#### 3 ABORIGINAL BACKGROUND

#### 3.1 Ethnohistory

The information used to establish pre-settlement Aboriginal spatial organisation is mostly based on observations made by Europeans during the initial period of Contact and subsequent settlement of the activity area region. Early specific historical accounts of Aboriginal land use near the activity area are scant.

The Aboriginal people in the Melbourne region belonged to the *Kulin* nation, made up of five language groups being the *Woiworung, Taungurong, Jajowrong, Bunurong* and *Wathaurung* (Presland 1994: 36-37). The *Kulin* were divided into two halves (moieties), *Bunjil* (eaglehawk) and *Waa* (crow).

There were two Aboriginal language groups that occupied the activity area. They were the *Djadjawurrung* in the north and the *Wadawarrung* in the south (Figures 4 and 5). Following are brief discussions of those groups:

The *Djadja wurrung* (or *Jajowrong*) language group occupied the country "from the northern slopes of the Great Dividing Range near Kyneton to Amphitheatre; from Kyneton north-east to the Alexandrine Range and the Loddon River near Boort; from Boort northwest to Lake Buloke; and from Lake Buloke southwest along the Richardson River to Walloo Creek, then to Navarre Hill and back to the Pyrenees Range at Amphitheatre (Clark 1990: 151, 153). The language group comprised 16 clans, one of which, the *Tureet balug* was located near the SHWF activity area. The country of the *Tureet balug* was located at Hepburns' station and around Smeaton Hill and Mt Moorookyle. They were also noted at the Coghill brother's station, Glendaruel, near Clunes. The clan head in 1841 was *Karringeboot* and *Paparra goondeet* was the chief from 1840-1842. Although Hepburn referred to the clan as "his natives, that is the tribe belonging to the ground he occupied" (Robinson 1844 in Clark 1990: 165), Robinson also noted that Hepburn, along with Birch and Coghil (christian names not identified) were involved in killing members of the clan between 1838 and 1839 (Clark 1990: 166).

Clark (1990: 145) noted that during the gold mining era, the *Djadjawurrung* were forced to live on the outskirts of mining settlements and survived largely through begging and prostitution. While some employment was available on stations, increased accessibility to alcohol was leading to its abuse (Clark 1990: 145-146).

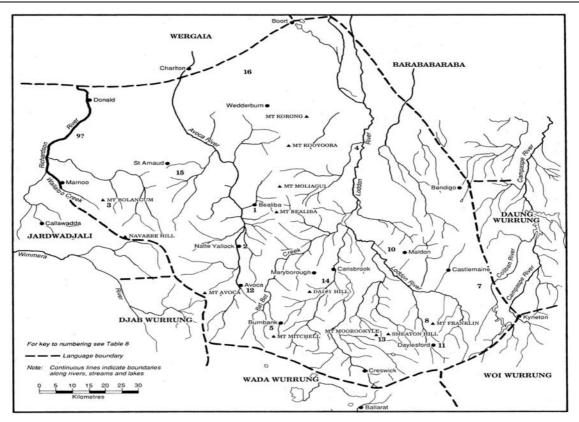
The *Wada wurrung* were the Aboriginal language group who occupied land to the west of the Werribee River at the time of Contact. Their language boundary extended from the Otway Ranges in the west to the Werribee River in the east, to the headwaters of Fiery Creek in the north, and incorporated the Bellarine Peninsula and Geelong (see Figure 4; Presland 2001: 36, 37f, 44). Clark (1990: 277) considered the ethnographic information suggested that the *Wada wurrung* mortuary practices and distinctive facial and body markings at corroborees could distinguish them from other language groups.

The Wada wurrung clans shared a system of organisation with clans to the north and east. They intermarried with the *Djab wurrung*, the *Djargurd wurrung* (Clark 1990: 277) and the *Bun wurrung*, with whom they also had ceremonial links (Gaughwin 1981: 59). Clan heads of the *Wada wurrung* were either *Arweet* or *Noure-nit/Nare* (Clark 1990: 277).

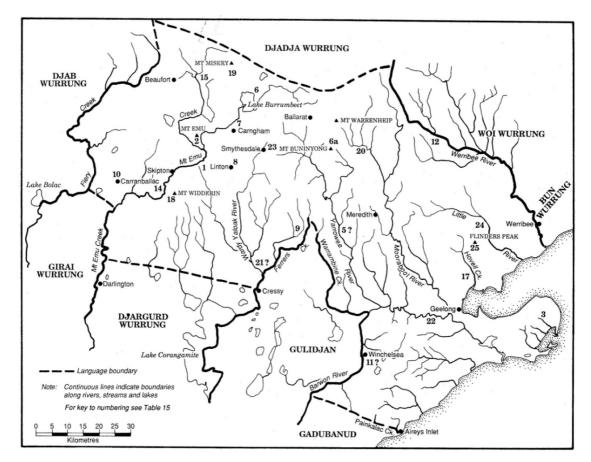
The language group of the *Wada wurrung* was divided into 25 clans. Two of these clans were recorded in areas near the activity area at the time of Contact. These clans were; the *Marpeang balug* from the Blackwood, Myrniong and Bacchus Marsh areas, whose clan head or *arweet* was *Worope* and moiety was *Waa*, and the *Burrumbeet balug*, who were recorded as having occupied the lands around Lake Burrumbeet and Learmonth. The *Burrumbeet balug* head were *Noonallaboon* (1842-1844), and *Balybalip/Bullurp Bullurp/Bille-bil-lup*, also known as King Billy of Ballarat (c.1823-1881). The clan's moiety was *Bunjil*. During the gold rush of the 1850s, some families of this clan relocated to Mount Franklin (Clark 1990: 311f, 318-319).

Clan estates were not clearly defined or tightly restricted to one specific area (Stanner 1965). Both the *Wada wurrung* and the *Dja Dja Wurrung* clans in the region would have moved through their country in small mobile bands of between 20 and 120 people (Dawson 1981, Lourandos 1977). Band sizes would be largely dependent on seasonal availability of resources and social and ceremonial obligations. In times of seasonal abundance, large intertribal and clan gatherings were possible. Bands could be comprised of members from different clans, most of who would be related through kinship ties. In times of stress, clans would retreat to their own estate and move in a seasonal pattern dictated by the availability of resources.

Mortuary practices of the *Kulin* included either burial of their dead, or placement of the body in tree hollows that were then often burnt. When burial was chosen, the dead were tied up in their cloaks and interred lying on their side, with arms and legs doubled-up or flexed. Dead whom were placed in trees were also tied up using their cloaks, and some time later, part or all of the remains were cremated. Although burial locations have been identified within ancient terraces of major rivers in the region, these are generally an extremely rare archaeological site type. Thus, based on this scant information, burial sites may still exist in undisturbed sand hills or deep alluvial locations within the region.







# Figure 6 *Djadja wurrung* Language & Clan Locations (adapted from Clark 1990: 311f)

Parker (in Cannon 1982: 693) noted that the river valleys were often used as travelling routes, describing such areas as "their ordinary place of resort" where Aboriginal people would utilise their most abundant resources. Clan members rarely numbered more than thirty during their day-to-day activities, only forming large groups for particular social functions or to exploit abundant seasonal food resources. During the 1840s and 1850s, corroborees were held close to settlements where Aborigines received provisions (du Cros 1989: 28).

After the establishment of the Aboriginal Protectorate, Assistant Protector Edward Parker travelled to the Loddon River in 1840 to establish the Mount Franklin Protectorate Station near Daylesford. The station originally comprised of 41,073 acres of good farmland, which was productive until 1843. Although the Aboriginal people of the area could initially both grow crops at Mount Franklin and continue to hunt, the rapid clearance of land meant that their food supply diminished and rations were more heavily relied upon. In time, Europeans settled sections of the station until only 113 acres remained. In 1860, the operation of Mount Franklin was taken over by the Central Board for the Protection of Aborigines (CBPA). By 1864, the station was closed and the occupants were moved to Coranderrk Station at Healesville or the Framlingham Mission, Purnim (Caldere & Goff 1991: 5, 13).

With the discovery of gold in the region and subsequent expansion of European population and their stock runs, the numbers of local Aboriginal people dramatically declined. These people were amongst the first Victorian groups to feel the full impact of European settlement. Camping reserves at Steiglitz and Bacchus Marsh were set aside for Aboriginal people to provide areas not impacted by gold miners and their habits (Caldere & Goff 1991: 11). Those who did not move away were compelled to rely on rations given or stolen from the squatters, as their traditional food resources were greatly depleted. Honorary Correspondent depots were set up around Victoria to dispense food and other supplies to Aboriginal people. Today, the interests of Aboriginal cultural heritage are in the custodianship of the Ballarat and District Aboriginal Co-operative Ltd.

### 3.2 Resources Available to Aboriginal People

The resource base available to past Aboriginal people in the activity area would have been rich and varied. The activity area and surrounding regions contain a variety of productive ecological zones such as riverine, lacustrine and terrestrial that would have been attractive for hunter-gatherers.

The water bodies near the activity area such as Lake Goldsmith and Mount Emu Creek and their associated tributaries would have attracted Aboriginal people to the area. It is likely that this area would have been the focus for Aboriginal resource exploitation and habitation. Within the riverine ecological zone there would have been variations in staple species diversity and abundance. This, in turn, would have influenced site location and the frequency of visitation (Walsh 1987).

Some of the food resources that may have been utilised by Aboriginal people include; wetland root crops (such as *Typa, Triglochin*), dry land root crops (such as *Microseris scaigera*), fresh water fish, eels and crustaceans, waterfowl and land mammals. Prior to European settlement the activity area would have contained a great number and variety of faunal species associated with forests, wetlands, woodlands and waterways, however with

the demise of native habitat the number and range of species that once existed has greatly reduced. Land mammal species that would have been commonplace throughout the activity area were tiger quoll, possum, native rats, wallaby, kangaroo and echidna. Within nearby wetlands and associated waterways, black swans, ducks, ibis, quail, fish and crustaceans would have been present in the pre-Contact period (LCC 1991: 111). Stone fish traps were constructed along some watercourses, few of which have survived to the present (Vines 1993: 9). The Yam daisy formed one of the important staple foods and prior to its destruction by introduced grazing animals, was widespread on the grasslands. Thomas Winter observed of the Aboriginal people around Melbourne, that in 1873, "Their natural food consists of the meat of the country when they kill it, but chiefly roots, of which the favourite is a plant very much like dandelion. This they roast or eat raw" (Winter in Bride 1969: 395). Ephemeral swamp plants such as bull rushes and sedges were also an important source of food as well as for fibre used to make woven bags and decorative items. Detailed lists of plant and animal species available within the Port Phillip area can be obtained from Presland (1994) and Gott (1983).

Red Gum and Yellow Box trees were common along watercourses and scattered on the grassland plains of the region. The smooth bark and large size of this species led to their common use for the manufacture of bark and wooden implements by Aboriginal people (Edwards 1972: 31). The bark from the trees would have also been removed for shelter and social or ceremonial purposes.

Stone implements were frequently used by Aboriginal people throughout Australia for a variety of functions including cutting, scraping and carving tools, as axes and spear barbs, and for ceremonial purposes. The most accessible sources of nearby stone included the basalt from the plains, and silcrete would have been found in outcrops such as that recorded near Comadai Creek at Bacchus Marsh (AAV7822-0102; Cupper 2002: 13). Quartz and quartzite pebbles were also available from the rivers and creeks near the activity area (Vines 1993: 23). The *Woi wurrung* tribe managed the highly valued Mt William greenstone quarry at Lancefield. Stone from the quarry was exchanged with neighbouring tribes through a barter system for other prized possessions such as possum skin cloaks, one of which could be exchanged for three to four greenstone axe blanks. The value of the stone was evidently high as a cloak often contained as many as 28 skins and took considerable time and effort to make (McBryde 1984; Barwick 1984).

## 3.3 Previously Recorded Aboriginal Sites/Places

There is one previously recorded pre-Contact Aboriginal site within the activity area (earth mound AAV7523-0027), and another 21 previously recorded sites within 5km (Figure 6). These include two earth features, eight scarred trees, and eleven stone artefact scatters. These sites are evidence of Aboriginal occupation of the region prior to European contact. Sites within 5km of the activity area are presented in Table 1. The primary raw material used to manufacture tools is quartz, although silcrete, basalt and chert would also have been utilised. Quartz is locally available in basalt outcrops and from watercourses. Silcrete is most likely imported from northern areas within the Avoca and Loddon River basins.

There is also one previously recorded post-Contact site within the activity area. This is the Stockyard Hill Honorary Correspondent Depot (Historic Place Report 5.4-67). This appears to be the site identified on the Pyrenees Shire Planning Scheme Heritage Overlay as the Old Homestead at Mawkwallock (HO32). Post-Contact Aboriginal sites are places of

Aboriginal occupation, employment or utilisation that have occurred since European settlement.

Historic Aboriginal places illustrate the often complicated relationships between European settlers and Aboriginal people. They often contain shared significance for descendants of the settlers and original inhabitants. Historic Aboriginal sites are accorded equal protection as pre-historic sites under the *Aboriginal Heritage Act 2006*.

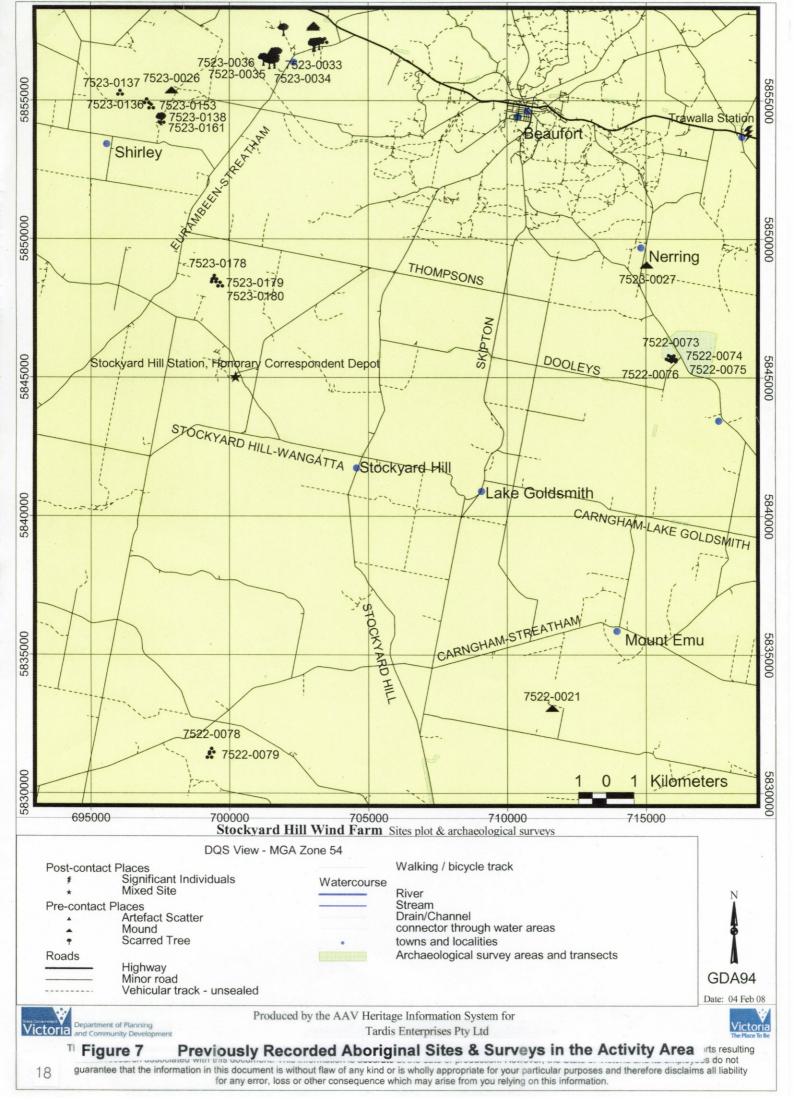
Figure 6 shows areas that have been subject to previous cultural heritage survey, indicating that none of the activity area has been subject to previous cultural heritage assessment. Both cultural heritage survey and good ground surface visibility are major factors allowing for the identification of Aboriginal sites.

## Table 1Aboriginal Cultural Heritage Sites within 5km of the Activity Area

AAV Site No, Name & Site Card Reference	Site Type	Site Location & Contents	Significance Assessment*
7522-0021 Nanimia 1 Watts 1985	Earth Mound	5km south of Carnghnam – Streatham Rd Arrangement of burnt stones associated with unspecified flaked stone (Grid Ref 7115E 8329N)	NA
7522-0073 Mena Park 1 Muir 2004	Stone Artefact Scatter	250m south-west of the intersection of Beaufort-Carngham Rd and Dooleys Rd, Mena Park 5 quartz flakes (AGD66 715783E 5845514N)	Low
7522-0074 Mena Park 2 Muir 2004	Stone Artefact Scatter	250m south-west of the intersection of Beaufort-Carngham Rd and Dooleys Rd, Mena Park 3 quartz flakes, one retouched (AGD66 715879E 5845465N)	Low
7522-0075 Mena Park 3 Muir 2004	Stone Artefact Scatter	250m south-west of the intersection of Beaufort-Carngham Rd and Dooleys Rd, Mena Park 2 quartz flakes, one retouched (AGD66 715890E 5845546N)	Low
7522-0076 Mena Park 4 Muir 2004	Stone Artefact Scatter	500m west of the intersection of Beaufort- Carngham Rd and Dooleys Rd, Mena Park 3 quartz flakes, 1 silcrete flake (AGD66 715703E 5845559N)	Low
7523-0026 Broadbent 1 McConnell <i>et al</i> 1982	Earth Mound	3km north-east of Shirley Mound with flaked quartz artefacts and a possible boomerang (Grid Ref 7978E 8552N)	Low (extremely disturbed)
7523-0027 Nerring McConnell 1983	Earth Mound	1.5km north of Snake Gully Road 11km east of Beaufort (Grid Ref 7149E 8489N)	N/A
7523-0033 Euramben East 1 Dickman & McConnell 1982	Scarred Tree	6km north-east of Shirley Yellow Box Tree, possibly removed by farmer due to safety risk (Grid Ref 7015E 8562N)	N/A
7523-0034 Eurambeen East 2 Dickman & McConnell 1982	Scarred Tree	6km north-east of Shirley Yellow Box Tree, possibly removed by farmer due to safety risk (Grid Ref 7011E 8563N)	N/A
7523-0035 Eurambeen East 4 Dickman & McConnell 1982	Scarred Tree	6km north-east of Shirley Yellow Box Tree, possibly removed by farmer due to safety risk (Grid Ref 7015E 8565N)	N/A

AAV Site No, Name & Site Card Reference	Site Type	Site Location & Contents	Significance Assessment*
7523-0036 Eurambeen East 5 Dickman & McConnell 1982	Scarred Tree	6km north-east of Shirley Yellow Box Tree, possibly removed by farmer due to safety risk (Grid Ref 7016E 8565N)	N/A
7523-0037 Eurambeen East 6 Dickman & McConnell 1982	Scarred Tree	6km north-east of Shirley Yellow Box Tree, possibly removed by farmer due to safety risk (Grid Ref 7015E 8565N)	N/A
7523-0038 Eurambeen East 7 Dickman & McConnell 1982	Scarred Tree	6km north-east of Shirley Red Gum Tree, possibly removed by farmer due to safety risk (Grid Ref 7015E 8563N)	N/A
7523-0038 Eurambeen East 7 Dickman & McConnell 1982	Scarred Tree	6km north-east of Shirley Yellow Box Tree, possibly removed by farmer due to safety risk (Grid Ref 7031E 8558N)	N/A
7523-0136 CO4 Wolski 1998	Stone Artefact Scatter	2km north-east of Shirley Quartz flakes and cores (Grid Ref 697100E 5854650N)	Low (extremely disturbed)
7523-0137 CO5 Wolski 1998	Stone Artefact Scatter	2km north of Shirley Quartz flakes and cores (Grid Ref 695800E 5855200N)	Low (extremely disturbed)
7523-0138 CO6 Wolski 1998	Stone Artefact Scatter	2km north-east of Shirley Quartz flakes (Grid Ref 696900E 5854800N)	Low (extremely disturbed)
7523-0153 CO21 Wolski 1998	Scarred Tree	1km north-east of Shirley Red Gum Tree (Grid Ref 69750E 585430N)	N/A
7523/0161 CO29 Wolski 1998	Stone Artefact Scatter	1km north-east of Shirley 1 quartz core (Grid Ref 697500E 5854300N)	N/A
7523-0178 Telegraph 1 Webber 2004	Stone artefact scatter	East of Eurambeen – Streatham Rd in farmers paddock 20 quartz flaked fragments (AGD66 699549E 5848191N)	NA
7523-0179 Telegraph 2 Webber 2004	Stone artefact scatter	East of Eurambeen – Streatham Rd in farmers paddock 5 quartz flaked fragments (AGD66 699321E 5848343N)	NA
7523-0180 Telegraph 3 Webber 2004	Stone artefact scatter	East of Eurambeen – Streatham Rd 13 quartz flaked fragments (AGD66 699342E 5848440N)	NA

\* As attributed by original recorder. Sites in *italics* occur inside the activity area.



#### 3.4 Previous Aboriginal Cultural Heritage Investigations

This section presents relevant regional and localised archaeological investigations to provide a detailed context of the existing archaeological values of the region. A synthesis of information in Section 3 is made, and a site prediction model generated in Section 3.5.

One regional study (Clark 1997) included the present activity area within its broader boundaries. One other regional investigation has some relevance (Van Waarden 1994) and is briefly discussed. One small scale cultural heritage assessment included part of the activity area within its broader boundaries (Richards & Sutherland 1994). This is discussed along with other small scale assessments carried out in nearby areas (Lovett 1992; Weaver 1994; Russell 1995; Long 1998; Luebbers 2001; Murphy & Amorosi 2004a & 2004b; Muir 2004a & 2004b; Rhodes & Paynter 2006). There has been no previous ground surface survey of the SHWF.

#### **Regional Investigations**

Clark's (1997) study of the Box - Iron Bark Forests of Northern Victoria included the present activity area within its broader boundaries. Clark detailed the range of uses these forests had for pre-Contact Aboriginal people. Supported by extensive ethnographic information, Clark highlighted the importance of this specific habitat to traditional Aboriginal life ways. One of the language groups who made extensive use of these forests was the Diadia wurrung. Therefore, clan members of the activity area would have had access to these resources through kinship ties. Although a large range of Aboriginal archaeological sites types are found within this area, scarred trees dominate the archaeological record. These sites are mainly found along the margins of stream systems and around lakes and swamps. Box and Iron Bark species provided an extensive range of uses, including a sweet beverage, spears, canoes, boomerangs, shields, sculptures, bark huts and for ceremonial practices. A large range of potential food and plant resources were prolific in this habitat. This study by Clark sheds some light on the complex relationship traditional Aboriginal people had with a specific habitat. The implications of Clark's study could be transposed to many other specific habitats of which little investigation has been undertaken. Further, similar studies would then be able to more accurately indicate the relationship traditional Aboriginal people had with their land, as well as highlighting the inherent bias of the current archaeological record that is predominantly comprised of lithic sites.

van Waarden (1994) conducted a regional desktop study of the Aboriginal archaeology of the Loddon River Basin. The study area commenced approximately 30km north of the present activity area. The author's study incorporated information from systematic surveys including the VAS Summer Field School, Kerang lakes, Little Murray River, Loddon River, Gunbower Island, and locality surveys at Kow Swamp, Kooyoora State Forest, Mt Beckworth and Franklinford. In addition, the information from seven archaeological excavations of sites at Kow Swamp, Gunbower, Koondrook, Burke's Bridge, Mangat Hill and Mount Hope, were included. A total of 853 Aboriginal archaeological sites, with 1005 distinct archaeological features had been recorded within the Loddon Basin at the time of van Waarden's study. van Waarden (1994) estimated that this number was likely to represent only a small proportion of the sites actually in the study area (van Waarden 1994: 10).

#### Small scale investigations

Lovett (1992) conducted an archaeological survey of the Mt Beckworth Reserve, approximately 40km east-north-east of the activity area. During the survey, five isolated artefact occurrences were recorded which included unretouched quartz flakes and a basalt chopper. Two of the sites were recorded in association with water courses.

**Weaver (1994)** conducted a desktop study, supplemented by a vehicular field inspection, of an optic fibre cable route from **Learmonth – Waubra – Evansford** located approximately 6km north-east of the activity area. The route extended along the Sunraysia Highway, along Langi Kal Kal and Beaufort – Waubra Roads, north along the road between St Mary's Hill and Ryan Hill, north-east along Troy's Road then north along Evansford Road. Weaver noted four archaeologically sensitive areas for Aboriginal stone artefact scatter sites that were associated with creeks and swamps (p.7). She noted that most of the road reserve in the study area had been previously disturbed by cable installation (p.2).

**Richards and Sutherland (1995)** conducted a desktop cultural heritage assessment supplemented by ground surface survey, of the **Haddon – Stoneleigh** route of a proposed telecommunications cable. This route included part of the activity area from Mena Park, north of Lake Goldsmith and along Stockhill Road. Six locations within the current activity area were considered to be of moderate archaeological potential; however no Aboriginal sites were recorded.

**Russell (1995)** conducted a desktop cultural heritage assessment of proposed Telstra optical fibre cable routes from Avoca to Lexton, Newstead to Campbelltown and Guildford to Yandoit. The Avoca to Lexton route is approximately 30km north-north-east of the activity area. It is approximately 32km long within existing road reserves and following mostly existing routes. A site prediction model was formulated: stone artefact scatters in close proximity to larger water courses with quartz as the dominant raw material; quarries where quartz naturally occurs at water courses and in lag deposits on rises; shell middens and mounds on the banks of larger water courses; scarred trees on mature >200 years (low potential); burials along the banks of major water courses (unlikely) and rock wells (extremely unlikely). Further ground survey was not recommended due to poor visibility and disturbance making such an assessment unproductive.

Long (1998) conducted an archaeological survey of Fraser's Plantation, Waubra. The property is named "Stonehenge" and is situated on the south of side of Mt Beckworth Road to the west of Mount Gap, approximately 27km north-east of the activity area. During the survey, eight isolated artefacts (AAV7623-0041 to 0048) and a stone artefact scatter (AAV7623-0049) were recorded (Figure 4). The main raw material found was quartz, with a small amount of basalt also present at two of the sites. All sites were subject to disturbance from slope wash, stock and vehicle tracks, ploughing, tree clearance and/or cropping. Sites were located either adjacent to drainage lines or on the summit adjacent to the granite outcrop (Long 1998: 22-27). All sites were assessed as being of low scientific significance due to the materials found at the sites and the level of previous disturbance at each site (Long 1998: 40). Five areas of moderate to high archaeological potential were identified. The summit ridge and granite outcrops were identified as being of high archaeological sensitivity for sites such as rock shelters (with or without art), rock wells, stone arrangements, artefact scatters and scarred trees (on mature native trees). The southern drainage system of eroded gullies and ephemeral drainage lines was considered

to have moderate sensitivity for containing scarred trees, artefact scatters and isolated artefact occurrences. The northern drainage system was assessed as having the same potential as the southern drainage system, with the exception of scarred trees. Two stands of native vegetation were considered to have moderate sensitivity for scarred trees. Finally, the basalt outcrops adjacent to a drainage line were considered to have moderate sensitivity for artefact scatters and quarry sites (Long 1998: 51-52).

Luebbers (2001) carried out a survey of proposed sewer alignments within the townships of Carisbrook and Skipton. Skipton is approximately 15km south of the activity area. During the survey of the proposed Skipton alignments, Leubbers failed to find any Aboriginal sites. The author recommended that as heavy vegetation affected site visibility, a monitoring program should be implemented during construction.

Murphy and Amorosi (2004a) conducted a cultural heritage assessment of four proposed water treatment sites at Clunes, Beaufort, Forest Hill and Blackwood. The closest site to the current activity area was at Beaufort, located immediately to the north. The area had been extensively disturbed by historic working and reworking of alluvial gold mining tailings which began in the 1850s. No Aboriginal sites were recorded, nor any areas of sensitivity for Aboriginal archaeological sites identified.

**Murphy and Amorosi (2004b)** conducted a desktop cultural heritage assessment of a proposed 18,000 hectare wind farm near **Waubra**, approximately 30km north-east of the activity area. Four previously recorded Aboriginal archaeological sites in the study area included three artefact scatters and one earth feature (mound). The three artefact scatters consisted primarily of flakes, cores and one scraper made from quartz. The mound contained burnt stone, charcoal and quartz artefacts. None were assessed for scientific significance.

Muir (2004 a & b) carried out surveys of the proposed Trawalla Koalin mine site on the Beaufort Carngham Road between Nerring and Mena Park, immediately south of the extreme eastern end of the activity area. The surveys located four Aboriginal archaeological sites (AAV7522-0073 to 0076), all of which were stone artefact scatters. These sites were described as having low scientific significance, and the surrounding areas as having low potential to contain additional Aboriginal archaeological sites.

Rhodes and Paynter (2006) conducted a cultural heritage assessment and monitoring of a 94.6 hectare proposed timber plantation near **Buangor** in the foothills of the Pyrenees Ranges, approximately 20km north-west of the present activity area. Four sites were located during the survey (AAV7523-0183 to 0186), all of which were stone artefact scatters. During monitoring of soil testing an additional two sub-surface artefact deposits were recorded (AAV7523-0187 & 0188). The artefacts were interpreted as the discard of the manufacture and maintenance of stone artefacts at short-term campsites by people travelling between different locales. Site AAV7523-0187 was assessed as having high scientific significance. Artefacts were predominantly found in a layer of relatively undisturbed sandstone gravel and sand 100-300mm in depth. Quartz veins were found in outcrops on both hills within the study area although they did not appear to represent quarries or primary stone reduction sites. The results confirmed that campsites are located on hills and connecting ridges between them which form natural routes of movement. All of the sites were within 200m of intermittent and possibly permanent sources of potable water, but were not found on small alluvial flats. Areas of archaeological sensitivity were

protected from development, and a program of monitoring of works immediately outside the buffer zones protecting sites was recommended.

# 3.5 Aboriginal Site Prediction Model for the Activity Area and Implications for this Investigation

The implications of the environmental, ethnographic and archaeological background for the present investigation are:

- One small-scale cultural heritage assessment utilising ground surface survey has included part of the activity area (from Mena Park and along Stockhill Road) within its broader boundaries (Richards & Sutherland 1994);
- Two previously recorded Aboriginal sites exist within the SHWF activity area;
- An additional 21 Aboriginal archaeological sites have been previously recorded within 5km of the activity area;
- The recorded sites do not accurately reflect the site numbers, types, contents or distribution of Aboriginal archaeological sites likely to be present within the activity area or the surrounding region;
- The site prediction model is therefore speculative and based on general predictive statements for Aboriginal archaeological sites found in adjacent areas;
- The most likely site types to be found are low to moderate density stone artefact scatters;
- Stone artefact sites will be found in higher densities within 200m of past or present permanent or perennial watercourses, springs, swamps and lakes; 50m from intermittent drainage lines; and on hilltops, saddles and ridgelines which afford advantageous views, are close to potable water, or provide routes of movement between locales. The number, size and density of stone artefact sites increase with proximity to more than one resource zone typically exploited by Aboriginal groups (e.g. rivers & swamps);
- The activity area contains several areas of Aboriginal archaeological sensitivity as specified under the *Aboriginal Heritage Act 2006* (Figure 13);
- Stone artefacts will be manufactured predominantly from locally available quartz found in outcrops and in streams. A smaller proportion of artefacts will be manufactured from imported silcrete. Other raw materials may include quartzite, basalt, flint and chert;
- Formal tool types will comprise a small overall percentage of any stone tool assemblage;
- To a lesser extent earth features (mounds), rock shelters, quarries and scarred trees may occur;

- Earth features (mounds) may occur near former swamps and on flood terraces on watercourses. Rock shelters and quarries may occur in areas of granite outcrops. Scarred trees may be found within remnant stands of mature native trees more than 200 years old;
- Unlikely site types within the activity area include freshwater shell middens, rock wells and burials;
- Freshwater shell middens could potentially be found along the undisturbed banks of larger watercourses. Rock wells may be found on larger rocky outcrops;
- Burials are most often found in sandy deposits along watercourses and lake/swamp lunettes, but are considered unlikely within the SHWF activity area;
- In terms of any future survey, the level of ground surface visibility affects the ability to identify archaeological sites. Poor ground surface visibility hinders the identification of sites and factors include thick vegetation cover or sedimentation since European occupation;
- Most of the activity area has been subject to ground disturbance by the removal of native vegetation, grazing, ploughing and possibly also gold mining. This will have caused disturbance to surface soils and will impact the integrity of sites and reduce their scientific significance;
- Most sites are to likely date to within the last 6,000 years and most will reflect occupation within the last 1,000 years;
- The overall Aboriginal archaeological potential for sites of high scientific significance is low to moderate.

### 4 HISTORIC BACKGROUND

The following section provides a brief historical background and context. It provides information on the potential for historic sites and their predicted location, as well as local and regional information regarding previously recorded sites. This information is then synthesised in Section 4.3, generating an historic site prediction model specific to the present activity area.

In 1802, Mathew Flinders viewed the basalt plains and Bacchus Marsh areas from the summit of the You Yangs. He thought the area showed great promise, noting that the country of Bacchus Marsh was "low, grassy and very slightly covered with wood, presenting great facility to a traveller desirous of penetrating inland" (Flinders in Peterson & Catrice 1995: 13). When Hume and Hovell crossed through the Werribee Plains in 1824, they provided a favourable description of the "abundant game and water, the luxuriant growth of grasses and the general prosperity of the blacks" (du Cros & Watt 1993: 8). Such descriptions of the area led to land speculation and attracted the attention of John Batman's Port Phillip Association to the Colony of Port Phillip. In 1836, Major Thomas Mitchell named the Pyrenees Ranges when his exploration party travelled near the activity area (now Lexton) on their return trip to Sydney from Portland (Oulton 1995: xv). Mitchell

provided a very favourable description of the Pyrenees region in his journal entry of 25 September 1836 (Mitchell in Oulton 1995: 2):

"One bold range of forest land appeared before us, and after crossing it we passed several rivulets falling northward, then over a ridge of trapean conglomerate with embedded quartz pebbles, and descended into a valley of the finest description. Grassy hills clear of timber appeared beyond a stream flowing northward. These hills consisted of old vesicular lava. We entered a forest of very large trees of iron bark eucalypts, and we finally encamped in a grassy valley in the midst of this forest...."

Such favourable descriptions led to large squatting runs (particularly for sheep) being taken up throughout the region in the late 1830s (Figure 8). In 1847, squatters were given the pre-emptive rights to purchase 640 acres of their run. The squatters frequently selected their pre-emptive right in the location of their original homestead and then those most well off would build homesteads in the same location (Oulton 1995: 8). Figure 9 shows the pre-emptive rights sections of Eurambeen from 1859, purchased by Alexander Campbell and Mr Beggs (north of the present activity area). Campbell's portion features drafting yards, cultivation paddocks, a stockyard, stable and store. Similarly, Figure 10 shows the 1855 plan of the Lillerie run, and the pre-emptive section purchased by Mr Macredie. This plan shows a woolshed constructed on the property.

The present activity area included the pastoral runs of Trawalla, Lillerie, Mt. Emu, St. Enochs, Mawallock and Eurambeem (Figure 7). Early settlers included the Kirklands and the Hamiltons at Trawalla. Mrs Kirkland was the first European woman to settle in Trawalla (Banfield 1956: 5-10), while Hamilton established 'Trawalla Station' in 1838. Hamilton Station was taken over by Adolphus Goldsmith in 1841 who established a large grazing enterprise. Mt Emu was occupied by Mr Baillie, Mr Wright, Mr Montgomerie, and Mr Urquhart (Learmonth in Bride 1983: 98). The original owners of the Lillerie run were G and J Macredie. These were followed in 1862 by A Fraser and in 1866 by J and D Affleck. The Mount Emu run had a succession of licensees from its initial holding by Thomas and Cunningham in 1847, as did Saint Enochs (initial licence 1849), and Mawallock (licensed in 1847 to Alexander Russell). The Eurambeen run was formed in 1849 following the division of the Mt Cole Station. Alexander Campbell took this portion and following his death in 1853 the run was sold to George and Francis Beggs. Eurambeen was further subdivided during the 1865 Ararat land selections, and 63 selectors took 16000 acres (Banfield 1956: 38, 112).

Successive subdivision of lands in the region occurred throughout the late 1800s, as evidenced by Figures 10 and 11 which show the subdivision of the Yangerahwill Parish into lots ranging mainly from 60 to 150 acres, with only the occasional property measuring over 400 acres, and the subdivision of the Enuc Parish into lots ranging mainly from 50 to 80 acres. Similarly, only the occasional lot measures over 190 acres.

The closest major town to the activity area is Beaufort. Beaufort was first explored by Mitchell in 1836. The first Europeans to settle in the region were squatters named the Kirklands and the Hamiltons. Following the discovery of gold in the early 1850s, settlements arose in the region. The town was surveyed in 1857, with allotments sold in 1858. The town was supposedly named after Rear Admiral Francis Beaufort, although some sources suggest it may take its name form a village in Monmouthshire in Wales.

Alluvial mining had been replaced by grazing and agriculture by the mid-1860s, with the railway opened at Beaufort in 1874. Beaufort today produces beef, lambs, wool, cereal and timber.

By far the most important historic phase to occur near the activity area (and within Australia) was the discovery of gold in 1851. The earliest focus of gold exploration was at Golden Point at Ballarat. Although the activity area was not a focal point for gold mining activity, several nearby localities were important sites of gold rushes. Clunes is generally regarded as the site of the first gold strike in Victoria dating to March 1850, where Campbell found gold in an auriferous reef on private land (Bannear 1999: 30). The development of many of the towns such as Beaufort, Clunes and Creswick, was directly or indirectly influenced by gold rushes in each of these areas.

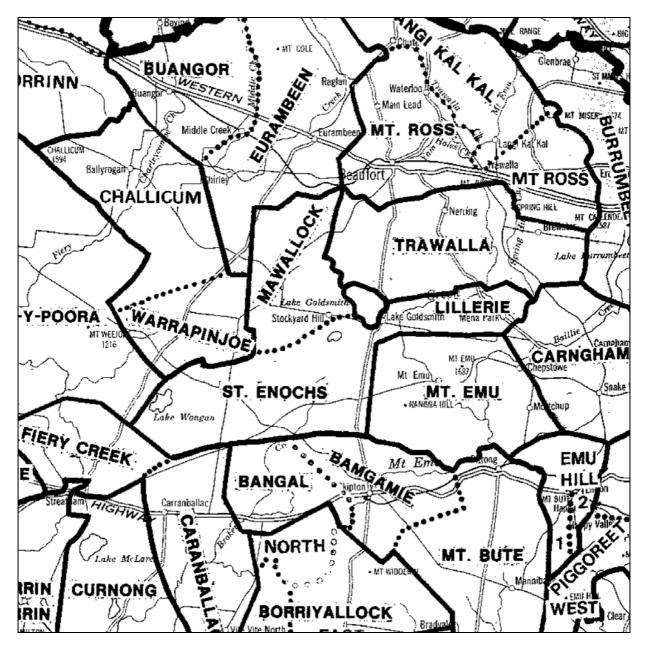
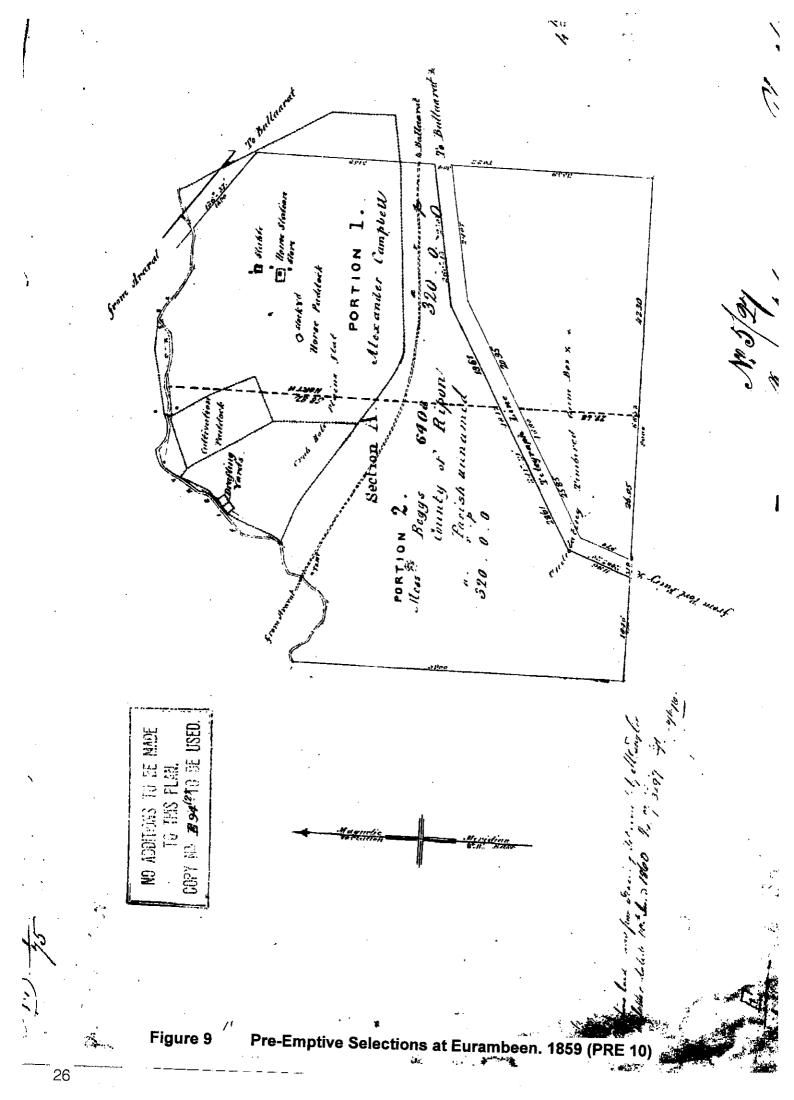


Figure 8 Early Pastoral Run Plan of the Activity Area (Spreadborough & Anderson 1983: 354)



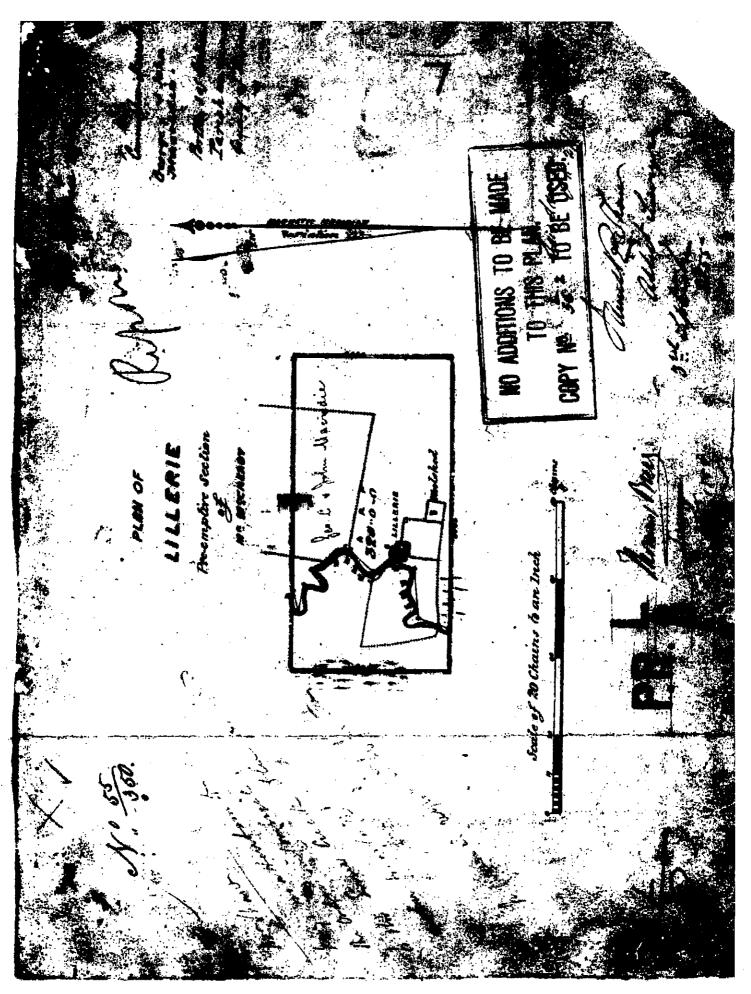


Figure 10 Pre-Emptive Selections at Lillerie. 1855 (PR L8)

