

# Illawarra Mountain Bike Trails Concept Designs

Illawarra Escarpment and Kembla Heights area

## STATEMENT OF HERITAGE IMPACT



*Painting by Martins, 'View of Five Islands' c.1861 (Source: National Library of Australia)*

**Prepared by Niche Environment and Heritage  
For National Parks and Wildlife Service  
Date – March 2022**

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## Illawarra Escarpment and Kembla Heights area STATEMENT OF HERITAGE IMPACT REPORT March 2022

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# Part A: Background

## 1 Executive Summary

### 1.1 Project Overview

Niche Environment and Heritage Pty Ltd (Niche) was commissioned by New South Wales National Parks and Wildlife Services (NSW NPWS) (henceforth referred to as the proponent) to prepare a Statement of Heritage Impact assessment (SoHI) for the Historical Heritage components for a Review of Environmental Factors (REF) for the Illawarra Escarpment Mountain Bike Trail Network (IEMB Network) (hereafter referred to as 'the Project').

### 1.2 Heritage Significance

Four heritage items were identified that were either within or in the near vicinity to the Subject Area that were listed on the Wollongong City LEP 2009, three sites were listed in the s170 asset register of Heritage Act 1977 and two sites were unlisted but identified as having heritage values. These sites were assessed using the criteria outlined in *Assessing Heritage Significance* (Heritage Office 2000).

On the basis of this assessment, the Subject Area can be said to have locally significant heritage items at various locations throughout. The Subject Area continues to hold significance for its historical context relating to the mining history especially the Mount Kembla Mining disaster to the local, state and national communities. The Mount Kembla mining disaster has been described as 'Australia's worst industrial disaster' which continues to be significant to this day. Societies such as the Mt Kembla Heritage Centre, Illawarra Heritage Trail and "Looking Back" have all been established with a focus on the mining history of the Subject Area and have dedicated personnel ensuring that the history of the Subject Area is protected and retold. The cedar getting history also appears to have dedicated local historians and societies focusing on this history, such as "eKiama" however to a lesser extent.

Visitors and tourists continue to visit the Subject Area including the mountain bikers as the area holds significance for them as an area of outstanding natural beauty and views to the Illawarra coastline as well as the historical context relating to the area.

Due to this, the additional heritage items, the homestead and possible cedar pits have also been assessed as having local significance as they hold heritage values and significance to the local communities however, sandstone homesteads and cedar pitting is not unique to the Subject Area and examples can be seen elsewhere in the State.

### 1.3 Summary of Key Heritage Impacts and Conclusions

On the basis of this assessment and as determined by the NSW Heritage Office Criteria (NSW Heritage Office 2001), the proposed works will likely have no or little impacts on the heritage items.

Archaeological deposits may be present within these sites and are likely to be only moderately disturbed due to the current use and history of the Subject Area. Mitigation measures should be taken to ensure the significance of these sites are protected.

## 1.4 Recommendations

Mitigation measures	Recommendation
Minor design amendments to lessen an impact that do not appreciable change the proposal	Complete avoidance of the Site Elements associated with the former mine and, Remnants of Original O'Brien's Road sites.
Work methodology, monitoring, and notification for historical archaeology	Any unexpected historical heritage finds including archaeological relics should follow the Unexpected Find Procedure found in Appendix 1.
Stop work in case of unexpected archaeological finds	Same as above
Archaeological Test Excavation	If avoidance of the Site Elements associated with the former mine and, Remnants of Original O'Brien's Road sites are not possible, an archaeological test excavation may be required to ascertain potential additional information that the site may yield and to record the sites fully.

## 2 Introduction

### 2.1 Project Background

Niche Environment and Heritage was engaged by National Parks and Wildlife Service (NPWS) of Office of Environment and Heritage (OEH) to prepare this Statement of Heritage Impact (SoHI) for the Illawarra Mountain Bike Concept Designs.

The proposed IEMB network is approximately 50 km in total length, spanning multiple land tenures, including approximately 250 ha of the Illawarra Escarpment State Conservation Area (IESCA), managed by NSW National Parks and Wildlife Services (NPWS). Other land tenures within the proposed IEMB network include:

- Wollongong City Council (WCC)
- WaterNSW
- Sydney Water
- South32 (Private landholder)

### 2.2 This Report

This Statement of Heritage Impact report aims to focus only on the historical period of the Subject Area in order to assess the heritage values and significance of historical sites and places as well as assess any impact to those historical heritage sites. This report will aim to identify and assess all of the historical heritage places within the Subject Area which will include the statutory listed places as well as the identified, unlisted built and archaeological places.

This SoHI has been written in parallel with *the Statement of Heritage Impact - Illawarra Mountain Bike Trails Concept Designs* report (Niche 2021) which should be read in conjunction with this report.

This SoHI aims to address the following objectives:

- Outline the purpose and background of the proposed project
- Provide an environmental and historical context of the Subject Area
- Identify all statutory listed historical heritage places within the Subject Area
- Identify all non-listed historical heritage place both archaeological and built heritage items
- Identify these heritage places values and assess their significance
- Assess any potential impacts to historical heritage sites
- Provide any recommendations for their protection or conservation

### 2.3 Site Identification

The focus of this report is within the area of land located along the Illawarra Escarpment, to the west of the Wollongong suburbs of Figtree and Cordeaux Heights, southwest of Mt Keira and northeast of Kembla Heights (see **Error! Reference source not found.** for further clarity) (henceforth referred to as the 'Subject Area'). The Subject Area is comprised of:

- Lot 22 DP 1076092
- Lot 2 DP 1103666
- Lot 1 DP 1103666
- Lot 21 DP 1190749
- Lot 1 DP 203263
- Lot 1 DP 45861
- Lot 3 196426
- Lot 110 DP 579512
- Lot 2711 DP 1190953
- Lot 2 DP 263263
- Lot 1 DP 255281
- Lot 1130 DP 1138956
- Lot 112 DP 751278



**Plate 1: Approximate location of the Subject Area (red) with impact areas in white (Source: Google Earth)**

## 2.4 Statutory Context

This section provides a summary of relevant legislation and associated planning instruments designed to protect and conserve significant heritage items and their values.

### Commonwealth and National Legislation

#### Environment Protection and Biodiversity Conservation Act 1999

The Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) is the Australian Government's central piece of environmental legislation. It provides a legal framework to protect and manage nationally and internationally important flora, fauna, ecological communities and heritage places. Under the EPBC Act, protected heritage items of significance are listed on the National Heritage



List (NHL) or the Commonwealth Heritage List (CHL). The NHL provides protection to places of cultural significance to the nation of Australia, while the CHL comprises natural, Aboriginal and historic heritage places owned and controlled by the Commonwealth.

**No items on the CHL or NHL were identified within the Subject Area.**

## **NSW State Legislation**

### **Heritage Act 1977**

The Heritage Act 1977 (hereafter referred to as ‘the Act’) affords statutory protection to those items identified as having heritage significance and which form part of the NSW heritage record. The Act defines a heritage item as “a place, building, work, relic, moveable object or precinct”. Items that are assessed as having State heritage significance are listed on the NSW State Heritage Register (SHR). Proposals to alter, damage, move or destroy heritage items listed on the SHR (or protected by an Interim Heritage Order [IHO]), require an approval under s60 of the Act.

Archaeological features and deposits are afforded statutory protection by the ‘relics provisions’ of the Act. A relic is defined as “any deposit, artefact, object or material evidence that relates to the settlement of the area that comprises NSW, not being Aboriginal settlement, and is of State or local heritage significance”. Land disturbance or excavation that will or is likely to result in a relic being discovered, exposed, moved, damaged or destroyed is prohibited under the provisions of the Act, unless carried out in accordance with a permit issued under s140 or s139 for Local heritage sites and s60 for State heritage sites of the Act. Archaeological potential will be assessed in more detail later in this report.

**There are no SHR listing within the Subject Area.**

### **State Heritage and Conservation (s.170) registers**

Under s.170 of the Act, NSW government agencies are required to maintain a register of heritage assets under their control or ownership. Each government agency is responsible for ensuring that the items entered on its register under s.170 are maintained with due diligence in accordance with State Owned Heritage Management Principles. Items listed on s.170 Heritage and Conservation Registers are listed on the State Heritage Inventory (SHI), and some are also listed on the SHR.

**There are two s.170 (and one potential s.170) listed items within the Subject Area.**

### **Environmental Planning and Assessment Act 1979**

The Environmental Planning and Assessment Act 1979 (EP&A Act) establishes the framework for cultural heritage values to be formally assessed in the land use planning process in NSW. The EP&A Act also requires local governments to prepare planning instruments, such as Local Environmental Plans (LEPs) to provide guidance on the level of environmental assessment required.

### **Wollongong City Local Environmental Plan 2009**

Heritage items within the Wollongong City Local Government Area are listed in Schedule 5 of the Wollongong City Local Environmental Plan (LEP) 2009. Wollongong City Development Control Plan (DCP) 2009 gives guidance and outlines controls in place to regulate development within the Wollongong City LGA. These items are subject to the planning controls and provisions set out in Clause 5.10 (Heritage Conservation) of that LEP.

**There are three LEP listed heritage items within the Subject Area.**

### **The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance (2013)**

This SoHI has been prepared in accordance with the principles and methodology contained in the Burra Charter.

The Burra Charter outlines a series of best practice principles and measures for heritage investigation and conservation. The Burra Charter is supported by a series of Practice Notes that provide practical advice in the application of the Burra Charter. The Burra Charter was first adopted in 1979 and has been subject to numerous updates with the most recent iteration adopted in October 2013. The policies and legislative guidelines developed by the Heritage Council of NSW are guided by the Burra Charter.

### **Summary of Listed Heritage items**

The following tables are a summary of the statutory listed heritage items within the Subject Area as well as the statutory listed heritage items within the near vicinity of the Subject Area.

<b>Item #</b>	<b>Item Name</b>	<b>Statutory listing</b>	<b>Location</b>	<b>Level of Significance</b>
6480	Illawarra Escarpment Landscape Conservation Area	Wollongong City LEP 2009	Macquarie Pass, NSW 2577	Local
6409	Kembla Heights Mining Village Heritage Conservation Area	Wollongong City LEP 2009	Kembla Heights, NSW 2526	Local
7105	Mount Kembla Colliery Including Site of Mine workings, Portal, Mine Air Shaft and Pit Pony Stables	Wollongong City LEP 2009	Harry Graham Drive Kembla Heights, NSW 2526	Local (Endorsed. State assessed)
11950	House remains	s.170	56 299142 E 618875 N	Local
2147	Remnants Of Original O'Brien's Road	Potential s.170	56 300124 E 619007 N	Local

## **2.5 Project Methodology & Key Resources**

This report will aim to use the follow methodology for this SoHI:

- **Statutory overview:** identification of the statutory constraints which apply to the proposed works.

- **Historical overview:** analysis of the history of the Subject Area to inform the assessment of heritage significance and archaeological profile of the site.
- **Physical evidence at the site:** a site inspection of the Subject Area which is used to further inform this assessment and amend or confirm the historical analysis.
- **Significance assessment:** use of the standard NSW assessment criteria to develop a statement of heritage significance which entails the assessment of the Subject Area with respect to the immediate region and the individual significance of items identified within the Subject Area.
- **Assessment of Impacts:** an assessment of any potential impacts to listed on non-listed heritage items identified during this report.
- **Recommendations:** recommend strategies to manage the impacts of the proposed works on the heritage significance of the Subject Area and its components. The assessment will also provide recommendations for unexpected finds during excavation activities.

This SoHI has been prepared in accordance with the principles and methodology contained in *The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance* (2013), hereafter referred to as ‘the Burra Charter’.

The Burra Charter outlines a series of best practice principles and measures for heritage investigation and conservation. The Burra Charter is supported by a series of Practice Notes that provide practical advice in the application of the Burra Charter. The Burra Charter was first adopted in 1979 and has been subject to numerous updates with the most recent iteration adopted in October 2013. The policies and legislative guidelines developed by the Heritage Council of NSW are guided by the Burra Charter.

This report has also been prepared in accordance with the best practice standards set out by the NSW Heritage Division including:

- *Assessing Heritage Significance* (Heritage Office (former), 2001)
- *Assessing Significance for Historical Archaeological Sites and ‘Relics’* (Heritage Council, 2009).

### Prior Assessments

The following prior assessments and reports were used during the drafting of this report:

- *Benefit Cost Analysis of the Proposed Illawarra Escarpment Mountain Bike Project*, PPM Economics and Strategy, August 2021
- *City of Wollongong Heritage Study, Vol. 1*, McDonald McPhee Pty Ltd, June 1991
- *City of Wollongong Heritage Study, Vol. 5*, McDonald McPhee Pty Ltd, June 1991
- *A Thematic History of the City of Wollongong*, Kass, T, Dec 2010
- *What makes a green public sphere? A case study of the Illawarra Escarpment*, Wilson, H, 2012
- *Dendrobium Area 3 Archaeological and Cultural Heritage Assessment*, Biosis, August 2007

## 2.6 Authorship & Acknowledgements

This SoHI has been written by John McLellan Gillen (Historical Heritage Consultant, Niche) and Nick Brodie (Historian) with document review and quality control provided by Wendy Thorp (Principal,

Cultural Resource Management) and Jo Nelson (Associate Heritage Consultant). The field survey and physical analysis was conducted by Samuel Ward (Historical Heritage Consultant, Niche) and Rebecca Chalker (Aboriginal Heritage Consultant, Niche) with technical assistance provided by Neil Berry (GIS Consultant, Niche). Unless otherwise attributed, images used in this report are produced by Niche.

## 2.7 Terminology & Abbreviations

<b>Burra Charter</b>	<i>The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance 1999.</i>
<b>Conservation</b>	Means all the processes of looking after a place to retain its cultural significance ( <i>Burra Charter Article 1.1</i> ). Conservation can include 'maintenance', 'preservation' and 'restoration' works.
<b>Maintenance</b>	Means the continuous protective care of the fabric and setting of a place and is to be distinguished from 'repair'. Repair involves 'restoration' or 'reconstruction' ( <i>Burra Charter Article 1.5</i> ).
<b>NSW Heritage Division</b>	The NSW government department <i>within</i> the Office of Environment and Heritage responsible for administration and protection of items listed under the <i>NSW Heritage Act 1977</i> .
<b>Restoration</b>	Means returning the existing fabric of a place to a known earlier state by removing accretions or by reassembling existing components without the introduction of new material ( <i>Burra Charter Article 1.7</i> ).
<b>Reconstruction</b>	Means returning a place to a known earlier state and is distinguished from 'restoration' by the introduction of new material into the fabric ( <i>Burra Charter Article 1.8</i> ).
<b>Preservation</b>	Means maintaining the fabric of a place in its existing state and retarding deterioration ( <i>Burra Charter Article 1.6</i> ).
<b>State Heritage Register (SHR)</b>	A register of places that are considered to be of 'state' significance and protected under the <i>NSW Heritage Act 1977</i> .
<b>S170 Register</b>	Section 170 Heritage and Conservation Register, a heritage register of items owned and managed by a government agency, as required by the <i>NSW Heritage Act 1977</i>

# Part B: History and Physical Analysis

## 3 Historical Background

This section discusses the history of the immediate area surrounding the Subject Area and provides an overview of the historical context of this site. The purpose of this context is to shape the understanding of heritage values connected with the site, and to provide a baseline for examining the archaeological potential of the Subject Area

### 3.1 Pre-Contact Aboriginal History

The Wodi Wodi are the Aboriginal custodians of the Illawarra who spoke a variant of the Dharawal language (NPWS 2005:6). Dharawal speakers lived and live in the country from Botany Bay and Campbelltown in the north through the Nepean, Wollondilly, Georges, and Cataract water catchments, west to Moss Vale and south to the Shoalhaven River and Jervis Bay. Dharawal people are distinguished as fresh water, bitter water or saltwater people depending on whether they occupied the coastal regions, the swamps or the plateaus and inland river valleys (NPWS 2005:6). Traditional stories tell of their arrival at the mouth of Lake Illawarra in canoes when the Ancestors were animals.

Historic accounts of Lake Illawarra and its hinterland, which specifically reference the Aboriginal inhabitants are scarce. Early ethnography accounts (e.g., research compiled by Sullivan 1992 and Organ 1990) suggest that at the time of European occupation, a highly mobile, dispersed Aboriginal population occupied the region. Based on the varied environmental zones along the south coast it is unlikely that consistent, large-scale movement from east to west was prevalent. Navin Officer (2000:35) note that a common theme within the ethno-historic data of the region describes the movement of people from the coast to the plateau lands, for season, ceremonial commitments, or the receipt of Government rations. It is likely that a formalised network of pathways and mountain pathways connecting east to west across the Illawarra escarpment and ranges existed (Biosis 2007:27).

The arrival of the First Fleet in Sydney Cove in 1788 was followed the next year by a smallpox epidemic, which spread to the neighbouring regions and, although the exact effects are not known, killed over half the Aboriginal population of the areas effected (Organ 1990: 5).

Access to traditional and everyday resources (such as water) and clearing the land of trees would have had a major impact on the ways in which Aboriginal people would have been living, and also caused significant social disruption between Aboriginal groups, and pressure between Aboriginal people and the ever-increasing European population. This period was a time of drought, and the competition for resources between the Europeans and the Dharawal, who were adapting to the massive changes that were so quickly upon them, led to several years of conflict. Organ (1990) documents the various skirmishes, killings and reprisals between Europeans and the Dharawal during the 1814 – 1815 period in the Cowpastures, Camden and Appin districts. Eventually this sporadic bloodshed would lead to larger scale conflict, with Governor Macquarie implementing a sustained punitive action against the Aboriginal population in the district. This resulted in the Appin Massacre on the 17<sup>th</sup> of April 1816, in which Aboriginal people were shot and driven over the steep cliffs (probably near Broughtons Pass) to their death during a surprise attack by a detachment of the 46th Regiment, in the middle of the night.

## 3.2 Post-Contact Aboriginal History

Early European exploration of the Illawarra region was widespread and indiscriminate. Historical examples of European exploration into the region include a pair of soldiers tracking south from Sydney with Aboriginal guides in 1794 and the seaborne landing near Red Point by George Bass, Matthew Flinders, and “the boy Martin” in the Tom Thumb in 1796 (Organ 1990). The Tom Thumb party also first identified coal at Coal Cliffs (Mitchell 1993b:72). This pattern of non-selective exploration of Europeans continued into the early years of the nineteenth century.



**Plate 2: "The hollow tree on the Illawarra Mountains", by Augustus Earle 1793-1838 (Source: National Library of Australia)**

The earliest well-recorded European settler was Charles Throsby who came into the region overland from the already settled districts of Campbeltown to the Illawarra's north and west. Charles Throsby played a significant role in the exploration of the region by Europeans and led an expedition to the Illawarra in 1815 upon the information and guidance of local Aboriginal men and accompanied by servants (Jervis 1922:75). Throsby's expedition descended into the Illawarra valley from Bulli and, once apprised of the quality of grazing land to be had, arranged for cattle to be grazed in the Illawarra soon afterwards, at which time a stockyard was erected, likely among the first European structures in the region (Jervis, 1922:75).

Subsequent to this, the Illawarra became a grazing ground for other European settlers, with land being surveyed and granted by the colonial government during the 1810s and 1820s (Jervis 1922: 77-83). In 1817 the colonial government established the settlement of Red Point at Port Kembla, with William Elyard RN placed in command (McCaffrey 1922: 25). Later reports mention that during this time and outside of the major European settlement areas, few structures were constructed within the landscape. Reminiscing in the 1890s about the 1820s, Alexander Stewart, an early European settler in the area, stated that:

*Fences in Illawarra were rare – very rare. [...] The whole of the Illawarra lowlands were then used for grazing, with the exceptions of a few solitary patches – mere handfuls of land – on which a few of the small settlers grew maize. [...] The stockmen, mostly miles apart, lived in very primitive huts in a most pastoral and hermetical fashion [...]* (Alexander Stewart, (interviewed by John Brown), “Reminiscences of Illawarra I”, Illawarra Mercury, 17 April 1894, p. 3)

The middle years of the nineteenth century saw a general shift within the Illawarra from open pasturage and select timber felling to more permanent and smaller farmsteads and urban growth. The settlement of Wollongong grew into one of regional Australia’s more significant cities. The Municipality of Wollongong was gazetted in 1859, and Wollongong was proclaimed a city in 1942 (Mitchell 1993d: 104-6).

Major changes during the nineteenth century included improvements to Wollongong Harbour from the 1840s to the 1870s, and the advent of railway connections with Sydney and Moss Vale in the 1880s and 1890s (Mitchell 1993c).

### 3.3 Non-Aboriginal History

These phases are briefly outlined and summarised in the following sections which relate to the Subject Area.

#### Phase 1: Exclusive Aboriginal Australian use

Dharawal speakers historical and presently live in the country from Botany Bay and Campbelltown in the north through the Nepean, Wollondilly, Georges, and Cataract water catchments, west to Moss Vale and south to the Shoalhaven River and Jervis Bay. Dharawal people are distinguished as fresh water, bitter water or saltwater people depending on whether they occupied the coastal regions, the swamps or the plateaus and inland river valleys (NPWS 2005:6).

Historic accounts of Lake Illawarra and its hinterland, which specifically reference the Aboriginal inhabitants are scarce. Early ethnography accounts (e.g., research compiled by Sullivan 1992 and Organ 1990) suggest that at the time of European occupation, a highly mobile, dispersed Aboriginal population occupied the region. Dharawal people use the land which constitutes the Subject Area for thousands of years prior to European arrival and will have likely used it throughout the period of European invasion.

## Phase 2: Cedar-getting

### ***Cedar-getting***

In the Illawarra, the cedar forests were generally small stretches along the mountain slopes or along almost every stream. However, there was a large patch between Wollongong and Dapto which includes the Illawarra Escarpment Conservation Area and the Subject Area.

In 1802, the Governor of NSW issued an order that no cedar could be felled without his permission indicating that cedar-felling had already begun in the Subject Area and surrounds. Land grants were not issued in the Subject Area or surrounding area until 1817 (McKinnon, no date). Cedar was hauled to then transported from Lake Illawarra in small craft to the rest of the NSW and beyond as early as 1810 approximately 15 years before any substantial settlements had been constructed in the Illawarra region. By the 1840s so much cedar had been cut down, the owners of the lands that these trees stood often decided to cut all the timber down to make farm lands. The cedar getting industry ceased to be of importance in the Illawarra by about 1850 cedar.

### ***O'Briens Road***

O'Briens Road was built as a private toll road in the early 19th century to connect Sydney and the Illawarra. O'Briens Road began at the locally infamous fig tree that gave the name to the suburb of Figtree. Views from the top look over Wollongong, Lake Illawarra and the local mountains. From the end of the trafficable part of O'Briens Road a short trail climbs to the summit area where the Illawarra Coastal Plain is visible, with the hills of Mount Mangerton, Mount Saint Thomas and Cobblers Hill visible amidst residential areas (King 1965).

Cornelius O'Brien was the son of Henry O'Brien of Hallimont, County Mayo, Ireland and Catherine Browne. At 16 years old, Cornelius O'Brien left Ireland and migrated to Australia. O'Brien had an uncle who had previously migrated to the Appin region who offered him employment in Abbotsbury where he was promised farmland. (King 1965).

O'Brien is said to have joined his uncle, Charles Browne, and established himself in the region by 1820 as an application for a land grant was filed to then governor, Lachlan Macquarie. O'Brien writes to Macquarie in the application stating:

*"Sir, having since my arrival in this colony about five years ago been actively engaged in farming concerns connected with my uncle Mr. Charles Browne and having thus acquired experience as a grazier and cultivator and a property in cattle which may be valued at one thousand pounds sterling, I venture to solicit Your Excellency for a grant of land and such other indulgences as Your Excellency deem proper".*

The acquired experience O'Brien states is also evident in primary resources from 1817 and 1818. In the Sydney Gazette of October 18<sup>th</sup>, 1817, it lists O'Brien as an army contractor supplying 2000lbs of beef to the government. On March 21<sup>st</sup>, 1818, an advert from O'Brien states that he is looking for extra hands to assist with his dairy business:



*"Wanted by Mr. C. O'Brien of Illawarra, a man well acquainted with milking cows and making butter, to whom suitable encouragement will be given. Enquire Mr. H. O'Brien, Macquarie Place, Sydney".*

Cornelius O'Brien was set on establishing himself in the Illawarra. This is evident in the fact that whilst he was waiting to be granted land in the Illawarra, he set about looking for an easier way from Appin to the Illawarra which at the time was extremely steep and dangerous to navigate. Much of this landscape is which the Subject Area. O'Brien explored the area of what is now the Illawarra Escarpment for a route back to Appin across the Cataract River which is now known as O'Brien's Gap, over Mount Nebo to Figtree.

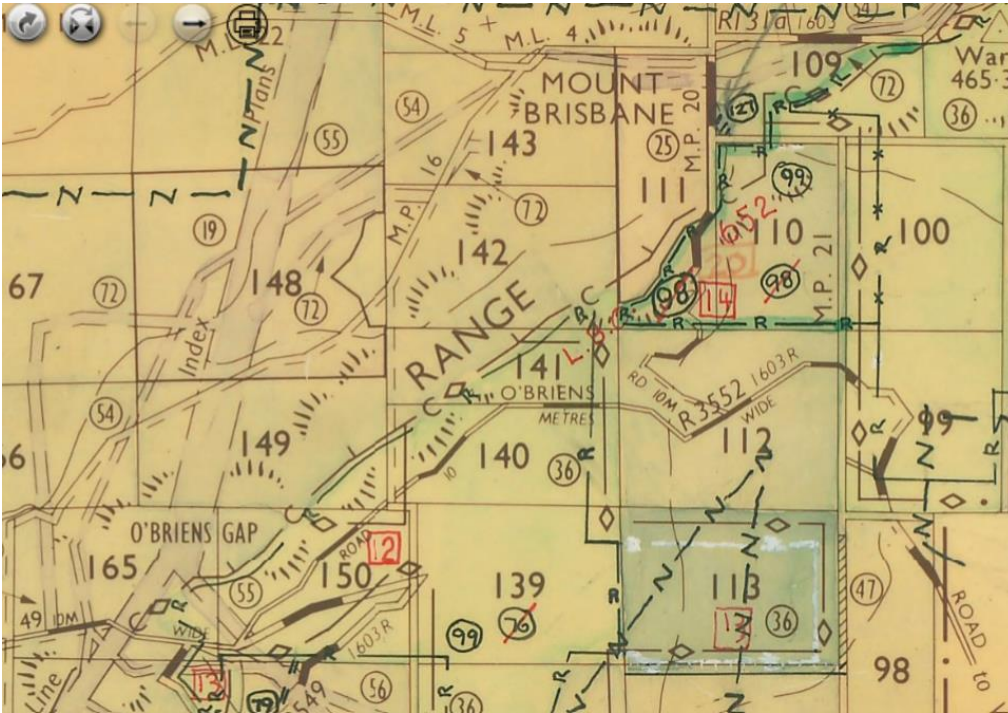
Articles from the Sydney Gazette, April 7<sup>th</sup>, 1821, state that:

*"Mr. Cornelius O'Brien informs the proprietors of land in the District of Illawarra that a track, much shorter and of far less and more gradual declivity is discovered; Should the proprietors think proper to subscribe towards the expense of cutting away the bush and etc, to make a passage for cattle, Mr. O'Brien will be happy to point out the track to those who may be employed on the work. It is estimated that £10 sterling from each proprietor, supposing them to be seven in number, would be sufficient to make a cattle road from Illawarra to the District of Appin by the new track".*

The appeal was successful, and the road was built between 1821 and early 1822. An article from the Sydney Gazette on January 18<sup>th</sup>, 1822, describes the road as not only passable and safe for cattle but also a good bridle road which for with a little more development would also be an excellent road for carts. The road however remained underdeveloped for many years as a bridle track and is currently used as a fire trail or access track.



**Plate 3: Map showing O'Brien's Road labelled "10 metres wide", c.1979 (Source: Land Registry of NSW)**



**Plate 4: Map showing O'Briens Road and O'Briens Gap (Source: Land Registry of NSW)**

### Phase 3: Mining

#### ***Mount Kembla Mine and Colliery***

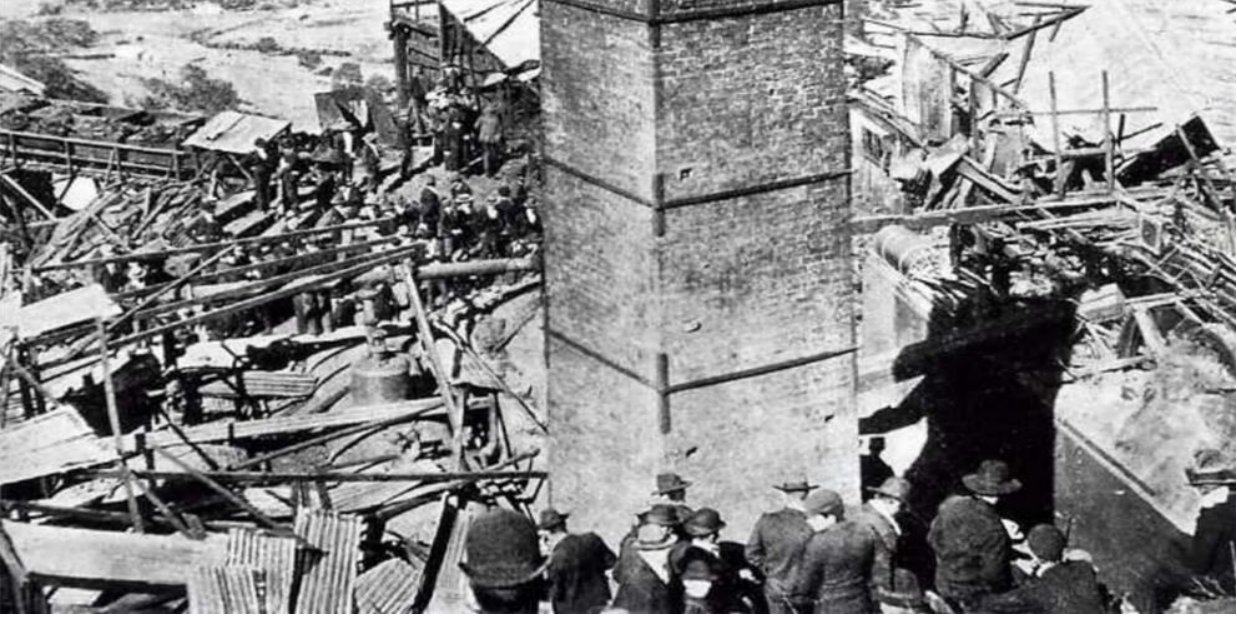
The Mount Kembla Mine and Colliery came about due to the closure of the Pioneer Kerosene Works which closed in 1877. After the closure of the Pioneer Kerosene Works moves were made to establish a new mine in the area as soon as possible and to build a railway from the mine to Five Islands, now called Port Kembla where a jetty which would harbour ocean-going vessels was to also be built. The Mount Kembla Coal Company brought the leases, and the Government granted the Mount Kembla Mine and Colliery company to be built the jetty and railway line in 1881. The jetty and railway line were completed, under the supervision of the mine's engineer, William Burrell in 1882 (Department of Mines Annual Report 1882). As part of the mining operation, the redundant retorts were utilised as water tanks for miners' cottages near the operating mine, prior to the advent of water supply in 1910.

The Mount Kembla Mine and Colliery was constructed north-northwest of the village of Kembla Heights and north of Mount Kembla village in 1883. It is most famous due to the major mine explosion that took place in 1902. At 2pm on the 31<sup>st</sup> of July 1902, Mt Kembla Mine suffered the worst mining disaster in Australia's history when a gas explosion killed 96 men and boys. The resulting royal commission concluded that a fallen roof pushed inflammable gasses into contact with a wheeler's naked flame triggering a series of coal dust explosions. Many bodies were laid to rest in a purpose-built cemetery in the Cordeaux Road. Prior to the Mount Kembla tragedy, another mine disaster in 1887 had befallen the region with the Bulli Mine Disaster which claimed the lives of 81 men and children. The cause of explosion in the Bulli mine was also due to the build-up of methane ignited by a naked flame. These two

mining disasters, together, place the region within the context of cultural significance, albeit infamous significance (Mitchell, 1993d:108).



**Plate 5: Worker using boiler at the established Mt Kembla Mine (Source: Arthur Wigram Allen)**



**Plate 6: Mount Kembla Colliery Disaster 1902. (Source: Wollongong City Library)**

The first shipment of coal from Port Kembla was made in February 1883 where over 21,000 tons of coal was mined at Mount Kembla by 110 men. By 1901, the staffing numbers had grown to over 300. A new furnace shaft and chimney was constructed in 1891 with a second furnace shaft being built in 1896 to the north west of Mount Kembla village. On 9 May 1903, the South Coast Times reported that the Mount Kembla Colliery had recently installed “a most thoroughly efficient and up-to-date electric light plant.” The main rope roads, the engine house, workshops, offices and all the outbuildings at the mouth of the tunnel were fitted this lighting. It is possible that the decision to introduce electric power into the mine came from the reports covering the 1902 mine explosion, which destroyed the mine which was reopened the same year. Mount Kembla Colliery was the first coal mine in Illawarra to use electric power. The surviving pit pony stables probably date from the 1950s.

In the 1880s and early 1890s, the mine had frequent disputes between managers and workers over conditions, safety, pay and the right of the workers to unionise. This would culminate in the worst mining disaster in Australian history; the 1902 Mount Kembla mine explosion.

The Mount Kembla Lodge conducted three major strikes before the disaster in 1885, 1889 and 1893. The first strike arose from difficulties encountered particularly at Mt Kembla. After Jack Lang’s government came into power Mount Kembla mine had the 1st first aid room in the region with a qualified ambulance paramedic.

The colliery and the railway line were eventually acquired by the Australian Iron and Steel company on 1 July 1946. The hand worked contract method of mining was replaced by a mechanised system using rubber tyred front-end loaders in 1968.

The mine ceased working and was closed in 1970 but the railway continued to be operated by AIS to haul coal from the nearby Nebo, and later, Dendrobium collieries. The railway is still in service hauling coal to the BlueScope Steel steelworks. Mt Kembla mine was the first colliery to use mechanical coal cutters.



**Plate 7: Pit Pony Stables. Part of Mount Kembla Mine (Source: Heritage Management System, Heritage NSW)**



**Plate 8: Mine shaft. Part of Mount Kembla Mine (Source: Heritage Management System, Heritage NSW)**



**Plate 9: Mount Kembla Mine and Colliery (Source: Heritage Management System, Heritage NSW)**

### ***Kembla Heights Village***

Kembla Heights village is a protected conservation area (#6409) due to its history and significance in relation to the mining activities, timber getters as well as the infamous mining disaster.

The discovery of oil bearing shale and coal the land surrounding Kembla Heights was purchased to become a mining settlement. The Pioneer Kerosene Works (1860–1878) was Australia's first shale mining and kerosene manufacturing plant was situated at Kembla Heights. This factory was eventually purchased by the Mt Kembla Coal and Oil Company (1878–1913) who developed a new coal mine to the north of Kerosene site, later renamed Mt Kembla Colliery Ltd (1913–1946) and finally purchased by Australian Iron and Steel, AIS (1946–1970). Nebo Colliery (1946–1993) was developed by AIS on the site of the original Kerosene works at Kembla Heights.

The Mt Kembla Coal and Oil Company's mine in Kembla Heights was the site of the worst industrial accident in Australia's history, the Mt Kembla Mine Disaster. The disaster took place on Thursday 31 July 1902, at precisely three minutes past two o'clock in the afternoon. The disaster was caused by gas seeping undetected from the coal seam in a disused area of the mine that had been mined out. A rock fall pushed the gas out into the tunnels where men were working. When the gas reached the naked flame of colliery workers light, it ignited instantly and caused a series of further gas and coal dust explosions. The initial blast killed some instantly, but the majority died from Carbon monoxide poisoning which penetrated the tunnels from the incomplete combustion of fuel. Both men and children worked and died during the disaster.

Windy Gully cemetery was created on a half-acre of company land to receive the bodies of the victims of the Mt Kembla Mine Disaster of 1902. In all, about a third of the victims were buried at Windy Gully. It was originally known as the Kembla Heights Cemetery or Presbyterian Cemetery.

### ***Miners Houses***

Many 'home-made' cottages were built by the workers around Kembla Heights and Mt Kembla in general to serve as cheap accommodation. The materials used varied depending on availability but mostly consisted of timber and brick. The cottages within the village can still be found however the ones outside of Kembla Heights Village no longer remain. The remnants of these cottages are still present in some places, however.



Backpackers' Quarters at Mt. Kembla.



Miners' Homes in the Village of Mt. Kembla.



Types of 'Homo-made' Houses, built by Miners on Proprietors' Land.



**Plate 10: Example of Miners house in the Kembla area (Source: *Australian Town and Country Journal* (Sydney, NSW: 1870 - 1919), p. 27)**

## Phase 4: Illawarra Escarpment Conservation Area

### **Conservation Area**

The Illawarra Escarpment Conservation Area is an extensive native bushland area measuring approximately 3900 hectares and spans over 3 LGAs at the eastern extremity of the Illawarra Range. It includes the edge of the Woronoria Plateau and the associated upper foothill slopes and possesses attributes which include the natural rock exposures, forests, and pasture lands as well as threatened and protected species. The adjacent coastal plain emphasises the vertical scale of the escarpment and acts as a dramatic background (HMS NSW, Item C058)

The escarpment forms a backdrop to the heavily developed industrial (both historically and recently) and newly emerging residential areas of the Illawarra region. The area has a number of historic features from pioneer cedar cutting activities and associated settlements, mining sites and early isolated homes. The heritage values encompass scenic, ecological, historic, and indigenous cultural, social (including tourist and recreational), visual, and natural history. Many smaller areas within the escarpment are of specific scientific, historic, and scenic importance also. The towns on the coastal plain adjacent to the escarpment were first founded to harvest the cedar trees on the slopes of the escarpment or the coal

seams beneath it. With the original logging industry of the area came the need for passes over the escarpment, creating such ones as Rixons Pass, Bulli Pass, O'Briens Road, and Macquarie Pass.

The conservation area was listed in 2013 for its natural landscape values with cultural overlays.

## Phase 5: Unsanctioned Mountain Biking

Currently, the Subject Area is used as a tourist and recreational area with many using it for unsanctioned mountain biking. The current mountain biking trails have been made by enthusiasts which the proposed works aims to use most of with only a few additional trials. The trails are currently unsanctioned as Wollongong City Council (WCC), WaterNSW, Sydney Water and, South32 currently possess the land and have not given permission for these trails to be made.

## Conclusions

The Subject Area has a long spanning history dating to early settlement of New South Wales and early industrialisation of the region with the longest period of industrial activity being from the coal mining phase.

Much of the Subject Area is undeveloped however, it does form a significant part of New South Wales' and Australia's historical development. This is due to the wider historical cultural landscape of industrial coal processes but also as a historical cultural landscape itself due to the timber getting industry which forms part of the historical development of much of the greater area as well as the site of Australia's worst industrial disaster.

Although the historical development can be said to be constrained to two phases, the Subject Area also has heritage values due to its scenic, social (including tourist and recreational), visual, and natural history also. The Subject Area was likely explored in the early 19<sup>th</sup> century by European settlers and its natural and scenic values were described as exceptional. Tourists and visitors continue to visit the area for similar values.

The historical development phases be summarised as follows:

Historical Phase	Description of phase
<b>Phase 1:</b> Exclusive Aboriginal Australian use. Prior to late 18 <sup>th</sup> century.	Dharawal speakers historical and presently live in the country from Botany Bay and Campbelltown in the north through the Nepean, Wollondilly, Georges, and Cataract water catchments, west to Moss Vale and south to the Shoalhaven River and Jervis Bay. This First Nations Country includes the Subject Area
<b>Phase 2:</b> Cedar-getting – Prior to 1802 – 1850. Height of activity 1840s.	In the Illawarra, the cedar forests were generally small stretches along the mountain slopes or along almost every stream. However, there was a large patch between Wollongong and Dapto which includes the Illawarra Escarpment Conservation Area and the Subject Area.
<b>Phase 3:</b> Mining in Mt Kembla. 1877 - 1970	The Mount Kembla Mine and Colliery came about due to the closure of the Pioneer Kerosene Works which closed in 1877. Mount Kembla Colliery was



Historical Phase	Description of phase
	the first coal mine in Illawarra to use electric power. The surviving pit pony stables probably date from the 1950s. The mine closed in 1970.
<b>Phase 4:</b> Illawarra Escarpment Conservation Area. 2013 – present.	The Illawarra Escarpment Conservation Area is an extensive native bushland area measuring approximately 3900 hectares and spans over 3 LGAs at the eastern extremity of the Illawarra Range. The heritage values encompass scenic, ecological, historic and indigenous cultural, social (including tourist and recreational), visual, and natural history.
<b>Phase 5:</b> Unsanctioned Mountain Biking. Unknown date, likely 21 <sup>st</sup> century.	Currently, used as a tourist and recreational area with many using it for unsanctioned mountain biking. The current mountain biking trails have been made by enthusiasts which the proposed works aims to use most of with only a few additional trials.

## 4 Descriptions

### 4.1 Site & Setting

#### **Methodology**

The site inspection was carried out over a few weeks in August and September 2021 and January 2022 by Niche personnel Rebecca Chalker (Heritage Consultant) and Samuel Ward (Heritage Consultant) as well as representatives of the Local Aboriginal Land Council as part of the Aboriginal heritage component. The entire Subject Area was covered in a systematic survey and any areas of potential or disturbance were closely inspected and recorded.

#### **Physical Description of Subject Area**

##### ***General Subject Area***

The Subject Area is mostly within a large and undeveloped native bushland. Due to the nature of the environment, ground coverage is very high, and visibility is very low. The native vegetation is very dense in some places. The topography of the Subject Area slopes steeply from north to south and consists of many rises, dip and gully valleys. Some areas of the Subject Area had natural bush rock present on the ground surface however, mostly, the surface was covered in soils and leaf debris.

##### ***Kembla Height Village***

Kembla Heights village consists of a small settlement that largely spans across the main road (Harry Graham Drive) running through the town however some building can be found set back from the road. The buildings vary but are mostly late Victorian and early Federation period cottages with the notable exception of the community hall which appears to be more modern in date (20<sup>th</sup> century). There is also a large open, landscaped space adjacent to the community hall surrounded by pine trees.

##### ***Mount Kembla Mine and Colliery***

The LEP listing for the Mount Kembla Mine and Colliery states that the condition of the heritage item is as follows:

*The site has been substantially cleared with some incomplete sandstone retaining walls remaining. The stables erected in about 1954 are constructed of a steel frame and are clad in corrugated steel sheeting with an unusual construction using railway tracks. The floor slab of the bath house can be identified nearby, although it is partially obscured by overgrown vegetation. The area originally used as the mines pit timber storage yard and located next to Harry Graham Drive was reworked to create a picnic area by the Rotary Club of Unanderra in the mid-1980s and includes a marker with details of the mine and the 1902 explosion. Mine air shaft: approximately 500 metres north of the site and beside the Harry Graham Drive is a circular brick chimney - a furnace shaft dating from the 1890s. A coal fire set in a grate at the base of the shaft helped to draw air through the mine.*

*The mine managers cottage (manager of old Pioneer Kerosene works) still stands below the old mine and is situated at Slow's Corner (A Profile History of Mount Kembla, K.C. Stone). The path of the incline can still be seen as part of the landscape from Mt Kembla village.*

*The site of the Pioneer Kerosene works is now buried. The pit pony stables are in a stable condition with some vandalism to the timber flooring. All other pit top buildings have been demolished. A 2008 landslip covered the Haulage Road entrance. In 2009 the Traveling Road mine entrance was partly collapsed, with a landslip above the area and the general area overgrown.*

The site inspection focused on the elements of the Mount Kembla Mine and Colliery heritage item that are within or in the near vicinity to the Subject Area. This consisted of the air shaft and the pit pony stables. The pit pony site was in a relatively good condition. The building was made of mostly corrugated iron and timbers however a bridge/access ramp ran from the higher ground at the north of the site to the first level of the building and appeared to be made of rail girders. The air shaft was well back from the Subject Area and within dense vegetation therefore a full physical analysis was not possible. However, it appeared to be in good condition and consisted of brick courses.

### ***Identified Heritage Items***

During the site inspection, some additional heritage items were discovered many of which were debris or demolished elements however two sites had enough integrity to still hold heritage values. A homestead was discovered south of the intersection of Harry Graham Drive and Firetrail No 15c (see **Plate 77**). The site consisted of a series of internal and external sandstone drywall as well as a possible paver footpath leading down a steep slope westward to a cleared, flat area with a possible entrance way and wall (see **Plate 66** to **Plate 76**). The condition of the site elements is moderate.

The other heritage items were two possible cedar pits, however their historical uses is, as of yet, unclear. The pits are approximately 0.9m to 1m deep with sandstone drywalls which appear to be used as shoring. The condition of these sites is moderate to poor and have large branches and debris covering most of the sites. Some chicken wire and plastic sheeting were also found within them indicating modern disturbance.

## **4.2 Imagery**

### **General**



**Plate 11: General view of the Illawarra Escarpment  
(Source: Niche)**



**Plate 12: General view of the Illawarra Escarpment  
(Source: Niche)**



**Plate 13: General view of the Illawarra Escarpment  
(Source: Niche)**



**Plate 14: General view of the Illawarra Escarpment  
(Source: Niche)**



**Plate 15: General view of the Illawarra Escarpment  
(Source: Niche)**



**Plate 16: General view of the Illawarra Escarpment  
(Source: Niche)**





**Plate 17: General view of the Illawarra Escarpment**  
(Source: Niche)



**Plate 18: General view of the Illawarra Escarpment**  
(Source: Niche)



**Plate 19: General view of the Illawarra Escarpment**  
(Source: Niche)



**Plate 20: General view of the Illawarra Escarpment**  
(Source: Niche)

## Unsanctioned Mountain Bike Trails



**Plate 21: Example of illegal mountain bike trails**  
(Source: Niche)



**Plate 22: Example of illegal mountain bike trails**  
(Source: Niche)



**Plate 23: Example of illegal mountain bike trails**  
(Source: Niche)



**Plate 24: Example of illegal mountain bike trails**  
(Source: Niche)



**Plate 25: Example of illegal mountain bike trails**  
(Source: Niche)



**Plate 26: Example of illegal mountain bike trails**  
(Source: Niche)

### **Kembla Heights Village and Mount Kembla**



**Plate 27: Moveable Heritage at Kembla Heights**  
(Source: Niche)



**Plate 28: Small shack at eastern end of Kembla Heights 200m from "Ruby's"** (Source: Niche)



**Plate 29: Eastern side of Kembla Heights (Source: Niche)**



**Plate 30: Community Hall, Kembla Heights (Source: Niche)**



**Plate 31: "Ruby's" in Kembla Heights (Source: Niche)**



**Plate 32: Heritage building, Kembla Heights (Source: Niche)**





**Plate 33: Heritage building, Kembla Heights (Source: Niche)**



**Plate 34: Open area next to Community Hall (Source: Niche)**



**Plate 35: Small hut, possible miner's home (Source: Niche)**



**Plate 36: Listed Heritage home (#6301), Mount Kembla at the base of Memorial Pathway (Source: Niche)**



**Plate 37: Pedestrian footpath at base of Memorial Pathway, proposed to be used as track. Adjacent to American Creek (Source: Niche)**

**Plate 38: Base of Memorial Pathway, Mount Kembla (Source: Niche)**



**Plate 39: View of Listed Cottage from Memorial Pathway (Source: Niche)**



**Plate 40: Signage for Memorial Pathway (Source: Niche)**



**Plate 41: Footbridge in Memorial Pathway (Source: Niche)**

**Mount Kembla Mine and Colliery, Pit Pony site and possible miners house remains**



**Plate 42: Inside of Pit Pony site (Source: Niche)**



**Plate 43: Inside of Pit Pony site (Source: Niche)**



**Plate 44: Ramp to first level of building (Source: Niche)**



**Plate 45: Outside of building (Source: Niche)**



**Plate 46: Ramp made of rail girders (Source: Niche)**



**Plate 47: Ramp made of rail girders (Source: Niche)**



**Plate 48: Telephone masts outside of Pit Pony site (Source: Niche)**



**Plate 50: Brick remains at House remains site (Source: Niche)**

**Plate 49: Material object remain at house remains site (Source: Niche)**



**Plate 51: Brick remains at House remains site (Source: Niche)**



**Plate 52: Brick remains at House remains site**  
(Source: Niche)



**Plate 53: Corrugated iron remain at House remains site**  
(Source: Niche)

### Views and Vistas



**Plate 54: Views from the Illawarra Escarpment**  
(Source: Niche)



**Plate 55: Views from the Illawarra Escarpment**  
(Source: Niche)



**Plate 56: Views from the Illawarra Escarpment  
(Source: Niche)**



**Plate 57: Views from the Illawarra Escarpment  
(Source: Niche)**



**Plate 58: Views from the Illawarra Escarpment  
(Source: Niche)**



**Plate 59: Views from the Illawarra Escarpment  
(Source: Niche)**



**Plate 60: Views from the Illawarra Escarpment  
(Source: Niche)**

**Identified Heritage Items**



**Plate 61: Possible cedar pits located north-east of the Subject Area (Source: Niche)**

**Plate 62: Possible cedar pits located north-east of the Subject Area (Source: Niche)**



**Plate 63: Surrounds of possible cedar pits (Source: Niche)**

**Plate 64: Glass bottle fragment found at Homestead site (Source: Niche)**



**Plate 65: Material objects at Homestead (Source: Niche)**



**Plate 66: Remains of Homestead (Source: Niche)**



**Plate 67: Remains of Homestead (Source: Niche)**



**Plate 68: Remains of Homestead (Source: Niche)**



**Plate 69: Remains of Homestead (Source: Niche)**



**Plate 70: Remains of Homestead (Source: Niche)**





**Plate 71: Remains of Homestead (Source: Niche)**



**Plate 72: Remains of Homestead (Source: Niche)**



**Plate 73: Remains of Homestead (Source: Niche)**



**Plate 74: Path leading to Homestead, used as mountain bike trail (Source: Niche)**



**Plate 75: Path leading to Homestead, used as mountain bike trail (Source: Niche)**



**Plate 76: Walled entrance to path leading to Homestead (Source: Niche)**

### 4.3 Historical Aerial imagery

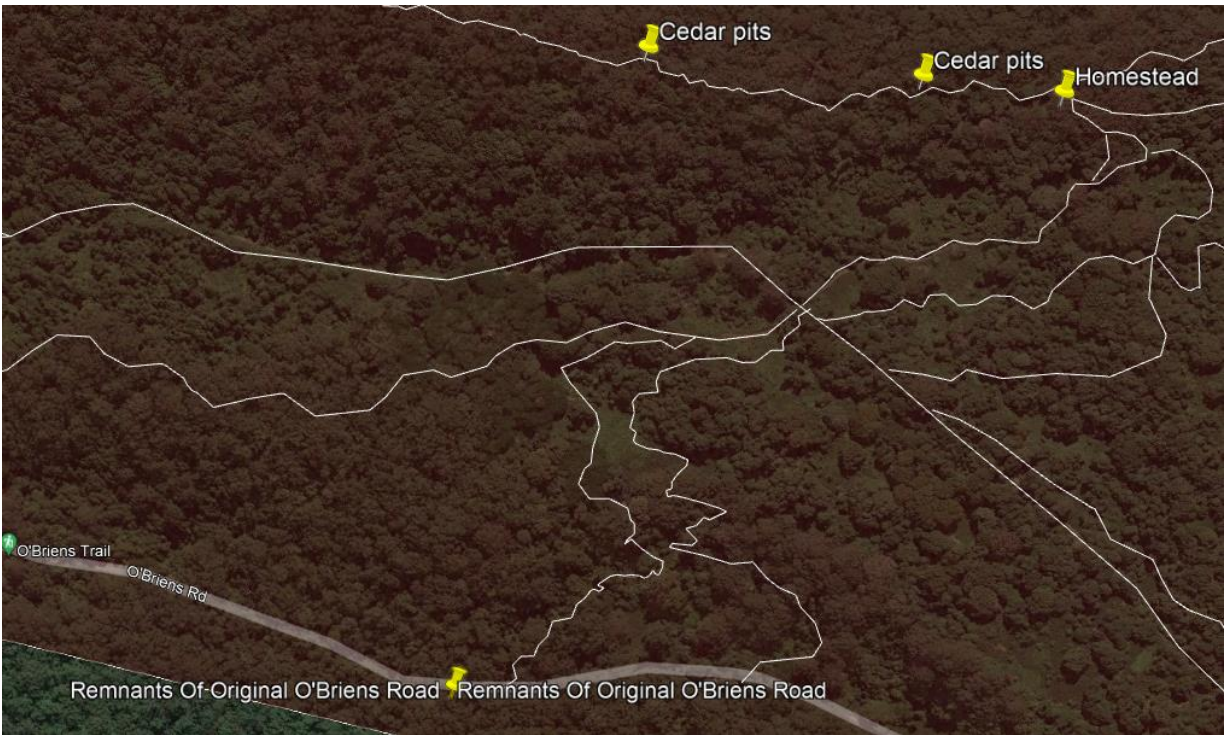
An analysis of historical aerial images from 1948 to 2020 ( ) shows that the Subject Area has had very little overall development and remained largely native bushland. Areas which do seem to contain development are, unsurprisingly, the Mount Kembla and Kembla Heights areas. The 1943 aerial does show however, that large areas to the south of the Subject Area had been cleared of native vegetation for pastoral lands. The subsequent aerials however show the clearances of bushland regenerated and return to wilderness. See **Error! Reference source not found.a-c** for more details.

### 4.4 Archaeological Potential

The land uses of the Subject Area, such as previous timber getting and mining, and more recently for recreational use, suggests a moderate to high level of disturbance. The recent disturbance will be limited to the areas, including their surrounds, where mountain bikers visit both presently and in the recent past. This requires users to a process of modifying or digging out the chosen trails, resulting in continuing ground surface disturbance and possibly light modification to surface landform features.

Historical disturbance is evident in the remains of the observed archaeological resources within the Subject Area. The continual use and upkeep and maintenance of the resources as well as their subsequent abandonment can result in the loss of information and reduced archaeological integrity. The remaining archaeological resources have been assessed as having moderate significance.

This assessment has found that there is a low chance of historical archaeological resources across the majority of the Subject Area. The areas that have been identified as having archaeological resources are outlined below:



**Plate 77: Locations of identified archaeological resource (Source: Niche and Google Earth)**

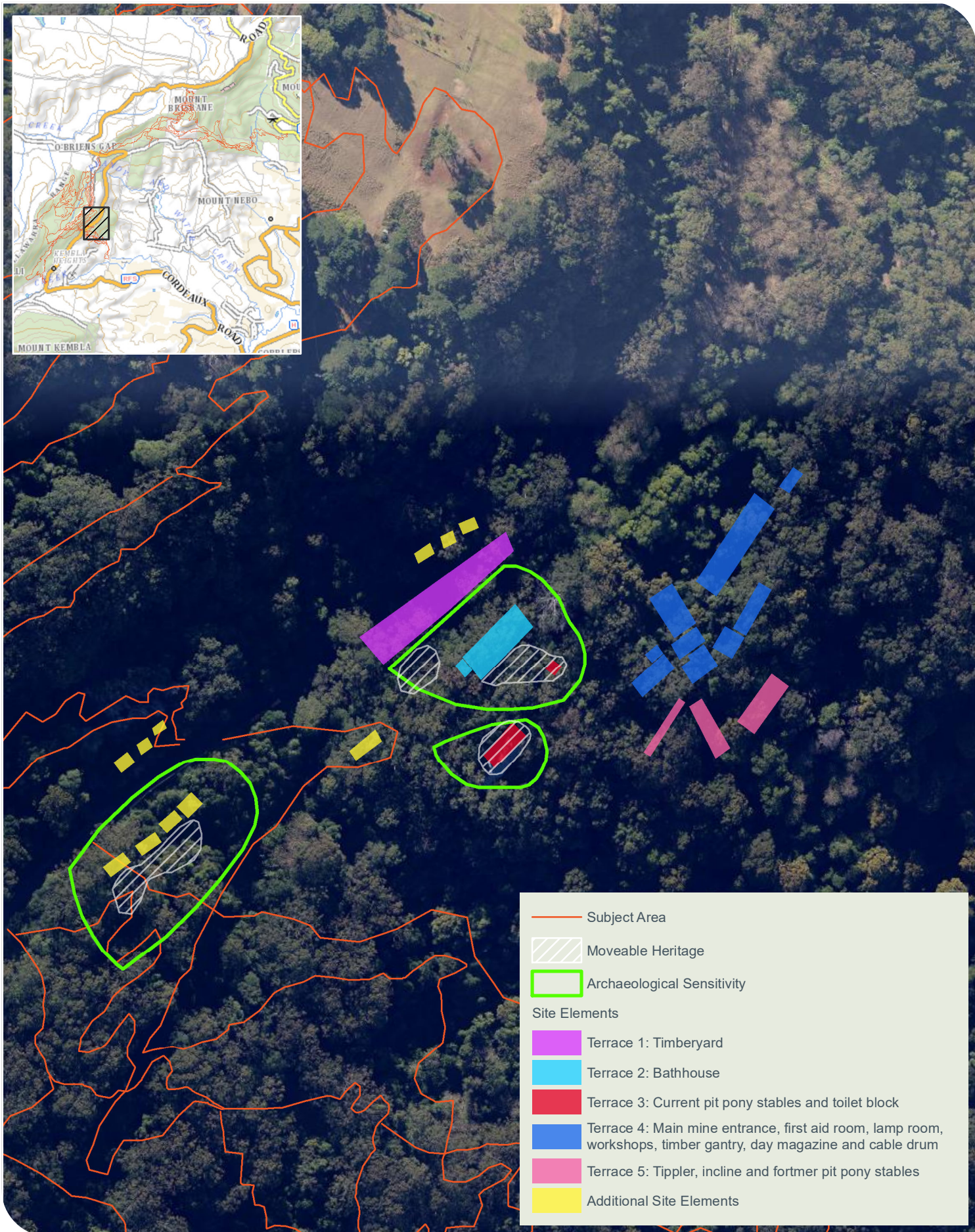
### 1.1.1 Summary of Potential Archaeological Resource

Historical disturbance is evident in the remains of the observed archaeological resources within the Subject Area. The continual use and upkeep and maintenance of the resources as well as their subsequent abandonment can result in the loss of information and reduced archaeological integrity. The remaining archaeological resources have been assessed as having moderate significance.

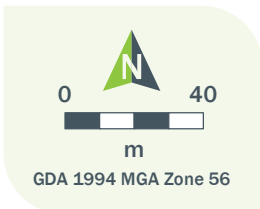
This assessment has found that there is a low chance of historical archaeological resources across the majority of the Subject Area. The area comprising additional Site Elements to the south-west of the timberyard and mine outbuildings have been assessed as having a moderate to high archaeological potential (Figure 4 and Figure 8, below).

In relevance to archaeological resources, this SoHi considers the following items are within the Subject Area and are considered to be potential archaeological resources;

- Additional Site Elements to the south-west of the former timberyard and former mine bathhouse (See Figure 4 and Figure 8 below).
- Remnants of Original O’Briens Road (Plate 77 above and Figure 8 below).



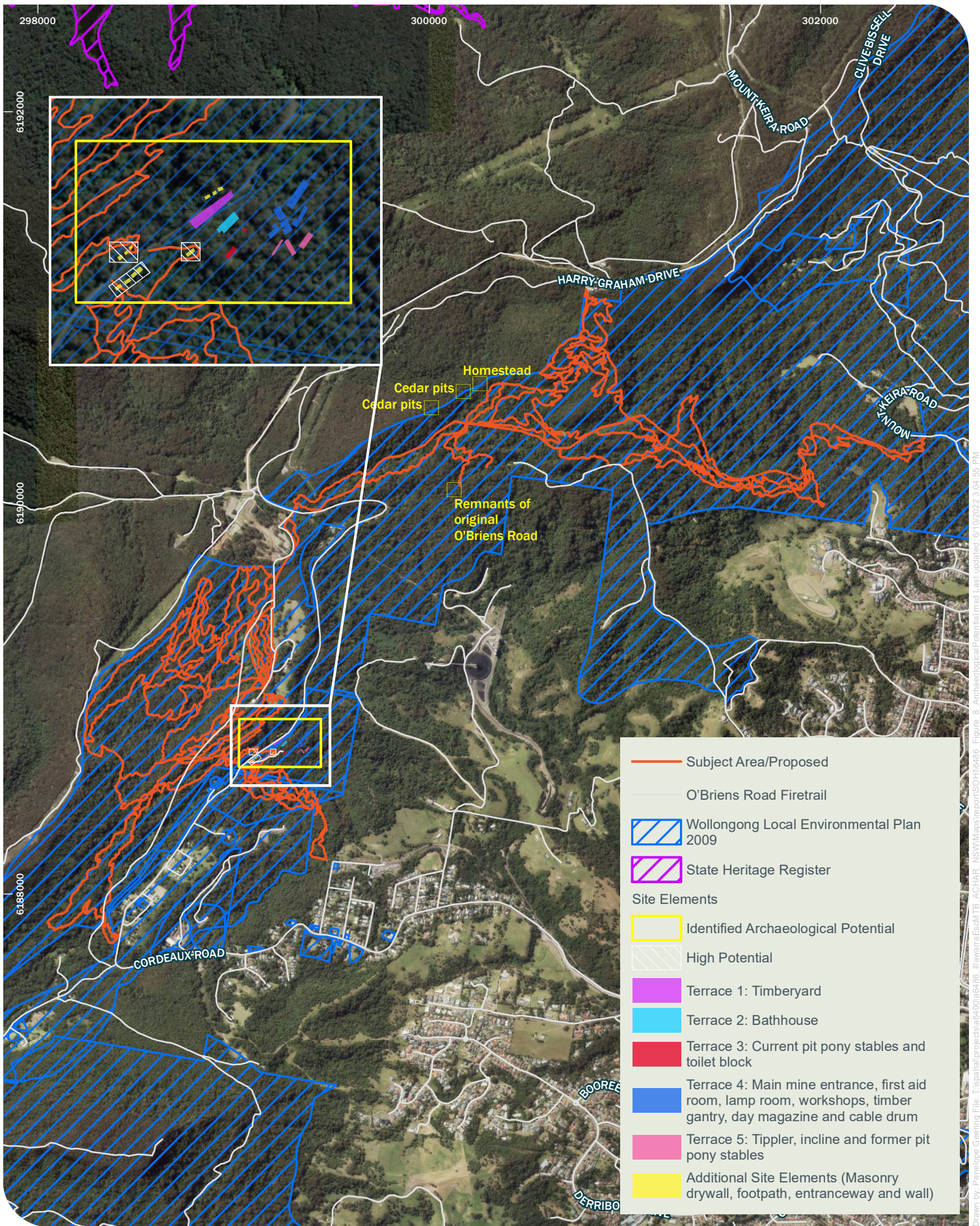
Drawn by: Penelope Geering File: T:\spatial\proj\casia6400\ja6486\_illawarraEscMTB\_ACHAR\_NSWM\Maps\report\SOHI\6486\_Figure\_4\_PreviewArchaeologicalInvestigations.mxd Last updated: 14-Feb-22 11:04:35 AM



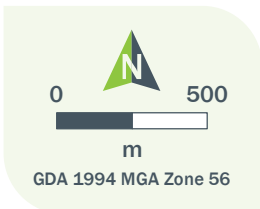
**Previous Archaeological Investigations (after AMBS, 2010: Figure 49)  
Illawarra Escarpment Mountain Bike Concept Plan SoHI**

Niche PM: John Gillen  
Niche Proj. #: 6486  
Client: National Parks and Wildlife Service – South Coast Branch

**Figure 4**



Drawn by: Penelope Geering File: T:\spatial\project\casia\6400\6486\_IllawarraEscMBT\_ACHAR\_NSWMap\report\SOH\6486\_Figure\_8\_ArchaeologicalPotential.mxd Last updated: 6/10/2022 3:04:55 PM



**Identified Archaeological Potential within the Subject Area**  
**Illawarra Escarpment Mountain Bike Concept Plan**

**Figure 8**

Niche PM: Jo Nelson  
 Niche Proj. #: 6486  
 Client: Illawarra Escarpment Mountain Bike Concept Plan

# Part C: Heritage Significance

## 5 Assessment of Heritage Significance

### Methodology for Assessing Significance

The Heritage NSW Manual guideline, 'Assessing Heritage Significance' (NSW Heritage Office 2002) provides the framework for the following significance assessment and Statement of Significance. These guidelines incorporate the seven aspects of cultural heritage value identified in The Burra Charter into a framework currently accepted by the NSW Heritage Council.

### Criteria for Assessing Significance

The SHR criteria are outlined in *Assessing Heritage Significance* (Heritage Office 2001) and are summarised in **Error! Reference source not found.** Using these criteria, a place can be assessed to be of local, state or no heritage significance.

Criteria	Value	Description
Criterion A)	Historical Significance	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)	Associative significance	An item has strong or special association with the life or works of a person or group of persons, of important in NSW's cultural or natural history (or the cultural or natural history of the local area).
Criterion C)	Aesthetic significance	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)	Social significance	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)	Research potential	An item has the 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)	Rarity	An item possesses uncommon, rare or endangered aspects of the area's cultural or natural history (or the cultural or natural history of the local area).
Criterion G)	Representativeness	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.)

## Grading of significance

A five-tier system detailing levels of significance is outlined in *Assessing Heritage Significance* (Heritage Office 2000). The grading system is used to identify the overall significance of items or sites being assessed. The levels of significance and their justification to be applied to items is listed in **Error! Reference source not found.** below.

Grading	Justification	Status
<b>Exceptional</b>	Rare or outstanding element directly contributing to an item's local or State listing.	Fulfils criteria for local and/or State significance.
<b>High</b>	High degree of original fabric. Demonstrates a key element of the item's significance. Alterations do not detract from significance.	Fulfils criteria for local and/or State significance.
<b>Moderate</b>	Altered or modified elements. Elements with little heritage value, but which contribute to the overall significance of the item.	Fulfils criteria for local and/or State significance.
<b>Little</b>	Alterations detract from significance. Difficult to interpret.	Does not fulfil criteria for local or State listing.
<b>Damaging</b>	Damaging to the item's heritage significance.	Does not fulfil criteria for local or State listing.

## Assessment of Significance for the Subject Area

Item Name/#	Statute	Level of Significance	Location	Listed Description (Source: Heritage NSW Heritage Management System)
Cottage (#6301)	Wollongong City LEP 2009	<b>Local</b>	2 Kirkwood Place, Mount Kembla, NSW 2526	Adjacent to proposed works. Single storey cottage of weatherboard with hipped corrugated iron roof and verandah returning to both sides, built on elevated grounds. The verandah has skillion corrugated iron roof with hip corners, timber floor and square timber columns with timber railing infilling the lower portion of the side verandah. There is a single tall brick chimney with steps. Windows have timber sills and louvered shutters, and aluminium replacement frames. Front door has no transom light. Fence is metal replacement. Various additions are present at the rear.
Pit Pony Stables, Mount Kembla (#6228)	S170 of Heritage Act 1977	<b>Local</b>	56 299278 E 618874 N	Adjacent to proposed works. See item #7105.

Item Name/#	Statute	Level of Significance	Location	Listed Description (Source: Heritage NSW Heritage Management System)
Illawarra Escarpment Landscape Conservation Area (#6480)	Wollongong City LEP 2009	Local	Macquarie Pass, NSW 2577	<p>Area approximately 3900 ha between 3 LGAs at the eastern extremity of the Illawarra Range. It includes the edge of the Woronoria Plateau and those upper foothill slopes which possess attributes whose preservation needs to be assured i.e. the natural rock exposures, forests and pasture lands, threatened and protected species.</p> <p>The adjacent narrow coastal plain exaggerates the vertical scale of the escarpment. In the horizontal plane the escarpment forms a magnificent backdrop to the heavily developed industrial and newly emerging residential areas. The escarpment extends for an extraordinary length of relatively unbroken cliff lines. Cliffs of the escarpment are generally sheer and spectacular. The varying colours of their sandstone exposures contrast with both the mixed heath vegetation and low forest at the plateau edge and the mature eucalypt forest and pockets of lush remnant rainforest near the cliff base and on deeper soils on the slopes.</p> <p>Red cedars ('Toona Australis), once common are becoming rarer. Many other species rapidly disappearing species are still to be seen in this landscape (NT). The cliffs are generally sheer and spectacular, extending in relatively unbroken lines for a remarkable distance. The area has a number of historic features from pioneer cedar cutting activities and associated settlements, mining sites and early isolated homes (RNE approx. 175,000ha)</p>
Kembla Heights Mining Village Heritage Conservation Area (#6409)	Wollongong City LEP 2009	Local	Kembla Heights, NSW 2526	None provided.



Item Name/#	Statute	Level of Significance	Location	Listed Description (Source: Heritage NSW Heritage Management System)
Mount Kembla Colliery Including Site of Mine workings, Portal, Mine Air Shaft and Pit Pony Stables (#7105)	Wollongong City LEP 2009	Local	Kembla Heights, NSW 2526	<p>The site has been substantially cleared with some incomplete sandstone retaining walls remaining. The stables erected in about 1954 are constructed of a steel frame and are clad in corrugated steel sheeting with an unusual construction using railway tracks. The floor slab of the bath house can be identified nearby, although it is partially obscured by overgrown vegetation. The area originally used as the mines pit timber storage yard and located next to Harry Graham Drive was reworked to create a picnic area by the Rotary Club of Unanderra in the mid 1980s and includes a marker with details of the mine and the 1902 explosion. Mine air shaft: approximately 500 metres north of the site and beside the Harry Graham Drive is a circular brick chimney - a furnace shaft dating from the 1890s. A coal fire set in a grate at the base of the shaft helped to draw air through the mine.</p> <p>The mine managers cottage (manager of old Pioneer Kerosene works) still stands below the old mine and is situated at Slow's Corner (A Profile History of Mount Kembla, K.C. Stone). The path of the incline can still be seen as part of the landscape from Mt Kembla village.</p>
House remains (#11950)	S170 of Heritage Act 1977	Local	56 299142 E 618875 N	None provided.
Remnants Of Original O'Brien's Road (#2147)	Potential s170 of Heritage Act 1977	Local	56 300124 E 619007 N	None provided.

Item Name/#	Statute	Level of Significance	Location	Listed Description (Source: Heritage NSW Heritage Management System)
Homestead	Not Listed	Local	See <b>Plate 77</b>	Not listed
Possible Cedar Pits	Not Listed	Local	See <b>Plate 77</b>	Not Listed

## Statement of Cultural Significance

Four heritage items were identified that were either within or in the near vicinity to the Subject Area that were listed on the Wollongong City LEP 2009, three sites were listed in the s170 asset register of Heritage Act 1977 and two sites were unlisted but identified as having heritage values. These sites were assessed using the criteria outlined in *Assessing Heritage Significance* (Heritage Office 2000).

On the basis of this assessment, the Subject Area can be said to have locally significant heritage items at various locations throughout. The Subject Area continues to hold significance for its historical context relating to the mining history especially the Mount Kembla Mining disaster to the local, state and national communities. The Mount Kembla mining disaster has been described as ‘Australia’s worst industrial disaster’ which continues to be significant to this day. Societies such as the Mt Kembla Heritage Centre, Illawarra Heritage Trail and “Looking Back” have all been established with a focus on the mining history of the Subject Area and have dedicated personnel ensuring that the history of the Subject Area is protected and retold. The cedar getting history also appears to have dedicated local historians and societies focusing on this history, such as “eKiama” however to a lesser extent.

Visitors and tourists continue to visit the Subject Area including the mountain bikers as the area holds significance for them as an area of outstanding natural beauty and views to the Illawarra coastline as well as the historical context relating to the area.

Due to this, the additional heritage items, the homestead and possible cedar pits have also been assessed as having local significance as they hold heritage values and significance to the local communities however, sandstone homesteads and cedar pitting are not unique to the Subject Area and examples can be seen elsewhere in the State.

# Part D: Heritage Impact

## 6 Proposed Works

### 6.1 Description of Proposed Works

The proposed IEMB network aims to provide safe, sustainable recreation for a broad range of mountain bike riders on a variety of trail types. The IEMB network has been designed with consideration to the physical, environmental, and cultural constraints identified by NPWS and stakeholder groups in response to the Draft Illawarra Escarpment MTB Strategy (NPWS and WCC 2018).

The IEMB network comprises all levels of the International Mountain Bike Association (IMBA) trail gradings, ensuring that the network would accommodate a broad range of rider skills levels:

- Green Circle (easiest)
- Blue Square
- Black Diamond
- Double Black Diamond (most difficult).

A key goal of the IEMB network is to provide a sustainable alternative to the building and use of unsanctioned trails along the Illawarra Escarpment, particularly those at nearby Mount Keira. Without proper design features, unsanctioned trails are unsustainable and can cause adverse safety, environmental and cultural impacts.

The proposed IEMB network includes 27.72 km of entirely new trail. A number of existing unsanctioned trails (21.42 km in total length) have been incorporated into the IEMB network to minimise environmental impacts from creating new trails. The existing trails that have been incorporated into the IEMB network require modification to meet the IMBA trail standards. The success of the proposed IEMB network would allow unsanctioned trails on Mount Keira to be closed and rehabilitated by NPWS.

The proposed IEMB network is structured in three distinct interconnected tiers. Each of the tiers can be ridden individually or as an interconnected network. The network is designed to enable a large variety of riding options and routes, with the possibility of creating unique loops that suit an individual rider's ability and/or preference.

Multiple network entry points and dispersed parking provide ease of accessibility to the IEMB network, enabling riders to easily access the ride start point of their choice. Climbing trails enable riders to cycle into the network from surrounding suburbs including Mount Kembla and Mount Keira, Keiraville, Cordeaux Heights and Farmborough Heights.

The IEMB network also includes important non-trail features, such as parking, amenities, signage and predetermined shuttle pick up locations, to ensure functionality of the network and a pleasant experience for all users.

Trail Network Tiers	Description
<b>Upper Tier</b>	O'Brien's Drift trail head with a short flowing cross-country network and descending trail to the mid-tier. It is also the start location for the advanced full-length descents. The entire trail network can be accessed from the Mt Keira foothills in proximity to the Mt Keira RFS station. The entire network is therefore linked internally by climbing trail and management trails, minimising the need for mountain bikers to access trails via the road.
<b>Mid-Tier</b>	Located behind the Motocross track in NPWS land above Kembla Heights and comprises the bulk of the trail network with a range of trails available for different riding genres and skill levels. This area has the greatest variety of trail types and is specifically designed to provide diversity of trail types and difficulty levels.
<b>Lower Tier</b>	Descending trail network into Kembla Village for more experienced riders, including a return climb to Harry Graham Drive.

Trail Types	Sum of Length (km)
Existing Trail*	21.42
Proposed	27.72
<b>Total</b>	<b>49.13</b>

\*Includes existing unsanctioned trails and fire/access trails

Trail Type	Skill Level	Number	Length (km)
Fire/Access Trails (existing)	All (connecting trail)	2	1.96
Black Trails	Advanced	13	7.54
Blue Trails	Intermediate	24	18.42
Green Trails	Beginner	15	6.48
Red (Climbing) Trails	Intermediate to Advanced	13	14.74
<b>Total</b>		<b>67</b>	<b>49.13</b>

# 7 Heritage Impact Assessment

## 7.1 Lists of Potential Impacts to Heritage Items/Elements

The table below outlines the assessed potential impacts to the heritage item and any reasonable measures that may be taken to minimise or avoid those impacts.

Item Name/#	Potential Impact to Heritage Item	Description of Impact	Mitigative measures/circumstances
Cottage (#6301)	Indirect impact – negative impact caused during proposed works	The proposed works may negatively impact the heritage item by causing indirect impact to significance of the building due to increased visitors and traffic. This will detract from the regular enjoyment of the heritage space.	All appropriate efforts should be made to ensure that the setting of the heritage item is intact. This may include visual segregation between the mountain biking trails (including congregation of bikers) and the heritage item.
Pit Pony Stables, Mount Kembla (#6228)	Indirect impact – negative impact caused during proposed works	The proposed works may negatively impact the heritage item by causing indirect impact to significance of the building due to increased visitors and traffic. This will detract from the regular enjoyment of the heritage space.	All appropriate efforts should be made to ensure that the setting of the heritage item is intact. This may include visual segregation between the mountain biking trails (including congregation of bikers) and the heritage item.
Illawarra Escarpment Landscape Conservation Area (#6480)	Indirect impact – negative impact caused during proposed works	The proposed works may negatively impact the heritage item by causing indirect impact to significance of the area due to increased visitors and traffic. There is a history of illegal trails that require deliberate damage to the item in order to build them. This may cause impacts to the significance of the items.	Regular maintenance and inspections of the site should be conducted by the landowners as by a suitably qualified heritage professional. All efforts should be made to ensure no “off piste” trails are made.
Kembla Heights Mining Village Heritage Conservation Area (#6409)	No impacts		

Item Name/#	Potential Impact to Heritage Item	Description of Impact	Mitigative measures/circumstances
Mount Kembla Colliery Including Site of Mine workings, Portal, Mine Air Shaft and Pit Pony Stables (#7105)	See Pit Pony Stables site		
House remains (#11950)	No impacts.		
Remnants Of Original O'Brien's Road (#2147)	Possible direct impact – negative impact caused during proposed works	The proposed works may directly impact the remnants of O'Brien's Road if the works means that any shoring or embankment work is needed in the immediate future. This would cause a detrimental impact on the last surviving element of a locally significant item.	An unexpected find procedure should be followed in the event that the Remnants Of Original O'Brien's Road are discovered during the proposed works. A toolbox talk should also be conducted for all staff during the proposed work in this area to ensure they are aware to look for heritage elements and to avoid them.
Homestead	No impacts.	The updated proposed works (January 2022) avoid the site and will therefore not impact the significance of it.	No impact is anticipated at this site.
Possible Cedar Pits	No impacts.	The updated proposed works (January 2022) avoid the site and will therefore not impact the significance of it.	No impact is anticipated at this site.

## 7.2 Summary of Heritage Impact Assessment

a) The following aspects of the proposal respect or enhance the heritage significance of the item or conservation area for the following reasons:

*The proposed works will largely respect the heritage significance of the Subject Area as although the proposed works are extensive the impacts are mostly low to nil.*

b) The following aspects of the proposal could detrimentally impact on heritage significance. The reasons are explained as well as the measures to be taken to minimise impacts:

*The proposed works may negatively impact the significance of the Site Elements relating to the former mine works; masonry dry wall, footpath, entranceway and masonry wall, and Remnants of Original O'Brien's Road, as the works go directly through both areas. Measures should be taken to avoid these sites completely.*

c) The following mitigation measures have been proposed for the Site Elements:

*To mitigate against potential impacts to the Site Elements relating to the former mine works; masonry dry wall, footpath, entranceway and masonry wall and, and Remnants of Original O'Brien's Road, fencing will be placed around areas of concern. No machine work in the area. All works will be undertaken by hand.  
Interpretive signage will be installed.*

## 7.3 Conclusion

On the basis of this assessment and as determined by the NSW Heritage Office Criteria (NSW Heritage Office 2001), the proposed works will likely have no or little impacts on the heritage items except for the Site Elements relating to the former mine works; masonry dry wall, footpath, entranceway and masonry wall and, and Remnants of Original O'Brien's Road where direct impacts are likely.

Archaeological deposits may be present within these sites and are likely to be only moderately disturbed due to the current use and history of the Subject Area. Mitigation measures should be taken to ensure the significance of these sites are protected (Section 8).

## 8 Recommendations & mitigation measures

The proposed works should proceed with caution and follow the recommendations below:

Mitigation measures	Recommendation
Minor design amendments to lessen an impact that do not appreciable change the proposal	Complete avoidance of the Site Elements associated with the former mine and, Remnants of Original O'Brien's Road.
Prepare an archival recording or photographic archival recording	If avoidance of the Site Elements associated with the former mine and, Remnants of Original O'Brien's Road sites are not possible, and photographic archival recording of both sites should be conducted.
Work methodology, monitoring and notification for historical archaeology	Any unexpected historical heritage finds including archaeological relics should follow the Unexpected Find Procedure found in Appendix 1.
Stop work in case of unexpected archaeological finds	Same as above
Archaeological Test Excavation	If avoidance of the Site Elements associated with the former mine and, Remnants of Original O'Brien's Road sites are not possible, an archaeological test excavation may be required to ascertain potential additional information that the site may yield and to record the sites fully.



## 9 References

AHMS (2012) Mount Kembla Mine Site Survey for NSW Department of Environment and Heritage, Final

AMBS (2010) Mount Kembla Mine Site, Kembla Heights, Moveable Heritage Assessment

Australia ICOMOS (2013). *The Burra Charter, the Australia ICOMOS Charter for Places of Cultural Significance*, ICOMOS Australia.

Department of Environment and Climate Change (2008). *Cultural Landscapes and park management: a literature snapshot*.

Commonwealth of Australia (1999). *Environment Protection and Biodiversity Act (EPBC Act) 1999*, Canberra, Australia.

Heritage Office (former) (2001) *Assessing Heritage Significance*. Heritage Council of NSW.

Heritage Office and Department of Urban Affairs & Planning (former), 1996 revised 2002, *Statements of Heritage Impact*.

NSW State Government (1974). *National Parks and Wildlife Act (NPW Act) 1974*, NSW.

NSW State Government (1977). *NSW Heritage Act 1977 (Heritage Act) 1974*, NSW.

NSW State Government (1979). *Environmental Planning and Assessment Act (EP&A Act) 1979*, NSW.

[https://drive.google.com/file/d/1ivZJnU1c7X7gG\\_FFY-DIRlg79yCqyXxZ/view](https://drive.google.com/file/d/1ivZJnU1c7X7gG_FFY-DIRlg79yCqyXxZ/view)

[https://drive.google.com/file/d/1iauB4zz4rfRwJ2mEL5\\_9NsJ8A4HSTzZF/view](https://drive.google.com/file/d/1iauB4zz4rfRwJ2mEL5_9NsJ8A4HSTzZF/view)

[https://www.wollongong.nsw.gov.au/\\_data/assets/pdf\\_file/0027/116784/Thematic-History-of-the-City-of-Wollongong.PDF](https://www.wollongong.nsw.gov.au/_data/assets/pdf_file/0027/116784/Thematic-History-of-the-City-of-Wollongong.PDF)

<https://ro.uow.edu.au/cgi/viewcontent.cgi?referer=https://www.google.com/&httpsredir=1&article=4572&context=theses>

[https://www.south32.net/docs/default-source/illawarra-coal/dendrobium/environmental-assessment/attachment-g-cultural-heritage-report-\(biosis\).pdf?sfvrsn=747cc736\\_4](https://www.south32.net/docs/default-source/illawarra-coal/dendrobium/environmental-assessment/attachment-g-cultural-heritage-report-(biosis).pdf?sfvrsn=747cc736_4)

[http://www.environment.gov.au/cgi-bin/ahdb/search.pl?mode=place\\_detail;search=state%3DNSW%3Blga\\_name%3DWollongong%2520city%3Bkeyword\\_PD%3Don%3Bkeyword\\_SS%3Don%3Bkeyword\\_PH%3Don%3Blatitude\\_1dir%3DS%3Blongitude\\_1dir%3DE%3Blongitude\\_2dir%3DE%3Blatitude\\_2dir%3DS%3Binregion%3Dpart;place\\_id=1538](http://www.environment.gov.au/cgi-bin/ahdb/search.pl?mode=place_detail;search=state%3DNSW%3Blga_name%3DWollongong%2520city%3Bkeyword_PD%3Don%3Bkeyword_SS%3Don%3Bkeyword_PH%3Don%3Blatitude_1dir%3DS%3Blongitude_1dir%3DE%3Blongitude_2dir%3DE%3Blatitude_2dir%3DS%3Binregion%3Dpart;place_id=1538)

<https://lookingbackwithmickroberts.wordpress.com/2019/03/16/south-coast-miners-homes/>

[https://www.illawarracoal.com/images/resources/MINING\\_HISTORY\\_OF\\_THE\\_ILLAWARRA-Mould\\_Cairns.pdf](https://www.illawarracoal.com/images/resources/MINING_HISTORY_OF_THE_ILLAWARRA-Mould_Cairns.pdf)

<https://trove.nla.gov.au/newspaper/article/263710461#>

<http://ekiama.com/K%20Museum/Cedar/index.htm>

<https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Parks-reserves-and-protected-areas/Conservation-management-plans/mount-keira-scout-camp-conservation-management-plan-vol02.pdf?la=en&hash=482915BEABB6F3AC908C64303A70D2FEFA3D3A78>

<https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Parks-reserves-and-protected-areas/Parks-management-other/mount-keira-scout-camp-conservation-analysis-report-130572.pdf>

The Story of Cedar, McKinnon, R, no date. Accessed via  
<http://ekiama.com/K%20Museum/Cedar/index.htm>

Cornelius O'Brien - Pioneer of Bulli, King, N.S., 1965

# 10 Appendices

## 10.1 Appendix 1

### Unexpected Finds Procedure

#### Introduction

The following provide a methodology to follow in the event of unexpected finds being encountered during the proposed works. These procedures have been prepared in accordance with best practice and are designed to minimise the heritage impact in the unlikely event that human remains, or archaeological material is encountered on site.

It is noted that these procedures do not provide a guarantee against impacts caused by unexpected finds. However, especially when used in conjunction with archaeological monitoring during works, provide for mitigation of the risk unexpected finds present. Also, to note is that the procedure used in the event of human remains is derived from the NSW government guidelines and in no way supplants the authority of the NSW Police or the NSW Coroner's office over human remains found on site.

It is critical for the construction team to be aware that any suspected archaeological evidence must remain as it was found (*in situ*) until it is assessed by a qualified archaeologist, as per the below steps. These objects, and where they are located and the material around them (referred to as the object's 'context') is critical for understanding their value to the site and determining what may be located near to the area of the find. The object and its context are legally protected under the *Heritage Act 1977*.

#### Discovery of Suspected Human Remains

The following procedure would be followed in the event of the unexpected find of suspected human remains during the works:

- Stop work on site
- Notify the local NSW police and NSW Coroner's Office immediately
- Notify UGL and TfNSW immediately after NSW police have been informed
- If not historical, follow instructions from NSW police
- If historical, contact the NSW heritage council and BRC's Heritage office and take into consideration any directions or responses from these organisations.
- Works could only resume once any actions from the above organisations are addressed.

#### Discovery of Unexpected Suspected Archaeological Material

The following procedure would be followed in the event of the unexpected find of suspected archaeological material during the works. This procedure would be made more efficient by the inclusion of a qualified archaeologist to monitor the excavation during the proposed works, to enable a speedy assessment of finds in the unlikely event suspected archaeological material is discovered.

- Stop work at in a 10m area around the unexpected find, and secure this area
- Notify UGL and TfNSW immediately after works cease in 10m area
- Notify a qualified archaeologist, and engage them to assess the suspected material to determine historical significance of the find
- If assessed to be not culturally significant, proceed with works with caution

- If assessed to be of cultural value, works must cease in this portion of the site (within 100m of the find) and the NSW heritage council and Local Government Council must be contacted. Any directions or responses from these organisations should be considered. Works of this type could include salvage excavation, testing, further monitoring, archival recording