SECTION II

The Historical Context
INTRODUCTION

The context in which the Great North Road was planned and constructed comprises the spectrum of colonial life in the early nineteenth century. Certain key factors acted as catalysts in its inception and planning, and affected its various stages of construction. These factors span diverse areas, including demography, technology, individual personalities and approaches, and contemporary transportation policy, all of which must be seen as integrated and interacting. Underlying all these themes connected with the road was the new, optimistic and responsible outlook of the settlers and government alike concerning the colony and its future which developed during the period of expansion between 1813 and 1830.
1. A New View of the Colony

Governor Macquarie wrote in 1822 that, upon his arrival in New South Wales, he had:

... found the colony barely emerging from infant imbecility and suffering from various privations and disabilities; the country impenetrable beyond forty miles from Sydney; agriculture in yet a languishing state; commerce in its early dawn; ... the public buildings in a state of dilapidation and mouldering to decay; the few roads and bridges formerly constructed rendered almost impassable, the population in general depressed by poverty ... (1)

By at least 1827, only 17 years after his arrival, this gloomy picture had vanished. In his conclusion of a study of the early settlement of New South Wales, Perry writes:

In the forty years (up to 1840) New South Wales was transformed from a "wretched country" to one of "smiling villages, crowded towns, growing cities ... (and) expanding settlements" by the "unparalleled exertions of its people" or so the Sydney Gazette would have us believe (22 January 1827). (2)

The exaggerated account of the Sydney Gazette encapsulated the mood of contemporary N.S.W. Where previously the colony was perceived by its white inhabitants as the miserable place Macquarie described, lacking in potential and prospects, this new view was one of exultant optimism and growing confidence founded on the belief in the availability of rich and boundless land. It was reiterated over and over again in the reports of government officials, travellers, visitors to the colony, and the "men of substance" residing in it. These were men who saw economic opportunities everywhere in New South Wales - in fact the landscape was viewed exclusively in terms of its potential for exploitation. They invariably described what they saw in the conventional romantic idiom of the nineteenth century, dwelling on the picturesque landscapes and denouncing the "ugliness" of the Australian
wilderness. Several closely related themes emerge from these similarly expressed accounts. In the first place, the
different between fertile and infertile land was quite clear
in the eye of the English observer. Where land naturally
resembled the tame, pastoral views of England, or where it
had been cleared and cultivated, his praise was abundant.
However, where the landscape was still wild, barren and
rugged, as on the ridges between the rocky gorges, it was
described with loathing and sometimes with fear. As Jeans
writes "... the romantic view of wild scenery in Australia
was rare ... nature was seen as oppressive and there was no
easy escape to civilised surroundings". (3)

The early reports of "good" land often expressed surprise,
relief and delight. When John Howe first saw the Patrick's
Plains area in the Hunter Valley in 1819, he wrote:

It is the finest sheep country I have ever seen
since I left England ... the grass on the low ground
equals a meadow in England and will grow as good a
swathe ... (4)

The comparison with England and the use of English terms is
perhaps inevitable and is found in most accounts. A similar
report by Peter Cunningham on the Twickenham Meadows in the
Hunter Valley in 1826 might have described English
countryside:

... these beautiful meadows, one of the richest
prospects that can well be witnessed presents
itself, the flat alluvial lands spread out before
you being matted with luxuriant herbage; branching
evergreens singly or in irregular clumps; the river
winding through the midst; whilst dark-foliaged
swamp-oaks bordering with a deep green fringe its
steep and grassy banks ... (5)

The image of an idyllic pastoral countryside is recreated by
his emphasis on greenness and gentleness, but at the same
time the term "richest prospect" betrays his true interest in the
land. In fact, the land existed simply and solely for the use of man, and it was taken for granted that "improvements" and exploitation were inevitable. Dunaresq conveyed this theme in his description of the as yet uninhabited Wollombi Valley:

From the barren rocks and the lofty unsheltered solitudes (of the ridge) the path descends into a rich grassy vale adapted to all the wants and enjoyments of man. (6)

Exactly the same attitude is conveyed in Mitchell's report on this survey of the Great North road between Ten Mile Hollow and the Wollombi Valley:

... Campoon's Pass, where a ledge of rock admits of an ascent which, when used as a road, will appear the work of man, so beautifully has nature worked for the Surveyor of Roads. (7)

The purpose of millions of years of the landscape's evolution was thus to provide a road for men.

The land which obviously did not present any opportunity for development was, by contrast, invariably seen as ugly, worthless, and monotonous. Breton wrote of the landscape on the ridge between Wisemans' Ferry and Wollombi:

... much of the scenery is indescribably sombre. The eye seeks in vain for something more cheerful to look upon than a succession of ridges stretching as far as the eye can reach, and deep gullies without a single spot uncovered by trees, and not a blade of grass in any direction. (8)

What was really so different about the Australian landscape was its monotony. Writers for the next fifty years constantly contrasted the sameness of the natural bush, whichbored most of them, with the variation and "cheerfulness" of the areas settled and under cultivation. (9) Breton wrote that the cleared spots had a "pretty effect" because they contrasted with the bush and the "monotony which reigns over
so much of the landscape". (10) When Samuel Lyons' estate at Five Dock near Sydney was subdivided one W. Bebbelwhite announced the sale in the *Australian* in 1836:

... (a few months) will witness the commencement of villas both on the Road (Great North Road) and River (Parramatta River); and the sameness and monotony of the bush yielding to the variety of the cottage and villa, and the busy note of industry. (11)

The impulse to conquer, tame and civilise the wilderness was reflexive and overwhelming in the face of such an oppressive and threatening landscape as described by William Dunmore in 1827:

If any man be sceptical of the importance of iron gangs let him travel this wild, solitary ... difficult and dangerous path ... on a razor back ridge ... with no trees ... you see yourself in this large space of wild untrodden country, a weak solitary being far from the busy hum of man and in helplessness inferior to the beasts. (12)

The first operation in the battle against the wilderness was, of course, settlement. The land required "only for (man's) enterprising spirits and improving hand to turn to account the native bounty of the soil" in order to "spread the light of civilisation over a portion of the globe yet unknown" (13) according to Mitchell. The simple exploitation of the land for economic gain had such noble ramifications for many colonists. "Civilisation" could be established and maintained by altering the landscape wherever necessary and possible, to resemble English countryside:

Some cleared their land of the more un-English eucalypts to procure the effect of parkland, watered their grassy lawns and lived the lives of English squires. Books, music and chasing the dingo in full hunting gear demonstrated their realisation of early ambition. (14)
The role of the convicts who arrived in ever increasing numbers after the end of the Napoleonic War was a vital one. They were the means of clearing the land, constructing the public buildings and the Great Roads. Dumaresq singled them out as such, rejoicing in the fact that the government had such a large, cheap labour force at its disposal. (15) Potter McQueen also had no doubt as to their function and value:

It has been distinctly understood for years past that the toil and labour of the convicts should be the means of civilising the colony, of extending its agriculture, producing food for its inhabitants, rearing flocks and herds and generally of carrying out the numerous improvements which skill, enterprise and industry are daily adding to the common property. (16)

The construction of roads by convicts was a most visible "civilising improvement" to the landscape and, in facilitating the spread and consolidation of settlement, was also a means of overcoming the wilderness and extracting wealth from it. Bangar thus wrote of the function of roads:

The making of roads is first necessary, therefore, when a barren and mountainous tract intervenes so as to prevent the intercourse between the capital town or port of shipment and the country in which the products are raised. In such routes, rocks have to be cut away and removed; mountains zig-zagged, jungles cut through and bridges thrown across ravines ... (17)

The humble lines begun in the 1810 and 1820's to the north, south and west of Sydney became "Great Roads" like their English counterparts (see Fig. 81). Not only did they overcome the barriers of barren, threatening land between Sydney and the rich pastorage of the valleys and plains, but, like great public buildings, they also became reassuring symbols of permanency, order, and of the "spread of civilisation itself".
The combination of rich land, convict labour and good roads lead many to foresee for the colony a future of wealth and prominence in the British Empire. Potter McQueen boasted that:

The colony at no distant period ... (will be) ... a settlement of tenfold greater value than the entire British possession added together. (18)

The discovery of rich and promising land after 1813 thus inspired a new view of the colony which rendered it a "true mine of colonial wealth" (19) and engendered attitudes of boundless optimism, confidence, praise and energy on the part of the colonists. The negative aspects tainting the new land, those vast isolated expanses of "barren wastes", were still vigourously criticised, but their conquest was now seen as possible and imminent through the construction of roads by convicts. The roads themselves, with their promise of heavy traffic and numerous thriving inns, thus became triumphant symbols of the colony's new outlook on itself and its future.
2. The Settlement of the Hunter Valley

It was a closely linked set of factors which gave rise to the new attitude to the colony. The expansion of the original settlement to fill the Cumberland Plain in the 1810's prompted the discovery of new lands beyond it, and the increase in the rate of immigration of both free people and convicts during the 1820's and 1830's resulted in relatively rapid expansion to the west, south and north of Sydney.

In describing the physical characteristics of the area, Perry states that:

... the most important single feature of the physical geography of the nineteen counties is the sandstone plateau at their centre. Because of its steep scarp and deep dissection, this plateau made communication between the Cumberland Plain and the districts fringing the plateau rather difficult ... (20)

During the period of expansion, these "dissections" were the main obstacles to road making, and the convict laboured in some cases for several years to render them passable. (21)

The destinations of the roads radiating from Sydney, such as the Hunter Valley and the upland districts west of the Blue Mountains were, in contrast:

... parklike in appearance, the trees more or less widely spaced and areas between them covered with grass. Their relief was subdued and their horizons wide; there was no impediment to easy travel through them ... (22)

While areas of alluvial soil in the river valleys were considered by settlers best for agriculture, the drier grassy plains further west were favoured for grazing sheep and cattle. (23)
Thus, Jeans writes, in the Hunter Valley with its ample coastal rains in the lower valley and much drier conditions further in land - "... the earlier settlement took account of such differences, and the dry upper Hunter became a pastoralists' district while the lower Hunter went to the farmer". (24)

After the discovery of the plains and grasslands west of the Blue Mountains in 1813, established pastoralists began to take up land there for grazing sheep. After 1816, the British government's emigration policy was relaxed and settlers with capital began to arrive in rapidly increasing numbers. The last of the Cumberland Plain was finally granted away during Brisbane's governorship in the early 1820's, while his predecessor, Macquarie, had already foreseen that the escalating demand for land necessitated the opening of the Hunter Valley in the north. (25)

The problem of government control over the colony's expansion, present from very early times, in the 'twenties assumed even greater proportions. The instructions to Governors "... stressed the need to locate settlers in groups rather than scatter them over wide areas, the object to enable them to provide mutual assistance." They were also ordered not to grant more land than the settlers could cultivate or stock. (26) However, Macquarie's generosity in granting land, combined with an abysmally understaffed Surveyor General's Department meant that, by the time Macquarie left, most of the 400,000 acres he had promised remained unsurveyed, resulting in endless confusion, argument and misunderstanding. Brisbane and Darling faced the problem of an expanding colony and an already huge arrears in its survey. (27) In 1825 regulations for closer settlement were introduced:
Settlers were to await the survey before going beyond the present settled areas, and the government would extend the survey only when occupation of lands already surveyed should justify an advance. (28)

Because of the lack of surveyors it was not possible to to enforce these regulations. Boundaries were "... simply marked out and settlers allowed to take up land". Numerous subsequent attempts to limit and completely control settlement also failed. (29)

Of the newly-settled areas, the Hunter Valley was one of the earliest discovered, the latest to be opened up and the most rapidly settled. The Hunter River was located by Lieutenant Shortland in 1797, and the present-day site of Newcastle was selected by Governor King in 1804 as a suitably isolated place for convicts sentenced to secondary punishment. The only form of transport between Newcastle and Sydney was then by water. The convicts were employed in coal mining, timber-getting, lime-burning and labouring in the town and on the wharves. (30) Macquarie maintained the settlement until the early 1820's, when its effectiveness as a prison dwindled through the discovery of an overland route which reduced its isolation. Some small farms were established by 1812 and a few well-behaved convicts were subsequently placed on grants at Patterson's and Wallis Plains. Although the Hunter Valley was officially closed to settlers, in 1817 and 1818 some were allowed farms in the Middle Hunter. (31)

In 1819 John Rowe, a grazier and constable at Windsor, located the first overland route between Windsor and Jerry's Plains in the Upper Hunter Valley. His second expedition in 1820 followed a slightly different line (see Map 3), and was probably used immediately for transporting stock. (32) It was officially opened in 1823, when a Public Notice advised that:
The road from Richmond to Wallis Plains is open for the public. A written permit must, however, be obtained from this office designating that brands of animals proposed to be driven; enumerating their numbers and naming the individuals to accompany them, together with the ships that they came by; the indulgences (if any) they possess; and specifying the days during which this journey will be accomplished. (33)

These safeguards were intended to preserve the isolation of the settlement at Newcastle, but their purpose was defeated by the existence of the road itself. While travellers such as Peter Cunningham described it as a "rugged bridle track over a mountain ridge called Bulga, quite unfit to take an empty cart by ...", (34) convicts who escaped from Newcastle found it most convenient. It was a simple matter for them to cross the relatively easy terrain of the valley to Jerry's Plains and then to follow the marked trees on the Bulga Road down to the settlements at Windsor. Macquarie received constant reports of convicts escaping by this route. Morrissett, the Commandant at Newcastle, wrote to him in September 1821:

I much fear that it (Bulga road) will cause many of the prisoners to run from this station. They have been kept here with the greatest difficulty. The trees have, I understand, been cut to mark the road from the settlement to near Windsor. (35)

Macquarie also became increasingly aware of the growing demand for land such as that of the Hunter Valley to accommodate the swollen ranks of free immigrants. He had written to Earl Bathurst in 1819:

Extensive plains of rich and fertile land being found at no great distance along the three principal sources of the River Hunter ... (have) ... now become an object of valuable consideration in the necessary increase in population ... (36)
These considerations led him to remove most of the convicts from Newcastle to a new and, again, remote settlement at Port Macquarie in 1822. By 1823 only a few remained at Newcastle to man mines, cut timber and labour in the town. (37)

The subsequent settlement of the Hunter Valley was characterised by three features; first, its rapidity, second, by the development of two distinct types of land uses - the smaller agricultural holdings in the lower valley and the large pastoral estates in the upper reaches, and third, by the fact that most of the settlers were newly-arrived, free immigrants.

In March 1821 there were 21 settlers in the Hunter Valley, including John Howe and Benjamin Singleton. By 1825 there were 283 settlers spread along the river as far as Segenhoe, the estate of Colonel Thomas Potter MacQueen, and the Hunter Valley had more people and more land under cultivation than any other district outside Cumberland. It was preferred to the Bathurst area because of its large areas of alluvial soil, the availability of water transport, and the relatively quick surveys undertaken there, which resulted in early ratification of grants. (38)

The sections of alluvial flats along the river at Patterson's, Wallis and Patrick's Plains were those earliest settled, forming the "nuclei of later settlement". In the drier upper Hunter, although grazing was first established by John Howe in 1820, it was not until the second half of the decade that the great pastoral estates of settlers such as the Dumaresq, Potter MacQueen and Ogilvie were established. (39)

The late opening and settlement of the Hunter Valley produced a distinctive population. By the time the convicts were
removed from Newcastle, most of the local demand for fresh pasturage had been satisfied and it was the newly-arrived immigrants who, preferring the Hunter Valley to the areas further inland, took up land there. The new regulations regarding the granting of land ramified this tendency - since capital was now a prerequisite for the grants, the size of the holding reflected the wealth of the new settler. For every £500 brought in cash or goods, 640 acres could be allotted. Between 1825 and 1828, more than 40% of the holdings exceeded 1000 acres and a further 20% exceeded 500 acres. (40) Perry concludes his discussion of the settlement of the Hunter Valley:

... the majority of the valley's settlers were new immigrants whose enterprise, coupled with the natural resources of the valley produced a rapid development of both agriculture and stock raising that contrasted with the predominantly grazing settlements of the Bathurst and Argyle districts. (41)

The towns which developed to serve this populous area became the destinations of the Great North Road. After the removal of the main body of convicts from Newcastle in the early 1820's, the settlement grew very slowly. Streets had been marked by 1821, and official services were originally established there, but the latter were subsequently removed to Maitland. While some merchants and suppliers moved to Newcastle in 1822 and 1823, it remained by most accounts an unimpressive place. By 1831 it had a population of only 400 and Lang described it in 1854 as "having the appearance of a deserted village". (42)

Maitland, then known as Wallis Plains, became the chief town of the lower Hunter Valley. Located on the site of an early cedar-getters' camp, it was conveniently central to the agricultural areas, where Newcastle was separated from them by
barren land, swamps and numerous creeks. At Morpeth, also referred to as "Wallis Plains" or "Green Hills", there was deepwater mooring near the confluence of the Hunter and Williams Rivers which catered for the busy shipping trade between Sydney and the Hunter Valley. Thus, at this early stage, Newcastle was also unimportant as a port. The Wallis Plains area later also included the official town of East Maitland, planned by Mitchell in 1829 and intended by him to replace the original unplanned town which had developed haphazardly. It failed to do so completely, becoming instead the centre of official services while West Maitland retained its commercial functions.

Further up the valley at Patrick's Plains, Benjamin Singleton's Plough Inn became the nucleus of the unofficial town of Singleton, while officially proposed towns such as Leamington and Whittingham were never built or never developed. At the top of the valley, "estate towns" such as Scone and Aberdeen developed in conjunction with the pastoral estates of Dumaresq and Potter MacQueen respectively.

The Hunter Valley thus became the "Garden of the Colony" and one of the inspirational sources of the contemporary optimistic view of New South Wales. The construction of the Great North Road reflects both the practical necessity for overland communication and transport, and the more ephemeral notion that the valley, symbolising, as it did, the promise of colonial wealth, would require a fine, planned and permanent road, "... as good as any in England". In linking the valley with Sydney, the isolation of the corner would be destroyed and the rugged ridges overcome.

The three distinctive characteristics of the valley's settlement had a direct effect on the planning, location and
construction styles of the Great North Road. In the first place, the remarkable speed with which the valley was settled impressed upon the government the importance of the area and made it aware of the urgent need for a road. The original official survey was made by Heneage Finch in 1825, (48) only three years after the convicts were removed from Newcastle. In the second place, the late opening of the valley and its settlement by newly arrived immigrants described by Perry as "men of substance and standing ... many with capital and patronage of influential members of society", (49) meant that the settlers were enterprising and no doubt articulate. They lost no time in pointing out in their petition for a road of April 1826 that they were:

... led to believe that they do not underestimate the importance of their district when they state that in the number of farms and establishments the extent of Cultivation and Breeding and the Population employed, Hunters River will be bound to exceed every other outstation within the colony. (50)

The petition went on to observe that the survey for a road had been made under Brisbane's governorship, but that "no further measures appear to have afterwards been taken to carry the same into effect" and that the road was necessary to them, since:

In this state of advancement, your memorialists have necessarily a good deal of intercourse with Sydney as the principal port of trade, which they are at present compelled from want of a Road to carry on by water to the very great inconvenience, risk and serious injury of their property. (51)

The petition was signed by eighteen major land-holders and a list of all settlers in the Valley was enclosed. (52) Such numerous and influential petitioners ensured the government's prompt attention to the North Road. William Dumas, the Surveyor of Roads and Bridges, and the Surveyor General, John
Oxley, marked out the line to Wisemans Ferry in the following
month and gangs started work at "Castle Hill North" in
September 1826. (53)

The distribution and type of settlement during the '820's
directly affected the road in terms of its original and
subsequent destinations. Since the first settlements were
the small holdings located on the lower reaches of the
Hunter, the Bulga Road which reached the valley at Jerry's
Plains in the Upper Hunter, was an extremely circuitous land
route to Sydney (see Map 3). (54) Pinch's original line of
1825 was, accordingly, directed via the Wollombi Valley
towards Maitland and Newcastle, the then centres of the
agricultural communities. In the second half of the decade,
when the large pastoral estates were established by wealthy
and influential settlers in the upper Hunter Valley, these
areas were also considered important destinations to be
served by the Great North Road. Branches of the road formed
by travellers between the head of the Wollombi and the upper
Hunter were later incorporated, with some alteration, into
Mitchell's official plans in 1829 (see Map 11). (55) When an
allegedly shorter, more easily constructed line was suggested
in 1828 from Ten Mile Hollow to Maitland via Mangrove Creek
(see Map 11), Dumaresq, then Colonial Engineer, commented
that it would be:

... of no use, if adopted, to settlers occupying the
Upper Branches of the River Hunter a numerous and
respectable class of people who at present use the
road to the head of the Wollombi where they branch
off to the left through an easy country to their
several properties - this consideration may have
some weight in determining the relative advantages
of the two roads - the settlers by the Mangrove line
are generally on a small scale ..." (56)

Dumaresq was himself one of the "numerous and respectable
class of people" to which he refers, which partly explains his
firm opposition to the new line. (57) Ironically, the Great North Road ultimately served the same areas which the old Bulga Road had reached in 1820. It is a measure of the Hunter Valley's remarkably rapid settlement that, only a few years before the Great North Road was thus constructed, the Bulga Road had been dismissed as of no use to the settlers in the valley.
3. Darling, the Great Roads and the Convict Road Gangs

In 1834, when called upon to report to the Secretary of State for War and the Colonies on his department's activities, Sir Thomas Mitchell wrote that Darling "... since his return home" classed the three great roads extending to the north, south and west "amongst the most important measures of his government". (58) Darling was particularly interested in establishing a good, permanent road system in New South Wales. He managed to bring several surveyors who were highly qualified in road-making to the colony, he formed the Roads and Bridges Department to administer the project, and he developed the massive convict road-gang system, with its organisational complexities of supplies and accommodation, to accomplish it. He appears to have closely supervised the planning and construction of the roads and, when defending the administrative system or requesting further staff in letters to his superiors, he frequently invoked the importance of roads in N.S.W. In 1828 he described the post of Surveyor of Roads and Bridges as "of great importance to this country" (59) and the work of the convict road gangs, in 1828, as the "important undertaking ... (of) ... making great leading roads throughout the colony". (60) Darling's brother-in-law and then Surveyor of Roads and Bridges, Captain William Dumesq, probably could not be expected to give anything but exuberant praise for Darling's policies:

... when roads are mentioned, I am eager to snatch the opportunity of recording my humble meed of praise to his Excellency, Governor Ralph Darling, for the highly improved state of the roads in every direction throughout the colony. (61)

Such statements were also frequently expressed in contemporary travellers' accounts, such as Breton's - "... of the public works of N.S.W., the principal are the roads, which are
monuments to perseverance and ability”. (62) Even if not accompanied by praise of the government, the Great Roads were invariably mentioned and always in laudatory terms. (63) Perry Simpson expressed the situation succinctly when, in a memorial to Darling, he described the more substantial sections of the Great North Road as "another monument of Your Excellency's paternal care of the colonists". (64) The roads were intended to be Darling's lasting contribution to the colony, and an epitaph to his governorship.

In a sense the roads were a metaphor for Darling's period of governorship as a whole. It was one of consolidation of the colony and of greatly improved regulations. To start with, as the sequence of early official records clearly evidences today, the first year of his appointment marked a far more smoothly organised civil service, and the proper, detailed and indexed recording of each department. The imposition of order upon chaos is also reflected in his great concern that accurate surveys of both individual grants and purchases, and of the colony generally, be undertaken as quickly as possible. This was a mammoth task, given the colony's rapid expansion compounded by the past neglect of proper, routine surveys. (65) He agitated constantly for more surveyors for the colony, and the staff of the Surveyor General's Department increased from five surveyors in 1826 to thirty surveyors and two draughtsman in 1830. (66) By the time he returned to England the general survey was well underway.

With regard to the administration of convicts, Darling transferred control to the Principal Superintendent, F.A. Hely. A Board of Inquiry of March 1827 reported that there had been great improvements in this area. (67) In addition, he:
... established a Board for the distribution of convict servants to replace the 'caprice' of the Civil Engineer; he had taken in hand the reform of the Female Factory at Parramatta and the Carter Barracks at Sydney, he had improved the ticket-of-leave system, the magistracy, the police and the penal settlements. (68)

Like the Great North Road, Darling's achievements, in spite of their impressiveness, were quickly overshadowed and forgotten. He was recalled in October 1831, leaving behind him a reputation for severity, coldness, formality and pedantic meddling in the affairs of his departments. (69) His alleged harshness and illiberality were expounded constantly by the Australian, culminating in the notorious Sudds and Thompson case. (70) Accusations such as those made by E.S. Hall in 1830, including ill-treatment and torture of convicts in road gangs, and indirect responsibility for murders and plundering by bushrangers, further fuelled the charges of severity and irresponsibility. (71) Darling had, however, been instructed to "revive the dread of transportation" in the first place. His subsequent actions were, as Shaw discusses, in many ways less harsh than his supposedly more lenient successor, Bourke, particularly with regard to the road gangs. The positive aspects of Darling's governorship were further obscured by his constant struggles with the headstrong and rebellious Surveyor General. (72)

It is clear that in spite of his contemporary and subsequent vilification, Darling was solely responsible for the imposition of order and efficiency over the confusion of previous years, which ramified the growing confidence of the colonists in their colony and in their ability to subjugate the new land. A properly regulated and regulating government assured a civilised society, providing, among other services, good roads for access to rich lands. In Darling's vision, the network of permanent all-encompassing great roads was to be the epitome of his governorship.
The use of convict labour for road building was not simply a result of Darling's ambitions for colonial roads. The period 1815-1835, following the end of the Napoleonic Wars was one of large-scale convict transportation to N.S.W. Before 1814, the numbers varied from 158 in 1796 to 629 in 1802, while after 1814, numbers swelled from 839 in that year to 1,528 in 1821 and 3,479 in 1833. (73) The proportion of second-offence convicts in the colony thus inevitably also increased dramatically, and the numbers became too great to be absorbed into penal settlements such as Port Macquarie. Such men were also unsuitable for assignment to settlers, and many were sent back for bad behaviour. Surveyor General John Oxley explained Darling's solution to this problem in 1827:

The cost attendant on the construction of Public Main Roads is necessarily ... defrayed by the Crown. The convicts worked on the roads cannot otherwise be employed; they are principally incorrigible characters ... there is no other mode of punishment which effectively answers the purpose at so trifling an expenditure. (74)

Where Macquarie had selected any skilled convicts available to labour on public buildings, and the men who opened the first road over the Blue Mountains in 1813 earned their tickets of leave by so doing, by 1826, the gangs who worked on the roads were being punished for offences committed since their arrival in the colony. The gangs also fulfilled Darling's instructions to increase severity; they effectively used distance to remove these "undesirables" from society; and they were a relatively cheap way of building the necessary roads for the colony. By 1830, 1,755 convicts worked on the colony's roads, in ironed and unironed gangs, 558 of whom were constructing the Great North Road. (75)
These convicts were perceived as a "civilising" force. While the individuals themselves were not intrinsically "good" or "worthwhile" (Darling referred to them as the "refuse of the colony"), gangs of them shackled in irons and, theoretically at least, imprisoned by isolation, were a very useful source of labour which could be applied to the fearful wastes of the new country. Mitchell wrote of the zig-zag descent to Wisemans Ferry:

The broad waters of the Hawkesbury then come unexpectedly into view, flowing in the deepest and apparently most inaccessible of these rock bound valleys ... (the traveller) here soon discovers a practical proof of the advantages of convict labour to the inhabitants of such a country, in the facility with which he descends by a road cut in the rock. (76)

The construction of such grand roads would not have been possible without this labour force, and Mitchell's lines of road, which in avoiding circuitousness, often spanned chasms or scaled sheer rock faces, could never have been built. In Charles Darwin's opinion:

The power which the government possesses of at once opening good roads throughout the colony has been ... one main cause for the early prosperity of this colony. (77)

While travellers of the later period were sometimes shocked by the treatment of convicts in road gangs, men such as Dumaresq believed that it was a far more healthy occupation for them than confinement to gaols in urban areas:

The establishment of iron-gangs was a master stroke of colonial policy and deserves for it immense advantages to supersede the use of gaols and hulks and penal settlements. Compare the squalid, unwholesome, half-naked idleness of the inmates of the Sydney Gaol with the hardy, robust, well-fed and well-clothed appearance of the chain gangs ... whilst one system is the foundation of public wealth, diffusing and perpetuating security and plenty in a lone and distant wilderness the other is replete with vice and bad example. (78)
This description is not a little exaggerated. Life for the convict in the gangs was just as squalid, unwholesome and "half-naked" as it was for his counterpart in the gaols. Reports of lack of clothing, proper shelter and food were frequent and conditions were probably harsher, given the inland extremes of temperature. However, Dumaresq's comments neatly summarise the contemporary view of convicts held by men such as himself. These wretches, he told himself, were far better off in road gangs and were also conveniently out of view most of the time. More importantly, the road gang system was the "foundation of public wealth" because by building the roads, they placed the potential of the rich lands of N.S.W. within easy grasp of "respectable" classes of free settlers.
4. The Road Building Revolution in Britain 1800-1820

A revived interest in road construction in Europe, and particularly in France, during the eighteenth century spread to England in the 1800's and thence to N.S.W. in the 1820's. The Great North Road is thus an example of a newly emerged technology applied in the context of a new colony, and owes its impressive style and its very survival partly to this fact.

The "old crooked horse tracks" preceding the road-building revolution in England were paralleled in N.S.W. by the simple "tracts made by carts" common before the 1820's. (79) In response to the public demand for improved roads in England in the wake of the Industrial Revolution, various committees of the House of Commons were appointed in the early nineteenth century and systematic work on roads begun. Their research brought to light the work of such men as John Metcalfe, Thomas Telford and John Loudon MacAdam, and stimulated interest in the old Roman roads still extant in England and in the work of earlier French engineers such as Gautier (1660-1737) and Tresaguex (1716-1794). (80) The new technology focussed on the development of hard, long-wearing surfaces and on the proper drainage of roads, because it was the continual and rapid ruting, sinking and decomposition of the traditional convex earth roads which was regarded as their major defect. (81)

Metcalfe, a blind road-maker of Knaresborough, used the stone from the remains of Roman roads to build new surfaces, and introduced the corduroy road, a surface of logs or planks laid perpendicular to the road alignment, particularly useful in muddy, marshy conditions. (82) Thomas Telford (1757-1834) was a stone mason whose best known roads were formed by placing a substratum of rough handset pavement of large stones, as a
foundation, with sufficient interstices between them for drainage, and then covering this with a layer of hard angular stones broken into small pieces, decreasing in size towards the top. In his evidence before the Select Committee in 1819, Telford also emphasised the need for drainage, minimum convexity and the formation of cuttings rather than the construction of roads on steep gradients. (83)

John Loudon MacAdam, who became Surveyor General of Bristol roads in 1815, concluded from his experiments that a substratum of large stones, as suggested by Telford, was not necessary if the road was kept dry by the use of a broken stone pavement in conjunction with drains and culverts. He wrote for the Report of the Select Committee on the Highways of the Kingdom in 1819 that the basic principle was:

... to put broken stone upon a road which shall unite by its own angles so as to form a solid, hard surface. It follows that when that material is laid on the road, it must remain in that situation in which it is placed, without ever being moved again. (84)

Like Telford, MacAdam maintained that no greater convexity should be given than enough to cause rainwater to run easily into side drains. (85)

Road tracing also became a "science" rather than a haphazard development. It was advised that such factors as terrain, availability of materials, location of river crossings and settlements, and the length of roads be duly considered and carefully weighed out in the selection of new lines of road. (86) The merits and demerits of the rival theories of Telford and MacAdam, and of formations such as zig-zags were hotly debated, and road masonry for various types of drains, culverts, retaining walls, breast walls and bridges were discussed in much detail in books such as Henry Farnell's
A Treatise on Roads (1833). (87)

Much of the new technology was familiar to the engineers who arrived in N.S.W. in the 1820's, and interest in this area was fostered by Governors Brisbane and Darling. Both written and material records reveal that many of the new methods, albeit simplified and adapted to the colonial context, were applied in the construction of the Great North Road with outstanding success. The Road's most notable engine, Percy Simpson, mentioned the recent innovations in English road-building in his memorial to Darling in 1829:

The improved system of road-making in England has been by Your Memorialist adopted and carried out successfully in this district (Wisemans Ferry) which has gained the unanimous approbation of all who pass on it. (88)

Military men were clearly the carriers of the new technology. While the source of Simpson's training is unknown, his statements and work indicate that he was well versed in the various aspects of road-building. (89) William Dumaresq had an English military education in engineering, possibly road engineering. (90) Assistant Surveyor Elliot, who was appointed by Darling to supervise the construction of the Argyle Road (Great South Road) was recommended by Thomas Telford himself. (91)

The availability of the new technology, applied by apparently zealous engineers and surveyors with suitably large resources of labour at their disposal allowed the construction of the grand, permanent thoroughfares with which Darling wished to endow the colony, and which the colonists saw as roads to wealth and civilisation.
SECTION II

THE HISTORICAL CONTEXT

Notes


2. T. M. Perry, Australia's First Frontier: The Spread of Settlement in N.S.W., 1788-1829, Melbourne, 1963, p. 121.

3. Dennis Jeans, An Historical Geography of N.S.W. to 1901, Sydney, 1972, p. 51.


5. Peter Cunningham, Two Years in New South Wales: a Series of letters comprising sketches of the actual state of society in that colony, of its peculiar advantages to emigrants, of its topography, natural history etc., 2 Vols., London, 1827, p. 81.


8. Lieutenant A. W. Breton, Excursions in N.S.W., Western Australia and Van Diemen's Land During the years 1830, 1831, 1832 and 1833, London, 1833, p. 86.


10. Breton, p. 86.

11. Australian, 9 December 1836.

12. Dumaresq, Letter IV.


15. Dumaresq, Letter IV.

16. Colonel Thomas Potter McQueen, Australia as She Is and As She May Be, London, 1840, p. 16.

17. Henry Dangar, Index and Directory to Map of the County Bordering upon the River Hunter and the Lands of the Australian Agricultural Company, with the Groundplan and Allotments of Kingstown, N.S.W., London, 1827, p. 69.

18. Potter McQueen, p. 5.

20. Perry, p. 15.


22. Perry, p. 15.


27. Wood, p. 20, and Perry, pp. 43-44.


30. For a detailed account of the discovery and early exploration of the Hunter River, see Perry, pp. 55-56, 58, 59; Shaw, p. 188; Wood p. 1.


32. For a detailed account of the discovery and use of this road, see H.A.M. Morgan, "The Bulga or Coal River (Road) - Australia's First North Road, Its History and Pioneers", in *J.R.A.H.*, Vol. 44, 1958, 185-221; and also Wood, pp. 15-16.

33. Cited in Morgan, p. 192.

34. Peter Cunningham, p. 75.


37. Perry, p. 60.


40. Perry, pp. 73-75.

41. Perry, p. 78.


43. Jeans, p. 131; Perry pp. 71-72; For a detailed history of Maitland, see Maitland City Council, Maitland 1863-1963, Sydney, 1963; See also G.B. White's "Plan of Road from Maitland to Newcastle", June, 1834, which shows a total of twenty bridges, Lands Department of N.S.W., Map No. M1.697.

44. Jeans, p. 131; Madew, p. 22.


46. Perry, p. 72; Wood, p. 108.

47. Jeans, p. 131.


49. Perry, p. 74.

50. Hunter's River Settlers to Darling, 19 April 1826, A.O.N.S.W., C.S.I.L.

51. Ibid.


53. Australian, 24 May, 1826; Wilford to Macleay, "Detailed Report of the Numbers of Convicts who have been employed in Making and Repairing Roads from December 1823 to September 1827", A.O.N.S.W., C.S.I.L.

54. An unpublished National Parks and Wildlife Service Report, "Addition of Great Northern Road - Dharug National Park" by J.F. Starling (n.d.) makes the point that "...the route of the early expeditions to Patrick's Plains along the Mellong Range, then across the Wollombi Brook was
circuitous and did not readily serve the new settlements, which actually favoured the broad alluvial flats on the lower reaches of the Hunter River near Newcastle ...”.


56. Dumaresq to Macleay, 13 May 1828, A.O.N.S.W., C.S.I.L.


58. Mitchell to Macleay, “Report to the Secretary of State for War and the Colonies”, 2 September 1834, A.O.N.S.W., S.G. to C.S.


61. Dumaresq, Letter I.


63. For example, R. Dawson in The Present State of Australia, London, 1830, pp. 98, 384 commented: "... the line of road to Sydney is now made practicable for carriages by the colonial government."; Charles Darwin, in Journal of Researches into the Natural History and Geology of the Countries Visited During the Voyage of H.M.S. Beagle Around the World, London, 1839, p. 314, wrote: "The roads were excellent and made upon the Macadam principle ... The power which the government possesses ... of at once opening good roads throughout the country has been, I believe, one main cause of the early prosperity of this colony." (1836); See also Henry Bangor, pp. 56-60, and James Atkinson, p. 135.

64. Simpson to Macleay, 3 October 1829, (Memorial to Darling), A.O.W.S.W., C.S.I.L.


66. See Returns of the Colony, 1826 and 1830.


68. Ibid., p. 196.

69. See Therry, p. 82; Shaw, p. 194.


75. Returns of the Colony, 1830, pp. 50-51.
77. Darwin, p. 314.
78. Dumasq, Letter II.
81. Law and Clarke, pp. 4-6, and John Loudon Macadam, Remarks on the Present System of Road Building, London, 1824, p. 33.
84. Macadam, Remarks, p. 41.
85. Ibid., pp. 11, 34.
87. Henry Parnell, A Treatise on Roads Wherein the Principles on which Roads Should be Made Explained and Illustrated by the Plans, Specifications, and Contracts Made Use of by Thomas Telford, Esq. on the Holyhead Road, London, 1833. See also Law and Clarke, pp. 23, 30, 44-49; Dobson, pp. 80, 89-90 ff.; and Sir Burgoyne, Remarks on the Maintenance of Macadamised Roads, Sydney, 1857, first published 1843.
88. Simpson to Macleay, 3 October 1829, (Memorial to Darling), A.O.N.S.W., C.S.I.L.