

Old Great North Road

Dharug National Park Conservation Management Plan

Volume 1



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The Old Great North Road Cultural Landscape

Dharug National Park
NSW NPWS

Conservation Management Plan

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Executive Summary

Dharug National Park encompasses a 16km stretch of the Old Great North Road, between the spectacular ascent of Devine's Hill through to Ten Mile Hollow. Dharug NP also contains the original 5km ascent from the Hawkesbury known as Finch's Line.

This CMP revises and updates the NPWS CMP of 1999. It also introduces a new integrated consideration of community values, natural heritage values and the cultural landscape, which together form the context for the OGNR.

The mission of this CMP is to provide NPWS and the community with a sustainable, achievable and strategic management approach to the OGNR cultural landscape. This management approach is based upon the significance of the OGNR cultural landscape, the identification of realistic management objectives, as well as optimal long-term outcomes.

Heritage Significance

The OGNR cultural landscape possesses national, state and local significance because of its combination of cultural, historic, natural, indigenous and other community values. These values include:

- rare and intact examples of convict-built public works and of early colonial road engineering, with demonstrated research potential and high community esteem.
- part of a large complex of bushland that surrounds Sydney, and continuous with the north-eastern extremity of the Greater Blue Mountains World Heritage Area.
- geology that contributes importantly to the character and aesthetic appeal through its range of differential sandstone weathering.
- an Indigenous cultural landscape including pre-colonial and colonial sites with demonstrated research potential and community value.

Strategic Management Approach

The strategic management approach aims to minimise loss and deterioration of cultural fabric and landscape quality through the implementation of a detailed Maintenance Plan. The approach has the following three levels of implementation:

- 1) Baseline management of the entire road corridor, including vegetation management, use and access management, and monitoring;
- 2) Management cycles of maintenance, inspection and monitoring on a precinct by precinct basis; and
- 3) Identification of strategic, long-term objectives which can be activated as funding becomes available: Interpretation and Visitor Facilities Strategies; A Long Term Repair and Reconstruction Strategy targeting Precinct 4: Mitchell's Loop (stabilisation and road surfacing works); and Precinct 2: Shepherds Gully Road (upgrading to provide access for vehicles for maintenance works avoiding Devine's Hill) ; and a Long Term Masonry Conservation Strategy.

1.0 INTRODUCTION

1.1 Background

The Great North Road was built using convict labour between 1826 and 1836, spanning the 250km distance between Sydney and the Hunter Valley. It was the first in a planned network of 'Great Roads', which mirrored the Great Roads of England, and aimed to facilitate colonial expansion from Sydney to the North, South and West (Lavelle and Karskens 1999: 6). The 43km span of road between Wiseman's Ferry and Mt Manning is the most substantial section of the Great North Road which has not been re-used, overbuilt and up-graded, due to its early abandonment for more convenient routes. The NPWS terms this section the 'Old Great North Road' (OGNR) to distinguish it from other portions of the route which have been modernised.

Dharug National Park encompasses a 16km stretch of the Old Great North Road, between the spectacular ascent of Devine's Hill through to Ten Mile Hollow. Dharug NP also contains the original 5km ascent from the Hawkesbury known as Finch's Line. It was abandoned in 1829 to build the alternative ascent up Devine's Hill.

Also considered in this document are Simpson's Track, which joins the OGNR at Ten Mile Hollow, and the Shepherd's Gully and Sternbeck's Gully Roads, which join the Old Great North Road at the top of Devine's Hill and connect through to the Macdonald Valley. The latter roads are within Yengo National Park.

Dharug NP covers 14,834 hectares and is bordered to the west by Yengo National Park. The Great North Road formed the original northwestern boundary of the park when it was reserved in 1967.

NSW NPWS commissioned this document in January 2003. A team assembled by Griffin nrm was briefed to revise the current Conservation Management Plan (CMP) for the Old Great North Road (NPWS 1999), and to embed within the revised CMP a strongly articulated strategic direction for conservation management, or a 'Strategic Plan'. The preparation of a detailed 'Maintenance Plan' will follow the finalisation and endorsement of this CMP review. Apart from the strategic aspects mentioned above, this CMP aims to ensure that management of this important heritage item is kept abreast of recent

developments in best practice heritage management, including innovative policy developments within NSW NPWS. These developments can be summarised as:

1. the integrated assessment of values, including natural, Aboriginal, cultural and broader community values, and historic heritage values (NPWS 2000: 10);
2. a cultural landscape, rather than a sites based, approach; and
3. understanding heritage as culturally constructed and 'socially grounded' (Byrne et al 2001: 140).

So as well as considering the conservation approach for the fabric of the road, its management and promotion, this document aims to contextualise the road within its environment, and within histories, memories and attachments that have not featured prominently in past research on the OGNR. However, rather than suggesting that these approaches have been neglected or avoided in the wealth of high quality scholarship and heritage analyses prepared for the Road in the past, we stress that these new approaches derive from the changing nature of our community. As society changes and as cultural interests change, so too does heritage significance and what we think is important about our past. While the story of the construction of the OGNR by convict road gangs in the 1820s and 30s remains central to why this place is held to be uniquely significant, we are also interested to pursue other stories here. For instance, Indigenous histories; local and community histories; and cultural understandings of the Road as part of the spectacular sandstone landscape of Dharug NP.

1.2 Report Objectives and Outcomes

Key project objectives are to:

- assist NPWS to meet its corporate objectives and statutory requirements;
- ensure balanced and compatible management of cultural and natural values;
- consider the cultural significance of the OGNR as an individual place as well as being part of a broader suite of places managed by NPWS;
- develop forward-looking strategic management policies within the context of legislative requirements, the NPWS management framework and stakeholder issues.

Key outcomes of the SP/CMP review will be:

- supporting the long-term conservation of the OGNR in Dharug NP;
- providing a long-term management focus for the OGNR in Dharug NP;
- informing the POM for Dharug NP;
- ensuring best-practice management of integrated heritage values.

1.3 Location

Dharug NP is located north of the Hawkesbury River, 55 km north of the centre of Sydney, and 25km west of Gosford (NPWS POM 1997: 2). It is bounded by Yengo NP, Wiseman's Ferry, McPherson State Forest, private land along Mangrove Creek, and the townships of Gunderman and Spencer (see Figure 1-1). The Old Great North Road forms the park's border to the northwest, but except for the Shepherd's Gully Road, the management of the OGNR is the responsibility of Dharug NP (see Figure 1-2).

1.4 Scope and Limitations of this Report

The focus of the brief for this study is on review and coordination of past research, with limited new research to be undertaken, and a strong emphasis on strategic conservation policies. Limited time has therefore been available to pursue new historical, archaeological, scientific or community-based research.

1.5 Sources and Conservation Management History

This document is based upon the extensive, existing body of research pertaining to the OGNR, its history and environment. It reviews and updates the NPWS's CMP prepared in 1999, and reproduces various sections of the text of that document, as acknowledged.

As well as the NPWS CMP this section of the OGNR is covered by the *Conservation Plan for the Great North Road* prepared by Siobhán Lavelle, Grace Karskens and RTA Technology for the Convict Trail Project (1999). This CP covers the entire 240 km length of the Great North Road. The Dharug National Park portions of the road equate with Lavelle and Karskens' Section No. 3 comprising:

- Precinct 3.1.0 Finch's Line
- Precinct 3.2.0 Devine's Hill
- Precinct 3.3.0 Devine's Hill Stockade
- Precinct 3.4.0 Shepherd's Gully Road
- Precinct 3.5.0 Mitchell's Loop
- Precinct 3.6.0 Ten Mile Hollow.

Other sources and studies are acknowledged through the text, including an annotated bibliography of past studies pertaining to the OGNR in Dharug NP, found at Appendix 2.

1.6 Authorship and the Consultant Team

The consultant team assembled by Griffin nrm consisted of Dr Tracy Ireland as Principal Consultant, Ingereth Macfarlane - Aboriginal History, Heritage and Archaeology, Lesley

Walker - Visitor Facilities and Interpretation, David Young – Conservation Planning and Materials Conservation and Neil Urwin - Natural Heritage and GIS.

This report has been overseen and written by Dr Tracy Ireland of Griffin nrm, except where otherwise acknowledged or as outlined below,

Section 2.4, 4.3, 6.9.1 Ingereth Macfarlane

Section 4.2, 6.8 Neil Urwin

Section 7.0 Lesley Walker

Section 6.9.2, 6.10 David Young

All of the team contributed to Section 8, Conservation Policies.

All the consultants visited the study area in February 2003, and all except Neil Urwin attended a stakeholder workshop held on the 26 February 2003. David Young facilitated a Management Workshop for NPWS staff on the 13 March 2003. Indigenous community consultation was carried out by Ingereth Macfarlane.

1.7 Abbreviations

AHC	Australian Heritage Commission
ANHC	Australian Natural Heritage Charter
CP	Conservation Plan
CMP	Conservation Management Plan
CTP	Convict Trail Project
DLHHS	Dharug and Lower Hawkesbury Historical Society
MLALC	Metropolitan Local Aboriginal Land Council
NSW NPWS	NSW National Parks and Wildlife Service
NP	National Park
OGNR	Old Great North Road
PMG	Post Master General's Department
POM	Plan of Management
RNE	Register of the National Estate
SHI	State Heritage Inventory
SHR	State Heritage Register
SP	Strategic Plan

1.8 Acknowledgements

The consultants would like to acknowledge the contributions made to this study by all individuals who participated in the Stakeholder and Management Workshops. All these individuals are named in Appendix 1. We also thank Jo MacDonald, Siobhán Lavelle, Grace Karskens, Dave Pross and Allen Madden.

Sarah Breheny and Cath Snelgrove managed and guided this study for NSW NPWS. Each has contributed significantly in terms of time, support and ideas. Jen Davis also made a valuable contribution to the project in its early stages.

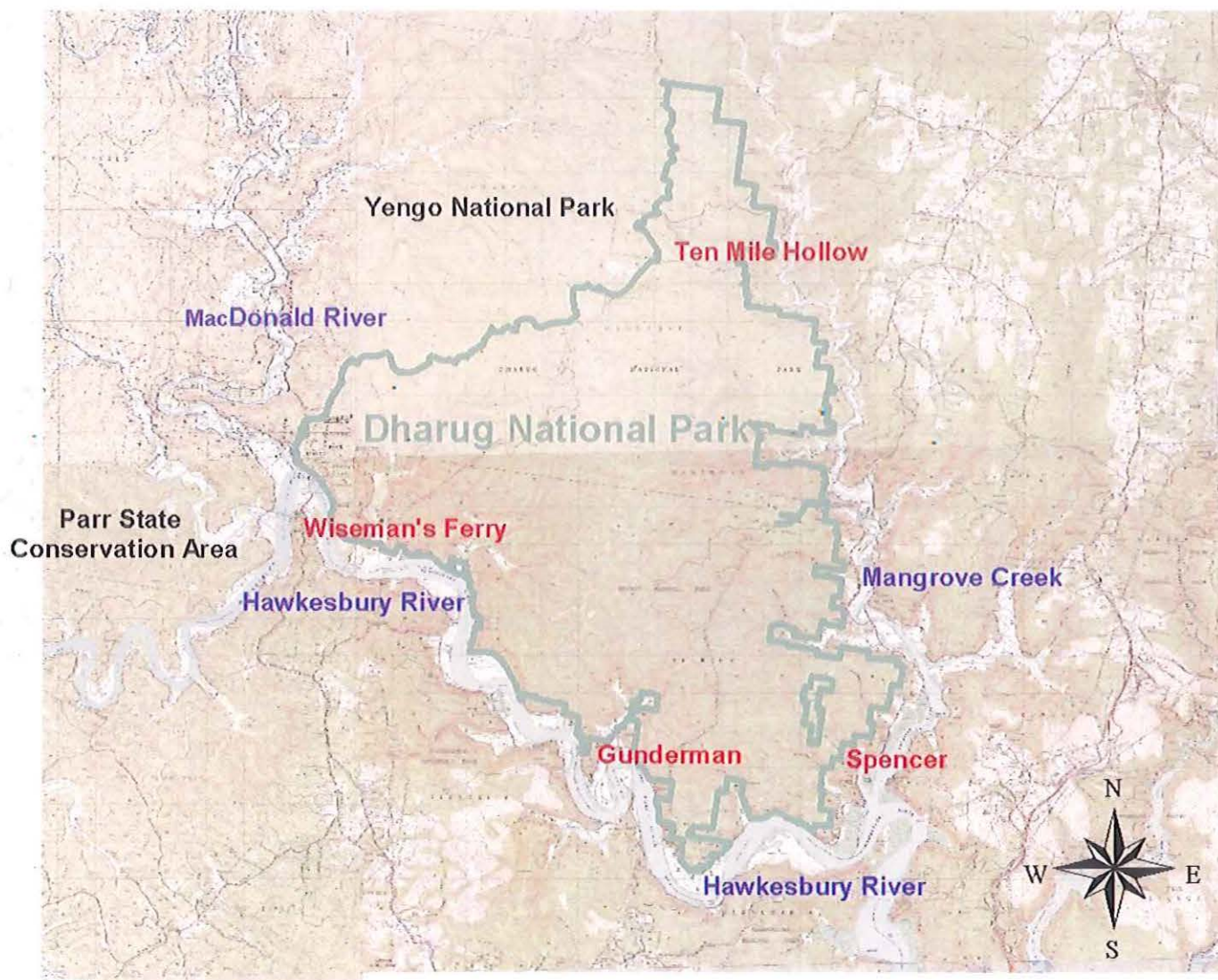


Figure 1-1: Location of Dharug National Park



Figure 1-2: Location of Old Great North Road along northern boundary of Dharug National Park

2.0 HISTORICAL OVERVIEW

2.1 Introduction

This document aims to provide a revision of NPWS' existing CMP (1999) for the OGNR. As there have been a number of high quality histories of the road already prepared, this section of our report will only investigate a number of quite specific areas. These areas arise as a result of new approaches to heritage significance and the management of cultural landscapes which feature prominently in current NPWS policy. These give rise to a focus on, for instance, what historic documents and historical accounts can tell us about the colonial history of Indigenous people in this region and about the relationships between the road, the landscape and the communities who have travelled along it. Read in isolation, this section (Section 4.3) may seem to be strangely silent on the history of the convict road gangs, and theoretical and speculative on the issues of indigenous colonial history related to the OGNR landscape. We stress therefore that this report is 'testing the historical waters' on these questions, in an attempt to broaden historical understandings of the cultural and historical construction of the OGNR and its landscape.

This section is therefore made up of a number of parts designed to contextualise the landscape and community analyses found in sections which follow, and to inform the assessment of significance found in Section 5. We will first briefly consider the research history of the Road and follow this with the historical summary developed for the NPWS CMP, which draws on this large body of scholarship. We then turn to a consideration of the 'shared' and 'landscape' history of the OGNR, exploring the notion of the OGNR as a 'contact zone' and as an 'interactional' landscape. We look briefly at the early colonial history of Indigenous/settler interaction in the Hawkesbury region, including a consideration of place names and ethnography as historical sources. We then consider the interesting lack of crossover between 'convict' and Indigenous histories in Australian historiography, suggesting a number of 'realms of interaction' between convict and Indigenous narratives.

2.2 Histories of the Old Great North Road

The Great North Road has inspired interest and research since the early 20th century, while a number of accounts of travelling the road in the 19th century also exist (see Lavelle and Karskens 1999 for sources, as well as Webb 1999; and Grantham 1999).

Interest in the material remains of colonial history escalated markedly in Australia in the 1960s and 1970s. In NSW this saw the emergence of the new subjects of historical archaeology and industrial archaeology, and the formation of groups such as the National Trust's Industrial Archaeology Committee in 1969 (Ireland 2002). As well as buried sites and their excavation, historical archaeology focused on a whole range of relics and ruins which were unlikely to be studied by heritage architects, but could be combined with the documentary records to produce insights into aspects of colonial history which may have been omitted from the more elite, official histories. Grace Karskens developed this approach to the OGNR through her innovative research into both the fabric and documentary records for her Masters degree in Historical Archaeology completed in 1985. Karskens' research formed the basis for a succession of heritage assessments commissioned by NPWS since 1988 to record and analyse in detail the fabric of the OGNR which came under NPWS control in the late 1970s (see Section 2.3 below and reports by Burke 1988, Comber 1990, 1991a, 1991b).

Drawing upon extensive research, as well as his personal interest developed since 1965, and his work as a NPWS ranger stationed in Dharug NP and the region between 1975 and 1989, Ian Webb has also published two volumes of history about the Road (Webb 1999).

Since the early 1990s a community group, The Convict Trail Project, has not only successfully lobbied for restoration funding and greater coordination of all the authorities managing the road, but has also prepared a Conservation Plan (Lavelle and Karskens 1999) for the road as a whole, and promoted a range of on-going historical research projects (see www.convicttrail.org).

The two Conservation Plans prepared for the Road in 1999 (Lavelle and Karskens and NPWS) provide useful historical overviews drawn from, and building upon, all of the above mentioned sources.

2.3 The NPWS Historical Overview (Reproduced from NPWS CMP 1999)

This historical overview is only a summary of the wealth of historical information that is relevant to the Old Great North Road. For further historical information, readers should refer to the bibliography for a list of historical resources. The main source for the following sections is Karskens (1985a), oral history from former Senior Ranger Ian Webb, Upton (1932) and NPWS files.

For a discussion of the broader context of road design and the role of road design and road construction in colonial administration refer to Lavelle and Karskens 1999.

2.3.1 The need for the Great North Road

The Hunter Valley was known from as early as 1801 as a fertile area but it was not until 1819 that Governor Macquarie considered opening the area to free settlement. There were two reasons for this. Firstly, since 1815 the number of free immigrants to the colony had been greatly increasing. The original settlement had expanded to fill the Cumberland Plain and new areas of settlement were needed. The lush pastures of the Hunter Valley fulfilled this need. Secondly, since 1804 Newcastle had been the site of a settlement for convicts sentenced to secondary punishment, and isolation of this settlement from land access had been considered desirable. However, as some escapees had begun to find their way back overland by 1819, Macquarie decided to remove the convicts to an alternative site. He resettled them in Port Macquarie in 1822 and subsequent free settlement was rapid. In 1821 there were 21 free settlers in the Hunter Valley and by 1825 there were 283. Towns such as Wallis Plains (present day Maitland) and Patrick's Plains (present day Singleton) developed to serve the area as the population increased.

Access to the lower end of the Hunter Valley was still by water. Howe's Track (Bulga Road) was partially located in 1819 and completely marked by blazed trees from St Patrick's Plains to Windsor by April 1820. This marked line was in use for transport of cattle and sheep in 1821, but was not trafficable for carts until November 1822 (Webb 2004 pers comm.). The track gave access to the upper end of the valley but settlement here was not well established until the second half of the century. The route was arduous and circuitous and considered to be of little use to most of the settlers in the valley. It became apparent to the Government that there was an urgent need for better overland access to the Hunter Valley from Sydney.

The Great North Road was planned to fulfil this need. At the same time its construction would be able to utilise some of the growing numbers of convicts from the colony as well as remove them from settled areas.

The Great North Road was a signifier of the outlooks of early colonial society. Its magnificent structures were powerful, tangible symbols of the colony's perceived place and role in the course of the empire, unmistakable evidence that the 'civilised state' was being attained, and a triumph over the rugged and inhospitable landscape separating the centre of Sydney from the 'garden of the colony', the Hunter Valley.

The original line of the Great North Road was probably one of a web of Aboriginal tracks in this area (Lavelle et al 1999). Edwards (1996:89) states that the Old Great North Road deviates around certain sacred Aboriginal sites, suggesting that the people of the Darkinjung tribe purposefully diverted the European trail-blazers to avoid these sites. However, Ian Webb maintains that although Indigenous people guided white travellers through this country, it is supposition that they diverted them from sacred Aboriginal sites; for example, the original Finch's Line of road, established by Wiseman, followed the ridge lines and there were no diversions around cave art sites, which are below the ridge line (Webb 2004 pers comm.).

2.3.2 Chronology of survey and construction

While Simpson supervised the southern section of the Road to Mount Manning, Campbell, Finch, Dulhunty and Ogilvie supervised the northern section from 1827 to 1836.

- | | |
|-------------------|--|
| Sept 1825 | Surveyor Heneage Finch completes survey from the 19 mile post on the Windsor Road, through Castle Hill North to Solomon Wiseman's farm and from north of the Hawkesbury River to the head of Wollombi Brook. |
| April 1826 | Hunter Valley settlers petition Governor Darling to start work on the surveyed road so they can have good overland access to Sydney. |
| Sept 1826 | Construction begins from Castle Hill North to Wiseman's Ferry by 67 convicts supervised by soldiers of the Royal Staff Corps. Not completed until 1830 but trafficable by 1828. |
| April 1827 | Lt. Jonathan Warner takes over supervision of construction.
Convict numbers risen to 127. |
| Sept 1827 | Convict numbers risen to 200 and comprise four groups: Nos. 3, 4 and 8 Iron Gangs (wearing leg-irons) and No. 25 Road Party (whose members were not shackled). |
| March 1828 | Work starts on the northern side of the Hawkesbury River (No. 25 Road Party and part of No. 3 Iron Gang) on the ascent now known as Finch's Line. |

- April 1828** No. 8 Iron Gang from the top of the ascent to Ten Mile Hollow (then known as Twelve Mile Hollow).
- June 1828** Lt. Percy Simpson arrives to take over from Warner. He advocates a route traced by Warner from Ten Mile Hollow through Mangrove Creek and north to Wallis Plains but this is later rejected. (The track leaving Ten Mile Hollow in this direction is now known as Simpson's Track).
- Sept 1828** No. 9 Iron Gang brought into Maroota area.
- Dec 1828** Surveyor-General Major Thomas Mitchell rejects Finch's ascent although it is almost completed and instructs him to survey a new ascent. Finch provides two new options, both of which are rejected. Mitchell also surveys a line of road from Bedlam Point (near present day Abbotsford) through Ryde and Pennant Hills to Dural, superseding the section of road between Castle Hill and Dural just after its completion.
- Jan 1829** On instruction from Darling, Mitchell surveys a fourth ascent (the present Devine's Hill, which he had located with Wiseman and Simpson) which cuts 2 1/2 miles from the route. Renames Twelve Mile Hollow as Snodgrass Valley but the name is not commonly used and the area later becomes known as Ten Mile Hollow. Construction begins on Devine's Hill, No. 25 Road Party worked on the lower section, the bridge below Devine's Hill and the wharf of the north side of the river until September 1830. The No. 3 Iron Gang worked on the section of Devine's Hill from the soft stone dyke uphill to the junction with Finch's Line. They were assisted by the No. 7 Iron Gang in late 1830, the No. 8 Iron Gang in 1831 and the No. 4 Iron Gang in 1832.
- April 1829** Most of the Great North Road between Baulkham Hills and Ten Mile Hollow completed apart from the descent to and ascent from the Hawkesbury River.
- August 1829** Mitchell surveyed the route from Richard Wiseman's farm on the Wollombi Brook back to Twelve Mile Hollow and his report recommended that the name Twelve Mile Hollow be changed to Snodgrass Valley to prevent

confusion, as Ten Mile Hollow and Twelve Mile Hollow were both in use at the time.

- Nov 1829** No. 9 Iron Gang working beyond Ten Mile Hollow to Giber Gunha (Mt Baxter) until April 1830.
- Jan 1830** No. 8 Iron Gang working around Ten Mile Hollow and the hairpin bends near the 7 mile position.
Clare's Bridge party, comprising men from the No. 25 Road Party, constructs Clare's Bridge, finishing in October 1830. Some of the men also work on the Sampson's Pass Bridge.
- Feb 1830** Construction of the Great North Road to Hungry Flat and Sampson's Pass, mainly by the No. 8 Iron Gang, until December 1830.
- June 1830** Work commences on a section north of Mount Manning by the No. 29 Road Party.
- c. 1831** Construction of the Circuit Flat Bridge by the North Road Bridge Party, under the charge of overseer William Barratt, completed April 1832; Barratt was originally an assistant overseer in the No 25 Road Party and his engraved name is associated with the Hanging Man engraving on Devine's Hill.
- 1833** Lines to the middle and upper Hunter surveyed and worked on until 1836.
- May 1833** Repairs started to the road on both sides of the river at Wiseman's Ferry, where rains had washed away the centre.
- April 1834** The gang at Wiseman's is moved to Bedlam Point.
- Nov 1834** The constable stationed on the north side of the river is assigned three convicts from the prison ships to keep the watercourses on the road clear and carry out small repairs on both sides of the river. If they performed well they would receive a ticket-of-leave; this is the last document found about convicts working on the OGNR (Webb 2004 pers comm.).

- July 1836** Supervisor Ogilvie writes a report to Mitchell detailing the large amount of work still to be done between his station and Maitland. Mitchell removes Ogilvie as Assistant Surveyor of Roads for using road gang men on his own land.
- Oct 1836** Newcastle Iron Gang working on the Northern Road (now New England Highway) at Harper's Hill; the gang was still working on the Northern Road near Scone in 1841.

2.3.3 Abandonment

In mid 1831, steamers were introduced between Sydney and the Hunter Valley. These were faster and more reliable than previous water transport and quickly became the preferred mode of transport to the Hunter Valley. By 1836, as the few remaining gangs were completing the last, northern sections of the Great North Road, it had been almost entirely abandoned as a route to the Hunter, and parts of the Road fell quickly into disrepair through neglect.

It was not only the advent of steamers that led to this virtual abandonment but also the nature of the terrain covered by the route. It was considered a long and difficult road to traverse with a lack of suitable accommodation and scarcity of water.

Later alternative routes north sealed the fate of much of the Great North Road. In 1844 an alternative route north via Peats Ferry came to be regarded as far superior, while in 1884, the road from Wiseman's Ferry through St Albans to Wollombi was formally opened to traffic (see Section 4.4 NPWS 1999).

The Great North Road thus:

never became the great thoroughfare it was intended to be. It is to this historical irony that we owe the physical survival of the Great North Road, and [especially its] ... most intact section in terms of impressive and modest structures, pavements, grades and sight lines, ... that between Wiseman's Ferry and Mt Manning (Karskens 1991:2).

2.3.4 Shepherd's Gully Road

The Shepherd's Gully Road, descending from the summit of Devine's Hill to the banks of the Macdonald River is historically closely related to the Great North Road, as it linked the Devine's Hill ascent with the river valley road through the Macdonald Valley settlements

below. This more hospitable route gradually evolved as the main road to the north (through St Albans and Mt Manning), and remained so at least until 1927. The water-bound Macdonald Valley, known earlier as The Branch, was settled by Europeans moving north from the Hawkesbury from about 1803. The river remained the sole means of transport and communication until the convict gangs cut the roads (Finch's Line, then Devine's Hill) along the ridge to the southeast. By then, a maze of unmade tracks most likely linked the farms within the valley, and a line northwards was discovered by John Blaxland in 1825 along the western side of the Macdonald River to St Albans. The road down Shepherd's Gully from Devine's Hill joined Blaxland's Road (now St Albans Road) via Butler's Ford (later Book's Ferry) (Hutton Neve 1987). The valley's settlements flourished, and the homesteads, hotels and farms it generated provided a far more hospitable environment for travellers, and the local route was increasingly used by through traffic as well as local traffic. As such, they were gradually improved through formation and drainage structures. An unreferenced account of 1841, probably from a newspaper, referred to the Shepherd's Gully Road as a:

by-road into the Macdonald which has been very difficult of descent, is being rendered both safe and easy through the exertion of some of the inhabitants and will doubtless bring an increase of traffic and travellers into The Branch (op. cit:111).

Work may have been sporadically carried out over the following decades, although in 1864 Surveyor Pitt declared the St Albans Road generally to be 'still only a bridle track'. More construction was carried out, probably by the Department of Public Works in the early 1880s and the road was formally opened in 1884 (Upton 1932).

Oral history evidence collected by National Parks and Wildlife personnel during the 1970s suggests that a third stage of road work was undertaken in the 1920s or 1930s (NPWS File F427, Central Coast District, brief dated Feb. 1991). This was most likely the outcome of the popularisation of motor cars, demanding the upgrading of many difficult sections of road. By 1927 the *NSW Motorists Guide* showed the Wiseman's Ferry - Devine's Hill - Shepherd's Gully - Road as the main route to the north. The punt at Webb's Creek, Wiseman's Ferry was also in operation, but was considered a secondary route. Traffic to the Hunter used Devine's Hill and Shepherd's Gully to access the Macdonald Valley and then follow the newly completed Mogo Creek route. This use of the Old Great North Road continued until the 1930s when the Pacific Highway was opened. The Old Great North Road was the only route in World War II when the Pacific Highway ferries were removed for war use.

Ironically, it was thus one of the meandering, rough 'bush' tracks so despised by Thomas Mitchell which superseded his grand and 'scientifically' planned road. The vague and sparsely recorded history of the Shepherd's Gully Road is typical of such unofficial local roads, for they evolved mainly in the local contexts, serving settlers for decades (Karskens 1991:21-22).

2.3.4 Simpson's Track

Simpson's Track was an important route which took travellers from Ten Mile Hollow to Mangrove Creek, Mangrove Mountain and then to Gosford (Webb 1999: 60). Webb suggests that this was the main access to the Brisbane Water prior to the introduction of vehicular ferries on the Peats crossing in May 1930 (Webb 1999: 60). Simpson's Track was named for Lt Percy Simpson who supported this route, which had been 'discovered' by a convict named Macdonald in early 1828, as the best course for the OGNR from Ten Mile Hollow to Wallis Plain (Maitland) (Webb 1999: 29). However it was not supported by Mitchell, who determined that the Great North Road should follow the ridgeline northwards to Wollombi (Payne n.d.). As the Simpson's Track went through gentler country, with ample water and grass, and passed by established small land holdings, it continued in use as an important local route.

2.3.5 Twentieth century use and management

Devine's Hill to Ten Mile Hollow was used as access to Gosford until the late 1920s to early 1930s when the Spencer road was upgraded and a bridge built over Mangrove Creek at Oyster Shell Road.

Until the opening of the Pacific Highway in 1930, with a ferry service for cars to cross the Hawkesbury River, the Old Great North Road was part of the major road route between Sydney and Gosford. Simpson's track (located off the Old Great North Road in Dharug National Park) was a part of this route. In the 1859 to 1860, the Northern Telegraph Line was installed between Wiseman's Ferry and Wollombi along the roadside between Finch's Line (including 1.8 km of Finch's Line) and Ten Mile Hollow.

Maintenance work was carried out on parts of the Old Great North Road by the Post Master General (PMG) until 1965 in order to retain access to the telegraph line. This involved the use of a backhoe, grader and small bulldozer on the Old Great North Road. Several wooden culverts were pulled out and replaced with concrete pipes and headwalls during this time.

Prior to the 1920s the original decking of Clare's Bridge was replaced. A photo taken in the 1920s shows a very flimsy looking decking supported by timber posts and it is much narrower than the original structure would have supported (Banks 1999:1). In 1965 the timber decking of Clare's Bridge was replaced with another timber decking during construction of the Eraring to Kemps Creek Transmission Line (Convict Trail Project, from Electricity Commission plans).

Most of the men engaged on construction of the Eraring to Kemps Creek Transmission Line were of Italian extraction. The bridge building gang installed the wooden decks on three bridges – over Mangrove Creek at Dubbo Gully, Clare's Bridge, and at Ten Mile Hollow – and rebuilt the collapsed eastern side of the southern abutment of Clare's Bridge. The filling on the east side of the north abutment was probably supported by bearers from the original deck (Webb 2004 pers comm.).

'A team of Italian stonemasons was brought in to reconstruct the northern and southern abutments on the eastern side of the bridge', using convict stone (Banks 1999:1). The collapsed eastern corner of the southern abutment was also rebuilt. Banks (1999:1) adds that the

Electricity Commission workmen had difficulty trying to make the bridge strong enough to support the traffic which needed to cross it. They dug holes for piers in the two abutments, and the centre pier and then poured concrete pads to support the steel girders which were placed across the bridge. Wooden decking was placed on the steel girders.

The wooden deck on Clare's Bridge was replaced twice (Webb 2004 pers comm.) before in turn being replaced with the present steel decking by Elcom in 1984 (Gray 1999 pers comm.). Prior to this a track had bypassed the bridge on the western side. It is possible that some of the decking timbers were re-used in 1959 to shore up the Old Great North Road immediately to the north of the bridge. The NPWS has been unable to locate records that would show the exact nature of this work. The collapse of the southeastern corner of the southern abutment appears to have occurred between July 1987 and April 1988.

Oil and shale exploration of the area by private contractors began during the 1950s and continued until about 1966. This took place mainly between Ten Mile Hollow and Mt Manning and involved the passage of bulldozers, backhoes and large six-wheel drive

drilling rigs. A number of deep pits were dug at a distance of some metres from the edge of the Old Great North Road.

Between about 1954 and 1965, loggers used the Old Great North Road to get access to timber, gaining access via Shepherd's Gully Road. This involved the passage of bulldozers and timber jinkers over the road.

NPWS files document serious damage inflicted on a section of the Old Great North Road in 1976 by a bulldozer and grader on hire to the Public Works Department through Gosford City Council (who manage this section of the Old Great North Road). The machinery was being used to upgrade the Old Great North Road for the purpose of gaining access to trig stations and major survey points for use in the survey of the proposed Mangrove Creek Dam. Damage was mostly in the Sampson's Pass area but also occurred intermittently over the 10 km south from Mt Manning. It included:

- removal of wooden culverts in creek crossings and their replacement with concrete pipes;
- a drop in the level of the road surface of up to 18 inches in parts;
- scraping and gouging of historic features such as picked cuttings, drill holes and graffiti; and
- pushing over of some stone retaining walls and covering of others.

At various times Elcom used a grader on the Old Great North Road from just south of Hungry Flat to the Wrights Creek turnoff. At the request of the NPWS, work on the Hungry Flat crossing was done by hand, while the Eraring to Kemps Creek Transmission Line was being installed..

During the 1970s the Australian Army used the Old Great North Road on occasions to test armoured personnel carriers and six-wheel drive vehicles.

In about 1980, two utility loads of convict worked stone were removed from the wall on the descent to Ten Mile Hollow. One load was later returned. It is likely that the convict worked stone which forms the foundations of a number of houses in the Wiseman's Ferry area also originated on the Old Great North Road, much of it possibly as edging along the Devine's Hill section.

In 1981, Hawkesbury City Council did some maintenance on Shepherd's Gully Road using a bulldozer and a grader.

In spite of the above history of use the Old Great North Road remained traversable by two wheel drive traffic until about the 1970. From about this time there was an increase in the numbers of privately owned recreational four-wheel drive vehicles and trail bikes, a corresponding increase in usage of the Old Great North Road by these vehicles and a dramatic increase in the rate of deterioration of the surface of the Old Great North Road and damage to other features such as culverts, retaining walls and cuttings.

Since the gazettal of Dharug National Park in 1967 the NPWS has monitored the condition of the Old Great North Road and done minor emergency conservation and maintenance works.

In 1978 the NPWS was able to close the most visually spectacular section of the Old Great North Road, Devine's Hill, to public use by vehicles and horses. Emergency conservation works were then carried out.

In 1988 funding became available to record the historical features of the Old Great North Road in order to provide an adequate basis for this Conservation Management Plan. (End of excerpt from NPWS CMP 1999).

In December 1992, following lobbying by NPWS and others, the NSW Minister for the Environment closed the Old Great North Road, Shepherd's Gully and other ancillary tracks, between Devine's Hill and Mogo Creek Road (43 kilometres), to public vehicular access to prevent further damage to the fabric and for public safety reasons.

Using funding received through an employment scheme, conservation and protection work was commenced on Devine's Hill and the first aluminium photo interpretive displays were installed (Webb 2004 pers comm.). During 1993 and 1994 NPWS carried out repairs on culverts on Devine's Hill and diverted the road around a wooden culvert at Ten Mile Hollow, and resurfaced the OGNR between the Wat Buddha Dhamma and Ten Mile Hollow. Metal interpretation signs were installed in April 1994 and were remounted on rough-hewn sandstone blocks in 2000, when some additional signs were also installed at various locations along the Road.

Between 1994 and 1997 road surface stabilisation works were carried out on Devine's Hill.

In 1998 further works were carried out on Devine's Hill and Clare's Bridge (which is outside the Park boundary). Works on Devine's Hill included the establishment of a wall movement monitoring program.

Between 1998 and 2002 work continued on vegetation clearing, the progressive repair of culverts on Devine's Hill and Finch's Line, as well as the preparation of technical reports on historic graffiti and timber items, and the reconstruction of a retaining wall at Chainage 1617 on Devine's Hill. The timber culvert at Ten Mile Hollow was also reconstructed with new fabric replacing rotted timbers. Culvert No.14 and the adjacent wall were reconstructed recently (Breheny 2004, pers. comm.). The reports on these activities can be found in chronological order in the annotated bibliography in Appendix 2.

2.4 Shared and Landscape History

2.4.1 Putting the OGNR in cultural and cross-cultural context

Thinking historically is a process of locating oneself in space and time. And a location...is an itinerary rather than a bounded site – a series of encounters and translations (Clifford 1997:11).

Clifford's work draws attention to the dynamism of all places. They are generated through time by the interactions of people at that place, with it and each other, and by the travel which brings them there. In the statement above, he sets out a perspective for an approach to the OGNR in which it is not only an object, but a focus for people's 'encounters and translations' of each other and of the landscape around them.

Coral Edwards, an Indigenous educator in the area (1996: 91), makes a powerful statement which evokes many of the relationships between place, past and present, which are implicated in realising these opportunities:

Rediscovering your own history about the GNR and being proud of the stonework and all that sort of thing – that's part of your cultural timeline. Ours is another one. And when people get to the point where they can appreciate their own history, they can step aside and look outside their own viewpoint, once you've got past celebrating the stonework, the achievement, then you've got to start looking beyond the achievement, and that's where the responsibility starts coming in. You can't do anything right now about what happened in the past, but you can act responsibly, starting right now. ... And if you keep on going that way you might then find that you begin to feel the Country.

The OGNR was built by convict labour to facilitate the expansion of the British colony beyond the Sydney Basin. It was difficult country to build a road through, and difficulty of traverse remains a quality of the landscape today. As the road fell rapidly into disuse, its preservation was fostered – those parts that continued to be used are those that have been most re-built and covered over; where the original line of road is most uncertain. It is a museum road, a road which cannot be used as a road for passage but which is an educational and heritage feature, a symbol of the convict system. Viewing it in this way tends to isolate 'the road' as a floating object, disconnected from its context. To put it back into a meaningful context we can think at different scales about what such a construction meant:

- 1) as part of the colonial project and modernity;

- 2) to the pre-existing landscape that the road was constructed through and how that may have been altered by the road; and
- 3) how the construction was experienced by the individuals involved, spending several years there – and stories of what life was like.

A further context is the road and the local Indigenous population. This context cuts across two standard categories of colonial history that take either a convict or an Aboriginal focus. These are commonly handled as rich, but separate, historical areas of study. We have investigated the areas in which they intersect at a general level. To do so involves several stages. In terms of the colonial history in the area, we have focussed on the forms of interaction which were enacted between Indigenous communities and the colonial system, and more specifically, the ways in which the convict system and Indigenous people could intersect. Where possible, we have tried to establish some of the elements of how these interactions played out in the local Hawkesbury River area, using published sources.

To understand the colonial history requires consideration of continuities and transformations in all aspects of the cultural and physical landscape which connects the pre-colonial past, through the colonial period, to the present and to a potentially emerging post-colonial world. NPWS current approaches, which stress the concept of 'shared histories', recognise this connection.

2.4.2 'Shared' history / interactional history

We prefer to use the term 'interactional history' in preference to 'shared' history, as the latter expression assumes that there necessarily was some sort of cross-cultural sharing of something. What this was and the terms on which it was enacted need to be demonstrated or investigated rather than assumed. 'Sharing' implies, or could be taken to assume, equity in the power relationships involved, the existence of reciprocal exchange, whereas the starting assumption needs to be that the participants have different stakes in the interaction. There were interactions, some of which may have led to the exchange of ideas, words, time, objects and genes. These may have been mutual at times, but were not necessarily equal. Much was not shared, either because it could not be, or because a choice was made to withhold from sharing.

We can use the idea of a 'contact zone' to emphasise the spatial aspects of any interactional history. A contact zone is defined as 'the space of colonial encounters, the space in which peoples, geographically and historically separated, come into contact with each other and establish ongoing relations, usually involving conditions of coercion,

radical inequity and intractable conflict' (Clifford 1997:192, citing Pratt 1992). This definition also stresses that such places of interaction are brought into being through the actions of the people involved. They are shaped by both the intended and unintended outcomes of those actions.

The OGNR is not an immediately obvious candidate for consideration as a 'contact zone', for several reasons: it was built late in the history of colonial interactions in the Sydney Basin – after over thirty years of farming on the Hawkesbury's alluvial flats, and traffic of stock through the area, and about ten years after major episodes of violent suppression of Aboriginal resistance to these incursions. It would be easy to overlook the presence of Indigenous people in the area at the time of construction as negligible. Such an assumption is never voiced however. Rather, in historical thinking, there has commonly been a silence or disconnection between two separate landscapes: one of ancient or prehistoric occupation, another of white colonial settlement - with no overlap. Historical assessments treat the OGNR as a 'stand alone' object of colonial history. This amounts to a form of forgetfulness or denial of the continuities that are required for understanding the relationships between the past and the present. It is consistent with a common tendency to treat such heritage places as 'pure products' (Byrne 1997) which leads to the reinforcement of historical invisibility for Indigenous people, rather than an assumption of connection and presence.

Within Dharug NP there are two images which speak directly of the transitional processes of inter-cultural interaction and are emblematic of the two-way nature of a 'shared history'.

The first of these is a detailed charcoal depiction of a two-masted ship on the roof of a rock shelter about 40m above Gunderman Creek (Figure 4-19, 20).¹ There is a smaller second ship depicted behind the main picture, and nearby are other charcoal pictures of what is perhaps a turtle and two ovoid shapes, with further charcoal, red and white pigment art inside the main shelter. There is no build-up of deposit. This may have been a coastal ship, seen in 1770 or at any time from 1788, or it may be a local event that is recorded here, of the early ships which travelled up the Hawkesbury from June 1789 (DLHHS 1987:4). This evocative image allows us to imagine the strong reactions that would follow the first sight of a ship under sail, and perhaps the re-telling of the event in the shelter to others who had not seen it.

¹ Not yet registered on NPWS database. Recorded S Breheny and K Sale 26/6/99. Located by local botanist Patrick Matthew.

We can compare the ship image to another representation associated with the OGNR, an engraving of a European person, perhaps a convict, created by drilling into a flat sandstone platform (Figure 4-39). The manner and scale of the image suggest that the artist had seen Aboriginal rock engravings and was imitating their form. The manner in which it is made, its location and the details of the picture – the long smoking pipe and high cap with brim – suggest that it is more or less contemporaneous with the road. Another engraved figure with hat and pipe is found on the Road, 7km north of Ten Mile Hollow (Lavelle and Karskens 1999, Inventory Number 3.9.1), while another remarkably similar profile head, with cap and pipe, is found alongside the Windsor Road at Northmead (SHR Database Number 505142). The similar iconography of these figures, stressing hat and pipe, suggests that they represented a 'type' of person, one that would have been readily recognised by contemporary observers.

Again, it is possible to imagine this image created as a component of telling a story to an audience, or it may have been a subversive or defiant private act. Its location near the OGNR and approximately 50m from the stockade site raises questions of who would have had the time to complete such a project, and whether or not it was illicit. Perhaps only an overseer would have freedom enough to finish it, or perhaps, as has been suggested, it represents problems in the supervision of the convict gangs (Lavelle and Karskens 1999: 3.2.3). It may have been executed after the completion of the road, or by any traveller on the road from the first part of the 19th century. It is not possible to know. David and Wilson (2002) make important observations about the social role of the act of graffiti making.

As a form of inscription usually practiced *outside* the censoring arm of the power elite, graffiti confronts and contradicts the ordered and ordering space of institutionalised life. ... It threatens the status quo not just because of the words or images written, but by the fact that its execution in public spaces lies outside the control of existing social forces. [Graffiti is a] particular kind of inscription in public space - the written voice of people actually or potentially subordinated by public sentiment and expectation. ... In marking place, *ownership* is claimed over space and the *right* to place. (2002:43).

Robert Hughes presented the dominant view that accounts of the convict system missed the voices of the convicts themselves (1987: xiv-xv). However, there is a body of narratives written by ex-convicts about their times as a prisoner, which counter this view, as discussed by Duffield (1997). This engraving – if it is in some way contemporaneous with the road and its convict builders – and with the other engravings described above, are another way in which individual convicts emerge from the blur of the repressive 'system' and show themselves to us. That they should use the same methods as the Indigenous

people of the area, mimicking their universe of imagery, provides an evocative point of contact between the two ways of life.

2.4.3 Colonial history of Indigenous relationships in the region

The country now referred to as the Sydney Basin saw Australia's earliest and therefore the most unpredictable encounters between Aboriginal people and British colonisers and has the longest history of these interactions (Goodall 1995). The outline of the sequence of complex interactions which took place is well known. The cascade of great changes to people's lives, which are still being played out, was set in motion on 28 April 1770 when James Cook's expedition sailed into what they named Botany Bay after the diversity of unknown plants encountered there, known as Kamay to the local people. Although they tried to prevent the Europeans landing, a week of uncertain, exploratory exchanges of goods and mutual observation followed. James Cook's descriptions of 'noble savages' and of available fertile country escorted the colonial First Fleet of January 1788 back to what became known as Port Jackson 18 years later, together with 1000 people: 759 convicts plus officials.

Formal British government instructions to Phillip and to Hunter were to establish friendly relations with the Aboriginal people, and to take action against those colonists that harassed them. The instructions from King to Hunter were 'to conciliate their affections, enjoining all our subjects to live in amity and kindness with them; and if any of our subjects shall wantonly destroy them, or give them any unnecessary interruptions ... it is our will and pleasure that you do cause such offenders to be brought to punishment' (23/6/1794 HRNSW 2: 230).

Initially the colonists received the hospitality of the local people. But as time went on, there was opposition to the clearing of the ground, and then the areas under occupation were avoided for almost two years. To learn their language and encourage more interaction, Phillip intervened by taking several hostages (see McBryde 1989).

A devastating unintended outcome of the colonists' presence was the rapid spread of diseases in several epidemics. The first, in 1789, spread to the Hawkesbury prior to the arrivals of the first expedition there. In just over a year, more than half the inhabitants of Sydney had died (Attenbrow 2002: 21). There were too many dead to allow appropriate burials. The deaths caused massive ruptures in the Aboriginal community's capacity to sustain its social structures. This was coupled with rapid curtailments of access to fish,

plant foods and hunting grounds, together necessitating a growing reliance on the colonists for food (Attenbrow 2002: 22, 84).

'The British failed to appreciate either the importance of what they were expropriating or that they were not giving sufficient back in return for the land and resources they were taking' (Attenbrow 2002: 84).

Governor Phillip soon led an expedition to find much-needed alluvial farming land in Broken Bay in June 1789, rowing almost as far up as present day Wiseman's Ferry on what he named the Hawkesbury River. A second, larger boat expedition later the same month mapped the river to the fertile plains of the Richmond/Windsor area, and planted vegetables there (DLHHS 1987: 4-5). They sang and exchanged gifts with Aboriginal people in Broken Bay (DLHHS 1987: 7). An overland party mapped the Windsor area in April 1791.

A combination of the deterioration of limited pasture by grazing, the drought of 1810-13 and plagues of caterpillars, drove rapid exploration and agricultural settlement beyond the Cumberland Plain, with the road over the Blue Mountains established to Bathurst and the Hunter Valley cleared. 'Sydney sat on a rocky peninsula surrounded by salt water; broken terrain and patchy soil restricted farming' - whereas the rich floodplain of the Hawkesbury, met by navigable tidewater, offered great potential for feeding the colony (Dyster 1988: 142). Land grants in the Hawkesbury were made freely after Governor Phillip left in 1792, and some lands were acquired ahead of the official settlement in January 1794. There were about 400 settlers in the Windsor/Richmond area, along the Macdonald and the Mangrove Creek valleys by 1796, growing corn and wheat, cabbages, potatoes, pumpkins, watermelons and stone fruits, and keeping poultry and pigs (Parsons & Cavenagh 1997:29; DLHHS 1987).

'By 1820 the earliest farms and riverside landing places dated back a quarter of a century, long enough for landing places to become villages and villages to become towns, long enough for farming practices to consolidate and a generation of native-born colonists to reach adulthood in the valley' (Dyster 1988: 143).

Coverage of the fertile river flats and foothills by white land holdings excluded Aboriginal people from the important yam beds of the river flats and access to other essential components of their subsistence found in the region, such as fish and shellfish. Timber was a preferred material for the colonists' building and boat making, especially as stone builders were retained in government gangs. This contributed to the drive for land clearing. Gale and Haworth (2002) argue that the impacts of changed land use on Indigenous food

and water resources were, like the spread of disease, rapid and marked, and likely to have preceded the official occupation of land by farmers. In the Hunter area, Gale and Haworth describe this immediate impact in terms of an alteration in rates of sedimentation, and by implication increased catchment erosion, with the arrival of stock, changes in drainage and runoff with the clearance of vegetation, cultivation, and possibly also changes in land use by Aboriginal populations forced to different regimes by the incursions and restrictions on their movement.

One Indigenous response to these changes was to begin digging up crops and raiding stock. They also attacked colonists, prompted by inevitable conflicts over access to land, food, and attacks on Aboriginal men or women.

The official response to these conflicts was the provision of military support to the colonists. In 1795 Captain Paterson, then governing the colony, ordered a detachment of two officers and 60 men to be sent to the Richmond/ Windsor area to assist colonists who were in his words 'being butchered and their labour rendered useless by [the Dharug's] degradations' (cited by Parsons & Cavenagh 1997: 29). They attacked and killed eight Dharug men and took several prisoners, several of whom were women. In 1796, Governor Hunter issued a General Order that the Hawkesbury settlers could form mutual defence groups, approving such defence as 'indispensably necessary' (Parsons & Cavenagh 1997: 30). Commandant McKellar on the Hawkesbury in 1797 followed a policy of 'destroying' natives for 'degradations on the settlers except for such native children as were domesticated' (cited by Parsons & Cavenagh 1997: 34). Two young Aboriginal boys, implicated in an earlier killing of two settlers, were killed. Those responsible were presumably encouraged by the semi-official acceptance of vigilante-ism. They were tried in a military court. The official policy of respecting the rights of Indigenous people was adhered to by the naval officer judges, but not by the NSW military representatives, and the five charged were released to continue as small farmers on the Hawkesbury (Parsons & Cavenagh 1997: 34).

There was a great fear of Aboriginal people, with about ten percent of the Windsor/Richmond settlers killed or wounded between 1795 and 1799, with concerted attacks on travellers and people working on farms by groups of Dharug men. The military, many of whom owned farms in the area, in turn attacked groups of Dharug people. Colonist farmers also continued to fight, but no records account for the numbers they killed or wounded. A cycle of attack and counter attack was instituted. This frontier war of guerrilla attacks and military counter-campaigns continued until 1816 and Macquarie's

final widespread onslaught. By this time the capacity to resist had been undermined (Parsons & Cavenagh 1997: 34).

Despite this the local Aboriginal people remained, successfully reconfiguring their lives in radical ways. Throughout the period of warfare some Aboriginal people were working on the farms as labourers, and receiving gifts of food or clothing from some colonists (Parsons & Cavenagh 1997: 31). Their provision of farm and domestic work continued into the 20th century, often working for food and tobacco (Sydney Gazette 1826 cited by Tobin 1997; Brook 1999, Attenbrow 2002: 84). Demand for labour was intense, even with convicts and freed convicts, as the cost of non-convict labour was high (Perkins 1988). One colonist at Lower Portland 'was said to have greatly feared the natives and to have set aside a portion of his land for them, in the hope of keeping them away from his home' (Ross 1981). By 1800, 'many' Aboriginal women lived with settlers on the Hawkesbury (McGrath 1990:195).

In 1804 Governor King asked three Hawkesbury Aboriginal people about their grievances. They replied that 'they did not like to be driven from the few places that were left on the banks of the river, where alone they could procure food; that they had gone down the river as the white men took possession of the banks; if they went across white men's grounds the settlers fired on them and were angry; that if they could retain some places on the lower part of the river they should be satisfied and would not trouble the white men'. King replied, "The observation and the request seem to be so just and so equitable that I assured them no more settlements should be made lower down the river. With that assurance they appeared well satisfied and promised to be quiet..." (Historical Records of Australia Ser 1 vol 5: 166-7). This promise was kept to the extent that there were no official land grants on the lower Hawkesbury until those formalised by Macquarie in 1810, but there had been numerous unofficial settlements prior to that date (DLHHS 1987: 8).

This is part of what Byrne (2002) has pin-pointed, in the Taree area, as a colonial process of 'segregation of the landscape'. Indigenous people, through necessity, had to find ways to continue to dwell in the 'in between' spaces beyond the settler occupied, fenced and cleared lands. A number of places where Aboriginal people were able to congregate along the Hawkesbury River and throughout the Cumberland Plain became recognised camps. For example, in 1803 there was a principal camp at South Creek, and in the 1840s another near Windsor, at the confluence of South and East Creek, at Sackville Reach (Brook 1999: 15). Another group at Blacktown included the descendants of Maria Lock, sister of Colebee and daughter of Nurragingy, who married Robert Lock, an ex-convict, in

the 'first official marriage of the two cultures'. They lived at Plumpton on the land granted to Colebee of the Burrumburongal clan and Nurragingy of the Dharug by Macquarie in 1819 (Brook 1999: 15; Tobin 1997). This land was, however, sold by the Aboriginal Welfare Board in the 1940s.

It is clear that 'by the end of the 1820s, there was no-one in the Sydney region that was not in some way affected by the British presence' (Attenbrow 2002: 84). At the time of the building of the OGNR, the census of 1828 shows that at Macdonald River ('first branch') there were 25 Aboriginal men, 22 Aboriginal women and 18 children (Sainty and Johnson 1980:15).²

Scraps of published information about the Indigenous people of the area through the 19th and early 20th centuries provide at best patchy glimpses of elements of their lives through this period. Much greater detail specific to the area is likely to be available through local historians and family histories.

In 1834 Mrs Felton Mathew witnessed a wallaby hunt in the Macdonald River area. People ran along ridge tops shouting, to drive the wallabies down onto the flats where they were killed with spears and dogs (Ross 1981: 204). Kangaroo hunts as described by Barrallier in 1802 were traditionally large-scale cooperative operations (McDonald 1994: 46) and so it is significant that one was organised in 1834.

In 1883 the Aborigines' Protection Board was set up to create reserves where Aboriginal people were directed to live. From 1889 to 1946 the 60 hectare Sackville Reach Aboriginal Reserve provided a secluded retreat, with access to the river for fishing, on the Cumberland Reach of the upper Hawkesbury River. However, from 1907 the Protection Board was granted greater control over people, and there were increasing numbers of removals of children (Brook 1999).

In the lower Hawkesbury, Mathews says in 1897 that '[a] small remnant of the Darkinung Tribe, numbering about 60 persons – men women and children – are at present located on a Government Reserve on the left bank of the Hawkesbury River, about 12 miles below Windsor... There are now only two initiated men surviving in this tribe – Joe Gooburra and

² There was a total counted population of 40,000 people in NSW at the time and 2,979 Aboriginal people counted in settled areas of NSW (Sainty and Johnson 1980).

Charley Clark...' (1897: 1).

This rough, patchwork overview of the continuing presence of Aboriginal people in the area through the 19th and early 20th centuries does highlight several points for this project. The primacy for Indigenous people of maintaining relationships to land shines out in the ferocious battles that were fought to maintain access. There is an overwhelming emphasis in historical and contemporary descriptions on the most fertile areas of the landscape. Conflict was at its height here, and it is where colonists and Indigenous communities were both trying to live. This component of the landscape was necessary for viable Aboriginal subsistence *and* for viable settler agriculture. Much of the surrounding land on the lower Hawkesbury was never settled – hence the existence of the National Park there now. What was going on in this country during this later colonial period?

There is evidence from Mathews that people continued to carry out painting and engraving in the area until 1855 (Attenbrow 2002: 151). It is highly significant that at least some of the significant places in the hinterland, and the ceremonies associated with them, were maintained for so long. There are some accounts of chance encounters with groups of Aboriginal people, for example by Mitchell on his 1829 survey of the GNR (Ross 1981: 204). There are snippets of information such as the wallaby hunt in the 1830s described in a family's oral history above. But beyond that, we know nothing about what people's lives in these more remote, less fertile areas were like during these times. Archaeologically, the most recent, surface dates for the occupation of sites, when available, are pre-colonial, but they are not always recorded. It is possible that a different set of sites was occupied, with novel patterns of use that developed in the colonial period as a response to the changes in land access. A question that only arises from consideration of the continuities of Indigenous history is whether or not there is any archaeological evidence for colonial and recent Indigenous actions in the area?

Place names

Place names record or recall local histories. They may be Europeanised versions of local language referents for particular places, for example, Gunderman is said to mean 'hut on a stream', a corruption of the Darkinjung words *gunji dharragang magan* (Mathew 1998). Dharug itself records the name of one of the language groups of the Hawkesbury area, though it is accepted that it was the Darkinjung language group who were responsible for the country that is now Dharug NP. 'Canoelands' is said to be a place where bark was collected, and 'the Paint Works' was a local name for a place on the northern side of the river where ochre was mined (Ross 1981: 202). Hospital Gully, off Popran Creek, was

named after a tent hospital set up to treat Aboriginal people suffering from influenza in about 1837. Many died and are buried there (DLHHS 1987: 9). 'Mogo' is said to be the word for 'stone axe', and the igneous rocks in the Mogo Creek a source of lithic raw material (Sim 1966:10).

Alternatively, place names may make reference to external systems of power and influence, eg the Hawkesbury, named by Phillip in 1789 in honour of the Earl of Liverpool and Baron of Hawkesbury, a town in Gloucestershire, UK.

Ethnography

Another way into the past is through the written observations of Aboriginal people by Europeans or 'ethnohistory'. The colonial officials were trained observers keen to record information of scientific interest about the local inhabitants in reports and diaries – the first book based on these was published as early as 1789 (Attenbrow 2002: 13; McDonald 1994: 35). These overlap with specifically anthropologically oriented observations, such as RH Mathews', a government surveyor in later nineteenth century. The Aboriginal people were at the same time observing the ethnographers closely, but their observations are only sometimes reported, or recorded in contact art.

While it might appear that reports by people at the time of colonisation would tell us all that we could want to know about people's ways of life prior to 1788, there are evidently many limitations to the information the observations provide. As Butlin says, the ethnographic evidence may be not only limited but misleading (1983: 155, cited McDonald 1998: 323). The lives being observed were altering so fast that only pre-1800 information may describe anything approaching a stable society (Attenbrow 2002). Later accounts describe the situation in the colonial period, and no direct reflection of the pre-colonial conditions can be assumed. The observers' preconceptions influenced the terms of their interpretations, and the absence of common protocols or assumptions could lead to misunderstandings. In addition, the archaeological record shows the dynamism in the ways of life in the region. The descriptions at 1788 can only be assumed to apply to the last 900 years, when shell fish hooks first started to be used on the NSW coast (McDonald 1994: 34).

However, these caveats accepted, McDonald (1998), for example, demonstrates the capacity for a combination of ethnographically informed interpretation and archaeological formal analyses of the Sydney rock art to generate a far richer approach to understanding its complexities than either approach used in isolation (discussed further in Section 4).

Attenbrow (2002) provides a detailed, encyclopaedic account of the ethnographically described social structure, material culture and subsistence bases of the people of the Sydney Basin. For this project, one of the key ethnographically described elements of Indigenous people's social organisation was the identification of the various language groups in the Sydney Basin. The early colonists noted the differences in the words used by people of adjacent areas on the coast, in Point Jackson and Broken Bay, for example. They reported that the speakers could understand each other on the coast, whereas speakers of some other variants in the inland could not communicate and were hostile. These differences came to be identified with language group names only during the 1870s, when the identifiers Darug, Dharawal, Darginung, Guringai were first used (Attenbrow 2002: 31). Each language group lived in a particular division of land with particular sets of totemic sites. The language spoken inland to the northwest of the Hawkesbury River was Darkinjung (There are many spelling variants: Darkinjung is used by the LALC, Darginung by Mathews 1897 and Attenbrow 2002). The group would have been made up of a number of smaller kinship-based residence groups, who would meet for economic and social reasons (McDonald 1994: 36-40). Mathews (1897, cited by McDonald 1994: 40) specifies the totems associated with the two Darkinjung moieties (primary kinship divisions): grey kangaroo, diamond python, wombat, black snake and wallaby for one and scrub possum, emu, bandicoot, eaglehawk and wallaroo for the other. One of the complex ceremonies of the Darkinjung, in which these feature, is described in detail by Mathews in 1897.

Analyses of early colonial ethnographic accounts and excavated deposits from rock shelters describe the broad basis of people's terrestrial economy in pre-colonial times. This made use of the resources of all the local micro-environments – yams were dug from the river flats, shellfish, fish and birds trapped from the rivers, large and small mammals and reptiles, insects and honey acquired from the slopes and ridges (Ross 1990).

2.4.4 Convict history and Indigenous colonial history

In Australian historiography, there has been a tendency to handle convict histories and Aboriginal histories as separate categories. Tom Griffiths (1987) has made a comparison of the silences that surround the historical realities of colonial violence between colonists and Aboriginal people, and those silences which surround the convict origins of European settlement. From the 1880s, there was contemporary censorship: overt violence was publicly unacceptable, so it went underground from early on. What Griffiths calls 'protective manipulation of family reputations' has clear parallels in treatment of both

convict and Aboriginal origins (1987: 24). Historical accounts skipped straight to the pastoral era, with Captain Cook, not Governor Phillip, commemorated (1987: 25). There was a bout of destruction of public records in the 1860s, by which time assertion of convict ancestry was an insult, 30 years after the cessation of transportation (Sainty and Johnson 1980: 7). In a developing climate of belief in social Darwinian ideas of 'blood' and inherited traits, convict origins cast an uncomfortable shadow over individuals' and the nation's convict-based origins. Historian Bonwick in 1858 compared convicts to 'departing tribes...They will no more advance with progressive civilisation than the blanketed Aborigine. Like men of the woods they are rapidly dying off. A new and another race are elbowing them off the stage' (1987:26). Social Darwinist ideas conveniently explained the historical process of colonisation as inevitable progress. The decline of convicts was as certain as that of Aboriginal people; a form of explanation which effectively isolated convicts and Aboriginal people from others. 'In their quest for a new beginning free of the convict taint, colonists turned away from the continuity of their history...' (Griffiths 1987:26). Australia was left with a kind of gap that overrode the actualities of the conflicts over land and cultural hegemony inherent in local colonial processes. This forgetting only began to be redressed in the mid 1970s, and is on-going, for example in the current NPWS heritage approaches which emphasise 'shared histories'.

Dharug National Park presents an intriguing cultural landscape to consider in terms of interactional historical thinking. The extraordinary richness of both the convict road and of the Indigenous cultural places and materials — well preserved because of the nature of the sites, plus their remoteness and difficulty of access in relatively undisturbed sandstone country — present dual cultural complexes that readily lend themselves to readings in culturally isolated, singular terms, rather than relative, or interactional terms. There is an apparent lack of overlay, of reworking of Indigenous places by places of convict actions, and by the agricultural system that the road was supporting and enabling. There appears to be a clean, sequential replacement of the Indigenous actors in the landscape by the convicts, and of them by the free land holders and finally by the National Park. The question which requires consideration is the inversion of this easy history: where do the overlaps occur and at what intensity were they taking place?

The route from Newcastle to the Hawkesbury was becoming well known to convicts in the Hunter penal establishment prior to the shift of the gaol north to Port Macquarie in 1820, so the area of the OGNR was already traversed by convicts at least ten years before formal road building commenced (Gale and Haworth 2002). Ian Webb claims that from April 1820, the route via Howe's track became known to convicts at Wallis Plains and

Newcastle. Blaxland's Track or Parson's Road (Boree Track) was well marked by September 1821 as a trail for absconding convicts to use. Prior to this, most escape attempts were along the coast or through Brisbane Water (Webb 2004 pers comm.).

The November 1828 census indicates the scale of convict presence in the area at the time of the OGNR construction. There were 4033 convicts in total in NSW. Of these, in the immediate vicinity of the OGNR there are listed an Iron Gang of 40 at 'Wiseman's or Portland Head'; 72 at 'Lo. Br. Hawkesbury' [Macdonald River]; 58 at 'Nth Road Wiseman's Lo. Pt. Head'. There is a Road Party of 35 at Portland Head. This indicates that there were 205 convicts in the immediate area, plus 76 in the Windsor Town Gang, plus their overseers and military (Sainty and Johnson 1980: 16).

The construction of the OGNR involved the concentration of traffic, people, cattle, noise and heavy use of the available water in the area. This would mean avoidance or a major re-orientation of the terms of Indigenous people's access to that country.

The major themes or realms of interaction that emerge from general literature are:

Violence

Convicts were conveniently blamed for massacres of Aboriginal people, even when approved by colonist farmers, or carried out by them, and tacitly approved by the colony's leaders (Duffield 1997: 30; Parsons & Cavenagh 1997). There are mirrored dual tropes of the treacherous and violent convict and the treacherous and violent 'native' (Kokiumbas 2001:30-1).

Fear

Fear of Aboriginal attack was one form of control of absconders from remote convict stations surrounded by large Aboriginal populations such as Port Macquarie and Morton Bay. John Caesar, a first fleet repeat absconder, is said to have survived in the bush during one escape by menacing an Aboriginal group with his stolen musket, and taking away their food (Bradley 1786 – 1792 cited by Duffield 1997: footnote 73 p41). Such events made the Aboriginal people inclined to be hostile (Duffield 1997: 30). Alternatively, Aboriginal people were used to track down absconders, and so were feared by convicts (Duffield 1997: 30). On the other hand, there was also a good deal of fear on the part of the authorities that absconders would join up with Aboriginal groups and be supported by them or assisted in crime.

Cooperation

Cooperation did occur - William Buckley is a famous example. Collaborative bushranger gangs are documented: In 1839 the *Sydney Herald* reported in alarm that certain Aboriginal people seemed to have been aiding escaped convicts and bushrangers. An Aboriginal woman called Mary Ann, and a young Aboriginal boy accompanied a party of four renegade convicts who had been robbing stations in Upper Hunter and New England. This group was assisted, or at least not stopped, by the assigned convict servants working on the stations in the district (Kokiumbas 2001: 29-30). Non-coercive sexual partnerships between Aboriginal women and escaped or ex-convict men also occurred (eg McGrath 1990; Duffield 1997). Also, it is interesting to note that there are four convicts assigned and therefore assisting 'in the service of E. Threkeld, Reid's Mistake, Teacher of Aborigines - Hunter's River or Newcastle' (Sainty and Johnson 1980: 16).

In the Hawkesbury region, we can see these forms of interaction being played out in an episode where four convicts escaped and lived with the Dharug. Military parties were sent in concentrated pursuit. The convicts were blamed for the ensuing violence (Parsons & Cavenagh 1997: 30).

There are also celebrated marriages between freed convicts and Aboriginal women, the forebears of many Dharug and Darkinjung people today, for example Maria and John Lock (Tobin 1998; see above) and in Darkinjung, Ephraim Everingham and Martha Hibbs. The latter couple married in 1878 at Sackville Reach, Ephraim being a son of John Everingham, first-fleeter, and Mildred Saunders, Aboriginal woman of the Boorooberongal tribe. This marriage is celebrated in a children's book 'Wargan the crow' retold by Cindy Laws 2002, 'a Hawkesbury story handed down from our Grandmothers for many generations'.³

2.5 Conclusions: The OGNR in Context

Roads have multiple resonances when we try to understand them in a cultural landscape context. Built to connect places, they are also places in themselves, locating people in a landscape and within a mental cartography of an environment. In Australia roads are symbols of imperialism and colonialism, of modernity and progress. Some merge a pre-colonial landscape with colonial history, representing contact and knowledge sharing between Indigenous people and colonial settlers. The colonial roads of NSW are also narrative trails evoking and recalling the colourful mythology of explorer heroes, the

³ This uses Darkinjung words for the river, sun, and animals, and uses a hand stencil in the illustrations.

policies of individual Governors, the notoriety of bushrangers' exploits. The OGNR has become 'The convict trail', a journey in the search of cultural roots, family connections and the personal histories of men caught up in an oppressive imperial system.

Our understanding of the Indigenous history of the landscape, which was to become dominated by the OGNR, is fragmentary. By the time of its construction in the late 1820s, colonial agricultural settlement and its associated violence and disease had profoundly affected the peoples of this region. However, Aboriginal people continued to live and work in the area and their connections to the country were maintained, for example in carrying out painting and engraving until 1855, through to the present day. We have seen that accounts of historical conflicts focus on the fertile lands required for colonial agriculture. The land that was to become the DNP landscape was not intensively settled, and the way in which Indigenous people continued to use this country is poorly known.

3.0 CONTEMPORARY SOCIAL VALUES

3.1 Introduction

Many communities hold a broad range of attachments to the OGNR. This project has entailed contact with individuals who hold expert or special knowledge of the road and its environment, organisations which hold the road in high esteem, as well as some of the local people who value the road and for whom it has been a part of their day-to-day lives. We have also had access to the previous heritage assessments of the OGNR, with their accounts of social values, as well as a range of published sources, most usefully perhaps Bill Bottomleys' *By Force of Maul and Wedge*, which collated a range of interviews with individuals who have had long and profound associations with the road. However, as with many community consultation projects, we are very aware that our enquiries have only scratched the surface of this issue. This chapter aims to collate and analyse the forms of attachment and values that emerge from talking to people about the OGNR and its landscape.

3.2 Community Consultation

Three different forms of community consultation have been undertaken. Personal contact has been sought with Indigenous organisations and individuals, a stakeholder workshop was held in Gosford on the 26th February 2003 (see Appendix 1 for a record of this meeting), and follow up consultation with stakeholders who could not attend has been undertaken through phone calls or email. Another very useful source of information is that collected from the Visitor's Books and which is analysed in full in Section 7.1.

3.2.1 Indigenous community consultation

Consultation with the Indigenous community representatives has shown that active associations with this country are maintained through visits and through teaching. For example, Dave Pross at Darkinjung Local Aboriginal Land Council (LALC) and Allan Madden at the Metropolitan Local Aboriginal Land Council (MLALC) spoke about their activities in the areas of Yengo and Dharug NPs: Cultural awareness tours are currently conducted by members of the Darkinjung LALC, in country adjacent to and within the DNP. Dave Pross, the current Chair of the Darkinjung LALC, 'shows people, plants and animals so they get the feeling of the place and then moves on to the [rock art] sites'. Members of the Metropolitan Local Aboriginal Land Council base cultural tours of DNP and surrounding country at Camp Wollemi, which is under the management and

ownership of MLALC. In this way students in TAFE Aboriginal programs, school groups and Indigenous community members, especially children, gain experience and knowledge of the country.

Both land councils stressed their links to, and pride, in the rich Indigenous heritage of the area. They also expressed interest in the aims and objectives of this CMP, that is, in the integration of Indigenous and non-Indigenous histories in the framework of the cultural landscape. They requested copies of the draft CMP to consider this concept more fully.

3.2.2 Non-Indigenous stakeholder consultation

Visitor book - themes of value

The visitor book analysis (Section 7.1) raises a number of themes describing some of the ways visitors value the road.

Imperial connections

Travellers from Britain made up a large proportion of the overseas visitors who recorded a comment in the book. These visitors valued the connections they saw between Australian colonial history and Britain; they were fascinated by personal connections, such as finding that one of the historical characters associated with the OGNR came from a visitor's own village. Others valued the road as a testament to British engineering skills, while others marvelled at what they saw as the skill and resourcefulness of the British convicts. These responses demonstrate that the OGNR, named for its 'mother' road in England, is perceived by some as a relic of British Imperial history, a symbol in many ways of the skills and qualities which British people drew upon to build their empire. These responses highlight the importance of understanding the OGNR, and the people associated with it, in a broader, imperial context - that they were part of a trans-national cultural and political network linked, rather than separated, by oceans. It reminds us that Australian colonial history is not simply an aspect of national history and heritage, but part of a global history and heritage of imperialism, migration, and forced migration in the case of the convicts.

Commemoration and convicts

Intense interest in convicts as ancestors, and in genealogies more generally, has been a feature of Anglo-Celtic Australian society since the 1960s (Curthoys 1997: 33). Both the undertaking of genealogical research, and recent trends in historiography, have contributed to the individualisation, and an immense widening in the array of the types of people and identities who feature in popular understandings of Australian history. Individualisation of convicts and their stories has been a feature of Australian literature,

film and television, as well as more academic research, such as Grace Karsken's work on the OGNR and in the Rocks. This is also clearly seen in the Convict Trail Project's 'Adopt-a-Convict' program, which has seen over 500 convict individuals 'adopted' as a research project.

This growth in knowledge about these historical actors leads to a growing empathy, which is expressed in a need to commemorate their lives, their names and identities. Visitor book comments referred to a desire to see the names of individual convicts recorded and commemorated in some sort of memorial associated with the road. This reflects how central the convict story has become to national narratives and how it draws upon other Australian cultural discourses that celebrate the underdog, the oppressed and the anti-authoritarian. The recording of names, a practice long associated with war memorials in Australia, and throughout the western world, has become a symbolic feature of much heritage interpretation in recent decades, and seems to be related to a desire to pay respect to those who may not have been respected in life. Recent examples of this include the Prince of Wales Destitute Children's Asylum Cemetery memorial garden in Sydney, The Cascades Female Factory in Hobart, The Edge of the Trees at the Museum of Sydney, and the Salem Witch Trials Tercentenary Memorial in the USA. (For a discussion of some aspects of these memorials see Clark 1996.)

'Feeling History'

The tangibility and scale of the visible, material remains of the OGNR evoke sensations that were described as "feeling history" by one participant in the stakeholder workshop. The same words were also used by one of the visitors to the road who recorded his thoughts in the Visitor's Book. The location of these remains in a setting remote from the sights and sounds of modern development appears to intensify the experience of the OGNR as 'living history'. The landscape, the spectacular stone remains and stories of convicts are a powerful combination, which inspires deep responses of 'experiencing' the past. Port Arthur is probably the best other example where these three elements of landscape, stone ruins and convicts are said to literally bring forth ghosts from the past.

'Technophiles'

The Visitor's Book also reveals a good deal of interest in the road as an example of the history of technology. Interest in traditional and often now obsolete technologies has been a strong motivational interest driving Australia's heritage movement since the 1960s. This combines with a more general contemporary fascination concerning engineering or building feats accomplished without the aid of contemporary technology.

3.2.3 Stakeholder workshop and discussions – themes of value and attachment

The stakeholder workshop and other discussions showed that while the OGNR is consistently valued for its historic importance, for its technological and engineering achievements, and for the role of convicts in its construction, there were a number of divergences, or contestations, in the way in which its value was expressed and the legitimacy of these expressions.

Historic origins and significance

There was debate, for instance, about the place of the road in local history. A few participants at the meeting felt it had no local history – that there were no communities based right on the road. It was expressed that the OGNR was built irrespective of locality, that the purpose of the Road was for communication between two points - it was like an expressway for its time, it did not necessarily interact or relate to the regions it travelled through. One view was that the only community really associated with the road were the convicts.

These views made distinctions between the road as it was built, why it was built and how it was built, and the later history of the road and its use as a local route.

It was suggested that NPWS' aims of researching community histories and attachments to the road were somewhat misguided and not pertinent to the real importance of the OGNR. It was also suggested that oral histories relating to the road might be dangerously inaccurate and that there was a great need for specificity in what was being recounted.

Memory and family history

Others however felt that the road was a part of local history and important family memories (in particular for Mangrove Mountain and other Central Coast communities). One group member (from Mangrove Mountain) stated that the OGNR was an iconic item of importance to her as she was growing up - to her the most important Australian places were 'Mt Kosciuszko, "Ayers Rock", the Harbour Bridge and the OGNR'.

Some people who lived locally also stressed that using the road, driving on it to places they knew such as Ten Mile Hollow or Dubbo Gully, was the essence of their attachment to the road. They mentioned that elderly family members, who could no longer walk with ease, would love to relive the journeys they had made in their youth along the road.

A direct link with history

In common with themes already mentioned above, stakeholders expressed that the direct experience of the OGNR is crucial to 'feel its history' and that part of this experience included the natural bush, its flora and fauna.

Education for the future

The stakeholder workshop participants placed a great deal of significance on the educational value of the road for teaching future generations about the past.

3.3 Conclusions: Contemporary Social Values Associated with the Old Great North Road

Members of the Darkinung, Dharug and other Indigenous communities maintain interest in and concern for the country in and around DNP and its archaeological sites and spiritually significant places, by visiting them, teaching about them and conducting cultural awareness tours.

Local communities value the OGNR and its landscape for its historical importance, the links it supplies with colonial and convict history and for the access it has given in the past to familiar places. It is valued because of its entwinement with family stories and because of its importance in opening up the local districts of Mangrove, Macdonald Valley and the Central Coast. It is valued because of its educational potential for future generations. It is also valued as a public resource, a public thoroughfare, belonging to the community.

The concept of a road as a public place and thoroughfare is deeply embedded in Australian Anglo-Celtic and also British culture (viz, the importance of public footpaths in rural England). This is perhaps one of the reasons behind the strong feelings that have been expressed regarding locked gates that prevent access to parts of the OGNR. There is a performative aspect to the public's understanding of a road, perceiving it in terms of its function (ie, to travel along) - as a public right of passage and as being in the public rather than the private domain.

Convict descendents and convict history researchers value the OGNR as a tangible link with an important narrative of Australian history and of Australian cultural identity. This group sees the convict narrative as central to national heritage and focuses their values on the convict construction of the road, rather than on its other historical associations.

British visitors and other international visitors value the place for its historical significance, natural beauty, and also as a link with a broader, trans-national history of the British Empire and migration, to which many individuals feel a connection.

The Convict Trail Project is an initiative begun by people living close to the road who value it as a crucial part of the history of their district. This initiative has been nationally recognised as one of the most successful community-based heritage organisations.

The OGNR is valued by many specialist groups such as historians, archaeologists and engineers. Archaeologists value this landscape for its significant Aboriginal and historical archaeological remains and the area has been the subject of a number of landmark studies by archaeologists such as Macdonald, Attenbrow and Karskens.

More broadly, the OGNR and its landscape is valued by communities for its evocative character and for its ability to produce an experience of touching or feeling the past.

4.0 THE NATURAL AND CULTURAL LANDSCAPE

4.1 Introduction

In this Section of the report we move from the historic and community contexts to the landscape itself. We look at the landscape from our various expert points of view: derived from archaeology and the environmental sciences. Our fields of expertise, current NPWS policy and heritage legislation are all reflected in the categories we use to divide up the landscape: in terms of natural, Indigenous and historic cultural significance. These categories help us with our task of breaking down the landscape description and discussing each part of it in an informed and relevant way. However, there are major overlaps between each of the three categories: natural significance encompasses cultural values as well as existence values, while Indigenous heritage and historic heritage cannot always, and perhaps should not, be separated into different categories of evidence.

This project can almost be seen as an inversion of the familiar EIS approach, where a road is to be built and its impact on the natural and cultural landscape is to be assessed. Here our aim is to re-incorporate this road back into the landscape, back into its historical and social context, to counter, to some extent, the tendency to interpret it as a stand alone, historical feature. Is the OGNR entwined in a temporal and spatial landscape? What does the landscape tell us about its environmental processes - the interaction of people and those processes – the changing patterns and flows of human lifeways that come together in this place and along the route of the OGNR?

4.2 Natural Heritage

Natural heritage is a term used to describe the ways in which our society values the environment, and its processes, for our culture, for science, for our life support, or in terms which we understand to be outside the realm of human perception, sometimes called 'existence value' (ANHC 2002: 5).

The Australian Natural Heritage Charter defines natural significance as:

The importance of ecosystems, biodiversity and geodiversity for their existence value or for present or future generations, in terms of their scientific, social, aesthetic and life support value" (ANHC 2002: 9).

In this section we investigate the environment of the OGNR in terms of these values considering biodiversity, geodiversity, evidence for environmental change over time and

landscape and scenic values. In Section 5, rather than assessing natural significance separately, we incorporate it within our general statement of cultural significance, stressing the cultural construction of these values and how they contribute to a perception of a complex cultural/natural landscape.

4.2.1 Biodiversity

Flora

Community level biodiversity

The study area is part of a complex of conservation areas comprising Dharug and Yengo National Parks and Parr State Conservation Area. This area is also continuous with the northeastern extremity of the extensive Greater Blue Mountains World Heritage Area. Its ecosystem and community level biodiversity value is therefore derived from being part of this complex whole.

The area traversed by OGNR is on the northwestern border of Dharug NP and the southeastern edge of Yengo NP. The delineation of vegetation communities for the two parks was undertaken in different surveys (Clark and Benson, 1986; Bell *et al*, 1993) and there is some incompatibility in the community classes identified. At the boundary along which the OGNR runs however, the differences are minor and the same general community types can be recognized.

The basis of both classifications is the combination of the common geological stratum (Hawkesbury Sandstone) with terrain and orientation (exposure). The community dominants in each survey have been selectively merged (on the basis of field observations) in the table below into a species array, which is characteristic of the landscape traversed by the OGNR and its immediate hinterland

Community Descriptor	Determining Environment	Characteristic Dominants		Merged Floristics for OGNR
		Dharug NP	Yengo NP/Parr SCA	
Sheltered Dry Hawkesbury Forest/Open Forest	Hawkesbury sandstone, on east-southwest facing slopes	<i>Angophora costata</i> , <i>Eucalyptus agglomerata</i> , <i>Corymbia eximia</i> , <i>Eucalyptus piperita</i> <i>Syncarpia glomulifera</i>	<i>Angophora costata</i> , <i>Syncarpia glomulifera</i> , <i>Allocasuarina torulosa</i> , <i>Persoonia linearis</i>	<i>Angophora costata</i> , <i>Eucalyptus piperita</i> <i>Corymbia eximia</i> , (+/- <i>Syncarpia glomulifera</i>)
Exposed Hawkesbury Woodland	Hawkesbury sandstone, on ridges or west-northeast facing slopes	<i>Corymbia eximia</i> , <i>Angophora bakeri</i> , <i>Eucalyptus oblonga</i>	<i>Corymbia eximia</i> , <i>Angophora bakeri</i> , <i>Leptospermum trinervium</i> , <i>Monotoca scoparia</i>	<i>Corymbia eximia</i> , <i>Angophora bakeri</i> , <i>Eucalyptus oblonga</i> +/- <i>Eucalyptus punctata</i> <i>Leptospermum trinervium</i>

The vegetation communities of the study area are replicated over a wide area in both national parks and their biodiversity status is not intrinsically high, but they are part of the complex array of communities which make the Greater Blue Mountains Natural Heritage

Area representative of 'significant ongoing ecological processes in the evolution and development of terrestrial, fresh water....ecosystems and communities of plants and animals' (NPWS and Environment Australia, 1998).

Species level biodiversity

The study area occupies ridge tops and upper slopes of a small part of a large continuum of bushland. Ridge top and upper slope areas of Hawkesbury sandstone open forests and woodlands are not as species-rich as, say, the neighbouring sheltered forests and gully flora of the Narrabeen geological strata or the dry rainforests of Mt Yengo. However, the vegetation along and adjoining the road alignment contains a number of unusual species which are either currently vulnerable as a population or restricted in their distribution. The number of species described as 'vulnerable' (and included as protected plants under the NSW Threatened Species Conservation Act 1995) indicates that the species array of the study area contains elements which have disappeared elsewhere in the region and are thus a measure of the completeness of the area's floristics. The following table shows flora species recorded within 1km of the OGNR (from NPWS Wildlife Atlas) which are listed as vulnerable or endangered in the schedules of the Threatened Species Act (TSC) and included in the Rare or Threatened Australian Plant (ROTAP) lists (Briggs and Leigh, 1996). The ROTAP notation combines assessments of distribution, conservation status, and reserved status. The buffer distance of 1km has been chosen to represent the environment immediately adjacent to the road. A map of the distribution of these species is at Figure 4-3.

Family	Species	TSC Schedule Notation	ROTAP Classification
Asteraceae	<i>Olearia cordata</i>	Vulnerable	
Myrtaceae	<i>Melaleuca deanei</i>	Vulnerable	
Poaceae	<i>Ancistrachne maidenii</i>	Vulnerable	
Proteaceae	<i>Persoonia hirsuta</i>	Endangered	3KCi
Tremandraceae	<i>Tetradlea glandulosa</i>	Vulnerable	2VC
Fabaceae	<i>Acacia kulnurensis</i>		2RC
Fabaceae	<i>Acacia matthewii</i>		3RC
Myrtaceae	<i>Eucalyptus prominula</i>		2KC
Rutaceae	<i>Boronia rubiginosa</i>		2RCa

Fauna

The combined habitat of Dharug and Yengo National Parks and Parr SCA supports a large population of animals. 233 fauna species have been recorded within Yengo/Parr, and 204 species in Dharug. In both, amphibia and reptiles are numerous and the Plans of Management for Dharug and Yengo speculate that this is due to the lack of disturbance

and 'the extensive topographically diverse areas of weathered sandstone' which provide microhabitats and niches for the smaller vertebrates. The areas along the OGNR are typical of this description and would be expected to be rich in small vertebrates, including mammals.

Thirty eight fauna species are listed as threatened in the TSC Act, 1995. Of these the following eight species could be expected to occur in the OGNR study area on the basis of habitat affinities:

Species Name	Legal Status	Habitat
Red-crowned Toadlet <i>Pseudophryne australis</i>	Vulnerable	Sandstone areas – grass and debris, logs and rocks.
Broad-headed Snake <i>Hoplocephalus bungaroides</i>	Endangered	Sandstone plateaux. Wind-blown sandstone caves or beneath boulders and slabs.
Heath Monitor <i>Varanus rosenbergi</i>	Vulnerable	Sandstone plateaux. Dry open forests. Burrows, hollow logs, rock crevices and outcrops.
Koala <i>Phascolarctus cinereus</i>	Vulnerable	<i>Eucalyptus punctata</i> trees
Glossy Black-cockatoo <i>Calyptorhynchus lathami</i>	Vulnerable	Prefers <i>Allocasuarina</i> species in woodlands
Brush-tailed Phascogale <i>Phascogale tapoatafa</i>	Vulnerable	Sandstone open forest with sparse understorey.
Squirrel Glider <i>Petaurus norfolcensis</i>	Vulnerable	Dry sclerophyll forest and woodland
Common Bent-wing Bat <i>Miniopterus schreibersii</i>	Vulnerable	Caves, culverts and stormwater drains in forested areas.

The National Parks and Wildlife Atlas includes recordings of only two of these species within 2km of the OGNR. These are the Red-crowned Toadlet (*Pseudophryne australis*) and the Glossy Black-cockatoo (*Calyptorhynchus lathami*). A map of the distribution of these recordings is at Figure 4-4.

Geodiversity

The geological diversity of the study area is limited by being virtually restricted to the one geological stratum – Hawkesbury Sandstone. The exception occurs at the northern end of the study area at 10 Mile Hollow, where there is a volcanic breccia diatreme.

The Hawkesbury Sandstone along the road is predominantly ridgetop formations exhibiting extensive and differential weathering. The POM for Dharug NP notes that these

range through 'honeycomb weathering, gnammas¹, cavernous joint weathering, overhanging sandstone visors, and undercut bluffs'. There are also occurrences of liesegang rings². Good examples of all of these occur in the vicinity of the OGNR.

The volcanic diatreme is mainly indicated by a sudden change in soil fertility (increase) and soil structure (and thus a change in floristic structure), rather than a geological exposure.

Conclusion

The OGNR and its setting is not an ecological entity and it is difficult to define biodiversity values which might apply to it, as distinct from that of adjoining lands. Certainly, the flora biodiversity of the study area is a small part of an extensive whole, however the high representation of threatened and vulnerable species in close proximity to the road indicates that the study area maintains a comparable floral biodiversity value with the Dharug/Yengo complex, despite the disturbance of the road and visitation.

The fauna biodiversity appears to be lower than surrounding areas, probably due to the habitat discontinuity and visitation. The sandstone formations however could be expected to provide good habitat for small vertebrates.

The geodiversity, though constrained to one stratum type, is relatively high due to the range of weathering phenomena on display.

4.2.2 Vistas and views

The main way that the road is experienced is through travelling along it. This provides two distinct visual experiences:

- the views from the road of the surrounding landscape, and
- views along the road and of the scenic interaction of the road and the landscape through which it passes.

Views from the Road

Although the road traverses mainly ridgelines, the views from it are generally severely restricted due to:

- parallel and tangential ridgelines of similar elevation and

¹ Small sandstone depressions which usually hold water.

² The glossary of geology defines liesegang rings as: "Secondary, nested rings or bands caused by rhythmic precipitation within fluid saturated rock". The liesegang rings tend to be red from iron oxide and hydroxides.

- closely bordering forest vegetation.

The viewsheds from the road (ie, what can be seen when looking out from various sections of the road) have been delineated using a digital elevation model. Twenty-two individual viewsheds have been identified. These are shown on Figure 4-9.

In all but two, the viewshed is wholly contained within Dharug or Yengo National Park. In a couple of cases where gullies run at near right angles to the ridge along which the road runs (Viewsheds #4, 6, 7 & 10), views can be had to more distant landscapes, but still within the unbroken bushland of either Yengo or Dharug. This is an advantage for management of the scenic resource as the visual catchment is predominantly under the control of NPWS.

Viewshed #1 is the view south and southeast from the incline of Devines Hill (seen from Finch's Line). This view is spectacular, covering the three reaches of the Hawkesbury River, Wisemans Ferry and Parr SCA. The vistas are unrestricted and extend to the horizon. Viewshed #3 is largely contained within Yengo NP but extends to a distant view of a hill on the opposite bank of the Macdonald River.

Views along the Road

The visual experience of being on the road is well described in the NPWS OGNR Conservation Management Plan, 1999. The experience is also discussed in this report in its historical perspective, specifically the road's representational role in the dominion of man over nature. Contemporary perceptions (the painters Martens in the 1830s, and Willis in 1882) emphasise the epic nature of the construction and setting. The compatibility of the construction in design and materials is also apparent in the early illustrations. In the watercolours of Willis in particular, the merging of bush and roadworks (especially considering it was then a relatively recent construction) is noteworthy.

The road is usually on the ridgeline, or just below it. The common visual experience at close quarters is the bushland slope falling away from the road on the downhill side. Because the road embankment is constructed of sandstone blocks, often with fingers of paved drains (also in sandstone) running into the bush, a strong merging of the construction and the landscape is apparent. This immediate downslope area, however, is

the most vulnerable area for degradation from vegetation change (including weed invasion), sedimentation and scouring.

Conclusion

Views from the road are mainly within areas managed by the NPWS and are currently of good quality. Scenery along the road is vulnerable to disturbance and requires a set of safeguarding management principles.

4.2.3 Landscape change

Flora

The species richness of the vegetation of Dharug NP plus the extensive list of rare and vulnerable species indicates that the current floristics are likely to be a largely authentic representation of what was there 200 years ago.

Significant community and species loss over an historical time period is not apparent. The writings of Baron Charles von Hugel and Major Thomas Mitchell include descriptions of the environment along the road in 1834 and the 1850s respectively (Hugel 1833-34 (n.d); Mitchell 1792-1855 (1996). Von Hugel was much taken with the profusion of Gynea Lilies (*Doryanthes* sp.) along the rock cuttings and on the Devine's Hill section mentioned *Boronia ledifolia*, *Epacris pulchella*, *Acacia* spp. and *Telopea speciosissima* (Hugel, 1833-1834). The same species, in similar profusion, can be observed along the road today. Mitchell describes the area more generally, noting the 'dreary labyrinth' of the bushland and that the sandstone rock 'is only partially covered with vegetation' (Mitchell 1996). A woodland/open forest community covers these ridge top areas today.

However, there have been physical changes in the vegetation. The REF for work to culverts and pavements from Devine's Hill to the Western Commission Track (Andrews Neil 2002) notes that in some sections of the road 'regeneration of the native vegetation appears to be slow where camps had been established or off-road driving had occurred prior to the road's most recent closure. In these areas some weeds are evident such as Kikuyu Grass (*Pennisetum clandestinum*) and Flatweed (*Hypochaeris radicata*)'. The main weed species in Dharug and Yengo NPs described in the Central Coast Hunter Range Region Pest Management Strategy (NPWS 2001), of blackberry and crofton weed, are not a problem in the study area.

A common cause of vegetation change is fire frequency. Fire incidence and extent of burnt area over the last 30 years have been recorded by NPWS. From this data, fire-

prone areas can be identified (ie, areas which have been burnt by a wildfire more than four times in the period). In these areas a degree of change to floristics and even community structure can be expected in the short term – but such change can also be corrected through the implementation of an appropriate fire management plan. The Draft Fire Management Plan for the Yengo/Dharug/Parr complex (Conacher Travers, 2000) uses differential fire sensitivity of flora species in determining fuel reduction regimes and, if implemented, could reduce vegetation change caused by fire.

Fauna

There is little mention of fauna along the road in historic sources and it is therefore difficult to say how much, if at all, the fauna populations have changed since European settlement. Certainly, the current recordings of foxes, goats, wild dogs, feral cats, and even cattle in both Dharug and Yengo NPs and Parr SCA indicate strong vectors of change – and, with the presence of foxes and cats in particular, a consequent diminution of populations of small vertebrates due to predation pressure.

Another inferential indicator is provided in the REF (Andrews Neil 2002). Ten animal species listed in the TSC Act, 1995, which might be found in the area of the road on the basis of their habitat preferences are identified in the report. A similar exercise was undertaken in the current study, with slightly different results (8 species identified – 6 in common with the list in the REF). Actual sightings within 1km of the road (taken from NPWS Wildlife Atlas GIS data) however account for only 20-25% of these species. Even allowing for the limitations of these observations (differing time of day, seasons, etc.) they indicate a species richness below expectations (and probably below historic levels).

Geology and geomorphology

The gradual weathering of cut sandstone surfaces, as well as natural rock formations, is a continuing process. In some cases, natural drainage across or through rock fissures has increased ambient weathering pressure on rock carvings. These issues will be examined in Section 6.0. Soil erosion is also active in some limited areas where vehicular access has been made off the formation of the OGNR. On many embankments, retaining walls, and on the road surface itself, colonization by native vegetation species can threaten the stability of structures. There are numerous locations along the road where the roots and basal bowls of tree species which are well adapted to establishing and thriving in rock fissures (in particular *Angophora costata*) have distorted and even impacted on the stability of cuttings in the natural rock. Pioneer species such as acacias and some *Proteaceae* have become established on the road surface, exploiting small niches where

soil has collected and in eroded/collapsed areas. The effect of this plant growth will be the progressive degradation of the road surface and formation.

Apart from the specific issues outlined above, the geomorphology of the study area is stable and ongoing natural geomorphological processes are unlikely to result in significant landscape change.

4.3 Pre- and Post-contact Indigenous Heritage

4.3.1 Pre-colonial relationships between people and land

Archaeological and ethnographic records and oral history (eg Foley 2001) provide different ways of developing a picture of people's lives in what is now known as the Sydney Basin region prior to and during the early colonial period. They also, in different ways, document cultural changes through time. These substantial bodies of information and studies have been well reviewed in Val Attenbrow's recent comprehensive study *Sydney's Aboriginal Past* (2002). For this project, specific details of the pre-colonial relationships of Indigenous people to each other and to the land of the Hawkesbury region, have been derived from these broader ranging Sydney Basin studies where possible. These are necessarily summary reviews of the secondary material. They will benefit from revision and refinement from the greater and more specific detail which is available to people living and working in, or otherwise directly connected to, the area. The Aboriginal places and features registered on the NSW NPWS data base have been summarised for Dharug National Park as a whole and for the area 2km either side of the road. The following section provides an overview of the rich known archaeological resources of the local area.

Known Indigenous archaeological sites in the area of Dharug and Yengo National Parks

A search of the NPWS Aboriginal Heritage Information Management System (AHIMS) has shown that 213 Aboriginal objects and Aboriginal places are recorded in or near the Great North Road, Dharug National Park, as at 24 March 2003. (The distance these sites are from the road has not yet been specified by NPWS). As this raw data was not able to be sorted so as to be specific to the Dharug National Park or to the OGNR, the data from the Northern Central District GIS has been used for the following summary, even though it was reported by the Site Registrar to be less up to date than that from the Head Office AHIMS.

Figures 4-16 and 4-17 show those Indigenous places that are located within the Dharug National Park boundaries and those that are within a two kilometre zone to either side of the OGNR. Two kilometres is further than you can see, looking out from the road. The distance is made greater in terms of travel times by the difficulty of crossing the sandstone country. Thus this distance encompasses all the archaeological places within the vicinity of the OGNR. There are 186 known Aboriginal sites within Dharug National Park, of which 15 are within 2km of the OGNR. A breakdown of these sites according to the site types shows that axe grinding grooves and shelters with art are the most frequently recorded site type in the DNP, with rock engravings also common. Rarer site types are shelters with deposit,

stone arrangements and shelters with midden. Open sites have not been recorded in the DNP.

Registered Aboriginal sites recorded within Dharug National Park

Shelter with deposit	9	4.8
Shelter with art	66	35.5
Rock engraving	36	19.4
Axe grinding groove	68	36.6
Stone arrangement	6	3.2
Shelter with midden	1	0.5
Total	186	100%

Of the 42 known Aboriginal sites recorded within 2km of the OGNR, only 15 are located within the boundaries of Dharug National Park.

Registered Aboriginal sites within 2km of the OGNR

Shelter with deposit	4	9.5
Shelter with art	23	54.7
Rock engraving	5	11.9
Axe grinding groove	5	11.9
Stone arrangement	2	4.8
Scarred tree	1	2.4
Waterhole/ well	1	2.4
Open camp site/ stone artefact scatter	1	2.4
Total	42	100%

The distribution in the park (see Figure 4-16) illustrates one of the unintended properties of roads: once constructed through the country, they provide greater ease of access to land to either side of them (as well as the end destination). Thus a cluster of sites has been recorded along the Western Commission track and near the OGNR due to the relative ease of access to those areas.

The range of sites in the DNP is representative of that in the dissected Sydney sandstone and river sides. It is dominated by art sites and axe grinding grooves, with relatively few

occupation sites (shelters with deposit) and no open sites. The archaeological signature which people's lives have created in the Sydney Basin presents a record which emphasises the social and spiritual elements of people's lives to a far greater extent than is the common pattern in much of NSW. This is because the engraving sites and shelter art sites are numerous and well preserved, whereas '[r]ecognition of artefact scatters in the Sydney Basin is notoriously problematic' (Vinnicombe 1984: 110) and shell middens on the river's sides are poorly preserved. The pattern of sites is thus the reverse of the more common archaeological record which is dominated by open artefact scatters and shell middens. Instead, the major evidence for 'domestic life' comes from the excavation of rock shelter sites which contain deposits with stone artefacts, charcoal, bone and/or shell.

The number of registered Indigenous places in DNP is a minimum number only. In addition to the strong likelihood of unrecorded sites being present, given the difficulty of access and the large area of the National Park, Attenbrow has demonstrated that a high percentage of shelters with no surface indications of occupation do contain stone artefacts below the surface. This means that the numbers of occupation sites on the site register will be an underestimate.

The registered archaeological places in the area are the result of a long history of recording by various individuals, including McCarthy in the 1950s, Vinnicombe in the 1970s, Bluff in the 1980s and 90s, and others. The results of their work have not been the subject of overall synthesis or coordination, and the form of recording varies. Such a synthesis is beyond the scope of this project. However, an overview of the known archaeology of the area, based on the outcomes of archaeological research programs carried out in some sections of the park, or adjacent to it, by Jo McDonald, Pat Vinnicombe and Val Attenbrow, provides a contextualisation of the archaeological places in DNP, both recorded and unrecorded.

4.3.2 Previous archaeological research results

Pat Vinnicombe recorded a number of sites in 1978 and 1979 as part of a report to NPWS on the archaeology of the Gosford-Wyong region (Vinnicombe 1980, 1984). Her surveys were directed at establishing a systematically collected data set which could be compared with that collected more haphazardly and serve as the basis for significance assessment and predictions of where sites were most likely to occur. She surveyed four environmentally contrasting 10km² areas: in the Spencer area, the junction of Mangrove Creek with the Hawkesbury River and in Upper Mangrove Creek, as well as on the coast at Bouddi Peninsula, outside DNP. She demonstrated that site densities are roughly twice

as high in the coastal inlet areas compared to the inland areas. This was in part attributed to the difficulty of identifying open sites in inland areas, as ground visibility is low and undifferentiated quartz artefacts are difficult to identify.

Comparison of the locational attributes of 596 shelter sites in the region demonstrated that elevation above the creek line was an important variable: sites with occupation debris tended to be lower, closer to the valley floor than sites with art which were at higher elevations. There was a strong preference for northwesterly facing shelters in the Upper Mangrove Creek, which could suggest that they were used for shelter from cold more than for shade. Size was not a reliable predictor for occupation of a shelter. Both small and large shelters were used for occupation and for art. Vinnicombe also made the point that archaeological features in the area tend to cluster: where one site is found, others, relating to both subsistence and to social organisation, may be expected to occur (1984).

The archaeology of the Mangrove Creek valley, particularly in its upper reaches, has been extensively studied by Attenbrow (1981, 1987). She carried out a stratified random sampling survey, which was later extended by McDonald (1988). A focus on the rock art of the area by a number of archaeologists (see McDonald 1994: 253) has resulted in the recording of more than 80 shelter art sites in the area. 'This represents one of the most systematically collected and comprehensively recorded samples of shelter art sites in the region' (McDonald 1994: 253). Attenbrow also excavated 31 sites, not all of which contained art assemblages. On the basis of her results, she defined patterns of site usage, and changes in these, over the last 3000 years, demonstrating the long-term dynamism in people's ways of life in the area.

The results of Attenbrow's work in the Upper Mangrove catchment, along with those of McDonald's excavation at Yengo I (1994b), and more broadly from excavations in southeastern Australia, have contributed to an overall regional sequence of change through time in people's stone-working technologies. In summary:

There was an initial occupation phase from c 11,200 to c 5,000 years ago (Attenbrow's 1987 dates) termed Capertian, or pre-Bondian. This is characterised as a time of low intensity occupation, with a variety of stone artefact raw materials used to produce non-specialised types of artefacts.

There is a marked change at about 5,000 years ago which continued to c 2,800 years ago (referred to as the early Bondian phase). There is a progressive increase in the intensity of

occupation during this period – most excavated shelters were initially occupied within this time bracket. There is also a major technological change, with the introduction of new technological elements. These are volcanic rock ground stone axes, and presumably the associated grinding grooves in flat sandstone pavements used in their production, as well as so-called 'Bondi points'. These are thin flakes or blades with small secondary flakes removed from one edge and a point at one end.

This intense phase of occupation continues through to c 1,600 years ago (referred to as the middle Bondian phase). At about this time there is a trend for Bondi points to be replaced by a bipolar technique of working mainly quartz, and there are reduced rates of shelter use. McDonald (1994, 1998) suggests that there was a trend to living in the open rather than in shelters. On the coast, shell fish hooks and bone points start to be produced during this late Bondian phase, which continues through until colonial contact and the rapid changes of that period.

The findings of two of the excavations carried out in contrasting environments adjacent to the DNP will be looked at in more detail. Shelters with deposit which can be excavated are much rarer in the area than shelters with art but no deposit. There are only about five recorded shelters with deposit in DNP (see Attenbrow 1987 for descriptions of others nearby). They provide windows into the diversity of components which played a part in pre-colonial life in the area. One is a rock shelter near the middle reaches of the Macdonald River, to the northwest of DNP, the other on the high ridge near Mt Yengo, to the north of the park.

MR/1 (NPWS Site ID 45-2-005)

MR/1 (NPWS Site ID 45-2-005) is a large rock shelter within 50m of the Macdonald River, about 70m above the valley floor, excavated by David Moore (1981). It is an example of an occupied shelter with no out-of-the-ordinary features for the area, which displays a rich set of interactions between the local micro-environments and the wider region. The basal date from this deposit indicates that the first occupation of the shelter was about 3500 years ago. The period of most intensive living in the shelter was about 2300 – 1800 years ago. No top, or most recent surface, date is given for the site. Shell and bone were preserved in the top half of the excavated sequence. This consisted mostly of the estuarine mussel (*Trichoma hirsuita*), which was probably locally available as the river is salt up to St Albans, with occasional rock oysters (*Saccostrea commercialis*), which are abundant in estuarine waters. The bone comes from wallabies, a large bird and large fish. Thus the full

range of the local micro-environments – river, valley and ridge top – were exploited and brought back to the shelter for consumption.

The deposits contained flakes from diorite ground-edge axes, indicating the use and re-sharpening of these in the shelter. This raw material is thought to come from the New England area. Stone working was carried out in the shelter, as 327 cores and 4394debitage flakes are present in the excavated deposits, together with about 100 retouched artefacts such as Bondi points, which were found in all but the lowest level excavated. In addition to locally available quartz, the raw materials used to make these are considered to have come from external contacts to the north and the south coast (see below). There is faded red pigment art in the shelter and further art sites in the vicinity. A large boulder about 7km upstream has a number of pigment images (Moore 1981: 414). On top of the scarp above the shelter is a stone arrangement: a low oval-shaped wall, 30m long and 7m wide (Moore1981: 414).

Yengo 1 (NPWS 37-5-1)

This shelter was excavated by Jo McDonald in 1988 (see McDonald 1994b).

It is an exceptional site, containing a long sequence of occupation deposit and two different styles of art practice. These are a rare form consisting of mainly circular pecked engravings. These are considered to be older than the densely accumulated pigment stencilled objects and hands. The site's uncommon character may in part relate to its location: it is 4km from Mt Yengo, the highest peak in the area, known to be an important, central place (eg, Edwards 1996: 89), and on the major route between the Hawkesbury area and the Hunter.

The shelter is east facing, 20m above an upper tributary of the Macdonald River. Seven more shelters with art are known in the vicinity, four within 20m of each other, and it is highly likely that there are more (McDonald 1994: 4-5). The earliest occupation of the shelter was at about 6000 years ago. People were using the shelter in a sporadic way at low intensity at this time. There are only a few stone artefacts, the majority of which are not secondarily modified and are made of materials other than quartz. The upper deposits show intensifying use of the site from around 2000 years ago, peaking at about 1500 years ago and continuing until about 550 years ago. This intensification is seen in the increased numbers of stone artefacts deposited. Quartz use increases and there are also increasing numbers of backed blades and ground edge implements deposited. There are numerous grinding grooves in the shelter, presumably used to shape the axes. Eight stencils of axes which may have been made in them are amongst the numerous stencils of

hands, and some clubs and boomerangs on the walls of the shelter. The pigment art is considered to have been made during the period of most intensive site usage. The 36 pecked engravings are older than 2800 years, and predate this phase.

Conditions for the preservation of bone were good in the site. Large kangaroos, various species of wallaby and smaller mammals such as bandicoots, possums, potaroos and bettongs were present, plus several varieties of snake and lizard, four types of bird and a small amount of fish. There is a change in focus from a combination of larger and medium sized animals in the lower deposits to a later preference for small animals – mammals and reptiles – in the upper layers. This has been associated with the changes in stone artefact production technology in the site and in the broader region (see above). There are areas of battering and rubbing in the back of the shelter which may have been the result of seed preparation or use as an anvil for stone knapping.

The diversity and density of material in the shelter, in both the art and the excavated deposit, have led to the interpretation of the site as a base camp, 'a focus in the landscape for the people living in the northern reaches of Darkinjung territory during the last two millennia BP' (McDonald 1994: 114). Here food was prepared in the hearths across the site; flaked and ground stone artefacts were made, used and repaired and wooden artefacts were shaped with these. Stencils which attest to the presence of particular individuals were made in large numbers by people of all age groups. The intensification of use of the site may have been associated with a shift in the degree of ritual restriction associated with the site, with it becoming a place for more public reinforcement of the ties within the group and less a place of restricted access. The cessation of use of the shelter after 550 years may be part of the proposed region-wide trend for people to use open habitation locations in preference to shelters.

Rock art

Many people have contributed to the recording and understanding of the complexities of the extensive corpus of rock art of the Sydney Basin, either working individually or as part of research programs. As a result, over 4000 rock art sites have been recorded in the Sydney Basin (an area which follows the distribution of the Hawkesbury sandstone, from roughly Wollongong to Newcastle). Archaeologically, they have been studied in terms of context, spatial distribution, content and changes through time to develop a fine-grained picture of the systems of social interaction in the region:

The rock art in the Sydney region functioned as a prehistoric superhighway. Through stylistic behaviour, groups around the region, who were not in constant verbal contact with each other, were able to communicate important social messages and demonstrate both broad-scale group cohesion and within-group distinctiveness (McDonald 1994: 352).

These images have been made in two ways, either by engraving on rock surfaces, or by using pigments: both wet pigment painting and dry pigment drawing or stencilling with pigments in rock shelters are common methods. The pigments used are various red and white ochres and black charcoal, with yellow ochres used rarely, or altered with time to red (McDonald 1992). Most engravings are on horizontal sandstone platforms, often in places with a wide view, and are thought to be associated with major route ways (Moore 1981; McDonald 2000: 61). Some engravings, on Port Jackson and the Hawkesbury River, are on vertical rock faces, and some have been made in shelters.

Stylistic analyses have demonstrated that the two techniques of production – engraving and pigment art – are linked and are both part of a distinct regional style (McDonald 1998). The images are classified as Simple Figurative in style, consisting of:

- a simplified silhouette of a human or animal model. Most portrayals are strongly standardised. Human beings are depicted frontally, animals and birds in profile, snakes and lizards from above. Normally only the minimal visual requirements for recognition of the motif are fulfilled by the shape of the figure (Maynard 1976 cited by McDonald 2000: 56).

Eighty percent of the motifs are of identifiable animals or humans, twenty percent are non-figurative patterns or forms. The subject matter and general form of the pigment art and the engraved art are similar. Engravings tend to be on a larger scale and to have less infill and detail than the pigment art, although some intricate engravings do exist.

Overall, human tracks are the most numerous forms depicted in engravings, followed by fish, kangaroos and men. Present in lower numbers are representations of land animals and of items of material culture such as shields, axes and boomerangs.

Hand stencils are the most commonly occurring motifs in the total body of Sydney Basin pigment art, with anthropomorphs, kangaroos, other land animals, fish, birds and weapons each contributing between 5 - 10 percent of all the motifs recorded in the region. There are regional differences in the art forms. For example, there is more emphasis on depicting marine animals closer to the coast, to the south of the Georges River there are no anthropomorphs (human-like figures), culture heroes, emus or contact images, while in the

north of the region, there are no anthropomorphs with a bird beak projection on the side of the head (Morwood 2002: 44).

Hand stencils have a particular quality of immediacy and personalisation. The individual person's presence in the shelter is marked by their hand. Assemblages of hand stencils and hand prints are found in the rock shelters of the region. These range from single prints to large numbers of different sizes, from large (> 19cm), medium (15-18cm in length) to small (<14cm), which indicate the presence of men, women, children and babies in the shelter. There are both right and left hands, and rarely, the hand images have been modified, eg thumb missing, a fist, or fingers bent, which may be part of a hand sign communication system (McDonald 1994b: 111-113). Items of material culture are also stencilled: digging sticks and string bags, axes, clubs and boomerangs. The area to the north of the Hawkesbury River is marked by the dominance of stencil art in 'a highly developed art form' in most of the shelter art assemblages to a greater degree than elsewhere in the Sydney Basin (McDonald 1994b: 110-112). Two sites in Darkinjung territory – Swinton's shelter (in the Mangrove Creek area) and Yengo 1 (37-5-1, near Mt Yengo, see above) – are the most intensively painted shelters in the Sydney region, in terms of numbers of motifs. Swinton's shelter contains 857 motifs (67% stencils), Yengo 1 has 504, of which 83% are stencils (McDonald 1994b: 112-3). 'The Darginung territory contains some of the most outstanding rock art in the whole central coast region' (Moore 1981: 423).

At least some of the shelter pigment art is associated with contemporaneous occupation of the shelter by mixed social groups. Thus this art was not 'closed' but open or 'domestic'. It was seen, and made, by women, men and children (McDonald 2000).

Engraving sites are considered to have fulfilled a different social role, being more restricted in access and associated with ceremonies that were closed to only certain members of the social group. It is suggested that these ceremonies involved interaction between neighbouring groups (McDonald 1998, 2000; Moore 1981: 423).

For Darkinjung territory, there is archaeological evidence of cultural contacts with groups further north. Excavations in a rock shelter on the Macdonald River (MR/1, [Moore 1981]) and at Yengo 1 produced stone artefact raw materials – indurated mudstone, silcrete and a porcellenite artefact – which are sourced only in the Hunter Valley region. Broadly, however, the stone artefact technology, dominated by quartz working, excavated at Yengo

1 is more similar to that of the Sydney region than the Hunter (McDonald 1994b:119). At MR/1 there are also cherts considered to be from the south coast (Wagonga).

Moore (1981: 423) concludes 'The Darginung appear to have been the middlemen in a far-reaching network of distribution of lithic raw materials and it may be assumed that they were also distributors of other more perishable goods'.

Elements of the art style found in the Hunter region are also recorded in the area north of the Hawkesbury, and in Swinton's shelter on Mangrove Creek, ie, Darkinjung territory. These are white painted radiating lines and 'tally marks'. There is 'evidence for a clinal sharing of stylistic characteristics from the two adjoining groups, with a strong Wanaruan influence extending down the Macdonald River and surrounding ridgelines to the east and west' (McDonald 1994b: 118).

Precursors to the OGNR: The Boree Track

The ridgelines from the Macdonald Valley to the Hunter were in use as a route through the inland prior to the surveying and construction of the OGNR. There is speculation about the origins and status of these early tracks. The rock art recorder Sim (1966:10) states that it is a 'historic' track known as 'the Boree Track or Blaxland's Road' and that it 'was opened by JM Blaxland in the 1820s for access to Wollombi Valley. It served until the 1940s as a route between the Macdonald Valley and those valleys to the north' in the Hunter. The track runs from a tributary of the Macdonald River, Mogo Creek, then follows high ridges, where vegetation is light sclerophyll and movement comparatively easy (Moore 1981: 402-3, Fig 1; Sim 1966: 10).

Sim (1966:10) suggests that this historically known track was 'a main line of travel' for Aboriginal people, both prior to colonial times and during the nineteenth century:

The geographical location of the ridge and the evidence of a number of groups of engravings along it indicate that it was probably a main line of travel for the natives. Its use by the natives in recent times is attested to by accounts handed down from early settlers. Mr A B Bailey of St Albans relates his mother's accounts of the custom of the local natives, a small group of men, women and children (c1880), of bivouacking in Mogo Creek, camping in fire-warmed holes dug in the sand flats and travelling in single file up the Bulga hill and along the track to Boree. Mr C Sternbeck of Upper Macdonald relates how his grandfather, one of the first tenants of the fertile Boree Valley, was taken there via the track by a Macdonald River native.

Tony Horwood, NSW NPWS, says that the Boree Valley had permanent water available and was associated with ceremonials, and that the Boree Track was part of an important access route from the Hawkesbury to the Hunter area (pers comm 2003). The archaeologist David Moore (1981) expands on Sim's discussion, reasserting that there are engravings in the vicinity of the track. He adds that there is only one water soak along the track plus some more ephemeral rock pools, and no known habitation sites located along it. One branch of the track leads to Mt Yengo, a sacred place, and beyond to Howes Valley and Milbrodale, and another leads into the Wollombi valley (Moore 1981:401-3). Moore doubts that Aboriginal people would have exposed a ceremonially significant route to visitation by leading European people along it. However, it is unclear whether or not the route itself was ceremonially important, or only more limited areas that it passed, and if so, if it were ceremonially restricted permanently, or only at certain times.

This cluster of associations is also stated in Lesley and Alan Wickham's discussion of their understandings of the OGNR (in Bottomley 1996:77-87). They have been told by local Indigenous educator Coral Edwards that the road that became the OGNR was 'a regularly used route by tribal people' and was 'shown to the early white explorers by Aboriginal people' (1996:77). 'Macdonald, for instance, who was the developer of what's now known as Simpson's Track – he was accompanied by Aboriginal guides to find his way through' (1996:80). They speculate, based on their own experiences of the road, that Aboriginal guides would have 'skirted sacred sites' (1996:84).

Archaeologist Jo McDonald (1994: 43) considers that '[d]ue to the rugged sandstone landscape, movement around the region would have been mostly by way of ridgelines. It makes sense that major access routes would have occurred in "zones of intermediacy", on the periphery of a clan's estate'. The river system of the area also provided important routes of movement through the landscape for Aboriginal people in bark canoes.

Current NPWS interpretations are appropriately cautious in their summary of these accumulated suggestions about routes:

the original line of the OGNR was probably an Aboriginal travelling route. There is some suggestion that the Aboriginal people purposefully diverted the European road surveyors away from their sacred sites (Visitor Guide NSW NPWS 1999 'The Old Great North Road').

While the final route of the OGNR does not directly follow the Boree Track, instead going further east, following the Mogo Creek valley and passing Mt Manning (Moore 1981: 403),

it is significant for the purposes of this study that this general line of travel following major ridgelines was known and used by Indigenous people in pre-colonial and colonial times, as well as by convicts escaping from Newcastle (Gale and Haworth 2002) and by explorers, surveyors and settler traffic as it afforded the best line of travel through the country.

In thinking about routes of travel, it is important not to confuse two interpretations of 'a track'. The first is a physical thing; the second is a 'way' – a known direction or line of movement. The former kind of track focuses movement, alters the landscape and gives direction by its physical existence, even if the traveller has never travelled it before. A 'way' consists of knowledge and experience of the best line of travel, and is located more in people's heads than as a presence on the ground. Thus it does not necessarily condense all travellers into one narrow corridor, except, for example, where there is only one way past an obstacle. It is not clear from the accounts of the Boree Track which understanding of 'track' is the most appropriate to use: either or both may have operated at different points along the route. Either way, any colonist attempting to access a route through the dissected sandstone country would have been greatly aided by local Indigenous people whose knowledge of the country would have been of inestimable assistance.

Coral Edwards (1996: 88-91), an Aboriginal cultural educator has clearly pin-pointed differences in the forms and concepts relating to tracks and travel for Aboriginal people. She says,

The sort of road that the colonists needed required all that engineering and building, whereas our roads were simply footpaths and didn't need any complicated engineering and building because we didn't need a road that could take horses and drays and carriages. [W]e would use tracks ... to get to a place, and it wasn't so much the importance of the road itself, but the importance of the learning that was done as you went along the road (1996: 89). You might be walking down a track for a very long time, and along the way there'll be certain stones, rock formations, hills, creeks, the way the path goes around a tree – everything will have a story and a relationship in spiritual ways – how it's connected to you, and the hill, and the rock and all that sort of thing. And they'll be stories that go back a long way – like Dreaming stories if you like – that have connection to the whole of the country, in a way. So in one way the songlines are a directional thing for people. They mark out space and time. You know how far you've yet to go by how many stories there are yet to come. Each landmark that you pass would have a story about it that is told time after time as you went along ... the stories go on for maybe days, and then when you come to the end of those stories for that part you know you have to make a turn to the left or right (1996: 91).

For the purposes of this project, this discussion has particular relevance. Whether along a physical track or a known line of travel, there was evidently regular contact – physical movement and meetings and/or exchange – between the people of the Hawkesbury territory and those to the north in the Hunter region, as well as to the south coast. It is just such a contact or connection which the OGNR was specifically constructed to facilitate within the requirements of the early colonial world. Even if the OGNR does not exactly follow a specific Aboriginal route from Sydney to the Hunter, the flow of people and goods along this general inland route has a 1600-year precursor. As Coral Edwards says 'there are other footsteps that went before' (1996).

Contact rock art

Indigenous people of the Sydney region continued to create both engravings and pigment art into the colonial period. As they observed the new objects, animals and ways of life that were introduced, Aboriginal people depicted these in the same styles and forms that they had used previously. Presumably, this was one way of understanding these new elements, and telling others about novelties encountered. It allowed creative incorporation of these phenomena into their own world and understanding of it.

In the Sydney region, images of sailing ships are known from rock shelters in Port Jackson, Berowra Creek and Ku-ring-gai Chase National Park, and engraved ships at Maroota and Cattai National Park. Other images from the contact period are the three large animals with horns which are taken to be bulls in Minto, a woman in a long skirt also at Cattai National Park and a stencil of a clay pipe at Ku-ring-gai Chase (Attenbrow 2002: 150, citing McDonald 1986a; Stanbury & Clegg 1990; McDonald 1987).

Near DNP, west of St Albans on a sandstone platform above a creek, is a 60cm engraving of a single-masted ship, with jib, mainsail, boom and stays depicted with irregular grooves and punctures. There is another engraved sloop near Mt White, on the east side of Mangrove Creek (Sim 1966: 28-9, plan 9c). Within DNP, there is a fine example of a drawing of a sailing ship (discussed in Section 2.4.2 above).

It is likely that traditional images also continued to be painted and engraved in the late colonial period, particularly in the more remote regions north of the Hawkesbury. Mathews wrote:

Among the Darkinung tribe of Aborigines, who occupied the country from the Hunter River to the Hawkesbury, I had the good fortune to meet a few natives who told me that when

they were boys they had seen both painting and carving on rocks done by their countrymen, between the years 1843 and 1855, and it is probable that the practice was continued for some years later (1897a: 468).

Conclusion

The known Indigenous places within DNP are part of the rich body of cultural material of the Sydney Basin sandstone. There are 186 known Aboriginal sites within Dharug National Park, of which 15 are within 2km of the OGNR. These known sites have been recorded by a variety of workers over an extended period, and the consistency and reliability of the recorded details is likely to be uneven and the number of registered places is highly likely to be an underestimate.

Archaeological research programs have been carried out in the vicinity of the DNP. They have demonstrated the general chronology of occupation and the long-term dynamism in people's ways of life in the area. There is a broad sequence of change through time in the intensity and form of people's stone-working technologies, art production and the selection of animals hunted. Also demonstrated is the variety of people's interactions with the local micro-environments and the wider region.

Analyses of early colonial ethnographic accounts and excavated deposits from rock shelters describe the broad basis of people's terrestrial economy in pre-colonial times. This made use of the resources of all the local micro-environments – yams were dug from the river flats, shellfish, fish and birds trapped from the rivers, large and small mammals and reptiles, insects and honey acquired from the slopes and ridges (Ross 1990).

Spatially, the country north of the Hawkesbury River is towards the northern end of the Sydney Basin, and the complex of engravings and pigment art sites, axe grinding grooves and occupation sites displays regional differences and connections to the Hunter region further north. For example, the area to the north of the Hawkesbury River is marked by the dominance of stencil art in 'a highly developed art form' in most of the shelter art assemblages to a greater degree than elsewhere in the Sydney Basin (McDonald 1994b: 110-112). Two sites in Darkinjung territory – Swinton's shelter (in the Mangrove Creek area) and Yengo 1 (37-5-1, near Mt Yengo, see above) – are the most intensively painted shelters in the Sydney region, in terms of numbers of motifs.

Stone artefact raw materials and art styles provide evidence of regular contact – physical movement and meetings and/or exchange – between the people of the Hawkesbury

territory and those to the north in the Hunter region, as well as to the south coast. So, as we have discussed, even though the OGNR does not equate with the Aboriginal route from Sydney to the Hunter, people and goods have traveled this inland corridor for 1600-years.

4.4 Historic Heritage

4.4.1 Introduction

In this context historic heritage refers to all those changes to the landscape which have occurred since the colonisation of Australia by the British in 1788. In previous sections we have discussed the evidence for the continuing use and habitation of this landscape by Indigenous people in the colonial period as well as the evidence of the pre-colonial cultural landscape.

In contrast to our fragmentary knowledge of Indigenous history, the history of the OGNR and its construction by convict road gangs has been the subject of detailed historical and archaeological research. The physical remains of the road have been studied and catalogued and this report aims only to draw together this past research in order that its significance can be reviewed, and its management consequently kept in touch with perceptions of significance. Sections 4.4.2 and 4.4.3 are based on the NPWS CMP 1999, while other sections, which follow, are derived from specialist reports, as acknowledged, and field inspections by the consultant team.

4.4.2 The road elements

This section presents a brief overview of the elements of the OGNR and its associated sites. A detailed catalogue of these elements, including maps, photographs and illustrations, and also including cross-referencing of the various numbering systems which have been applied to them in the past, is provided in Appendix 4. The road and its elements are also divided into management precincts in Section 6.11 as a means of facilitating management of the fabric.

The following summary is based upon the NPWS CMP 1999.

The archaeological evidence or fabric of the Old Great North Road is defined as all the remaining physical material of the Old Great North Road and its associated precincts. This includes:

- the formation of the Old Great North Road, meaning its shaping as well as the shaping of the immediate setting uphill and downhill, and including the sub-surfacing and surfacing;
- the alignment of the Old Great North Road; and
- individually identified elements and classes of elements.

A wealth of material from the period of road construction and use remains, demonstrating both road making activities and the life of convict workers and people who used the Old Great North Road. The road making activities included cutting and filling to form the shape of the road (involving chiselling, blasting and quarrying), building walls and bridges, sub-surfacing and paving of the road, the construction of drainage systems and fencing. Evidence of convict life includes stockade and hut sites, graffiti and water supply features.

Devine's Hill to Ten Mile Hollow – carriageway

The road carriageway was formed as follows:

Wherever the natural terrain sloped from one side of the road to the other, the lower side was embanked and/or the higher side cut down. A gentle slope was often slightly embanked with a side wall of one or two courses. On very steep slopes both cutting and filling were required and the operations were usually simultaneous, the material from the cutting forming the embankment. Where land was naturally level, it appears that no formation was made at all. The line was simply cleared and a broken stone pavement laid.

...Three main methods of reducing the slope were used according to size of the area to be reduced. Generally where a stone cutting was required up to approximately 1.5m/4ft in height, it was hand cut with chisels or rock picks and the face was vertical. Larger stone cuttings were usually blasted out and where retaining walls were required, the exposed rock faces were quarried both to provide stone and to widen the road (Karskens 1985a:277- 9).

Blasting involved the preparation of holes to the depth of rock to be blasted off. This is likely to have required two men, one holding a jumper bar and the other wielding a hammer or sledge. Some time after preparation of the hole, gunpowder was poured in, the top tamped with clay and the rock face blasted off. This process would be begun on the uphill side of the road with successive layers dislodged until the road attained the correct depth (after Karskens 1985a).

Evidence of blasting can be seen in the numerous jumper scars with their distinctive triangular profile and in occasional unused jumper drill holes (Figures 4-22 and 4-23). Associated artefacts include possible powder magazines at Devine's Hill and Finch's Line and portable artefacts such as jumper bars and sledges.

The cuttings range from road edging a few centimetres high, to walls approximately 1.5m in height.

Quarrying was carried out with basic tools using primitive methods. While quarrying may have been done using wedge pits, guttering and/or plug and feather methods, there is evidence only for the first of these. This involved the cutting of wedge pits up to 9 cm depth into the rock with a chisel or pick. Iron wedges were then driven into the pits with a maul in order to split the rock. If quarried or blasted rock was unsuitable for wall construction it was discarded over the edge (Karskens 1985a:279).

Large scale quarrying left a rock face with a distinctive benched profile. Both used and unused wedge pits can be seen along the Old Great North Road.

Alignment

In general, the alignment of the Old Great North Road is dictated by the landscape with the road largely following the ridge line, however specific areas such as the Devine's Hill ascent illustrate Mitchell's 'straight line' policy of road construction.

Road surface

The road carriageway was levelled to make it suitable for horse and cart traffic by forming a pavement.

This was usually done in one of two ways depending upon the composition of the road surface. Broken stone pavements involved putting down layers of stones of various sizes grading from large at the base to small on the top (Figure 6), while sheet stone pavements were formed from the incorporation of natural rock platforms or shelves. For these, they were simply smoothed with picks or chisels and any gaps filled in with broken stones (Burke 1988:16 after Karskens 1985a).

Broken stone pavement is more commonly used along the Old Great North Road, however there are significant sections of sheet stone pavements.

Retaining walls

The construction of the road over a ten-year period by numerous gangs under different supervisors resulted in an extremely diverse range of retaining walls, varying broadly in every possible way. The dimensions vary according to the functions, from between less than 30cm to over 9.5m in height and between 30cm and 1m in thickness. In some cases a single course of stone was required to enclose a slight embankment elevating and levelling uneven ground, while in other cases over twenty heavy courses were necessary to support massive formations on precipitous slopes (Figure 8)...The common factor is that all the walls are dry laid. Even walls comprising the smallest and most ill-shaped blocks were not

mortared. It appears that either broken stone or a mixture of earth and stones was employed as backing fill for these walls (Karskens 1985a:340-2).

There are several kilometres of retaining walls altogether. They range in length from a few metres to several hundred metres.

Drainage

Drainage along the Old Great North Road takes two forms: side drains and culverts. Their size:

seems to vary indiscriminately and often without apparent logic. The cross-sectional area of many culverts is often smaller at the entry and larger at the discharge end. One is left with the impression that the design of the hydraulics of the road drainage was ad hoc...This indeed is very likely the case as the fundamental design information for proper control of the water would have been unavailable to the constructors of the day (McBean and Crisp 1990a:35).

(i) Side drains

The side drains constructed served to collect and channel water and were of three types: stone-cut, stone-block edged or merely as a ditch dug in the soil along the side of the road. Stone-cut examples were constructed through areas of sheet sandstone outcrop, where these formed the surface of the road, while ditch-drains were installed in other sections. Stone-block edged drains provided a low wall of sandstone blocks along the inner edge of the drain to prevent road fill material from washing into the drain (Burke 1988:15 after Karskens 1985a).

For most of the Old Great North Road there is a drain on the inboard side (Figure 4-25).

(ii) Culverts

Culverts were constructed from either stone or timber and served to divert water from the side drains, underneath and away from the road. Both types of culvert were constructed in a similar fashion, only the basic compositional material varying. A typical stone block culvert had both walls constructed from sandstone blocks and capping stones of thinner sandstone slabs (Figure 10). The inlet and outlet were both composed of stone blocks (Figure 11), sometimes the lintel stone being curved, for purely decorative reasons.

Timber culverts had two parallel support beams running the width of the road (Figures 12 and 13), with split slabs used as capping and squared logs used as lintels for both inlets and outlets. The lintels were often secured by iron stakes driven into the support beams beneath (Burke 1988:15 after Karskens 1985a).

One hundred and eight culverts have been recorded, 28 constructed out of wood, 63 out of stone and 17 consisting of concrete pipes, which for the most part are known to have replaced wooden culverts and were installed within the past 40 years. The locations of a further 6 wooden culverts which have completely disintegrated over the past few years and 3 stone culverts buried under Settlers Road, between James's Bridge and the site of the toll house and the ferryman's house, near the bottom of Devine's Hill, have also been recorded (Webb 1990, 1991c).

According to a hydrology report undertaken by Jordan and Associates (1997:8), culverts on the Devine's Hill section are:

generally adequate with most able to cater for flows similar to or greater than the estimated 100 year ARI rainfall events. An area of concern is between culverts C34 and C36, ...where significantly large catchments contribute flows about 2 to 4 times culvert capacity for the 10 year ARI rainfall event.

Wooden structures

Remnants of guard-rail fencing exist in three locations. They comprise a total of 8 wooden posts *in situ* and fragments of worked timber nearby (Figure 4-32).

Finch's Line

The ascent of Finch's Line is relatively short (about 1km of the 5.2km line) and very steep and narrow with several zig-zags where the road widens to form turning circles of 8-10 metres width. The retaining walls are dry laid, roughly squared and coursed and rise up to 5 metres. Much of the line below the ascent comprises an embankment with only one course of stone to delineate the outer boundary, while the line above the ascent, following a relatively flat ridgeline, has walls ranging from one to several courses high. The drainage system comprises sloping roadway to facilitate runoff and 7 stone slab culverts (Comber 1991b). Finch's Line features a major quarry, 3 examples of convict graffiti, an engraved mile marker (at one mile) and the remains of a stone hut a short distance from the Old Great North Road (Figures 4-34, 4-35, 4-36 and 4-37).

The Shepherd's Gully Roads

The archaeological evidence detailed in Comber (1991a) may be interpreted as loosely reflecting three phases of development. First, approximately 350m of the original levelled track (probably dating from the late 1820s) edged by an intermittent course of stones and featuring a stone slab culvert (Figure 27). Second, the better defined Sternbeck's Gully

Road, with Type 2a/2b stone retaining walls up to 7m high (Figure 28), blasted quarries, seven stone slab culverts and a small bridge; these sections are thought to date from 1841-1880s (Appendix 1). Third, the Shepherd's Gully line, with retaining walls and culverts of both stone slabs [15 culverts, 4 of which have remnants of wooden decking] and of pipes with stone facing at inlets and outlets [3 culverts] (Figure 29). This road is thought to date from the 1920s/early 1930s. The stone comprising some structures, for example culvert 17 at 1835m (and others), appear from their texture and the looseness of construction to have been robbed from the Old Great North Road above and re-erected on this, the new main road north. The use of pipes and stone facing is more typical of early twentieth century work; many other examples are located on the St Albans Road further north, and on the 1912 Berghoffer's Pass in the Blue Mountains (Karskens 1991:22).

Simpson's Track

Simpson's Track leaves the OGNR at Ten Mile Hollow and while the OGNR continues northward on the sandstone, it passes through sandy open forest following the gully of Ten Mile Hollow Creek until it meets the boundary of Dharug NP. The Track therefore has quite a different character to the OGNR and the surrounding vegetation is slightly different. Webb reports that retaining walls and timber and stone culverts are to be found along the stretch of the Track within Dharug NP, and that they are similar in construction to those found on the Shepherd's Gully Road (Webb 1999: 66). Despite dating to as early as 1828, and its use as the first road linking the Central Coast to the OGNR, no detailed field survey has yet been carried out on this Track.

4.4.3 Features associated with the Road

Quarry sites

Quarry sites are found on Devine's Hill, Finch's Line and Shepherd's Gully. They demonstrate an array of stone mining techniques including wedge pits and jumper marks where gunpowder has been used. The Shepherd's Gully Quarry appears to have been used in the 20th century, utilising modern earth moving equipment.

The Devine's Hill stockade site

There were apparently up to six semi-permanent encampments along the Old Great North Road, but evidence of only one, at Devine's Hill, has been found in the study area (Burke 1988 after Webb, pers. comm.). Similar camps are located south of the river within Wiseman's Ferry Historic Site, also managed by the NPWS. Early encampments (1826-7)

comprised temporary slab and bark huts in random groups at convenient intervals along the Great North Road. Later encampments, known as stockades, were more complex, comprising buildings with stone foundations, hearths and ovens (from Karskens 1985a: 59ff). The Devine's Hill Stockade area has been cleared of some vegetation which was affecting footings. (pers comm. Sarah Breheny). Stone footings and evidence of earthworks can be observed in the clearing. Features surviving in the area have been catalogued by Comber (1991: 61-62) and Karskens (1985: 521). One feature listed by Karskens as a baker's oven has been identified by Webb (Webb 2004, pers. comm.) as the remains of the police constable's house.

Devine's Hill stockade is very important, as it was the only stockade on the northern side of the Hawkesbury between the river and Muswellbrook and Maitland. There were 16 semi-permanent convict campsites between the Hawkesbury and Bucketty, six of which were between the river and Ten Mile Hollow (Webb 2004 pers comm.). Devine's Hill cannot be termed semi-permanent as it was used from 1829 to at least late 1834, the longest used site on the OGNR (Webb 2004 pers comm.).

Hut site

The remains of stone foundations of a hut is at the base of Finch's Line.

Water supply sites

These comprise several hand-cut rock features including races, basins and wells.

Graffiti or rock engravings

Numerous examples of convict graffiti occur along the Old Great North Road. Graffiti from later periods up to the present also occur. The convict graffiti is pecked into the rock face with a road or quarry pick. Initials are the most common form but pictures and words also occur.

Hangman's Rock or the powder magazine

The small natural rock shelter on Devine's Hill known as Hangman's Rock has been modified with hand-cut steps, shelf and postholes (Figure 4-33). It is thought that this site may have been used as a powder magazine due to its location close to a major quarry, its open aspect, the presence of postholes, suggesting a barrier, and the fact that the dimensions of the shelf correlate with the dimensions of gunpowder containers of the period (I. Webb, pers. comm.).

Mile markers

Three mile markers have been identified: the 1 mile on Devine's Hill, the 7 mile and the 1 mile on Finch's Line. All are engraved except the 7 mile marker, which is a wooden post, no longer *in situ* (see 5.2.8 (vii)). It is at present at Bucketty Depot and it is planned to remove it to Mill Creek Depot. Three timbers from the timber culvert at Ten Mile Hollow are also located at Mill Creek Depot. The 12 mile marker has also been identified; however this marker is outside the study area.

Portable artefacts

This category includes a number of metal artefacts such as leg-irons and picks as well as larger items such as the wooden 7 mile post (Burke 1988:50), all of which have been removed by the NPWS for their protection and housed in NPWS head office. Some other portable artefacts are thought to have been removed by members of the public from places such as the stockade site on Devine's Hill (I. Webb, pers comm.).

In terms of their future security and ongoing conservation, it may be appropriate that moveable artefacts should only be lodged with a professional museum that has established conservation and curatorial procedures, under a written agreement covering insurance, damage to artefacts and display conditions, and which lays down conditions for public access to the collection.

4.4.4 The North Telegraph Line

Bushfire has today destroyed much of the evidence of the North Telegraph Line which was installed in 1859. The line ran from Windsor to Wiseman's Ferry, to Wollombi and thence to Maitland. It spanned the Hawkesbury and joined the Finch's Line where some steel ring bolts and insulators driven into the rock can be observed. Many burnt telegraph poles and insulators can also be observed around Ten Mile Hollow and at other locations along the road. This line was maintained until 1965 and the PMG carried out work on the OGNR in order to maintain the line until that date (Webb 1999: 58. 63).

4.4.5 The Ten Mile Hollow archaeological site

Substantial masonry footings are visible close to the road at Ten Mile Hollow around 50 metres before the creek crossing. Much wombat activity is evident in the sandy soils around these remains, but a portion of abutting walls is exposed and appears to have been excavated at some time. Webb publishes a sketch plan of the site (1999: 67) with

the legend 'limits of excavation' around the exposed portion. Webb reports that Solomon Wiseman was granted 100 acres of land at this location and four allotments in the town site for an inn, but that a village development was planned but never executed (1999: 65). Webb suggests that there is no evidence that Wiseman ever built at this site but does report that an unlicensed house associated with a man named Paley is referred to in the 1840s (op.cit). Another reference to an unlicensed house at '12 Mile Hollow' (an earlier name for Ten Mile Hollow) comes from 1838 (Swancott n.d. 95,96). No surface artefactual material was observed at this site.

4.4.6 The Meisterham house and garden remains and the Wat Buddha Dhamma

Three archaeological sites associated with the Meisterham family who lived at Ten Mile Hollow prior to the 1960s, have been recorded by NPWS. The sites are titled: 'Meisterham house ruin', 'Artefact scatter – Meisterham house ruin' and 'Garden, Meisterham house ruin'. The Meisterhams established a pine plantation at Ten Mile Hollow. Webb also reports that the family harvested native plants for sale to Sydney florists (1999: 66). Along with the archaeological site described in section 4.4.4, Ten Mile Hollow contains the only evidence of historic habitation (post construction) along the OGNR in DNP. This habitation continues today by virtue of the one surviving freehold block within DNP. This block was purchased from a Meisterham family member by the Wat Buddha Dhamma which has established a Buddhist retreat on the site. The retreat consists of an array of small timber buildings, and a few mud brick buildings, clustered in a clearing. The buildings narrowly escaped the bushfires of January 2003. The Wat continues to use the OGNR, north of the Western Commission Track, as its access (NPWS POM 1997).

4.4.7 The Western Commission Track and transmission line

The most recent change to the DNP/OGNR landscape has been the installation of a major power line by Transgrid. This involved the installation of a new track, known as the Western Commission Track.

4.5 Conclusions: the Cultural and Natural Landscape

The building of the OGNR has been the most substantial alteration to and impact upon this landscape. The building of the road has been a focus, a funnel for all subsequent human activity. The landscape shaped the road and in turn it has shaped the landscape: it has shaped patterns of fire - acted as a firebreak and as a route of access for fire fighting. It has shifted erosion patterns. It congregates other uses around it such as the telegraph

line of 1859, the modern power line, the unlicensed inn of the 1840s, and the small amount of rural/domestic development: the Meisterham house and the Buddhist retreat.

The remains of convict work are numerous and diverse, ranging from monumental retaining walls, to the intimate graffiti recording initials or character images. The location of these features within this rugged environment, which in terms of geology and vegetation is characteristic of the broader region, contributes to the highly scenic and evocative character of this landscape. With views of bushland as far as the eye can see in many areas, this landscape evokes the 'frontier' experience of travelling the road in the 1830s.

The presence of the road has also influenced the recording of Indigenous sites, with 42 located within two kilometres of the road. Before the construction of the OGNR this landscape was part of an Indigenous cultural landscape that included the precursors to the Boree Track, numerous art and ceremonial places, and evidence of human habitation. The location and route of the OGNR may represent some exchange of knowledge between Indigenous people and the original surveyors, providing an aspect of overlap between the pre- and post-colonial cultural landscapes.

The pre-colonial archaeological places of this landscape contribute to our understanding of change through time of the occupation and culture of the people of the Sydney Basin. This evidence includes a significant array of regional art forms that have been interpreted as a communication network important to social cohesion and cultural identity, and distributions of lithic raw materials which demonstrate interaction between people to the north, in the Hunter, and to the south.

While we cannot see the OGNR as a *focus* for contact between settlers and Indigenous people, two images speak of the cross-cultural interaction which may have taken place here: the drawing of the European ship in a rock shelter associated with traditional representations and stencils, and the European rock engraving of a figure, perhaps a convict, worked in a technique which mirrored the Aboriginal engravings found in the surrounding landscape.



Figure 4-1: The environmental context of the OGNR is within a complex of national parks and conservation areas comprising the Blue Mountains World Heritage Area. (Photo: Ingereth Macfarlane)



Figure 4-2: *Eucalyptus piperita* regrowth after fire. This species (Sydney Peppermint) is a community dominant along the OGNR route. (Photo: Ingereth Macfarlane)

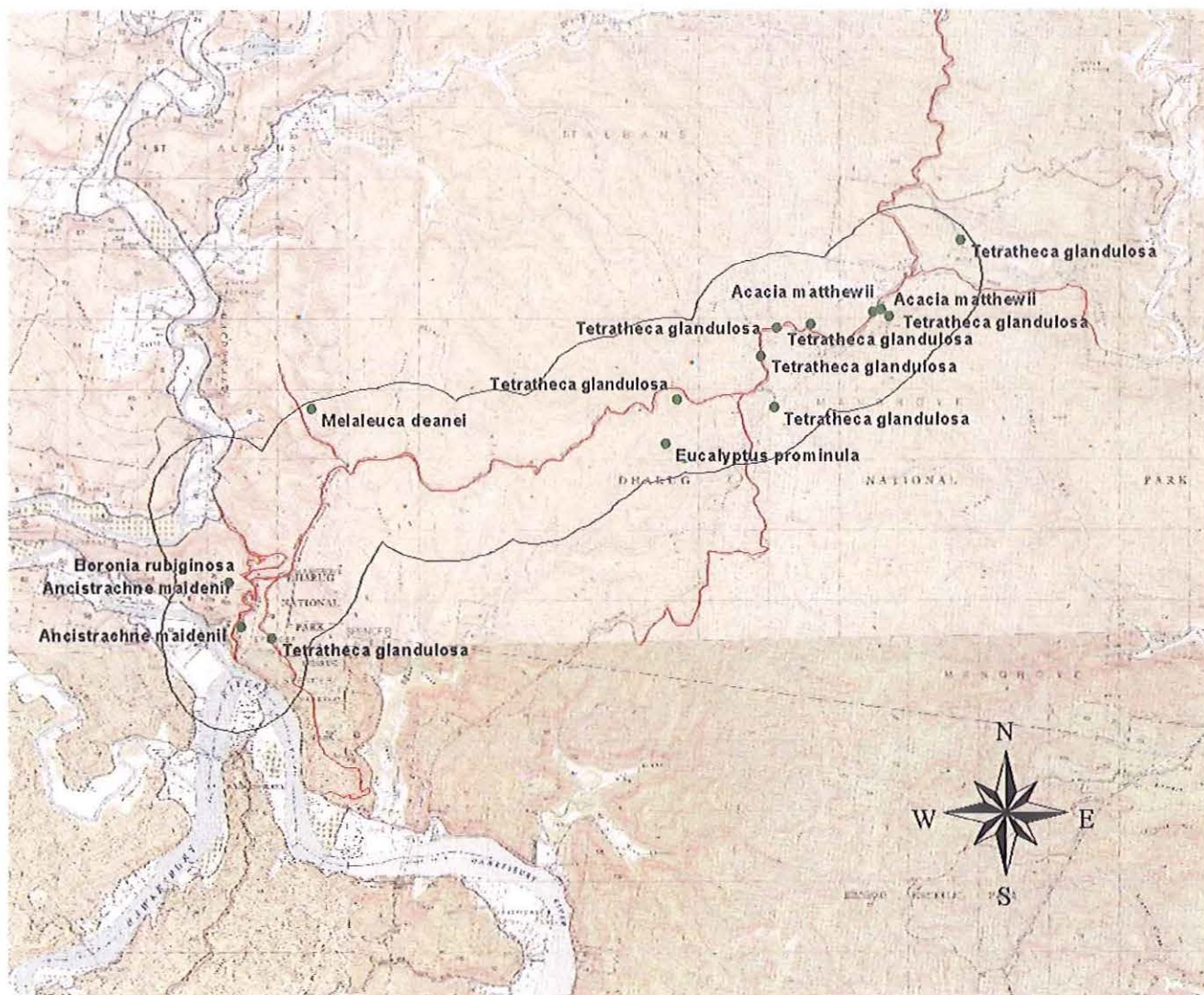


Figure 4-3: Vulnerable Flora Species within 1km of OGNR

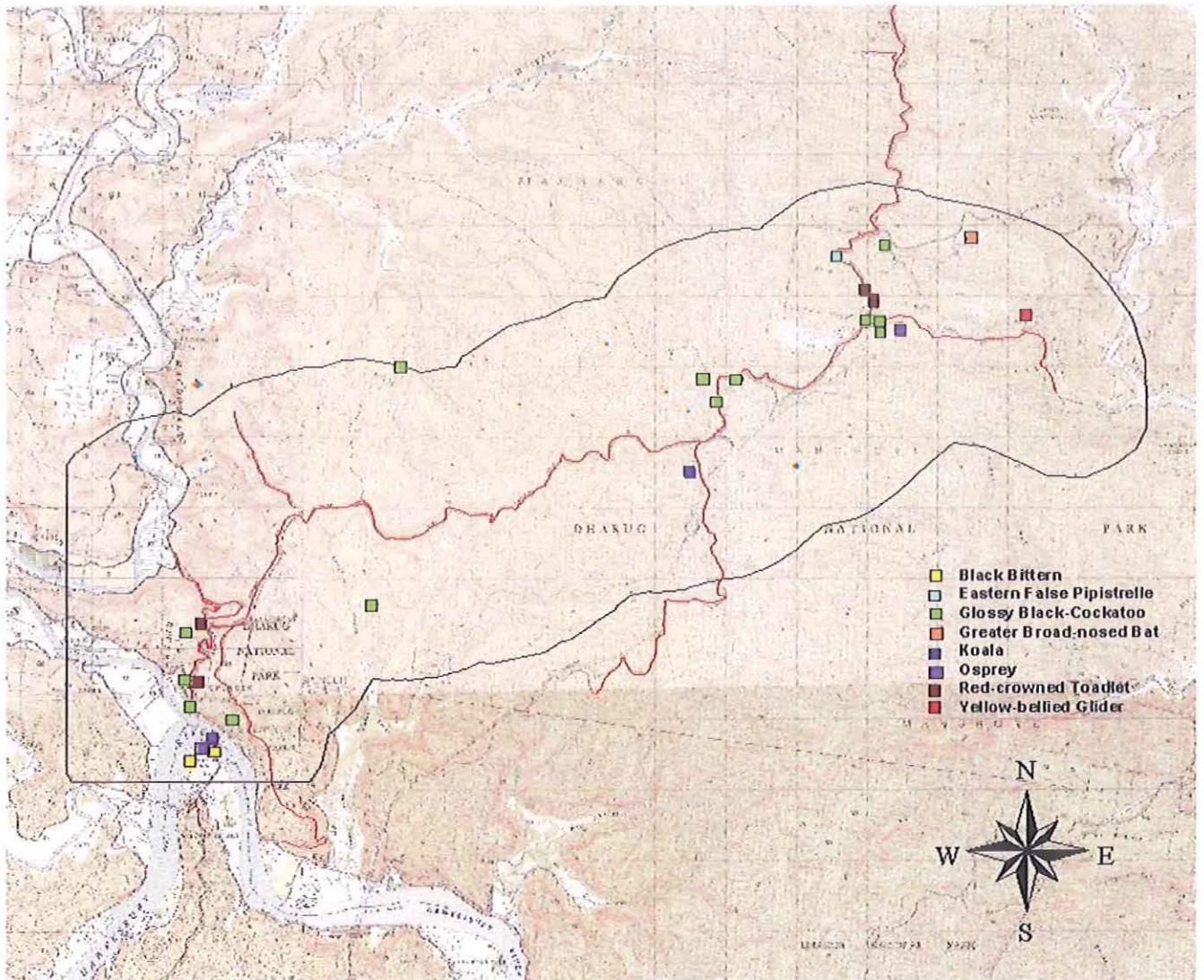


Figure 4-4: Vulnerable Fauna Species Recorded within 2km of OGNR

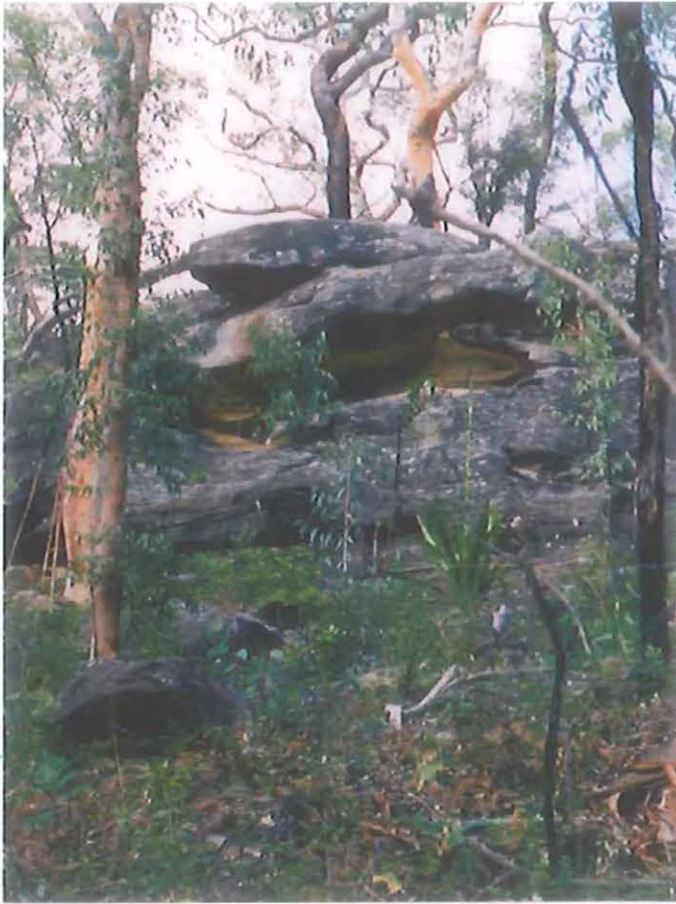


Figure 4-5: Diverse weathering in Hawkesbury Sandstone along the OGNR: Undercut bluffs. (Photo: Ingereth Macfarlane)



Figure 4-6: Diverse weathering in Hawkesbury Sandstone along the OGNR: Honeycomb weathering. (Photo: Ingereth Macfarlane)



Figure 4-7: Diverse weathering in Hawkesbury Sandstone along the OGNR: Surface mottling.
(Photo: Ingereth Macfarlane)



Figure 4-8: Diverse weathering in Hawkesbury Sandstone along the OGNR: Liesegang Rings.
(Photo: Ingereth Macfarlane)

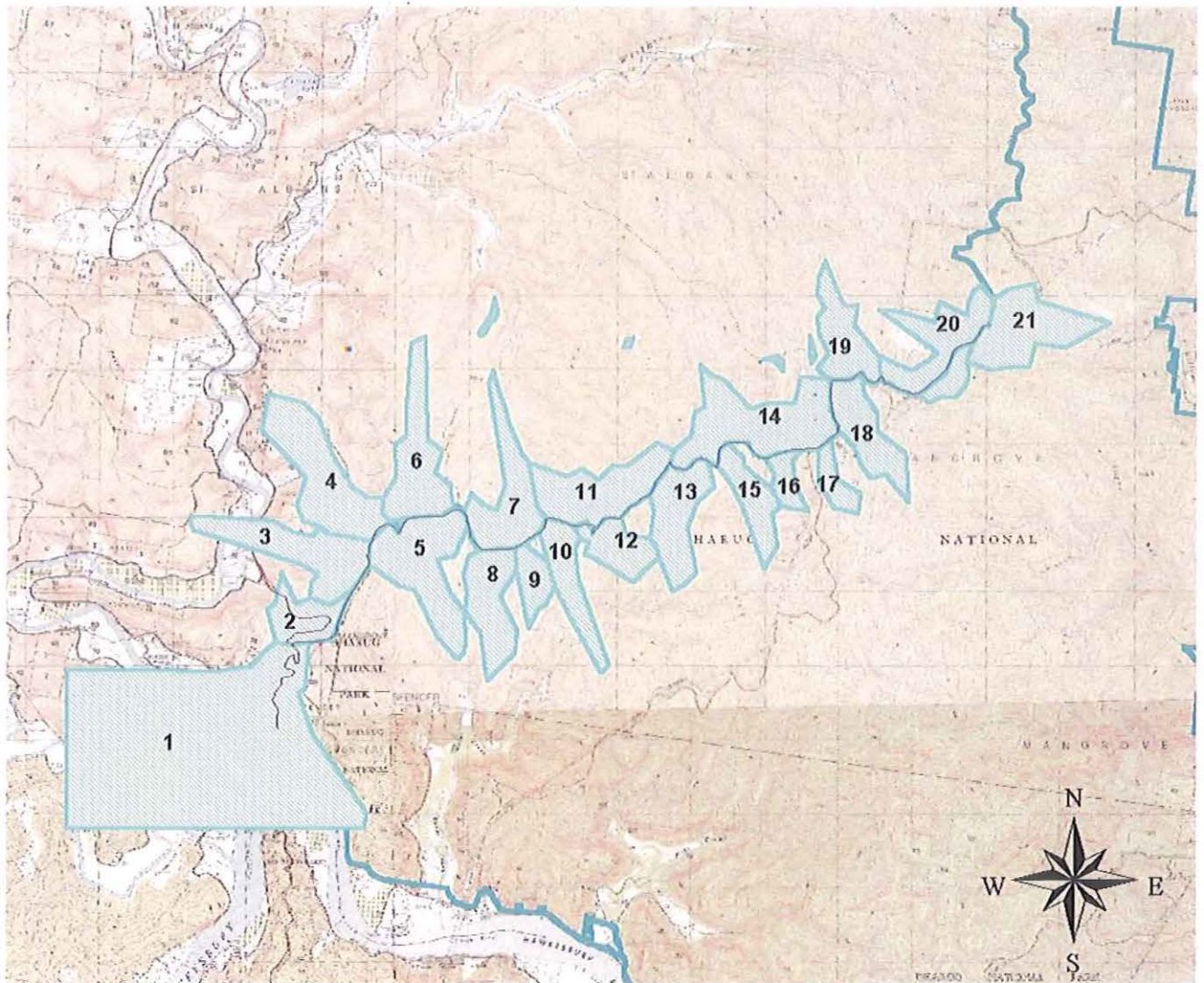


Figure 4-9: Viewsheds from the Road



Figure 4-10: Views from the OGNR are typically bounded by adjoining bushland and ridges. (Photo: Ingereth Macfarlane)



Figure 4-11: The most expansive viewshed from the OGNR is from Devine's Hill, from which three reaches of the Hawkesbury River, Wisemans Ferry and Parr SCA are visible. (Photo: Lesley Walker)



Figure 4-12: Views along the road are typically of rocky woodland on the uphill side, with taller forest on the downhill side. (Photo: Ingereth Macfarlane)

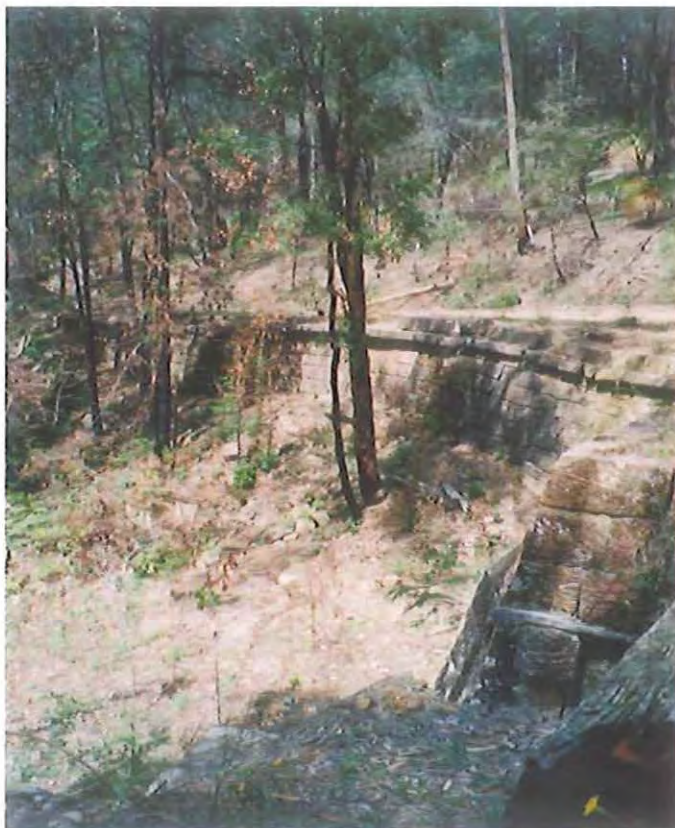


Figure 4-13: The road formation and retaining wall often acts as a fire break, impeding the spread of fire uphill. (Photo: Ingereth Macfarlane)



Figure 4-14: *Angophora costata*, with its ability to grow in rock fissures, can damage road structures. (Photo: Ingereth Macfarlane)



Figure 4-15: Vegetation encroaching on the road formation – Finch's Line. (Photo: Ingereth Macfarlane)

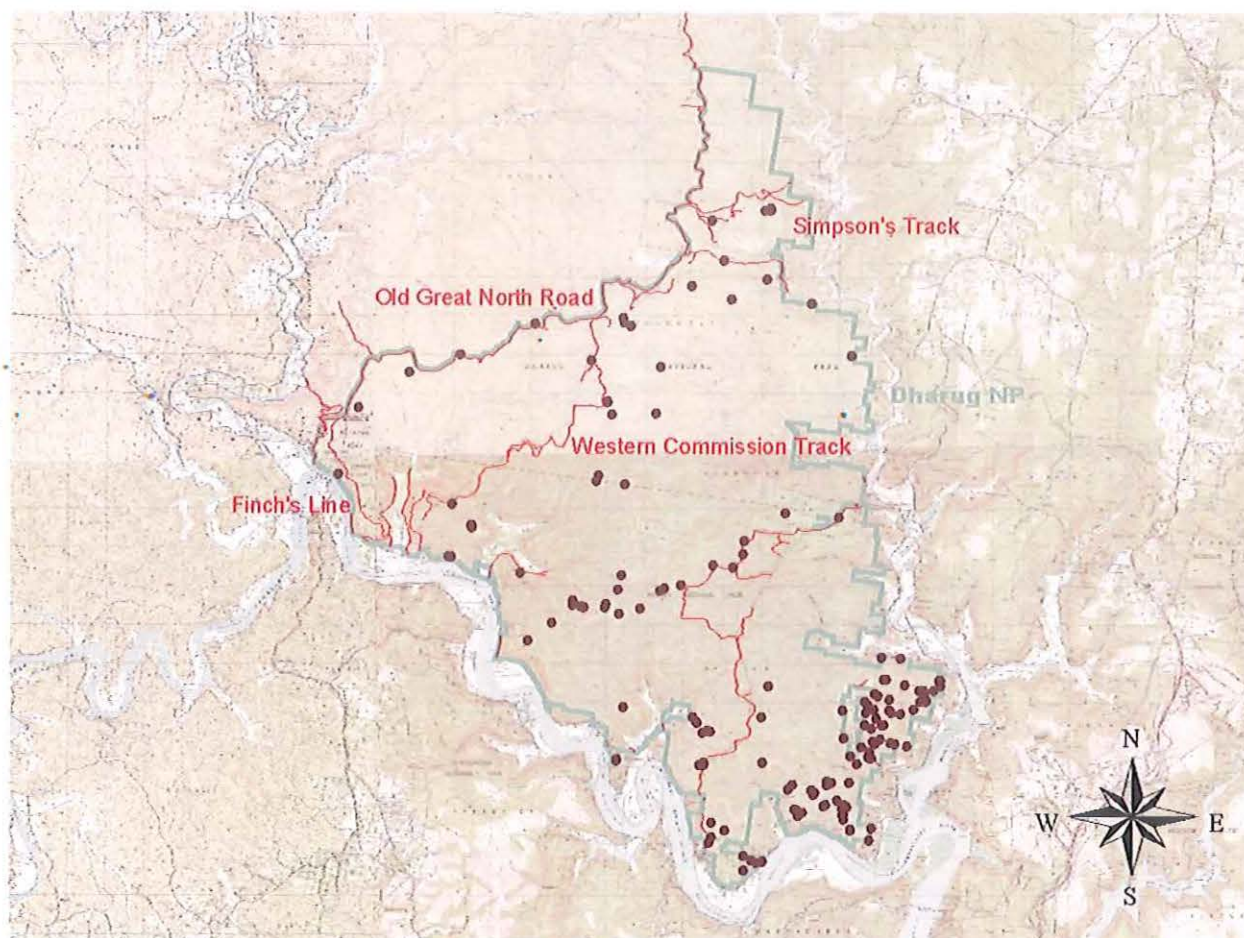


Figure 4-16: Recorded Indigenous Sites in Dharug National Park

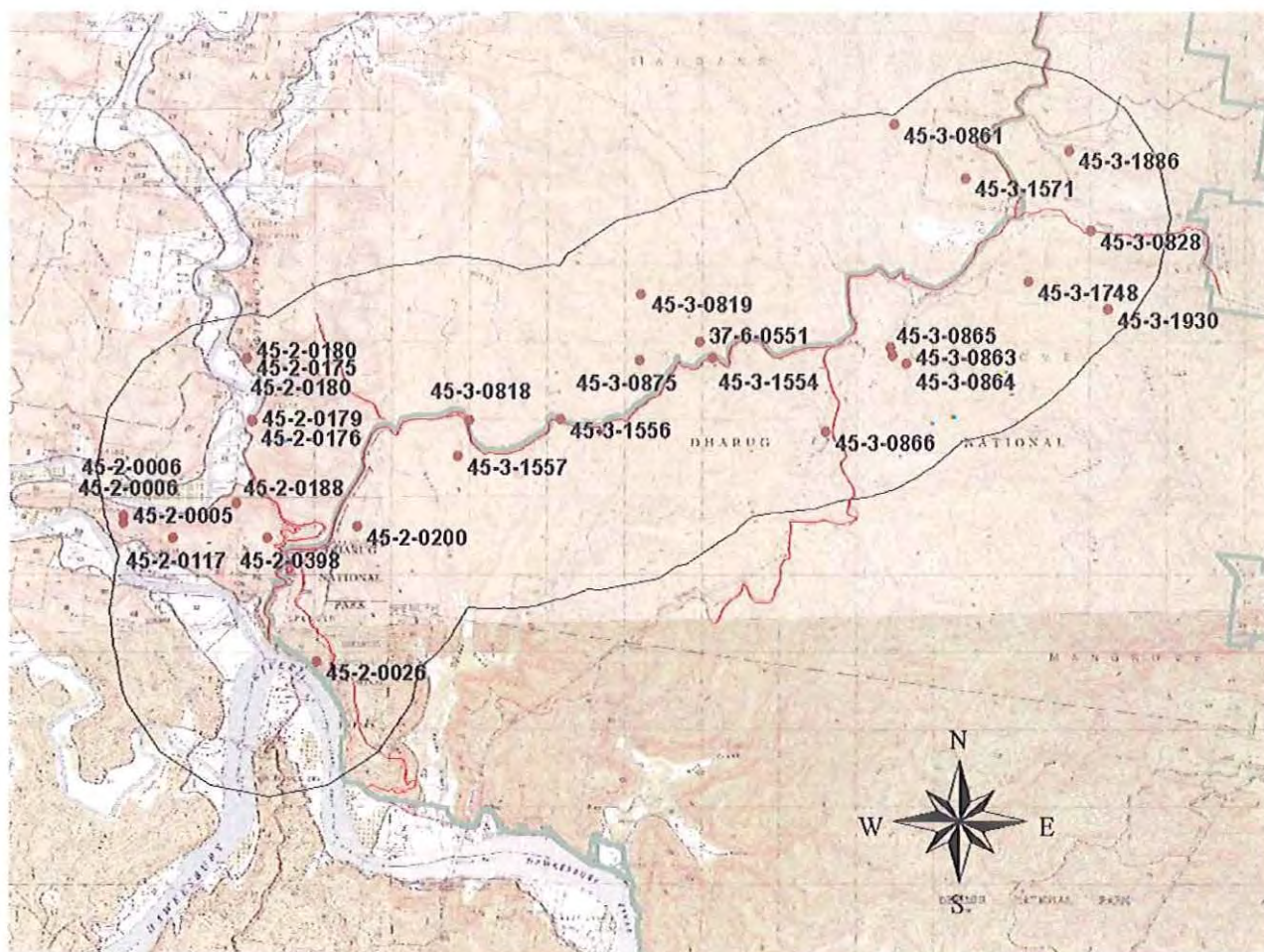


Figure 4-17: Recorded Indigenous Sites within 2km of the OGNR



Figures 4-18 and 4-19: Hand stencils in rock shelters in Dharug National Park. (Photo: Top - Ingereth Macfarlane; Bottom – Lesley Walker)



Figures 4-20 and 4-21: Contact art. Two views of a detailed charcoal depiction of a two-masted ship on the roof of a rock shelter about 40m above Gunderman Creek. (Photos: Lesley Walker)



Figure 4-22: Quarry on Devine's Hill showing jumper marks of rock drilling. (from OGNR Conservation Management Plan, NPWS, 1999. Photo Sarah Breheny).

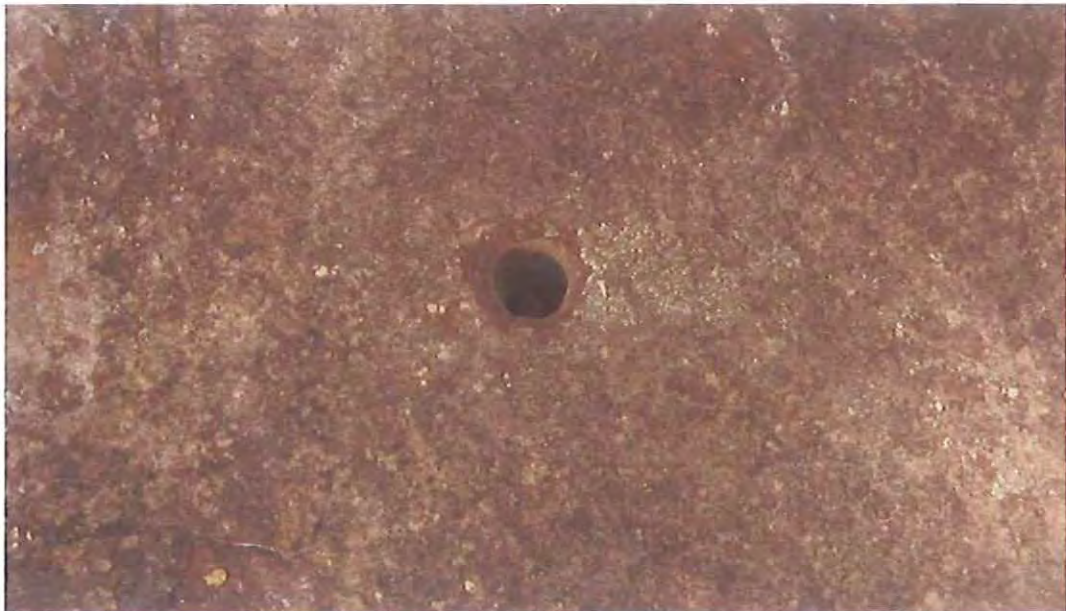


Figure 4-23: Unused jumper drill hole. (Photo: Lesley Walker)



Figure 4-24: Retaining wall and buttress, Devine's Hill. (Photo: Lesley Walker)

Figure 4-25: Side drain picked into rock, between Western Commission Track and Ten Mile Hollow. (Photo: Ingereth Macfarlane)





Figure 4-26: Stone culvert in retaining wall, Devine's Hill. (Photo: Ingereth Macfarlane)



Figure 4-27: Stone culvert in base of road formation. (Photo: Lesley Walker)



Figure 4-28: Spillway below culvert, Devine's Hill. (Photo: Ingereth Macfarlane)



Figure 4-29: Remains of wooden culvert, between Devine's Hill and Western Commission Track. (from OGNR Conservation Management Plan, NPWS, 1999. Photo Sarah Breheny).



Figure 4-30: Capping stones over road culvert, between Devine's Hill and Finch's Line. (from OGNR Conservation Management Plan, NPWS, 1999. Photo Jeff Betteridge).



Figure 4-31: Retaining wall of Sternbeck's Gully Rd (foreground) and Shepherd's Gully Rd (background). (from OGNR Conservation Management Plan, NPWS, 1999. Photo: Jillian Comber, 1991).



Figure 4-32: Remains of timber guard rail, between Devine's Hill and Western Commission Track. (from OGNR Conservation Management Plan, NPWS, 1999. Photo Sarah Breheny).



Figure 4-33: Steps leading to Powder Magazine (also called Hangman's Rock), Devine's Hill. (from OGNR Conservation Management Plan, NPWS, 1999. Photo: Jillian Comber, 1990)



Figure 4-34: Hut site (powder magazine), Finch's Line. (from OGNR Conservation Management Plan, NPWS, 1999. Photo: Jillian Comber, 1991)



Figure 4-35: Mile marker (1 mile) on Finch's Line. (from OGNR Conservation Management Plan, NPWS, 1999. Photo Sarah Breheny).

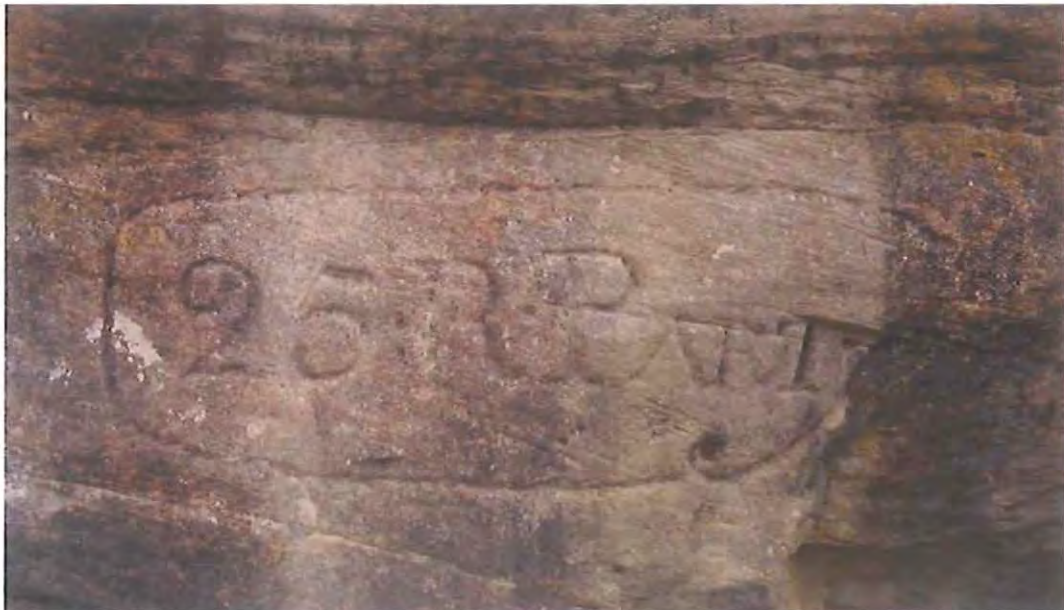


Figure 4-36: Convict engraving; No. 25 RD Party, Finch's Line. (Photo: Ingereth Macfarlane)



Figure 4-37: Broad arrow engraving, Finch's Line. (Photo: Ingereth Macfarlane)



Figure 4-38: Engraving; EHC, between Western Commission Track and Ten Mile Hollow. (Photo: Tracy Ireland)



Figure 4-39: Profile head engraving of a man with a tall hat and long pipe, Devine's Hill. (Photo: Ingereth Macfarlane)



Figure 4-40: Detail showing pattern of engraving. (Photo: Ingereth Macfarlane)

5.0 ASSESSMENT OF SIGNIFICANCE

5.1 Introduction

Assessing heritage significance (sometimes called cultural significance) is about articulating and ordering the values that we have identified in our research to this point, in a way that is clearly understood by the community and government agencies responsible for managing the OGNR. Assessing the heritage significance of a complex cultural landscape, in sufficient detail to enable the NPWS to manage all of its component parts in the best way, means that this Section is long, detailed and technical. However, the Statement of Significance, at Section 5.7, expresses the results of this process in a more succinct form, while the Table of Significance, at Section 5.6, looks at the significance of all the different aspects of the OGNR and its landscape and gives them a level of significance from Primary to Intrusive. These grades of significance are also expressed in terms of state, regional and local significance (terms defined below).

The NSW NPWS has adopted the heritage significance assessment procedures outlined in the *NSW Heritage Manual* (1996), and therefore these procedures will be followed here. In addition to the *NSW Heritage Manual* reference will also be made to the *Australian Natural Heritage Charter* (1996) and *Australian Historic Themes* (2001), (produced by the Australian Heritage Commission).

The national benchmark for the assessment of heritage significance is provided by the revised Australia ICOMOS *Burra Charter* (1999). The *Burra Charter*, which first appeared in 1978, expressed cultural significance in terms of four equally important sorts of value or significance:

- Historical
- Aesthetic
- Scientific
- Social

The NSW Heritage Assessment Criteria embody these four values but are expressed in a more explicit way. The definitions of these criteria reflect both policy decisions about some of the debates surrounding the heritage significance assessment procedure, the history of heritage management in NSW, and the way in which procedures and practices developed.

Some aspects of these histories and debates are discussed in the NSW NPWS's *Social Significance: a discussion paper* (Byrne et al 2001).

5.1.1 NSW heritage assessment criteria

- 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 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) (*Assessing Heritage Significance, a NSW Heritage Manual update*, 2000: 8).

The *NSW Heritage Manual* states that these criteria must be approached within a contextual understanding of both local communities and history (*Assessing Heritage Significance, a NSW Heritage Manual update*, 2000: 3-4). The NSW NPWS also defined an approach to this study which has implications for the assessment of heritage significance. This approach was defined as:

1. an integrated, or whole-of-landscape, approach with regard to the identification and assessment of all cultural (both historic and pre-contact Aboriginal) and natural values;
2. a cultural landscape approach to understanding the values of the place within its wider environmental, historic and social setting;
3. an emphasis on identifying (and framing policies regarding) the social/community values of the place (NPWS Brief for a CMP and SP for the OGNR: 5.0).

In view of all of these factors, this report approaches the OGNR and its landscape as an entwinement of people, place, environment and history. We approach heritage significance as primarily grounded in communities and the values they place upon land, history, memories and culture. This means that heritage is an expression of identity, and that places can stimulate and enhance experiences of cultural identity. The following is an attempt to understand at least some of the processes which imbue the OGNR and its landscape with meaning.

5. 2 Historic Themes

The following outline of national and state historic themes is derived from the NSW Heritage Office (www.heritage.nsw.gov.au/about/historythemes.htm). Those shaded in the table below are the themes considered relevant to the history and heritage of the OGNR and its landscape as far as it has been revealed through research.

National Theme	NSW Theme
1.Tracing the Evolution of the Australian Environment	Environment- naturally evolved
2. Peopling Australia	Aboriginal cultures and interactions with other cultures
	Convict
	Ethnic influences
	Migration
3.Developing Local, Regional and National Economies	Agriculture
	Commerce
	Communication
	Environment - cultural landscape
	Events
	Exploration
	Fishing
	Forestry
	Health
	Industry
	Mining
	Pastoralism
	Science

	Technology
	Transport
4. Building settlements, towns and cities	Towns, Suburbs, Villages
	Land tenure
	Utilities
	Accommodation
5. Working	Labour
6. Educating	Education
7. Governing	Defence
	Government and Administration
	Law and Order
	Welfare
8. Developing Australia's cultural life	Domestic life
	Creative endeavour
	Leisure
	Religion
	Social Institutions
	Sport
9. Marking the Phases of Life	Birth and Death
	Persons

The following briefly outlines how these themes are relevant.

1. Tracing the Evolution of the Australian Environment	Environment - naturally evolved
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The environment of the OGNR is part of a large complex of bushland that surrounds Sydney to the north and west, and continuous with the northeastern extremity of the Greater Blue Mountains World Heritage Area. The environment of the OGNR landscape replicates the ecology and ecosystems of this greater whole. It features a high representation of vulnerable plant species. The geology of the landscape is also relatively uniform which contributes importantly to the character of the OGNR landscape through the display of the range of differential sandstone weathering which contributes importantly to the aesthetic appeal of the landscape. The scenic quality of the OGNR landscape derives from the contrast between the monumental stone remains (where these exist) and the seemingly undisturbed nature of the bush around them. Important views across

undisturbed bushland are gained from the ridge top locations of the road, while the Finch's Line provides spectacular views over the Hawkesbury and Wiseman's Ferry.

2. Peopling Australia	Aboriginal cultures and interactions with other cultures
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The Indigenous archaeological places of this landscape contribute to our understanding of change through time of the occupation and culture of the people of the Sydney Basin. This evidence includes a significant array of regional art forms which have been interpreted as a communication network important to social cohesion and cultural identity, and a lithic distribution network showing contact with the Hunter Valley and further north.

Ethnography recorded in early colonial times records aspects of the culture and cosmology of the Darkinjung and Dharug people, including the Boree Track, a route of ceremonial and communication significance, which can be seen as a precursor to the OGNR.

The presence of rock engravings, paintings and drawings by both Indigenous people and settlers in the study area reflects aspects of cross-cultural interaction.

Aboriginal art sites, found in close proximity to the road, contribute to current perceptions of the temporal layering of the landscape.

Continuing Indigenous use of and connection with this area documents the survival of Indigenous links to country despite massive disruptions from the very earliest colonial period.

	Convict
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The road provides a confronting, direct experience of the convict system and its importance in Australian historical narratives and narratives associated with Anglo-Celtic cultural identity.

Grace Karskens' research on the OGNR contributed importantly to the use of historical archaeology as a technique to subvert elite accounts of history, through the analysis of

material evidence. Historical archaeology has become a crucial way via which the cultural worlds and life experiences of convicts in Australia have been reconstructed.

The road preserves the work of known convict road gangs, to which particular individuals can be traced, therefore affording a connection for some people with convict history in general, and with known ancestors in some cases.

The graffiti, engravings and the archaeological site of the stockade also provide opportunities for personal and significant research connections with convict history and the 'voices' of individuals from the past.

3. Developing Local, Regional and National Economies	Agriculture
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One of the main aims in the construction of the OGNR was the opening up of lands by the colonial authorities for agricultural production, and the concept that the Hunter Valley would provide agricultural produce to the colony of NSW. This process denied the Aboriginal people of the region access to the resources of these fertile areas, including the important yam harvesting areas of the river valleys.

	Communication
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The rock art of this region has been interpreted by Josephine Macdonald as a 'prehistoric superhighway' used to communicate important social messages and demonstrate aspects of cultural identity.

The ridgeline tracks which form known routes, such as the Boree Track, have also been interpreted as significant lines of communication for movement, meetings and exchange between the Indigenous people of the Hawkesbury, Hunter and South Coast regions.

Even though the OGNR did not become the major transport corridor that had been planned, it has indeed acted as a line of communication in this district from the colonial period until its incorporation into the National Park. The road was used for local mail deliveries and transport throughout the 19th and early 20th centuries. It created the corridor used for the 1859 Northern Telegraph Line.

Simpson's Track and Shepherd's Gully and Sternbeck's Gully Roads show the modification of official routes to suit local conditions. Although Simpson's Track was rejected as a route for the OGNR it linked to Gosford, Brisbane Water and settlements around Mangrove Creek and Mangrove Mountain and therefore continued to be useful to local people. Shepherds Gully was similarly adopted as a more congenial route, especially for those living in the Macdonald Valley.

	Environment - cultural landscape
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Before the construction of the OGNR, this landscape was part of an Indigenous cultural landscape which included the known lines of communication, such as the Boree Track and numerous art and ceremonial places. Forty-two recorded Indigenous archaeological sites are located within two kilometres of the OGNR.

The location and route of the OGNR may represent some sharing of knowledge between Indigenous people and the original surveyors, providing an aspect of overlap between the pre- and post-colonial cultural landscapes.

Indigenous people maintained their links with this cultural landscape into the latter 19th century.

The OGNR has dominated this landscape through the 19th century to the present, funnelling activities as diverse as fire fighting to archaeological survey along its route. The road has been both the main constructed feature of this cultural landscape, as well as the means via which the landscape has subsequently been perceived. Artists have used the road as an expression of the 'sublime' in the Romantic sense, a symbol or metaphor for the extension of civilisation through a 'wilderness'.

	Exploration
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The road is associated with the well-known colonial explorer/surveyor Sir Thomas Mitchell, and with the histories of John Howe and Richard Wiseman, who located the first line from Wiseman's Ferry to Maitland. This line was then probably followed by Heneage Finch, who first surveyed the line of the OGNR (Lavelle and Karsken 1999: 7).

	Technology
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The OGNR is an extraordinary museum of technology for it demonstrates the extent to which engineers and surveyors transferred, applied and modified certain newly-emerged principles of road engineering to the colonial context (Lavelle and Karsken 1999: 9).

(Excerpt from NPWS CMP 1999 follows)

The Old Great North Road allows us to study the transmission of technology to the colony, providing evidence of the skills and knowledge of the surveyors and engineers and the way they adapted British technology to suit Australian conditions. The ambitious formations and structures clearly show that early nineteenth century road and bridge building was not primitive, and that the road engineers of the 1820s and 1830s were well versed in the then-modern road-building technology.

The retaining walls are significant in that they demonstrate the work patterns, skills and organisation of the convict road gangs which built them, as well as the contrasting approaches of successive supervisory engineers. As Karskens (1991:13-25) states 'the Type 3a and 3b retaining walls demonstrate the experience/intuitive knowledge of the colonial engineers. Besides being impressive engineering feats, the use of open joints and free-draining backfill indicate some knowledge of the movement of soils behind walls. This evidence is unavailable elsewhere'.

The cuttings have technological significance as evidence of the engineers' skills. The drainage structures of the Old Great North Road, including side drains, stone culverts, wooden culverts and associated features such as inlets, outlets, lintels, aprons, races and cantilevered spillways have significance in that they together demonstrate the colonial engineers' grasp of hydraulics and of the importance of proper and adequate drainage in maintaining a good road.

The timber culverts demonstrate a quicker and cheaper method of construction where stone was not so freely available.

The surviving fragments of broken stone pavements demonstrate the hybridisation of the theories of Telford and MacAdam to better suit colonial conditions. The exclusion of

Telford's heavy stone foundation, for example, made pavements cheaper and more practical to build over such long distances (Karskens 1991:13-25).

Finch's Line has technological significance 'as a physical record of early approaches to surveying roads (the winding, zig-zagged line) and the modest, fairly cheap road building technology employed in New South Wales before the advent of more skilled and ambitious surveyors and engineers' (Karskens 1991:13-25).

The overlaid roads of Shepherd's Gully have technological significance because they demonstrate the development of road building over a century, physically documenting repeated attempts to improve gradients, and various construction methods and materials. The culverts of the three roads have significance in their demonstration of the survival of the early-style square block and slab, and timber slab culverts throughout the nineteenth century and into the 1920s. The pipe culverts from the latter period represent one of the few technological innovations of the Old Great North Road's construction history (Karskens 1991:13-25).

The stone conduit bridge (c.1841-1880) on Sternbeck's Gully Road is of technological significance as being typical of small nineteenth century stone conduit bridges, demonstrating the continuity of this simple bridge technology on local byways during the century and contrasting with major technological advances in bridge building elsewhere (Karskens 1991:13-25).

	Transport
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The OGNR, its features such as mile markers and water receptacles, within the context of the natural and rugged landscape of DNP, are evocative of the experience of 19th century overland travel.

Shepherd's Gully and Simpson's Track represent the evolution of local routes and connections which developed as settlement expanded.

The OGNR was designed to provide transport for agricultural produce, stock and people between Sydney and the Hunter Valley.

5.Working	Labour
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Most centrally the OGNR is evidence of the convict road gang system, the conditions of their labour, the nature of their skills, supervision of the gangs, their housing and victualling. The OGNR landscape also provides evidence of other types of work: Aboriginal stone tool production and resource exploitation, the work of the PMG, Transgrid, the NPWS, fire fighters, oil shale exploration, forestry and inn keeping.

	Law and Order
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Governor Darling was concerned to 'revive the dread' in which transportation was held. As a consequence, he established the road gang system. In this system convicts and others with one or more colonial conviction were sentenced to hard labour as a secondary punishment (Lavelle and Karskens 1999: 13). During Darling's governorship the labour of convicts was vital in setting up the infrastructure for what he saw as a more bureaucratically competent governance.

The remote locations in which the road gangs worked meant that they were removed from the colonial justice system, while the opportunities for evading work were high. Thus, Karskens argues, the threat of floggings, treadwheels and prison cells were only partly effective (Karskens 1986: 20).

Attempts were made in this period to regulate every aspect of the convicts' existence: clothing, food and daily routine.

Convict escapees were common and often blamed for violence and crime, sometimes against Aboriginal people or in tandem with them. There are recorded instances in the Hawkesbury of convicts living with the Dharug, and alternatively Aboriginal people being used to track escaped convicts. Collaborative convict/Aboriginal bushranging gangs were also reported.

	Persons
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The OGNR and its landscape is associated with one of early colonial society's most successful surveyor/explorers, Sir Thomas Mitchell, and also with Governor Ralph Darling, the entrepreneur Solomon Wiseman, and one of Australia's earliest scientific road engineers; Percy Simpson.

5.3 Comparison with Other Places

This section aims to provide a context for understanding the importance of the OGNR and its landscape and considers other places which might be compared, or be related to, the OGNR in a cultural, geographic, historical or other way.

5.3.1 The rest of the OGNR

The main context for this study is of course the remainder of the OGNR itself. It should be noted that some of the sections considered in this study, namely Finch's Line, the ascent of Devine's Hill and the stockade site, are the focus for the World Heritage Nomination for Convict Places (Pearson and Marshall 1995). The following discussion is extracted from the NPWS CMP 1999.

Karskens (1991:3-5) details comparable surviving sites as follows:

the abandoned section (Great North Road) 40.4 km north of Baulkham Hills features low rough retaining walls, a single primitive culvert, cuttings and a good section of broken stone pavement. This section demonstrates the early, fairly modest works completed under Lt Jonathan Warner, the first Assistant Surveyor, a useful comparison for his 1828 ascent of Finch's Line and a contrast to Percy Simpson's later much more elaborate work. There are fragments of the old road in the Sydney metropolitan area too - a stone wharf (1832) at Bedlam Point, Gladesville; a rough stone conduit bridge, roadway and quarry (c.1829) at Cherrybrook; a stone flagged causeway over a small creek on Old Beecroft Road at Epping.

Additional comparable sections of the Great North Road include the remaining unsealed in-use sections between Mount Manning and Mount McQuoid, and at Sawyers Gully north of Cessnock. The former contains some fine walls, picked rock faces, quarries and benches, while the latter contains a number of fine culverts still in use.

Of all the early colonial remains of the OGNR however, the most extensive and intact is the Old Great North Road between Wiseman's and Mt Manning. As Karskens (1991:5) states, 'it allows the analysis of construction methods and patterns far more fully than other more limited or fragmented sites, and has provided the essential typological tools for identifying and interpreting other old roads.'

As Karskens has argued therefore, the extent of intact OGNR features found within the DNP rivals any other section of the Road. The fact that these features are now located within a NP enhances their context and setting, and also serves to protect the archaeological features which exist alongside the road, and which have the ability to demonstrate the long history of this landscape through pre-colonial, colonial and 20th century historical developments.

5.3.2 Other colonial roads

** Great Western Road (Cox's Road)*

Another important context for the OGNR are the remains of the other planned 'Great' roads. Karskens' research on the Cox's Road (Great Western Road) is relevant here:

The historical saga and archaeological remains of the Great Western Road over the Blue Mountains to Bathurst present the best comparative site for the Great North Road... sections of road cut into rocky platforms along the ridge tops, narrow and often steep earthen embankments, bridge sites with sharply-turning approaches, land-bridge sites which demonstrate Cox's use of inclined timber decks to traverse rocky escarpments. All the sites bespeak of Cox's haste and the lack of labour at his disposal.

Other useful comparative sites located on the Great Western Road include David Lennox's Lapstone Bridge, the oldest stone arch bridge on the mainland (1833) and the 1830s ascent of the Blue Mountains also selected by Mitchell. The remains of another large stone conduit bridge at Bowen's Hollow (c.1832) indicate a somewhat less sophisticated design than Clare's Bridge and the Circuit Flat Bridge (Karskens 1991:3-5).

Great Southern Road

Less research appears to have been carried out on the remains of the Great South Road. A bridge and stockade site (see below) can be observed near Towrang, in the Southern Tablelands.

Old Windsor Road, Kellyville

Another important colonial road which opened up new agricultural lands in the early 19th century, and which retained its rural character until the late 1980s, is the Windsor Road

(Casey and Lowe 1993). This road was formed more like a country lane, with vegetated embankments and was therefore of a much different character to the more monumental 'Great Road' which forged through difficult terrain. Only one small section of the 19th century form of this road now remains at Kellyville.

George St North, The Rocks

Many examples of early road building techniques have been observed in central Sydney. Karskens has documented one example of wood block technology on George Street in the Rocks (1989).

Convict Road at Arndell's Mill, Corduroy Road at Lake Innes House

Two examples of early roads on NPWS estate include a small section of convict-built road at Arndell's Mill at the northern end of Cattai National Park. This was built in 1810 and measures 75 metres long by two metres wide. A section of 'corduroy' road (constructed with logs) is also preserved at Lake Innes House, near Port Macquarie.

Stockades

Several examples of convict stockades have been investigated since Thorp's early study for NPWS of 1987. These include:

Wiseman's Ferry Stockade (Austral Archaeology 1999).

Towrang Stockade on the Great South Road

Blackheath Stockade (Lavelle 1993)

No.2 Stockade Cox's River (Pearson 1996)

Bulls Camp site Woodford (Thorp 1989)

5.3.3 Other places of convict work

The most substantial surviving convict built public work, from the same period as the OGNR, is Busby's Bore, an underground tunnel constructed using stone mining techniques, to supply Sydney with water. Being underground it is obviously less accessible as a heritage item than the OGNR.

Also related to the convict work gang system are the sites of Hyde Park Barracks and Darlinghurst Gaol in Sydney, where work gangs were accommodated.

The site of the Coal Mines at Port Arthur has a remote bushland setting similar to that of the OGNR, and is probably the most comparable site of convict labour. It however relates to a later (1840s) and different secondary punishment system.

5.3.4 The European rock engraving on the Windsor Road

The European rock engraving of a figure with cap and pipe which is located near the Devine's Hill stockade has parallels along the OGNR, but a second close parallel is found on the Windsor Road (SHR Database No. 505142). The similar iconography of these figures suggests that they represented a 'type' of person or 'character' that would have been readily recognised by contemporary observers.

5.3.5 Other linear heritage items

Australia ICOMOS has recently published an edition of *Historic Environment* entitled *Making Tracks: the heritage of routes and journeys (2002)* reflecting world wide interest in 'cultural routes' which focus on connections between places, cultural contacts and hybridity. Our approach to the OGNR and its landscape is drawing on similar recent interests in the heritage of routes and journeys. The impact and significance of other Australian linear heritage items, such as the Overland Telegraph Line in Central Australia (Mulvaney) and forestry tracks and trails (Ramsay and Truscott) are explored in this volume. Another relevant example is the Golden Pipeline, which carried water to the Kalgoorlie Goldfields.

5.3.6 World Heritage Serial Nomination of Convict Places

The OGNR has been recognised as being of international significance in the context of the draft world heritage serial nomination developed to encompass the most significant convict places in Australia. The other nominated sites are:

Kingston, Norfolk Island;
Port Arthur, Tasmania;
Fremantle Prison, Western Australia;
Probation Station, Tasmania;
Hyde Park Barracks, Sydney;
Cockatoo Island Convict Station, Sydney; and
First Government House Site, Sydney.

As a group of places, these sites tell the story of the convict system in Australia, and for the nomination to be successful, as a group they must demonstrate outstanding universal heritage value for the world community. The consideration of World Heritage values is outside the scope of this CMP.

5.4 Analysis of Heritage Significance: Application of the Criteria

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).

The OGNR and its landscape have historic significance at many levels. The OGNR was the first road to be constructed north of the Hawkesbury, some 40 years after first settlement at Sydney. The road symbolises the imperial ambitions of the colony of NSW and of the men responsible for its planning: Darling and Mitchell. The road also symbolises the global nature of the empire in which Australia became embroiled, and the links this created as it moved technology and people across oceans.

The road survives as a substantially intact relic of the public works constructed by convict gangs in the 1820s and 1830s. The road construction, and associated graffiti, engravings and stockade site, represent the individuals involved in the convict labour system.

Before the construction of the OGNR this landscape was part of an Indigenous cultural landscape which included tracks and art sites. Forty-two recorded Indigenous archaeological sites are located within two kilometres of the OGNR, and 14 within 500 metres.

The route of the OGNR may represent some sharing of knowledge between Indigenous people and the surveyors, providing an aspect of overlap between the pre- and post-colonial cultural landscapes.

The rock art of this region has been interpreted by Jo Macdonald as a 'prehistoric superhighway' used to communicate important social messages and demonstrate aspects of cultural identity.

Cross-cultural rock art in the study area, deriving from the colonial period, is emblematic of the histories of Indigenous- settler interaction in the early decades of colonisation.

Even though the OGNR did not become the major transport corridor that had been planned, it has indeed acted as a line of communication in this district from the colonial period until its incorporation into the National Park. The road was used for local mail

deliveries and transport throughout the 19th and early 20th centuries. It created the corridor used for the 1859 Northern Telegraph Line.

Simpson's Track and the Shepherd's Gully and Sternbeck's Gully Roads show the manipulation of official routes and ongoing use of these areas by local communities.

Its form, features and location also evoke the experience of 19th century travel.

Criterion (b) an item has strong or special association with 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).

The road is associated with the well-known colonial explorer/surveyor Sir Thomas Mitchell, and with the histories of Solomon Wiseman, and of John Howe and Richard Wiseman, who located the first line from Wiseman's Ferry to Maitland. This was probably followed by Heneage Finch who surveyed the line of the OGNR (Lavelle and Karsken 1999: 7).

It is also associated with Governor Ralph Darling, who established the convict road gang system with the aim of providing the infrastructure for what he saw as more bureaucratically competent governance.

Percy Simpson was one of Australia's first scientific road engineers, and was responsible for applying technological advances of British road making in the colonial context.

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).

The combination of monumental stone construction, rugged landscape, distinctive vegetation, spectacular views or aspects, and intriguing sandstone formations has inspired a range of aesthetic responses to the OGNR and its landscape, both historically and in the present community.

Aboriginal art sites, which can be associated with beautiful sandstone formations, hold high aesthetic appeal.

The technical achievement of the road's construction shows the transfer of technology from Britain to the colonial situation, the adaptation of the methods of Telford and Macadam, as well as the intuitive knowledge and experience of the engineers. The retaining walls of Devine's Hill show the technical achievements of the convict road gangs who built them.

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.

Darkinung, Dharug and other Indigenous communities maintain connections with this landscape, its sacred and archaeological sites.

Local communities value the OGNR and its landscape for its historical importance, the links it supplies with colonial and convict history and for the access it has given in the past to special places. It is valued because of its entwinement with family stories and because of its importance in opening up the local districts of Mangrove, Macdonald Valley and the Central Coast. It is valued because of its educational potential for future generations. It is also valued as a public resource, a public thoroughfare, belonging to the community.

Convict descendents and convict history researchers value the OGNR as a tangible link with an important narrative of Australian history and of Australian cultural identity.

British visitors and other international visitors value the place for its historical significance, natural beauty, and also as a link with a broader, transnational history of the British Empire and migration, to which many individuals feel a connection.

The Convict Trail Project is an initiative begun by people living close to the road who value it as a crucial part of the history of their district. This initiative has been nationally recognised as one of the most successful community-based heritage organisations.

The OGNR is valued by many specialist groups such as historians, archaeologists and engineers, for its research potential.

More broadly the OGNR cultural landscape is valued for its evocative character, which combines dramatic landscape, stone ruins and narratives of convicts and colonial times, to produce an experience of touching or feeling the past.

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).

The research significance of the OGNR and its landscape has been well demonstrated, including landmark archaeological studies by Macdonald, Attenbrow and Karskens.

The integrity and intactness of the OGNR cultural and natural landscape hold important potential for further historical, cultural, archaeological and scientific research.

Archaeological sites of Aboriginal occupation in particular may shed light on the poorly recorded decades of the 19th century when Aboriginal people were displaced from their traditional lands and may have changed their patterns of use and occupation in this area.

The sites of the Devine's Hill stockade and the Ten Mile Hollow archaeological site also have research potential to shed light on both the accommodation of convict gangs, and the history and nature of the building remains at Ten Mile Hollow.

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).

While the flora biodiversity of the study area is a small part of an extensive whole, there is a high representation of threatened and vulnerable species in close proximity to the road.

The intactness and integrity of the remains of the OGNR in the study area make them rare examples of work done by convict road gangs. They are also rare surviving examples of road works from the 1820s – 1830s. Although some comparable remains exist, none are so well preserved or display such an array of features.

The convict graffiti and European rock engravings are rare examples of this form, representing 'unofficial' activities within a system of overt social control.

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).

The flora, fauna, ecology and geology of the OGNR landscape is representative of the broader conservation areas of Yengo and DNP and Parr State Conservation Area. These in turn are representative of the complex array of ecosystems which make up the broader Blue Mountains World Heritage Area.

The range of Aboriginal archaeological sites in the OGNR landscape is representative of that found in the Sydney dissected sandstone and riversides. It is dominated by art sites and axe grinding grooves with relatively few occupation sites.

The road building features found on the OGNR are representative of the techniques and methods being employed in major road works in the 1820s and 1830s.

5.4 Previous Statements of Significance

Three previous statements of significance are directly relevant to this review. The first is Karskens' 1991 Statement of Significance, which was the first to be commissioned by NPWS and covered the Great North Road between Devine's Hill and Mt Manning. The second is that prepared by Lavelle and Karskens for the entire Great North Road in 1999 for the Convict Trail Project. The third is the Statement prepared by NPWS for their 1999 CMP. Also relevant in this context are the Statements of Significance prepared for the NSW State Heritage Register and the Commonwealth Register of the National Estate.

1. Karskens 1991:

- The road is of **historical/cultural** significance as a signifier of the outlooks of early colonial society. Its magnificent structures were powerful, tangible symbols of the colony's perceived place and role in the course of empire, unmistakable evidence that the civilised state was being attained, and a triumph over the rugged and inhospitable landscape separating the centre of Sydney from the 'garden of the colony', the Hunter Valley.
- The road has **historic/archaeological** significance in that it physically demonstrates the work patterns, skills and organisation of the convict road gangs, particularly through the distribution and configuration of the stone retaining walls, drainage structures and bridges. This evidence is unavailable

in documentary sources and has been essential in changing our historical view of convicts in road gangs. The road may be considered a museum of convict work, graphic in its **demonstration** of the difficulty, laboriousness and isolation of 1830s road building.

- The road is **associated** with several notable figures in colonial administration, surveying and engineering. It represents the more ordered and administratively responsible style of government imposed by Governor Ralph Darling; its location, tracing and, indirectly, its structures record Surveyor General Thomas Mitchell's obsession with rectilineality in road building, and his attempt to use such major public works as a means of self-aggrandisement; the road's most ambitious structures are the materialisation of the skills and vision, as well as the hopes of remuneration, of one of Australia's earliest scientific road engineers, Percy Simpson.
- The road is of **historic/scientific** value in its demonstration of the standards and practice of road engineering in the colony during the 'Great Roads' period of the late 1820s and 1830s, and records the importation and adaptation of the recent road-building revolution in England. This essential information is unavailable in documentary sources, and as such it has changed our understanding of Australia's road engineering history.
- The section of the road between Devine's Hill and Mt Manning is significant for its **rarity** and integrity. While there are comparable sites of the same period elsewhere, there are no sections as extensive or as well preserved.
- The road has **aesthetic** value, both historically and at present. The conjunction of spectacular views, rugged topography with the great curve of stone walls and handsome bridges inspired several nineteenth century artists (most notably Conrad Martens) who considered such engineering feats as Devine's Hill both sublime in the romantic sense, and a subject for reflection upon the relationship of 'man' and nature.
- The road still **demonstrates** the nature of nineteenth century travel, through its early-style geometry, sight lines, structures passing through the surrounding original landscape and vegetation.

2. Lavelle and Karskens 1999:

The Great North Road is an item of **National** heritage significance. It has values under all relevant heritage assessment criteria, including historic, aesthetic, scientific and social significance as expressed by the ICOMOS *Burra Charter*, and under the SHI criteria. The Road also fulfils numerous assessment criteria as expressed by the Australian Heritage Commission. Whilst many heritage items will fulfill more than one value, the immense significance of the Great North Road is reflected in its possession of these multiple values at a number of levels.

Historically the Great North Road was the first made road north of the Hawkesbury, constructed by convict gangs between 1826 and 1836. The road has historic associations with several notable colonial figures including Governor Darling and Surveyor-General Sir Thomas Mitchell. The road is also tangible evidence of the development of the colony of Sydney, and of policies which saw convict gangs used to construct major public works during this period.

The Great North Road also provides a direct material record of convict labour. Many surviving structures and precincts indicate the quality of work achieved by convict artisans. Many precincts of the road also remain in relatively unspoilt settings which are evocative of the environment on the 'frontier' of the 1830s.

Other parts of the Great North Road (even if re-named) remain in use as an essential transport corridor and have thus carried European traffic continuously since the 1830s. (Lavelle, Karskens et al 1999: 34).

3. NPWS 1999:

The Great North Road is extremely rare because of its integrity and state of preservation over such a distance. There are no comparable convict-built roads of such length surviving elsewhere and for convict built public works of similar magnitude. It is this integrity which presents historical and cultural significance, for the Old Great North Road greatly enhances our view of the past, drawing attention in new directions, illustrating colonial self-images and aspirations, ideas of civil society, and even the personal ambitions of the men involved in its construction.

The Old Great North Road is of historical and cultural significance as a signifier of the outlooks of early colonial society. Its magnificent structures were powerful, tangible symbols of the colony's perceived place and role in the course of empire, unmistakable evidence that the 'civilised state' was being attained, and a triumph over the rugged and inhospitable landscape separating the centre of Sydney from the 'garden of the colony', the Hunter Valley (Karskens 1991:13-25).

The setting of the Old Great North Road is important as it is located in natural bushland which provides a sense of what nineteenth century travel was like and the values of the time.

Clare's Bridge and Circuit Flat Bridge have cultural significance in that they contributed to the Old Great North Road's powerful symbolic role through their aesthetic qualities and technical accomplishment.

The Old Great North Road provides evidence of convict work and living conditions, and demonstrates the key role that convict labour played in the colonial economy for the construction of public works designed to encourage the expansion of settlement.

The fabric of highest rarity is that associated with the construction and original form of the roads. Evidence of later use and accommodation of motor traffic is also significant. The transmission line and other twentieth century features also reflect changing uses of the Old Great North Road.

These statements of significance, based upon excellent research, all amply demonstrate the cultural significance of the OGNR, its array of historical features and associations, and research potential. The Statement of Significance prepared for this study on the OGNR and its landscape is informed by the above statements and does not replace them. It is however couched in slightly different terms, on the basis of the research carried out for this study, and places more emphasis on landscape, Indigenous and broader community values.

5.6 Statement of Significance – The OGNR Cultural Landscape

The OGNR cultural landscape possesses national, state and local significance because of its combination of cultural, historic, natural, Indigenous and other community values.

The historic features of the OGNR are rare because of their integrity and intactness over such a distance. There are no comparable convict-built roads of such length surviving elsewhere, and no other convict-built public works survive on such a scale.

The OGNR is a symbol of Australia's history of transportation and the use of convict labour. It is a rare intact example of the labour of convict gangs, and of early colonial road engineering, with demonstrated research potential.

The OGNR is also a powerful symbol of imperial ideology, as well as colonial self-images and aspirations, ideas of civil society, and even the personal ambitions of the men involved in its construction. The OGNR cultural landscape represents the global links of empire, the movement of technology and peoples around the world, and the cross-cultural interactions that ensued.

The 'unofficial' features associated with the OGNR, such as graffiti and rock engravings, afford rare, evocative glimpses of convicts as individuals, rather than as part of an anonymous, voiceless labour force.

All of these associations are highly valued by community members, while local people also value the road for its links with family and local histories of settlement and life in the region.

Nineteenth century artists responded to the OGNR and its landscape as an expression of the 'sublime' in the Romantic sense, a metaphor for the extension of civilisation into the 'wilderness'. Today the scenic qualities of the OGNR landscape derive from the contrast between the monumental stone remains (where these exist) and the seemingly undisturbed bush around them. This evocative character combines with popular narratives of convicts and colonial times, to produce an experience of 'touching' the past.

The environment of the OGNR is part of a large complex of bushland that surrounds Sydney to the north and west, and is continuous with the northeastern extremity of the Greater Blue Mountains World Heritage Area. The geology contributes importantly to the character and aesthetic appeal of the OGNR landscape through its range of differential sandstone weathering.

This area is part of an Indigenous cultural landscape which includes pre-colonial and colonial tracks, art sites, sites of work and habitation. Forty-two recorded Indigenous archaeological sites are located within two kilometres of the road, and 13 within 500 metres. Archaeological research in this broader region has made a significant contribution to understanding pre-colonial life ways.

Despite colonial violence and profound ruptures in Indigenous social networks early in the colonial period, Indigenous people maintain links with this cultural landscape from the 19th century through to the present.

The complex of tracks associated with the OGNR, Finch's Line, Simpson's Track, Shepherd's Gully and Sternbeck's Gully Roads, illustrate both the complex history of the construction of the OGNR, but also the manipulation of the official routes by local users.

The early abandonment of the OGNR as a major transport route contributed to the survival of the early colonial fabric of the OGNR. However, the road continued to be used: as a local transport route; for communications, such as the installation of the 1859 Telegraph Line, and for the recreation of local communities.

5.7 Significance of Precincts

In Section 6 we will propose that approaching the road and its landscape in terms of a number of precincts will facilitate the future management of the OGNR (as indeed has been the practice of NPWS in the past). In some cases, such as the Finch's Line, the precinct has a clear geographic boundary which links to its history of construction and abandonment. In other cases however, the precincts have more arbitrary boundaries. While it is important to have a holistic understanding of the significance of the OGNR cultural landscape, it is also important that management of the precincts proceeds on a sound understanding of significance. In view of this, brief assessments of significance have been prepared for each precinct. The location of precincts is shown on Figure 5-1.

Precinct 1 Ascent to Devine's Hill to the Finch's Line Intersection (Lavelle & Karskens 1999 Precinct 3.2.0)

See Figure 5-2. This precinct possesses the most outstanding array of built features relating to the OGNR, including massive retaining walls, buttresses, spillways and culverts. This is the most impressive, intact, and well-preserved early colonial part of the OGNR as a whole. It is of national significance and is included in the draft World Heritage nomination. This precinct also includes a high number of features relating to the road and its construction, which possess historic and research significance: the Stockade site, the so-called Hangman's Cave, and the colonial engraving of a profile head. This precinct provides important views along the road, especially at points where the retaining walls change angle so that they can be viewed in elevation. No Indigenous archaeological sites are known in this precinct.

Precinct 2 Shepherd's Gully Road and Sternbeck's Gully Road (Lavelle & Karskens 1999 Precinct 3.4.0)

See Figure 5-3. This precinct is contained within gullies with dense rainforest vegetation, contrasting to the more open woodland of the OGNR proper. The precinct contains some scant road remains dating from the 1820s (the Original Line), 1840s - 1880s (Sternbeck's Gully) including rubble retaining walls, stone culverts and a stone bridge, and the 1920s-1930s (Shepherd's Gully) which also appears to re-use some stone robbed from the OGNR.

This precinct also features 2 Indigenous archaeological sites (45-2-0188, shelter with art, 45-2-0398, axe grinding grooves). This precinct demonstrates local manipulation of the official road corridors and their ongoing use by local communities. This precinct is of regional and state significance.

Precinct 3 Finch's Line (Lavelle & Karskens 1999 Precinct 3.1.0)

See Figure 5-4. Finch's Line was constructed in 1828 by the No. 25 Road Party and part of the No.3 Iron Gang but work was abandoned in January 1829, in favour of the Devine's Hill ascent. Devine's Hill was opened to foot traffic in November 1829, and Finch's Line was still used for cart traffic until Devine's became available (Webb 2004 pers comm.). This history is representative of the politicking and career building of the men involved in colonial public works. It contains rare, extant 1820s remains relating to road building and to the convict gangs themselves. It features a very steep zigzag ascent with retaining walls of roughly squared masonry up to 5 metres in height. Above the ascent the road follows a relatively flat ridgeline featuring retaining walls and 7 stone stab culverts. This precinct

also contains an array of early colonial features including a quarry site, 3 examples of historic graffiti, an engraved mile marker and the remains of a stone hut.

Precinct 3 contains 1 known Indigenous archaeological site (45-2-0026, shelter with art). The Line provides some spectacular views to the south overlooking Wiseman's Ferry and the Hawkesbury. It also provides important views over bushland to the north. Finch's Line provides a contrasting experience to the more open and maintained road on Devine's Hill, the surrounding vegetation contributes strongly to the aesthetic appeal of the precinct. It is of National significance and is included in the draft World Heritage nomination.

Precinct 4 Finch's Line Intersection to (and including) Mitchell's Loop (Lavelle & Karskens 1999 Precinct 3.5.0)

See Figure 5-5. This precinct takes the OGNR along the ridge top after the Devine's Hill ascent and ends at the feature known as Mitchell's Loop. This is an undocumented deviation that Karskens interprets as an improvement made by Mitchell in 1829-30 (Karskens 1985: 530), although Webb cites a March 1831 letter of instruction from Mitchell to Assistant Surveyor White, indicating that the straightening of the road to the east at Mitchell's Loop was built after this time (Webb 2004 pers comm.).

This precinct features a range of intact colonial features including retaining walls, graffiti, cuttings, drains and a stone cut drinking hole. As the road approaches Mitchell's Loop the surface has become severely eroded due to the angled bedding of the sandstone creating fissures in its surface. Mitchell's Loop features 6 timber culverts in a ruinous condition. Precinct 4 features 1 known Indigenous archaeological site (45-2-0200, a shelter with art). This precinct is of state significance as a part of the OGNR. Its location within the NP means that this precinct can be managed to retain its significance and the integrity of the OGNR corridor.

Precinct 5 Mitchell's Loop to the Western Commission Track Intersection

See Figure 5-6. This section of the road is the least intact in the study area. In Burke's 1988 survey this area has a low incidence of constructed road features, with most in a ruinous condition. This precinct features low retaining walls, cuttings, side drains, and remains of 7 timber and 7 stone culverts, most completely collapsed. Burke also identifies numerous graffiti. This precinct has the highest incidence of recorded Indigenous sites (7), including an open campsite, art sites and grinding grooves. (37-6-0551, an open campsite, 45-3-0875 and 45-3-1556 two sets of rock engravings, 45-3-1554 a set of grinding grooves, 45-3-1557 a shelter with art, 45-3-1557 a shelter with deposit, 45-8-0818, shelter

with art). As this precinct is deepest within the NP it is the least accessible for visitation, but it is visited by bushwalkers, campers and mountain bike riders. This precinct is of State significance as part of the OGNR, with numerous original, though degraded, early colonial features and a landscape rich in Indigenous cultural sites. Its location in a NP means that this precinct is no longer subject to many of the forces that degraded it, and therefore can be managed to retain its significance and the integrity of the OGNR corridor.

Precinct 6 Western Commission Track Intersection to Ten Mile Hollow (Lavelle & Karskens 1999 Precinct 3.6.0)

See Figure 5-7. This part of the OGNR descends from the upper ridge towards Ten Mile Hollow and has suffered considerable degradation similar to Precinct 5. However this section is notable for its more continuous use over the 19th and 20th century. The longer period of use has resulted in upgrading which has removed some historic fabric, but has also resulted in a denser array of historical archaeological remains being found here than elsewhere along the road. This use continues to the present by virtue of one remaining freehold portion, which is occupied by a Buddhist retreat, the Wat Buddha Dhamma.

This precinct features numerous colonial cuttings, sandstone sheet paving, retaining walls and side drains. Most culverts have been replaced by modern ones and a large colonial timber culvert was reconstructed with new material in 2000-01. This precinct also features a 'mistake' – a historically documented deviation of the line that was subsequently abandoned and corrected. Precinct 6 features 1 known Indigenous archaeological site (not yet on register - grinding grooves, 2 clusters on side of creek, 4 & 18 grooves and sink holes in the sandstone), and 7 recorded historical archaeological sites. One of these is thought to be the remains of the Ten Mile Hollow Inn operating in the 1830s. Other sites are thought to derive from 20th century habitation. The Ten Mile Hollow Inn site possesses significant research potential. This precinct is accessible to authorised visitors via the Simpson's Track and the Western Commission Track and features a camping ground. This precinct is of state significance because it is a part of the OGNR with some intact colonial features, and an archaeological site of significant research potential. Its local significance derives from the archaeological remains of later activities.

Precinct 7 Simpson's Track

See Figure 5-8. Precinct 7 encompasses the first part of a track named for Lt Percy Simpson, and first 'discovered' by a convict called Macdonald in 1828. This route was proposed to take the OGNR northwards from Ten Mile Hollow but was rejected by Mitchell

in favour of the ridge top route to Wollombi. The Simpson's Track continued in local use however, and was the major route to Gosford prior to 1930. The Track proceeds through sandy, open forest, following a gully to the boundary of Dharug NP. Webb (1999) reports the presence of retaining walls and timber culverts but a more detailed survey is required to determine the date of the features. Two Indigenous archaeological sites are known in this precinct, including a fine hand stencil site (45-8-0828 shelter with art, 45-3-0862, shelter with art). This precinct is of state significance for its history as a proposed route for the OGNR. Its regional and local significance derives from its later use and Aboriginal cultural remains.

5.8 Table of Significance of Component Parts

This table forms an important information base for the OGNR as it is drawn from all the research done to date on the Road. As well as updated significance information it compiles notes on condition assessment drawn from this earlier work (*see overleaf for table*).

Significance of Component Parts

In the table below, the Feature No. code is structured as follows.

- The first numeral represents the precinct in which the feature is located.
- The letter codes represent elements of the Road: C – culvert; R - retaining wall; D – drain; HA - historical archaeological site; E - engraving; I - Indigenous site; O – other; T - timber posts and guardrails; Cut – cutting.
- The numbers following the letter code denote the number in the series of the particular element.

Precinct	Feature	Feature No	NPWS ID	Condition	Significance*	Level
1	Ascent of Devine's Hill to Finch's Line					National/ International
	Culverts					
	43 Stone culverts	1/C1-43	Nos 1-43 (Mc Bean and Crisp 1990) NB No 43 (Mc Bean and Crisp 1990) is the same as Burke IIA1/1	No.14 Mc Bean and Crisp 1990, Reconstructed and repaired in 2002. See Archaeological Assessment of this culvert (Austral Archaeology 2001) and Excavation Report (Stedinger Heritage and Archaeology 2002) No 34 (Bill Jordan and Associates 2001) Reconstructed 1998 (Lavelle 1998) (and see Bill Jordan and Associates Pty Ltd 1997)	Primary	

Precinct	Feature	Feature No	NPWS ID	Condition	Significance*	Level
				No 35 geotechnical assessment (Robert Carr and Associates 2001) and reassessment by Bill Jordan and Associates (letter from Jordan to NPWS, 7 November 2001) No 43 - IIA1/1 capping stones replaced (see Stedinger May 2002).		
	1 Stone culvert	1C/44	Burke IIA1/4	Two capping stones removed and left open for public viewing (see Stedinger May 2002).	Primary	
	1 Stone culvert	1/C45	Burke IIA3/2	3 capping stones replaced (see Stedinger May 2002).	Primary	
	1 Stone culvert	1/C46	Stedinger May 2002 '2A new'	9 capping stones replaced. Culvert works described by Stedinger May 2002 but location of '2A new' not mapped or described.	Primary	
	Retaining walls					
	Ranging from 0.5 to 8.5 metres in height, incorporating buttresses, culverts and spillways.	1/R	Mc Bean and Crisp 1990 Comber 1990	Monitoring program established by Bannister and Hunter Surveyors. Monitoring the reconstructed section at Chainage 1617 (see below) as well a bulge at Chainage 1840. NPWS	Primary	

Precinct	Feature	Feature No	NPWS ID	Condition	Significance*	Level
				is also monitoring 6 bulges on Devine's and 1 on the way to Finch's, at Chainage 1840.		
	Retaining wall at Chainage 1617	1/R1	(Bill Jordan and Associates 2001)	Reconstructed (Bill Jordan and Associates 2001) and see (Stedinger July 2002 and Hughes Trueman 2002)	Primary	
	Side drains					
	Stone cut, some with dwarf stone walls	1/D	Mc Bean and Crisp 1990 Comber 1990		Primary	
	Road surface					
	This precinct completely re-surfaced			New surface applied between 1997 – 2001 See Hughes Trueman June 2001	None	
	Historical archaeological sites					
	Convict stockade site	1/HA1		Has had some vegetation cleared from around stone remains and has an interpretive sign	Primary	
	Quarry	1/HA2		Has had some vegetation cleared and has an interpretive sign	Primary	
	Powder cave	1/HA3		Good	Primary	
	Buried culvert a	1/HA4	Mc Bean and Crisp 1990	Not known	Contributory	

Precinct	Feature	Feature No	NPWS ID	Condition	Significance*	Level
	Buried culvert b	1/HA5	Mc Bean and Crisp 1990	Not known	Contributory	
	Buried culvert c	1/HA6	Mc Bean and Crisp 1990	Not known	Contributory	
	Engravings					
	'IG 25 FEB'	1/E1	DH 1 (Austral Archaeology May 2000)	'25' recorded by Comber 1990 but no longer legible in 2000. Deteriorating - poor (Austral Archaeology May 2000)	Contributory	
	'J R J M'	1/E2	DH 2 (Austral Archaeology May 2000)	Poor, deteriorating (Austral Archaeology May 2000)	Contributory	
	'J.T.S'	1/E3	DH 3 (Austral Archaeology May 2000)	'Deteriorating'(Austral Archaeology May 2000)	Contributory	
	'R/ W/ / T' and an engraving of a man in a hangman's noose	1/E4	DH 4 (Austral Archaeology May 2000)	'Deteriorating, almost illegible' (Austral Archaeology May 2000)	Contributory	
	'JB'	1/E5	DH 5 (Austral Archaeology May 2000)	'Good but deteriorating' (Austral Archaeology May 2000)	Contributory	
	'E ^w '	1/E6	DH 6 (Austral Archaeology May 2000)	'Legible but deteriorating' (Austral Archaeology May 2000)	Contributory	
	'WE / 1976'	1/E7	DH 7 (Austral Archaeology May 2000)	Legible but deteriorating (Austral Archaeology May 2000)	Contributory	
	'M A C W.....C'	1/E8	DH 8 (Austral Archaeology May 2000)	'MAC' more recent than W...C which appears to be colonial, deteriorating (Austral Archaeology May 2000)	Contributory	

Precinct	Feature	Feature No	NPWS ID	Condition	Significance*	Level
	'CMc MS SD JB 31- 3- 59 B.B.'	1/E9	DH 9 (Austral Archaeology May 2000)	'Almost illegible deteriorating'. (Austral Archaeology May 2000)	Contributory	
	'RJCAWTHORNE MGEORGE'	1/E10	DH10 (Austral Archaeology May 2000)	'Deteriorating' (Austral Archaeology May 2000)	Contributory	
	'EN'	1/E11	DH 11 (Austral Archaeology May 2000)	'Just legible' (Austral Archaeology May 2000)	Contributory	
	'G F(R)'	1/E12	DH 12 (Austral Archaeology May 2000)	'Legible but deteriorating' (Austral Archaeology May 2000)	Contributory	
	'P'	1/E13	DH 13 (Austral Archaeology May 2000)	Moss covered, legible but deteriorating (Austral Archaeology May 2000)	Contributory	
	Profile head engraving of a man with a tall hat and long pipe	1/E14	DH14 (Austral Archaeology May 2000)	Legible, exposed and deteriorating (Austral Archaeology May 2000)	Primary	
	'C. Coll 1886'	1/E15	DH15 (Austral Archaeology May 2000)	Legible but deteriorating (Austral Archaeology May 2000)	Contributory	
	An arrow	1/E16	DH16 (Austral Archaeology May 2000)	Legible but deteriorating (Austral Archaeology May 2000)	Primary	
	Series of circular pecked holes	1/E17	DH17 (Austral Archaeology May 2000)	Illegible , poor deteriorating (Austral Archaeology May 2000)	Contributory	
	Anchor or arrow	1/E18	DH18 (Austral Archaeology May 2000)	(Austral Archaeology May 2000) (Austral Archaeology May 2000)	Contributory	

Precinct	Feature	Feature No	NPWS ID	Condition	Significance*	Level
	'H r' (?)	1/E19	DH19 (Austral Archaeology May 2000)	(Austral Archaeology May 2000) (Austral Archaeology May 2000)	Contributory	
	Straight line (linesman's mark)	1/E20	DH20 (Austral Archaeology May 2000)	'Legible' (Austral Archaeology May 2000)	Contributory	
	'H'	1/E21	DH21 (Austral Archaeology May 2000)	'Illegible, poor deteriorating' (Austral Archaeology May 2000)	Contributory	
2	Shepherd's and Sternbeck's Gully Roads					Regional/State
	Indigenous sites					
	Shelter with art	2/I1	45-2-0188		Contributory	
	Axe grinding groove	2/I2	45-2-0398		Contributory	
	Retaining walls					
	Ranging from one course to 7 metres in height, mostly rubble masonry	2/R			Primary	
	GPS point white peg (monitoring station)	2/R1			Primary	
	Culverts					
	Upper Steinbeck's Gully Road, Stone culvert	2/C1	Culvert 1 Comber 1991		Contributory	
	Upper Sternbeck's Gully Road, Stone culvert	2/C2	Culvert 2 Comber 1991		Contributory	
	Upper Sternbeck's Gully Road, Stone culvert	2/C3	Culvert 3 Comber 1991		Contributory	
	Upper Sternbeck's Gully Road, Stone culvert	2/C4	Culvert 4 Comber 1991		Contributory	
	Upper Sternbeck's Gully Road, Stone culvert	2/C5	Culvert 5 Comber 1991		Contributory	
	Upper Sternbeck's Gully Road, Stone culvert	2/C6	Culvert 6		Contributory	

Precinct	Feature	Feature No	NPWS ID	Condition	Significance*	Level
			Comber 1991			
	Upper Sternbeck's Gully Road, Stone culvert	2/C7	Culvert 7 Comber 1991		Contributory	
	Shepherd's Gully Road, Stone culvert	2/C8	Culvert 1 Comber 1991		Contributory	
	Shepherd's Gully Road, Stone and timber culvert	2/C9	Culvert 2 Comber 1991		Contributory	
	Shepherd's Gully Road, Stone culvert	2/C10	Culvert 3 Comber 1991		Contributory	
	Shepherd's Gully Road, Stone culvert	2/C11	Culvert 4 Comber 1991		Contributory	
	Shepherd's Gully Road, Stone and timber culvert	2/C12	Culvert 5 Comber 1991		Contributory	
	Shepherd's Gully Road, Stone culvert	2/C13	Culvert 6 Comber 1991		Contributory	
	Shepherd's Gully Road, Stone and timber decking culvert	2/C14	Culvert 7 Comber 1991		Contributory	
	Shepherd's Gully Road, Stone culvert	2/C15	Culvert 8 Comber 1991		Contributory	
	Shepherd's Gully Road, Timber culvert	2/C16	Culvert 9 Comber 1991		Contributory	
	Shepherd's Gully Road, Stone and pipe culvert	2/C17	Culvert 10 Comber 1991		Contributory	
	Shepherd's Gully Road, Pipe culvert	2/C18	Culvert 11 Comber 1991		Contributory	
	Shepherd's Gully Road, Stone and pipe culvert	2/C19	Culvert 12 Comber 1991		Contributory	
	Shepherd's Gully Road, Stone culvert	2/C20	Culvert 13 Comber 1991		Contributory	
	Shepherd's Gully Road, Stone culvert	2/C21	Culvert 14 Comber 1991		Contributory	
	Shepherd's Gully Road, Stone culvert	2/C22	Culvert 15 Comber 1991		Contributory	
	Shepherd's Gully Road, Stone culvert	2/C23	Culvert 16		Contributory	

Precinct	Feature	Feature No	NPWS ID	Condition	Significance*	Level
			Comber 1991			
	Shepherd's Gully Road, Stone culvert	2/C24	Culvert 17 Comber 1991		Contributory	
	Shepherd's Gully Road, Stone culvert	2/C25	Culvert 18 Comber 1991		Contributory	
	Historical archaeological sites					
	Upper Sternbeck's Gully Road stone bridge	2/HA1	Comber 1991:21	No decking. Stone abutments, western abutment partially collapsed (Comber 1991)	Primary	
	Engravings					
	'T. Davey Al Vickers Linesmen' and two representations of telegraph poles.	2/E1	SGR1 (Austral Archaeology May 2000)	'Legible but deteriorating'(Austral Archaeology May 2000)	Primary	
3	Finch's Line					National/ International
	Indigenous sites					
	Shelter with Art	3/I1	45-2-0026		Contributory	
	Culverts					
	Stone culvert	3/C1	Culvert 1 (Comber 1991)	Good but blocked. (HLA-Envirosciences March 2000)	Primary	
	Stone culvert M1a	3/C2	Culvert 2 (Comber 1991)	Good but blocked. (HLA-Envirosciences March 2000)	Primary	
	Stone culvert M1a	3/C3	Culvert 3 (Comber 1991)	Good. Culvert cleared and archaeologically investigated in 2000. (HLA-Envirosciences May2000)	Primary	

Precinct	Feature	Feature No	NPWS ID	Condition	Significance*	Level
	Stone culvert	3/C4	Culvert 4 (Comber 1991)	Good, functioning. (HLA-Envirosciences May 2000)	Primary	
	Stone culvert	3/C5	Culvert 5 (Comber 1991)	Good, functioning, to west of outlet some unstable wall. (HLA-Envirosciences May 2000)	Primary	
	Stone culvert	3/C6	Culvert 6 (Comber 1991)	Good, functioning. (HLA-Envirosciences May 2000)	Primary	
	Stone culvert	3/C7	Culvert 7 (Comber 1991)	Collapsed but stable. (HLA-Envirosciences May 2000)	Primary	
	Retaining walls					
	Retaining walls of stone and rubble, of varying heights	3/R	Comber 1991	Erosion and collapse in some locations, vegetation has been cleared in recent years: generally good condition. See also Comber 1991: 30.	Primary	
	Historical archaeological sites					
	Telegraph remains	3/HA1			Contributory	
	Stockpile M1/4	3/HA2	Comber 1991: 13		Contributory	
	Quarry site	3/HA3	Comber 1991: 19		Primary	
	Hut site (powder magazine (L&K)?)	3/HA4	Comber 1991: 23		Primary	
	Engravings					
	Broad arrow	3/E1	FL1 (Austral Archaeology May 2000)	'Legible but deteriorating – covered in moss' (Austral Archaeology	Primary	

Precinct	Feature	Feature No	NPWS ID	Condition	Significance*	Level
				May 2000: 43)		
	No. 25 RD Party M1/3	3/E2	FL2 (Austral Archaeology May 2000)	'Legible but deteriorating' (Austral Archaeology May 2000: 44)	Primary	
	'M1'	3/E3	FL3 (Austral Archaeology May 2000)	'Legible but deteriorating' (Austral Archaeology May 2000: 445	Primary	
4	Finch's Line Intersection to Mitchell's Loop					State/National
	Indigenous sites					
	Shelter with art	4/I1	45-2-0200		Contributory	
	Culverts					
	Stone block culvert	4/C1	Burke IIA11/1	Good (HLA_Envirosciences 2000)	Primary	
	Stone block culvert	4/C2	Burke IIB5/2	Good (HLA_Envirosciences 2000)	Primary	
	Stone block culvert	4/C3	Burke IIB12/6	Fair (HLA_Envirosciences 2000)	Primary	
	Timber culvert	4/C4	Burke IIC8/5	Poor HLA_Envirosciences 2000)	Primary	
	Timber culvert	4/C5	Burke IIC9/2	Destroyed (HLA_Envirosciences 2000)	Primary	
	Timber culvert	4/C6	Burke IIC10/1	Destroyed (HLA_Envirosciences 2000)	Primary	
	Timber culvert	4/C7	Burke	Poor	Primary	

Precinct	Feature	Feature No	NPWS ID	Condition	Significance*	Level
			IIC10/2	(HLA_Envirosciences 2000)		
	Timber culvert	4/C8	IIC11/2	Poor	Primary	
	Timber culvert	4/C9	IIC18/2	Destroyed	Primary	
	Retaining walls					
		4/R			Primary	
	Engravings					
	'J M'	4/E1	10M/2	'Legible but deteriorating'	Contributory	
	'P(R) W'	4/E2	10M/3	'Legible but deteriorating'	Contributory	
	'1883'	4/E3	10M/4	'Just legible, deteriorating'	Contributory	
	'AR'	4/E4	Burke IIB12/2 10M/1	'Illegible, poor, deteriorating'	Contributory	
	Other					
	Mitchell's Loop feature	4/O1			Primary	
5	Mitchell's Loop to the Western Commission Track					State/National
	Indigenous Sites					
	Open camp site	5/I1	37-6-0551		Contributory	
	Shelter with art	5/I2	45-3-0818		Contributory	
	Rock engraving	5/I3	45-3-0875		Contributory	
	Axe grinding groove	5/I4	45-3-1554		Contributory	
	Rock engraving	5/I5	45-3-1556		Contributory	
	Shelter with art	5/I6	45-3-1557		Contributory	
	Culverts					
	Stone culvert	5/C1	IID5/3	Destroyed (HLA-Envirosciences 2000)	Contributory	
	Stone culvert	5/C2	IID6/3	Destroyed (HLA-Envirosciences 2000)	Contributory	
	Stone culvert	5/C3	IID11/2	Fair (HLA-	Primary	

Precinct	Feature	Feature No	NPWS ID	Condition	Significance*	Level
				Envirosciences 2000)		
	Stone culvert	5/C4	IID11/3	Destroyed (HLA-Envirosciences 2000)	Contributory	
	Timber culvert	5/C5	IID15/1	Destroyed (HLA-Envirosciences 2000)	Contributory	
	Timber culvert	5/C6	IIE5/1	Destroyed (HLA-Envirosciences 2000)	Contributory	
	Stone culvert	5/C7	Burke IIE6/3	Good (HLA-Envirosciences 2000)	Primary	
	Stone culvert	5/C8	Burke IIE7/2	Fair (HLA-Envirosciences 2000)	Primary	
	Timber culvert	5/C9	Burke IIE15/1	Poor (HLA-Envirosciences 2000)	Contributory	
	Timber culvert	5/C10	Burke IIF1/1	Poor (HLA-Envirosciences 2000)	Contributory	
	Timber culvert	5/C11	Burke IIF5/1	Poor (HLA-Envirosciences 2000)	Contributory	
	Stone culvert	5/C12	Burke IIF5/2	Poor (HLA-Envirosciences 2000)	Contributory	
	Timber culvert	5/C13	Burke IIF6/2	Destroyed (HLA-Envirosciences 2000)	Contributory	
	Stone culvert	5/C14	Burke IIF6/5	Poor (HLA-Envirosciences 2000)	Contributory	
	Retaining walls					
		5/R			Primary	
	Engravings					
	'H J D'	5/E1	Burke IIC14/2 10M/6(Austral Archaeology May 2000)	'Legible but deteriorating' (Austral Archaeology May 2000)	Contributory	
	Arrow	5/E2	Burke IIC14/3	'Legible but deteriorating' (Austral Archaeology May 2000)	Contributory	

Precinct	Feature	Feature No	NPWS ID	Condition	Significance*	Level
			10M/7 (Austral Archaeology May 2000)	The arrow has attracted further modern graffiti around it which Austral Archaeology recorded separately as 10M/8 and 9 (see below).		
	'1988'	5/E3	10M/8 (Austral Archaeology May 2000)	Added since Burke's survey in 1988.	None	
	'W C M D'	5/E4	10M/9 (Austral Archaeology May 2000)	Added since Burke's survey in 1988.	Contributory	
	' <u>PRT</u> '	5/E5	10M/10 (Austral Archaeology May 2000)	'Legible but deteriorating' (Austral Archaeology May 2000)	Contributory	
	'W J B'	5/E6	10M/11 (Austral Archaeology May 2000)	'Legible but deteriorating' (Austral Archaeology May 2000)	Contributory	
	'H M'	5/E7	Burke IIC18/1 10M/5 (Austral Archaeology May 2000)	'Legible, deteriorating and poor' (Austral Archaeology May 2000)	Contributory	
	'W C'	5/E8	10M/23 (Austral Archaeology May 2000)	'Deteriorating, flaking' (Austral Archaeology May 2000)	Contributory	

Precinct	Feature	Feature No	NPWS ID	Condition	Significance*	Level
			May 2000)			
	'HH'	5/E9	10M/24 (Austral Archaeology May 2000)	'Illegible , poor deteriorating' (Austral Archaeology May 2000)	Contributory	
	'H'	5/E10	10M/25 (Austral Archaeology May 2000)	'Illegible , poor deteriorating' (Austral Archaeology May 2000)	Contributory	
	'JD'	5/E11	10M/26 (Austral Archaeology May 2000)	Illegible , poor deteriorating (Austral Archaeology May 2000)	Contributory	
	'J S'	5/E12	10M/22 (Austral Archaeology May 2000)	'Legible but deteriorating' (Austral Archaeology May 2000)	Contributory	
	'P'	5/E13	10M/21 (Austral Archaeology May 2000)	'Legible but deteriorating' (Austral Archaeology May 2000)	Contributory	
	'W H Poo..'	5/E14	10M/18 (Austral Archaeology May 2000)	'Illegible , poor, deteriorating' (Austral Archaeology May 2000)	Contributory	
	'Len... Fe..'	5/E15	10M/19 (Austral Archaeology May 2000)	'Poor, deteriorating'(Austral Archaeology May 2000)	Contributory	
	'J S'	5/E16	10M/20 (Austral Archaeology May 2000)	'Illegible, poor deteriorating'(Austral Archaeology May 2000)	Contributory	
	Arrow	5/E17	10M/17	'Illegible, poor and	Contributory	

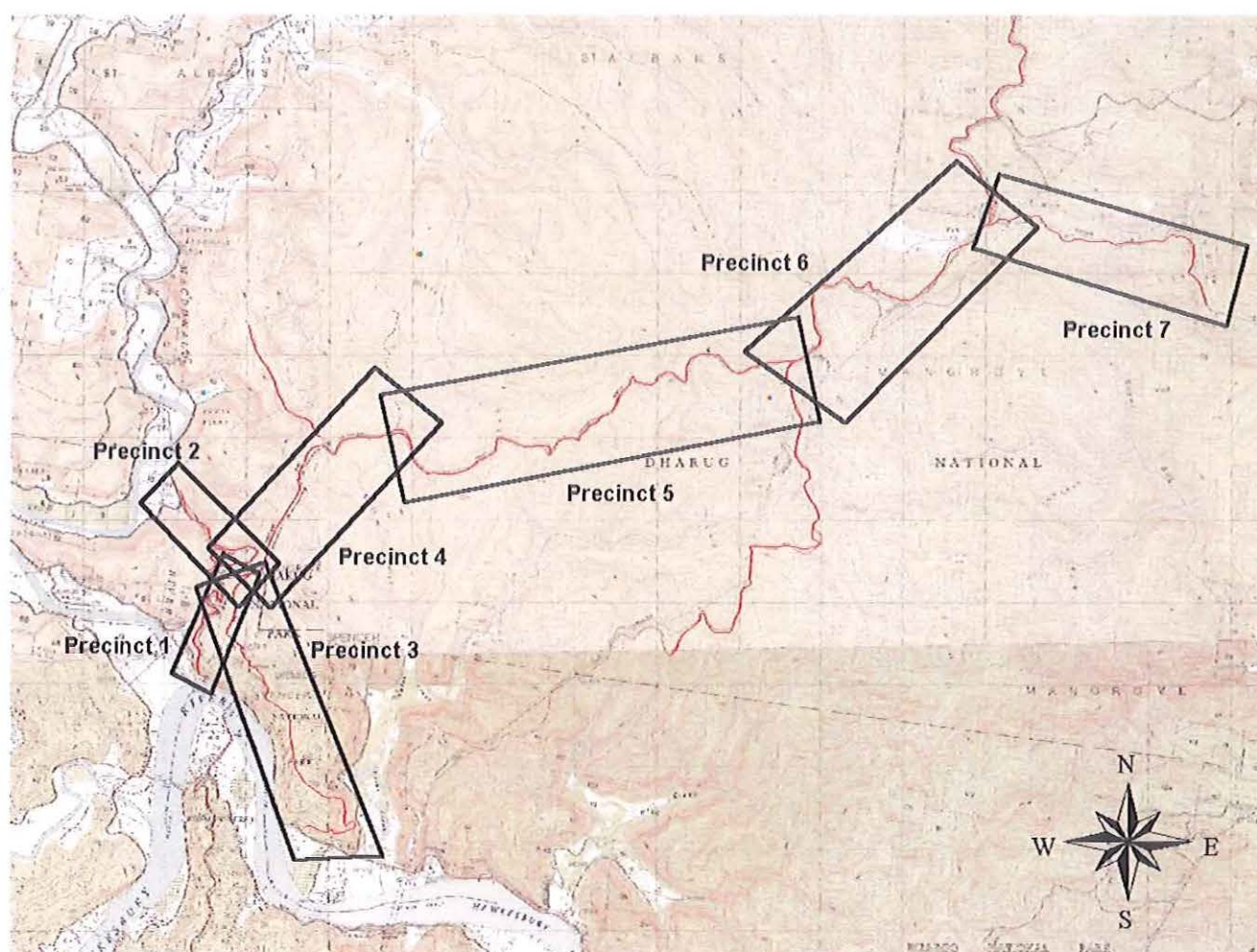
Precinct	Feature	Feature No	NPWS ID	Condition	Significance*	Level
			(Austral Archaeology May 2000)	deteriorating' (Austral Archaeology May 2000)		
	'H'	5/E18	10M/28 (Austral Archaeology May 2000)	'Illegible, poor deteriorating' (Austral Archaeology May 2000)	Contributory	
	Timber posts and guardrails					
	Four timber posts	5/T1	10M/29 (Austral Archaeology May 2000)	'On ground, deteriorating' (Austral Archaeology May 2000)	Contributory	
	Timber posts and rails	5/T2	Burke IIE13/2 10M/16 (Austral Archaeology May 2000)	'Deteriorating' (Austral Archaeology May 2000)	Contributory	
	Two upright timber posts	5/T3	Burke IID13/1 10M/27 (Austral Archaeology May 2000)	'Weathered and deteriorating' (Austral Archaeology May 2000)	Contributory	
6	Western Commission Track to Ten Mile Hollow					State/National
	Indigenous sites					
	Grinding grooves on side of creek	6/I1			Contributory	
	Culverts					
	Stone culvert	6/C1	Burke IIG12/3	Good (HLA-Envirosciences 2002)	Primary	
	Timber culvert	6/C2	Burke IIK1/1	Reconstructed (HLA-Envirosciences 2002)	Primary	

Precinct	Feature	Feature No	NPWS ID	Condition	Significance*	Level
	Concrete culvert (massive erosion) M5/4	6/C3			Intrusive	
	Concrete culvert/pipe M5/5	6/C4			Intrusive	
	Cuttings					
	Shallow cutting (pecked) & liesegang M5/2	6/Cut1			Primary	
	Cutting and drain (peck marks) M5/3	6/Cut2		Damage from bulldozer	Primary	
	Retaining walls					
	Retaining wall M5/6	6/R1			Primary	
	Engravings					
	'PH'	6/E1	Burke I1H8/3 10M/12 (Austral Archaeology May 2000)	'Illegible, poor, deteriorating' (Austral Archaeology May 2000)	Contributory	
	'V L C'	6/E2	Burke I1H11/2 10M/13 (Austral Archaeology May 2000)	'Legible, poor and deteriorating' (Austral Archaeology May 2000)	Contributory	
	'V L C'	6/E3	Burke I1H13/4 10M/14 (Austral Archaeology May 2000)	'Legible, poor, deteriorating' (Austral Archaeology May 2000)	Contributory	
	'H P'	6/E4	Burke I1H14/2 10M/15 (Austral Archaeology May 2000)	'Barely legible, poor and deteriorating' (Austral Archaeology May 2000)	Contributory	
	'E H C' Grafitti M5/7	6/E5	Not previously recorded	Good; legible	Contributory	

Precinct	Feature	Feature No	NPWS ID	Condition	Significance*	Level
	Historical archaeological sites					
	Meisterham House ruin	6/HA1	3905338		Contributory	
	Shed/outbuildings, Meisterham House ruin	6/HA2	3908270		Contributory	
	Garden, Meisterham House ruin	6/HA3	3908271		Contributory	
	Unknown structure, Meisterham House ruin	6/HA4	3908272		Contributory	
	Artefact scatter, Meisterham House ruin	6/HA5	3908273		Contributory	
	House, Meisterham House ruin	6/HA6	3908274		Contributory	
	10 Mile Hollow Inn site	6/HA7	3905337	Disturbed, but retains archaeological potential	Primary	
	Other					
	'The Mistake'	6/O1	Burke IIG13/1		Primary	
7	Simpson's Track					Local/Regional/ State
	Indigenous sites					
	Shelter with art	7/I1	45-3-0862		Contributory	
	Shelter with art	7/I2	45-3-0828		Contributory	
	Retaining walls					
	Webb 1999 reports the existence of retaining walls	7/R	Webb 1999		Unknown	
	Culverts					
	Webb 1999 reports the existence of culverts	7/C	Webb 1999		Unknown	

* Grading of Significance (Modified from Assessing Heritage Significance 2001, NSW Heritage Office.)

- Primary A rare, intact or outstanding element which makes a crucial contribution to the exceptional significance of the item as a whole.
- Contributory An element which is less outstanding, intact or rare, but which contributes to the overall significance of the item.
- None An element which is neutral, neither contributing to nor detracting from the significance of the item.
- Intrusive An unsympathetic element which is damaging to the item's heritage significance.
- Unknown The significance of the item is yet to be determined.



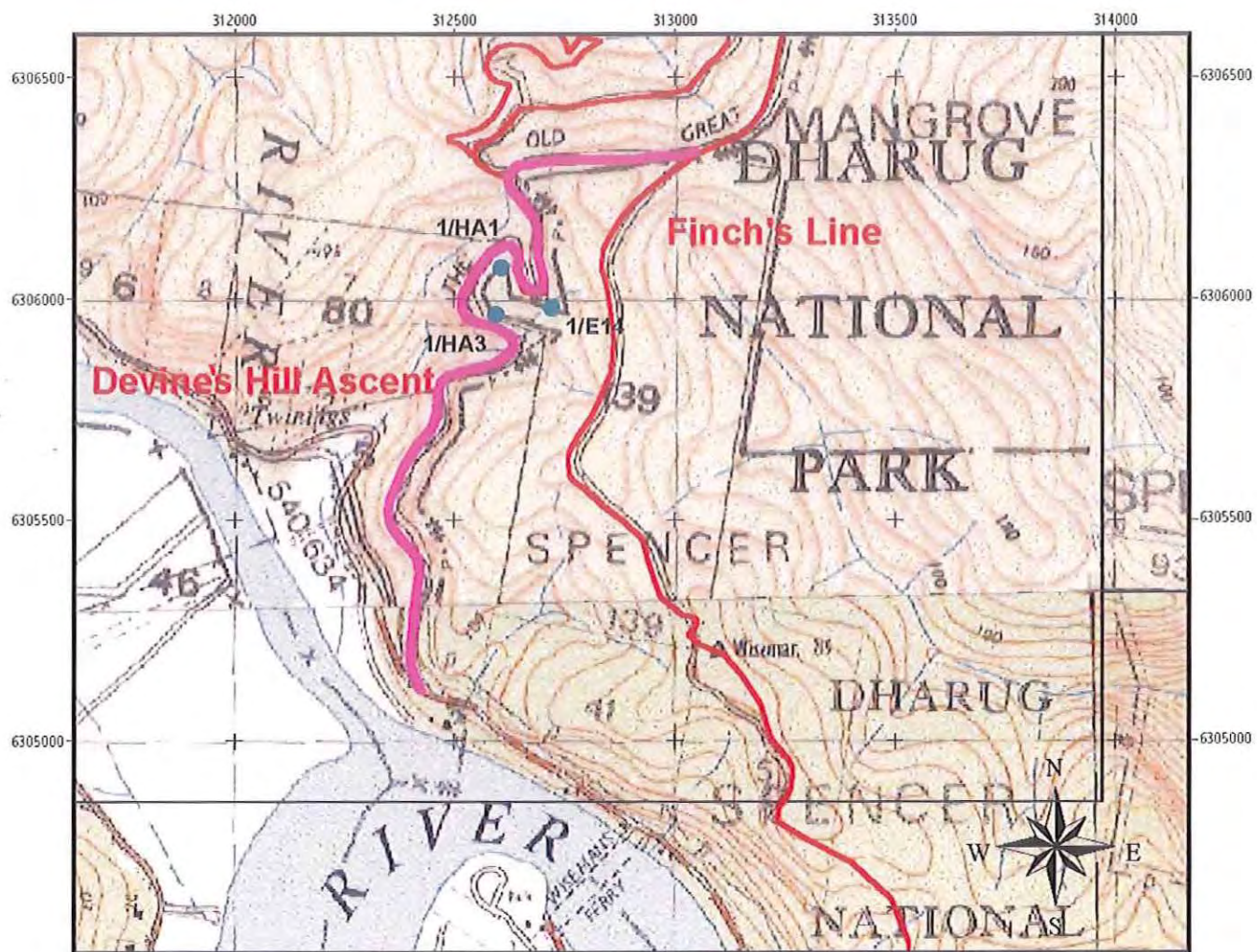


Figure 5-2: Precinct 1 Devine's Hill to Finch's Line

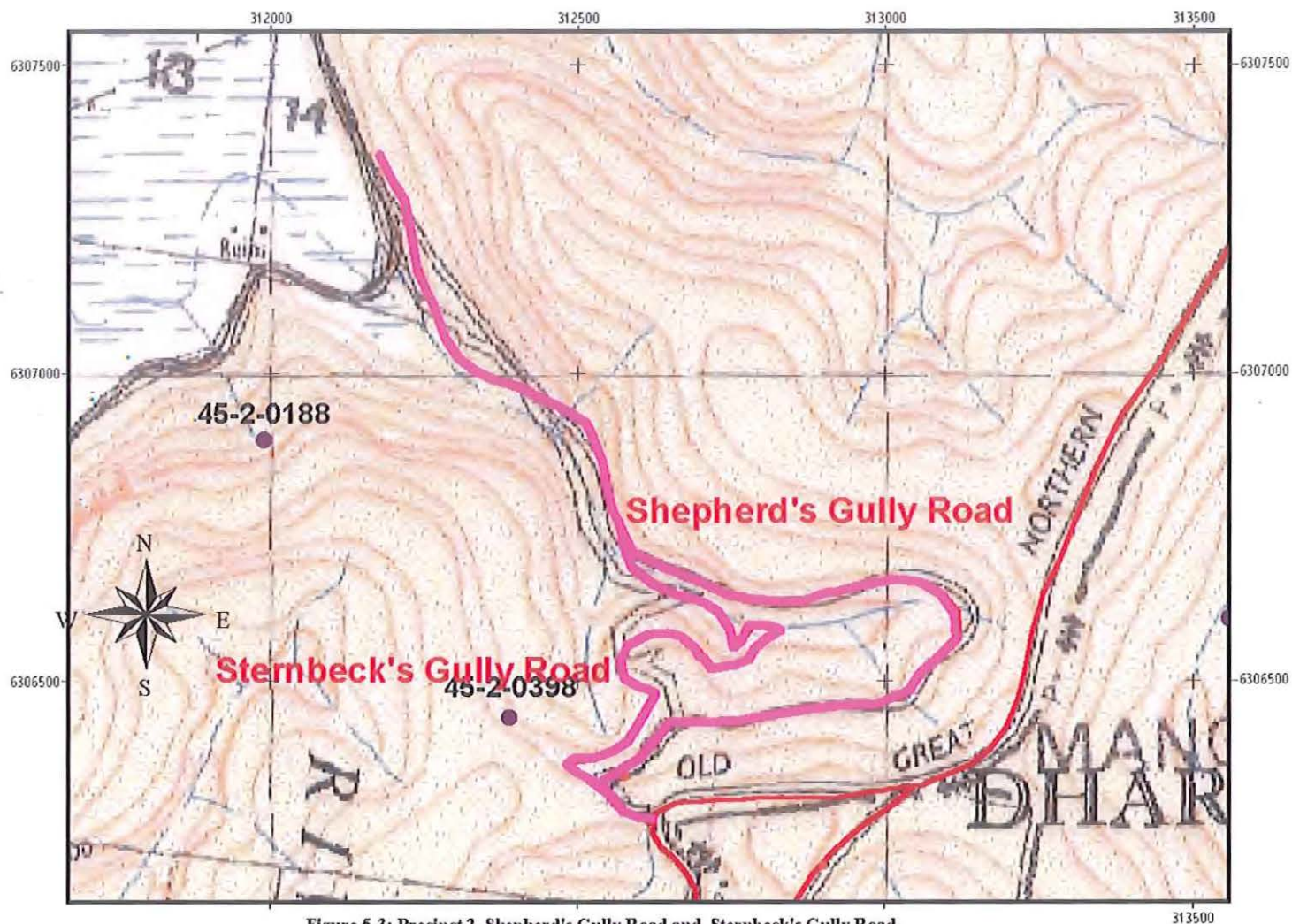


Figure 5-3: Precinct 2 Shepherd's Gully Road and Sternbeck's Gully Road

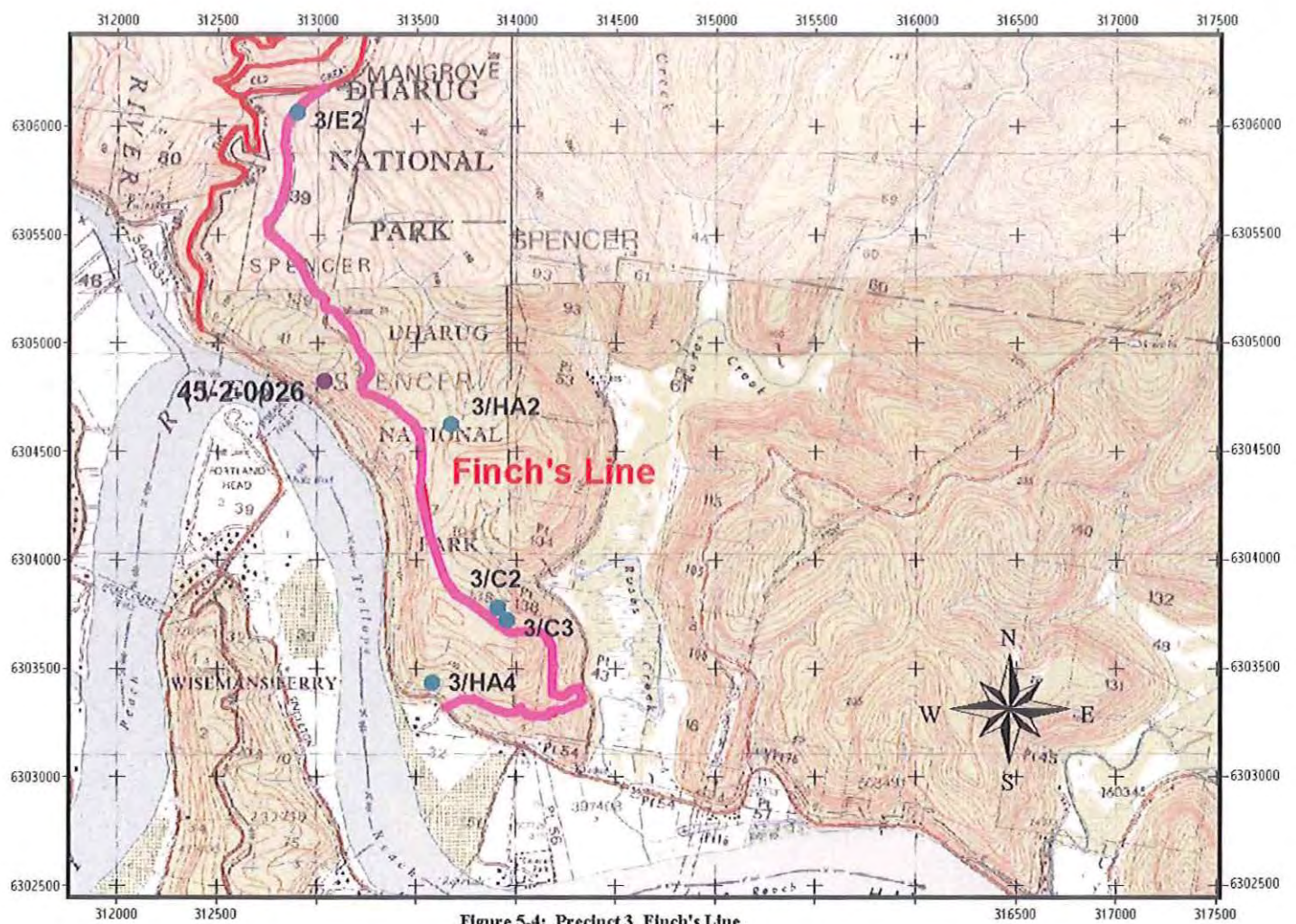


Figure 5-4: Precinct 3 Finch's Line

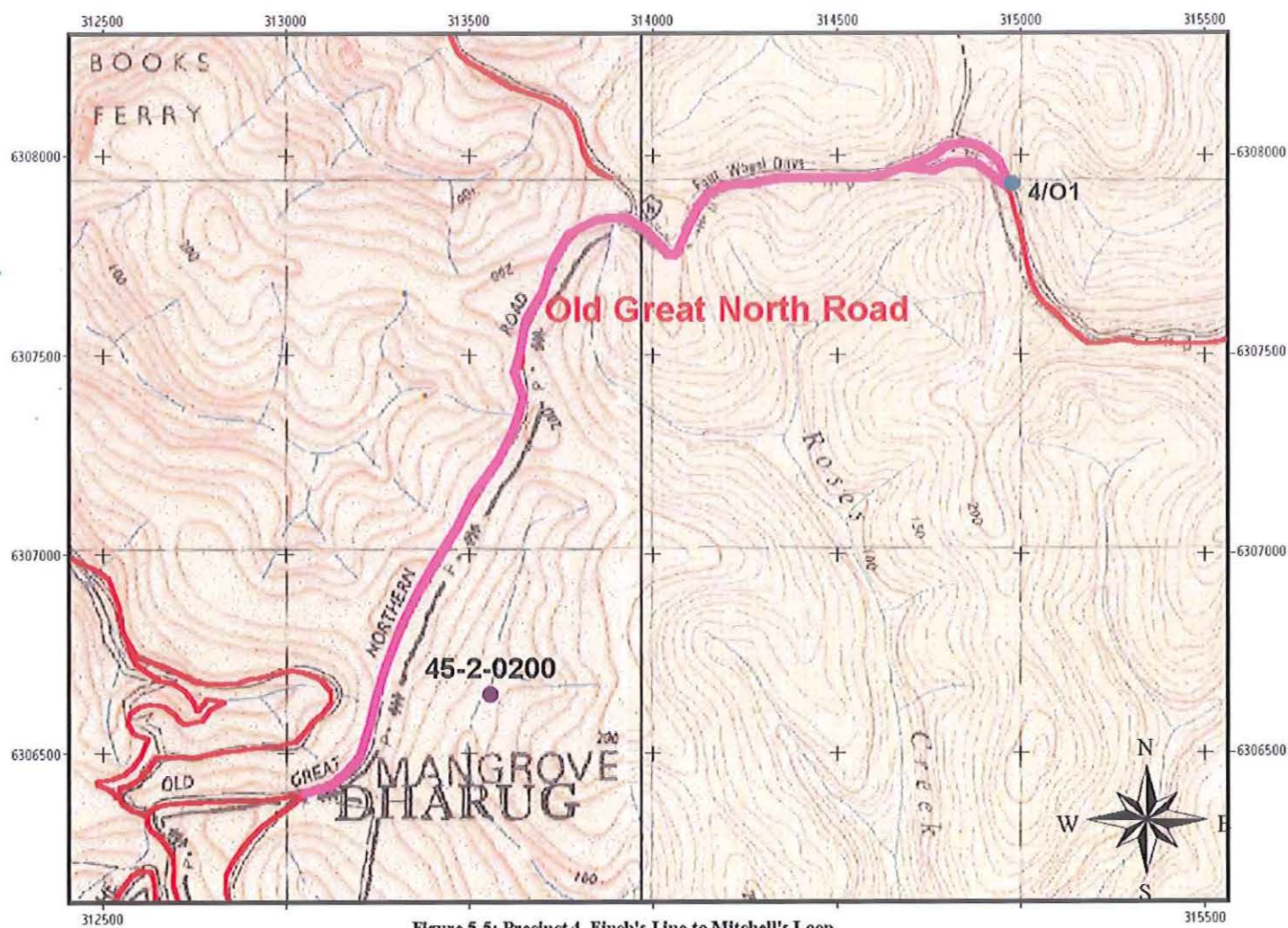


Figure 5-5: Precinct 4 Finch's Line to Mitchell's Loop

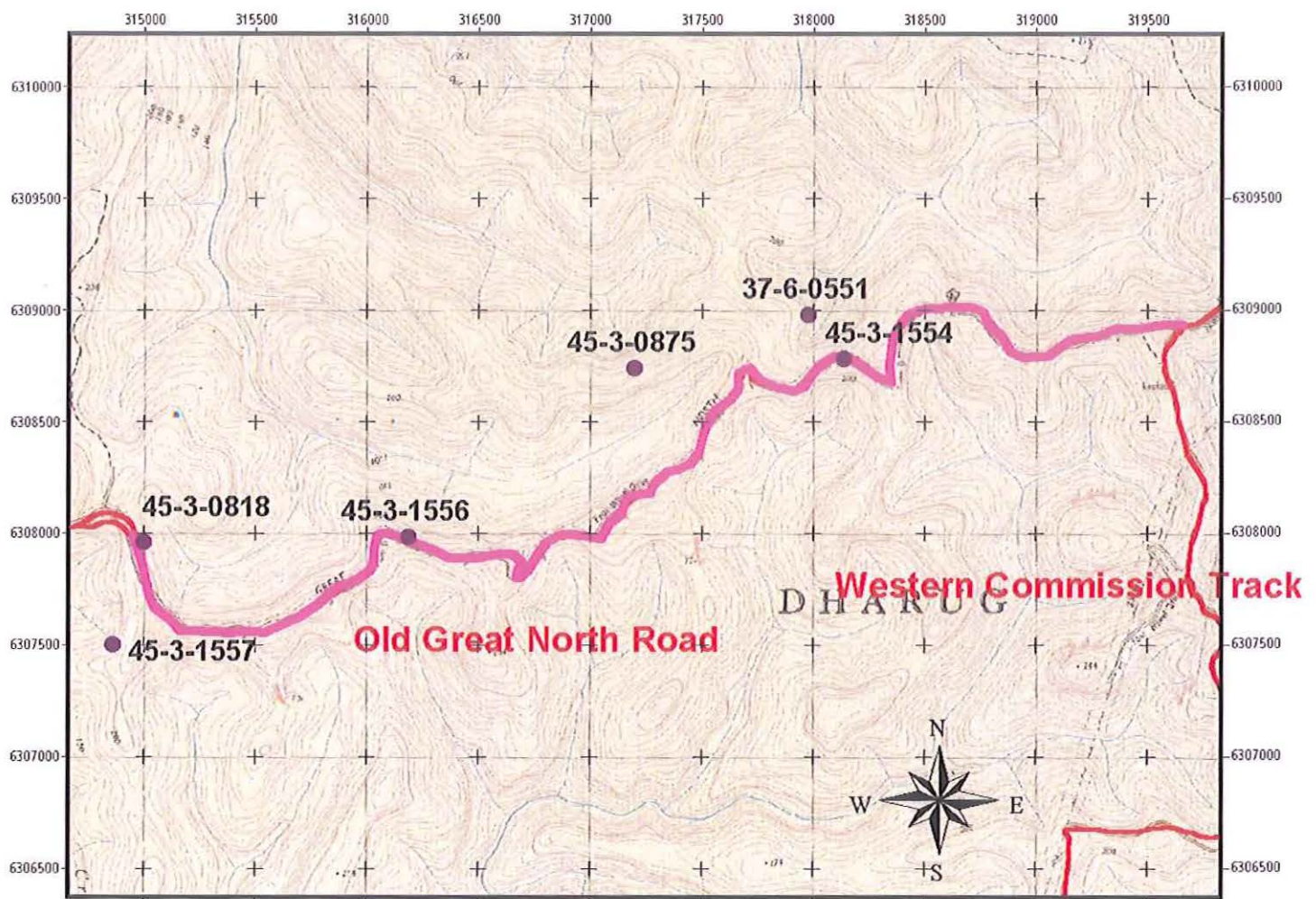


Figure 5-6: Precinct 5 Mitchell's Loop to Western Commission Track

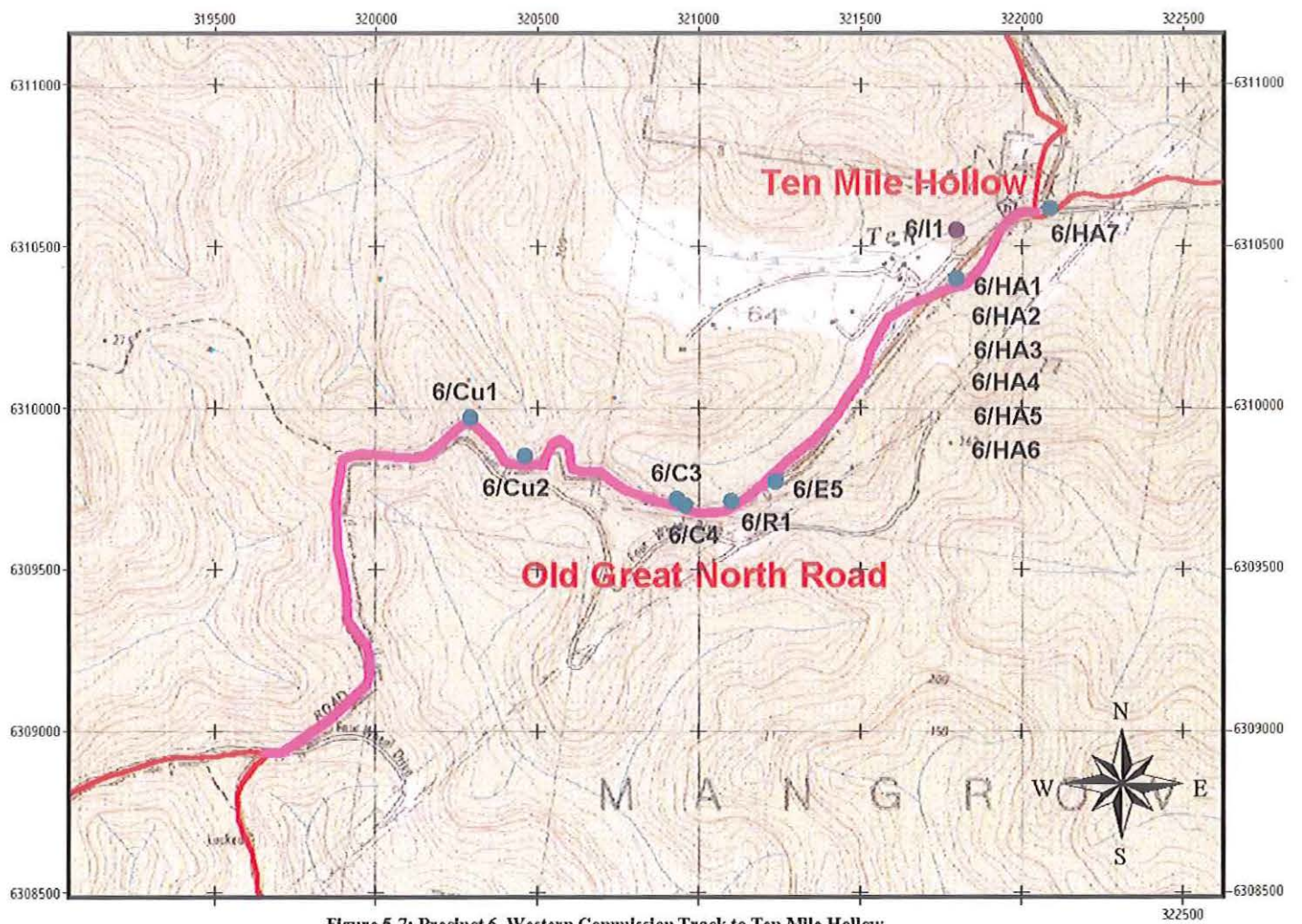


Figure 5-7: Preinct 6 Western Commisssion Track to Ten Mile Hollow

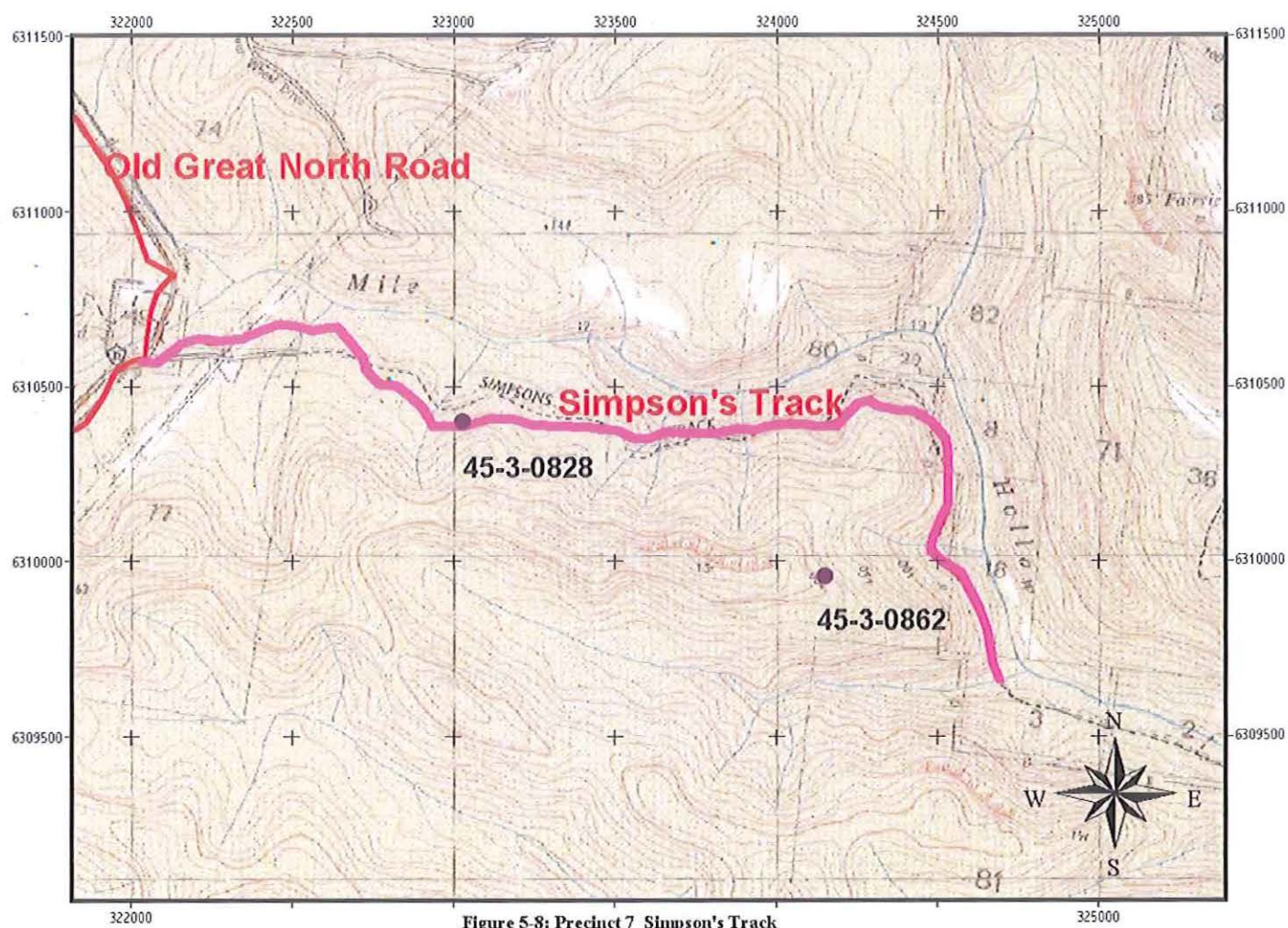


Figure 5-8: Precinct 7 Simpson's Track

6.0 POLICY FORMULATION

Having determined the cultural significance of the OGNR cultural landscape, the next task is to investigate the best ways in which to manage, conserve and interpret this significance. In this section we discuss the issues which affect its future management, such as; NPWS need for a strategic focus for their conservation works; the concerns of stakeholder groups; and the conservation problems affecting the different kinds of heritage items found within the landscape. Issues surrounding visitor facilities and interpretation will be dealt with in Section 7.

6.1 Obligations Arising from Significance

The OGNR cultural landscape has been assessed as possessing significance on all levels through national, state, regional and local, as well as potential international significance recognised by its inclusion in the Draft World Heritage Nomination of Convict Places in Australia (Pearson and Marshall 1995). This section considers how this significance gives rise to some specific requirements in terms of its future use and management.

The fabric of the OGNR

The fabric of the OGNR is held in high regard throughout the community, as has been explained in Section 5. Conservation of this fabric, in the short and long term, must therefore remain one of the primary objectives of heritage management. This poses many challenges for NPWS and the community, and these will be dealt with in the sections below.

Integrated values: Indigenous cultural landscape and natural heritage values

As we have seen, the OGNR does not exist in a vacuum but interacts and interrelates with the natural environment and with the Indigenous cultural landscape. All of these values come together to produce a cultural landscape that can be read in different ways by different people, and on a number of different levels. Interpretation should provide access to understanding and appreciation of these integrated values, as well as to the ongoing importance of the convict themes which have been recognised in the past.

Research potential and educational value

Many aspects of the OGNR cultural landscape hold significant research potential and educational value. Future research should be fostered, and hand in hand with this, interpretation should reflect the changing understandings and new knowledge produced.

Community attachments

Many communities value the OGNR cultural landscape and seek access to it and involvement in its management. Stronger community management partnerships should be fostered so that the balance between rights of access and the need for long-term conservation can be cooperatively assessed.

Indigenous community attachments

The archaeology, history and contemporary community attachments of Indigenous people to this country form an integral part of its heritage significance. This significance gives rise to a requirement to consult and involve Aboriginal people in the management of the OGNR landscape, to provide access and opportunities for cultural and educational experiences and to interpret the Indigenous cultural landscape.

6.2 Current Heritage Status

6.2.1 State Heritage Register

The OGNR is an item on the NSW State Heritage Register (SHR No. 3902005), under the NSW Heritage Act 1977. Items on the SHR require the consent of the Heritage Council for any works or alterations to the item. The Heritage Council generally requires any such proposals to be supported by a CMP. The NPWS OGNR CMP was endorsed by the Heritage Council in 1999.

6.2.2 S170 Register

Also under the Heritage Act, government bodies are required to list the heritage items for which they have responsibility. The NPWS has therefore placed the OGNR on its draft S170 register. The Heritage Council must be notified of proposed works to such items, although compliance with an endorsed CMP replaces the need for continual notifications.

6.2.3 Register of the National Estate

The OGNR is also an item on the Commonwealth's Register of the National Estate (RNE No. 003206). This has no direct legal implications for state bodies but is considered to be an authoritative recognition of heritage significance. Since 1 January 2004 the RNE has become an advisory resource for the new Australian Heritage Council, which is concerned with matters of national and Commonwealth heritage. The Council will maintain and develop the RNE, but its exact function is yet to be determined by that body. The RNE therefore remains an important authoritative listing.

6.2.4 Environment Protection and Biodiversity Conservation Act, 1999

As a site of national heritage significance, this place may also be a candidate for the new National Heritage List, under the Commonwealth *Environment Protection and Biodiversity Conservation Act, 1999*. Only a handful of places have been listed since this legislation came into effect on 1 January 2004. To be placed on this list the site would need to be assessed against the new National Heritage Criteria, and if listed, the Commonwealth Minister for Heritage would become a consent authority. As an item of historic heritage however, the Commonwealth has only limited constitutional powers to enforce its legislation over State land management matters. It is anticipated that National list items would be added on the basis of an accredited management plan, which would be the subject of a bilateral State/Commonwealth agreement.

6.2.5 Draft World Heritage Nomination

The significance of the Devine's Hill and Finch's Line sections of the OGNR in Dharug NP has been recognised by its inclusion in a draft World Heritage Nomination first prepared in 1995. This nomination is still under development and negotiation, but the present Federal government has expressed its wish to proceed with consideration of this nomination.

The primary management objectives for World Heritage properties are part of Australia's general obligations under the World Heritage Convention:

- to protect, conserve and present the World Heritage values of the property;
- to integrate the protection of the area into a comprehensive planning program;
- to give the property a function in the life of the Australian community;

- to strengthen appreciation and respect of the property's World Heritage values, particularly through educational and information programs;
- to keep the community broadly informed about the condition of the World Heritage values of the property; and
- to take appropriate scientific, technical, legal, administrative and financial measures necessary for achieving the foregoing objectives
(<http://www.deh.gov.au/heritage/worldheritage/criteria.html>).

If this nomination is successful then this CMP will need to be reviewed and/or supplemented by consideration of the management implications of the site's World Heritage value.

6.3 Legislative Requirements and Compliance

Management of the heritage values of the OGNR cultural landscape is regulated within a network of state legislation. Of greatest importance in this network are the National Parks and Wildlife Act, 1974 and the Heritage Act 1977. Also relevant are the NSW Environmental Planning and Assessment Act 1979 and the Commonwealth Aboriginal and Torres Strait Islander Heritage Protection Act 1984.

6.3.1 NPW Act 1974

Aboriginal cultural heritage, natural heritage values and the management of reserved lands are regulated through the NPWS Act. The NPW Land Management Regulations also protect non-Aboriginal cultural material, more than 25 years old, found on NPWS managed land.

The NPW Act also requires the preparation of a Plan of Management (POM) for reserved lands. The POM for Dharug NP is discussed further below.

6.3.2 NSW Heritage Act 1977

Whereas the management of Aboriginal cultural heritage is regulated through the NPW Act, non-Indigenous cultural heritage is regulated through the Heritage Act 1977. This Act contains blanket provisions protecting non-Indigenous archaeological relics. To assist in the compliance with these provisions, and with the relics provisions of the NPW

Act, archaeological management guidelines have been developed for the OGNR cultural landscape in this CMP.

A further requirement of the Heritage Act arises from the inclusion of the OGNR on the State Heritage Register (SHR No. 3902005). Inclusion on the SHR means that these sites have been previously assessed to be of state significance and that Heritage Council consent is required for works affecting listed places. NPWS policy provides for the preparation of a Conservation Management Plan for all SHR items within its estate. A major objective of this CMP is therefore to fulfil this requirement and to be endorsed by the NSW Heritage Council as the basis for future management of the place. This CMP will also allow the Heritage Council to upgrade its SHR listing to reflect the integrated natural, cultural and community values of the OGNR cultural landscape, as they have been identified here.

6.3.3 Environmental Planning and Assessment Act 1979

Under Part 5 of the EP&A Act, the NPWS is required to assess the environmental impact of any proposed works or developments. The definition of environment used here is:

all aspects of the surroundings of humans whether affecting any human as an individual or in his or her social groupings.

This CMP will form a basis of information for any future proposals requiring a Review of Environmental Factors to be determined by NPWS. As set out above, endorsement of this CMP by the NSW Heritage Office, or by its delegate the Director of Cultural Heritage, NPWS, will also mean that proposals in accordance with this CMP have the concurrence of the Heritage Council.

6.3.4 Commonwealth Aboriginal and Torres Strait Islander Heritage Protection Act 1984.

This Act is designed to provide protection for Aboriginal heritage when this protection is not forthcoming at the state level. This legislation can be activated by applications made by Aboriginal people. This CMP aims to both identify the range of Aboriginal heritage values associated with the OGNR cultural landscape and ensure that they are managed together with the Indigenous community in a strong collaborative and consultative environment.

6.3.5 Dharug National Park Plan of Management

The NPW Act 1974 requires each national park to have an adopted Plan of Management (POM). The Dharug National Park Plan of Management was adopted in 1997 and policies that are relevant to the conservation and management of the Old Great North Road are listed below, using the POM numbering. The POM should be reviewed in light of the findings of this CMP.

4.1.6 The Old Great North Road

- *The NPWS will liaise with the Convict Road Committee (now known as the Convict Trail Project) to ensure that its management of that part of the Road in Dharug National Park is complementary to the management of the other (non-park) sections of the Road.*
- *The Old Great North Road and its setting will be conserved in order to retain or recover its significance which derives from a combination of its:*
 - *physical evidence and the ability of that evidence to provide essential and unique information;*
 - *association with historical figures, events and processes;*
 - *aesthetic values; and*
 - *integrity as a whole.*
- *Only those uses will be permitted that are compatible with the retention or recovery of the significance of the Road or which allow appreciation of the significance of the Road.*
- *Vehicles will not be permitted on the section of the Old Great North Road south of the Western Commission Trail, except for essential management purposes.*
- *Vehicle use of that part of the Old Great North Road north of the Western Commission Trail will be permitted for access to the Buddhist Retreat (Wat Buddha Dhamma) and for vehicle-based Discovery programs.*
- *Restoration, reconstruction, adaptation and modification will be used only where it will retain or recover the significance of the road.*
- *Only those new elements that are compatible with the retention or understanding of the significance of the road will be permitted.*

- *Removal of movable relics will only be permitted if they cannot be conserved in situ and only in accordance with the approval of the Heritage Council of NSW.*
- *An excavation permit under the Heritage Act will be obtained for any work that requires the disturbance or removal of the fabric.*
- *In the event that any additional sections of the road are acquired by the NPWS, the relevant policies of the draft conservation plan and this plan of management will apply to their management.*

4.2.1 Promotion of the Park

- *The Old Great North Road will be interpreted to the public.*

4.2.2 Recreational Opportunities

- *Only non-damaging use and access for the purpose of appreciating the Old Great North Road will be permitted.*
- *Use of the informal pack camping areas along the Old Great North Road will be monitored and if unacceptable impacts arise through the use of these sites, additional formal pack camping areas may be provided, subject to environmental assessment.*
- *Bicycle touring will be permitted on the Old Great North Road and management trail systems.*
- *Horse riding will be permitted only on sections of the Old Great North Road and will be in accordance with a Horse riding Management Plan for Dharug and Yengo National Parks and Parr State Recreation Area and in accordance with the NPWS Horse Riding Code.*

4.2.3 Scientific Research

- *Scientific research to improve understanding and management of the park will be encouraged. Priority will be given to research into:*
 - *further understanding of the Old Great North Road.*
- *Research on the Old Great North Road which involves disturbance of the fabric or potential disturbance of the fabric may be permitted if it will:*

- *provide data essential for the conservation of the road; and/or*
- *secure evidence about to be lost or made inaccessible through necessary conservation or other unavoidable action.*

4.2.4 Management Operations

- *Management use of and access via the Old Great North Road for non-emergency purposes will be restricted to a level which does not damage the fabric of the Road.*

6.4 Non-statutory Considerations

6.4.1 *Burra Charter*, ICOMOS (latest version 1999)

The most significant non-statutory consideration for heritage management is the Australia ICOMOS *Burra Charter* which since 1979 has established a benchmark for the principles, procedures and practices of heritage conservation. The preparation of this CMP has been in accordance with the procedures set out in the *Burra Charter*.

6.4.2 Code of Ethics of Co-Existence in Conserving Significant Places, ICOMOS, 1994

This code aims to establish the principle that competing cultural values need not be resolved through heritage management, but should be able to co-exist. This code states that it is a conservation practitioner's responsibility to identify and acknowledge all cultural groups associated with a place. The basis of this code is well reflected in NPWS policy (discussed below), which asserts that all places are constructed as significant through an array of discourses concerning natural, cultural and community values. NPWS policy and the brief for this CMP therefore embody the concepts of co-existence set out in this charter.

6.4.3 Australian Natural Heritage Charter, World Conservation Union

Like the *Burra Charter*, this Charter aimed to establish clear procedures and processes for the assessment of natural heritage values. This Charter acknowledges to an extent that natural values are culturally constructed, but also argues for 'the existence value' of eco-systems. This CMP has based its assessment of significance and conservation policies for natural heritage on the principles of this charter.

6.4.4 Ask First: A guide to respecting Indigenous heritage places and values, Australian Heritage Commission

This guide establishes a consultation and management process designed to ensure that Indigenous people are actively involved in the heritage management process and that consultation is effective. This draft CMP has involved initial consultation with Indigenous people with interests in the area. Consultation on the basis of this draft, towards the finalisation of the CMP, will be undertaken in accordance with this guide and with NPWS policy (see below).

6.4.5 Non-statutory heritage lists and organisations

The OGNR is recognised by a range of non-statutory bodies that reinforce the high esteem in which it is held by the community. The National Trust of Australia (NSW) and the Institution of Engineers both list the item.

The community based organisation, The Convict Trail Project, has also prepared a CMP for the entire OGNR :The Stage 1 Conservation Plan for the Great North Road (Lavelle, Karskens & RTA Technology 1999) covers the entire 240km length of the road from Sydney to the Hunter Valley. Along this length the status of the road varies from continuing use as a gazetted road in urban and rural areas, to management trail and walking track in or adjacent to National Parks. The road is owned or managed by a diverse range of authorities including up to ten local government areas. The Stage 1 Conservation Plan is an advisory document. The plan identifies the lack of a holistic management structure for the full length of the road as the biggest issue affecting its long-term care as a heritage item, and recommends preparation of a Regional Environmental Plan specifically for the road, as the best way of delivering a consistent planning framework. The plan provides a range of broad policies for the conservation of the road which are supported.

6.5 NPWS Policy and Management Issues

6.5.1 The NSW NPWS Corporate Plan, 2000 – 2003

The NSW NPWS *Corporate Plan, 2000 – 2003* establishes some key directions and priorities for the Service to develop in this period. Of relevance to this document is the change in emphasis it promotes towards a 'holistic approach to conservation which integrates natural, cultural and community values' (NPWS 2001: 12). This CMP for the

OGNR cultural landscape assists NPWS in achieving a number of its Objectives for Conservation Planning, Conservation Management and Conservation Facilitation as set out in the Corporate Plan in the following key result areas:

Key Result Area	Corporate Objective
Conservation Assessment	<i>To achieve the use of rigorous and systematic policy, science and assessment as the basis for conservation planning and management in NSW.</i>
Conservation Planning	<i>To improve the process for establishing conservation priorities for NSW to ensure:</i> <ul style="list-style-type: none"> <i>• integration of natural, cultural and community values;</i> <i>• consultation and transparency; and</i> <i>• responsiveness to threats and change.</i>
Conservation Management	<i>Objective 1 – To work with Aboriginal communities to achieve the protection of the natural and cultural heritage through mechanisms which also deliver social and economic benefits.</i>
	<i>Objective 5 – To manage NPWS built assets to achieve conservation and health and safety outcomes.</i>
	<i>Objective 7 – To contribute to the environmental, social and economic well being of local and regional communities.</i>
Conservation Facilitation	<i>Objective 1 – To work with the community to foster understanding and appreciation of, and commitment to cultural and natural heritage.</i>
	<i>Objective 2 – To increase community involvement in the management of natural and cultural heritage conservation in NSW.</i>
	<i>Objective 3- To enhance people's enjoyment of the park system.</i>
	<i>Objective 4 - To provide practical guidance and support for community conservation activities.</i>

6.5.2 NPWS policy framework

NPWS has a dense policy framework that reflects the complexity of issues it faces in undertaking land management in an ethical, community focused context. The following is

an outline of the policies which have guided this CMP and which will continue to guide the implementation of the conservation policies.

- *Cultural Heritage Strategic Policy*: this establishes guiding principles and policies for the consideration of cultural heritage values in all land management activities.
- *Risk Management Strategic Plan*: provides a framework to help identify priority risk areas for attention, action and review. This CMP raises a number of issues which require further risk assessment.
- *Cultural Heritage Community Consultation Policy*: sets out principles and protocols concerning consultation with communities. This policy guided research for this plan and will continue to guide implementation of the Conservation Policies.
- *Cultural Heritage Information Policy*: acknowledges that communities and individuals are the custodians of their cultural heritage and the owners of the information they possess about it.
- *Guide to approvals for works and activities that impact on cultural heritage places, sites, buildings, landscapes and movable heritage items on NPWS estate*. This guide presents a useful tabulation of the documentation and approvals required for work on heritage places. This CMP should form the basis of documentation for future works proposed for the OGNR cultural landscape, and the guide will assist NPWS staff in the implementation of the Conservation Strategies and Actions.

6.5.3 Current management arrangements

The OGNR cultural landscape presents major management challenges for the NPWS because of its size, the need for extensive ongoing maintenance and protective works, as well as its recognised high level of national significance. A management workshop was held for NPWS staff (Appendix 1.5) to help this CMP identify and address major issues arising for the NPWS. These are discussed below:

Need for a strategic direction for management and works

Following the endorsement of the CMP for the OGNR in 1999, substantial Heritage Asset Maintenance Program (HAMP) funds were made available for conservation works on the OGNR. In undertaking these works, numerous issues arose which pointed to the need for; an agreed strategic direction for works and management; a consistent and

clearly articulated conservation approach; and some additional Conservation Policies on particular issues not covered in the 1999 CMP.

To address these issues, a draft Strategic Plan was prepared by Dharug NP Ranger Sarah Breheny and that draft document provided the starting point for this revised CMP which aims to provide a strongly articulated strategic direction for future management. The goals for future management and priorities are analysed further below.

Funding

NPWS's Heritage Asset Maintenance Program (HAMP) funding program is administered on the basis of competitive bids from NPs state wide. There is, therefore, enormous pressure on this fund, considering the number and range of important heritage assets found in the NPWS estate. Since the endorsement of the CMP for the OGNR, it has attracted substantial HAMP funds for works and also for the employment of temporary field staff.

The NPWS recognises a need to seek alternate sources of funds to assist in the conservation of the OGNR (see Appendix 1.5). Commonwealth funds could ensue if the OGNR is to be listed on the National Heritage List. This list will be a smaller list than the Register of the National Estate and designed to assist in the conservation of items of national significance. The progress of the draft World Heritage Nomination for Australian convict sites could also result in the attraction of funds. However it is impossible to judge the timeframe within which these two listings might be resolved.

In the shorter term, NPWS staff members have expressed interest in seeking sponsorship for the work on the OGNR, and also to investigate the use of volunteers to undertake works. The Convict Trail Project has been successful in these areas and future management of the OGNR should forge stronger links with community.

A maintenance plan

The complexity and extent of the conservation issues arising for the OGNR have led to the need for a detailed Maintenance Plan to guide the nature and frequency of conservation actions. This is discussed further below.

Skills, training and staffing issues

While permanent staff develop significant familiarity with heritage issues, casual staff may require some training in the heritage issues affecting the areas they are working in. Some management practices, such as the protection of historic graffiti, require specialist techniques and experience. Procedures need to be put in place to ensure adequate induction and training for staff of all levels. These should include attendance at Cultural Heritage Division training days and seminars, developing links with skilled staff from other regions and areas, as well as more formal training opportunities.

Expert advice

Significant knowledge and expertise on the OGNR exists in the community in both professional and amateur contexts. The existing community based Regional Advisory Committee should be expanded to include members with considerable heritage expertise to assist and support NPWS staff in assessing heritage issues as they arise.

Consultants

A record of consultant reports and some of the issues arising from them is provided in Appendix 2. A number of issues have arisen surrounding the frequent use of consultants for advice on the OGNR. It is necessary that procedures be adopted by NPWS to enhance both the selection and briefing of appropriate consultants. It would be beneficial to consider the use of period contracts: these are competitively tendered contracts which appoint an approved consultant to undertake works arising over a nominated time period. This would improve the consistency of consultant work and ensure adequate background knowledge of significance and field conditions.

NPWS use requirements for the Road

NPWS currently uses the OGNR for a range of purposes including:

- fire fighting – this can be in conflict with the conservation of the road and is discussed further below;
- rescue – the road can provide access for rescue vehicles, but helicopter rescue is preferred;
- pest/weed management - the road provides access for these activities;
- conservation works - major works require vehicle access and at this time vehicles do not have access to Precinct 5.

Archiving and documentation

Numerous technical reports and specifications have been prepared for the OGNR. Photographs, maps, historical information and other relevant documents have also been acquired. It is important to archive these items and to allow easy access for NPWS staff, consultants, other agencies and community groups.

The Arcview project

NPWS has initiated an Arcview (GIS) project for the OGNR which will provide the ability to store information, increase the security of information and allow people to visualise, explore, query and analyse the information geographically. The computer database will enable features to be located on a map, with links to all the relevant documents, photographs, plans and reports about the feature. It is important that this project is supported and maintained by NPWS.

Research and analysis undertaken for this CMP has included the preparation of a number of new layers of information that can be added to the NPWS database. For a heritage item like the OGNR this kind of digital, geospatial archive has great potential to enhance the efficiency and accuracy of management decisions. Its use should be expanded to track areas of monitoring, highlight areas of archaeological sensitivity and non-sensitivity, such as culverts which have been cleared previously under archaeological supervision. It should be noted that this project did not include extensive mapping of heritage items, which were identified in earlier surveys. While we located major items during fieldwork, there is a need to accurately locate all features. This could be simply done by field staff during monitoring work, using a GPS. In this way the GIS could be quickly developed to be a comprehensive management tool.

6.6 Stakeholders

Wat Buddha Dhamma

The Wat Buddha Dhamma is located on a freehold portion within Dharug NP (Portion 64 at Ten Mile Hollow). The Wat is a Buddhist retreat with a small permanent population which may rise to up to 200 on retreat weekends. Residents and visitors drive to the Wat via the Western Commission Track, which is otherwise kept locked, and thence on the OGNR (Precinct 6). The OGNR also serves as a *de facto* firebreak for this property and

to provide access for firefighting vehicles to protect it. The OGNR is also used as a route for educational walks for visitors to the Wat.

Convict Trail Project

As discussed above, this community group works to promote the conservation of the OGNR as a whole. It has prepared a CMP for the entire OGNR that was endorsed by the Heritage Council (20 January 2000). This group possesses significant expertise on the OGNR and NPWS should continue to forge strong partnerships with it.

Indigenous communities' expectations and interests

As discussed in Section 3, Indigenous communities maintain a range of links with, and activities within, the Dharug/Yengo NPs and surrounding area. Consultation with appropriate LALCs and individuals should be ongoing and further interpretation of the cultural landscape must be developed in collaboration with these groups.

Local community

At the stakeholder meeting much attention was focused on the need for extended access to the OGNR in Dharug NP in the form of vehicle supported walks and extended interpretation, including licensed commercial operators. The locked gates north of Dharug NP were an emotional issue, although the stakeholder group supported no vehicle access to Devine's Hill. Community members had high expectations as to the level of maintenance that was required on the road and also suggested that Shepherd's Gully Road should be maintained so that it provided alternative access to the top of Devine's Hill for vehicles.

At present authorised vehicles are only allowed in Precinct 6 of the OGNR and NPWS has had advice (Crisp 1989 discussed below) that unregulated vehicular access to the OGNR was a major cause of its deterioration. NPWS, as a conservation agency with long-term objectives, must balance conservation needs with the community's desire for vehicular access.

TransGrid

The access to structures 144 to 147 on 25 / 26 Transmission Line 330kV line utilises the Old Great North Road, and TransGrid maintains that access to the Road is essential to

the ongoing maintenance of the line. TransGrid seeks to be involved and consulted on all issues related to the ongoing use of the Road. TransGrid undertakes that, 'All aspects of the transmission line asset maintenance shall be in accordance with the revised MOU that NPWS formally rolled out to NPWS Supervisory Staff and Transgrid (sic) Northern Region Senior Management at Coffs Harbour NPWS office on 6/12/02.'¹ NPWS should seek to update this MOU following the endorsement of this CMP.

Transgrid will need access at least twice a year to transmission line structures on the section of the OGNR between the Western Commission Track and Ten Mile Hollow, as well as further sections of the OGNR to the north of the study area.

The strategic management approach developed in Section 8 should provide a sound basis for the future management of the road including monitoring and possible future upgrading, where funds become available. These may provide future opportunities for extended access for licensed vehicular tours in the section from the top of Devine's Hill through to Mitchell's Loop (Precinct 4) using Shepherd's Gully (Precinct 2) as access. Frequency of tours would need to be controlled and the speed of vehicles limited.

6.7 Users and Impacts

Recreational users

(Extract from NPWS Draft Strategic Plan 2002 follows)

The Old Great North Road is used for many forms of recreation - walking, mountain bike riding and overnight trekking. The sections of the Road are used as follows:

Devine's Hill

- Walkers - individuals and groups

- School groups

- Bushwalking clubs and groups

- Historical groups

- Walking for fitness groups

- Commercial licences for walking/history tours; one licence current

- Discovery activities - walking/history tours

¹ P Minihan, Manager – Property & Environment / Northern Region, TransGrid, letter to Ranger, Dharug National Park, 21 May 2004 [Ref: 2002/1920-04 – P85712])

Finch's Line

Walkers - individuals and groups

Mountain bike riders (bikes must be walked along the ascent from Wiseman's Ferry Road)

Discovery activities - walking, mountain bike trips

Commercial licenses for walking/history tours; no licences current

Shepherd's Gully Roads

Walkers - individuals and groups

Mountain bike riders Discovery activities - walking, mountain bike trips

Horse riders – licensed activities only

Devine's Hill to Western Commission Track

Walkers - individuals and groups

Mountain bike riders

Discovery activities - walking, mountain bike trips, overnight walks camping at Ten Mile Hollow

Duke of Edinburgh trips for school students usually camping at Ten Mile Hollow

Horse riders – licensed activities only

Western Commission Track to Ten Mile Hollow

This is the only section of the Road that currently permits use by authorised vehicles:

Discovery activities - two wheel drive and four-wheel drive tag-along tours, sometimes camping at Ten Mile Hollow

Vehicle access for Wat Buddha Dhamma visitors

Horse riders – licensed activities only

Horse riders

Horse riding is currently not permitted on the Old Great North Road except for organised events that have historically used part of the Road as their route. These events, 'Mud Hut', 'NRMA Careflight' and 'Shazada' are conducted annually and involve only short sections of the OGNR and Shepherd's Gully Road.

Authorisation will not be given to future applications to use the Old Great North Road for horse riding activities.

Transgrid

Transgrid uses the section of the OGNR between the Western Commission Track and Ten Mile Hollow, as well as further sections of the OGNR to the north of the study area, at least twice a year for access to transmission line structures.

Unauthorised access

Unfortunately unauthorised access to the OGNR continues to be a substantial management problem for NPWS. This generally involves damaging and removing the locked gates north of Ten Mile Hollow to enable four-wheel drive vehicles to access the road. Unauthorised access along the Simpson Track also occurs. The OGNR CMP (NPWS 1999) cited a report by heritage engineer Colin Crisp from 1989 that stated that frequent vehicular use of the road was the second major cause of deterioration of the fabric, following uncontrolled water runoff.

Use of the road by four-wheel drive vehicles other than slow and infrequent use can have a damaging effect by virtue of their need to drive too close to retaining walls, over culverts with insufficient top cover and on original (and rare) surface pavements not able to cope with the ferocity and power of modern vehicles.

There are clear and obvious signs that the effect of recent trafficking by 4WD vehicles has accelerated natural damage. This has reached the point where the damage has caused and will continue to cause significant and important items of high heritage value to be lost (McBean and Crisp, File F425, Central Coast District, May 1989).

It is noted that since the beginning of June 2003 there is a new sign at Simpson's Track with symbol signs admitting walkers and mountain bikes, but prohibiting motor vehicles, motorbikes, pets and horses.

6.8 Conservation Issues – Natural Heritage

Arising from the discussion in Section 4, the conservation management issues most pertinent to the maintenance and enhancement of the area's natural heritage are:

- pest and weed management

- ❑ fire management
- ❑ management to avoid degradation of roadside vistas
- ❑ runoff control and stabilisation of the geological features

Taking each in turn, their management requirements and their potential interactions with the requirements for cultural heritage management are as follows:

Pest and weed management

Pest management activities will occur quite independently of the management of cultural heritage. However, weed management has implications for cultural management in the wider context of vegetation control. The Central Coast-Hunter Range Region Pest Management Strategy (NPWS, 2001) nominates low impact weed removal. In many cases where vegetation impinges on cultural relics, a more adaptive management approach is required. A Vegetation Removal Procedure appropriate for cultural resource management will be developed as a management response to these specific cases.

Fire management

The draft Fire Management Plan has many facets – most of which are compatible with, or will not adversely affect, cultural management objectives. Chief among these, with benefits for the management of the road as a cultural resource, are:

- ❑ reduction of wildfire incidence on structures, and
- ❑ maintenance and rehabilitation of vegetation community structures by the establishment of a more natural fire regime.

Roadside vista management

The immediate downslope area (ie, the bushland slope falling away from the road on the downhill side) is the most vulnerable area for degradation from vegetation change (including weed invasion), sedimentation and scouring. While these impacts will affect vegetation values and water quality directly and would require management to address them in those contexts, the potential effect on the scenic value is highlighted here.

Another issue is the growth of vegetation on the road formation itself. Where this becomes dense it will interrupt the important vistas along the road, and diminish the visual experience of the roadway snaking through the bush.

The management of the scenic amenity of the downhill slope from the road requires attention to access control, runoff control, weed control, and appropriate fire management planning. All of these are compatible with the needs of the cultural heritage management of the road and road structures.

Views along the road

Additionally, vegetation control along the road to control the growth of native species on road structures and the road surface will be a special requirement of management. For native vegetation removal and the control of weed species where they impinge on cultural relics, an adaptive management approach will be required. A Vegetation Management Procedure appropriate for cultural heritage management will be developed as a management response to these specific cases.

Runoff control and stabilisation of the geological features

Stabilisation of the road, particularly against the effects of uncontrolled or misdirected runoff water, will prevent sedimentation of downstream drainage lines. It will also safeguard interesting weathered surfaces on rock faces along the road formation (such as the liesegangs). Activities aimed at stabilisation will fulfil both natural and cultural heritage management objectives.

6.9 Conservation Issues – Cultural Heritage

6.9.1 Indigenous heritage

In Section 4 we presented a general overview of the Indigenous heritage in the OGNR cultural landscape. For management purposes, and in the context of conservation and interpretation, it is proposed that a more limited area is discussed in more detail. These areas marry with the management precincts proposed for the OGNR cultural landscape in Section 6.11 below.

There are at least 14 Indigenous archaeological sites in close proximity to the OGNR. A GIS plot of the registered Indigenous places within 500m of either side of the OGNR reveals the following:

Precinct 2, 2 sites (45-2-0188, shelter with art, 45-2-0398, axe grinding grooves)

Precinct 3, 1 site (45-2-0026, shelter with art);

Precinct 4, 1 site (45-2-0200, a shelter with art);

Precinct 5, 7 sites (37-6-0551, an open camp site, 45-3-0875 and 45-3-1556 two sets of rock engravings, 45-3-1554 a set of grinding grooves, 45-3-1557 a shelter with art, 45-3-1557 a shelter with deposit, 45-8-0818, shelter with art).

Precinct 6: 1 site (not yet on register-grinding grooves – 2 clusters on side of creek, 4 & 18 grooves and sink holes in the sandstone.

Precinct 7: 2 sites (45-8-0828 shelter with art, 45-3-0862, shelter with art).

As no systematic survey of the area has been carried out, this is highly likely to be an underestimation of the number of Indigenous places present. There is one known place, a set of grinding grooves in Precinct 6 that have been recorded but not yet registered, and there are highly likely to be further unrecorded places in the area. Nor has the reliability of the existing recordings been checked.

Current usage and relative accessibility

The majority of the sites nearest the OGNR are in the most eroded section of the road, Precinct 5. As these are not readily accessible, they will not be able to be directly incorporated into any interpretation programs. This then concentrates potential visits in the few Indigenous places that are in Precinct 7, and possibly those in Precincts 2, 3 and 4. These places would need to be assessed for their sensitivity to damage by visitors, their incorporation in any interpretation conducted in consultation with Indigenous communities as to its appropriateness, and the condition of the places consistently monitored.

There is limited access to the majority of the Indigenous places in the DNP due to the nature of the rugged sandstone country. This reduces the likelihood of impact of casual visitors to the places. Most visitors will stay on the line of the road. However, where the OGNR follows ridgelines or crosses flatter land, the likelihood of casual visitation is increased. Currently, Discovery Tours visit the site containing hand stencils in a low shelter on relatively level ground to the side of the Simpson's Track, near Ten Mile Hollow (45-8-0828). Cultural awareness tours are also currently conducted by members of the Darkinjung LALC, in country adjacent to and within the DNP. It is important that the condition of these sites is monitored as a part of allowing visitation.

Potential impacts

Any process which leads to build up on the walls of shelters, or leads to loss of pigment or the underlying rock causes long term damage to pigment art. These threats are fire, vegetation growth, lichen, water damage, animal damage, wasp nests and visitor damage – both intentional graffiti and unintentional, such as build up of dust.

A base line assessment of current condition and the threats to sites close to the road and of any sites used in interpretation is needed so that their continuing condition and any changes to that can be consistently monitored.

Basis for management

There is currently no overview of the Indigenous cultural places in the DNP, apart from that provided in this report. A synthesis of the registered site information, followed by a selective checking of the sites' contents and condition would provide the basis for informed management of these significant components of the cultural heritage within the DNP in the future. Base line information on the current status of the places is required. The quality and reliability of the recorded material also requires checking. A first priority is the sites nearest the access routes – the OGNR, and the other tracks through the DNP.

6.9.2 Condition assessment of the OGNR, associated tracks and historical features

This section discusses aspects of the condition of the Road itself and its associated features. These are discussed element by element and are grouped into those that were constructed on, and those that were excavated into, the land surface.

Constructed elements include:

- retaining walls
- stone culverts
- spillways and buttresses
- the sandstone itself
- backfill
- road pavement
- timber elements

Excavated elements include:

- drains
- road surfaces
- quarry
- cuttings and rock faces
- historic graffiti

Major conservation works have been undertaken in recent years and these are summarised below in Section 6.11. Key references on the condition of the road and conservation works, proposed and undertaken, are McBean & Crisp, 1990 and Bill Jordan & Associates 1997.

Retaining walls

These range up to 7m in height and are made of squared sandstone blocks laid as drystone walls (ie, without mortar). The walls are battered and either have battered or inward sloping bedding planes or horizontal bedding planes (in which case the batter is cut on the face of the stone). The retaining walls are totally reliant on open mortar joints and free-draining backfill to prevent damming of water and build up of hydrostatic and earth pressure which could lead to collapses such as the major 1857 event on the Devine's Hill ascent. Though in generally good condition, the retaining walls suffer from:

- bowing or bulging (and local collapse) caused by excess water in the backfill, particularly in sections where the wall is convex in plan;
- slope instability which led to the 1857 collapse on Devine's Hill;
- settlement or washing away of foundation material;
- localised cracking due to settlement or slope instability;
- loss of stones adjacent to damaged culverts;
- disruption by self-sown trees growing below, within or on the pavement above the walls; and
- dislodgment or loss (due to vehicle movement or trees or theft) of stones forming the capping to the walls.

Stone culverts

These range from those constructed of sandstone blocks and slabs (block walls with slabs forming the base or invert as well as the cover) through to those cut entirely into

the bedrock and covered with quarried slabs. The culverts, arguably one the most important parts of the road structure (from a functional point of view), are also the most damaged. They suffer, and have suffered, from:

- loss of protective cover due to erosion of the overlying road pavement;
- displacement, loss, (theft?), and cracking and caving in of cover slabs due to erosion of pavement and the weight of modern vehicles;
- hydrostatic lifting of cover slabs during high intensity rainfall events;
- blocking with leaf and tree debris leading to silting up, in turn leading to excess water dispersal through surrounding backfill;
- with consequent damage to the masonry of the culvert and retaining wall;
- water leaking through open joints in culverts adding to wetting of backfill; and
- loss of any clay jointing that may have sealed the culvert stones, allowing discharge behind the retaining walls.

Spillways and buttresses

Where the culverts disgorge their water from substantial retaining walls there is often a stone block and slab spillway for several metres downslope from the wall with the aim of removing excess water from the base of the masonry. There are also four major 'buttresses' (formerly five) in the highest part of the Devine's Hill retaining walls. As McBean & Crisp (1990) speculate, these seem to be less about structural buttressing and more about water disposal as they incorporate spillways in their outer faces.

The spillways and buttresses suffer from:

- displacement of spillway blocks due to self-sown trees, downslope creep and the major collapse which has removed Buttress 4;
- poor bonding of the buttresses into the retaining walls;
- outward movement and considerable opening of joints in buttresses;
- settlement of foundation material, due to excess water; and
- structural cracking of some blocks due to the above movement.

The sandstone itself

The sandstone that makes up the constructed elements was locally quarried, principally in the main quarry site (see *Quarry* section below) but probably also opportunistically along the road wherever substantial excavation of sound stone was made necessary by the road alignment. There is some variation in stone quality and condition which is

generally sound. The few examples of advanced stone deterioration can be attributed to either:

- poor initial stone selection;
- salt attack in specific locations including culvert soffits, tongues and walls;
- excessive wetting of masonry around blocked culverts; leading to
- fracturing and dislodging of individual stones during structural movement.

Also requiring comment is the slow 'natural' deterioration of the sandstone which occurs more generally along the road. This includes the slow dissolution of the cementing materials within the stone itself, a process which is enhanced by weak acids from biological growths, rotting vegetation and from acidic rain. The same processes affect all of the sandstone in the area including the cuttings and quarried surfaces as well as cliffs and other natural outcrops, and the rate of this natural decay is very slow. However, the more exposed nature of the stone blocks of the road structures renders them more susceptible. In the very long term this decay may be a factor affecting the stability of some features, particularly where point or eccentric loads in the drystone walling exceed the declining strength of the stone. In the short and medium terms any contribution from natural deterioration is likely to be masked by the more severe and more localised decay identified above.

Backfill

This is the material that is backfilled behind the retaining walls and which consists of sandstone rubble in all sizes from boulders down to stone dust. While this is just filling material, its performance is a key factor affecting the future of the road. When saturated, its role in the build up of hydrostatic and earth pressure against the retaining walls, causing bowing and eventual bursting of the structure, is well understood. Less well understood is its condition, and the rate of change of that condition with respect to its ongoing capacity to drain freely. With periodic wetting since construction, including natural events as well as the intensification around blocked culverts, there must have been downward flushing of sand, silt and clay through the fill. Some of this material may now be trapped lower in the wall leading to an increased risk of damming and the excessive build up of hydrostatic and earth pressure in the structure. Downward flushing through the fill will continue whenever there are significant rain events, pointing to the increasing need to improve and maintain the road's drainage systems in order to prevent

major failures. The rate of change in the free draining capacity of the backfill will need to be investigated and monitored.

Road pavement

This is the made surface of the road consisting of large stones of similar size laid in layers with size diminishing towards the surface. The seal, or uppermost layer, may have (in part) been a shaly material (McBean & Crisp 1990) or may have been a more clay rich variant of the local sandstone. The pavement has been very badly damaged and is deeply eroded, in places up to 1.5 metres. As noted earlier, the Devine's Hill ascent and the section between the Western Commission Track and Ten Mile Hollow have been resurfaced in recent years, though the latter has again suffered erosion leading to blocking of drains and culverts. Damage to the road pavement is due to surface water flow scouring out the pavement. This is made worse by poor drainage conditions and is also exacerbated by powerful, heavy modern vehicles.

Timber elements

Timber elements include many culverts where the sides and the top are timber logs instead of stone blocks and slabs. Timber was also used for guard rails: there are a few surviving posts and rails, which were identified by Burke (1988) and described by Austral Archaeology (2000c). Timber elements are subject to fire, fungal rot and termites. Culvert timbers particularly are at risk of fungal rot: a timber culvert at Ten Mile Hollow was reconstructed when the existing logs were found to be rotten (Bill Jordan & Associates 2001; HLA-Envirosciences 2000, 2002).

Drains

Where the road is built on the side of a hill there is generally a gutter or drain on the inward or uphill side. In places the drain is cut into the sandstone bedrock, in others it is cut into earth or decomposed rock and is often excavated only on the base and the uphill side, the outer side being formed by low stone walls generally of only one course height, the latter also serving to restrain the pavement material. Where the drains are cut into earth or soft decomposed rock they are often deeply scoured and their present form would bear little resemblance to the original, whereas in sound bedrock the drains still show the original pick marks from their cutting. Though often blocked with earth, silt, weeds, leaves and tree debris, the drains are in good condition.

Road surfaces

Like the drains, there are places where the road surface is itself a cutting into bedrock. A good example is in Precinct 5 (Figure 4-8) where the slightly weathered sandstone has enabled a smooth road surface to be achieved. Such cuttings are generally in good condition but are at risk of damage to both floor and sides due to use of heavy earthmoving machinery such as graders.

Quarry

Though the source rather than the end use of the sandstone blocks, the main quarry at Devine's Hill is an important feature of the road, as it illustrates part of the complete story of construction. Vegetation, including substantial trees, has overgrown the quarry and some clearing has been undertaken in recent years to expose the made landform. Benches or 'lifts' are readily apparent as are the many drill holes used for blasting blocks from the quarry faces. Though still partially tree covered, the quarry features are clear and in good condition.

Cuttings and rock faces

Like the quarry, the cuttings and rock faces are important parts of the major achievement of building the road. They show abundant evidence of being worked including drill and wedge holes, and many pick marks.

Historic graffiti

These include the engravings that can confidently be ascribed to the period of construction. Most are carved into the near vertical faces of cuttings made as part of the roadworks, though some are in sloping rock pavements. Their condition is generally good, though the natural decay of the sandstone substrate (noted earlier) has led to softening of the carved edges and loss of crisp detail due to biological growths such as lichens. The historic graffiti has been documented (Austral Archaeology 2000c) (though their assertion of rapid decay is questioned) and some attempts at conserving graffiti have been undertaken but these were not successful. This issue requires further field trials and training of field staff in appropriate methods.

Invasive vegetation

This includes the trees, shrubs and grasses that have colonised the drains, the road surfaces and the retaining walls or, in the case of trees, are growing too close to the base of walls, buttresses and spillways. Substantial clearing has been undertaken on the Devine's Hill and Finch's Line sections of the road. In other places the encroachment of vegetation is contributing to the impassability of the road. Trees growing too close to the base of walls may disturb the foundations and also damage stonework directly through abrasion by branches. Trees and shrubs growing within the wall structure have caused localised distortion of the stonework. While grasses may have colonised some parts of the road surface, they do act in a positive way, helping to bind the pavement together and resist scouring by runoff.

Contemporary graffiti

Graffiti which is the product of contemporary vandalism is most often just light scratching of the stone surfaces with sticks, stones or occasionally made implements. When light the scratching mostly only removes lichens and other biological growths exposing fresh sandstone with a much lighter colour which makes the damage more apparent than it really is. Simple field techniques need to be developed for disguising such graffiti, the aim being to do it as soon as possible after the damage has occurred in order to discourage further offenders.

Historical archaeological sites

A number of specific historical archaeological sites have been identified in the study area. Further, the OGNR itself holds potential archaeological information about its construction, modifications and use, and also the potential for deposits to yield buried artefacts. Karkens and Lavelle (1999) state for instance, that silt and other deposits have yielded tools dating to the period of construction. Other artefacts are known to have been collected by NPWS and others over the years. This issue is discussed below.

The identified historical archaeological sites are:

Precinct	Site Name	Feature No	Significance
Precinct 1:	The stockade site	Feature No: 1HA1	Primary/State
Precinct 3:	Hut site	Feature No: 3HA4	Primary/State
Precinct 6:	Ten Mile Hollow Inn sites	Feature No: 6HA7	Primary/State
Precinct 6:	Meisterham sites	Feature No: 6HA1-6	Little/Local

As none of these sites have been subject to redevelopment as such they should all possess integrity, however the Ten Mile Hollow Inn site shows clear signs of both extensive wombat activity as well as illegal digging. Vegetation growth, animal activities and unchecked erosion also have the potential to compromise the integrity of archaeological sites. Erosion should not affect the Inn site as it is in a depositional environment, however it may have affected the stockade site in the past. Vegetation growth is an issue for all sites and a vegetation management strategy should be established for the sites of high significance.

The Telegraph Line

Unfortunately only the most fragmentary remains of the 1859 Telegraph Line have survived frequent bushfires. However some fragments remain and these should be left *in situ*. It is not considered warranted to collect these remains, nor should they be cleaned away during any maintenance work on the road. The remaining fabric of the line should be recorded and photographed (Webb 2004 pers comm.).

Moveable artefacts

As reported in Section 4 a number of artefacts including leg-irons and picks, as well as larger items such as the 7 mile wooden mile post (Burke 1988:50), have been removed by the NPWS for their protection and housed in NPWS head office. As mentioned in chapter 4, the 7 mile post is at present at Bucketty Depot and it is planned to remove it to Mill Creek Depot. Three timbers from the timber culvert at Ten Mile Hollow are also located at Mill Creek Depot. Some other portable artefacts are thought to have been removed by members of the public from places such as the Stockade site (I Webb, pers comm).

Such a collection deserves to be more fully researched, documented and objects' conservation and storage needs assessed and acted upon. In terms of their future security and ongoing conservation, it may be appropriate that moveable artefacts should only be lodged with a professional museum that has established conservation and curatorial procedures, under a written agreement covering insurance, damage to artefacts and display conditions, and which lays down conditions for public access to the collection.

6.9.3 Maintenance plan

The previous sections have identified the essential need for a planned program of maintenance of key elements of the OGNR, including culverts, drains, invasive vegetation and the road pavement. The brief for this project envisages preparation of a Maintenance Plan following completion of this document, and a draft budget has been provided as part of this work.

The Maintenance Plan should include:

- the philosophical basis for maintenance — the conservation objective;
- a strong relationship to the CMP;
- general maintenance guidelines that apply to the whole road;
- specific detailed maintenance schedules on a precinct by precinct basis;
- a finer grained level of detail where appropriate, eg, for different culvert types.

The Maintenance Plan should cover at least the following topics:

- vegetation management — clearing, poisoning procedures, etc.;
- general cleaning of road surfaces, of tree litter, etc.;
- cleaning of gutters, drains and culverts;
- management of historic graffiti;
- cleaning/disguising modern graffiti;
- guidelines for the removal of items for conservation;
- guidelines for *in situ* conservation of timber items;
- monitoring programs; and
- maintenance of road surfaces, including nature and source of topping material.

Because of the unusual nature of this project, the Maintenance Plan should be prepared 'in the field', should involve NPWS staff, and draw on their knowledge and understanding to develop and refine maintenance techniques. Adequate funding and staff training are critical to instituting a maintenance plan (Webb 2004 pers comm.).

6.9.4 Major repairs, reconstructions and the long-term conservation of masonry

While implementation of the maintenance plan should reduce the incidence of failure of elements of the road, this project has identified a range of issues which will continue to cause conservation issues for the masonry elements in particular:

- minimising water entry into the backfill of retaining walls;

- the free draining capacity of the backfill;
- maximising water disposal from the structures;
- the natural deterioration of the sandstone;
- long-term conservation of historic graffiti; and
- best practice conservation and repair of weak stonework.

Dealing with these issues will be a long-term project as there are no simple answers. Indeed there may be no answers, or no practicable answers, to some issues, but it would be neglecting responsibility not to address them and seek solutions. Addressing these issues will require the combined skills of several disciplines (at least engineering and materials conservation); literature searching for case studies of similar problems; consideration of any tests or investigations required; the undertaking of those tests; review of results and the need for any further investigative work; trial application of techniques; and long-term monitoring of any such trials.

It should be clear that these issues are distinct from conservation activities such as the reconstruction of culverts or sections of retaining walls that have collapsed or are at risk of collapse. Such activities (as have already been undertaken on Devine's Hill) are dealt with separately on a precinct by precinct basis.

Part of the point of reviewing the management of the OGNR through a CMP process is to identify issues such as this that require further attention. Even if these issues had been identified before the CMP was commissioned it would not be practicable, for reasons of cost and the long-term nature of the work, to incorporate them into the CMP.

The Maintenance Plan to be developed following this CMP will cover routine maintenance activities, about the clearing of vegetation, culverts and drains; the care of historic graffiti and the cleaning of modern graffiti; and about the maintenance of road surfaces. These are very different to the long-term issues needing resolution for the long-term conservation of masonry. It is conceivable that solutions to some of these long-term issues might be to modify one or more of the maintenance activities, but this will not be known for some time, possibly many years. Meanwhile, maintenance should proceed on current understandings of best practice, and as developed in the preparation of the plan.

Repair and reconstruction

As can be seen in Appendix 2 a body of expert advice on issues commonly associated with the Road has been built up over the years. In addition to this, monitoring programs for wall distortion have already been established at several sites. While the Maintenance Plan will deal with the ongoing protective care of extant fabric, and the long-term issues for masonry conservation have been outlined above, there will continue to be a need to repair and reconstruct elements as they fail. These instances will require expert technical advice on a case by case basis, but the overall conservation approach to these issues will be framed by the Conservation Policies developed in Section 8. This approach is based on the need to conserve extant fabric as far as possible. Repair is preferable to reconstruction where the latter involves replacement and removal of significant fabric. Where the introduction of new materials supports the retention *in situ* of significant fabric this should be considered. If items such as timber culverts, which present particular problems, are beyond repair then they should be stabilised and protected where possible and left *in situ*, while alternative solutions to water diversion or drainage are sought. The reconstruction of collapsed stone elements such as walls and culverts should use existing fabric where possible and the use of new materials should be explored where they will support the *in situ* conservation of existing fabric. New materials may include concrete elements, mortars, sealers or consolidants as appropriate.

The specific approaches to repairs, reconstruction, and conservation are discussed in detail in the maintenance plan (see Chapter 8, Policy 6 – Conservation of the fabric).

6.9.5 Convict Trail Project guidelines

The Convict Trail Project's Stage 1 Conservation Plan for the Great North Road provides Specific Additional Guidelines for Maintenance and Repair (Lavelle, Karskens & RTA Technology, 1999, pp 64-65). In general terms these guidelines are sound conservation practice and should be followed. However, there are some particular points where good practice may be at variance with the recommendations. The guidelines stress that as the retaining walls and other structures were dry laid masonry, there should be no mortar used in their conservation. While as a general approach this is certainly correct, there may be occasions where the judicious use of mortar is an important part of conserving

the whole structure. The guidelines advise against chemical cleaning agents and this is also a good basis from which to start, but particular conservation issues may warrant the limited and specialised use of chemical treatments. Likewise, there may be a role for the use of chemical consolidants and perhaps waterproofing coatings, but only with specialised direction and supervision.

6.10 Disasters

6.10.1 Rainstorm

Periods of very high intensity rainfall present the greatest threat to the fabric of the road. As discussed in section 6.9, high rainfall events may lead to erosion of the road pavement and to overloading of drains and culverts, with consequent discharge through the backfill causing excessive hydrostatic and earth pressure build up behind the retaining walls, leading to bowing, bursting and collapse. There is the risk of the road structures becoming more susceptible to such events through downward flushing of fines within the backfill.

6.10.2 Earthquake

Though potentially more destructive than a rainstorm, earthquakes of sufficient magnitude are fortunately less common.

6.10.3 Risk management

The principal risks that can be managed include:

- risk of water damage during an intense rain storm;
- damage by fire, whether wildfire or controlled burning;
- abrasion damage from vehicles such as bulldozers and graders;
- wear and erosion caused by modern heavy vehicles or powerful 4WDs; and
- vandalism.

The need to manage these risks requires an active maintenance and repair program together with a management framework capable of enforcing appropriate policies.

6.11 Management Precincts

As foreshadowed above and in Section 5, the OGNR needs to be divided into precincts to make management more efficient. The delineation of the precincts also becomes fundamental to the development of a *strategic management approach* that we set out in

the Conservation Policies (Section 8). There is also a need for NPWS and Gosford City Council to clarify responsibility for management of the Road from Ten Mile Hollow to Mount Manning. The NPWS does not actively manage this section of the Road.

Seven management precincts have been delineated. While they are based around the roads and tracks of the study area, we look at each precinct as a cultural landscape incorporating natural, Indigenous and historic values. Assessments of Significance were provided for each precinct, as a basis for management, in Section 5, while detailed tabulations of all known features are shown in Appendix 4.

The precincts formalise NPWS's implicit management approach to the OGNR over the past five years, since the endorsement of the CMP. The following table shows the management actions carried out by NPWS on the precincts since 1997:

<p>Precinct 1 Devine's Hill to Finch's Line</p>	<p>1997-1998 <u>Devine's Hill</u></p> <ul style="list-style-type: none"> • Vegetation removal • Clearing drains and culverts of silt and debris • Set up of bulging walls movement monitoring program • Road surface protection works approximately 250 metres including diversion mounds • Reconstruction of culvert 34 and part of adjacent buttress <p>1998-1999 <u>Devine's Hill</u></p> <ul style="list-style-type: none"> • Road surface protection works approximately 600 metres including diversion mounds from curved wall to 400 metres short of the start of Finch's Line (excluding edges) <p>1999-2000 <u>Devine's Hill</u></p> <ul style="list-style-type: none"> • Archaeological assessment and monitoring of construction of new entranceway • Construction of new entranceway using sandstone blocks, timber post and rail fence and wrought iron gate • Monitoring of bulging walls <p><u>Devine's Hill to Finch's Line</u></p> <ul style="list-style-type: none"> • Road surface protection works approximately 900 metres including diversion mounds <p><u>Devine's Hill to Ten Mile Hollow, Finch's Line and Shepherd's Gully Roads</u></p> <ul style="list-style-type: none"> • Archaeological assessment of all convict graffiti (various locations) and timber guardrail remnants <p>2000-2001 <u>Devine's Hill</u></p> <ul style="list-style-type: none"> • Archaeological recording and geotechnical assessment of retaining wall at culvert 14 • Engineering report on methods of protecting stone culverts and road surface materials – road carrying capacity • Wall stability assessment at chainage 1617 • Monitoring of bulging walls • Geotechnical assessment of culvert 35
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	<p><u>Devine's Hill to Finch's Line</u></p> <ul style="list-style-type: none"> Road surface protection works approximately 900 metres including diversion mounds Report on road surface stabilisation Sandstone slabs to replace broken capping stones <p><u>Devine's Hill to Mitchell's Loop</u></p> <ul style="list-style-type: none"> Vegetation removal <p>2001-2002 <u>Devine's Hill</u></p> <ul style="list-style-type: none"> Reconstruction of retaining wall at chainage 1617 Devine's Hill completed (including completion of REF, archaeological assessment and research design, REF determination and Section 60 approval) Planning completed (including REF, archaeological assessment and research design), approvals obtained (REF determination and Section 60 approval) and replacement stone blocks purchased for reconstruction of culvert 14 Wall movement monitoring program continued, including a new wall bulge survey point established Remove vegetation and soil and divert water at convict head engraving Clearing side drains and culverts of silt and vegetation Re-establishment of side drains <p><u>Devine's Hill to start of Finch's Line</u></p> <ul style="list-style-type: none"> Road resurfacing works completed between the top of Devine's Hill and the start of Finch's Line 500m Re-establishment of side drains. <p>2002-2003 <u>Devine's Hill</u></p> <ul style="list-style-type: none"> Reconstruction of Culvert 14 completed including archaeological report Wall movement monitoring program continued, including a re-establishment of Chainage 1617 as a survey point for monitoring Vegetation removal along side drains Vegetation regrowth removal from quarry site Clearing culverts and side drains of silt and debris Mitigation of soil erosion at Chainage 1617 Removal of soil and rocks that aesthetically impact on the Road
Precinct 2 Shepherd's Gully Road and Sternbeck's Gully Road	<p>1999-2000 <u>Devine's Hill to Ten Mile Hollow, Finch's Line and Shepherd's Gully Roads</u></p> <ul style="list-style-type: none"> Archaeological assessment of all convict graffiti (various locations) and timber guardrail remnants <p>2001 <u>Shepherd's Gully</u></p> <ul style="list-style-type: none"> Remedial Engineering Study, Hughes Trueman
Precinct 3 Finch's Line	<p>1999-2000 <u>Finch's Line</u></p> <ul style="list-style-type: none"> Archaeological assessment of the seven culverts Restoration of culvert 3 (clearing of the inlet) by archaeologist <p>1999-2000 <u>Devine's Hill to Ten Mile Hollow, Finch's Line and Shepherd's Gully Roads</u></p> <ul style="list-style-type: none"> Archaeological assessment of all convict graffiti (various locations) and timber guardrail remnants <p>2001-2002 <u>Finch's Line</u></p> <ul style="list-style-type: none"> Vegetation removal – clearing of stumps, removal of vegetation on road surface Removing silt and debris from culverts <p>2002-2003 <u>Finch's Line</u></p>

	<ul style="list-style-type: none"> • Placement of rock for visitor safety at Culvert 5 • Vegetation regrowth removal from features and road surface
Precinct 4 Finch's Line Intersection to (including) Mitchell's Loop	<p>1999-2000 <u>Devine's Hill to Ten Mile Hollow, Finch's Line and Shepherd's Gully Roads</u></p> <ul style="list-style-type: none"> • Archaeological assessment of all convict graffiti (various locations) and timber guardrail remnants <p>2000-2001 <u>Devine's Hill to Mitchell's Loop</u></p> <ul style="list-style-type: none"> • Vegetation removal
Precinct 5 Mitchell's Loop to the Western Commission Track Intersection	<p>1999-2000 <u>Devine's Hill to Ten Mile Hollow, Finch's Line and Shepherd's Gully Roads</u></p> <ul style="list-style-type: none"> • Archaeological assessment of all convict graffiti (various locations) and timber guardrail remnants <p>2001-2002 <u>Devine's Hill to Ten Mile Hollow</u></p> <ul style="list-style-type: none"> • Review of Environmental Factors completed for future conservation works on culverts and road resurfacing <p>2002-2003 <u>Devine's Hill to Ten Mile Hollow</u></p> <ul style="list-style-type: none"> • Maintain security of the Road through gate extensions and locks
Precinct 6 Western Commission Track Intersection to Ten Mile Hollow	<p>1999-2000 <u>Devine's Hill to Ten Mile Hollow, Finch's Line and Shepherd's Gully Roads</u></p> <ul style="list-style-type: none"> • Archaeological assessment of all convict graffiti (various locations) and timber guardrail remnants <p>2000-2001 <u>Ten Mile Hollow</u></p> <ul style="list-style-type: none"> • Archaeological assessment, engineering assessment and conservation works on timber culvert (#21) <p>2001-2002 <u>Devine's Hill to Ten Mile Hollow</u></p> <ul style="list-style-type: none"> • Review of Environmental Factors completed for future conservation works on culverts and road resurfacing <p><u>Western Commission Track Intersection to Ten Mile Hollow</u></p> <ul style="list-style-type: none"> • Road resurfacing works completed approximately 1 km on the descent into Ten Mile Hollow <p>2002-2003 <u>Devine's Hill to Ten Mile Hollow</u></p> <ul style="list-style-type: none"> • Maintain security of the Road through gate extensions and locks <p><u>Western Commission Track Intersection to Ten Mile Hollow</u></p> <ul style="list-style-type: none"> • Clearing culverts and side drains of silt and debris • Re-establishment of side drains • Installation of effective soil erosion and sedimentation control • Installation of new directional signs
Precinct 7 Simpson's Track	<p>2002-2003 <u>Simpson's Track</u></p> <ul style="list-style-type: none"> • Installation of directional signs and park boundary signs

6.12 Goal Analysis

At this point, having considered the major issues affecting the formulation of a conservation policy for the OGNR, we want to draw out the factors that need to be dealt with strategically in order for NPWS to achieve their conservation goals. These factors

guide the development of strategically appropriate conservation policies, which are set out in Section 8.

- NPWS has limited funds available for the maintenance and management of the road so it is crucial that baseline (minimum standards) management actions are established in order to prioritise conservation actions.
- The aim of conservation is to minimise further loss of significant fabric. The approach towards achieving this goal needs across-the-board understanding in NPWS and in the community, and the support of both.
- Community expectations and NPWS goals need to be brought closer together so that expectations on both sides are realistic.
- It is possible that from time to time NPWS may have access to extra funding derived from external programs and relating to the state and national significance of the road, and its identification in a world heritage nomination. It is important that this CMP identify a strategy and a vision for the utilisation of such funds towards agreed long-term outcomes for heritage conservation.
- Staff require access to training and expert advice, and to guidelines and reporting procedures which have a commitment from across the agency at all levels.

Old Great North Road

Dharug National Park Conservation Management Plan

Volume 2



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March 2005

The Old Great North Road Cultural Landscape

Dharug National Park
NSW NPWS

Conservation Management Plan
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7.0 VISITOR FACILITIES AND INTERPRETATION

7.1 Current Visitor Facilities Analysis

7.1.1 Current visitation and use

Although no official visitor figures have been collected, since June 2000 a visitor book has been placed on Devine's Hill. While this is not the most comprehensive or reliable means to collect visitor statistics, the two books do contain just over 4000 entries from visitors from June 2000 until the present. This has enabled a survey of both visitor numbers, place of origin, reactions and responses to their visit to be compiled, within the limitations that filling in the book is voluntary and therefore will give only minimal visitor numbers. There is some evidence of a few prank entries which have been discounted wherever possible and some of the organised groups do not indicate the numbers in their groups. However, within these limitations, it has been possible to assess a baseline number of visitors over the past three years, their place of origin, what organised groups visit and also some indication of why people visit the OGNR. Responses to the restoration and conservation work, the interpretive signage, restriction of access and provision of visitor facilities are also able to be gauged.

7.1.2 Visitor profiles

As Chart 7.1 shows, 90% of the visitors from Australia who filled in the visitor book come from NSW, interstate visitors making up only 10%. Of the 90%, 53% are from Sydney and suburbs. They come from all parts of Sydney including as far south as Menai and Engadine and as far west as Emu Plains but the impression is that the Blacktown and Hills districts were over-represented. This is not surprising given their physical proximity to the OGNR and also these areas' historical connection with the Road. Also, in terms of population growth these areas provide a ready source of visitors and family groups to the tourist attractions in the area such as OGNR.

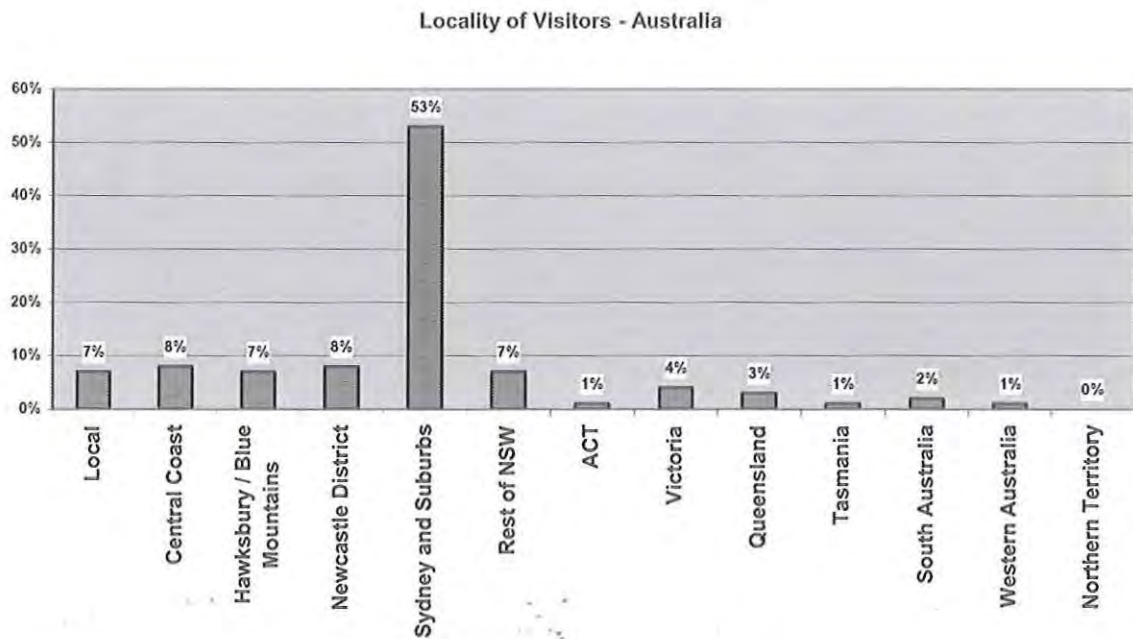


Chart 7.1

It was difficult to determine the boundaries of the 'local' area, especially given that a visitor from Pennant Hills and another from Newcastle termed themselves as 'local'. For the purposes of this survey, only the immediate areas around the OGNR including Wiseman's Ferry, Spencer, Gunderman, Glenorie, Cattai, Kenthurst, Galston, Mangrove, the Lower Macdonald Valley and St Albans were used. The areas closer to Kellyville, Richmond and Windsor were counted separately, along with the Blue Mountains. Again the Central Coast and Maitland/Newcastle/Lake Macquarie districts were counted separately. A more comprehensive and pre-planned survey might well treat the areas very differently. One of the interesting features of the comments in the visitor books was the frequent emphasis on colonial and convict connections between the OGNR and other early settlements. Many of the Toongabbie residents described themselves as from the 'Third Settlement'. The preoccupation of many of the visitors with convict connections will be discussed later.

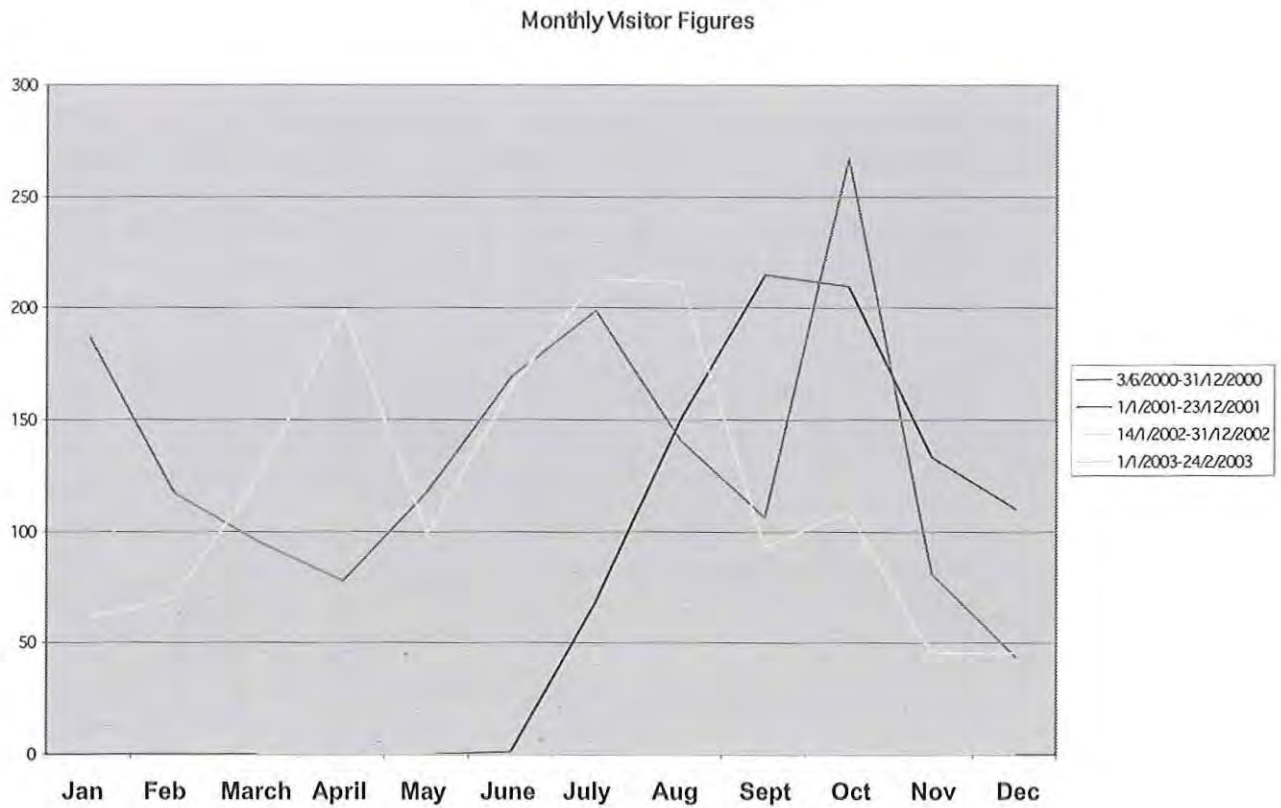


Chart. 7.2

Chart 7.2 shows the comparative visitor numbers over years recorded by the visitor books. Unfortunately, because they were started in June 2000 and this study commenced in late February 2003, there are only some months for which there are three figures. Also there is a gap (2001/2002) in what may be one of the peak visitation periods, late December and early January. The Sydney Olympics in September 2000 and the longer school holidays obviously affected the visitor figures in September 2000 but October remains a popular month for visitors. The inconsistencies between the years can perhaps be explained by the random method of collecting the data and also the fact that the numbers, as a result, are not necessarily highly accurate. April 2002 included most of the Easter break plus the NSW school holidays, which accounts for the high numbers. School holidays obviously affect visitor numbers, the impression being from the visitor books that many people come to the OGNR in family groups. Overall the winter and spring months are the key visitation seasons.

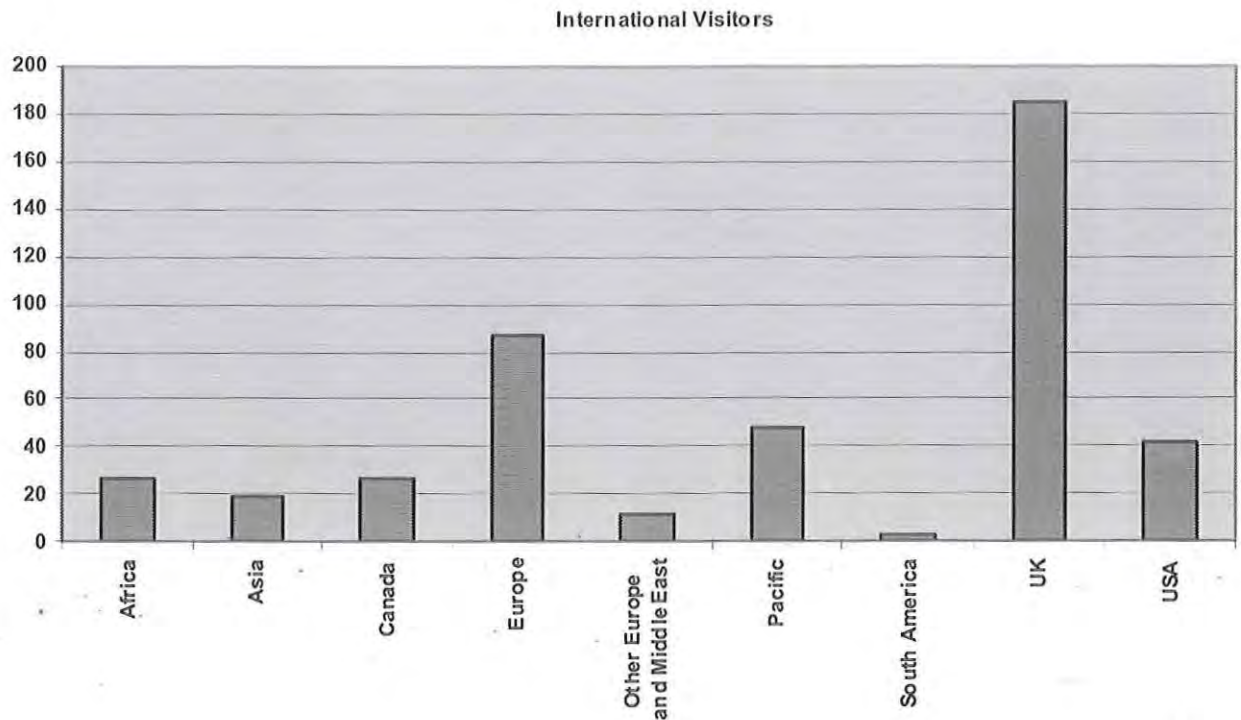


Chart 7.3

Chart 7.3 gives a breakdown of international visitors to the OGNR. The range of countries of origin of these visitors is perhaps surprising. While some are clearly travelling in groups or pairs around NSW, many appear to have been brought to the OGNR by Australian residents. This is a particularly interesting feature of the overseas visitation and several people commented on how much they enjoyed showing guests the road. The second feature, perhaps not surprising, is the preponderance of UK visitors. One couple noted that the OGNR was not mentioned at all in their guidebook and were delighted that they had managed to stumble across it. The connections between British history and colonial Australian history were emphasised by many of the British visitors, some commenting that one of the officials on the OGNR had come from their village near Plymouth. Others took great credit for the 'great British engineering' and the skills of the British convicts and saw the OGNR as a 'great bit of British history'. Again, like many of the local visitors, there appears to be a sense of personal connection between the convict period and the British visitors.

Chart 7.4 lists all the identified organised groups who have visited the OGNR over the time covered by the visitor books.

Identifiable Organised Groups 3/6/2000-24/2/2003

Bushwalkers	28
School	7
Scouts	6
History	4
Probus	4
4x4	2
TAFE, Belmont	1
Biking	2
Cruising Yacht Assoc, Careel	1
Outdoor club, Sydney	1
Coach group, Tamworth	1
Church group, St Anne's, Ryde	1
ITC group, Newcastle	1
SAG excursion group	1
Tourist centre: Visitor Info. Centre, Hornsby	1
UPA, Newcastle	1
Aust. Plant Society, Nowra	1
CMCA, Sydney	1
Riverlink Interchange, Ryde	1
Bush regenerators group, Lane Cove	1
CLS Learning Service, Castlereagh	1

Chart 7.4

Some of the bushwalking groups, such as Gosford, Blacktown, Baulkham Hills and WEA Sydney, have come several times over the past three years. The groups originate from either the Central Coast or Sydney, particularly from the North Shore, the Hills District and Blacktown.

Three high school groups, from Regents Park and Strathfield, Sydney and Merewether, Newcastle were participating in Duke of Edinburgh Awards and not on a subject excursion. Two other schools who visited were Turramurra High School and Kurnai

College, Morwell, Victoria. Two local schools recorded their visit: Wiseman's Ferry Public School Classes 3,4,5,6 and Lorient Novalis School at Dural. Clearly school excursions are not a ready market at present although there may be some scope for development of site studies tying into the Years 9 and 10 History and Geography syllabuses.

There were only four organised history groups noted: an historical society from Blacktown, a family history group from Botany Bay, a Baulkham Hills leisure-learning history group and WEA Newcastle 'On the Convict Trail'.

7.1.3 Visitor responses and comments

The major feature of the comments is the empathy for the convicts that the experience of walking the road creates. The comments reveal over and over sympathy, awe, fascination and even horror at what the visitors imagine must have been the convicts' lot as they lived and worked on the OGNR. While several recorded sightings of native fauna and commented on the bush and views, the majority of the comments focussed on the history of the site, the engineering and the human connections with the landscape. The interpretation was well received by many and there were no negative comments about the signage, although a few suggestions were also made about what else people would like to know about, particularly the social history of the convicts, names, counties of origin, crimes etc, and also some more details of the engineering. Interestingly, many visitors compared the OGNR with other famous and much-visited international sites such as the Pyramids, Hadrian's Wall, and Roman roads.

Many visitors were coming for repeat visits, some after a long absence. Their comments emphasise the noticeable physical improvement of the site, appreciation of the maintenance and for the interpretive signage.

Criticisms include comments on the graffiti, a question on why the road surface looked like Bondi Beach (from a UK visitor) and that the road base was disfiguring and the colour disappointing. There was only one strong critical comment, that the road should have been left in its natural state and that its restoration was a waste of money, from a female visitor from Blacktown. (Her comments were countered by three people from Denmark who responded that if it was left alone, there would soon be no sign or evidence of history.)

7.1.4 Interpretive signage

With regard to signage, the NPWS' work program is dynamic and ongoing. We realise that some areas and topics we identify for action may already be in the planning or implementation stage. Nevertheless we believe it is valuable to identify them as part of a complete scope of work.

Over the past few years the NPWS has installed 19 interpretive metal and sandstone signs along the OGNR, concentrating on Devine's Hill. These give some information about the history of the site, the engineering of the road, the reasons for its building and subsequent abandonment and general contextual and visitor information. Several additional signs are in the process of being made to be placed along Shepherd's Gully Road, Finch's Line and other key locations along the OGNR.

The success of these signs is immediately evident from comments in the visitor books. That they are read is also shown by some of the comments regarding the triangular boring, the drains and the stone trough.

There were many positive comments about the provision of the signage, including comments on their physical appearance and sandstone bases. Many return visitors were grateful and delighted with both the information provided and the design of the signs themselves.

Comments in the visitor books raised the following issues regarding the interpretive signage:

- no mention of the Dharug people anywhere – request for Aboriginal stories of the area;
- more information about the convicts themselves requested, on convict life, perhaps a plaque where convict names could be listed or where they could be commemorated in some way;
- more detailed information requested on elevation and road gradients and how this effected construction;
- several requests for more information about other workers on the OGNR particularly blacksmiths.

7.1.5 Directional signage

For visitors approaching from Wiseman's Ferry, there is a NPWS sign announcing Dharug National Park immediately facing the ferry disembarkation point. Beneath this there are directional arrows to the picnic-camping area (to the right) and the Old Great North Road (to the left). There is no indication of how far it is to either place or where any parking might be located. Vehicles travelling from Spencer or along Settlers Road could easily miss the signs.

The Thomas James Bridge, which is shortly after the left turn towards the OGNR, is marked by two signs, placed by the Convict Trail Project, which contains their logo, the name of the bridge and the year it was built, and a bronze plaque in a rock which can only be read by people on foot. This duplication of signage, from different bodies and in different styles without explanation, is confusing. The lack of consideration for the needs of people approaching by car may mean that many people miss both the bridge and the entrance to the OGNR altogether. The entrance to the OGNR itself is signposted for traffic coming from the Spencer direction but at the time of the preparation of this report the heavy, locked iron gates do not indicate anywhere that this is a walking trail. It is noted that the NPWS plans to attach a walker symbol and mountain bike symbol to the main sign.

The first interpretive plaque which welcomes visitors to the OGNR is located inside the gate and any passing motorist who may also be looking for parking signs and indications of visitor facilities would not see it. There are unmarked and inadequate parking facilities near the gates and some day visitors do park their cars there. Several comments in the visitor books on the apparent difficulty with directional signage indicate that this form of signage is an issue that needs to be addressed.

NPWS should discuss improving signs in the area, and their location, with the Road Transport Authority and relevant government authorities.

7.1.6 Visitor guides

NPWS produces a free, black and white, DL-sized folded leaflet on The Old Great North Road, part of their series of leaflets on the national parks. There are also leaflets on

Dharug and Yengo National Parks, and on the Mill Creek camping area. There are some comments on the OGNR in both the national parks leaflets.

The OGNR Guide contains a basic map, with some points of interest marked along the Road. The map contains a scale but no indication of the distances of the tracks. While the printed 'Things to Do' section of the leaflet contains distances for Finch's Line combined with Devine's Hill, there is no time, or level of difficulty, indicated. Devine's Hill has a time indication of a two hour return walk but no kilometre distance or level of difficulty. There is no information on distance, time, or level of difficulty for Shepherd's Gully Road, nor specific information about these basic matters for continuing on to Ten Mile Hollow or Clare's Bridge, except that it is 43km from Wiseman's Ferry to Mount Manning. It seems evident from comments in the visitor book that some visitors stumble on the OGNR by accident, and many do not have the leaflet, or do not find that it provides sufficient information. The leaflet also contains some historical information on the building of the road, including reproduction of some of the engravings from the signs.

A full-colour, attractive and informative A4 booklet, *Exploring the Great North Road*, published by the Convict Trail Project (n.d.) covers the history of the entire road. It gives indications of time, distance in kilometres, and some comments on level of difficulty for Devine's Hill, which is described as a 'gentle walk' on 'gentle gradients'. Its information contradicts the NPWS information on Devine's Hill, which suggests allowing two hours for a return walk. The Convict Trail Guide suggests one hour, with no indication of whether that is one way or return. The distances of the OGNR from Wiseman's Ferry to Mt Manning are also discrepant - NPWS gives it as 43km and The Convict Trail as 42km. An A4 booklet is not a suitable format for a walking guide to be used en route. It is also not necessarily available for sale locally. Certainly, there were no copies in the office of the resort in which we stayed.

There was no indication in the visitors' books that any of the visitors had a copy of either guide.

7.1.7 The website and the OGNR

The NPWS website also contains information, historical and practical, about the OGNR. A general map can be downloaded but what is more useful is the suggestion to buy

particular 1:25,000 topographic maps if you are planning to walk or cycle. There is basic information about the roads, the bridges and convict heritage, and also about cycling and walking the route. Again no specific information is given about the length of the shorter walks, other than the 9km loop track of Devine's Hill and Finch's Line which you can walk 'if you have a few hours up your sleeve'. The 43km from Wiseman's Ferry to Mogo Creek is a long walk or mountain bike ride - it will take walkers two or three days and cyclists a day - and there is useful information about camping facilities and bike riding conditions along the route. There is also practical information on the Dharug National Park page which states that Discovery walks, talks and tours are available year round. However there are no Discovery walks, tours or talks for either Dharug or the OGNR promoted on the website. Presumably, interested visitors have to contact the Gosford office.

7.1.8 Current visitor facilities

The current visitor facilities need to be looked at for two different visiting groups: the day visitor and the longer-term visitor who may wish to camp, either en route on the OGNR, or at campsites with car access closer to Wiseman's Ferry.

For the longer-term visitor on the OGNR there are basic camping facilities, including pit toilets, at Ten Mile Hollow, which can only be reached by walkers. Outside the designated area for this study, there are also camping facilities at Mogo Creek in Yengo National Park, which can be reached by 2WD vehicles. There is no permanent water supply along the road. There is also Mill Creek camping area at the southern end of Dharug National Park containing eight car camp sites, 12 sites without direct vehicular access and 10 pack camping sites a short distance from the car park. Large groups can book a camping area which takes between 15 and 30 people. Mill Creek has basic facilities, including composting toilets, water, gas and wood barbecues and rubbish bins.

For the day visitor there are also composting toilets at Hazel Dell picnic area and obviously there are public facilities in Wiseman's Ferry and surrounding villages.

There is no NPWS Visitor Centre at Wiseman's Ferry or on the OGNR.

Comments in the visitors books raised the following issues regarding facilities, access and directional signage:

- the difficulties of finding the track in the first place - many commented that they stumbled on it by accident, that they never knew it was there, that they had been trying to find it for some time;
- the lack of wheelchair access;
- the lack of secure lock-up facilities for bikes, particularly for long-distance cyclists who wanted to walk parts of the OGNR;
- concern about further access restrictions by NPWS;
- questions about access to the OGNR for dogs (several comments indicate that people were accompanied by dogs on their walk);
- more information is needed on signage about length of tracks and distance to various key points on the trail; some visitors wanted to know at the outset what the possible goals of walking up the hill would be, for example how far it was to the top and whether there was a viewing platform, (some had turned back unsure if they would make it); some felt that there should have been some indication of what lay ahead, particularly when they reached the top of Devine's Hill, so they could choose whether to walk on or not;
- there should be 'controlled' vehicle access, including 4WD, so more people can visit and see the road;
- there should not be vehicle access;
- some repair of the road beyond Finch's Line would be welcome;
- more visitor parking at the bottom of the road for day visitors;
- toilets and car park needed adjacent to entrance;
- more information needed on other walks on the OGNR and in the area;
- provide some form of transport up and down the slope so all could experience it;
- several visitors commented on the lack of fences and lighting, and saw the road as dangerous for children, while another commented that it was wonderful to see something without fences;
- need for some seating; and
- need for some provision of water.

7.1.9 Concluding discussion

As mentioned above, the impact of the fabric of the OGNR, and the personal connections visitors felt with the history of the site and the 'convict experience' was a remarkably consistent feature of the comments. The OGNR appears to generate strong responses in visitors – about history being 'real', 'alive', about feelings of ghosts, empathy for the convict experience, being able to walk along the road without the intrusion of modern life (except for the signage), and the apparent unchanged nature of the physical and natural surroundings. The OGNR, and the experience of being there, appears for many to be a real and tangible link between the past and present. Several commented on their convict ancestry and on their ancestors who settled in the district and the Hunter Valley. There are some comments on the OGNR as a convict monument and memorial, as a hidden treasure, as a tangible and important part of our heritage.

Many visitors are interested in the engineering aspects of the OGNR, on comparable roads in NSW and overseas.

Many comments concerning the conservation of the site, the restoration work, the integrity of the road and questions about why restoration was done the way it was, indicate that some visitors have a high level of understanding and appreciation of heritage and conservation issues.

It is worth noting that there were comments about the flora and fauna but the primary interest for many was the heritage: the history and archaeology of the site. Being able to see and recognise the marks of convict picks, the bore holes and other physical signs of the building of the Road was a key feature for many: 'Have read about it but to see it makes it so much more real.' As one comment put it, 'We are locals who love the history.' The opportunity to share the history with their children was also a benefit.

A final comment by a 29-year-old male from Mt Isa, Queensland, sums up the value of the OGNR for many people: 'At the age of 29 I had never before experienced the special feeling of the history of our country. This is a place to which I shall return with others.'

7.2 Interpretive Themes

The purpose of developing interpretive themes is to analyse and synthesise this complex of historical, archaeological and environmental information. The aim is to develop a small number of themes which encapsulate different aspects of the cultural landscape and express the intertwined, interdependent relationship between landscape, community and history. The themes acknowledge the complexity of the cultural landscape in which the OGNR is located and the many detailed and important histories with which it intersects.

In order to re-incorporate the OGNR into its broader spatial and temporal contexts, interpretation that looks *out* from the road and incorporates the multiple elements of the landscape through which it was constructed is appropriate. This can highlight the surrounding aspects of historical, cultural and natural significance, focussing on points of interaction – the flats of the river, contact art images, the northerly line of travel to the Hunter, for example – and the points of difference such as the density and variety of art and the use of the many microenvironments for subsistence.

Storytelling is an important part of travelling through a landscape, as Coral Edwards states (1996: 88-91, see section 4.2.1). An emphasis on different people's diverse perspectives on the landscape, their differing expectations of it, could provide a way to connect the road to other places in the landscape.

At the moment the emphasis of the interpretation in DNP is on the convict road itself. Based on the preliminary overview of available evidence of the early colonial interactions with Indigenous people, it is considered that incorporation of Indigenous pre-colonial and colonial history in the interpretation framework would be appropriate.

All interpretation should be developed in consultation with, or collaboratively with, members of the Darkinjung Local Aboriginal Land Council and the Metropolitan Aboriginal Land Council. Consultation would consider, for example, the acceptability of the integration theme, the appropriate amount of detail and, with other stakeholders such as rock art and materials conservation experts, the degree to which direct exposure of sites is acceptable.

The use of photographs of the Indigenous places in signs and pamphlets which do not state their exact location is also possible, in consultation with the stakeholders.

The following themes are derived from the historical overview (Section 2), the landscape analysis (Section 4), the community consultation (Section 3) and most importantly from the assessment of significance (Section 5).

It is intended that these themes be used to structure the interpretive information presented to visitors and to act as a stimulus for the development of insights into the cultural landscape.

Theme 1 Looking out from the Road: a cultural landscape

- Indigenous people and the environment
- Non-indigenous people and the environment
- Natural heritage, biodiversity, geodiversity, habitats

Theme 2 Imperial connections

- The OGNR in the context of empire
- Technology and empire: industrialisation, adapting technology to local conditions
- The convict system – forced migration
- Connections between convicts and Indigenous people: the art sites
- Acts of resistance: convict graffiti, bushranging, Indigenous resistance
- The impact of imperial settlement on the Hawkesbury

Theme 3 Paths, routes, travel and journeys

- Indigenous paths through the landscape and communication links to the north and south
- The river as the first road in and out of the region
- Colonial perspectives on journeys and travel through a landscape - focus on the road
- Cross-cultural encounters in the landscape
- Colonial perspectives - opening up the country and connecting settlements

- Need for a route between Sydney and the pastoral lands of the Hunter Valley
- Imposing order on the landscape - imported road-building technology and skills
- Finch, Warner, Simpson, Mitchell, and the Road and Iron Gangs - surveyors and builders
- The abandonment of this section of the OGNR and the preference for alternative ways
- The use of Shepherd's Gully Road, Sternbeck's Gully Road and Simpson's Track as local routes

Theme 4 Living and working in the OGNR landscape

- Indigenous archaeological sites: art sites, axe grinding grooves
- Agricultural settlement in the environs
- Convict life and work - part of Australia's history of transportation, use of convict labour, housing and containing convicts
- OGNR as a recreational resource in the 20th century - driving, 4WD, horse riding, bushwalking
- NPWS and the community's work, including the Convict Trail Project, in caring for the OGNR

Theme 5 Reading the landscape: tools to read the landscape

- Traditional knowledge, legends and stories
- History, archaeology, geology, biology and environmental science
- NPWS and the community researching and studying the natural and cultural values of the landscape

Communication objectives associated with the themes

Within the overarching framework of the above themes, the following describe the communications objectives for interpretation on the OGNR:

Visitors should

- appreciate the Indigenous perspective of the cultural landscape and its importance for the present Indigenous community;

- learn how Indigenous life in this region has changed over the past 2000 years, including early colonial conflict and subsequent adaptations and maintenance of connections to this country;
- recognise the major species of flora and fauna to be found within the area today;
- have their imagination and memory traces stimulated by the tangible and intangible heritage of the OGNR;
- be reminded that the OGNR is part of a global history of empire, to which people all over the world have connections, not only an Australian or national story;
- follow the story of European road-building and use of the OGNR in terms of the surveyors, engineers and convicts and settlers and the technology employed;
- gain an impression of the living and working conditions of convicts working on the OGNR in the early 19th century;
- learn about the road builders including Thomas Mitchell, road surveying and building, and understand the significance of the OGNR in Australia's colonial and transport history;
- gain an appreciation of the geology of the area and how this shaped human use of the area;
- understand the role of major figures in the OGNR story including Ralph Darling, Heneage Finch, Jonathan Warner, Percy Simpson, Thomas Mitchell, Solomon Wiseman;
- learn about conserving the OGNR and the role of the local community and NPWS;
- gain an appreciation of the various ways the area has been used for communication and recreation including Indigenous, colonial and 20th century use.

7.3 Strategic Opportunities for Visitor and Interpretation Development

7.3.1 School groups and education

As the analysis of the visitor books revealed, there is currently very low visitation by school groups to the OGNR. The changing perspectives of the Stage 4 and 5 History curriculum which virtually ignore colonial and 19th century history is a factor in this, as is the cost of coach transport to and from the site and the lack of interpretive and general visitor facilities to cater for such visitation. The opportunity here is to develop an active school-user group. This could be accomplished in several ways:

- website
- CD-ROMs
- education packs
- partnership resource development
- well-planned and resourced one-day field trips which target specific areas of the curriculum.

Recommendations

That a quality, dedicated website be developed on the OGNR which would include educational resources across the curriculum. Linked to the NPWS and Convict Trail websites, the website could make available tourist information, information on the local area, access details for driving to the site, walking, cycling and camping along the Road and historical and technical information. An important part of the website would be an education section which would provide the following:

- database of historical images, including photographs, film footage if available, and graphics;
- database of documents on the OGNR and/or hyperlinks to websites of institutions such as the State Records Office, the State Library of NSW and other repositories of documentation;
- database of those who worked on the building of the OGNR in conjunction with The Convict Trail Project;
- information on Indigenous use of the area before the Road, during the contact period, and beyond;
- statistical and technical/engineering information on the OGNR including comparisons with other similar roads, for example Cox's Road;
- school excursion information relevant to the OGNR;
- a possible 'virtual guided tour' of the Road up Devine's Hill and past Hangman's Rock and the Stockade site to the top, incorporating district views and locating the Road in its regional context;
- downloadable curriculum resources including excursion programs, developed for students and teachers in conjunction with DET, using the OGNR in the Key Learning Areas.

Advantages

- Internationally and nationally accessible, particularly to schools in the country areas and far west of NSW who may not be able to visit the site;
- increase of user groups and education outreach even if logistical factors make it difficult for school groups to visit the site;
- the Mandatory Site Study for History Stage 4-5 specifies that, if necessary, a site study can be based on material on a website or CD-ROM - this approach can also be combined effectively with an actual site visit;
- emphasis on contact history in the Stage 4 History syllabus could be a great opportunity for increased interpretation of the Indigenous and contact history of the area;
- websites can also be updated regularly in response to curriculum needs.

Disadvantages

- No direct financial return to the creators and maintainers of the site except through subscription or advertising;
- website needs to be regularly updated and maintained;
- students may use the site in class but not visit the OGNR as a group, and if visitor numbers are important then this may be a disadvantage.

An alternative is to develop quality CD-ROMs for the appropriate curriculum areas which could contain the following:

- a selection of images and film footage if available;
- documentary and printed material;
- information on Indigenous use of the area before the Road, during the contact period, and beyond;
- statistical and technical information;
- quality curriculum resources, lesson plans, excursion programs developed in conjunction with DET;
- a possible 'virtual guided tour' of the Road up Devine's Hill and past Hangman's Rock and the stockade site to the top, incorporating district views and locating the Road in its regional context.

These CD-ROMs could be sold to schools. Tasters of the curriculum resources and lesson material could be included free on the website and the CD-ROMs advertised on the site. These too make the OGNR accessible to schools in the country, far western NSW and interstate. They could also be developed and sold in partnership with DET (see below).

While education packs are the traditional way of making material available to schools and this may still be appropriate, particularly in a cross-curriculum context, the newer technologies such as websites and CD-ROM offer greater opportunities for accessible, innovative and interactive interpretation of the OGNR for schools.

Curriculum material development in partnership with the DET, and with an appropriate level of funding or sponsorship, would ensure the development of appropriate, targeted, quality resources, publicity, and widespread distribution to schools throughout the state.

The NSW school curriculum offers a range of opportunities for which the OGNR would be appropriate. These are summarised below.

Key Learning Area	Stage	Curriculum Area/Comments
English	K-12	Specialist programs for writing for various purposes, poetry, creative writing, sensory writing, drama, etc using the natural and cultural landscape.
HSIE	K-6	HSIE strands: Change and Continuity, Cultures, Environments and Social Systems and Structures
	St1 St2/3	'Transport', Overview of significant aspects of Australian History within a generalised framework -
	St2	'Australia: You're Standing in It'; 'Places, Then, Now and Tomorrow'.
	7-10 St4	History Mandatory - Indigenous Peoples, Colonisation and Contact History
	St4-5 St4-5	Compulsory Site Study Elective - 'The Modern World (after 1750)' (mostly non-Australian in content) - Technology, Transport and Communication; Urban and Industrial Archaeology
	7-10 St5 St5A2	Geography Mandatory - Investigating Australia's Identity; Changing Australian Environments; Issues in Australian Environments Elective - Communities, Work and Settlement
Mathematics	K-6	Key Ideas - data, measurement, space and geometry

Key Learning Area	Stage	Curriculum Area/Comments
	7-12 St6	Standard Course
Science	K-6	Science and Technology Built Environments Products and Services Design and make - investigating, designing and making, using technology, eg, alternative harbour crossing/bridge Resources for primary S&T would be very useful now
	7-10 St4 St5	Science Prescribed focus areas: 4.3 identifies areas of everyday life that have been affected by scientific developments 4.4 identifies choices made by people with regard to scientific developments 4.11 identifies resources used by humans and where they are found, and describes ways in which they are exploited 4.12 identifies, using examples, common simple devices and explains why they are used 5.3 evaluates the impact of applications of science on society and the environment 5.6 applies basic physical models, theories and laws to situations involving energy, force and motion 5.12 describes scientific principles underlying some common technologies
Creative Arts	K-6 St3	A CD-ROM <i>arts action</i> was produced in 2002, offering ideas for classroom teachers to develop lessons, units and programs in dance, drama, music and visual arts. <i>Steel, stacks and steam</i> is a program for Stage 3 which looks at places, spaces and objects. Students refer to a local industrial site and its structures as stimulus for art making. Trialled with a Port Kembla school using the Port Kembla industrial site, this program could be adapted for using the OGNR.
	St4-5 7-10 St6 11-12	Visual Arts 3 concepts: Subject matter, Forms, Frames. Subject Matter: Events, Places and Spaces - Space frames, art and architecture Forms: categories of different art-making forms Frames: points of View, perspectives - subjective, cultural, structural, postmodern. 3 practices: Art making, art history, art criticism Architecture and built environment all contextualised in units of work.
Technological and Applied Studies (TAS)	K-6	Science And Technology Built Environments Products and Services Design and make - investigating, designing and making, using technology eg alternative harbour crossing/bridge Resources for Primary S&T would be very useful now

Key Learning Area	Stage	Curriculum Area/Comments
	7-12	Design and Technology
	St4	Technology Mandatory: Technology, design and design processes. Students undertake Design Projects.
	St5	Design and Technology - Strands: Approach to the design process, Activity of designers, Holistic approach to design Design Context:: Engineered Systems - use of large-scale applications of engineering - drains, bridges, roads, transport modes; use of small scale applications of engineering - levers, pulleys, etc Design Context:: Transport and Distribution - design, manufacture and use of machines and systems for the conveyance of people and freight, historical changes and developments in transport modes. New syllabuses 7-10 Stage 4 and 5 to be implemented in 2005
	St6	At the HSC level Design and Technology and Engineering Studies would be particularly relevant.

Well-planned and resourced one-day field trips which target specific areas of the curriculum could overcome the logistical difficulties of isolation and location of the OGNR. Special programs could be developed to make such a visit worthwhile and provide value for money.

The secondary 7-10 Science curriculum is an example of what could be targeted, with an emphasis on applied science:

- studies of the materials from which the road is built, from raw material at source to the finished product;
- issues to do with the properties of the sandstone of and through which the road is built;
- use of knowledge of forces in the design of the road, buttresses and drainage;
- examples of applied science activities using the OGNR could be elevation and road gradients used to calculate the load a horse can pull up Devine's Hill, and braking capacity determining what load can be eased down the hill, as well as exercises on leverage, force needed to move boulders, pulleys and other examples of use of forces in early technology;
- issues of weathering and erosion.

7.3.2 Signage

Interpretive signage

As the visitors' comments indicated, the current level and design of interpretive signage and planned additions is appropriate and appreciated. Except for one sign at Mill Creek,

and as the comments also indicated, there is one important aspect of the OGNR and its landscape which has not been interpreted - that of the Indigenous archaeology and history of the area.

Recommendations

- A general sign should be placed in several places introducing the Indigenous values of the landscape - for example, in Hazel Dell and somewhere along the OGNR itself (in addition to the one at Mill Creek).
- An introductory and welcome sign at the entrance to the OGNR which acknowledges the Indigenous history of the place, perhaps as Darkinjung Country, and uses Coral Edwards' evocative statement 'There are other footsteps that went before'. The differences in issues of significance of the OGNR, of different approaches to 'place' between Aboriginal peoples and settler Australians, should be acknowledged.

Directional signage

Section 7.1.8 commented on the need for better and more specific directional signage to the OGNR from all possible directions of approach, including within Wiseman's Ferry itself.

Recommendations

The NPWS should review all existing directional signage and implement a program of installing consistent and useful directional signage which includes information on car parking, visitor facilities and distances to the entrance of the OGNR where appropriate. One such sign, indicating the distance to Devine's Hill from the ferry, has recently been installed.

Proper signage and information on the other tracks such as Shepherd's Gully Road were not in place at the time of reviewing the site for this report and this was identified as an area for action. However, while this report was in preparation a new sign has been made for the start of Shepherd's Gully Road to be placed at the Settlers Road end.

Boundary signage, also identified as an area for action, is in the process of being installed at the limits of the national park on the entrances and exits of the walking tracks, so that visitors know when they are leaving and entering Dharug NP. Signs

stating distances to features of the OGNR, eg, Ten Mile Hollow and Clare's Bridge, have now been installed on Simpson's Track, at the Dubbo Gully entrance, and at the Western Commission Track. A sign will shortly be installed for Devine's Hill. There are also signs at the intersection of the OGNR with the track to Dubbo Gully, with distances indicated.

We recognise that approximate times for each walk and their level of difficulty are very subjective notions and mean different things to different people. However, walking track signage which gives more information on distances of various walks and to key points on the trail, the type of terrain that can be expected ahead (for example, level, flat, narrow, rough, steep, climbs, mixed terrain) should also be considered. If signage for this purpose is not appropriate or is too intrusive, then an alternative, on-site and accessible means of providing visitors with this information should be implemented.

Visitor Guides

A more comprehensive and practical walking guide for the OGNR should be developed, which includes distances and type of terrain (see above) and particular points of interest on the walks. This should cater for the range of visitors the OGNR attracts, particularly the casual day tripper wanting short and interesting walks. This guide should be available locally in cafes, accommodation, shops and other locations where visitors are likely to go.

In the longer term NPWS should investigate the feasibility of developing an audio tour of the Devine's Hill section of the OGNR. A visitors' centre (see below) would obviously facilitate the logistics of this. A well-researched and scripted audio tour using actors' voices and sound effects could be a very effective method of interpretation for both groups and individual visitors. It could teach visitors how to read the landscape, including evidence of quarrying, stone work, the use of explosives and the stockade site. Stories about Mitchell's determination that the road go by the most direct route despite human needs, the views of the other surveyors and overseers, engineering information, the convict perspective, life in the iron gangs, contact history, and information about the local area and communities, could all be included.

The Website and the OGNR

The OGNR is included on the NPWS website, with general information about various routes and what people will see. The more specific information suggested for the walking guide should also be included on the website and should be easily downloaded and printed off. Links to a specific OGNR website, if implemented, should be provided. The Discovery Tours and NPWS activities program should also be available on the website.

7.3.3 Visitor facilities

As the NPWS has identified, the facilities for short-term campers need to be upgraded. Provision of composting toilets and water storage at Ten Mile Hollow, is currently being planned.

But it is the facilities for day visitors that particularly need to be looked at including, in the long-term, a visitors' and information centre at Wiseman's Ferry which would provide facilities such as car parking, lock up bike parking and toilets. The centre could provide practical and historical information for Dharug and Yengo National Parks as well as the OGNR. Such a centre would also provide a focus for the local community, an exhibition, interpretation and education space, encourage increased visitation, and cater better for organised groups in particular. Many day visitors may arrive in Wiseman's Ferry without having visited a local tourist information centre or a NPWS centre, without a brochure, or the guide to the Convict Trail. They may have no contextual or practical information on the OGNR and what it offers when they arrive. A visitors' centre would fulfil an important practical, educative, interpretive and community role.

The stockade site on Devine's Hill could also be a location for appropriate and sympathetic visitor facilities such as seating and picnic tables (to cater for older visitors). Any such seating should be at the perimeter of the actual site and not intrude on or disturb the archaeological remains. This would encourage people to spend some time considering the off-road lives of the convicts and iron gangs, issues of surveillance, sleeping, eating and recreational activities. A thorough archaeological survey should be undertaken to establish the perimeter of the Devine's Hill stockade site before any visitor facilities are located on the site (Webb 2004 pers. comm.).

Discovery program

NPWS Discovery program for the Central Coast Hunter Range Region offers activities designed to show communities there is a wealth of cultural and environmental heritage available within the local area. However the program which caters for the OGNR does not appear on the NPWS website. Brochures are mailed out to members on a mailing list who pay a small charge for the brochure to be sent prior to normal distribution. The brochures are also located at key points and at tourist information centres within national parks.

For April and May 2003 there were three programs on offer involving the OGNR, two tag-along 4WD one-day guided tours from Wiseman's Ferry and one guided three-day hike from Wiseman's Ferry to Bucketty. The brochure grades the walks and provides necessary information on what to bring and the duration of the program. For June and July 2003 there was one tag-along 4WD one-day guided tour. The tag-along 4WD tours involve a maximum of ten private vehicles per tour and involve an average of about 15 to 20 people.

Discovery has in the past offered a 2WD trip to Clare's Bridge and Ten Mile Hollow. At present these tours appear to be available only to those with access to a private 4WD vehicle, but repairs to the Ten Mile Hollow bridge will make 2WD trips possible again. This means that the disabled, the elderly or visitors with limited mobility may not be able to participate in such activities. Some way of making these kinds of tours available to such groups needs to be investigated, whether it be through provision of a NPWS 4WD vehicle to take small groups or a private tour company.

Discovery programs which target special calendar events throughout the year, for example NADOC, Heritage Week, World Environment Day, Seniors Week, etc, should also be developed. Local events in the Wiseman's Ferry, St Albans and Hawkesbury district should also be tapped into wherever possible.

Further interpretive projects

The Stockade site on Devine's Hill and the inn site at Ten Mile Hollow could be subject to properly planned, researched and conducted archaeological investigations when funds permit. The living conditions and daily lives of the convict community and post-

convict communities need to be interpreted along the OGNR, and the Stockade site and Ten Mile Hollow provide great opportunities for further off-road interpretation of archaeological remains and the convict community.

The rock engraving of the convict profile could be reproduced photographically and interpreted for visitors in the context of its convict and Indigenous contact. This could also be done on the Stockade site. Other engravings and Indigenous art could also be made available photographically and interpreted in appropriate ways so that the very special nature of these remains and the need to protect them is appreciated.

Linking the OGNR with other convict sites in Sydney, Newcastle, New South Wales and nationally would also be an effective way to promote the OGNR as a destination for cultural tourism, particularly to overseas visitors. Interpretation of the OGNR also needs to be within its imperial and colonial context, and the comments of visitors, both international and national, indicate a high level of interest in such sites.



Figure 7-1:
Entrance signage.
NPWS sign at the
beginning of the
Devine's Hill
ascent. (Photo:
Lesley Walker)



Figure 7-2:
Entrance signage.
NPWS interpretive
sign introducing
the OGNR. (Photo:
Lesley Walker)



Figure 7-3: Entrance signage. National
Engineering Landmark sign at the beginning of the
Devine's Hill ascent. (Photo: Lesley Walker)



Figure 7-4: Convict Trail sign at Thomas James
Bridge. (Photo: Lesley Walker)



Figure 7-5: Direction sign for Finch's Line.
(Photo: Lesley Walker)



Figure 7-6: Interpretive sign providing a description of Finch's Line. (Photo: Lesley Walker)



Figure 7-7: Signs for features. Interpretive sign for the convict stockade site, Devine's Hill. (Photo: Lesley Walker)



Figure 7-8: Signs for features. Interpretive sign for the Ten Mile Hollow site. (Photo: Lesley Walker)



Figure 7-9: Signs for features. Interpretive sign for the quarry site, Devine's Hill. (Photo: Lesley Walker)



Figure 7-10:
Interpretive signage
on road-building.
Rock cutting
technique. (Photo:
Lesley Walker)



Figure 7-11:
Interpretive
signage on road-
building. Culverts
and drainage.
(Photo: Lesley
Walker)



Figure 7-12:
Interpretive
signage on road-
building. Facing
the blocks in
retaining walls.
NPWS Visitor
Book is attached.
(Photo: Lesley
Walker)

8.0 CONSERVATION POLICIES

8.1 Vision

The integrated heritage values of the Old Great North Road cultural landscape conserved and enhanced through:

- ongoing maintenance and repair to best-practice conservation standards;
- managed access for sustainable uses;
- strong community management partnerships;
- creative interpretation; and
- promotion as a key destination.

8.2 Mission

The mission of this CMP is to provide NPWS and the community with a sustainable, achievable and *strategic management approach* to the OGNR cultural landscape. This management approach is based upon the significance of the OGNR cultural landscape, the identification of realistic management objectives, as well as optimal long-term outcomes.

8.3 The Strategic Management Approach

The strategic management approach aims to minimise loss and deterioration of cultural fabric and landscape quality through the implementation of a detailed maintenance plan. The strategic management approach, which will be refined in the maintenance plan, has the following three levels of implementation:

1. baseline management of the entire road corridor;
2. management cycles of maintenance, inspection and monitoring on a precinct by precinct basis;
3. identification of strategic and long-term objectives which can be activated as funding becomes available.

All the activities involved in these levels of implementation are covered and guided by specific policies.

Definitions of the implementation levels

Baseline management

Baseline management will comprise:

- 1) ongoing activities controlling access and usage of the road corridor;
- 2) the management of vegetation impinging on the road corridor and its associated sites
- 3) establishment of monitoring targets and monitoring activities.

These activities should be considered to be routine and an integral part of the NPWS's custodial role over the OGNR cultural landscape.

Management cycle in precincts

The management cycle for each precinct will follow the iterative loop characteristic of all environmental management systems. The cycle will comprise:

- planned targets
- maintenance/corrective activity
- monitoring effectiveness
- revised targets on the basis of monitoring data.

The areas covered in this way will be the ongoing maintenance of re-surfaced areas, including culvert and drain clearance, surface consolidation as well as areas of potential structural weakness (embankment bulges and areas of potential collapse), monitoring of archaeological sites and visitor impacts.

Strategic and long-term management objectives

The key strategic and long-term management objectives identified by this CMP for OGNR, which can be activated as funding becomes available are:

- An interpretation and visitor facilities strategy;
- A masonry conservation strategy (covering issues outlined in Section 6.9.4)
- A long-term repair and reconstruction strategy targeting:

Precinct 2: Shepherd's Gully Road upgrading to provide access for vehicles for maintenance works, avoiding Devine's Hill; and

Precinct 4: Mitchell's Loop stabilisation and road surfacing works.

- Minor repair works with the following priorities:
 1. Localised repairs to road surface (principally to maintain access);
 2. Culvert repairs, including replacement of multiple cover slabs;

3. Repositioning multiple coping and/or kerb stones; and
4. Stabilising base of retaining walls.

Each of these areas is covered by specific conservation policies set out below.

8.4 Long Term Outcomes

The long-term outcomes of the implementation of this CMP for the OGNR cultural landscape and for NPWS will be:

- unified NPWS management goals
 - effective community management partnerships
 - a conserved road maintained to best practice standards
 - natural setting maintained
 - retained Indigenous heritage values
 - social values maintained
 - clearly defined opportunities and constraints for managed and sustainable access
 - OGNR cultural landscape recognised for its high quality interpretation
 - high public awareness of significance
 - research outcomes
 - recognition/acknowledgement for high quality management
-

8.5 The Conservation Philosophy

The conservation philosophy for the OGNR cultural landscape is based upon the *Burra Charter* (Australia ICOMOS 1999). The key conservation processes to ensure the retention of cultural significance include:

Maintenance: the continuous, protective care of the fabric, contents and setting;

Preservation: maintaining the fabric of a place in its existing state and retarding deterioration;

Restoration: 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;

Reconstruction: returning a place to a known earlier state and is distinguished from restoration by the introduction of new material;

Adaptation: modifying a place to suit the existing use or proposed use;

Interpretation: all the ways of presenting the cultural significance of the place.

8.6 Specific Policies

8.6.1 Retention of heritage significance

Policy 1 Significance the basis for planning and work

The statement of cultural significance set out in Section 5 of the CMP should be the principal basis for future planning and work.

Policy 2 Adopt and endorse this CMP

This CMP will be submitted for endorsement by the NPWS executive and the NSW Heritage Office.

Policy 3 Standards of practice

The outstanding significance of the OGNR and its cultural landscape requires best practice standards of heritage management.

Policy 4 Expert advice

The management and conservation of the OGNR and its cultural landscape will draw on appropriate expert advice to ensure high standards of conservation practice.

Strategy Expert heritage advice

Invite an appropriately qualified and experienced individual with significant heritage expertise relevant to the OGNR to join the NPWS's community-based Regional Advisory Committee.

Strategy Use of consultants

The use of period contracts for consultants should be investigated to ensure expertise, consistency of approach, development of a knowledge base and familiarity with the broader context of the OGNR.

Strategy A single heritage manager for the OGNR cultural landscape

Should funding become available (for instance through the declaration of the site as World Heritage) a single 'heritage manager' for the OGNR cultural landscape should be appointed to ensure streamlined management, efficient liaison with NPWS and the community, and consistent application of these policies.

Policy 5 Knowledge and skills

All those involved in the care and management of the OGNR and its cultural landscape will have an appropriate level of knowledge and skills.

Strategy Training of staff

Provide appropriate heritage management training for all those who work on the OGNR. This will range from simple induction training in basic heritage management principles for contractors, to on-site and off-site training of NPWS staff. The maintenance plan workshops and perhaps heritage conservation videos (cost permitting) can be used to train new field staff. All staff should take advantage of Cultural Heritage Division training days and seminars. Links with expert staff in other regions and areas should be developed.

Policy 6 Conservation of the fabric

The fabric of the OGNR and its associated features within Dharug National Park will be conserved in accordance with the policies, strategies and actions set out in this Conservation Management Plan.

Strategy Application of policy

The policy applies to all aspects of the fabric of the OGNR and its associated features including the road alignment; excavated features such as cuttings, drains and quarries; constructed elements such as retaining walls, culverts, spillways and bridges; and archaeological sites including the stockade and other occupation sites.

Strategy Extent of conservation works

The extent and nature of conservation works is reflected in the Strategic Management Approach (8.3) and will vary from precinct to precinct depending on proposed use of the precinct, levels of funding and the condition of the fabric. (See Policy 18.)

Strategy Maintenance plan

Develop and implement a maintenance plan that provides for cyclical maintenance of the fabric of the OGNR in line with the Strategic Management Approach (8.3) and the implementation levels identified for each precinct in Policy 18. The maintenance plan should cover at least the following topics:

Vegetation management, cleaning of gutters, drains, culverts and road surfaces, management of historic graffiti, cleaning/disguising modern graffiti, monitoring programs, the removal of items for conservation purposes, conservation of timber items *in situ*, and maintenance of road surfaces, including nature and source of topping material.

Strategy Repair and reconstruction

Repair is preferable to reconstruction where the latter involves replacement and removal of significant fabric. Where the introduction of new materials supports the retention *in situ* of significant fabric this should be considered. If items such as timber culverts, which present particular problems, are beyond repair then they should be stabilised and protected where possible and left *in situ*, while alternative solutions to water diversion or drainage are sought. The reconstruction of collapsed stone elements such as walls and culverts should use existing fabric where possible and the use of new materials should be explored where they will support the *in situ* conservation of existing fabric. New materials may include concrete elements, mortars, sealers or consolidants as appropriate.

Repair and reconstruction works may be required as items fail or threaten to fail. Repairs and reconstruction, except in so far as they are considered in the maintenance plan, will require expert advice, an REF process and

application for statutory approval under Section 60 of the *Heritage Act*, 1977 from the Heritage Council. This is due to the fact that except for the two targets outlined below, and for the monitoring regime established through Policy 18, this CMP cannot further predict the failure of elements.

- Repair and reconstruction should aim to maintain, rather than replace, existing fabric as far as possible.
- The introduction of modern materials, which perform better than original materials, should be considered when this will assist in the long-term conservation of significant fabric.
- Repair and reconstruction may also be undertaken pro-actively to prevent the loss of significant fabric.
- Significant fabric which is beyond repair should be stabilised and conserved *in situ* as far as possible, to prevent the cumulative loss of historic fabric.

Two targets for future repair and reconstruction works, as funds become available, have been identified in the Strategic Management Approach (8.3):

Precinct 2: Shepherd's Gully Road upgrading to provide access for vehicles for maintenance works avoiding Devine's Hill.

Precinct 4: Mitchell's Loop stabilisation and road surfacing works

Strategy Masonry conservation

Collate information derived from ongoing conservation works, and supplement with new research as funding becomes available and use a qualified masonry conservation specialist to develop a masonry conservation strategy which addresses the long-term conservation needs of the masonry elements of the OGNR. The strategy should provide a systematic approach to dealing with a range of issues that would be poorly dealt with on a case-by-case basis.

Policy 7 Community management partnerships

The community will be involved in, and consulted about, the management of the OGNR cultural landscape.

Strategy Relationship with the Convict Trail Project

NPWS should continue its close working relationship with the Convict Trail Project.

Strategy Relationship with Indigenous community

Darkinung Aboriginal Land Council and Metropolitan Aboriginal Land Council participate in NPWS's Central Coast Hunter Range Aboriginal Heritage Advisory Committee. Through this mechanism these groups should be regularly consulted on the management of the OGNR cultural landscape.

Strategy Relationship with local community

The conservation and promotion of the OGNR should bring benefits to the local community in terms of their own access and involvement and through future consideration of business opportunities for licensed tour operators and other local businesses.

Strategy Communicating with local community

An annual community meeting should be held to keep the lines of communication open between NPWS and the community.

Strategy Relationship with TransGrid

TransGrid requires access to the Road for ongoing maintenance of the 25 / 26 Transmission Line and undertakes that all aspects of the transmission line maintenance shall be in accordance with the formal 2002 MOU with NPWS. NPWS should seek to update this MOU following the endorsement of this CMP.

Policy 8 Dharug National Park POM

The POM will be reviewed and amended as required following the adoption and endorsement of the CMP.

Policy 9 Compliance with environmental legislation

This CMP provides a context for the NPWS's determination of whether proposed works will have a significant effect on the environment (under the EP&A Act 1979). The

analysis of both cultural and natural heritage values which it contains provides a basis for the determination, and recommendations for the need for a Review of Environmental Effects (REE) for required works along the road identified in this CMP are included in the precinct management strategies.

Policy 10 Funding, sponsorship

The maintenance and management requirements of the OGNR cultural landscape, as set out in this CMP and further refined in the maintenance plan, should be recognised in a regular, annual budgetary allocation by the NPWS, as well as through the investigation of alternative funding sources including sponsorship, National List funding and World Heritage funding.

Strategy DEC funding

In order to implement the policies of this CMP, NPWS should make a regular annual budgetary allowance. HAMP funding is not an appropriate source of funding for long term management, alternative funding sources should be investigated.

Strategy Corporate sponsorship

Seek corporate sponsorship to support the conservation of the OGNR. Consider the use of the OGNR as a corporate 'image' in return for sponsorship.

Strategy Volunteers

Consider the use of volunteer programs such as working bees to assist in conservation activities such as vegetation clearing and side drain clearing; monitoring vandalism and other site stewardship activities.

Strategy National List and World Heritage funding

Undertake regular liaison with the Commonwealth Government to ensure that the OGNR is nominated for National List registration and to promote the Draft World Heritage Listing of Convict Sites. Take advantage of any funds made available for National List and World Heritage items to support the long-term management objectives.

Policy 11 Archiving and documentation

The documents and archives associated with the history and management of the OGNR landscape will be stored and curated to ensure their long-term conservation and accessibility as a record of the management of the OGNR cultural landscape.

Strategy Consultants' reports

All consultants' work should be forwarded to NPWS head office library. In addition the regional office should maintain two sets of documents, only one of which is made available for loan to consultants or researchers. A copy of all reports should be lodged in the Historic Places Register in the Cultural Heritage Division offices in Hurstville.

Strategy The Arcview project

This project should be supported and developed. The use of student volunteers to support the project should be considered. The results of this CMP should be added to the GIS. All future fieldwork should include a requirement to accurately locate features in a form that can be added to the GIS.

Policy 12 Access and use

The terms and conditions of access to, and use of, the OGNR cultural landscape will be based on a policy which is developed with expert heritage advice and community consultation, and which:

- is publicly available;
- governs NPWS and community alike;
- is based on sound data;
- is regularly revised, responding to the results of monitoring of condition and impacts carried out as a part of the Strategic Management Approach outlined above.

Strategy Access and use policy

Following the implementation of the Strategic Management Approach, review current access and use regulations against new data concerning condition and impact.

Strategy Current access

Continue current access and use policies as set out in the POM until compilation of new data, in line with the Strategic Management Approach.

Strategy Unauthorised access

Consider a local media campaign based on the heritage significance of the OGNR and its vulnerability to damage by vehicles. Use local volunteers in site stewardship programs.

8.6.2 Natural heritage

Policy 13 Natural heritage

The natural heritage values of the Old Great North Road cultural landscape will be conserved and interpreted. Natural heritage values will be managed through vegetation (including weed) control (guided by the *Vegetation Management Procedure*, Appendix 3), fire management, roadside vista management, and runoff control.

Strategy - Pest and weed management

Continue weed management program as appropriate in areas adjoining the road, in line with the Central Coast – Hunter Range Region Pest Management Strategy. In areas on or adjoining cultural heritage sites, weed management should also be guided by the vegetation management procedures

Strategy Fire management

Support the implementation of a fire management plan for the parks complex, based on the present plan by Conacher Travers (2000), which will result in the maintenance and rehabilitation of vegetation community

structures by the establishment of a more natural fire regime, and a reduction of wildfire incidence on the structures of OGNR.

Strategy The fire management plan

The Old Great North Road is used for fire management purposes, primarily during fire fighting. It is a strategic firebreak for wildfires and hazard reductions and therefore will continue to be used to a degree by fire fighting vehicles. In this context, the CMP recommends that the NPWS continues to investigate alternative fire management approaches which avoid or minimise the use of OGNR as a fire break in future suppression strategies under the plan. Where there are no alternatives to fire fighting vehicles using the Road, only Cat 9s (strickers) should be used.

Strategy - Roadside vista management

Activities to manage the roadside vista are already included in the POMs for Dharug and Yengo National Parks. In particular, the NPWS should:

- continue to incorporate effective soil erosion and sedimentation control principles and practices in all development, protection and incident control activities adjoining the road;
- continue strict control of vehicle access and pack camping on areas adjoining the road;
- rehabilitate any disturbed areas adjoining the road using local soils and plants from local genetic stock;
- remove all woody vegetation growing on the road surface, road structures and the faces of rock cuttings in line with the vegetation management procedures.

Strategy Run-off control and stabilisation of the geological features

Ensure during all works on the road that changes to drainage and run-off patterns will not impact adversely on vulnerable geological structures such as honeycomb weathering, gnammas, cavernous joint weathering, overhanging sandstone visors, undercut bluffs, and liesegang rings.

If impacts are likely to occur, plan, construct and maintain drainage control structures (berms, ditches or drains) to intercept run-off water and direct it away from the feature.

Where possible, ensure an appropriate spatial separation between any runoff interception structures and the road so that they do not impinge physically or visually on cultural items or the scenic amenity of the road.

8.6.3 Cultural heritage

Policy 14 New works

The aim of this CMP is to minimise the loss of significant cultural fabric. New works will be undertaken in accordance with the specifications prepared by an appropriately qualified heritage specialist where it has been demonstrated (in a structural engineer's report) that the long-term conservation of original fabric depends upon new works. Examples of new work include new culverts, new road surface, run-off control works and so on.

Policy 15 Design, appearance and installation of new elements

The installation of new elements (such as fences, signs, gates, toilets, etc as indicated in the Conservation Policies) within the OGNR cultural landscape will not impact upon significant fabric. The design and appearance of new elements will clearly distinguish them from original fabric, and will contribute to the aesthetic experience of the OGNR cultural landscape.

Strategy Consistent, high quality design
New elements should be designed to a high standard; should be consistent throughout the OGNR cultural landscape; should not detract from people's interpretation of the original elements of the Road; and be sympathetic to the OGNR cultural landscape.

Policy 16 The Telegraph Line

Remains of the Telegraph Line found in many of the precincts will be left *in situ* and not actively conserved.

Policy 17 Moveable artefacts

Moveable artefacts associated with the OGNR will be retained *in situ* unless a heritage impact assessment or an archaeological assessment determines that their significance is such that they must be removed in order to ensure their long-term conservation. Archaeological relics must only be removed in accordance with the statutory provisions of Section 139 of the *Heritage Act*, 1977. Removed artefacts must have their significance and conservation needs assessed, and must be stored and curated in order to ensure their long-term conservation and association with the OGNR cultural landscape.

Strategy Conservation of moveable artefacts
NPWS should ensure that artefacts associated with the OGNR are catalogued, stored safely, and have their significance and conservation needs assessed and acted upon. It may be appropriate to approach a collecting institution such as the Newcastle Regional Museum, The Powerhouse Museum or the Hyde Park Barracks (Historic Houses Trust) to determine an appropriate long-term repository for moveable artefacts of high significance to ensure their long-term conservation.

Policy 18 Precinct-based management

Manage each road precinct in accordance with the strategic management approach, including baseline management, and establish a precinct management cycle in the maintenance plan in accordance with the individual needs of the precinct.

Maintenance plan

In general, the maintenance plan will cover, for each precinct:

- vegetation management
- access management
- monitoring and establishment of monitoring targets.

In addition it will include specific requirements for some precincts, including:

Precinct 1: Devine's Hill to Finch's Line

- graffiti management
- culvert and drain clearing
- pavement stabilisation
- monitoring of distortion and movement of walls and buttresses
- run-off management

Precinct 3: Finch's Line

- graffiti management
- culvert and drain clearing
- pavement stabilisation
- run-off management

Precinct 6: Western Commission Track Intersection to Ten Mile Hollow

- culvert and drain clearing
- pavement stabilisation
- run-off management

Strategic / long-term outcomes

In general, the strategic and long-term outcomes will include for each precinct:

- improved interpretation – in accordance with this CMP and the Interpretation Plan based on its findings.

Specifically for each precinct, the strategic and long-term outcomes will include:

Precinct 1: Devine's Hill to Finch's Line

- improved visitor Information at Settler's Road gate
- Indigenous heritage acknowledged in this key area

- stockade site: researched and interpreted as set out below in the interpretation policy; works in support of site interpretation may require an REF

Management of stockade site: feature 1/HA1

- vegetation management in accordance with Appendix 3
- extent of clearing of vegetation – clearing should be maintained within the existing area; archaeological features outside the present cleared area should be monitored and vegetation impacting on these features should be removed, but they should not be further exposed by clearing, unless as part of an interpretation strategy developed under policy 19
- further research (including archaeological research), in accordance with the Interpretation Plan, may determine a revised or extended area for clearing in the future
- see policy 19 Interpretation for further strategies for this site
- no excavation, except in line with the general archaeological management guidelines, set out below

Precinct 2: Shepherd's Gully Road and Sternbeck's Gully Road

- upgrade of Shepherd's Gully Road, subject to available funding, to provide alternative vehicular access to the OGNR (ie, avoiding Devine's Hill) (Hughes Trueman 2001); it is likely an REF would be required for this work
- maintenance of Sternbeck's Gully Road and promotion as a walking track

Precinct 3: Finch's Line

- all fabric well maintained and stabilised
- engraving features stabilised and protected

Precinct 4: Finch's Line Intersection to (including) Mitchell's Loop

- stabilisation and repair works for road pavement and culverts as set out in REF (Andrews Neil Devine's Hill to Western Commission Track 2002)
- Mitchell's Loop stabilised, maintained and interpreted as a feature

Precinct 5: Mitchell's Loop to the Western Commission Track

- stabilisation and repair works for road pavement and culverts, as set out in REF (Andrews Neil Devine's Hill to Western Commission Track 2002)

Precinct 6: Western Commission Track Intersection to Ten Mile Hollow

- Indigenous heritage acknowledged in this key location

- Ten Mile Hollow Inn site: researched and interpreted as set out below in the interpretation policy and as recommended in the Interpretation Plan. An REF will likely be required for these works

Precinct 7: Simpson's Track

- access - further use of bulldozers on this historic track is prohibited
- detailed survey and identification of features

General archaeological management guidelines:

The following general guidelines should apply in all precincts:

1. Cyclical maintenance and monitoring does not require archaeological supervision.
2. Vegetation management must be in accordance with the Vegetation Management Procedure Appendix 3.
3. New works (such as the installation of a new culvert or the excavation of a long collapsed or buried culvert), or any other work involving excavation which is more extensive, should be archaeologically supervised and recorded in accordance with an Excavation Permit issued under Section 60 of the *Heritage Act*, 1977.
4. Minor excavation (such as for a small number of postholes for a sign) does not require archaeological supervision. However such work should always be sited away from the road fabric wherever possible.
5. Research excavation that will enhance the interpretation of the OGNR cultural landscape, or is vital for the conservation of the OGNR cultural landscape, must be adequately resourced and justified (precincts 2, 3, 4, 5).

The following guidelines should also be applied specifically in particular precincts:

Precinct 1: Devine's Hill to Finch's Line

Known historical archaeological sites 1/C1-6 should not be excavated except in accordance with a research design and Excavation Permit; research that will enhance the interpretation of the OGNR cultural landscape, or is vital for the conservation of the OGNR cultural landscape, and is adequately resourced, should be considered.

Precinct 2: Shepherd's Gully Road and Sternbeck's Gully Road

Known Indigenous archaeological sites should be monitored.

Precinct 3: Finch's Line

Known Indigenous archaeological sites should be monitored.

Precinct 4: Finch's Line Intersection to (including) Mitchell's Loop

Known Indigenous archaeological sites should be monitored

Precinct 5: Mitchell's Loop to the Western Commission Track

Known Indigenous archaeological sites should be monitored

Precinct 6: Western Commission Track Intersection to Ten Mile Hollow

Known Indigenous site and historical archaeological sites 6/HA 1-7 should not be excavated except in accordance with a research design and Excavation Permit. Research that will enhance the interpretation of the OGNR cultural landscape, or is vital for the conservation of the OGNR cultural landscape, and is adequately resourced, should be considered.

Precinct 7: Simpson's Track

Known Indigenous sites should not be excavated except in accordance with a research design and Excavation Permit. Research that will enhance the interpretation of the OGNR cultural landscape, or is vital for the conservation of the OGNR cultural landscape, and is adequately resourced, should be considered.

Specific recommendations for all precinct features are tabulated in Appendix 4.

8.7 Visitor Use and Interpretation

Policy 19 Interpretation

The integrated heritage values of the OGNR cultural landscape will be interpreted through creative and innovative methods which provide:

- enhanced understanding of the integrated heritage values of the OGNR cultural landscape;

- opportunities for access, involvement and educational/cultural experiences for local and regional communities, and national and international visitors; and
- for the promotion of cultural tourism experiences for the broader community.

Strategy Interpretation plan

Prepare an interpretation plan based upon the findings and policies of this CMP.

Strategy Interpretation principles

Base the interpretation plan upon the following principles:

- Interpretation should inform, engage and stimulate visitors in ways that enhance their enjoyment and experience of the OGNR cultural landscape.
- The information provided should be accurate, authentic and based on current research. However, as interpretation is the result of current interests and research directions, the interpretive needs of the community and the styles, media and content they will respond to, will change as society changes.
- Interpretive installations should not detract from the visitor's personal experience of discovery of the place, nor should they intrude physically on the character of the area.
- Interpretation should acknowledge local, Indigenous and other community attachments and custodianship of the place. It should not alienate people who feel ownership and attachments to the OGNR cultural landscape.

Strategy Signage

- Directional signage, including distance information, difficulty of terrain, needs to be included at the major entry points.
- A sign promoting the location and features of the OGNR should be located in Wiseman's Ferry.
- Signs should acknowledge the Indigenous heritage of the area.

Strategy A Website and the OGNR

If funding is available to enhance interpretation, a quality, dedicated website should be developed on the OGNR which includes:

- school educational resources
- tourist information
- local area information
- access details for driving to the site, walking, cycling and camping along the Road
- historical and technical information, and
- links to the NPWS and Convict Trail websites.

Strategy Visitor facilities

- Upgrade the camping facilities at Ten Mile Hollow with a composting toilet, small water tank and fire pit.
- Picnic facilities could be provided at the stockade site but they should not have an impact on archaeological remains.

Strategy Visitor guides

Information on distances and particular points of interest on the walks should be added to the visitor guide.

Strategy Discovery program

As well as the existing programs, short guided walks should be offered.

Strategy Further interpretive projects subject to funding

- The stockade site deserves further research and interpretation, including archaeological research. A thorough archaeological survey should be undertaken to establish the perimeter of the Devine's Hill stockade site before any visitor facilities are located on the site. The rock engraving of the (convict?) head could be reproduced as a promotional symbol for the stockade site.
- Audio tours would be very suited to the OGNR cultural landscape and could be developed and managed by a licensed operator.

- A visitors' centre should be a long-term objective for the interpretation of the OGNR cultural landscape.

8.8 Research, Listing and Recording

Policy 20 Research, listing and recording

Ongoing research into the cultural and natural significance of the OGNR cultural landscape should be supported and promoted.

Strategy Survey and synthesis of Indigenous archaeological sites

Consider further surveys, analysis and assessment of the Indigenous archaeological heritage of the OGNR cultural landscape.

Strategy Moveable artefacts

The OGNR moveable artefacts in NPWS possession should be:

- documented
- provenanced where possible
- further researched in order to assess their significance, and
- assessed to determine their conservation status and future conservation requirements.

Policy 21 Plan implementation

This CMP will be implemented in accordance with Section 9 *Implementation Strategies and Action*.

Policy 22 Plan review

A public and professional review of the CMP should be undertaken in five years time, ie, in 2010.

9.0 Implementation Strategy

The following table takes the Conservation Policy (Section 8) and outlines implementation strategies, responsibilities and timeframes. This implementation strategy classifies activities in terms of short (1-2 years), medium (3-5 years) and long (5-10 years) term timeframes. Funding for the implementation of these plans and policies is competitive within the NPWS and other funding agency programs. In view of this, timeframes suggested here indicate the priority of actions, ie, those given a one-year time frame are considered to be urgent pending the allocation or attraction of funds for their implementation.

Abbreviations used in the table:

RD	Regional Director
RM	Regional Manager
AM	Area Manager
AHU	Aboriginal Heritage Unit
R	Ranger, Dharug NP
FO	Field Officers
CHD	Cultural Heritage Division, NPWS Head Office
PMO	Pest Management Officer
FMO	Fire Management Officer

Conservation Policies	Strategies and Actions	Responsibility	Time Frame		
			Short	Med	Long
Retention of Heritage Significance					
Policy1: Significance the basis for planning and work <i>The statement of cultural significance set out in Section 5 should be the principal basis for future planning and work.</i>	<ul style="list-style-type: none"> Applies to all Strategies and Actions 	N/a		ongoing	
Policy2: Adopt and endorse this CMP <i>This CMP will be submitted for endorsement by the NPWS executive and the NSW Heritage Council.</i>	<ul style="list-style-type: none"> Applies to all Strategies and Actions 	N/a	✓		
Policy 3: Standards of practice <i>The outstanding significance of the OGNR and its cultural landscape requires best-practice standards of heritage management.</i>	<ul style="list-style-type: none"> Applies to all Strategies and Actions 	N/a		ongoing	
Policy 4: Expert advice <i>The management and conservation of the OGNR and its cultural landscape will draw on appropriate expert advice to ensure high standards of conservation practice.</i>	<ul style="list-style-type: none"> Invite an appropriately qualified and experienced individual with significant heritage expertise relevant to the OGNR to join the NPWS's community based Regional Advisory Committee. 	AM, R		ongoing	
	<ul style="list-style-type: none"> The use of period contracts for consultants should be investigated to ensure expertise, consistency of approach, development of a knowledge base and familiarity with the broader context of the OGNR. 	AM, R		ongoing	

Conservation Policies	Strategies and Actions	Responsibility	Time Frame		
			Short	Med	Long
	<ul style="list-style-type: none"> Should funding become available (for instance through the declaration of the site as World Heritage) a single 'heritage manager' for the OGNR cultural landscape should be appointed to ensure streamlined management, efficient liaison with NPWS and the community, and to ensure consistent application of these policies. 	AM, R		ongoing	
<p>Policy 5: Knowledge and skills All those involved in the care and management of the OGNR and its cultural landscape will have an appropriate level of knowledge and skills.</p>	<ul style="list-style-type: none"> Provide appropriate training for all those who work on the OGNR. This will range from simple induction training in basic heritage management principles for contractors, to on-site and off-site training of NPWS staff. The maintenance plan workshops and heritage conservation videos can be used to train new field staff. All staff should take advantage of Cultural Heritage Division training days and seminars. Links with expert staff in other regions and areas should be developed. 	R, FOs	✓	✓	✓
<p>Policy 6: Conservation of the fabric The fabric of the OGNR and its associated features within Dharug National Park will be conserved in accordance with the policies, strategies and actions set out in this Conservation Management Plan.</p>	<ul style="list-style-type: none"> The policy applies to all aspects of the fabric of the OGNR and its associated features including the road alignment; excavated features such as cuttings, drains and quarries; constructed elements such as retaining walls, culverts, spillways and bridges; and archaeological sites including the stockade and other occupation sites. 	N/a		ongoing	
	<ul style="list-style-type: none"> The extent and nature of conservation works is reflected in the Strategic Management Approach (8.3) and will vary from precinct to precinct depending on proposed use of 	N/a		ongoing	

Conservation Policies	Strategies and Actions	Responsibility	Time Frame		
			Short	Med	Long
	the precinct, levels of funding and the condition of the fabric. See Policy 18.				
	<ul style="list-style-type: none"> Develop and implement a maintenance plan that provides for cyclical maintenance of the fabric of the OGNR in line with the Strategic Management Approach (8.3) and the implementation levels identified for each precinct in Policy 18. The maintenance plan should cover at least the following topics: <ul style="list-style-type: none"> vegetation management, cleaning of gutters, drains, culverts and road surfaces, management of historic graffiti, cleaning/disguising modern graffiti, monitoring programs, the removal of items for conservation purposes, conservation of timber items in situ, and maintenance of road surfaces, including nature and source of topping material. 	R, FOs	✓		
	<ul style="list-style-type: none"> Repair and reconstruction works may be required as items fail or threaten to fail. Repairs and reconstruction, except in so far as they are considered in the maintenance plan, will require expert advice, an REF process and application for approval under S60 of the Heritage Act, 1977. 	CHD, R, FOs		ongoing	

Conservation Policies	Strategies and Actions	Responsibility	Time Frame		
			Short	Med	Long
	<ul style="list-style-type: none"> Collate information derived from ongoing conservation works, and supplement with new research as funding becomes available and use a qualified masonry conservation specialist to develop a masonry conservation strategy which addresses the long-term conservation needs of the masonry elements of the OGNR. The strategy should provide a systematic approach to dealing with a range of issues that would be poorly dealt with on a case-by-case basis. 	CHD, R, FOs		✓	✓
<p>Policy 7: Community management partnerships The community will be involved in, and consulted about, the management of the OGNR cultural landscape.</p>	<ul style="list-style-type: none"> NPWS should continue its close working relationship with the Convict Trail Project. 	CHD, R	✓		
	<ul style="list-style-type: none"> Darkinung Aboriginal Land Council and Metropolitan Aboriginal Land Council participate in NPWS's Central Coast-Hunter Range Aboriginal Heritage Advisory Committee. Through this mechanism these groups should be regularly consulted on the management of the OGNR cultural landscape. 	AHU, R	✓		
	<ul style="list-style-type: none"> The conservation and promotion of the OGNR should bring benefits to the local community in terms of their own access and involvement and through future consideration of business opportunities for licensed tour operators and other local businesses. 	AM, R		✓	✓

Conservation Policies	Strategies and Actions	Responsibility	Time Frame		
			Short	Med	Long
	<ul style="list-style-type: none"> An annual community meeting should be held to keep the lines of communication open between NPWS and the community. 	AM, R	✓		
Policy 8: Dharug National Park POM <i>The POM will be reviewed and amended as required following the adoption and endorsement of the CMP.</i>	<ul style="list-style-type: none"> Applies to all Strategies and Actions 	R		ongoing	
Policy 9: Compliance with environmental legislation <i>This CMP provides a context for the Service's determination of whether proposed works will have a significant effect on the environment (under the EP&A Act 1979). The analysis of both cultural and natural heritage values which it contains provides a basis for the determination, and recommendations for the need for a Review of Environmental Effects (REE) for required works along the road identified in this CMP are included in the precinct management strategies.</i>	<ul style="list-style-type: none"> Applies to all Strategies and Actions 	R		ongoing	
Policy 10: Funding, sponsorship <i>The maintenance and management requirements of the OGNR cultural landscape, as set out in this CMP and further refined in the Maintenance Plan, should be recognised in a regular, annual budgetary allocation by the NPWS, as well as through the investigation of alternative funding sources including sponsorship, National List funding and World Heritage funding.</i>	<ul style="list-style-type: none"> In order to implement the policies of this CMP, a regular annual budgetary allowance must be made by the DEC. 	RM, AM		ongoing	
	<ul style="list-style-type: none"> Seek corporate sponsorship to support the conservation of the OGNR. Consider the use of the OGNR as a corporate 'image' in return for sponsorship. 	RM, AM	✓	✓	

Conservation Policies	Strategies and Actions	Responsibility	Time Frame		
			Short	Med	Long
	<ul style="list-style-type: none"> Consider the use of volunteer programs such as working bees to assist in conservation activities such as vegetation clearing and side drain clearing; monitoring vandalism and other site stewardship activities.. 	R	✓	✓	✓
	<ul style="list-style-type: none"> Undertake regular liaison with the Commonwealth Government to take advantage of funds made available for National List and World Heritage items, to support the long term management objectives. 	AM, R	✓	✓	

Conservation Policies	Strategies and Actions	Responsibility	Time Frame		
			Short	Med	Long
Policy11 : Archiving and documentation <i>The documents and archives associated with the history and management of the OGNR landscape will be stored and curated to ensure their long term conservation and accessibility as a record of the management of the OGNR cultural landscape.</i>	<ul style="list-style-type: none"> All consultants' work should be forwarded to NPWS head office library. In addition the regional office should maintain two sets of documents, only one of which is made available for loan to consultants or researchers. A copy of all reports should be lodged in the Historic Places Register in the Cultural Heritage Division offices in Hurstville. 	CHD, R		ongoing	
	<ul style="list-style-type: none"> The ArcView project should be supported and developed. The use of student volunteers to support the project should be considered. The results of this CMP should be added to the GIS. All future fieldwork should include a requirement to accurately locate features in a form which can be added to the GIS. 	AM, R		ongoing	
Policy 12: Access and use <i>The terms and conditions of access to, and use of, the OGNR cultural landscape will be based on a policy which is developed with expert heritage advice and community consultation, and which:</i> <ul style="list-style-type: none"> is publicly available; 	<ul style="list-style-type: none"> Following the implementation of the Strategic Management Approach, review current access and use regulations against new data concerning condition and impact. Continue current access and use policies as set out in the POM until compilation of new data. 	R		✓	✓
		R, FOs	✓		

Conservation Policies	Strategies and Actions	Responsibility	Time Frame		
			Short	Med	Long
<ul style="list-style-type: none"> governs NPWS and community alike; is based on sound data; is regularly revised responding to the results of monitoring of condition and impacts carried out as a part of the Strategic Management Approach outlined above. 	<ul style="list-style-type: none"> Consider a local media campaign based on the heritage significance of the OGNR and its vulnerability to damage by vehicles. Use local volunteers in site stewardship programs. 	AM, R	✓		
Natural Heritage					
Policy 13: <i>The natural heritage values of the Old Great North Road cultural landscape will be conserved and interpreted. Natural heritage values will be managed through vegetation (including weed) control (guided by the Vegetation Management Procedure, Appendix 3), fire management, roadside vista management, and run-off control.</i>	<ul style="list-style-type: none"> Continue weed management program as appropriate in areas adjoining the road, in line with the Central Coast – Hunter Range Region Pest Management Strategy. In areas on or adjoining cultural heritage sites, weed management should also be guided by the Vegetation Management Procedures 	R, FOs, PMO		ongoing	
	<ul style="list-style-type: none"> Amend the Vegetation Management Procedure with any methodological lessons learnt. 	R, FOs	✓	✓	
	<ul style="list-style-type: none"> Support the implementation of a Fire Management Plan to maintain and rehabilitate vegetation community structures by the establishment of a more natural fire regime, and a reduction of wildfire incidence on the sandstone structures of OGNR. 	AM, R, FMO	✓	✓	

Conservation Policies	Strategies and Actions	Responsibility	Time Frame		
			Short	Med	Long
	<ul style="list-style-type: none"> Continue to investigate alternative fire management approaches (within the context of the Fire Management Plan) which avoid or minimise the use of OGNR as a fire break or boundary in suppression strategies 	AM, R, FMO	✓		
	<ul style="list-style-type: none"> Activities to manage the roadside vista are already included in the POMs for Dharug and Yengo National Parks. In particular, the NPWS should: <ul style="list-style-type: none"> continue to incorporate effective soil erosion and sedimentation control principles and practices; 	R, FOs		✓	✓
	<ul style="list-style-type: none"> continue strict control of vehicle access and pack camping on areas adjoining the road; 	R, FOs		ongoing	
	<ul style="list-style-type: none"> rehabilitate any disturbed areas adjoining the road using local soils and plants from local genetic stock; 	R, FOs		✓	✓
	<ul style="list-style-type: none"> remove all woody vegetation growing on the road surface, road structures and the faces of rock cuttings; 	R, FOs, PMO	✓	✓	
	<ul style="list-style-type: none"> undertake all weed control in line with the Vegetation Management Procedures. 	R, FOs, PMO	✓	✓	

[illegible]

Conservation Policies	Strategies and Actions	Responsibility	Time Frame		
			Short	Med	Long
<p><i>Policy 15: Design, appearance and installation of new elements</i> <i>The installation of new elements (such as fences, signs, gates, toilets, etc. as indicated in the Conservation Policies) within the OGNR cultural landscape will not impact upon significant fabric. The design and appearance of new elements will clearly distinguish them from original fabric, will contribute to the aesthetic experience of the OGNR cultural landscape.</i></p>	<ul style="list-style-type: none"> New elements should be designed to a high standard; should be consistent throughout the OGNR cultural landscape; should not detract from people's interpretation of the original elements of the Road; and be sympathetic to the OGNR cultural landscape. 	AM, R		ongoing	

Conservation Policies	Strategies and Actions	Responsibility	Time Frame		
			Short	Med	Long
Policy 16: The Telegraph Line <i>Remains of the Telegraph Line found in many of the precincts will be left in situ and not actively managed.</i>	<ul style="list-style-type: none"> Applies to all relevant strategies and actions 	N/a			ongoing
Policy 17: Moveable artefacts <i>Moveable artefacts associated with the OGNR will be retained in situ unless a heritage impact assessment or archaeological assessment determines that their significance is such that they must be removed in order to ensure their long-term conservation. Archaeological relics must only be removed in accordance with the statutory provisions of Section 139 of the Heritage Act, 1977. Removed artefacts must have their significance and conservation needs assessed, and must be stored and curated in order to ensure their long-term conservation and association with the OGNR cultural landscape.</i>	<ul style="list-style-type: none"> NPWS should ensure that artefacts associated with the OGNR are catalogued, stored safely, and have their significance and conservation needs assessed and acted upon. It may be appropriate to approach a collecting institution such as the Newcastle Regional Museum, The Powerhouse Museum or the Hyde Park Barracks (Historic Houses Trust) to determine an appropriate long-term repository for moveable artefacts of high significance to ensure their long-term conservation. 	AM, R	✓		
Policy 18: Precinct-based management <i>Manage each road precinct in accordance with the Strategic Management Approach: including Baseline Management, and the establishment of a precinct management cycle.</i>	Precinct 1: Devine's Hill to Finch's Line <ul style="list-style-type: none"> Improved interpretation – in accordance with this CMP and the Interpretation Plan based on its findings Improved visitor information at Settler's Road gate. Indigenous heritage acknowledged in this key area. Stockade site: researched and interpreted as set out below in the interpretation policy and as recommended in the Interpretation Plan, including a 	AM, R		✓	✓

Conservation Policies	Strategies and Actions	Responsibility	Time Frame		
			Short	Med	Long
	thorough archaeological survey to establish the perimeter of the site. Works in support of site interpretation may require an REF.				
	<p>Management of stockade site: Feature 1/HA1</p> <ul style="list-style-type: none"> Vegetation management in accordance with Appendix 3 Extent of clearing of vegetation – clearing should be maintained within the existing area. Further research (including archaeological research), in accordance with the Interpretation Plan may determine a revised or extended area for clearing in the future. See Policy 19 Interpretation for further strategies for this site. No excavation except in line with specific recommendations in Appendix 4. 	AM, R			✓
	Precinct 2: Shepherd's Gully Road and Sternbeck's Gully Road				
	<ul style="list-style-type: none"> Upgrade of Shepherd's Gully Road to provide alternative vehicular access to the OGNR (ie, avoiding Devine's Hill) (Hughes Trueman 2001). An REF would likely be required for this work. 	AM, R			✓
	<ul style="list-style-type: none"> Maintenance of Sternbeck's Gully Road and promotion as a walking track. 	AM, R		✓	✓
	<ul style="list-style-type: none"> Improved interpretation – in accordance with this CMP and an Interpretation Plan based on its findings 	R			✓

Conservation Policies	Strategies and Actions	Responsibility	Time Frame		
			Short	Med	Long
	Precinct 3: Finch's Line				
	<ul style="list-style-type: none"> Improved interpretation – in accordance with this CMP and the Interpretation Plan based on its findings 	R		✓	✓
	<ul style="list-style-type: none"> All fabric well maintained and stabilised. 	R	✓	✓	✓
	<ul style="list-style-type: none"> Engraving features stabilised and protected. 	R	✓	✓	✓
	Precinct 4: Finch's Line Intersection to (including) Mitchell's Loop				
	<ul style="list-style-type: none"> Improved interpretation – in accordance with this CMP and the Interpretation Plan based on its findings 	R			✓
	<ul style="list-style-type: none"> Stabilisation and repair works for road pavement and culverts as set out in REF (Andrews Neil Devine's Hill to Western Commission Track 2002). 	AM, R		✓	
	<ul style="list-style-type: none"> Mitchell's Loop stabilised, maintained and interpreted as a feature. 	R		✓	✓
	Precinct 5: Mitchell's Loop to the Western Commission Track Intersection				
	<ul style="list-style-type: none"> Stabilisation and repair works for road pavement and culverts as set out in REF (Andrews Neil Devine's Hill to Western Commission Track 2002) 	AM, R		✓	✓

Conservation Policies	Strategies and Actions	Responsibility	Time Frame		
			Short	Med	Long
	Precinct 6: Western Commission Track Intersection to Ten Mile Hollow				
	<ul style="list-style-type: none"> Improved interpretation – in accordance with this CMP and the Interpretation Plan based on its findings Indigenous heritage acknowledged in this key location. Ten Mile Hollow Inn site: researched and interpreted as set out below in the interpretation policy and as recommended in the Interpretation Plan. An REF will likely be required for these works. 	R			✓
	Precinct 7: Simpson's Track				
	<ul style="list-style-type: none"> Improved interpretation – in accordance with this CMP and the Interpretation Plan based on its findings. Access: further use of bulldozers on this historic track is prohibited. Detailed survey and identification of features. 	R			✓
		R		ongoing	
		R		✓	

Conservation Policies	Strategies and Actions	Responsibility	Time Frame		
			Short	Med	Long
<p>Policy 19: Interpretation The integrated heritage values of the OGNR cultural landscape will be interpreted through creative and innovative methods which provide:</p> <ul style="list-style-type: none"> enhanced understanding of the integrated heritage values of the OGNR cultural landscape; opportunities for access, involvement and educational/cultural experiences for local and regional communities, and national and international visitors; and opportunities for the promotion of cultural tourism experiences for the broader community. 	<ul style="list-style-type: none"> Prepare an Interpretation Plan based upon the findings and policies of this CMP. 	CHD, R		✓	
	<ul style="list-style-type: none"> Base interpretation upon the following principles. 	R, CHD	✓	✓	✓
	<ul style="list-style-type: none"> Interpretation should inform, engage and stimulate visitors in ways that enhance their enjoyment and experience of the OGNR cultural landscape. 				
	<ul style="list-style-type: none"> The information provided should be accurate, authentic and based on current research. However, as interpretation is the result of current interests and research directions, the interpretive needs of the community and the styles, media and content they will respond to, will change as society changes. 				
	<ul style="list-style-type: none"> Interpretive installations should not detract from the visitor's personal experience of discovery of the place, nor should it intrude physically on the character of the area. 				
	<ul style="list-style-type: none"> Interpretation should acknowledge local, Indigenous and other community attachments and custodianship of the place. It should not alienate people who feel ownership and attachments to the OGNR cultural landscape. 				

Conservation Policies	Strategies and Actions	Responsibility	Time Frame		
			Short	Med	Long
	<ul style="list-style-type: none"> Directional signage, including distance information, difficulty of terrain, needs to be included at the major entry points. 	R		✓	✓
	<ul style="list-style-type: none"> A sign promoting the location and features of the OGNR should be located in Wiseman's Ferry. 	R		✓	✓
	<ul style="list-style-type: none"> Signs should acknowledge the Indigenous heritage of the area. 	R		✓	✓
	<ul style="list-style-type: none"> A quality, dedicated website should be developed on the OGNR which includes: <ul style="list-style-type: none"> school educational resources, tourist information, local area information, access details for driving to the site, walking, cycling and camping along the Road, historical and technical information, and links to the NPWS and Convict Trail websites. 	R			✓
	<ul style="list-style-type: none"> Upgrade the camping facilities at Ten Mile Hollow with a composting toilet, small water tank and fire pit. Picnic facilities could be provided at the Stockade site but they should not impact on sub-surface remains. 	R, FOs		✓	✓
	<ul style="list-style-type: none"> Information on distances and particular points of interest on the walks should be added to the visitor guide. 	R		✓	✓

Conservation Policies	Strategies and Actions	Responsibility	Time Frame		
			Short	Med	Long
	<ul style="list-style-type: none"> As well as the existing programs, short guided walks should be offered as part of a discovery program. 	R, FOs			✓
	<ul style="list-style-type: none"> The Stockade site deserves further research and interpretation, including archaeological research. The rock engraving of the (convict?) head could be reproduced as a symbol for the Stockade site 	CHD			✓
	<ul style="list-style-type: none"> Audio tours would be very suited to the OGNR cultural landscape and could be developed and managed by a licensed operator. 	AM, R			✓
	<ul style="list-style-type: none"> A visitors' centre should be a long-term objective for the interpretation of the OGNR cultural landscape. 	RM, AM			✓
Policy 20: Research, listing and recording <i>Ongoing research into the cultural and natural significance of the OGNR cultural landscape should be supported and promoted.</i>	<ul style="list-style-type: none"> Consider further surveys, and analysis and assessment of the Indigenous archaeological heritage of the OGNR cultural landscape. 	CHD		✓	✓
	<ul style="list-style-type: none"> The OGNR moveable artefacts in NPWS possession should be: <ul style="list-style-type: none"> documented, provenanced where possible, further researched in order to assess their significance, and assessed to determine their conservation status and future conservation requirements. 	CHD	✓	✓	

Conservation Policies	Strategies and Actions	Responsibility	Time Frame		
			Short	Med	Long
<i>Policy 21: Plan implementation</i>	<ul style="list-style-type: none"> This CMP will be implemented in accordance with the Implementation Strategies and Actions set out in this section. A public and professional review of the CMP should be undertaken in five years' time (ie, in 2010). 			<i>ongoing</i>	
<i>Policy 22: Plan review</i>					

10.0 References

American Geological Institute.

1983 *Dictionary of Geological Terms*, 3rd Edition. New York.: Doubleday Books

Andrews, Neil

1999 Conservation Management Plan for the Wiseman's Ferry Historic Site

2002 Review of Environmental Factors: Restoration of Retaining Wall at
Chainage 1617 Old Great North Road

2002 Review of Environmental Factors: Culvert 14 Restoration Old Great North
Road

2002 Review of Environmental Factors: Conservation Works to Culverts and
Pavement, Devine's Hill to the Western Commission Track Old Great
North Road

Attenbrow, Valerie

1981 'Mangrove Creek dam: salvage excavation project', 2 vols., Unpub. report to NSW
NPWS on behalf of PWD

Attenbrow, Valerie

1987 'The Upper Mangrove Creek Catchment: a study of quantitative changes in the
archaeological record' Unpub. PhD thesis, University of Sydney

Austral Archaeology

2000 A Historical Assessment of the Proposed New Entranceway, Devine's Hill
Old Great North Road

2000 Results of the Devine's Hill Archaeological Monitoring, Old Great North
Road, Wiseman's Ferry

2000 An Archaeological and Conservation Assessment of the Graffiti and
Timber Guardrails on the Old Great North Road, Dharug National Park,
Wiseman's Ferry

2001 Non-Indigenous Archaeological Assessment: Culvert 14 Devine's Hill Old
Great North Road

Australian Heritage Commission

2002 *Australian Natural Heritage Charter*, 2nd ed.

Bell, S., Vollmer, J., Gellie, N.

1993 *Yengo National Park and Parr State Recreation Area, Vegetation Survey,
For Use In Fire Management*. National Parks and Wildlife Service,
Sydney

Bottomley, Bill (ed)

1996 *By Force of Maul and Wedge: Talking about the Great North Road, an
Informal Oral History of a Monument to Convict Engineering and Plans for
its Preservation*

- Brooks, J
1999 Shut out from the world: the Hawkesbury Aborigines Reserve, Deerubbin Press, Berowra Heights, NSW (2nd Ed)
- Byrne, Denis,
1997 'The archaeology of disaster', Public History Review Vol 5/6:17-29
- Byrne, D
2002 'Nervous landscapes: the heritage of racial segregation in NSW', paper presented to ICOMOS Conference June 2002
- Burke, Heather
1988 The Great North Road: An Historical Archaeological Survey
- Carr, Robert and Associates
2001 Geotechnical Assessment: Culvert 35 Old Great North Road, Devine's Hill and Wiseman's Ferry
- Clark, Julia
1996 "Hamlet's castle: ectoplasm and interpretation" in Museum of Sydney, *Sites, nailing the Debate: archaeology and interpretation in museums*, Historic Houses Trust of NSW: Sydney. Pp: 163-178
- Clark, P.J. and Benson, D. H.
1986 *Vegetation Survey of Dharug National Park*. National herbarium of NSW, Royal Botanic Gardens, Sydney
- Clifford, J
1997 *Routes: travel and translation in the late twentieth century*, Harvard University Press, London
- Comber, Jillian
1990 Historical Archaeological Survey of Devine's Hill, the Old Great North Road Wiseman's Ferry
1991 Historical Survey of Finch's Line, the Great Old North Road, Wiseman's Ferry [Volumes 1 and 2 (photo record)].
1991 [J.C. and Adrienne Powell) Historical Archaeological Survey of Shepherd's Gully, the Great Old North Road (including the original line, Sternbeck's Gully Road and Shepherd's Gully Road) [Volumes 1 and 2 (photo record)]
- Cuthoys, Anne
1997 "History and Identity" in Wayne Hudson and Geoffrey Bolton (eds) *Creating Australia: Changing Australian History*, Allen and Unwin: Sydney. p 23-38
- David, B and Wilson, M
2002 Spaces of resistance 'Graffiti and Indigenous place markings in the early European contact period of northern Australia' In *Inscribed landscapes: marking and making place*, University of Hawaii Press, Honolulu:42-60

DLHHS/Dharug and Lower Hawkesbury Historical Society

- 1987 *The ferry, the branch, the creek: aspects of Hawkesbury history*, Revised edition, Dharug and Lower Hawkesbury Historical Society, Wiseman's Ferry, NSW.

Dyster, B

- 1988 'Public employment and assignment to private masters 1788-1821', in S Nicholas (ed) *Convict workers: reinterpreting Australia's past*, Cambridge University Press, Cambridge: 127 – 151

Edwards, Coral

- 1996 "...there are other footsteps that went before...", in *By force of maul and wedge: talking about the Great North Road*, In Bill Bottomley (ed), Wirrimbirra Workshop, Kulnara, NSW

HLA-Envirosciences

- 2000 An Archaeological Assessment of Timber and Stone Culverts between Devine's Hill and Ten Mile Hollow, Old Great Northern Road
2000 Report on Test Excavation and the Unblocking of Culvert 3, Finch's Line, Old Great North Road
2000 An Archaeological Assessment of Seven Culverts on Finch's Line, Old Great North Road
2001 Report on the Reinstatement of Culvert II K 1/1 at Ten Mile Hollow, Old Great North Road

Gale, SJ and Haworth, R J

- 2002 'Beyond the limits of location: human environmental disturbance prior to official European contact in early colonial Australia', *Archaeology in Oceania* 37: 123-136

Goodall, H.

- 1995 'New South Wales' in *Contested ground: Australian Aborigines under the British Crown*, A. McGrath (ed), Allen & Unwin, Sydney

Griffiths, T

- 1987 'Past silences: Aborigines and convicts in our history-making', *Australian Cultural History* 6: 18-32

Grantham, Ian (ed)

- 1999 'An Account of a Trip to Hunter's River & 'A Visit to Wollombi and the Cumnaroy' (The letters of XYZ), Kulnara: Wirrimbirra Workshop.

Hughes Trueman

- 2001 Shepherd's Gully Road: Remedial Engineering Works
2001 Great Old North Road – Devine's Hill Road Pavement Stabilisation
2002 Chainage 1617 Retaining Wall Remedial Works Old Great North Road Devine's Hill

Hugel, Carl, Freiherr von

- n.d. *New Holland Journal: November 1833 – October 1834*, Melbourne University Press, Melbourne.

Ireland, Tracy

- 2002 'Giving Value to the Australian Historic Past: Historical archaeology, heritage and nationalism', *Australasian Historical Archaeology* 20: 15- 25

Jordan, Bill and Associates

- 1997 Old Great North Road Devine's Hill and Clare's Bridge: Remedial Works
2001 Wall Stability Assessment Chainage 1617 Devine's Hill Old Great North Road
2001 Old Great North Road: Road Carrying Capacity
2001 Old Great Northern Road Timber Culvert at Ten Mile Hollow

Karskens, Grace

- 1984 "The Convict Road station site at Wiseman's ferry: an historical and Archaeological Investigation" *Australian Historical Archaeology* 2: 17 – 26
1985 The Grandest Improvement in the Country – An Historical and Archaeological Study of the Great North Road, NSW 1825 – 1836, MA Thesis, University of Sydney
1986 "Defiance, Deference and Diligence: Three Views of Convicts in New South Wales Road Gangs", *Australian Historical Archaeology* 4: 17 – 28
1991 The Great Old North Road Interpretation and Statement of Cultural Significance
1999 [G.K. and Siobhan Lavelle and RTA Technology] Stage 1 Conservation Plan for the Great North Road

Kociumbas, Jan

- 2001 "Mary Ann', Joseph Fleming and 'Gentleman Dick': Aboriginal-convict relationships in colonial history', *Journal of Australian Colonial History*, v.3, no.1: 28-54

Kohen, James

- 1993 *The Darug and their neighbours: the traditional Aboriginal owners of the Sydney region*, Darug Link in association with Blacktown and District Historical Society, Blacktown, N.S.W.

Lavelle, Siobhán

- 1998 Photographic Record of Work to Reconstruct Stone Box Culvert Devine's Hill near Wiseman's Ferry, NSW
1999 [S.L. and Grace Karskens and RTA Technology] Stage 1 Conservation Plan for the Great North Road

Laws, C

- 2001 *Wargan the crow: a Hawkesbury story*, Envirobook, Annandale NSW

Matthew, P

- 1998 Some notes on the early settlement at Gunderman Creek, NSW, *Dharug and Lower Hawkesbury Historical Society*: 4-6

Mathews, RH

- 1897a 'The Burbung of the Darkinung Tribes' *Proceedings of the Royal Society of Victoria* 10(1): 1-12

- McBean and Crisp Pty Ltd
1990 Old Great North Road, Engineering Assessment, Zone I Devine's Hill
- McBryde, I
1989 *Guests of the Governor: Aboriginal residents of the First Government House*, The Friends of the First Government House Site, Sydney
- McDonald, Josephine
1988 'The proposed Warren Warren Aboriginal Place, McPherson State Forest: archaeological investigation', Unpub. report to the Forestry Commission, NSW
- McDonald, Josephine
1994 'Dreamtime superhighway: an analysis of Sydney Basin rock art and prehistoric information exchange', vol 1, Unpub PhD thesis, Department of Archaeology and Anthropology, Australian National University, Canberra
- McDonald, Josephine
1994b Appendix 1 Excavation of Mt Yengo I and II pp 1-146, unpub PhD thesis, 'Dreamtime superhighway: an analysis of Sydney Basin rock art and prehistoric information exchange'. vol 2, Department of Archaeology and Anthropology, Australian National University, Canberra
- McDonald, Josephine
1998 Shelter rock-art in the Sydney Basin, a space-time continuum : exploring different influences on stylistic change, *The Archaeology of Rock Art*: 319-335
- McDonald, Josephine
2000 Media and social context : influences on stylistic communication networks in prehistoric Sydney, *Australian Archaeology*, no.51: 54-63
- McGrath, A
1990 'The White Man's looking glass: Aboriginal – colonial gender relations at Port Jackson, *Australian Historical Studies*, 24(95): 189-206
- Mitchell, Thomas, Sir.
1996 *Three expeditions into the interior of eastern Australia*. Eagle Press, Maryborough, Vic
- Moore, DR
1981 'Results of an archaeological survey of the Hunter River valley, NSW, Australia', *Records of the Australian Museum* 33(9): 388-442
- Morwood, M
2002 *Visions from the past: the archaeology of Australian Aboriginal art*, Allen and Unwin, NSW
- NSW Heritage Council
2000 *Assessing Heritage Significance, a NSW Heritage Manual update*
- NSW National Parks and Wildlife Service
1997 Dharug National Park Plan of Management

- 1999 Old Great North Road Conservation Management Plan Dharug National Park
 - 2000 2000 – 2003 Corporate Plan
 - 2001 Draft Fire Management Plan for Yengo National Park, Parr State Recreation Area and Dharug National Park
 - 2001 Register of Visitors of Devine's Hill, Old Great North Road
 - 2001 Central Coast-Hunter Range Region Pest Management Strategy
 - 2003 Register of Events on the Old Great North Road
 - 2003 Register of Conservation and Maintenance works on the Old Great North Road
- NSW National Parks and Wildlife Service and ENVIRONMENT AUSTRALIA
- 1998 *Greater Blue Mountains Area: World Heritage Nomination: nomination of the Greater Blue Mountains Area for inscription on the World Heritage List by the Government of Australia*, National Parks and Wildlife Service, Sydney
- Parsons, George & Cavanagh, Pat
- 1997 'The failure of authority: Governor Hunter and the violence against the Darug, 1795 – 1799', *Aboriginal Studies Association Journal*, 6: 29-36
- Perkins, J
- 1988 'Convict labour and the Australian Agricultural Company' in S Nicholas (ed) *Convict workers: reinterpreting Australia's past*, Cambridge University Press, Cambridge: 167-179
- Ramsay, Juliet and Marilyn Truscott,
- 2002 Tracking Through Australian Forests, *historic environment* 16 (2): 32 – 37
- Rose, Deborah, Diana James and Christine Watson
- 2001 Indigenous Kinship with the Natural World in New South Wales
- Ross, A
- 1990 'Aboriginal life on the lower Hawkesbury at the time of European settlement', in *Hawkesbury River history: Governor Phillip, exploration and early settlement*, edited by Jocelyn Powell and Lorraine Banks. Wiseman's Ferry, NSW: Dharug and Lower Hawkesbury Historical Society ; Sydney South, N.S.W. : Distributed by Hawkesbury River Enterprises
- Ross, V
- 1981 *A Hawkesbury story*, Library of Australian History, Sydney
- Sainty, M.R. and Johnson K.A.
- 1980 *Census of NSW, November 1828*, Library of Australian history, Sydney
- Sim, I.M
- 1966 *Rock engravings of the Macdonald River District, NSW*, Occasional papers in Aboriginal Studies No 7, AIAS, Canberra

Stedinger Associates

- 2001 Excavation Report on the Reconstruction of Culvert 14, Old Great North Road, Wiseman's Ferry, Dharug National Park, N.S.W.
- 2002 Conservation Works on Stone Culverts along the Old Great North Road Devine's Hill to Finch's Line (Culverts 2A1/1, 2A1/4, 2A new and 2A3/2)
- 2002 Excavation Report on the Reconstruction of the Retaining Wall at Chainage 1617, Old Great North Road, Dharug National Park, N.S.W.

Sullivan Environmental Consulting

- 2001 Geotechnical Assessment of Retaining Walls Old Great North Road Wiseman's Ferry

Tobin, C

- 1997 *The Dharug story: An Aboriginal history of western Sydney from 1788*, Private publication, Glenbrook NSW; also <http://www.penrithcity.nsw.gov.au/history/Aborigines/dharug1.htm> accessed 1/2/03

Thorp, Wendy

- 1987 Non-Institutional Convict Sites: a Study of Work Gang Accommodation

Vinnicombe, P

- 1980 'Single sites or site complexes?: a case study from north of the Hawkesbury, NSW' in *Site surveys and significance assessment in Australian archaeology*, S. Sullivan & S Bowdler (eds), RSPacS, ANU Printing Service: 107-118

Vinnicombe, P

- 1984 'Predeliction and prediction: a study of Aboriginal sites in the Gosford-Wyong region', unpub. report to NSW NPWS

Webb, Ian

- 1998 *Blood, Sweat and Irons: Building the Great North Road from Wiseman's Ferry to Mt. Manning 1827-1832*

Appendix 1

Old Great North Road Stakeholder Workshop

A1.1 List of invited stakeholders

Australian Heritage Commission	Ms Kirsten Brown
Australian Society for Historical Archaeology	Ms Jennie Lindbergh (NSW contact)
Baulkham Hills City Council	David Workman
Cessnock Historical Society	Mr Brian Andrews
Confederation of Bushwalking Clubs	The Conservation Director
Convict Trail Project	Ms Elizabeth Roberts
Convict Trail Project	Mr Paul Budde
Dept of Land and Water Conservation	The Environment Officer
Dharug and Lower Hawkesbury Historical Society	Lois Winch
Geographical Society, Central Coast Branch	The Secretary
Mr Denis Gojak	Banksia Heritage and Archaeology
Gosford City Council	Lyn Morris, Heritage Officer
Gosford Fire Control	Mr Bill McArthur
Gosford Heritage Association	The Secretary
Gosford Police Station	The Chief Inspector
Gosford Tourist Information Service	
Dr Grace Karskens	Dept of History, University of New South Wales
Hawkesbury and District Historical Society	The Secretary
Hawkesbury City Council	Donald Ellesmore Heritage Advisor
Hawkesbury Fire Control Centre	Mr Bill Rogers
Hornsby Shire Historical Society	Pat Dewey
Mr Ian Webb	
Institute of Engineers	The Secretary
Mangrove Mountain Community Group	The Secretary
Metropolitan Land Council	Mr Allan Madden

National Parks Association of NSW	The Secretary
National Parks Association of NSW, Central Coast Branch	The Secretary
National Trust of Australia	The Director
NPA Park Management Committee	The Convenor
Royal Australian Historical Society	Mari Metzke Outreach Officer
Ms Siobhán Lavelle	
Transgrid	The Environment Officer
Wat Buddha Dhamma	Mr Michael Brook
Windsor Police Station	The Chief Inspector
NSW Heritage Office	Mr Reece McDougal, Director

Apologies:

Siobhán Lavelle
Grace Karskens
Denis Gojak
Pat Dewey
Brian Andrews
National Trust
Lyn Morris, Gosford City Council

In attendance:

Elizabeth Roberts
Lorraine Banks
Mari Metzke
Mary Crawford
Dave Crawford
Margaret Pontifex
Greg Gray
Gosford Police Sergeant
Sarah Breheny
Tracy Ireland
David Young
Ingereth Macfarlane
Lesley Walker

A1.2 Stakeholder meeting record

The stakeholder workshop was unfortunately not very well attended and this was partly due to the scattered nature of the stakeholder group, with quite long distances to be travelled to attend the meeting in Gosford.

Apologies received all stressed the involvement and commitment of individuals and groups to the future heritage management of the OGNR.

Despite the small group, the meeting featured lively discussion, and a broad range of views were aired on the nature of the significance of the road and how it should be managed. The SWOT analysis, outlined below, clearly shows overlapping perceptions of issues surrounding the road. For instance, different members of the group perceived limited access as both a strength and a weakness, and while some group members stressed the local history of the road and its interconnectedness with their family history, others believed the road did not have a local history. These issues are discussed further in Section 3.0 of the main report.

Strengths	Weaknesses
Educational value	The condition of the Road
The information available	The number of jurisdictions responsible for its management
The combination and complexity of the history – landscape in which built	Public understanding of the management complexities
The Convict Trail Project - community initiative	Few visible links with communities
Strong links with Central Coast and Hunter communities	Later history of the road not well known
Personal experiences / links / local histories with communities at Mangrove and St Albans	Access to the road – limited, constrained
Control of access - for protection of road and safety	The distance from schools
	Safety / insurance / liability
	Fire
Opportunities	Threats
Tourism	Tourism
The history of the road and its links to other places	Ongoing erosion and deterioration
Education opportunities	Denial of access
Research opportunities	Fire management plan – still in draft – has problems
Multimedia access	
Hands-on access	
Local history opportunities	
Licensed, trained tour operators	
Free sandstone fill for road upgrading – less erosion and prevention of further damage	
Location of OGNR in NP – potential for connection to broad range of communities.	

A1.3 Vision

Discussion about a vision for the future management of the road centred on:

- improved – extended opportunities for direct experience of the road;
- its value for education.

Suggestions to achieve this vision:

- limited approved, licensed access, available for a reasonable fee;
- vehicle supported walks – commercial arrangement;
- access for people of all physical capabilities;
- roads which are less fragile should be used to give access; these need improved maintenance too, ie,
 - vehicle access along Western Commission Track to Ten Mile Hollow, where camping facilities, including water, should be provided;
 - no vehicular access to Devine's Hill, but could use Shepherd's Gully Road to access top of Devine's Hill;
- generally improve maintenance of the Road
- maintenance should be consistent, but not identical to the historic materials
- potential for a visitors' centre in Wiseman's Ferry
- the Road should be maintained at its 1820s width
- it should be innovatively interpreted – the use of a 'soundscape', such as members had experienced at Alcatraz in the USA, was discussed.
-

A1.4 The significance of the Road and its stories

Aspects of significance discussed:

- The purpose of the Road was for communication between two points; it was like an expressway for its time; it did not necessarily interact or relate to the regions it travelled through.
- There was debate (following on from the above) about the place of the Road in local history. Some felt it had no local history – there were no communities based right on the road, and that it was built irrespective of locality. Others felt however that the Road was a part of local history (in particular for Mangrove Mountain and other Central Coast communities) – this led to distinctions between the significance of the road as it was built; why it was built and how it was built; and the later history of the road and its use as a local route.
- One group member (from Mangrove Mountain) stated that the OGNR was an iconic item of importance to her as she was growing up; to her the most important Australian places were 'Mt Kosciusko, "Ayers Rock", the Harbour Bridge and the OGNR'.
- One view was that the only community really associated with the road was the convicts.
- The view was expressed that oral histories relating to the road would be dangerously inaccurate and that there was a great need for specificity in what was being recounted.
- Part of the experience of the road included the natural bush, its flora and fauna.
- The direct experience of it is crucial; its 'history can be felt'.

A1.5 NPWS Management Staff Workshop, 13 March 2003

In attendance:

NPWS staff

Sarah Breheny

Alan McDonough

Steve Brown

Robin Aitkin

Tony Horwood

Tom Bagnat

Jeff Betteridge

Consultants:

David Young

Tracy Ireland

Issues and priorities

Issues	Top Priority (A)	No.Votes 6 max
Heritage value of the asset	A	4
Access – how do we define legitimate access?	A	3
Preservation or no preservation – manage as a ruin v. need for access	A	6
Fire impact		
Fire management practices	A	4
Maintenance plan – principles or detail? used by whom? scope appropriate for levels of funding and risks? monitoring program - done by whom? interpretable by field staff and new staff? prescriptive or flexible?	A	5
What does NPWS need to operate most effectively?	A	6
Money pit	A	1
Coordination of existing knowledge		
Consultancy costs – where are they leading?	A	3
Cultural heritage hoops – legislation, policy	A	4
Archaeology driven process? Creating more work for archaeologists?		

Need for a strategic direction for conservation works	A	6
Sustainability – maintaining the results of major capital works inputs	A	5
A flexible, adaptable management plan	A	2
World Heritage nomination – implications?	A	1
Ongoing recording of discoveries and fabric and archiving management history		
Management of artefacts related to the place		
Introducing new elements, how do we decide what is suitable?		
Reality check – NPWS can't afford to maintain the road forever	A	4
Agreeing on a vision – <ul style="list-style-type: none"> ➤ community expectations (changing) 4A ➤ the range of communities including NPWS staff, Convict Trail, and so on ➤ NPWS has to make the best decisions for the overall community 	A	5
A short-term vision and a long-term vision (do they need to be compatible?)	A	6
Management levels - a ruin v. a working road	A	6
Clarify management precincts (de facto ones exist already)	A	3
Priorities for capital works	A	3
Alternate sources of funds and labour	A	4
Staff levels, HAMP currently used for field staff	A	3
Sponsorship; volunteers - supervising, training	A	2
Coordination of decision making across NPWS branches	A	2

SWOT on the management of the Road (rather than the road itself)

Strengths	Weaknesses
Total commitment / ownership by staff	Fragmented management and public perceptions of this as a problem
The knowledge base among the management staff	Responsibility for management – the lines are blurred
Access to CHD expertise	Lack of buffer zone
Access to community expertise and enthusiasm	Day-to-day knowledge located in a couple of individuals
Community awareness of management issues	Lack of permanent staff to undertake works
	Rationale for provision of staffing based on hectares not significance
	Lack of cultural heritage expertise in the region
	Levels of regulation, NPWS < state, federal and difficulty in applying the standards required
	Problem of leaping from principles to practice
	Access to CHD staff when you need them
	Pressures for access (fire and other uses)
	S44
	Inconsistent consultation by emergency services and within NPWS
	Draft FMP
	NPWS staff involved in fire management – lack of knowledge – including beyond region
	Different visions within NPWS
Opportunities	Threats
Training of local staff	Loss of HAMP funding
Import new expertise	Time – ongoing deterioration – don't act now more costly later
Alternate funding (World Heritage National List) and labour (volunteer)	Over-cautious approach may be a threat
Opportunities for more consistent management through MOUs, VCAs – with shires and neighbours	Loss of knowledge over time - generational
Opportunities to link themes of interpretation across NPWS estates	S44 situations
Raise revenue through licensed activities	Historic antipathy between NPWS and HRFS
Sponsorship – to attract funds for management	Threats from adjacent private land - development
Endorsement/approval from HC for 5 years	Changing heritage and archaeological management paradigms
	Changing community expectations

Vision

Issues for the vision

- Recognition of the complex array of values
- Retention of significance
- Its strategic location
- The world heritage package
- The allure of convicts
- Local packages – towns, pubs, river, stockades, etc
- The scale of the enterprise (significance)
- Interpretive links / centre
- To generate income
- Make available/accessible
- Maintained to a minimum standard to retain significance

NOT in the vision

- **smooth road all the way**
- **primary role as fire access**

Draft vision

The Old Great North Road will be inspirational in telling stories of the (early / colonial / including Indigenous) history / settlement of eastern Australia – by / through:

- Retaining the integrated heritage values of the OGNR
- Enabling sustainable public use and interpretation
- Promoting as an outstanding example of early 19th century engineering in a colonial context
- Allowing managed access.

Outcomes of vision

- Unified NPWS management goals
- Effective community management partnerships
- A conserved road maintained to minimum standards
- Natural setting maintained
- Retained Indigenous heritage values
- Social values maintained
- Clearly defined opportunities and constraints for access
- Road recognised for its high quality interpretation
- High public awareness of significance
- Research outcomes
- Public access – managed, sustainable, varied
- Clearly defined management and access guidelines
- Recognition / acknowledgement of high quality management
- High quality management

Appendix 2

Annotated Chronological Bibliography of NPWS and Consultants' reports on the Old Great North Road

1988

April/August Burke, Heather
The Great North Road: An Historical Archaeological Survey, Unpublished Report for the NPWS.

Does not include the ascent to Devine's Hill, Finch's Line or Shepherd's Gully, but includes from the top of Devine's Hill through to Ten Mile Hollow (approx. 15km).

1990

April 1990 McBean and Crisp Pty Ltd
Old Great North Road
Zone I Devine's Hill
Engineering Assessment
July/August Comber, Jillian
Historical Archaeological Survey of Devine's Hill, the Old Great North Road, Wiseman's Ferry

Includes a survey of Devine's Hill, recommendations for management but not an assessment of significance.

1991

May Comber, Jillian
Historical Survey of Finch's Line, the Great North Road, Wiseman's Ferry [Volumes 1 and 2 (photo record)].

Includes a survey of Finch's Line, recommendations for management but not an assessment of significance.

July Comber, Jillian and Adrienne Powell
Historical Archaeological Survey of Shepherd's Gully, the Great North Road (including the original line, Sternbeck's Gully Road and Shepherd's Gully Road) [Volumes 1 and 2 (photo record)].

Includes a survey of Shepherd's Gully, recommendations for management, but not an assessment of significance.

September Karskens, Grace
The Great North Road Interpretation and Statement of Cultural Significance.

1997

- November Jordan, Bill and Associates Pty Ltd
Old Great North Road Devine's Hill and Clare's Bridge: Remedial Works.

1998

- September Lavelle, Siobhán
Photographic Record of Work to Reconstruct Stone Box Culvert, Devine's Hill near Wiseman's Ferry, NSW.

1999

Siobhán Lavelle, Dr Grace Karskens and RTA Technology
Stage 1 Conservation Plan for the Great North Road for the Convict Trail Project

This document covers the entire length of the Great North Road, described in terms of eight precincts. The Dharug National Park section of the road falls within Precinct 3, Wiseman's ferry to Mt Manning

- November NSW National Parks and Wildlife Service
Old Great North Road Conservation Management Plan, Dharug National Park.

2000

- February Austral Archaeology Pty Ltd
A Historical Assessment of the Proposed New Entranceway, Devine's Hill Old Great North Road.

Unfortunately this assessment misread Burke's 1988 report, which started its identification of features at the top of Devine's Hill, at the junction with the Shepherd's Gully Road to St Albans, rather than from the base of Devine's Hill, at the junction with Settler Road (the location of this assessment; see pages i, 8). The assessment does not refer at all to Comber's 1990 historical archaeological survey of Devine's Hill, which would have been the pertinent documentation. The basis of the assessment and its recommendations are therefore completely inaccurate and inappropriate. This demonstrates the problems of bringing in new consultants, with little familiarity with the broader context of the road, its features and management history, to make expert recommendations on a particular, localised issue.

- March HLA-Envirosciences Pty Ltd
An Archaeological Assessment of Seven Culverts on Finch's Line, Old Great North Road.
- May Austral Archaeology Pty Ltd
Results of the Devine's Hill Archaeological Monitoring, Old Great North Road, Wiseman's Ferry.

This report describes archaeological monitoring activities undertaken as a result of the findings of the February 2000 Austral Archaeology archaeological assessment, which found a 'low to moderate potential for historic material culture to exist' in the area of proposed new works. As pointed out above, this finding was based on inaccurate information. Monitoring revealed no impact upon sub-surface cultural material.

Austral Archaeology Pty Ltd
An Archaeological and Conservation Assessment of the Graffiti and Timber Guardrails on the Old Great North Road, Dharug National Park, Wiseman's Ferry.

HLA-Envirosciences Pty Ltd
Report on Test Excavation and the Unblocking of Culvert 3, Finch's Line, Old Great North Road.

This report recommends that future works on this culvert should not require an excavation permit or archaeological supervision.

November HLA-Envirosciences Pty Ltd
An Archaeological Assessment of Timber and Stone Culverts between Devine's Hill and Ten Mile Hollow, Old Great Northern Road.

This report includes field inspections and condition assessments of all culverts from the top of Devine's Hill through to Ten Mile Hollow. It provides very useful cross-references to Burke's original detailed study of 1988. In particular it documents a high degree of apparent deterioration in the road fabric between 1988 and 2000.

2001

March Jordan, Bill and Associates Pty Ltd
Old Great Northern Road Timber Culvert at Ten Mile Hollow.

April Carr, Robert and Associates Pty Ltd for Bill Jordan and Associates Pty Ltd
Geotechnical Assessment: Culvert 35 Old Great North Road Devine's Hill and Wiseman's Ferry.

May Jordan, Bill and Associates Pty Ltd
Wall Stability Assessment Chainage 1617 Devine's Hill Old Great North Road.

Sullivan Environmental Consulting Pty Ltd
Geotechnical Assessment of Retaining Walls Old Great North Road Wiseman's Ferry.

June Jordan, Bill and Associates Pty Ltd
Old Great North Road: Road Carrying Capacity.

Hughes Trueman
Great North Road – Devine's Hill Road Pavement Stabilisation.

NSW National Parks and Wildlife Service
Register of Visitors of Devine's Hill Old Great North Road.

September Hughes Trueman
Shepherd's Gully Road: Remedial Engineering Works.

December Austral Archaeology Pty Ltd
Non-Indigenous Archaeological Assessment: Culvert 14 Devine's Hill Old Great North Road.

NSW National Parks and Wildlife Service
Draft Fire Management Plan for Yengo National Park, Parr State Recreation Area and Dharug National Park.

2002

Andrews Neil
Review of Environmental Factors: Conservation Works to Culverts and Pavement, Devine's Hill to the Western Commission Track Old Great North Road.

This REF contains an archaeological assessment by Stedinger Archaeology 2002 which goes over the same culverts studied by HLA-Envirosciences in 2000. This seems to have been an unnecessary repetition of consultants' services.

Further, seven registered Indigenous archaeological sites are located within 500 metres of the road in this zone. P23 states that an assessment of Indigenous archaeological significance has been carried out by Stedinger but this does not appear to be the case.

January Andrews Neil
Review of Environmental Factors: Culvert 14 Restoration Old Great North Road.

February Andrews Neil
Review of Environmental Factors: Restoration of Retaining Wall at Chainage 1617 Old Great North Road.

Includes an archaeological assessment by Stedinger Heritage and Archaeology

Hughes Trueman
Chainage 1617 Retaining Wall Remedial Works Old Great North Road Devine's Hill.

March HLA-Envirosciences Pty Ltd
Report on the Reinstatement of Culvert II K 1/1 at Ten Mile Hollow, Old Great North Road.

This report documents the reconstruction of this timber culvert in 2002. The author (Iain Stuart) suggests that 'events overlook' the conservation works as progressive discoveries revealed all components of the culvert to be unsound. All timbers were replaced with new ones.

- | | |
|----------|---|
| May | Stedinger Associates
Conservation Works on Stone Culverts along the Old Great North Road
Devine's Hill to Finch's Line (Culverts 2A1/1, 2A1/4, 2A new and 2A3/2). |
| July | Stedinger Associates
Excavation Report on the Reconstruction of the Retaining Wall at
Chainage 1617, Old Great North Road, Dharug National Park, N.S.W. |
| December | Stedinger Associates
Excavation Report on the Reconstruction of Culvert 14, Old Great North
Road, Wiseman's Ferry, Dharug National Park, N.S.W. |

Appendix 3

Vegetation Management Procedure

This procedure is for vegetation control in and around heritage sites and cultural remains. It needs to apply to all invasive vegetation (both weeds and native species), since all can damage physical remains, destabilise cuttings and structures, block culverts, or create or exacerbate cracks and voids in the road formation.

Weeds

Often, weed growth will be more aggressive in disturbed areas than the slower growing native species. It may also dominate in areas of long-past disturbance where soil and drainage conditions have been permanently changed.

Weed removal is a priority conservation policy for the management of the natural heritage of the parks. The strategies for exotic plant control as set out in the Dharug and Yengo POMs as well as the CCHR Region Pest Management Strategy are generally appropriate for this site - although the particular emphasis on blackberry, lantana, noogoora burr, and whiskey grass is most appropriate for the river flat areas and less relevant to the OGNR, where weed growth is not currently a significant problem. However, the discontinuity in the natural bushland caused by the road, its openness to elevated levels of sunlight and exposure, and its use and continuous low level of disturbance, combine to make the road environs vulnerable to weed invasion.

The control strategies in the management plans include chemical (herbicide), mechanical, and manual approaches. Each of these approaches will be appropriate to various circumstances along the road (see Table A3-1 below).

Native plants

The growth of native species among items of cultural heritage can also be damaging. Along the road, colonisation by native vegetation species can threaten the stability of structures and the integrity of the road surface. There are numerous locations where the roots and basal bowls of tree species which are well adapted to establishing and thriving in rock fissures (in particular *Angophora costata*) have distorted and even had an impact on the stability of cuttings in the natural rock. Pioneer species such as Acacias and some *Proteaceae* have become established on the road surface,

exploiting small niches where soil has collected or in eroded/collapsed areas. The effect of this plant growth will be the progressive degradation of the road surface and formation. Previous studies (for example Comber [1990] and Stuart [2000]) have highlighted instances where vegetation has the potential to block culverts and alter drainage. The requirements for developing access and interpretation of individual heritage features associated with the road might also call for the removal of some native species.

Vegetation management

Vegetation management in the context of cultural heritage conservation often requires different methods to the usual weed control practices. A common objective of weed control in native bushland is the removal of all exotic plant material. In the case of cultural heritage conservation, the undesirable invasive or disfiguring effects of the vegetation should be checked and reversed but in a way which does not damage the fabric to which it adheres or the soil profile through which it grows. In some cases this will involve the complete removal of plant material and in some cases it will not. Typical vegetation management circumstances which will be encountered along the road are set out in Table A3-1.

Table A3-1: Typical Vegetation Management Categories for OGNR

Vegetation Growth	Potential Threat to Cultural Resource	Management Approach (Control Method)
Weeds and native plants growing on the road formation	<ul style="list-style-type: none"> • Can crack surface allowing water intrusion and erosion • Can widen cracks and washaways • Reduce visual amenity of the road and engineering works 	Complete manual or mechanical removal associated with surface stabilisation works (may be preceded by chemical treatment).
Large woody plants invading rock faces and retaining walls	<ul style="list-style-type: none"> • Can destabilise rock walls, leading to falls • Can cause crumbling and loss of features (eg, graffiti loss) • Can displace stone blocks in walls, destabilising structures 	<ul style="list-style-type: none"> • Chemical treatment ('cut and paste') without complete removal of parts in contact with structures • Complete manual or mechanical removal associated with rebuilding/repositioning of blocks (may be preceded by chemical treatment).
Vegetation growing in culvert entrances on in drainage structures	<ul style="list-style-type: none"> • Can block culverts and drains, causing damage to road structures by redirected or pressurised runoff water 	Complete manual or mechanical removal
Vegetation encroaching on archaeological sites	<ul style="list-style-type: none"> • Can cause disturbance to underground archaeological 	Chemical treatment ('cut and paste') without complete removal of underground

(eg, the stockade site)	deposits <ul style="list-style-type: none"> • Can increase weathering and deterioration of relic structures and ruins 	parts or parts in contact with structures
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The procedure

The Vegetation Management Procedure is not intended as a set of prescriptions for vegetation control. Rather, it is a documentary-based measure to ensure that park workers do not embark upon vegetation removal activities either under-briefed or without an understanding of the conservation objective being pursued at that location.

The procedures consist of three parts:

- i. a clear statement of objectives,
- ii. a vegetation removal plan,
- iii. a protocol for activities.

The **objectives** of a vegetation removal program should clearly state the desired outcomes. The outcomes should be based upon the particular conservation policy of the site and the environmental conditions of the site. The objective should be a conservation target, *not* a vegetation removal target. This will ensure that there is no ambiguity in the purpose of any activity and that the needs of the conservation of cultural heritage are uppermost.

The **plan** should describe the methods to be used. These will differ from species to species and from place to place on a site. The discrimination of methods against different situations, vegetation types, and threats posed is illustrated in Table A3-1 above. The plan should also include an appreciation of the nature of the site so that, to workers unskilled in heritage matters, the likelihood of unseen remains and archaeological deposits within a curtilage is made clear.

The **activities** should include briefing of participants on the objective and methods, any phasing of operations which might be required, and arrangements for on-site supervision and monitoring.

The documentation of these procedures for each site need not be lengthy. One page describing the objectives, plan and major activities, properly disseminated, will be sufficient to ensure that the need for different management approaches in these areas is flagged and that appropriate activities are nominated and explained.

APPENDIX 4: Management Recommendations for Component Parts

A4.1 Definition of Management recommendations

The Management recommendations set out in the following table follow the Strategic Management Approach (Section 8.3) in terms of the following definitions:

Level 1 - Baseline management will comprise:

- 1) ongoing activities controlling access and usage of the road corridor; and
- 2) the management of vegetation impinging on the road corridor and its associated sites.
- 3) Establishment of monitoring targets and monitoring activities.

These activities should be considered to be routine and an integral part of the NPWS's custodial role over the OGNR cultural landscape.

Level 2 - Management cycles of maintenance, inspection and monitoring

The management cycle for each precinct will follow the iterative loop characteristic of all environmental management systems. The cycle will comprise:

- Planned targets
- Maintenance/corrective activity
- Monitoring effectiveness
- Revised targets on the basis of monitoring data.

The areas covered in this way will be the ongoing maintenance of re-surfaced areas, including culvert and drain clearance, surface consolidation as well as areas of potential structural weakness (embankment bulges and areas of potential collapse), monitoring of archaeological sites and visitor impacts.

Level 3- Long Term Strategic Objectives – indicates that opportunities to meet the Long Term Strategic Objectives identified for this precinct exist for this item.

These levels of management also should be cross referenced to the detailed Precinct by Precinct policies found in Policy 18, Section 8.

APPENDIX 4: Management Recommendations for Component Parts

Ongoing conservation works will need to be undertaken, on a needs basis and as laid down in policies for the precincts.

Precinct	Feature	Feature No	NPWS ID	Management Recommendations
1	Ascent of Devine's Hill to Finch's Line			
	Culverts			
	43 stone culverts	1/C1-43	Nos 1-43 (Mc Bean and Crisp 1990) NB No 43 (Mc Bean and Crisp 1990) is the same as Burke IIA1/1	Level 2
	1 stone culvert	1C/44	Burke IIA1/4	Level 2
	1 stone culvert	1/C45	Burke IIA3/2	Level 2
	1 stone culvert	1/C46	Stedinger May 2002 '2A new'	Level 2
	Retaining walls			
	Ranging from 0.5 to 8.5 metres in height, incorporating buttresses, culverts and spillways.	1/R	McBean and Crisp 1990 Comber 1990	Level 2
	Retaining wall at Chainage 1617	1/R1	(Bill Jordan and Associates 2001)	Level 2

Precinct	Feature	Feature No	NPWS ID	Management Recommendations
	Side drains			
	Stone cut, some with dwarf stone walls	1/D	McBean and Crisp 1990 Comber 1990	Level 2
	Road surface			
	This precinct completely re-surfaced			Level 2
	Historical archaeological sites			
	Convict stockade site	1/HA1		Level 3
	Quarry	1/HA2		Level 2
	Powder cave	1/HA3		Level 2
	Buried culvert a	1/HA4	McBean and Crisp 1990	Level 1
	Buried culvert b	1/HA5	McBean and Crisp 1990	Level 1
	Buried culvert c	1/HA6	McBean and Crisp 1990	Level 1
	Engravings			
	'IG 25 FEB'	1/E1	DH 1 (Austral Archaeology May 2000)	Level 2
	'J R J M'	1/E2	DH 2 (Austral Archaeology May 2000)	Level 2
	'J.T.S'	1/E3	DH 3 (Austral Archaeology May 2000)	Level 2
	'R/ W/ / T' and an engraving of a man in a hangman's noose	1/E4	DH 4 (Austral Archaeology May 2000)	Level 2
	'JB'	1/E5	DH 5 (Austral	Level 2

Precinct	Feature	Feature No	NPWS ID	Management Recommendations
			Archaeology May 2000)	
	'E ^w '	1/E6	DH 6 (Austral Archaeology May 2000)	Level 2
	'WE / 1976'	1/E7	DH 7 (Austral Archaeology May 2000)	Level 2
	'M A C W.....C'	1/E8	DH 8 (Austral Archaeology May 2000)	Level 2
	'CMc MS SD JB 31- 3- 59 B.B.'	1/E9	DH 9 (Austral Archaeology May 2000)	Level 2
	'RJCAWTHORNE MGEORGE'	1/E10	DH10 (Austral Archaeology May 2000)	Level 2
	'EN'	1/E11	DH 11 (Austral Archaeology May 2000)	Level 2
	'G F(R)'	1/E12	DH 12 (Austral Archaeology May 2000)	Level 2
y	'P'	1/E13	DH 13 (Austral Archaeology May 2000)	Level 2
	Profile head engraving of a man with a tall hat and	1/E14	DH14 (Austral	Level 2

Precinct	Feature	Feature No	NPWS ID	Management Recommendations
	long pipe		Archaeology May 2000)	
	'C. Coll 1886'	1/E15	DH15 (Austral Archaeology May 2000)	Level 2
	An arrow	1/E16	DH16 (Austral Archaeology May 2000)	Level 2
	Series of circular pecked holes	1/E17	DH17 (Austral Archaeology May 2000)	Level 2
	Anchor or arrow	1/E18	DH18 (Austral Archaeology May 2000)	Level 2
	'H r' (?)	1/E19	DH19 (Austral Archaeology May 2000)	Level 2
	Straight line (linesman's mark)	1/E20	DH20 (Austral Archaeology May 2000)	Level 2
	'H'	1/E21	DH21 (Austral Archaeology May 2000)	Level 2
2	Shepherd's and Sternbeck's Gully Roads			
	Indigenous sites			
	Shelter with art	2/I1	45-2-0188	Level 1
	Axe grinding groove	2/I2	45-2-0398	Level 1
	Retaining walls			
	Ranging from one course to 7 metres in height,	2/R		Level 2

Precinct	Feature	Feature No	NPWS ID	Management Recommendations
	mostly rubble masonry			
	GPS point white peg (monitoring station)	2/R1		N/a
	Culverts			
	Upper Sternbeck's Gully Road, stone culvert	2/C1	Culvert 1 Comber 1991	Level 2
	Upper Sternbeck's Gully Road, stone culvert	2/C2	Culvert 2 Comber 1991	Level 2
	Upper Sternbeck's Gully Road, stone culvert	2/C3	Culvert 3 Comber 1991	Level 2
	Upper Sternbeck's Gully Road, stone culvert	2/C4	Culvert 4 Comber 1991	Level 2
	Upper Sternbeck's Gully Road, stone culvert	2/C5	Culvert 5 Comber 1991	Level 2
	Upper Sternbeck's Gully Road, stone culvert	2/C6	Culvert 6 Comber 1991	Level 2
	Upper Sternbeck's Gully Road, stone culvert	2/C7	Culvert 7 Comber 1991	Level 2
	Shepherd's Gully Road, stone culvert	2/C8	Culvert 1 Comber 1991	Level 2
	Shepherd's Gully Road, stone and timber culvert	2/C9	Culvert 2 Comber 1991	Level 2
	Shepherd's Gully Road, stone culvert	2/C10	Culvert 3 Comber 1991	Level 2
	Shepherd's Gully Road, stone culvert	2/C11	Culvert 4 Comber 1991	Level 2
	Shepherd's Gully Road, stone and timber culvert	2/C12	Culvert 5 Comber 1991	Level 2
	Shepherd's Gully Road, stone culvert	2/C13	Culvert 6	Level 2

Precinct	Feature	Feature No	NPWS ID	Management Recommendations
			Comber 1991	
	Shepherd's Gully Road, stone and timber decking culvert	2/C14	Culvert 7 Comber 1991	Level 2
	Shepherd's Gully Road, stone culvert	2/C15	Culvert 8 Comber 1991	Level 2
	Shepherd's Gully Road, timber culvert	2/C16	Culvert 9 Comber 1991	Level 2
	Shepherd's Gully Road, stone and pipe culvert	2/C17	Culvert 10 Comber 1991	Level 2
	Shepherd's Gully Road, pipe culvert	2/C18	Culvert 11 Comber 1991	Level 2
	Shepherd's Gully Road, stone and pipe culvert	2/C19	Culvert 12 Comber 1991	Level 2
	Shepherd's Gully Road, stone culvert	2/C20	Culvert 13 Comber 1991	Level 2
	Shepherd's Gully Road, stone culvert	2/C21	Culvert 14 Comber 1991	Level 2
	Shepherd's Gully Road, stone culvert	2/C22	Culvert 15 Comber 1991	Level 2
	Shepherd's Gully Road, stone culvert	2/C23	Culvert 16 Comber 1991	Level 2
	Shepherd's Gully Road, stone culvert	2/C24	Culvert 17 Comber 1991	Level 2
	Shepherd's Gully Road, stone culvert	2/C25	Culvert 18 Comber 1991	Level 2
	Historical archaeological sites			
	Upper Sternbeck's Gully Road stone bridge	2/HA1	Comber 1991:21	Level 2
	Engravings			
	'T. Davey Al Vickers Linesmen' and two representations of telegraph poles.	2/E1	SGR1 (Austral	Level 2

Precinct	Feature	Feature No	NPWS ID	Management Recommendations
			Archaeology May 2000)	
3	Finch's Line			
	Indigenous sites			
	Shelter with art	3/I1	45-2-0026	Level 1
	Culverts			
	Stone culvert	3/C1	Culvert 1 (Comber 1991)	Level 2
	Stone culvert M1a	3/C2	Culvert 2 (Comber 1991)	Level 2
	Stone culvert M1a	3/C3	Culvert 3 (Comber 1991)	Level 2
	Stone culvert	3/C4	Culvert 4 (Comber 1991)	Level 2
	Stone culvert	3/C5	Culvert 5 (Comber 1991)	Level 2
	Stone culvert	3/C6	Culvert 6 (Comber 1991)	Level 2
	Stone culvert	3/C7	Culvert 7 (Comber 1991)	Level 2
	Retaining walls			
	Retaining walls of stone and rubble, of varying heights	3/R	Comber 1991	Level 2

Precinct	Feature	Feature No	NPWS ID	Management Recommendations
	Historical archaeological sites			
	Telegraph remains	3/HA1		Level 1
	Stockpile M1/4	3/HA2	Comber 1991: 13	Level 1
	Quarry site	3/HA3	Comber 1991: 19	Level 1
	Hut site (powder magazine (L&K)?)	3/HA4	Comber 1991: 23	Level 2
	Engravings			
	Broad arrow	3/E1	FL1 (Austral Archaeology May 2000)	Level 2
	25 RD Party M1/3	3/E2	FL2 (Austral Archaeology May 2000)	Level 2
	'M1"	3/E3	FL3 (Austral Archaeology May 2000)	Level 2
4	Finch's Line Intersection to Mitchell's Loop			
	Indigenous sites			
	Shelter with art	4/I1	45-2-0200	Level 1
	Culverts			
	Stone block culvert	4/C1	Burke IIA11/1	Level 1
	Stone block culvert	4/C2	Burke IIB5/2	Level 1
	Stone block culvert	4/C3	Burke IIB12/6	Level 1
	Timber culvert	4/C4	Burke IIC8/5	Level 1
	Timber culvert	4/C5	Burke IIC9/2	Level 1
	Timber culvert	4/C6	Burke	Level 1

Precinct	Feature	Feature No	NPWS ID	Management Recommendations
			IIC10/1	
	Timber culvert	4/C7	Burke IIC10/2	Level 1
	Timber culvert	4/C8	IIC11/2	Level 1
	Timber culvert	4/C9	IIC18/2	Level 1
	Retaining walls			
		4/R		Level 1
	Engravings			
	'J M'	4/E1	10M/2	Level 1
	'P(R) W'	4/E2	10M/3	Level 1
	'1883'	4/E3	10M/4	Level 1
	'AR'	4/E4	Burke IIB12/2 10M/1	Level 1
	Other			
	Mitchell's Loop feature	4/O1		Level 3
5	Mitchell's Loop to the Western Commission Track			
	Indigenous sites			
	Open camp site	5/I1	37-6-0551	Level 1
	Shelter with art	5/I2	45-3-0818	Level 1
	Rock engraving	5/I3	45-3-0875	Level 1
	Axe grinding groove	5/I4	45-3-1554	Level 1
	Rock engraving	5/I5	45-3-1556	Level 1
	Shelter with art	5/I6	45-3-1557	Level 1
	Culverts			
	Stone culvert	5/C1	IID5/3	Level 1
	Stone culvert	5/C2	IID6/3	Level 1
	Stone culvert	5/C3	IID11/2	Level 1

Precinct	Feature	Feature No	NPWS ID	Management Recommendations
	Stone culvert	5/C4	IID11/3	Level 1
	Timber culvert	5/C5	IID15/1	Level 1
	Timber culvert	5/C6	IIE5/1	Level 1
	Stone culvert	5/C7	Burke IIE6/3	Level 1
	Stone culvert	5/C8	Burke IIE7/2	Level 1
	Timber culvert	5/C9	Burke IIE15/1	Level 1
	Timber culvert	5/C10	Burke IIF1/1	Level 1
	Timber culvert	5/C11	Burke IIF5/1	Level 1
	Stone culvert	5/C12	Burke IIF5/2	Level 1
	Timber culvert	5/C13	Burke IIF6/2	Level 1
	Stone culvert	5/C14	Burke IIF6/5	Level 1
	Retaining walls			
		5/R		Level 1
	Engravings			
	'H J D'	5/E1	Burke IIC14/2 10M/6(Austral Archaeology May 2000)	Level 1
	Arrow	5/E2	Burke IIC14/3 10M/7 (Austral	Level 1

Precinct	Feature	Feature No	NPWS ID	Management Recommendations
			Archaeology May 2000)	
	'1988'	5/E3	10M/8 (Austral Archaeology May 2000)	Level 1
	'W C M D'	5/E4	10M/9 (Austral Archaeology May 2000)	None Level 1
	' <u>PRT</u> '	5/E5	10M/10 (Austral Archaeology May 2000)	Level 1
	'W J B'	5/E6	10M/11 (Austral Archaeology May 2000)	Level 1
	'H M'	5/E7	Burke IIC18/1 10M/5 (Austral Archaeology May 2000)	Level 1
	'W C'	5/E8	10M/23 (Austral Archaeology May 2000)	Level 1
	'HH'	5/E9	10M/24 (Austral	Level 1

Precinct	Feature	Feature No	NPWS ID	Management Recommendations
			Archaeology May 2000)	
	'H'	5/E10	10M/25 (Austral Archaeology May 2000)	Level 1
	'JD'	5/E11	10M/26 (Austral Archaeology May 2000)	Level 1
	'J S'	5/E12	10M/22 (Austral Archaeology May 2000)	Level 1
	'P'	5/E13	10M/21 (Austral Archaeology May 2000)	Level 1
	'W H Poo..'	5/E14	10M/18 (Austral Archaeology May 2000)	Level 1
	'Len... Fe..'	5/E15	10M/19 (Austral Archaeology May 2000)	Level 1
	'J S'	5/E16	10M/20 (Austral Archaeology May 2000)	Level 1
	Arrow	5/E17	10M/17 (Austral	Level 1

Precinct	Feature	Feature No	NPWS ID	Management Recommendations
			Archaeology May 2000)	
	'H'	5/E18	10M/28 (Austral Archaeology May 2000)	Level 1
	Timber posts and guardrails			
	Four timber posts	5/T1	10M/29 (Austral Archaeology May 2000)	Level 1
	Timber posts and rails	5/T2	Burke IIE13/2 10M/16 (Austral Archaeology May 2000)	Level 1
	Two upright timber posts	5/T3	Burke IID13/1 10M/27 (Austral Archaeology May 2000)	Level 1
6	Western Commission Track to Ten Mile Hollow			
	Indigenous sites			
	Grinding grooves on side of creek	6/I1		Level 2
	Culverts			Level 2
	Stone culvert	6/C1	Burke IIG12/3	Level 2
	Timber culvert	6/C2	Burke IIK1/1	Level 2

Precinct	Feature	Feature No	NPWS ID	Management Recommendations
	Concrete culvert (massive erosion) M5/4	6/C3		Level 2
	Concrete culvert/pipe M5/5	6/C4		Level 2
	Cuttings			Level 2
	Shallow cutting (pecked) & liesegang M5/2	6/Cut1		Level 2
	Cutting and drain (peck marks) M5/3	6/Cut2		Level 2
	Retaining walls			Level 2
	Retaining wall M5/6	6/R1		Level 2
	Engravings			
	'PH'	6/E1	Burke IIH8/3 10M /12 (Austral Archaeology May 2000)	Level 1
	'V L C'	6/E2	Burke IIH11/2 10M/13 (Austral Archaeology May 2000)	Level 1
	'V L C'	6/E3	Burke IIH13/4 10M/14 (Austral Archaeology May 2000)	Level 1
	'H P'	6/E4	Burke IIH14/2 10M/15 (Austral Archaeology)	Level 1

Precinct	Feature	Feature No	NPWS ID	Management Recommendations
			May 2000)	
	'E H C' Graffiti M5/7	6/E5	Not previously recorded	Level 1
	Historical archaeological sites			
	Meisterham House ruin	6/HA1	3905338	Level 1
	Shed/outbuildings, Meisterham House ruin	6/HA2	3908270	Level 1
	Garden, Meisterham House ruin	6/HA3	3908271	Level 1
	Unknown structure, Meisterham House ruin	6/HA4	3908272	Level 1
	Artefact scatter, Meisterham House ruin	6/HA5	3908273	Level 1
	House, Meisterham House ruin	6/HA6	3908274	Level 1
	10 Mile Hollow Inn site	6/HA7	3905337	Level 3
	Other			
	'The Mistake'	6/O1		Level 2
7	Simpson's Track			
	Indigenous sites			
	Shelter with art	7/I1	45-3-0862	Level 1
	Shelter with art	7/I2	45-3-0828	Level 1
	Retaining walls			
	Webb 1999 reports the existence of retaining walls	7/R	Webb 1999	Level 1
	Culverts			
	Webb 1999 reports the existence of culverts	7/C	Webb 1999	Level 1