cultural Material** any material remains which are produced by human activity.

**Debitage** Includes cores, flakes, and flaked pieces involved in the reduction process.

**Excavation** A controlled means of soil disturbance (digging) allowing for detailed recording of the soil profile, features and artefacts exposed.

**Flake** A stone artefact that contains characteristics such as a the presence of a platform, bulb of percussion and termination which reveal that the stone has been struck from a core and is the result of stone working (Holdaway & Stern 2004: 5).

**Flaked Piece** Small fragments of stone that have been removed from flakes resulting in tool maintenance or tool production (Holdaway & Stern 2004: 17). Flaked pieces do not display the characteristics evident in a complete flake.

**Geometric Microlith** part of the small tool tradition and are symmetrical in form, pointed at both ends, can be backed along a lateral margin (Holdaway & Stern 2004: 262).

**Grindstone** A flat slab of rock with central depression used to grind, crush or pound seeds, ochre, or sharpen tools etc. Grindstones are usually made on sedimentary rocks, with an abrasive surface and can be used in conjunction with a muller.

**Ground surface visibility** an assessment of ground disturbance that allows the ground to be seen

**Hearth** The remains of a fireplace containing charcoal and sometimes burnt earth, bone stone artefacts or other organic material.

**In situ** An artefact or feature that remains in its original position, or where it was left.

**Organic** compounds formed from living organisms (plants or animals).

**Platform** the surface from which the flake was struck off the core – natural flaked or abraded (Holdaway & Stern 2004: 120)

**Point** a flake that has two edges that form a point and has retouch along one or both lateral margins (Holdaway & Stern 2004: 16).

**Post-contact** after contact between Aboriginal people and Europeans

**Pre-contact** before contact between Aboriginal people and Europeans

**Quartz** a mineral that commonly occurs in sedimentary, igneous and metamorphic rocks. Quartz can come in a number of forms including crystal, rose, and smoky.

**Quartzite** a metamorphic rock, formed by the re-crystallization of quartz. Quartz is rich in sandstone and limestone (Roberts 1998: 109).

**Retouch** a worked edge, or modification of a flake formed by removing a number of small flakes along an edge. This can be done as a form of maintenance or to produce a tool.

**Scarred Tree** A tree, which has had a slab of bark removed, exposing the sapwood on the trunk or branch of a tree. Aboriginal people used the bark to make shelters, containers (coolamons) and canoes.

**Scraper** a flake with at least one edge that has continuous retouch. Scraper types include, steep edged, end, side, nose scraper (Holdaway & Stern 2004: 16).

**Shell Midden** A surface and /or sub-surface deposit composed of shell and sometimes stone artefacts, charcoal and bone. Middens are normally found in association with coastlines, rivers, creeks and swamps – wherever coastal, riverine or estuarine shellfish resources were available and exploited.

**Silcrete** a fine grained rock derived from shale or siltstone mixed with silica.

**Spit** A horizontal unit of soil removed during excavation. Spits can be arbitrary (dug to a depth of 5, 10, 20, 30cm, etc.) or can be confined to a particular soil type or context. The

excavation of spits allows for greater understanding, analysis and interpretation of the soil profile.

**Stratification** The position of sediments and rocks in sequence throughout time.

**Sub-surface testing** a method of excavation that involves ground disturbing works to identify the potential for cultural material. Can take the form of hand excavation, backhoe scrapes etc.

**Survey** An inspection of land either by foot or by car (windscreen survey) noting conditions on surface visibility and ... etc

**Tool** Modified flakes usually with retouch present along an edge – altered shape (Holdaway & Stern 2004: 33)

**Transect** An excavated stretch of ground can be of varying lengths in a straight line.

**Trench** An area confined by excavation usually in the form of a square (eg. 2x2m) or rectangular (eg. 1.5x1m).

## References

AAV Mini Posters (1-7)

Davies, M & K. Buckley (1987) *Port Arthur Conservation & Development Project: Archaeological Procedures Manual*. Occasional Paper No.13. Department of Lands, Parks and Wildlife, Tasmania.

Holdaway & Stern (2004) *A Record in Stone: The Study of Australia's Flaked Stone Artefacts*, Victoria Museum, Melbourne.

Roberts, J.L. (1998) *A Photographic Guide to Minerals, Rocks and Fossils*, New Holland, London