

Non-Indigenous Heritage Assessment Erskine Park Development Lands

11 June 2004

Prepared for:

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Non-Indigenous Heritage Assessment:
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11 June 2004

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EXECUTIVE SUMMARY

Introduction

HLA-Envirosciences Pty Limited (HLA) was engaged by CGP on behalf of CSR to conduct a Non-Indigenous Heritage Assessment for CSR lands at Erskine Park, New South Wales. This report was designed to identify the Non-Indigenous heritage issues affecting the potential future development of the CSR lands at Erskine Park. In accordance with existing heritage legislation, the aim was to identify previously recorded heritage sites and potential sites, and provide management recommendations for sites within the proposed development lands of CSR's holdings which may be impacted by the proposed development.

Site History

The Non-Indigenous history of the study area is linked closely to European exploration and settlement of the Cumberland Plain. Original settlement in the Penrith district focused on the establishment of small farms along the alluvial soils of the Hawkesbury River. Erskine Park was originally part of James Erskine's 3000 acre property granted in 1818. Ownership of Erskine's land passed to a number of individuals including Andrew Thompson who established the Lenore Estate dairy in 1898. During the 20th century Thompson's estate was acquired by the Crown and divided into a number of farms as part of the Closer Settlement initiative. Quarrying activities are also characteristic of the history of the site. In accordance with the NSW Heritage Office, the study area comes under the NSW Historic Themes of Agriculture, Land Tenure, Pastoralism and Industry.

Field Survey

The field survey identified a number of potential Non-Indigenous heritage items within the study area. These included a stockyard and remnant fencing (located outside the development area as advised by CSR), and sundry farm dams, an airstrip, building (former Gyro Club), model plane club and quarry workshop (located within the development area).

Significance Assessment

The sites that are located within the proposed development area were assessed to determine heritage significance in accordance with the assessment criteria under the guidelines of the NSW Heritage Office. No items assessed as having moderate heritage significance at a local level were located within the proposed development area. Items located within the development area were assessed as having little (sundry dams and workshop) or no heritage significance (airstrip, former gyro club, and model plane club).

Conclusions & Recommendations

HLA has developed management recommendations to be implemented in conjunction with the existing statutory requirements, for those items located within the proposed development area. In accordance with the NSW Heritage Office requirements a Section 139 (4) Exception Application will be required prior to the commencement of works, which will impact on the sundry dams and workshop.

1 INTRODUCTION

1.1 Project Description

HLA-Envirosciences Pty Ltd (HLA) was commissioned by CGP on behalf of CSR in September 2003 to conduct a Non-Indigenous Heritage Assessment for CSR lands at Erskine Park, NSW.

This report was designed to identify the Non-Indigenous heritage issues affecting the potential future development of the CSR lands at Erskine Park. This aimed to identify the known heritage items of the area, conduct a field survey to identify any additional archaeological relics, and assess the potential for subsurface relics to occur within the proposed development lands. This report outlines the results of the archaeological assessment, conducted and reported to the standards outlined in the NSW Heritage Office *Heritage Manual (Heritage Office and the Department of Urban Affairs and Planning, 1996)*.

Relics are defined as meaning any deposit, object or material evidence which relates to the settlement of the area that comprises New South Wales (not being Aboriginal settlement), and which is 50 or more years old (the NSW *Heritage Act [1977 as amended 1998]*). Should any heritage items and relics be identified within the development lands, this report aims to provide information about those resources, outline their heritage significance and recommend the appropriate way to manage those resources should future development be proposed.

This study was originally prepared to support the Master Plan Development Application for the site. Since the original report was completed the focus of the study has changed to specifically evaluating heritage issues on potential development areas within the Master Plan and thus this report does not cover the larger area originally assessed. However, HLA has retained the historical research and information relating to sites in the larger area for completeness. The management recommendations in this report refer to the smaller areas of the “development lands” (see below). Note that the actual “development area” as advised by CSR will be a smaller area within the development lands.

1.2 Study Area

This study addresses land to the south of Lenore Lane owned by CSR. The general location of the CSR lands is illustrated on **Figure 1**. Within the study area, four precincts (1,2,3 and 5) have been identified as the “development lands” in this report and are the subject of this report. Precinct 1 and 5 comprise the Western Lands and Precincts 2 and 3 comprise the Eastern Lands. A fifth precinct (No.4) contains the Enviroguard landfill and is not part of the development lands.

HLA understands that where the boundary of these precincts is adjacent to Lenore Lane the actual boundary is some 10m to the south of the road reservation as it is intended to widen Lenore Lane and this land will be acquired by Council.

1.3 Study Team

This report was authored by Kylie McFadyen and Dr Iain Stuart, based on an earlier report by Suzanne Thompson-Wright and Meaghan Russell.

1.4 Report Limitations

This assessment is based on the existing knowledge of the study area and the results of the archaeological survey undertaken. All known surface archaeological materials within the study

area are identified and discussed. The subsurface potential of the study area is also addressed, although it should be noted that additional subsurface relics may be exposed during later works not identified by this report due to lack of current historical and archaeological evidence.

This report was undertaken to best archaeological practice and its conclusions are based on professional opinion. It does not warrant that there is no possibility that additional archaeological material, will be located in subsequent works.

Significance assessment represents a mixture of facts and interpretations and it is possible that another professional may interpret the historical facts and physical evidence in a different way.

Section 6 provides a summary of the statutory requirements regarding heritage. This is made on the basis of experience with the heritage system in NSW and does not purport to be legal advice. It should be noted that legislation, regulations and guidelines change over time and users of the report should satisfy themselves that the statutory requirements have not changed since the report was written.

2 LITERATURE REVIEW

A review of available archaeological, historical and environmental information was undertaken to assess the Non-Indigenous heritage sites and issues relevant to the CSR lands at Erskine Park. This research targeted the known history of the site within the context of the broader Penrith area, the known heritage items identified from previous archaeological and historical studies, and the likely heritage items to be found at the site as a result of its land use history. This section outlines the methodology and results of the literature review conducted.

2.1 Methodology

Information on the historical development of the Erskine Park area was obtained from published historical accounts and previous archaeological assessments of the area. This was reviewed to identify the land use history of the area and its potential material form, and to identify the historic themes relevant to the CSR site at Erskine Park. A number of studies were targeted for their relevance, including historical accounts of the Erskine Park local area (Freame 1916, and Penrith City Council 2002). Accounts of the larger Penrith area (Proudfoot 1978; Power 1983, McClelland 1986, and Gyford 1988) also contained information on the development of Erskine Park within a local context. The Heritage Study conducted by Fox & Associates (1987) for the Penrith local government area was an important tool in identifying the known archaeological resource of the Penrith area. Archaeological studies in the Erskine Park area have been limited, although a study conducted by Koettig (1981) examined both Indigenous and Non-Indigenous heritage to the north of the study area. Other relevant works include an Environmental Impact Statement by Mitchell McCotter (1992) for the rehabilitation of the Erskine Park quarry.

Information on known heritage items was obtained from searches of the relevant databases, including: the Register of the National Estate; the National Trust Register; the State Heritage Register and Inventory; and the Penrith City Council Local Environment Plan (1998). Environmental information on the locality was also compiled and reviewed, as terrain resources and limitations are an influence on land use history. Land use history information was also obtained from research in NSW State Records, the review of available aerial photography, orthophotos and historical landholder certificates.

2.2 Environmental Characteristics

Erskine Park is located in the Cumberland Plain to the southwest of Sydney. The Cumberland Plain extends east-west from Parramatta to the Nepean-Hawkesbury River, and north-south from Windsor to Camden. This section outlines the general characteristics of the Plain with reference to historic land use patterns.

The Cumberland Plain is composed of two major geological formations – the Middle Triassic Wianamatta Shale Group and the Hawkesbury Sandstone Group. Erskine Park is in the Bringelly Shale of the Wianamatta Group, which is comprised of shale (claystone and siltstone), carbonaceous claystone, laminite and fine to medium grained lithic sandstone and rare coal.

The Blacktown soil landscape underlies the study area, and this landscape is characterised by gently undulating rises with slopes usually under 5 per cent. The original vegetation – being eucalypt woodland and tall open-forest (dry sclerophyll forest) – has been predominantly cleared (Bannerman and Hazelton, 1990).

Most importantly for the history of the study area, a small (200 metres by 200 metres) deposit of basalt suitable for quarrying was located as a hill within the Erskine Park Estate. This hill,

identified as the “Erskine” trig station or “Lenore Hill”, formed an important source of road metal and was extensively quarried.

Overall the landscape within the study area can be characterised as a low gently undulating ridge between South Creek and Ropes Creek and open woodland with patches of fertile soil along the creeks; a local high point being “Lenore Hill”.

2.3 Historical Development

This section discusses the history of the study area and the regional historical context.

2.3.1 Settlement of Penrith District

Among the first Europeans to venture into the Penrith district was an exploratory group led by Lieutenant-Captain Watkin Tench. In June 1789, Tench discovered a ‘river nearly as broad as the Thames at Putney’ (Penrith City Council 1971). On his return to Sydney, Tench reported to Governor Phillip, who named the river and the district ‘Evan’ after his colleague and friend, Sir Evan Nepean.

Early settlement of western Sydney dates to the 1790s with 22 settlers establishing farms along the alluvial soils of the Hawkesbury River (Penrith City Council 1971). Agricultural production was the major focus of early settlement in the region, following the identification of the Cumberland Plain as suited to extensive agricultural production. By 1801, the farms on the alluvial soils of the Hawkesbury-Nepean had become the major source of the colony’s grain. Settlement soon extended inland with large pastoral estates established in the open forests on the Wianamatta shale soil.

Land grants in the early nineteenth century further opened the area for settlement. Subdivision surveys were made by Surveyor Grimes and James Meehan from 1803, which resulted in land grants to free settlers varying in size from 40 acres to over 1000 acres. These grants were made to free settlers, members of the military and some officials (Fox & Associates 1987:44). Grants were first made in the Mulgoa Valley in 1810 with further grants in 1811-1813 and 1815 and 1816, by which time most of the land had been alienated in the Valley. An area around St Marys was also divided into large grants with the subsequent establishment of large estates, including the prominent ‘Mamre’ founded by Rev Samuel Marsden.

Access to the region was limited prior to 1815, when the established route into the area was via Castlereagh. Construction began on the western road in this year, and by 1817, the Great Western Road had become the primary access to the region. The establishment of this route prompted the founding of Penrith, which began as a military depot on the road west (Proudfoot 1978). Penrith’s existing settlement pattern was largely established by 1821, and development throughout the nineteenth century focussed on the consolidation and growth of Penrith and the other principal towns of Windsor and Richmond.

A number of large estates along the Nepean also date to the 1820s, with “Regentville” established in 1823, “Winborne” established in 1824 and “Glenmore” established in 1825. This decade also marked a change in farming patterns from wheat growing to grazing, a trend which had been developing from 1814 (Fox & Associates 1987:45). Cattle grazing became the major land use by the 1820s. By 1828, eight per cent of Sydney’s total population was located in the Penrith and Castlereagh regions, although the township of Penrith remained a relatively small community of only “291 inhabitants, sixty-three houses and two churches” (Proudfoot 1978).

During the 1850s major improvements in communications were made, primarily the beginning of the railways. In 1863 the railway reached Penrith, linking the regional city to Sydney and as the

railway expanded, to the Blue Mountains. During this construction, Penrith became a centre for railway workers and tradesmen as well as a small rural servicing town. The extension of the railway also resulted in an increased timber production industry, for both rail production and domestic purposes. Fox & Associates (1987:49) described this period as follows:

“The push westward, represented by men and materials, now centred at Penrith providing a further impetus for growth. It changed from agricultural centre to a railway town with railway yards the biggest outside the metropolitan area. The population of the area, encouraged by these developments, more than tripled between 1861 and 1881.”

From the 1890s to the 1910s, Penrith continued to function as a quiet rural centre. Developments during this period included new subdivisions in outlying areas, with new lands used for fruit growing, market gardening and dairying after the introduction of refrigeration in the 1880s. A number of vineyards were also established but were inhibited by competition and crop diseases in the region. During 1914 to 1940, industrial activities at the adjacent St Marys declined with the introduction of new technologies and emerging industry developing elsewhere. However, orcharding, grazing, dairying, poultry raising and mixed farming continued in the region.

During World War II, the region experienced an unprecedented period of growth and expansion. With the establishment of the wartime Munitions Fillings Factory at St Marys, a branch railway line was extended into the area and new housing was built to house the factory workers around the nucleus of the St Marys Station (Fox & Associates 1987:62). At the closure of the War, factories and factory sites were leased or sold for attractive prices by the Commonwealth and attracted large engineering works to small manufacturers. The military presence in the area also contributed to the development of bases, airstrips, accommodation, service facilities and dumps.

Further residential and industrial expansion took place at Penrith, Emu Plains and Colyton by 1966, and by 1977 there were considerable areas zoned for residential development in the Werrington County and Werrington Downs areas. Later in the 1970s the farming blocks north of Penrith at Cranebrook and Mt Pleasant were subdivided for residential development, with the Housing Commission and Penrith City Council assuming an active role (Fox & Associates 1987:63). Suburbanisation is the primary characteristic of the most recent phase in the development of the Municipality of Penrith. Commercial and industrial development has continued to be attracted to the region contributing to the growth of Penrith as a major metropolitan centre.

2.3.2 Erskine Park

The early history of Erskine Park is reflective of the broader region, with a number of estates established throughout the area by early settlers. Until the 1840s, these estates were typically large land grants in the possession of a few individuals.

The study area of this report was originally part of a large estate obtained by James Erskine in 1818, named “Erskine Park”. The original estate was 3000 acres in size extending from Mamre Road in the west to Ropes Creek in the east. The estate also covered Portion 44 of the existing suburb of St Clair, which was originally known as South Creek after the adjacent creek system. **Figure 2** is a parish plan (1967) showing the extent of Erskine's grant.

James Erskine was born in Ireland in 1765 and had an established career as a soldier having fought in the West Indies, Ireland and the Peninsular Campaigns. Accompanied by his regiment, Erskine arrived in Sydney aboard the “Matilda” in August 1817 and was promptly

awarded the position of Lieutenant Governor in September by Governor Macquarie. Within one year, the Erskine Park estate was established. Erskine constructed a villa on the property during the nineteenth century, which is believed to have stood until the 1960s. The precise location of this building is not known. In 1825, James Erskine died of cholera in Madras, India.

North of Erskine's grant another significant early landholder emerged in John MacHenry. MacHenry was a free settler who arrived in the colony in 1819 and soon made his way to Penrith. In 1821 Governor Macquarie promised him a grant of 100 acres, and by purchase and further land grants MacHenry quickly built up substantial land holdings south of the Great Western Highway (Gyford, G 1988:110). By 1828 he owned 2600 acres of land in Penrith and Bathurst districts. Before he died in 1832 he had also acquired 1600 acres at St Marys.

Bounded by the Western Highway, the present railway and Queen Street, 600 acres was granted to the explorer and Surveyor General John Oxley. Around this grant and bounded by South and Ropes Creeks lay "Dunheved", the home of the King family. To the West, straddling both sides of the Highway were grants to Governor Bligh's daughter, Mary whose second marriage was to Sir Maurice O'Connell (Gyford, 1988:110). West of Mamre Road was "Mamre", farmed by the Reverend Samuel Marsden. Marsden was granted 1030 acres in 1804 on which he ran a successful farm with imported fruit trees and bloodstock. In 1805 Marsden began sheep breeding experiments and in 1811 exported the first commercial quantity of wool to England.

The CSR lands at Erskine Park remained in the Erskine family until August 1853 when they passed to a J.R Barvall. During 1853, the land was mortgaged by Henry Dawson, and later sold to James Henry Thomas in 1865. In 1885 Edgar Ger purchased the land then sold it to David Dale in 1896. Land ownership was transferred to Andrew Thompson in February 1898.

2.3.3 The Lenore Estate

A prominent local, Andrew Thompson, was a tanner and owner of the nearby St Marys Tannery located between Saddington and Vincent Streets, which he established in 1881. He lived in St Marys at "Mimosa" which was built for him in 1894. In conjunction with owning one of the largest tanning operations in NSW, Thompson's holdings in the St Marys district totalled 810 hectares (about 2000 acres).

Thompson applied to bring the land under the provisions of the *Real Property Act* lodging a Primary Application (PA 10612) on the 28th of February 1898. There is however something slightly puzzling about the application as the land is referred to as Lot 1 of the Erskine Park Estate and the area given as 497 acres. However, on the Parish Plan there is no such sub-division indeed the 1908 Parish Plan shows Erskine's original grant, Portion 44 intact. This suggests that Thompson may have planned a sub-division that was not registered. It seems likely given the nature of settlement in the area that these would have been small farms for dairying.

The study area was part of the Lenore farm, named after the prominent hill (also known as the Erskine trig station). It appears that this land was managed by Thompson's son Andrew Thompson (confusingly three generations of Thompson's were called Andrew Thompson making it unclear exactly who owned what).

The farm was described in an article by "Moir" in the *Sydney Mail*, 6th June 1906. Moir describes Lenore as being a "kite shaped" property of 500 acres and mentions Rose Vale and Lockwood, as adjoining Thompson owned properties, which were part of the dairy. Rose Cottage is shown to the north of the study area and Lockwood to the southwest on the 1927 1:63360 Liverpool map.

A dairy farm is spatially organised with a central core of facilities and a periphery area used for grazing (see Ashton and Laffin 1950). At Lenore the outer paddocks were used for grazing and contained the usual infrastructure such as fences and dams. Inner paddocks were cultivated to provide feed for cows. Moira reports corn being grown, this is supported by evidence of a paddock of corn seen in the photographs in the newspaper article (**Figures 3 and 4**). The grain would be stored in silos and partly decomposed through a process of silage. This was undertaken in four concrete silos enclosed in a shed with a steam powered chaff cutter at one end (probably the southern end). The feed was dispensed into a feed trolley, which was mounted, on a small tramway, which ran to the silos, and then into the milking shed.

The milking shed which was part of one continuous building with the silos at the southern end, had 40 bails organised in 2 rows of 20 with the cows heads inwards to a central row of individual feed troughs filled from the feed trolley which ran between the two rows of feed troughs. The buildings were described as stoutly built using cheap bush timbers but with bricked floors to aid cleaning.

Waste products from the milking were fed to the pigs and the farm had an extensive piggery adjacent to the dairy. Water, which was essential to the process of milking, was pumped by windmills from farm dams to an old boiler on the top of Lenore Hill and gravity fed down to the farm. There were also extensive farm dams on the property.

The main homestead was located at the bottom of the hill and there were associated farm buildings as well as an orchard, vineyard and gardens. There was a formal entry, which seems to have been off Mamre Road, which was tree-lined with the entrance being through the jaws of a whale. Farm fencing around the yards was post and rail but elsewhere judging from the photographs it was post and wire.

Illustrations copied from the Sydney Mail are shown as **Figures 3 and 4**. An idea of the layout of the farm can be seen from the plans of the Closer Settlement subdivision (see below).

Overall this was a large dairy farm for the time and for the location. Dairy farms typically were around 200 acres and had a herd of about 100 cattle (see Stuart 2003). Most dairy farms were located in coastal areas such as the Illawarra and south coast. There were some near Camden and Campbelltown as well, but western Sydney was not known for its dairying at this time. Indeed there was not a local dairy to send the milk to at that time and it must be presumed that Thompson was selling milk directly into the Sydney market.

Historical accounts refer to Thompson's death in 1918 at his country home 'Tyrone' which was built on top of a hill on the existing Enviroguard recycling site within Erskine Park (Penrith City Council, 2002). This building was not mentioned in Moira's account however there is no reason to assume that if it existed it would have been mentioned, indeed Andrew Thompson Snr is mentioned as residing in St Marys. Therefore Tyrone must have been constructed between 1906 and 1918.

2.3.4 Soldier Settlement

The ideal of closer settlement has been a dominant factor in Australian land policy since the 1850s (see Stuart 2000). The ideal has been that it is desirable to break up large landholdings and create small holdings for "yeoman farmers" and to further that process, various governments in NSW passed a series of Land Acts to facilitate this. The Government resumed control of land and then in effect sold it back to selectors who in return for proving their bona fides as genuine selectors and improving the land to the governments requirements, were able to purchase land on generous terms (see Stuart 2000 Chapters 3 & 4).

As World War I concluded, governments across Australia developed Soldier Settler schemes to reward the soldiers with the opportunity to obtain small holdings on similar terms as selectors. In NSW special provision was made by the Returned Soldiers Settlements Act for the occupation of land by discharged soldiers and sailors (there was no separate air force). Crown land or acquired land could be set apart for discharged soldiers and sailors, and obtained by them under the Returned Soldiers Settlements Act, or under the Crown Lands or Closer Settlement Acts. The latter two acts were amended to incorporate provisions for returned soldiers.

Under one of the provisions under the Returned Soldiers Settlement Act, land could be subdivided into home maintenance areas and set apart as a group settlement for discharged soldiers as approved by the Minister. Upon being satisfied as to their fitness and suitability, the Minister would allot blocks subject to prescribed conditions. Within 12 months from the date of allotment, right of possession was established, the title commencing from the date of confirmation. Five years of residence was necessary. Boundary fences were to be completed within 3 years from the date of confirmation. The capital value as notified was repayable by annual instalments, usually of 6 per cent of the property value, including interest on the principal at 5 per cent. Under certain circumstances, the Minister could postpone the payment of the first two annual instalments. The third instalment could be suspended, provided that improvements of a value equal to the amount of the three instalments were made. On payment of all moneys due, and fulfilment of all conditions, a freehold title was given.

In 1919, the Lenore Estate was acquired by the Crown, from Thompson's executors, as a home maintenance area called the Lenore Estate (no 806). It seems that the project was initiated by a H.R.McWilliam, a closer settlement specialist based in Sydney who found both the land and the soldier applicants. F.R. Stevenson surveyed the land in August 1919. The subsequent draft plan and finalised plan is reproduced as **Figure 5**. These show the nature of the Thompson estate and the value of the buildings and structures.

The Lenore Estate was subdivided into seven small farms of roughly equal size. The infrastructure located at Lenore Hill was split between three farms, Farms A, B & C, and a house and kitchen on Farm B was to be moved to Farm D. The intention was to give each farm sufficient area and infrastructure for the farmers to quickly establish themselves as mixed or dairy farmers (see Report dated 14th Nov 1919 by Closer Settlement Board SR 10/37119). The form of the subdivision accounts for the odd shape of the land holdings in this area.

Two of the farms within the study area: No 77 (Farm B) and 78 (Farm C) have been researched in detail. The valuations describe the land as follows:

Table 1: Land Valuations of Farm B and C:

Farm B – 210 acres	Value
Open shed 40 x 42 IR and two sides iron	30
Pig stys 66 x 9, bricked flooring, slab sides, 8 pens slab floors	36
2 coppers, 120 galls and 30 galls, one loose one bricked in	10
Old buggy shed and stables	5
Brick (tower) house 33 x 50, 4 rooms IR, bk chim, well finished (£800)	300
Iron store room 10 x 10 IR, £3/-, Copper built in £12/-	15
2 – 1000 gallon tanks £16/- Fibro cement bathroom £4/-	20
Iron shed 16 x 12 flat IR £6/-, Gas generating equipment £10/-	16

Fencing	
31 chains, 6 B, N.E. bdy @ 10/-, H.V.	7-15-0
80 chains, old 2r & 2w N.B. @ 3/- FV	12- 0-0
18 chains, R and W pt SB, @ 3/- H.V.	1- 7-0
23 chains 2r and 2w pt SB @ 3/- H.V	1-14-6
37 chains, barb Div @ 8/- FV	14-26-0
25 chains 2r and 2w Div, @ 5/- FV	6- 5-0
Total Fencing	43-17-6
Windmill pump and piping	40
Water laid on to house and piping, 1200 ft	25
Old boiler supply tank	5
Dam	100
Total infrastructure	£645-17-6
60 acres cleared @ 30/-	90- 0-0
150 acres partly cleared @ 10/-	75- 0-0
Total clearing	165- 0-0
Total value	£810-17-6

(source SR 10/37119)

Farm C – 215.25 acres	Value
Old brick dwelling 9 rooms & brick kitchen 54 x 33 & 54 x 32 (£450 to £600	300
Underground tank cement and brick 15 x 15 wood tap	40
Slab dairy, cement and brick floor 24 x 30 IR	15
Copper bricked in and brick chimney	5
Open hay shed	30
Dam £10, Dam £5, Dam £5	50
Fencing	
48 chains, 2b W.B. 3/- HV	3-12-0
23 chains old 2r & 2w pc NB 3/- HV	1-14-6
22 chains 6w EB @ 10/- HV	5-10-0
130 chains 2r 2w SB @ 3/- FV	19-10-0
154 chains mixed BW fencing @ 5/- av	38-10-0
Total Fencing	68-16-6
Total Infrastructure	£508-16-6
85 acres cleared @ 30/-	127-10-0
130.25 acres ringed & cleared up @ 10/-	65-07-6

	Total cleared	£192-17-6
Total Value		£701-14-0

(source SR 10/37119)

It seems that the valuation was adjusted downwards as it was understood that some of the infrastructure was too large for a smaller dairy farm to be fully used and thus was excessive.

Farm B was applied for and allocated to a Charles Hely, who was a surveyor and had been a Lieutenant with the 39th Battery AIF. Hely received a gunshot wound to the left arm and was discharged in 1917. Hely was 31 years old, unmarried but owned 2 houses in Wardell Road Dulwich Hill.

Farm C was applied for and allocated to a Francis Roberts who had been a trooper in the 1st Cavalry Signal Squadron of the AIF. Roberts was born in New Zealand on the 26th of April 1881 and was 38 years old, married with a five-year-old daughter. Since discharge, Roberts had been studying at the Hawkesbury Agricultural College.

Both intended dairy farming with associated piggeries. They considered that St Marys was only 4 miles distant by a first class (macadamised) road and they were confident of having the skills and capital to make a success of farming (See reports on each applicant SR 10/13245, 806).

The farmers occupied the land on the 1st of November 1919 and the purchase for Closer Settlement was gazetted on the 23rd July 1920.

Portion No 77 (Farm B) was purchased by Charles Hely on the 1st November 1919. The land was transferred to a Horace Walter Chad on the 14th June 1923. It appears that Chad subdivided the land into two, creating Portion 85, which covered the Erskine Hill area and room for access to a nearby road. Papers in file SR 10/37119 discuss the application. Initially the Closer Settlement Board was informed by H.R McWilliam who claimed Hely had been paid £12000 and 10000 £1 shares in the NSW Blue Metal Company which was formed in November 1921. There is nothing more in the file about this and it is presumed the proposal did not eventuate.

Valuer Mr H.C. Bucknell inspected the property in June 1925 (about 4 years after the first report) in connection with a proposed sub-division. He interviewed Mr Chad and found that a Mr German had proposed to mine the blue metal deposit and pay Chad £1000 plus either £1000 in shares or cash and a half penny per ton royalty. Bucknell thought this was permissible especially as Chad was lacking in funds and owed the Closer Settlement Board a considerable amount of money, which Bucknell thought, should be covered by German's cash. This was approved and a separate portion was created.

In view of the detailed knowledge of the land in the historical records for this time, if quarrying had been established prior to the mid-1920s it would have been recorded. The purchase of the land by Mr German no doubt marks the beginnings of quarrying in the study area.

Chad sold the land to Percy Arthur Poolman on the 9th of March 1934 and the land was held by the Poolman family after his death. Arthur Renwick Poolman and Nena Christina Alice Taylor held the land as joint tenants in common until it was sold to National Contractors Pty. Ltd on the 19th July 1960. From the title it seems that Portion 85 was also sold at this time. In 1985, the land was transferred to CSR Limited.

Portion No 78 (Farm C) was purchased by Francis Roberts on the 1st of November 1919 and then sold to Herbert Hodges on the 20th March 1924, and mortgaged to the Minister of Lands by

Hodges in that month. The capital value of the holding was given as £2124/2/9 based on a valuation of £9/17 per acres. Hodges farmed the land until he sold it to Leslie James O'Neil on the 22nd August 1940. Although there were excisions for a pipeline and the realignment of Mamre Road the bulk of the holding remained intact until it was purchased by National Contractors Pty. Ltd in April 1964. In 1985, the land was transferred to CSR Limited.

2.3.5 Quarrying

Review of the 1947 aerial photograph of the Erskine Park study area shows that the quarry had expanded into Farm C (i.e to the south and west). All buildings from the Thompson farm on Farms B & C had been removed by 1947, although the large dairy on Farm A was still extant. It seems from the aerial photograph that the Farm B house and buildings were located to the east of the hill. There seems to be a house, some out buildings and piggeries in this location.

There is another building complex positioned to the west of the original quarry pit. This complex consisted of, at minimum, six buildings positioned to the north and south of the western access road to the quarry. Analysis of aerial photography indicates that five of these six structures were removed between 1947 and 1986. **Figure 6** details these structures and the quarry in 1947. Only one building is still evident on the most recent aerial photography of the site (2000), being a building approximately 30 metres by 20 metres to the north of the access road into the site. The function of this building is unknown, although its proximity to the quarry pit indicates that it was industrial in function. Analysis of aerial photography indicates that the surrounding area has been subject to continued development, with new buildings constructed for the quarry. It is unlikely that the footprint of earlier industrial structures will be found in this area.

During the 1990s, rehabilitation investigations took place for the conversion of the quarry into a landfill waste depot. Development consent was obtained in November 1992 and in April 1994 rehabilitation operations commenced. Enviroguard Pty Ltd now uses the former quarry site as a solid waste landfill. Quarry overburden materials are situated adjacent to the former quarry on Lot 93 DP 838541. Lot 92 DP 838541 (3.73 hectares) is currently utilised by Enviroguard Pty Ltd for purposes associated with the landfilling operations (offices and workshops).

Within the study area, the Gyro Flying Club was also established in the later part of the twentieth century. As part of this land use, an airstrip was established and a small hut erected in the southeast of the study area. From a review of historical aerial photographs it is evident that the airstrip was constructed between 1955 (when it is not evident on the 1955 edition of the Liverpool 1:633690 map) and 1961 when it appears on the aerial photograph (**Figure 7**).

There has been some suggestion that this was a World War Two landing ground or dispersal landing strip. However research into a dispersal site at Hoxton Park by Stuart (2003) and a thematic study prepared in 2001 for Deakin University and the NSW Heritage Office both confirm that this was not a World War Two construction. The airstrip and hut are most likely related to the operations of the Gyro Flying Club.

2.4 Historic Themes

A historic theme is a way of describing a major historical event or process, which has contributed to the history of New South Wales. Historic themes provide the background context within which the history, physical expression and significance of an item can be understood. Themes have been developed at National and State levels but Regional and Local themes can also be developed depending on the history of the area and item. The State and National themes are outlined in synoptic form in the *New South Wales Historical Themes* issued by the NSW Heritage Office (2001). The themes outlined below are the most applicable themes to the history of the development of the study area.

Table 2: Historic Themes

Australian Theme	NSW Theme	Notes
Building settlements, towns and cities	Land Tenure	Activities and processes for identifying forms of ownership and occupancy of land and water, both Aboriginal and non-Aboriginal.
Developing local, regional and national economies	Industry	Activities associated with the identification, extraction, processing and distribution of goods.
Developing local, regional and national economies	Agriculture	Activities relating to the cultivation and rearing of plant and animal species, usually for commercial purposes, can include aquaculture.
Developing regional and local economies	Pastoralism	Activities relating to the rearing and production of animal products and services, usually for commercial purposes.

The relationship of these themes to the study area is briefly outlined below.

Land Tenure

As a result of European settlement in the Penrith district, Erskine Park has been a site of pastoral activity. Originally the large estate of James Erskine was typical of those granted to prominent individuals in NSW in the early 1800s. Other examples are the nearby estates of Mamre held by the Rev Samuel Marsden and Regentville held by Sir John Jameson.

As discussed above the closer settlement movement was a significant part of the NSW Government's policy on land although the policy was aimed at the squatting estates (which were not freehold like Erskine's estate). However the combination of closer settlement and soldier settlement was important in its own right as a particular form of closer settlement. The subdivision of the Lenore Estate for soldier settlement was part of a common process throughout NSW but seems to have been relatively rare in the Cumberland Plain and even then it seems that many of the soldier settlement schemes were for intensive poultry farming rather than dairying.

Archaeological indicators of land tenure history can include: fences, survey marks, subdivision patterns, boundary hedges, stone walls, natural boundary features (rivers), cairns, trig stations, and colonial/state border markers.

Agriculture

The history of Erskine Park is directly associated with the early agricultural development of the Cumberland Plain, being constructed to provide an overland passage of goods between the fertile lands of the Cumberland to Sydney. Land grants in the Penrith district date to the early 19th century, primarily James Erskine's grant in 1818. Early agricultural land use was originally focussed along the fertile floodplains of the Hawkesbury-Nepean, then extending inland to the Cumberland Plain along the creek lines of the area. As technological support increased, arable production was able to move away from the creek lines of the area, and in this way, the Cumberland Plain continued to be a focus of agricultural activity throughout the nineteenth century, only to give way more recently to intensive urban development.

Archaeological indicators of agricultural lands are often ephemeral, as later land use and continued cultivation often obliterate evidence of earlier systems. The distinctive ridges and furrows (or 'lands') of early agricultural systems only survive in areas no longer used as arable land. More permanent indicators of agricultural activity are the industry and processing facilities associated with primary production. These include features such as threshing floors, mills and granaries.

Pastoralism

Pastoralism was conducted in conjunction with agricultural cultivation during the early history of Penrith. As settlement followed the streams into the Cumberland Plain, the potential of the vast tracks of land within the Cumberland Plain for grazing became obvious. Stock grazing within the area primarily consisted of cattle grazing. Pastoral activity within the Cumberland Plain continued to be an important activity throughout the nineteenth century.

The prime change in the dairy industry occurred in the 1880s and 1890s with the introduction of the centrifugal cream separator and the development of refrigeration. This led to the opening of a large export market for butter and cheeses (Ashton 1949:4-9). An increased emphasis on improvements of cattle breeds and the ability through rail transportation to sell fresh milk to the Sydney market allowed the dairy industry to rapidly expand.

The dairy on the Lenore Estate is unusual as it was clearly undertaken on a large scale and in an area not noted for its involvement in the dairy industry. Typically dairying was located on the coastal areas and most often was undertaken by small family run farms. Andrew Thompson was clearly working at a much larger scale and most likely integrating the dairy with his other business interests such as tanning.

With the break up of Thompson's estate into Soldier Settlement farms there was a reversion to family sized farming (in line with the ideals of Closer Settlement) and the infrastructure was divided between the farms.

Archaeological indicators of pastoralism can include a variety of features, such as widespread clearance to provide grazing land, introduction of foreign grasses to provide for the stock animals, grazing, and construction of associated infrastructure such as fences, sheep washing areas and dips, shearing buildings, cattle pastures and associated dairying facilities (a storage structure and hard-floored milking area) and so on. These features can result in a number of landscape impacts such as accelerated erosion and earthworks. The articulation between transport and agricultural and pastoral activity must also be considered, with the movement of stock and products an important consideration.

Industry

The study area remained predominantly pastoral during the 19th century and early 20th century, however extractive industry started to emerge in the 1900s. A gravel quarry was established in 1925, which provided a valuable resource in the construction of many of Sydney's roadways and construction material requirements during the 20th century. This pit expanded as demand for blue metal material increased through the use of blue metal in road making and in concrete construction.

Later, almost the reverse happened with building material being brought back to the quarry and the hole being filled.

Archaeological indicators of industry can include a range of features such as factories, workshops, depots, industrial machinery, timber mills, quarries, railways or wharfs, blacksmiths,

canneries, kilns, smelters, tanneries, breweries, and factory offices. From the known history of the study area, potential evidence of early quarrying may include the quarry pit, on-site processing facilities, on-site storage areas, transport infrastructure (roads) constructed to move quarry product, and office facilities. It is also possible that some on-site accommodation for quarry workers may have been established.

3 KNOWN AND POTENTIAL HERITAGE ITEMS IN THE STUDY AREA.

This section discusses the known and potential heritage items in the overall study area.

3.1 Known Heritage Items

The following heritage databases were searched on the 20th of October 2003 with the aim of identifying any known Non-Indigenous heritage items contained within the study area:

- the Register of the National Estate;
- the National Trust Register;
- the State Heritage Register and Inventory; and
- the Penrith City Council Local Environment Plan 1998 (urban land).

No heritage items listed on these databases are contained within the CSR lands at Erskine Park.

3.2 Potential Heritage Items

A number of potential heritage items have been identified in and adjacent to the CSR lands at Erskine Park by the analysis of historical records, maps and aerial photography. These are discussed below in the context of the periods of the site's land use over time.

3.2.1 Erskine Estate

The villa constructed by James Erskine in the 1800s, the precise location of which is not known, may potentially be contained in the study area. This structure was apparently destroyed in the 1960s. Review of the 1947 aerial photograph does not show any indication of a "villa" and it is therefore unlikely that foundations would be located in the study area.

3.2.2 Thompson's Lenore Farm.

The core area of Thompson's dairy was located adjacent to the blue metal deposit and by 1961 all infrastructure except the dairy had either been quarried or demolished through quarrying activities. The dairy survived until 2003 when it was demolished.

Infrastructure located away from the quarry, including dams, appear to have survived as revealed from the analysis of map and aerial photography.

3.2.3 Lenore Soldier Settlement

As a result of the Soldier Settlers using the core infrastructure from Thompson's dairy, all of the physical infrastructure has been removed along with the area identified on the 1947 aerial photograph as being the relocated house and outbuildings for Farm B.

However, the infrastructure located away from the quarry would have been used and repaired. It would be difficult to distinguish between evidence of use by Thompson and that by Soldier Settlers in the peripheral areas due to the lack of distinguishing physical evidence likely to be created in this period.

3.2.4 Quarrying

The quarry was used from 1925, with the original quarry pit being extended. Material evidence of the original quarry pit is not expected due to the continued quarrying throughout the 20th century, as the expansion of the quarry pit would have effectively removed the original construction of the earlier phases of the pit.

Review of the 1947 aerial photograph of the Erskine Park study area indicates that another building complex was positioned to the west of the original quarry pit. This complex consisted of, at minimum, six buildings positioned to the north and south of the western access road to the quarry. Analysis of aerial photography indicates that five of these six structures were removed between 1947 and 1986. Only one building is still evident on the most recent aerial photography of the site (2000), being a building approximately 30 metres by 20 metres to the north of the access road into the site. The purpose of this building is unknown, although its proximity to the quarry pit indicates that it was industrial in function. Analysis of aerial photography indicates that the surrounding area has been subject to continued development with new buildings constructed for the quarry. It is unlikely that the footprint of earlier industrial structures will be found in this area.

3.2.5 Airstrip

The use of the eastern section of the study area by the Gyro Flying Club in the late 20th century is evident through an airstrip traversing the site from northeast to southwest. The airstrip was placed to maximise the gentle slope of the landscape, and consequently, no earthworks were required for its construction and use. The airstrip is defined by a grassy depression from continued use.

3.2.6 Other Archaeological Issues

Although no other areas have been identified to be of archaeological potential by this literature review, it is possible that material evidence of 19th century pastoral use and early 19th century quarrying may be found at the site. Potential items may include fences, disposed machinery and equipment.

4 FIELD ASSESSMENT

This section outlines the methodology and results of the survey undertaken to assess the Non-Indigenous heritage of the study area.

4.1 Methodology

As noted in **Section 1.1**, this study aimed to identify the Non-Indigenous heritage constraints and opportunities affecting the potential future development of Precincts 1,2,3 and 5 of the development areas within the CSR lands at Erskine Park. This study therefore aimed to identify the registered heritage items of the area, identify any previously unrecorded heritage items, and assess the potential for subsurface relics to occur within the study area. Relics are defined as meaning any deposit, object or material evidence which relates to the settlement of the area that comprises New South Wales (not being Aboriginal settlement), and which is 50 or more years old (the NSW *Heritage Act [1977 as amended 1998]*).

As outlined above there are no registered heritage items within the study area but there are a number of relics and areas of archaeological potential within the overall study area. The field survey therefore aimed to inspect these items and areas to document their material fabric, and assess their potential and/or heritage significance so that where these items were to be impacted by the development of Precincts 1,2,3 and 5, appropriate management strategies could be developed.

A standardised recording form was developed prior to the field survey based on the recording requirements of the NSW Heritage Office outlined in the *Archaeological Assessment Guidelines* (1996). This recording form enabled the following information to be collected in a standardised method:

- *site name and number*: label specific to the survey.
- *feature name and number*: each heritage item identified was numbered consecutively throughout the survey.
- *location*: location of item within the landscape; this could include lot and DP numbers where applicable.
- *landform unit*: the positioning of each heritage item within the landscape.
- *AMG Co-ordinates*: the precise location of the heritage unit as taken with a handheld GPS.
- *physical description of item*: included information on fabric, construction, condition and associated features.
- *sketch plan*: rough map of the item and its relationship to associated features.
- *section*: documenting the relationship between the item, the landscape and any associated features.
- *historical notes*: identifies any known history of the site and/or related sites.
- *recorder and date*: identified the details of the survey.

Photographic records were an important feature of site recording, with all photographs including a clear scale for reference.

4.2 Results

An initial field survey was conducted on the 5th of November 2003 by Suzanne Thompson-Wright. A supplementary survey was undertaken by Dr Iain Stuart and Kylie McFadyen on the

25th of November 2003 to verify the results of the initial survey. A general inspection of the Erskine Park Estate study area was conducted, the limits of which are illustrated in **Figure 1**.

The following sites were identified as occurring within the study area however, not all are located within the development land (Precincts 1,2,3 and 5). Their locations are mapped on **Figure 8**.

4.2.1 Items Outside the Proposed Development Areas

Stockyard

The stockyard is located near the junction of Erskine Park Road and Lenore Lane outside the development lands. It consists of two pens and a race leading to a ramp. The fencing is mostly post and rail with the use of morticed posts to support timber rails as opposed to wire fencing. The post and rail fence has typically been seen as the oldest style of fencing in common use until replaced by the more cost-effective wire fence from the 1850s and 1860s (Pickard 1998). It should be noted that a period of lag time may have occurred resulting in the construction of this type of fencing during the early 20th century. It is a small but typical stockyard and is illustrated in **Plate 1**. The overall condition of the site is good.

Remnant post and rail fencing

Remnant post and rail fencing runs along Lenore Lane from Erskine Park Road for approximately 675m. CSR has advised that this fencing is located outside the nominated development area. From remnant posts there seems to be 2 rails. This would seem to be part of the 80 chains of 2 rail and 2 wire fencing recorded as being part of the northern boundary of Farm B in 1919. Generally the fencing is in poor condition and has been replaced by modern fences initially by adding posts and wire to the existing post and rail and then by building a new fence inside the old one (**Plates 2-4**).

Remnant wire fencing along Lenore Lane

Where the post and rail fence ceases, a 5-wire fence takes over. CSR has advised that this fence is also located outside the nominated development area. This runs for approximately 775m along Lenore Lane and consists of split wooden posts with 5 wires. This could be part of the fencing identified as being in the northeast on the 1919 valuation but it is not clear that this is the case. The style of fencing and the wire is consistent with a 1919 date but it cannot be proved that it is the fence. The association of wire fencing (first introduced in the 1850s) with the timber posts is suggestive of their continued use throughout the late nineteenth and early twentieth centuries. The fence is in poor condition with the majority of posts rotting and supplemented by new posts and wire and subsequently a fence inside the old one (**Plate 5**).

4.2.2 Items Within the Proposed Development Areas

Eastern Lands

Sundry Farm dams

Two dams appear to be in the same location as dams shown on the 1919 plan although both are of larger size and have been recently dug out and reconstructed. These dams are located within the nominated development area.

The airstrip

The airstrip consists of a strip of mown lawn and compacted land approximately 50m wide. Located within the nominated development area. There is no evidence of a made surface such as was used on World War Two dispersal strips. The boundary of the airstrip is marked by white painted tyres and there is a rain gauge and a support, possibly for a windsock associated with the strip. It runs on an angle of 45° to 225° and rises steeply on the 45° landing and goes over a ridge. The construction of the airstrip dates from after 1955 and before 1961. Officially the airstrip was closed about 2-3 years ago but it is understood that aircraft may still practice landing there (**Plate 6**).

Building (former Gyro Club)

This is a timber-framed building with a metal exterior cladding and no interior lining. It has a skillion roof covered with corrugated asbestos cement sheet and other corrugated iron and clear plastic sheets. The building has three large windows and a large opening at one end. The interior is not floored and contains a brick fireplace with no chimney.

It appears as if the timber frame at least was used for another building as there are old mortices on the top plate that suggest a former use. This was possibly some form of storehouse recycled as a clubhouse. Presumably this building dates to the same time as the airstrip (**Plate 7**). The building is located within the nominated development area.

The Model Plane Club (Carl James Memorial Field)

This is an area for flying model planes and consists of a cement block viewing area, which according to an inscription dates to 1975 (**Plate 8**). This area is located within the nominated development area.

Western Lands

Quarry Workshop

This building is visible on the 1947 aerial photograph as a rectangular building. However like most of the buildings associated with the quarry the building has changed over time.

The original building was a rectangular building with a timber and metal truss roof (the truss type is a "Fink" truss, composed of a metal King post, and a metal Queen Post with wooden struts running on each side of the posts to the principal rafter). On each side of the building the trusses (so called "Jack trusses") have been extended to create bays and at the eastern end a large cement block extension was added, probably some time in the late 1970s.

The main roof consists of corrugated asbestos cement sheeting and it seems that this may have been the original exterior wall cladding. The roof and walls of the extended bays are corrugated galvanised iron.

The interior is largely open with office and storage areas in the bays. The building may have been some form of workshop for the repair of quarry machinery but there is no evidence of this (**Plates 9-12**). The building is located within the nominated development area.

4.3 Areas of archaeological potential

Archaeological Potential is defined "as the degree of physical evidence present on an archaeological site" (Archaeological Assessment Guidelines 1996:34). From the historical

evidence and from the field inspection there is no evidence of archaeological remains other than fences and dams in the study area. The reason for this is the nature of dairy farming and the Lenore farm. The entire infrastructure was located in a central place, Lenore Hill. Quarrying of Lenore Hill effectively destroyed all the farm buildings by removing the ground surface so that there is no archaeological deposit left.

The fences have some archaeological potential, as indicators of enclosing the landscape to make paddocks, and it might be possible to see whether there is evidence of changing use of paddocks over time by following fence lines. However, as individual items, they have little research potential beyond the immediate physical evidence of their type.

Farm dams are of some importance as sources of fresh water for dairy cattle and their location relative to fences helps understand how the landscape was used for dairying. However, their physical form has altered over time as they have been enlarged and altered through cyclical maintenance (essentially digging out of silt). Their archaeological potential is limited.

4.4 Summary: Nature of the physical evidence

As a summary the nature and date of the physical evidence is compared to the historical themes outlined in **Section 2**.

Table 3: Summary of Physical Evidence

Theme	Evidence
Land Tenure	No physical evidence
Agriculture	No physical evidence
Pastoralism	Stockyard, Sundry Dams*, Post and rail fence, 5-wire fence
Industry	Quarry Workshop*
	Airstrip*, Gyro Flying Club*

* : Evidence located within the development area.

Overall it seems that the physical evidence of non-indigenous heritage is not fully representative of the rich history of the site. This is largely due to the nature of quarrying and the location of the infrastructure from Thompson's Dairy Farm adjacent to a rich deposit of blue metal.

5 HERITAGE SIGNIFICANCE ASSESSMENT

An assessment of significance is undertaken to explain why a particular site is important and to enable the appropriate site management to be determined. The basis for assessing cultural significance is the ICOMOS Australia Burra Charter and associated guidelines.

Cultural significance is defined in the *Australian ICOMOS Charter for the conservation of places of Cultural Significance* (the *Burra Charter*) as meaning "aesthetic, historic, scientific or social value for past, present or future generations" (Article 1.1). Cultural significance may be derived from the fabric of a place, association with a place, or the research potential of a place. The significance of a place is not fixed for all time, and what is of significance to us now may change as similar items are located, more historical research is undertaken and community opinions change.

The application of the Burra Charter and guidelines to the preparation of Conservation Plans is outlined in J S Kerr's *The Conservation Plan* (1990). The essential components of significance involve assessing the historical, aesthetic, scientific or social significance of a place.

The process of linking this assessment with a site's historical context has been developed through the former Department of Urban Affairs and Planning and the Heritage Council of NSW State Heritage Inventory Program (SHIP) and is outlined in the *Heritage Assessment Guidelines, NSW Heritage Manual*. The *Heritage Assessment Guidelines* establish six evaluation criteria (which reflect four categories of significance and whether a place is rare or representative) under which a place can be evaluated in the context of State, Regional or Local historical themes. These Guidelines have (mid August 2001) been updated by the guideline *Assessing Heritage Significance*, which reflects recent legislative, changes to the Heritage Act. It is understood that the guidelines in the Heritage Manual will be successively upgraded to reflect the new assessment criteria.

The Heritage significance criteria are:

Criterion (a) – an item is important in the course, or pattern, of NSW's cultural or natural history (or the cultural or natural history of the local area);

Criterion (b) – an item has strong or special association with the life or works of a person, or group of persons, of importance in NSW's cultural or natural history (or the cultural or natural history of the local area);

Criterion (c) – an item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in NSW (or the local area);

Criterion (d) – an item has strong or special association with a particular community or cultural group in NSW (or the local area) for social, cultural or spiritual reasons;

Criterion (e) – an item has potential to yield information that will contribute to an understanding of NSW's cultural or natural history (or the cultural or natural history of the local area);

Criterion (f) – an item possesses uncommon, rare or endangered aspects of NSW's cultural or natural history (or the cultural or natural history of the local area);

Criterion (g) – an item is important in demonstrating the principal characteristics of a class of NSW's:

cultural or natural places; or
cultural or natural environments.

(or a class of the local area's:
cultural or natural places; or
cultural or natural environments.)

Analysis of a heritage item against these criteria allows an assessment of the level of significance of an item, being either of local or state heritage significance. Should an item be so altered that it fails to meet the significance criteria, a significance assessment may not be able to be made.

Different components of a place may make a different relative contribution to its heritage value. Loss of integrity condition may diminish significance. In some cases it may be useful to specify the relative contribution of an item or components. Table 4 summarises the Significance Gradings outlined in the NSW Heritage Manual, *Assessing Heritage Significance* (2001). While it is useful to refer to this table when assessing this aspect of significance, it may need to be modified to suit its application to each specific item:

Table 4: Significance Grading

Grading	Justification	Status
Exceptional	Rare or outstanding item of local or State significance. High degree of intactness. Item can be interpreted relatively easily.	Fulfils criteria for local or State listing
High	High degree of original fabric. Demonstrates a key element of the item's significance. Alterations do not detract from significance.	Fulfils criteria for local or State listing.
Moderate	Altered or modified elements. Elements with little heritage value but which contribute to the overall significance of the item.	Fulfils criteria for local or State listing.
Little	Alterations detract from significance. Difficult to interpret.	Does not fulfil criteria for local or State listing.
Intrusive	Damaging to the item's heritage significance.	Does not fulfil criteria for local or State listing

The heritage significance of each heritage item identified by this study within the development area is outlined below. Items not located in the nominated area are not included in the assessment.

5.1 Assessment of Items Within Proposed Development Lands

5.1.1 Sundry Dams

Criterion (a) the items meet this criterion, as they are associated with Andrew Thompson's Lenore Estate however at a low level of importance.

Criterion (b) the items do not meet this criterion as they lack of strong association with a particular person.

Criterion (c) the items do not meet this criterion.

Criterion (d) the items do not meet this criterion.

Criterion (e) the items do not meet this criterion as they have no research potential.

Criterion (f) the items do not meet this criterion.

Criterion (g) the items do not meet this criterion as they are not important in demonstrating the principal characteristics of an early 1900s farm dam.

These items have local heritage significance but are graded as little.

5.1.2 The Airstrip

Criterion (a) the item does not meet this criterion as its history does not suggest that it is historically important.

Criterion (b) the item does not meet this criterion.

Criterion (c) the item does not meet this criterion.

Criterion (d) the item does not meet this criterion.

Criterion (e) the item does not meet this criterion.

Criterion (f) the item does not meet this criterion.

Criterion (g) the item does demonstrate the principal characteristics of grass airfields but it is not important in demonstrating these characteristics even at a local level.

This site has no heritage significance.

5.1.3 Building former Gyro Club

Criterion (a) the item does not meet this criterion.

Criterion (b) the item does not meet this criterion.

Criterion (c) the item does not meet this criterion as the architectural design lacks aesthetic or technical qualities.

Criterion (d) the item does not meet this criterion.

Criterion (e) the item does not meet this criterion.

Criterion (f) the item does not meet this criterion.

This site has no heritage significance.

5.1.4 The Model Plane Club

Criterion (a) the item does not meet this criterion, largely as it is recent.

Criterion (b) the item does not meet this criterion.

Criterion (c) the item does not meet this criterion.

Criterion (d) the item does meet this criterion through its association with the Model Plane club but probably not at such a sufficiently high level to meet this criterion.

Criterion (e) the item does not meet this criterion.

Criterion (f) the item does not meet this criterion.

Criterion (g) the item does not meet this criterion.

This site is too recent in origin to have gained any heritage significance.

5.1.5 Workshop

Criterion (a) the item meets this criterion, as it has been part of the quarry facility since at least 1947, however the level of this importance is low.

Criterion (b) the item does not meet this criterion

Criterion (c) the item does not meet this criterion, as the structure of the building is relatively common.

Criterion (d) the item does not meet this criterion

Criterion (e) the item does not meet this criterion

Criterion (f) the item does not meet this criterion, as the building's form is not rare.

Criterion (g) the item does demonstrate the principal characteristics of a large shed but is really not important in demonstrating the principal characteristics of such buildings.

This item has local heritage significance through its association with the quarrying activity but is graded as little as it is typical in form and has little to contribute to demonstrating or interpreting the history of the quarry.

6 MANAGEMENT

The section discusses the management of Non-Indigenous heritage sites within the proposed development lands. The aim of management is to:

- Advise of relevant statutory controls on development of and adjacent to identified heritage items.
- Ensure the heritage significance of identified items is maintained.
- Ensure that new development is undertaken in a manner that is sympathetic to, and does not detract from, the heritage significance of heritage items and their settings
- Advise of appropriate measures to record and if necessary, protect heritage items and sites.

6.1 Statutory Controls Relating to Heritage

The nature and level of controls on the project area are set out below. The relevant statutory controls to protect cultural heritage are outlined below. It should be remembered that the legislation has different applications according to the nature of the landowner.

COMMONWEALTH

Environmental Protection and Biodiversity Conservation Act (as amended 2003)

This Act has been amended to protect heritage places of National significance or which the Commonwealth owns. The amendments replaced the Australian Heritage Commission with the Australian Heritage Council and created a Commonwealth Heritage List and a National Heritage List. Actions by the Commonwealth or any actions impacting on items on the above two Acts or the Register of National Estate will have to be referred to Environment Australia for consideration.

The Register of the National Estate, Commonwealth Heritage List and the National Heritage List were searched on the 26th of March 2004. There are no listings for items within the study area.

NEW SOUTH WALES

Heritage Act 1977 (as amended 1998)

The *Heritage Act 1977 (as amended 1998)* was passed to conserve the environmental heritage of New South Wales. The Heritage Act is binding on all State Government agencies. Items of heritage significance are protected by the means of Interim Heritage Orders or by listing on the State Heritage Register. Short-term orders under Section 130 of the Act, which was abolished in the 1998 amendments, continue for three years after the repeal of Section 130 by the amendments.

The State Heritage Register was searched on the 18th of October 2003. No items within the study area are listed on this register.

Section 139 of the Heritage Act also includes additional special provisions passed to protect "relics". A "relic" is defined as meaning "any deposit, object or material evidence:

- (a) which relates to the settlement of the area that comprises New South Wales, not being Aboriginal settlement, and
- (b) which is 50 or more years old.

Section 139 further states:

- 1) *A person must not disturb or excavate any land knowing or having reasonable cause to suspect that the disturbance or excavation will or is likely to result in a relic being discovered, exposed, moved, damaged or destroyed unless the disturbance or excavation is carried out in accordance with an excavation permit.*
- 2) *A person must not disturb or excavate any land on which the person has discovered or exposed a relic except in accordance with an excavation permit.*

There is no formal register of “relics” held by the NSW Heritage Office. Some of the sites listed on the State Heritage Register or on LEPs may either be “relics” or have relics associated with them. The NSW Heritage Office is the consent authority for these relics, and they cannot be disturbed in any way without an approved Section 140 (Excavation Permit) application. In light of this, the following items are protected as “relics”:

- Stockyard
- Remnant post and rail fencing along Lenore Lane
- Remnant wire fencing along Lenore Lane
- Sundry Dams
- Workshop

For items listed on the State Heritage Register, a permit is required to carry out activities to an item (Section 60). A permit is also required for activities that would affect known or potential archaeological relics (Section 140).

Exceptions to Section 139

If the proposed works are only minor in nature, and will have minimal impact on the heritage significance of the place, they may be excepted from the provisions of Section 139. On the 7th of March 2003 the Minister for Planning revoked all existing standard exceptions and granted new exceptions. The new standard exceptions relate to a broader range of minor development and will result in a more streamlined heritage approval process. The exceptions are set out below.

‘Excavation or disturbance of land of the kind specified below does not require an excavation permit under s.139 of the Heritage Act provided that the Director of the New South Wales Heritage Office (the Director) is satisfied that the criteria in (a), (b) or (c) have been met and the person proposing to undertake the excavation or disturbance of land has received a notice advising that the Director is satisfied:

(a) where an archaeological assessment has been prepared in accordance with Guidelines published by the Heritage Council of New South Wales which indicates that there is little likelihood of there being any relics in the land or that any relics in the land are unlikely to have State or local heritage significance;

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(b) where the excavation or disturbance of land will have a minor impact on the archaeological resource;

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(c) where the excavation or disturbance of land involves only the removal of fill which has been deposited on the land.

A person proposing to excavate or disturb land in the manner described in paragraph 1 must write to the Director and describe the proposed excavation or disturbance of land and set out why it satisfies the criteria set out in paragraph 1. If the Director is satisfied that the proposed

[development meets the criteria set out in paragraph \(a\), \(b\) or \(c\) the Director shall notify the applicant.'](#)

Environmental Planning and Assessment Act 1979

The *Environmental Planning and Assessment Act 1979* (EP&A Act) requires that consideration be given to environmental impacts as part of the land use planning process. In NSW environmental impacts are interpreted as including cultural heritage impact. Three parts of the EP&A Act are most relevant to Heritage. Part 3 relates to planning instruments including those at local and regional levels, Part 4 controls development assessment processes and Part 5 refers to approvals by determining authorities.

Under the provisions of the EP & A Act, Local Environmental Plans (LEPs) and Regional Environmental Plans (REPs) can be made. Typically LEPs and REPs have provisions that protect items of environmental heritage.

The study area is contained within the Penrith City Council area, which is covered by the Penrith LEP 1998 (urban land) and the Sydney REP No. 26.. A search was conducted on the 18th of October. No heritage items within the study area are listed on either the LEP or REP.

Based on the above review the only statutory obligations as those stemming from the "relics" provisions of the Heritage Act.

6.2 Management Strategy

Following NSW Heritage Office guidelines the following management strategy has been developed for each item located within the proposed development lands and must be employed prior to the commencement of any works within the development area.

6.2.1 Items with moderate heritage significance at a local level

There are no items with moderate heritage significance at a Local level which area located within the development lands (Precincts 1, 2, 3 and 5).

6.2.2 Items of "little" heritage significance

These items are:

- **Sundry Dams**
- **Workshop**

These items have been assessed as having heritage significance but they are graded as 'little' due to changes inflicted on the original form. Consequently, consent is not required from the NSW Heritage Office under recent exceptions passed under Section 139(4). Under these exceptions, an application can be made to the Director of the New South Wales Heritage Office to satisfy that the relevant heritage criterion is met to obtain an exception.

To achieve this, a qualified archaeologist should prepare a written application made out to the Director of the New South Wales Heritage Office for an exception under the Section 139(4) exceptions prior to the commencement of construction works (i.e a good 6 to 12 weeks prior). This letter should briefly summarise the heritage status, heritage significance and level of heritage impact to these items. A copy of this Non-Indigenous Heritage Assessment should be attached to the application to fulfil criteria 1(a) of the exception. The preparation of this application would take approximately one week.

Following the receipt of an exception under Section 139(4), CSR can remove the sundry dams and workshop as part of site preparation works.

6.2.3 Items of “no” heritage significance

- **The airstrip**

This item is not a relic nor a listed heritage item and as a consequence no further investigation is required. A permit is not required for this item.

- **Building former Gyro Club**

As this item is not a relic or a heritage item no further investigation is required. A permit is not required for this item.

- **The Model Plane Club**

No further investigation is required, as this item is not a relic or a heritage item. No permit is required.

6.2.3 Summary of Management Strategy

This assessment has identified Non-Indigenous heritage items located within the proposed development area on CSR lands. An analysis of the significance of these items has determined the implications for development works to be undertaken within the proposed development area. Clearly if works do not impact on these items then no permits are required. The following is a breakdown of what mitigation is required if works impact on these items:

Table 5: Mitigation Requirements for Items Within Proposed Development Areas

Heritage Item	Archival Recording	S.140 Excavation Permit Application	S.139(4) Exception Application
Sundry Dams	No	No	Yes
Workshop	No	No	Yes

In conclusion a qualified archaeologist should undertake the preparation and submission of a S.139 (4) Exception Application for the two sundry dams and workshop prior to commencing any works, which may impact the above mentioned heritage items:

It should be noted that Exception Applications take time for the Heritage Office to process (normally this takes between 4-12 weeks) and sufficient time should be allowed to obtain the relevant permits prior to works commencing.

7 REFERENCES

7.1 Published Sources

- Ashton, L. G. 1949. *Dairy Farming in Australia: Victorian edition*. Canberra: Commonwealth Dept. of Commerce and Agriculture.
- Ashton, L. G., and G. T. Laffan, 1950, *Dairy Farming in Australia: New South Wales edition*: Canberra, Commonwealth Department of Commerce and Agriculture.
- Bannerman, S. M., and P. A. Hazelton, 1990, *Soil Landscapes of the Penrith 1:100 000 Sheet*: Sydney, Soil Conservation Service of NSW.
- Brew, A., 2001, *Thematic Study: Aerodromes and Associated Structures in New South Wales*, Report prepared for Deakin University and the NSW Heritage Office.
- Fox & Associates, 1987, *Heritage Study of the City of Penrith Volume 1*, Report prepared for the Penrith City Council.
- Freame, W., 1916, *On old South Creek*: Sydney, W. Freame.
- Gyford, G. F. B., 1988, *Short History of St. Clair*: Sydney, Nepean District Historical Archaeology Group.
- Heritage Office and the Department of Urban Affairs and Planning, 1996, *NSW Heritage Manual*, Prepared by the NSW Heritage Office.
- Koettig, M., 1981, *Erskine Park South St Mary's Second Stage Release Area: Archaeological Survey for Aboriginal & Historic Sites*.
- McClelland, J., 1986, *History of N.S.W. 1728-1986, covering Parramatta, Penrith, Liverpool, Windsor, Richmond, Campbelltown: Penrith, N.S.W*, James McClelland Research.
- Mitchell McCotter, 1992, *Rehabilitation of Erskine Park Quarry using non-putrescible waste disposal: Environmental Impact Statement*, Prepared for CSR.
- Moria, 1906, *A Model Homestead*, Sydney Mail 6th June 1906:1486-1487
- Penrith City Council, 2002, *Historical Profile: Erskine Park*, <http://www.penrithcity.nsw.gov.au/Lib/LocalSuburbs/erskinePark.htm>.
- Pickard, J. (1998). *Post and rail fences: development and persistence of rural technology in colonial Australia: Tools and Tillage*.
- Power, B., 1983, *A history of Penrith*: Sydney, Western Sydney Project.
- Proudfoot, H., 1978, *Exploring Sydney's West*: Sydney, Kangaroo Press Pty Ltd.
- Stuart, I. M. 2000. *Squatting Landscapes in South-Eastern Australia (1820-1895)*. Ph. D. Thesis, University of Sydney, 2000.
- Stuart, I. M. 2003. *Non-Indigenous Heritage Assessment of the impact of the proposed quarry (Lot 1 DP 858245) near Signal Hill, Croom*. Report to Cleary Brothers (Bombo) and Perram and Associates Pty. Ltd.

7.2 Archive Material

NSW State Records

Lands Department, Closer Settlement and Soldier Settlement Branch, Settlement Estate Files
"Lenore" 806, CGS 10/37119 & CS 10/13245.

Land Titles Office

Primary Application No 10612

Figures



Plates