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**AUSTRALIA'S INDUSTRIOUS CONVICTS: AN ARCHAEOLOGICAL
STUDY OF LANDSCAPES OF CONVICT LABOUR**

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A thesis submitted in fulfilment of the requirements for the degree of Doctor of Philosophy

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Declaration

Some of the contents of this thesis have been published under sole authorship. The bibliographical details of the work and where it appears in the thesis are outlined below:

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Sections of this paper appear in the latter half of Chapter 2

ABSTRACT

This thesis devises and tests an approach to understanding archaeological sites of convict labour in an Australian context. It is centred upon a seemingly simple question: was convict labour motivated more by punishment or profit? Focussing on those places where the government retained direct control of convict labour, this thesis proposes an analytical framework that can form the foundation of discussions into the role and residues of convict labour in Australia. Such a framework is required, with research into the convict past marked by a growing disconnect between the archaeological and historical disciplines.

The model presented for discussion posits that there are two main analytical elements that should be discussed when engaging with landscapes of convict labour: the setting and process. The latter, in particular, presents a multi-faceted way of examining these landscapes, encouraging their analysis through a tripartite filter: organisation (how the convict labour was managed and deployed), supervision (how the labour was directed and controlled) and production (the economic basis of the convict labour).

This thesis tests the model by applying it to five case study sites. These were established by the government to exploit Van Diemen's Land's (Tasmania) coal resource through the deployment of convict labour between ca.1822 and 1848. By drawing upon the archaeological and historical record, this research analytically deconstructs these places using the devised model. Focus is placed upon the role of penological aims in their formation and development, in particular the tension engendered between the motives of punishment and profit. It finds that these places were formed and developed in response to complex multi-scalar influences and the transformative effects of the power dynamics which were played out within them. Importantly, this thesis observes that these places of convict labour are marked by an ambiguity that resulted in a melded landscape where the formative motivators of punishment and profit co-existed, the disentanglement of which requires the application of archaeological and historical methodology.

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The figures and tables included in the appendices are separately enumerated.

A note on nomenclature

Place names used were those recorded at the time that this thesis deals with - namely the early-to-mid 19th century. Below are three of the five case study sites where clarification may be required. The names used in the text are listed with their historical and modern counterparts.

- Tasman Peninsula coal mine - the Coal Mines, Slopens Main colliery, Port Arthur coal mines, Port Arthur colliery
- Jerusalem - modern Colebrook
- Recherche Bay - Southport, Southport Coal Company, South Port Colliery

In addition, a number of terms have been employed to provide distinction between the two main levels of administrative control overseeing the convict system. The terms 'British', 'Home' and 'Imperial' have been used interchangeably to refer to the British-based level of governance. The term 'colonial' has been used to refer to that level of government. Where the term 'government' has been used on its own, it refers to the administrative power as cohesively exercised by both levels.

CHAPTER 1: INTRODUCTION

This research had its genesis in 2007, when the author visited the Coal Mines, on the Tasman Peninsula in Tasmania's south east. Although the underground workings of these mines had been burnt out and collapsed decades ago, the rails of the inclined plane lifted and the jetties washed away, the site still retained a palpable sense of industrial process. Maybe it was the coal dust which coated the earth, or the rocky chasm which marked the location of the main shaft, but today's eucalypt-covered landscape did not seem far removed from its animated industrial beginnings. Added to this, the sandstone and brick relics of accommodation buildings, stores and workshops, distinct splashes of red, orange, gold and cream amid the greens and greys of the bush, and it was impossible not to get a sense of industrial order and process.

Among the ruined brick and stone walls were spaces that seemed to jar with this industrial order. A grassed courtyard surrounded on three sides by tall sandstone buildings, each marked by internal divisions and recessed fireplaces. Below one of these buildings, two short corridors flanked by sixteen constrictive, dark, brick-domed spaces, the deep recesses around the entrances suggestive of thick-timbered doors. Such arrangements hinted not at an industrial past, but rather one of incarceration. What these buildings represented was the control of space and the people within it. They were relics of the penological past with which the Tasman Peninsula had become synonymous.

This place was at once an industrial landscape and a penological one: a seemingly incongruous positioning of penal objectives and profit motives.¹ How was it possible for these aims to co-exist? How could a "just measure of pain" be extracted from a convict working deep in the unsupervised and poorly-lit depths of a mine (Ignatieff 1978)? How could a mine using the unwilling and coerced labour power of the unfree be expected to become a productive and reliable feature of the colonial economy? What sort of archaeological and documentary record is produced by this paradoxical place?

¹ Archaeologist James Garman, in his investigation of the nineteenth century Rhode Island State Prison, rightly notes that there is a difference between "self-sufficiency" - defraying the costs of upkeep - and "profit" - the accrual of revenue to the state (Garman 1999: 162). This thesis uses both terms largely in accordance with this definition, though does commonly use "profit" as a catch-all term reflecting the attempt to derive an economic benefit from convict labour.

Those familiar with the course of convictism in Australia would be aware that the Tasman Peninsula coal mine was not the only place where this strange fusion of profit and punishment was pursued. The use of convict labour in the pursuit of profit characterised the workings of convict transportation to Australia between 1788 and 1868. Whether working for a free or emancipist settler, or under an overseer in a government gang, the convict was subject to a web of penological objectives, at the same time being an economic unit through which virgin bush was cleared, the earth was sown, and fledgling manufactories established. To understand how and if the dichotomous objectives were met, is in part to understand the powers that shaped early Australian settlement.

Convict labour is a key thematic constant for historical archaeologists and historians engaging with the convict past. Within the study of labour are questions of punishment, profit and reform, of the power dynamics that characterised the relationships between and within the circles of free and unfree. It provides a signifier for the objectives and methods of colonial settlement. Convict labour founded Australia, with the places and spaces that were created imbued with an archaeological and historical narrative waiting to be revealed. This thesis aims to understand how landscapes of convict labour were places where penological and economic aims were played out. The research focuses on the convicts who were directly supervised by the government, working in the gangs and stations which dotted the colonial landscape. The places where the government retained direct control of the process and products of convict labour were where the interface between administrative aims and operational realities were at their clearest. To demonstrate this, five case study sites have been chosen, each established in Van Diemen's Land (Tasmania) between ca.1822 and 1848, with each being a government-run operation employing convicts in coal mining (Figure 1-1). This thesis will characterise these landscapes of government convict labour, focussing on the documentary and archaeological residue of the convict system. It will illustrate how they were formed and evolved and how they can be understood through the application of methodology drawn from the tools available to historical archaeologists and historians.



Figure 1-1: Site locations

This research is predicated on a measured critique of the historiography that has marked convict studies in Australia until this point. As will be discussed in Chapter 2, the output of Australian historical archaeologists engaging with the study of convict Australia has been characterised by a disconnect from the course of academic discussion in historical fields. Regrettably, the disciplines of Australian historical archaeology and history have been charting divergent courses for the previous three decades. Historical studies have been exemplified by a progress from an early focus on system

studies, to more fine-grained critiques of the key academic questions that have emerged. In contrast, Australian historical archaeology has taken a more scattershot approach, at times referencing the development of historical understanding and drawing from its observations, at others, regardlessly separate from it.

In the face of this disconnect, this thesis draws heavily on the historiography and methodology of historical practice. Historical archaeologists draw freely from the documentary record, though such engagement is sometimes marked by a haphazard approach. Just as there is a well-articulated fear that archaeology can easily become a “handmaiden to history” (Hume 1964), it must also be considered that history can just as easily become the corrupted plaything of archaeologists. Primary and secondary resources can be plundered and cherry-picked to support the findings of archaeologists, with an abridged documentary record massaged to fit interpretations already retrieved from the material record. Historians, in turn, can do the same with materiality; their documentary-centric focus leading them to misinterpret or ignore physicality's evidential weight. This thesis seeks to illustrate how both in-depth historical and archaeological analyses can be used in a complementary fashion. As has been noted by others, the relationship between the two evidential methods must be recursive, a constant loop of enquiry in which both streams of evidence are used to query the other (e.g. Little 1994).

As will be demonstrated in Chapter 2, the framework for this thesis is drawn from both historical and archaeological schools. The author of this thesis was firstly trained as a historian, steeped in the historiography of historical engagement with Australia's convict past. Through this he developed an understanding of the major themes with which historians have sought to engage, in addition to the course of this historiographic tradition. This thesis is unapologetically a product of this training, seeking to create a more nuanced historical understanding of the topic. Countless hours spent in the archives have been the result, piecing together an historical narrative. It seems counterintuitive that any engagement with an aspect of the convict system would not seek to locate and analyse all available relevant documentary sources.

However, the author's training as a research and commercial historical archaeologist has meant that any treatment of convict labour could not stop at the historical. Just as it seems impossible to ignore the documentary record, it is equally impossible to ignore its physicality. How can the experience of the free and unfree at these places be even partway understood unless engagement with the physicality of these places is conducted? The places of convict labour were formed and altered by the forces of penology, labour relations, technology and colonisation. History can inform as to where these places were established, how long they were occupied, what ideology drove their formation and evolution, even who the agents were who occupied them. Yet it does not provide insight into *how* the places were occupied and how spaces were co-opted to suit the aims of the gaolers and the gaolled. The built and natural landscape bears witness to the processes of penology and labour, with the landscapes archaeologists study today a direct reflection of the ideologies that were imposed. It is this disciplinary crossover that lends strength to the conclusions drawn from this thesis. If there is an agenda that drives this research, it is that, in the pursuit of historical archaeology, archaeological and historical methods are evidentially evenly-weighted.

This thesis therefore reviews and analyses what has gone before, drawing out the key themes and approaches that have characterised both the historical and archaeological engagement with convict labour. From this, an analytical framework is distilled, based upon an historical and archaeological methodology (Chapter 2). The majority of this thesis is taken up by the author's implementation of this methodology (Chapters 3-8). Focussing on the labour of convicts in the coal mines of Van Diemen's Land, the five case studies are designed to illustrate how the analytical foundation laid in Chapter 2 can be applied in a research setting. The archaeological method employed at these case studies was purely non-invasive, this thesis concerning the information that can be gathered through a primary stage of engagement with the immediate landscape, in combination with the compilation of an historical narrative. Full-scale archaeological surveys were undertaken as part of this process, as well as the re-assessment and synthesis of surveys which have gone before (Chapter 4). Through the compilation of this survey data, its full digitisation and presentation using spatial analysis software, the landscapes of convict labour have been recreated and analysed.

This research is the result of identifying the gap in the archaeological knowledge base. It represents the first time that the analytical model has been applied to archaeological sites of convict labour. It is also one of the more comprehensive attempts to match the materiality and physicality of places of convict labour to an in-depth historical narrative. As yet there has been insubstantial archaeological engagement with such landscapes, how they were formed and evolved as a result of the forces brought to bear. Where analysis has occurred - either from the historical perspective, or the archaeological - there has been very little crossover. This thesis seeks to draw upon both historical and archaeological method and practice to create a way of engaging with these labour landscapes. These landscapes were characterised by a melding of penological and industrial philosophies.² One of the intentions of this research is to examine how these motivators interacted to form the physical residue of the convict labour landscapes visible today. By engaging with these landscapes through an analytical process, this thesis intends to discover if such landscapes were predominantly *penological* or *industrial*, or an equal amalgam of the two.

² This term “industrial landscape”, in the sense used in this thesis, applies to the setting in which convict labour was carried out. This is inclusive of, but not restricted to, the more narrow definition of places where manufacturing or extractive activities were carried out.

CHAPTER 2: LITERATURE REVIEW, THEORETICAL FRAMEWORK AND MODEL DEVELOPMENT

In this chapter, the thinking behind the claimed gap in archaeological understandings of convict labour landscapes will be explained. This chapter begins with a short summary of convictism in the Australian colonies, designed to provide the necessary setting for the ensuing discussions. It is followed by an analysis of scholarship into Australia's convict past, charting the major historiographic trends and thematic threads which have emerged within the historic and archaeological disciplines. Stemming from this analysis, the key lacunae in archaeological knowledge will be identified, leading to the following section on theoretical engagement. Using frameworks derived from a number of disciplines, the key theoretical points of engagement with convict labour landscapes will be discussed. These will lay the foundation for the final half of the chapter, in which a method for engaging with such labour landscapes will be devised. By the end of this chapter a model for facilitating engagement will have been laid out, ready to be tested over the course of the following chapters.

Historical overview

Transportation to the Australian colonies lasted for 80 years (1788-1868), the flow of sentenced men and women from Britain and her colonies to Australian shores forming part of a much wider movement of unfree people throughout the globe (Nicholas and Shergold 1988). Some 139,000 men and 26,000 women were transported to the Australian penal colonies during this period (Maxwell-Stewart 2011:17), playing an integral role in the development of New South Wales (1788-1840), Van Diemen's Land (1803-54) and Western Australia (1850-68). Throughout this 80 year history, a discernible trend of divergence characterised the relationship between Britain and her Australian colonies (Tuffin 2007: 71-6). The first three decades were marked by a relative cohesiveness, the fledgling colonies soaking up convict labour, their administratively-diminutive size rendering them unequal partners subject to British will. As the colonies grew, they began to question their role as participants in the great transportation scheme. Both Van Diemen's Land and New South Wales

adapted elements of convict management independent of British influence, the history of convictism in these colonies punctuated by moments where Britain sought to bring divergent systems into line. The Bigge Reports in the 1820s, the convening of the Select Committee on Transportation in 1837 and the enquiries of Charles Joseph La Trobe in the 1840s, were all attempts to highlight what were considered to be system-wide discrepancies between the aims of the British and colonial governments. Such reports act as waymarkers in the documentary record, marking points at which the practiced reality was deemed to have diverged too far from the ideal.

The act of transportation united all convicts sent to Van Diemen's Land, New South Wales and Western Australia. This act - the enforced separation of the convicted prisoner from their native country - severed the convict from past connections at the same time as "Draining the Nation of its offensive Rubbish" as one 1731 pamphleteer remarked (Ekrich 1985: 184). Transportation to the Australian colonies had begun, simply, because it could no longer continue to America. With the War of Independence in 1775, a useful channel through which convicts had been transported for over a century was stopped, leaving Britain scrambling for a solution to deal with an increasing number of convicted felons (Kercher 2003: 527). Transportation to America had begun in the early 1600s, some 5,000 convicts making the crossing before the passage of the 1718 Transportation Act (Shaw 1966: 24-25). Between 1718 and 1776, a further 50,000 prisoners crossed the Atlantic (Grubb 2000: 94). Unlike its American counterpart, Australian transportation saw attempts to control every facet of the convict's life: from their treatment aboard the transports, to the fulfilment of their sentences in the colony. Over the course of eighty years the manner in which this control was manifested varied enormously.

From the very beginning, transporting a prisoner 10,000 miles to Australian shores was seen in terms of the immediate punishment it inflicted upon the individual and its deterrence value to British criminals. During the early years of settlement in the colonies, deterrence and punishment took precedence over motives of reform or economy (Tuffin 2007: 71-3). Periodic reviews, such as the House of Commons Select Committee report of 1812 and the reports of Commissioner John Bigge in the early 1820s, allowed the British government to take stock of transportation's progress and correct

its course.³ Bigge's investigation, in particular, sought to ensure that transportation remained a "real terror", tightening controls over the system of privately assigned convict labour, at the same time as strengthening the hierarchical model of punishments that awaited recidivists (Kercher 2003: 583-584).

Increasing regulation from 1810 resulted in decreasing freedoms for the convicts, added administrative burden upon settlers with assigned labour and altogether more control by the government (Hirst 1983: 90-4; Dyster 1988: 130-131). Despite this, pragmatic colonial approaches to convict labour management were viewed in Britain as slowly eroding transportation's power to deter crime in Britain:

While transportation to New South Wales is thus applied as an adequate punishment for the most heinous offences, it unfortunately, at the same time, carries with it, in public estimation, so little apprehension in any proportion to the guilt of the convicts...New South Wales is intended as a severe punishment, applied to various crimes; and as such must be rendered an object of real terror to all classes of the community.⁴

Bigge formed the lynchpin of remaking the colony once again a "fit receptacle for convicts".⁵ His three reports were published in Britain between 1822-1823, their contents amounting to a ringing condemnation of convict management up until that point. Amongst Bigge's complaints was the congregation of convicts in the settled districts, leading to perceived "evils of association" and superintendence difficulties.⁶ Bigge also noted the disconnect that necessarily existed between the economic and punitive objectives governing transportation.⁷ He recommended that convicts should be evenly dispersed by public and private service, with new penal settlements established on the frontiers of settlement for the worst-behaved convicts.⁸ Although places for the punishment of reoffenders had existed prior to Bigge's report, his report ensured that penal settlements became a fixture within the

³ Select Committee on Transportation, *Report from the Select Committee on Transportation*, British Parliamentary Papers [B.P.P.] 1822 (341), pp. 1-117; *Report of the Commissioner of Inquiry into the state of the colony of New South Wales*, B.P.P. 1822 (448), 1-186; *Report of the Commissioner of Inquiry, on the judicial establishments of New South Wales, and Van Diemen's Land*, B.P.P. 1823 (33), pp. 1-92; *Report of the Commissioner of Inquiry, on the state of agriculture and trade in the colony of New South Wales*, B.P.P. 1823 (136), pp. 1-113.

⁴ *New South Wales*, A copy of the instructions given by Earl Bathurst to Mr. Bigge, on his proceeding to New South Wales, 6 January 1819, B.P.P. (532), p. 4.

⁵ *Ibid.*, p. 1.

⁶ *Report of the Commissioner*, (448), p. 155.

⁷ *Report of the Commissioner*, (448), p. 154.

⁸ *Report of the Commissioner*, (448), p. 180.

apparatus of punishment, heavily regulated and systematised and the locus for transportation's more punitive aspects (Roberts and Garland 2010: 5). Bigge's intention was to make these settlements places of dread for the convict population, engendering a salutary effect within their ranks.⁹

Between 1821-30, penal settlements were established in New South Wales (Port Macquarie, 1821; Moreton Bay, 1824), Van Diemen's Land (Macquarie Harbour, 1822; Maria Island, 1825; Port Arthur, 1830) and Norfolk Island (1825). These stations were deliberately removed from the settled districts, the distance underlying the convict's banishment (Evans and Thorpe 1992: 102). The commandants and staff were invariably of military extraction, their appointment symptomatic of an Empire-wide "militarization [*sic*] of prison discipline" that had begun after the cessation of the Napoleonic Wars (Ignatieff 1978: 191). It was hoped that these prison administrators, to whom discipline and structure were second nature, would ensure that Bigge's "just degree of severity and rigour" would be maintained.¹⁰

By the beginning of the 1830s, the elements that have come to characterise the colonial convict system were in place. The interplay between British and colonial governments had seen the creation of a tiered system of convict labour management. The colonies managed their convict population through a mixture of assignment, gangs and penal stations, followed by controlled release under Tickets of Leave and conditional pardons. Despite such systematisation, an 1832 Select Committee report found the punitive value of transportation still to be inadequate, causing Secretary of State Stanley, to call for the re-introduction of a "degree of rigour" to secondary punishment.¹¹

The report also raised the issue of transportation's increasing costs. Whether placed in assignment, government gang or penal settlement, the convict was a steady drain on the treasury, the report's raising of these concerns marking the beginning of a period of intense economic scrutiny and an increasing focus on the reformative value of transportation (Winter 2013:137).¹² The 1830s witnessed a departure from the earlier period of measured "benevolence", during which the British government

⁹ *Report of the Commissioner*, (448), p. 175.

¹⁰ *Report of the Commissioner*, (448), p. 175.

¹¹ *Report from Select Committee on Secondary Punishments*, B.P.P. 1831 (276), pp. 1-177; *Report from Select Committee on Secondary Punishments*, B.P.P. 1831-32 (547), pp. 1-162; *Report from Select Committee on Secondary Punishment*, B.P.P. 1834 (82), pp. 1-90.

¹² *Secondary Punishments*, (547), p. 19.

had been obliged to bear the financial burden of the colonies' growth years, so long as the primary aims of transportation were being met (Tuffin 2007: 73). From the 1830s the British government sought to both tighten its purse strings and heavily regulate the results of transportation. A key marker of this period was the formation of another Select Committee in April 1837 to examine transportation's "[e]fficacy as a Punishment, its Influence on the Moral State of Society in the Penal Colonies, and how far it is susceptible of Improvement".¹³ The Molesworth Report, as it became known, played a major role in ending transportation to New South Wales and bringing about the end of assignment in Van Diemen's Land.¹⁴

While today seen as an "emotional" picture of the convict system that used "selected examples, half-truths, even inaccuracies" to damn the assignment system (Townsend 1985: 80), the Molesworth Report was nevertheless a reflection of Whitehall's concerns that the system was an uncertain one, where transportation's values were undermined by placing convicts in the hands of private masters (Smith 2008: 200-21). The committee unsurprisingly found in favour of the "anti" parties in both colonies. It agreed with advocates of transportation's abolition, stating:

...the two main characteristics of Transportation, as a punishment, are inefficiency in deterring from crime, and remarkable efficiency, not in reforming, but in still further corrupting those who undergo the punishment...¹⁵

Despite this, the committee chose to tread a path of compromise, recommending the discontinuation of transportation to New South Wales, but choosing to continue it to Van Diemen's Land - albeit in an altered form.¹⁶ During 1839 the number of convicts sent to New South Wales was reduced, the final transport arriving in November 1840 (Shaw 1966: 275). Assignment in Van Diemen's Land was gradually phased out between July 1839 and November 1843.¹⁷

¹³ *Report from the Select Committee on Transportation*, B.P.P. 1837 (518), p. ii.

¹⁴ *Report from the Select Committee*, (518), pp. 1-61.

¹⁵ *Report from the Select Committee on Transportation*, B.P.P. 1838 (669), p. xli.

¹⁶ *Report from the Select Committee*, (669), p. xliii.

¹⁷ *Hobart Town Courier*, 26 July 1839, 10 November 1843.

When the new system, probation, was eventually implemented in Van Diemen's Land from 1840, it was intended to be built upon a foundation of certainty.¹⁸ Placed in gangs upon arrival in the colony, convicts could only progress into private service as passholders through outward displays of moral and religious reformation, their "obedience, industry and good conduct" aided by a new three-tiered gang classification system and rigorous superintendence.¹⁹ Probation failed in all these respects, becoming as much an uncertain system of transportation as assignment had before it. New probation establishments, essential for housing the incoming convicts, were only slowly created. Between the first notice of assignment's end in July 1839 and the construction of the first station in March 1841, newly-arrived convicts were salted throughout existing establishments, namely the road stations scattered across the colony (Brand 1990: 14). The period 1841-1843 saw the probation system shift and flex in the face of rapidly increasing convict numbers and a challenged colonial economy (Tuffin 2001: 67-88). It was not until November 1842 that a clear codification of probation was issued by Secretary of State, Lord Stanley.²⁰

Probation's introduction drastically altered the relationship between Britain and Van Diemen's Land. Its timing had unfortunately coincided with an unparalleled boom-bust period in the colonial economy. For some months following the order for assignment's withdrawal, the colony experienced a period of economic prosperity that saw land values soar and speculators thrive (Easteal 1971: 79; Robson 1983: 73; Dyster 1993: 602-603). There was a palpable confidence in the prosperity of the colony, with the colony taking on an increased budgetary burden (Shaw 1966: 265).²¹ Yet, before long, the boom gave way to a fully-fledged depression, the colony entering a period of economic gloom in from 1843 which lasted until 1848 (Hartwell 1954: 212-213). This depression coincided with the release of the first passholders from probationary gangs, who found a market glutted with labour and unwilling to engage them (Hartwell 1954: 78).

¹⁸ *Report from the Select Committee*, (669), p. xliii.

¹⁹ *Convict Discipline*, B.P.P. 1845 (659), p. 12; *Convict Discipline and Transportation*, John Hampton, Comptroller General, to William Denison, Lieutenant Governor, Enclosure 6 Regulations of the First Stage of Convict Probation in Van Diemen's Land 1843, 15 November 1847, B.P.P. 1849 (1022) (1121).

²⁰ *Convict Discipline*, Lord Stanley, Secretary of State, to Sir John Franklin, Lieutenant Governor, 25 November 1842, B.P.P. 1843 (159), pp. 3-9.

²¹ *Report from the Select Committee on the Accounts of Colonial Receipt and Expenditure*, T.S. Rice, Secretary of State, to Major-General Bourke, Governor, 15 November 1834, B.P.P. 1837 (516), pp. 90-2.

The colonial government was forced to shoulder the burden of these unemployed convicts.²² The situation was further exacerbated by the British government's refusal to pay for works benefitting the colony (Tuffin 2007: 74). As Britain increasingly attempted to recoup the cost of transportation, gangs and stations were separated according to whether they were paid for from colonial or British coffers, the latter retaining control of probation, punishment and invalid stations (Tuffin 2007: 74).

Reformative aims at these places suffered due to sub-standard infrastructure, the administrators unable to adequately classify their convict populations to allow their progression through primary probation's stages (Brand 1990: 51).

In 1847 the results of a review of the probation system were published.²³ Conducted by Charles Joseph La Trobe, Superintendent of Port Phillip, during the closing months of 1846 and into 1847, the review roundly damned probation as a "fatal experiment".²⁴ Poorly-sited stations and unsuitable officers who failed to enforce the key tenet of probation - separation and classification - creating an intolerable situation where the certainty of punishment and offer of reform was utterly negated. The report had come at a time when the British government had begun to take steps to alleviate the ailing condition of Van Diemen's Land. In addition to defraying some of the colony's expenses, it completely ceased to transport convicts to Van Diemen's Land between 1846-48 (Shaw 1966: 335). When transportation eventually recommenced, it was as the 'Exile' system, whereby convicts served the penal part of their sentence in one of Britain's penitentiaries, prior to being sent to the colony as a Ticket of Leave holder (Shaw 1966: 313-314; Brand 1990: 29). Although Van Diemen's Land received the majority of these transports, they were also directed to Port Phillip (Melbourne), Western Australia (from 1850) and - briefly - New South Wales. Championed by the Secretary of State, Earl Grey, and favoured by La Trobe, the Exile system was an extension of the 'progressive' form of penal management, convicts progressing through successively less restrictive stages of punishment to attain their release (McConville 1995: 135).

²² *Convict Discipline*, Sir John Eardley Wilmot, Lieutenant Governor, to Lord Stanley, Secretary of State, 2 December 1843, (659), p. 18.

²³ *Convict Discipline and Transportation*, Copy of a despatch from C.J. LaTrobe Esq., Acting Governor of Van Diemen's Land, to Earl Grey, 31 May 1847, B.P.P. 1847-48 (941), p. 33-79.

²⁴ *Ibid.*, p. 45.

The post-1847 period was marked by an increasing disengagement of British interests (Tuffin 2007: 75). Stations were closed and the remaining convicts centralised at those remaining. As the number of stations diminished, the quality of infrastructure and staff at those remaining consequently increased, thereby improving the conditions which La Trobe had so railed against. Convict transports continued to arrive in Van Diemen's Land until 1853, after which point a dwindling number of convicts was contained in a small number of establishments centred in the main population areas and on the Tasman Peninsula (Brand 1990: 96).

When transportation was introduced to Western Australia in 1850, the aims of economy were very much at the forefront, as the colony sought to capitalise on the benefits that could be accrued through the utilisation of convict labour (Gibbs 2006: 72). In part-replication of the Exile system, transportation to Western Australia was a continuation of a sentence that had already been part-served in British prisons (Shaw 1966: 354). The convicts' presence provided a market for local produce, in addition to providing a source of labour with which many private and public works were completed. In the end, economy played a role in the cessation of transportation to Western Australia, when the British government decided prison-building in Britain was a cheaper option (Shaw 1966: 357).

The study of Australia's convicts

The study of the convict past has long been a pressing and weighty matter for Australian historians; a difficult and fraught endeavour, mired in sensitivities and mythology.

(Roberts 2011: 46)

Archaeologists need to incorporate the changing historical understanding of convict transportation into their analyses...[they] face the challenge of pursuing research that both fills in the gaps and encourages new questions to be asked of the evidence.

(Gojak 2001: 81)

The above overview indicates that, amongst other determining factors, a convict's temporal and spatial situation greatly affected their eventual experience in the Australian colonies. To generalise about the 'convict experience' is therefore a risky proposition. How can generalisations be made in the face of 80 years of transportation, a changeable Imperial government, three very different colonies, two main systems of penal management and their myriad micro-systems, as well as the thousands of places and spaces where tens of thousands of bond and free individuals lived and laboured? Nevertheless, the historiography²⁵ of historical and archaeological treatments of convictism is littered with works which have sought to uncover and present a systematic front to the convict experience. Some, as will be shown, have been successful in building the case for analytical frameworks for the convict past. Others have been responsible for the promulgation of inaccurate and unsubstantiated views. Quantitative and qualitative evidence has been recruited to the causes of such works, weighting and proving chosen arguments. Today it can be said that the historiography of convictism has begun to be characterised by a shift away from generalist approaches to the convict past and toward more targeted analyses of its disparate elements. Historians and archaeologists have increasingly sought to understand the convict experience through this fragmented approach, where focussing on single elements or themes has created bridgeheads from which inroads can be made into understanding Australia's convict past. However, as will be shown, it is the historians who have led the way in this approach. Despite their unique position to engage with the physicality of the convict past and to thereby test and challenge the course of historical engagement, the historical archaeology of the Australian convict experience has been largely marked by deviation and fragmentation.

²⁵ For the purposes of this review the term 'historiography' includes both historical and archaeological literature, following its strict definition as "the body of literature dealing with historical matters". Dictionary.com, "historiography," accessed 6 January 2015, <http://dictionary.reference.com/browse/historiography>.

Historian David Roberts has noted the erratic path that convict historiography has taken since the late nineteenth century, charting a movement “away from the simplified and emotion-laden equations... toward a more multifaceted and personalised picture” (Roberts 2011: 46). Up until the 1960s Australian convict studies were still largely influenced by nineteenth century views of the convict past (Smith 2008: 9-11, 34-42; Roberts 2011: 34). Influenced by such works as Marcus Clarke’s *For the Term of His Natural Life* (1874), Australian convictism became synonymous with barbarity, the convicts either depicted as degenerates, or the objects of measured compassion. There soon began to emerge a number of academic exceptions to this, such as works by the statistician Timothy Coghlan (1918) and historian Professor George Wood (1922). In his study of the history of labour in Australia, Coghlan placed convicts squarely in the country’s origin story, though summarised that they had a negligible impact upon the country’s early development (Roberts 2011: 35). Wood took a different direction, lauding the convicts’ contributions to the nation’s beginnings and their conversion from criminals to upstanding citizens (Roberts 2011: 36). The work of Coghlan and Wood was later joined by that of Manning Clark (1962) and Russel Ward (1978), which continued to challenge the portrayal of convicts. Clark deconstructed what he perceived as the myths erected by Wood, depicting convicts as “parasites preying upon society” (Clark 1962: 95): Ward accorded them more of a role in Australia’s foundation, though referred to them as an undifferentiated mass of “habitual criminals” (Ward 1978: 43). These works were joined by studies in transportation and colonisation’s motivations (Kerr 1953; Ward 1960), as well as the process of colonial formation - with a particular focus upon the “great men” (Levy 1953; Auchmuty 1954; Roe 1956; Shaw 1963).

Although these early works drew upon much of the available documentary evidence in the formation of their arguments, it was the works of Leslie Robson (1965) and A.G.L Shaw (1966) that demonstrated the massive potential of primary records, then largely held in Britain and Ireland. Robson’s *The Convict Settlers of Australia* and A.G.L Shaw’s *Convicts and the Colonies* marked a break from the historiographical traditions of the past, both works distinguished by their comprehensive use of archival and statistical data, deployed in coherent, book-length arguments. The works of these two authors marked watershed moments in Australian convict historiography, creating

an empirical superstructure around which future studies would be constructed. Shaw and Robson painted a picture of convicts as a somewhat dissolute bunch, undeniably hampered by the social, political and economic situations from which they were drawn, but nevertheless at the “undesirable” end of the scale (Shaw 1999: 7-8).

The period following was marked by the release of Michael Sturma’s *Vice in a Vicious Society* (1983), John Hirst’s *Convict Society and its Enemies* (1983), the edited compilation *Convict Workers* (1988b) and Robert Hughes’ *The Fatal Shore* (1988). Both Sturma and Hirst provided structured and nuanced examinations of the convict past, with Hirst dissecting previous depictions of early Australian society to suggest that views had been coloured by the “enemies” of convict society and that, instead of being vice-ridden, Australia enjoyed relative order (Hirst 1983: 27). Sturma challenged notions of convict “criminality”, seeking to place the convicts and their crimes within their political, social and economic contexts (Sturma 1983: 8). *Convict Workers* and *The Fatal Shore*, both released in the same year, have become punctuation points in convict historiography, exemplifying the debate centred around quantitative and qualitative approaches. Both works sought to examine the origins, characters, transportation and colonial experiences of the convicts, although their approaches were different enough that they can be seen as markers at either end of convict studies. *Convict Workers* used painstakingly collated and analysed quantitative data on 20,000 transported male and female convicts to make judgements about their lives once in the colony. With this data it sought to understand these transportees in terms of the skills they brought to the colony, their utilisation in public or private employment, and the punitive and reformatory regimes they faced. Hughes’ work eschewed reliance upon statistical data, choosing instead to construct a narrative view of the convict past, largely following a chronological path from Botany Bay to the end of transportation.

Though lauded (in admittedly different circles) *The Fatal Shore* and *Convict Workers* attracted similar criticism for their approach to presenting the convict past. *The Fatal Shore* was criticised for its portrayal of a system dominated by “the triangle, the iron gang, Norfolk Island” (Robbins 2000: 141). The historian A.G.L. Shaw described it as “too much a regurgitation of the traditional horrors of the system” (Shaw 1999: 11). *Convict Workers* was criticised for the way in which it reduced individuals

to an average in its attempt to grapple with convictism's imposing edifice, the actual convicts' experience lost in a blur of statistics. Its assumption of the "unimpeachable nature" of these statistics exasperated some critics (Evans and Thorpe 1992: 93). Whereas *The Fatal Shore* was seen to sensationalise the punishment-orientated aspects of convictism, the quantitative basis of *Convict Workers* was thought to lessen the negative aspects of a system that could be undeniably brutal.

It is noteworthy that historical archaeologists were conspicuous by their absence during this formative phase. Admittedly a young discipline, with university courses not offered until 1974 (Ireland 2002: 16), by the 1980s historical archaeology was nevertheless in a position to play a vital role in the formative debates which characterised the period after the release of the two works. The only substantial engagement with the physicality of the convict system had been undertaken by historian James Kerr (Kerr 1984). Based upon his 1977 doctoral thesis, *Design for Convicts* charted the evolution of the convict system in the colonies through its architecture: the gaols, barracks, stockades and hospitals which comprised the built environment of the penal colonies. A seminal work, *Design for Convicts* was very much an examination of the ideological physicality of the convict system, drawing its evidence from contemporary maps and plans. The archaeological landscapes of convictism remained untouched.

This is not to say that historical archaeologists were inactive at this time and there were some expansive, comprehensive investigations of sites and regions. Wendy Thorp's contextual examination of government work gang sites in New South Wales (Thorp 1987a), Damaris Bairstow and Martin Davies' survey of the Tasman Peninsula coal mine in Tasmania (Bairstow and Davies 1987) and Grace Karskens' archaeological and historical surveys of convict work and accommodation sites on the Great North Road (N.S.W.) (Karskens 1984, 1986) were published works which shed valuable light on the physicality of the places where convicts lived and laboured. Karskens, in particular, sought to link her archaeological observations to the prevailing debates about convict identity (Karskens 1986: 18-9). Her close reading of both archaeological and historical evidence generated conclusions about the intent and actuality of convict labour management that few archaeologists or historians have matched since. The use of archaeological evidence to form conclusions about the

deployment and accrual of skills within the convict workforce particularly influenced the thinking behind Chapter 6 of this thesis (Karskens 1986: 22-7).

In 2001 archaeologist Denis Gojak conducted an overview of historical archaeological studies into Australia's convict past (Gojak 2001). Gojak found that archaeological research up until that point had three main foci: the convict experience, punishment institutions; and the nature of convict society, although the concentration on each was uneven and lacked a serious engagement with system-wide contextualisation (Gojak 2001: 73). Also, while Gojak cited a number of archaeological examples, many of these were unpublished reports and theses, sitting in repositories and adding little to the progress of convict historiography.²⁶ In addition to suggesting a move away from a prior concentration on urban contexts, as well as penal institutions, Gojak also posited that Australian historical archaeologists needed to link their analyses to wider research agendas in order to retain the necessary contextualisation for their work (Gojak 2001). A similar observation was made a year later by Tim Murray in his overview of the practice of academic and heritage-based Australian historical archaeology (Murray 2002).

At the time Gojak published his review, historical research into Australian convictism had been enjoying a sustained period of publishing efflorescence, which has effectively continued to the present day. Although there was still debate about the portrayal of convictism (Neal 1987; Robson 1988), attention had begun to turn to the examination of the system's workings, with an increasing focus upon the convict as active agent. Beginning with Alan Atkinson's "Four Patterns of Convict Protest" (1979), a number of analyses began to focus upon colonial power relationships, in particular the contestations of power that took place between the free and unfree. The lives of convicts both within and without punishment institutions were used to illustrate the dynamism of unfree labour systems, where notions of domination, resistance and collusion were played out on a daily basis (Macfie 1988; Evans and Thorpe 1992; Maxwell-Stewart 1995, 1997; Maxwell-Stewart and Duffield 1997; Reid 1997; Anderson 1999; Maxwell-Stewart 1999; Roberts 2000; Robbins 2003; Dunning and Maxwell-

²⁶ This grey literature, while an important source, is not considered by this thesis. Despite some attempts to release it into the wider academic community (i.e. Colley and Gibbs 2011), it remains largely inaccessible and therefore cannot be considered an index of the course of archaeological historiography.

Stewart 2004; Robbins 2005). Convict sexuality (Damousi 1995; Daniels 1998; Evans and Thorpe 1998; Moore 1998; Reid 2007), health (Evans and Thorpe 1992; Maxwell-Stewart 2011) and the creation and search for convict 'identity' within the records was also examined (Dunning 1989-1990; Maxwell-Stewart 1998; Duffield 1999; Maxwell-Stewart 2000), with feminist historians in particular building upon 1980s publications by Portia Robinson (1988) and Babette Smith (1988).

This focus on agency and power was joined by a recognition of the convict as worker - something that had begun in earnest with the release of *Convict Workers*. This was centred upon a belief that unfree labour in the Australian colonies was characterised by complex systems of management, resulting in a myriad of experiences. Some historians saw the study of convict as worker uncomfortably existing within a gap between the study of the convict past and a history of labour relations (Robbins 2003: 362-3). Studies by historians like William Robbins analysed convict labour in terms of employer/employee relationships, where the former attempted to extract labour effort from the unfree labour base, in the process creating labour management regimes marked by a concern for productivity and efficiency (Robbins 2000; Macfie 2002; Nash 2003; Robbins 2003, 2004; Tuffin 2004, 2008; Robbins 2009). Such studies recognised the intrinsic skills of the convict workforce and the complexity inherent in extracting labour power from an unfree workforce. They posited that attempts to ensure the full extraction of a convict's labour potential, were defining features of convict labour management. Recent work by David Roberts has ensured that the existing historiography of convict labour is read as part of the wider story of Australia's labour history (Roberts 2011).

Historians also continued the task of placing convictism within its Australian economic framework (Butlin 1994), including discussion of the economics of convict labour (Meredith 2002; Meredith and Oxley 2005; Tuffin 2007) and the economic benefits of transportation (Lewis 1988; Nicholas 1990). Studies also analysed the origins and results of key evidential documents (Ritchie 1970; Parsons 1972b; Ritchie 1976; Townsend 1979, 1985), and examined convict labour from the perspective of the application of British and colonial law (Kercher 2003). There were still site-based (Brand 1984b, 1993; Maxwell-Stewart 2008) and larger scale, system-wide analyses (Brand 1990; Boyce 2008), with

some historians querying previous predilections for viewing the convict system as a monolithic entity (Atkinson 1999) and the convict experience a uniform one (Smith 2008).

Where were the historical archaeologists in all of this? When analysing convictism's historiography, the impression is one of imbalance, where the archaeology of Australia's past has been severely under-represented. This did not need to be the case. Gojak's 2001 review was contained within a special convict-themed edition of the *Australasian Historical Archaeology* journal. Within this were articles by: Greg Jackman, who placed the boys' prison of Point Puer, Tasmania, within an Imperial labour and penological framework (Jackman 2001); Eleanor Casella and Fiona Starr, who used the physicality of material culture as a way of demonstrating aspects of domination and resistance, as well as the emplaced regimes for the care and treatment of convicts (Casella 2001a; Starr 2001); Martin Gibbs, who constructed a framework for engaging with the convict sites of Western Australia, previously very poorly represented in archaeological research (Gibbs 2001); finally, Clayton Frederickson sought to use the archaeological fabric of Fort Dundas, Northern Territory, to examine notions of skilled and unskilled labour, convict subversion and patterns of resistance (Fredericksen 2001).

These papers demonstrate that the historical archaeology of convicts was still sharing the course then being forged by historical studies. Through its engagement with convict labour, health, sexuality, systems of management and the dynamics of power, historical archaeology was not only positioned in the midst of current debate, but also capable of occupying a position at the forefront. However, despite an ever-increasing mountain of grey literature produced by the commercial and academic sectors (Colley and Gibbs 2011; Gibbs 2012), the historical archaeology of Australian convictism lost its focus in the 2000s. With notable exceptions, it began to chart an erratic and divergent course from historical studies. This was exemplified by Martin Gibbs' 2012 review of archaeological research into the convict system of New South Wales, which found that archaeological research between 2001-12 had been marked by an uneven pace, with much valuable information locked away in unpublished reports and theses (Gibbs 2012).

There have been exceptions to this trend. For example, the work of Eleanor Casella, whose excavations at the Ross Female Factory, Tasmania, were a study in the power dynamics of a convict institution (Casella 1997, 2000, 2001b, 2002). Casella's work dovetailed neatly into existing discussions about convict agency and the power relationships between the free and unfree, linking to both Australian and international theoretical schools. Casella followed up this work with investigations into places of confinement and their role in the narrative of global transportation (Casella 2005) and the formation of Australia's sense of history (Casella and Frederickson 2004). Martin Gibbs followed up his 2001 paper with further engagement in the physicality of Western Australia's convict legacy (Gibbs 2006). Also concentrating on Western Australia, Mathew Trinca built upon his earlier research on the "spatial intent" of the convict system's built legacy (Trinca 1997: 33), taking a documentary-focussed approach to the control and coercion of convict labour (Trinca 2006). Similarly, analysis of excavations of the Moreton Bay lumber yard, Queensland, was an exercise in linking physical fabric to documentary record (Ginn and Harris 2002). Graham Connah used material evidence from an excavation at Lake Innes, New South Wales, to illustrate the social hierarchies that existed between a bond assignee workforce and its employers (Connah 2001). In Tasmania, surveys were published of some of its probation stations (Parham and Noble 1994), with one of the most comprehensive completed by amateur archaeologist John Thompson (Thompson 2007).

These works are notable for their focus on sites and regions. Few archaeologists have emulated the historians and extended the range of their analysis to encompass the wider penological and labour systems at play. Susan Lawrence and Peter Davies provided an archaeology-focussed overview of the operation of the convict system, taking a somewhat positive view of the role that archaeology played in the discourse between historical and archaeological studies (Lawrence and Davies 2011).

Previously, Eleanor Casella and Clayton Frederickson released a similarly positive overview of the progress and outlook of the study of places of confinement in Australia, in particular how these studies have played a role in the emergence of a postcolonial history (Casella and Frederickson 2004). Susan Piddock highlighted the experience of those confined within 19th century lunatic asylums -

including many serving and time-expired convicts - juxtaposing the built form of these places against administrative intent (Piddock 2007). Recently Sean Winter has placed the convict system of Western Australia within a wider global context (Winter 2013). As part of this he likened the convict system to a series of interlinked bi-directional networks, along which information, convicts, administrators and *matériel* flowed (Winter 2013: 139-42). In his model, the constant streams of these elements were affected by the interrelationship between local and global considerations, the more systemic aims of Britain running in parallel to - or at odds with - those of the local administrators. In the same year I sought to undertake a systemic analysis of places of convict labour in Australia through a reappraisal of existing historical and archaeological studies to create an analytical framework for their characterisation and study (Tuffin 2013). This article outlined the theoretical framework constructed for this thesis and is more fully discussed in Chapter 2.

The impression given by this historiographic overview is that, while historical analyses of the convict system have proceeded at an impressive pace, the archaeological approach has been - with a few notable exceptions - scattershot and often disconnected from the theoretical frameworks identified by the historians. Indeed, it is hard to argue that historical archaeology has kept up with its disciplinary cousin. There has been no sequel to *Design for Convicts* - no all-encompassing study of the convict system's physicality. James Kerr laid the perfect groundwork 30 years ago for a colony and system-spanning investigation of the physical spaces, places and networks of convict Australia - in a word, the archaeology of the Australian convict experience. The publications discussed above go some way in addressing this need, but they are too disparate, too removed from one another or the theoretical underpinnings formed over the previous decades, to provide this insight. They are analytically separated, remaining as examinations of temporally and spatially-limited areas.

Unsurprisingly, it is not archaeologists who have led the way with the formation of one of the most ambitious convict studies projects of recent times. Founders and Survivors is an ongoing project with the goal of charting the lives of the 73,000 convicts transported to Tasmania and how they and their descendants formed modern Australia (Survivors 2014). It is a collaborative project between

historians, genealogists, demographers and population health researchers. Historical archaeologists are conspicuous by their absence, despite the fact that the lives of each and every convict was shaped by the physicality of the built environment within which they were situated, as well as by the cognitive environment that was erected around them. Historical archaeologists are uniquely placed to shed light onto the physical aspects of the complexities of convictism. Where historians can often only grapple with the ideology of the convict system, archaeologists can use their access to the material and documentary evidential domains to investigate the system's reality.

This thesis seeks to in some way redress the imbalance between the progress of history and that of archaeology. Although it does not claim to provide the solution, it does seek to show how both historical and archaeological method can be applied in an effort to better understand the Australian convict system. As shown above, historians have made great gains in their understandings and portrayals of power relationships, convict identity, sexuality and labour power, as well as increasing our knowledge of the sites and systems which characterised Australia's convict past at both local and global levels. There is an interconnectedness between these studies, flowing back to the works of Shaw, Nicholas or Robson. Although often drawing upon the similar theoretical foundations, the work of historical archaeologists feels disconnected and uncoordinated, seemingly lacking direction as its gaze focuses on individual sites or processes, at the expense of wider and more meaningful analyses.

The theoretical framework

The following section expands upon the theoretical and methodological grounding outlined above.

The notions which Australian historians and archaeologists have grappled with stem from discussions that have taken and are taking place on a global stage. Using theoretical approaches underpinned by the work of archaeologists, historians, sociologists, historical geographers, anthropologists and economists, the following will draw out the key theoretical elements that must be addressed when examining Australian landscapes of convict labour. Beginning with an analysis of these theories, this

section will demonstrate where and how these have been applied in the Australian setting and the opportunities that exist for their further application.

This research draws heavily and unashamedly on a historical grounding, meaning that, at times, it may appear to be more *history* than *archaeology*. There is no apology for this, as such a foundation is essential if the physicalities of the case studies are to be best understood. Historical archaeologists, as Alan Mayne points out, can run the risk of becoming fixated by the material record:

Significantly, the best studies in historical archaeology...share an impatience with assertions of such a bridge [materialist bridge to the past], and of a qualitative difference between documentary and archaeological sources that would underpin these assertions. (Mayne 2008: 104)

This thesis aims to illustrate how history and archaeology need not be two disparate, differently-weighted approaches, but rather two essential parts that can comprise one holistic approach to Australia's convict past. It is today generally accepted - amongst historical archaeologists at least - that the documentary record has much to add toward the interpretation of sites and processes (Hardesty 1988: 3; Jack 1993; Little 1994: 8; Champion 1996; Killick 1998: 288; Delle, Leone and Mullins 1999: 1146; Connah 2001: 151). Through historical archaeology's ability to meld historical and archaeological source material, it is possible to examine original *intent*, at the same time as engaging with *actuality* as presented through the archaeological record (Lenik 2012: 52, 53). From the point of view of convict studies, the maps, plans, letters, reports and accounts available to the researcher - James Garman's "documents of control" (Garman 1999: 194) - provide insight into the intentions of the administrators: why a particular station might have been formed, what class of convicts it was meant to hold, or how an establishment was meant to operate. Through the archaeological record, the actuality of this can be measured: the site's relationship to the natural environment, the design, situation and construction of buildings, or the patterns of material culture distribution, can be read against the backdrop of intent. The landscapes of convict labour were formed in reflection of penological aims and shaped by the interactions between the governors and the

governed. At the same time, the constructed landscape also acted upon those within it (Widlok 1999; Anschuetz, Wilshusen and Scheick 2001: 185).

Historical archaeology: landscape and labour

One of the foundational theoretical elements to be considered is the historical archaeological approach to labour. This thesis is primarily concerned with how convict labour was deployed and managed, with a particular focus upon the landscapes that were generated by the actions of the controlled and the controllers. As discussed above, the lack of unity in the archaeological approach to Australian convict studies has meant that, while its practitioners are aware of the literature generated on convict labour and to some degree contribute to it, archaeological research has suffered from fragmentation and lack of direction. This is despite the global recognition of archaeology as uniquely situated to contribute to the study of labour dynamics:

The labor that occupies the attention of historical archaeologists is the labor that is colonized, enforced, controlled, exploited, indebted, hierarchical, unequally distributed, often rigidly structured, and simultaneously global and local (Silliman 2006: 147).

Labour interactions therefore provide the archaeologist with insight into the constant push-and-pull of human relationships. Stephen Silliman's examination of the place of labour studies in archaeology found it was pervaded by concerns about identity, race and gender, as well as agency and the lived experience (Silliman 2006). Through labour, archaeologists can understand the process of colonisation and the way that it can occupy the nexus between two cultures (e.g. Delle, Leone and Mullins 1999; Given 2005; Paterson 2005). Through labour, the form of social hierarchies can be traced, in particular the powered cultural landscapes that can be created by the operation of interpersonal power dynamics (e.g. Orser 1988; McGuire and Paynter 1991; Singleton 2001; Vaidik 2009; Spencer-Wood and Baugher 2010; Lenik 2012).

At the most basic level of understanding, the sites which form the focus of this study are cultural landscapes: former natural landscapes that have been altered by human action (Spencer-Wood and

Baughner 2010: 464). This thesis ascribes to the view that landscapes are at once conceptual frameworks and material artefacts, representative of a palimpsest of human social activities which have created “archaeological sites writ large” (Cassell and Stachiw 2005: 1). The landscape is shaped as much by the ideology and philosophies of those who occupy it, as it is by the actual physical powers which shape it (Brayshay and Cleary 2002: 5). The examination of landscape takes place on different scales (Orser 1995: 134-5), with archaeologist Jeffrey Parsons positing that three such scales exist: the individual structure, the settlement and the region (Parsons 1972a: 137-44). Whatever the scale, the landscapes are formed from places and spaces, the two seemingly similar concepts in fact having very different definitions. As sociologist Thomas Gieryn suggested: “place is not space... [s]pace is what place becomes when the unique gathering of things, meanings, and values are sucked out” (Gieryn 2000: 465).

Spaces have a multiplicity of meanings, constantly evolving as they act upon and are acted upon (Watkins 2005: 211). By definition, the places and landscapes formed from spaces are similarly fluid: “Places are not inert containers. They are politicized [*sic*], culturally relative, historically specific, local and multiple constructions” (Rodman 1992: 641). These meanings are imposed upon a landscape by human agents, resulting in a multiplicity of perspectives and understandings. Whether meanings are at odds or in synchronicity affects how the landscape is formed and negotiated. The human agents react to each other and the surrounding landscape, creating webs of power, meaning and influence as they do. In particular, the power relationships that are formed when people negotiate their place in a landscape can have a visible effect upon the physicality that archaeologists study.

The powered cultural landscape

The landscapes of convict labour were unavoidably formed and constantly reformed in response to the dynamics of power. “Power” according to sociologist Max Weber, can be defined as “the probability that one actor within a social relationship will be in a position to carry out his own will despite resistance, regardless of the basis on which the probability rests” (Weber 1965: 152). Weber and, a

decade later, Michel Foucault, believed that in social relationships, power operated along a linear plane: whereby domineering force would be exerted downward from one individual or party in a bid to determine the behaviour of others (Foucault in Spencer-Wood 2010: 521). Since these definitions were emplaced, they have been expanded and challenged. One such theorist was anthropologist Eric Wolf, who expanded the power dynamic to four main types: the power of the individual, the power of individuals over others, the organisational power to control settings, and structural power to control and allocate social labour (Wolf 1990: 586-7).

Archaeologists were quick to adapt theories of power to meet the unique requirements of the discipline. Robert Paynter and Randall McGuire, in their influential *The Archaeology of Inequality*, posited that both Weber's and Foucault's definitions had formed a foundation upon which many existing archaeological studies of power were built (McGuire and Paynter 1991: 7). They suggested that archaeologists had tended to restrict their discussions to the more traditional "domination/resistance" paradigm pioneered by Weber and Foucault (McGuire and Paynter 1991: 7). An example of this is the work of Shanks and Tilley, who, while stressing the centrality of power to social life, only defined it in terms of subjectivity and subjugation: power to and powers over (Shanks and Tilley 1987: 71-2). McGuire and Paynter instead believed that power was exerted from a multiplicity of bases - what they called "heterogeneity of power" - in much the same way as Eric Wolf (McGuire and Paynter 1991: 6). Every individual therefore had the ability to change their condition in some way, through such actions as domination, resistance or collusion. McGuire and Paynter's work was later built upon by Suzanne Spencer-Wood and Sherene Baugher, who noted the complexities hidden beneath a simplified domination/resistance paradigm (Spencer-Wood 2010: 503; Spencer-Wood and Baugher 2010: 464-9).

Archaeologists have progressed a great deal in their theorising of space and the power relationships played out within it. No longer does Paynter and McGuire's 1991 statement hold true that "archaeologists generally pay little attention to how people exercised social power" (McGuire and Paynter 1991: 1). The creation and control of social power, as well as the role of individual or group agency as part of this, has become paramount (Cassell and Stachiw 2005: 5); the material culture and

landscapes that the archaeologist studies not passive reflections of social systems, but rather “contradictory and conflict-ridden medium[s] through which individuals act and are acted upon” (Christopher Tilley in Mayne 2008: 107-8). Power is an essential analytical element for the discussions of cultural landscapes. Historical geographer Cole Harris emphasised that power cannot be conceived apart from its spatial context: “power requires space, its exercise shapes space, and space shapes social power” (Harris 1991). The landscape becomes a “terrain of power”, within which control is sought through the appropriation of symbolic and ideological meanings, geographic location and built form (Gieryn 2000: 475). For the archaeologist, space and power are inter-related, the creation, control and experience of space central to human communication, behaviour and social relations (Ellem and Shields 1999: 537; Gosden 2004; Wilkins 2014). James Delle considered that space is a class of material culture that can be used to manipulate human behaviour, it being “produced, experienced, interpreted and negotiated by human agents” (Delle 1999: 16). Within spaces, tripartite interactions between domination, resistance and collusion take place (Delle 1999: 12), creating a landscape marked by overlapping networks of power (Hardesty 1998).

The successful, or attempted, imposition of control can be through physical or cognitive means. The former is what anthropologist James Scott called the “public transcript”, carried out between the dominators and those they attempt to control (James Scott in Hall 1991: 42). Such physical control is manifested in many forms, with the act of “putting someone in their place” (Pauls 2006: 67) a key goal of much architecture (Leone 1984; Delle, Leone and Mullins 1999). Archaeologists have examined how the built landscape reflected the methods of surveillance and control wielded by nations, prison administrators, owners of slaves, managers of free workforces and institutions, with similar methods of spatial and temporal control deployed on different scales (Delle, Leone and Mullins 1999). At the local site scale, the placement of buildings played an important role in the creation of sightlines and webs of control (Griffin 2002: 160-61; Given 2005: 53-4). In Jonathan Crush’s examination of South African gold mines, the built form and information technology were co-opted as instruments of discipline and control during the twentieth century (Crush 1992). Power can

also be expressed through the creation, maintenance and presentation of memory (Shackel 2001; Schmidt and Walz 2007).

The paradoxical position to domination and control is resistance and freedom. The extent to which resistance is experienced is based upon the form of control being sought, the methods used to enforce it and the understanding of its methods by those seeking to resist (Little 1994: 22; Pfaffenberger 1998: 297). Archaeologists are fascinated by those who resist. They are part of subaltern “hidden transcripts” (James Scott in Hall 1991: 42), though care must be taken when recovering them (McGuire and Paynter 1991: 15; Mayne 2008: 103). Resistance is most effective when removed from the view of the domineering power. In South Africa, slaves found the most room for individual and cultural expression away from the rigid lines and confines of township architecture (Hall 1991: 53). Darren Griffin, in his examination of contestation of space at Poonindie Mission, South Australia, demonstrated how the Indigenous residents of the mission were able to bypass the physical and psychological constraints emplaced by the authorities to establish their own spaces (Griffin 2002). Charles Orser discussed how planters' reliance on slave labour left them open to acts of resistance, the slaves expressing their own degree of power through acts of passive or even aggressive subversion (Orser 1988: 741-2). Paul Shackel found echoes of resistance to a new imposed industrial order in the material culture of nineteenth century worker households (Shackel 2000).

Jennifer Dornan warned of the tendency for archaeologists to immediately equate such acts of resistance with human agency, instead arguing for a more nuanced understanding that included practices like “strategic accommodation and acquiescence” (Dornan 2002). The understanding of agency progressed from the theoretical recognition of the individual as active agent, to a practical engagement with how these individual agents reacted to the existing structures of ideas (Johnson 1989: 206; Dobres and Robb 2000: 4-6). The placement of the human agent within the built environment is part of this understanding, where they are at once controlled subjects and active participants defined by their choices (Johnson 2000: 229; Shackel 2000: 244). An example of this is the engagement with individual interaction and negotiation of the built environment. Through analytical techniques such as permeability (or spatial) mapping, human negotiation of the built

environment can be visualised, as well as the way in which spaces and places could support or emphasise social ideas and practices. Although this technique necessarily emphasises the designed intent behind the built environment, it is a way of immediately engaging with how space and place in domestic (Kinahan 1996; Widlok 1999), institutional (Markus 1993) or workplace settings (Campion 1996) can be negotiated.

The landscapes that archaeologists study are therefore often places that were historically overlain webs of power. Such webs bound together a place's human elements within networks of powers: controlling, resisting, colluding, existing. Some understanding of these networks can be recovered from the residual archaeological and documentary record, where the lines of walls, or the siting of buildings, and their relationship to the text, are indicative of the type and interplay of the powers active in the landscape. The following section takes this underpinning of power dynamics and applies them to the settings of most relevance to this study: penological, industrial and colonial.

Power and the unfree

The landscapes which this thesis seeks to bring some analytical clarity were first and foremost penological landscapes. They were formed for the purpose of incarcerating and controlling prisoners, bringing to bear an array of methods in pursuit of this aim. Their formation and adaption was a result of influences of both local and global scales, the landscape being the container where the power dynamics between and within the ranks of the free and unfree were played out. This "container" could be demarcated by built or natural boundaries, or by cognitive webs of fear and threat (Myers and Moshenska 2011: 2-3).

In her 2007 publication, Eleanor Casella outlined three of the aims of incarceration. In addition to its punishment value, Casella also cited the objects of deterrence and reform (Casella 2007: 58). An earlier work by historian Philip Priestley, while in part mirroring Casella's aims, posited that punishment, reform and economy were the key goals of incarceration (Priestley 1985: 123). Taking a slightly different tack, sociologist Mark Colvin defined the goals of *punishment* as being: deterrence,

retribution, rehabilitation and public protection (Colvin 1997: 8). Drawing upon such works, this thesis posits that four key motivators were incorporated into the foundations of penological practice: punishment, deterrence, reform and economy. The ratio by which one motivator could dominate another provides a key to understanding the intent and actuality of a penological approach.

Classic criminological debates have been shaped within a framework formed by the four penological goals (Casella 2007: 58). The influential work of prison reformers John Howard (1777) and Jeremy Bentham (1791), and the analyses of Emile Durkheim (1964) and Michel Foucault (1977), can be read within their bounds. The idea of the penitentiary - the "total institution" - was born with Howard's treatise, his ideas of individual reform guided by a rational authority system suited to that time period, marked as it was by calls for social and political reform (Ignatieff 1978: 65). The reform agenda guided British penological practice for two decades, newly-built penitentiaries ostensibly reflecting new disciplinary and reformative agendas that required disciplined routine and hygienic ritual, the penitentiary enforcing the social distance between the free and unfree (Ignatieff 1978: 100-3). The ultimate theoretical expression of this was Bentham's all-seeing Panopticon, elements of which were incorporated into prison management (Markus 1993: 122-9). From the 1810s, decreasing satisfaction with either the disciplinary and deterrent values of the penitentiary system led to its increasing severity. The introduction of stricter diets, solitary and separate confinement, silence and the treadmill formed markers on the path to penology's ultimate expression - Pentonville - in 1842 (Ignatieff 1978).

The construction of Pentonville signified the diminishment of reform agendas and the ascension of discipline and deterrence. With its close resemblance to the discipline and process of the Industrial Revolution's factory, Pentonville also brought economy to the fore, although such economic considerations had not been newly-introduced with Pentonville. (Ignatieff 1978: 215). Wherever and whenever the prisoner had been engaged in productive labour, there had always existed a tension between punishment and profit motives, centreing upon the question of whether the labour of the convict was to be pointless and painful, or reformative and productive (Priestley 1985: 135; Vaidik 2009). In his 1791 work, Bentham based his penitentiary model upon "pecuniary Economy", where

the prison would be driven as much by profit as by punishment, deterrence or reform (Bentham 1791: 42-75; Ignatieff 1978: 110-113). The economic motive was continually prevalent, archaeologist James Garman interpreting institutional (convict) labour as “a peculiar form of corporate capitalism” (Garman 1999: 6). It is a central tenet of Garman’s thesis - and indeed this one - that the economic motive was always present in the deployment of convict labour, with the very act of transportation able to be read in terms of the economic benefit attained through the settlement and “improvement” of uncolonised landscapes.

Whether in pursuit of profit, punitive retribution, deterrence or reform, the behaviour of the bond population needed to be controlled. The threat of punishment or the offer of incentive was a way of guiding and controlling the behaviour of bond labour, forming an essential way in which the power relationships between the governors and the governed were negotiated. As criminologist Charles Hyneman observed in 1927, “Unless some reward is given for labor [*sic*], or a punishment imposed for refusing to work, the prisoner will not put forth his best efforts”(Hyneman 1927: 604). Alex Lichtenstein demonstrated that the use of convicts in late-nineteenth century coal mines in America’s south required a continual balance between the lessees of the labour (those seeking to profit from the convicts’ labour), the state (at once the enforcer of discipline and the convicts’ protector) and the convicts themselves (Lichtenstein 1996: 126-51). Lichtenstein found that the viability of convict labour relied “on the degree to which productive forced labor [*sic*] could be made compatible with the penal rationales of custody and punishment” (Lichtenstein 1996: 151).

It was often not just a matter of working prisoners hard, for a distinction exists between working hard and working well (Fenoaltea 1984: 638). Those in charge of convict labour needed to strike a balance between punishment/incentive and the skill level of the work required. This has been modelled by Stefano Fenoaltea (Figure 2-1).

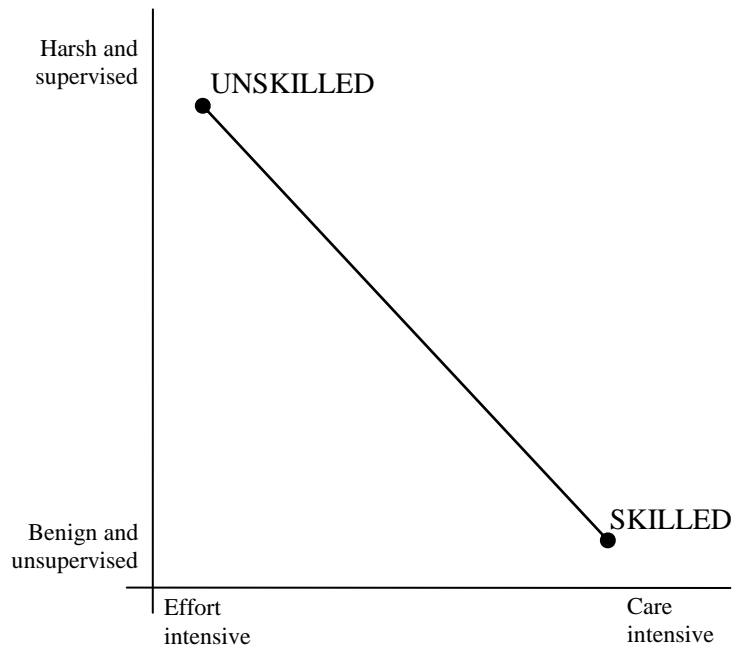


Figure 2-1: Visualisation of Fenoaltea's theorised relationship between skilled/unskilled labour, punishment levels and care/effort intensity

Fenoaltea essentially suggested that, where low-skilled work was undertaken by the unfree, the application of pain-based incentives and higher levels of supervision resulted in a higher work output, but lower levels of carefulness on the part of the worker (Fenoaltea 1984). Conversely, work of a higher skill that required more level of carefulness could be less supervised and incentive-based and still retain productivity.

In the implementation and pursuit of control, authorities used a myriad of tactics over their bond charges, centreing upon the regulation of time, behaviour and space (Garman 1999: 246). Penological institutions often relied on ritualistic routines to assert dominance over prisoners (Ignatieff 1978: 101-4; Markus 1993: 97; Cunzo 1995: 118-24; Garman 1999: 158-60; Cunzo 2006: 178). The built environment of these places, in particular the walls which delineated space in prisons and institutions, affected how people negotiated their surroundings: where they could move, what they could see (Garman 1999: 13; McAtackney 2011; Myers and Moshenska 2011: 8-9). In applying spatial mapping techniques to institutions, architectural historian Thomas Markus noted that layers of permeability increased commensurate with an individual's decrease in power, evidenced by the placement of cells "deep" within controlled structures (Markus 1993: 17). However, these built elements also

represented a paradoxical ideology: power/insecurity, domination/fear and protection/isolation (Marcuse in McAtackney 2011: 81).

As in wider discussions about power, it is vital to consider the place of the prisoner in all this. They were not passive agents, but reacted to their environment through the tactics of overt and covert resistance, outright collusion, or just “getting by”, the latter two representative of Jennifer Dornan’s actions of “strategic accommodation and acquiescence” (Dornan 2002: 319). Such human agency is an essential element of any study of penological practice, applying to both the free and unfree of these places (Casella 2011: 291-3; Vito and Lichtenstein 2013: 319). Based upon notions of contested places, such analysis stresses the complexity inherent in places which sought to control through built and cognitive means (Gibson 2011: 1059). In discussions of resistance, Eleanor Casella found that such acts required a certain level of opacity in spatial and temporal authoritarian landscapes (Casella 2007: 70-1). Alex Lichtenstein recounted that, in the darkness of coal mines in America's south, convicts sought to resist the imposition of heavy task work quotas through day-to-day acts: mixing slate with coal, working together to meet quotas, or, more drastically, damaging the mine works (Lichtenstein 1996: 136-8).

Important parallels to the study of penological practice are found in studies of slavery. Here, dependent upon their spatial or temporal situation, complex systems of control were devised to manage and extract labour power from an unfree workforce. As with prisoners, coercive and incentive-based methodology was used to attempt to control the physical and cognitive landscapes the slaves were required to navigate. Historian Charles Dew, in his examination of the labour management methods used on slave ironworkers in America's south, found that skilled slaves retained a level of bargaining power over where they could be sent and, once working, had the capacity to physically and financially damage any operation to which they were attached (Dew 1974: 399, 402, 405; 1974b: 204-6). Charles Orser demonstrated that in plantation society, slaves were ranked according to occupation, with the power of advancement or demotion vested solely in the plantation managers (Orser 1988: 740). Stephan Lenik grappled with the interplay between economic practice and belief systems (Lenik 2012).

Penological landscapes are therefore characterised by a complex negotiation of power between and within free and unfree social groups. Strategies of domination, resistance and acquiescence were played out throughout the landscape, such power negotiation inevitably reflected in the cognitive and physical architecture defining these places. It is through examination of this that Lenik's comparison of intent and actuality can occur (Lenik 2012: 52, 53).

Industrial landscapes and the worker

As with penological landscapes, examination of the industrial landscape provides the opportunity to engage with the concept of power, in this instance between and within the circles of the employed/servants/labourers and employers/masters/overseers. While drawing upon a similar theoretical heritage as penology, engagement with power in the industrial setting sheds light on the methods used to drive, motivate and control a nominally free workforce and its corresponding reaction. Engagement with the material and documentary record of industry also provides insight into the physical processes that were carried out in the landscape as part of its pursuit. Such insight leads to discussion of technological progress, efficiency and adaptation, the active scales of superintendence and direction, and the interaction with the natural environment.

An active debate which has accompanied archaeological investigations of industrial landscapes concerns the perceived disconnect between the study of industry's social past and that of its relics. Initially the focus was centred upon the monumental aspects of the industrial past (i.e. Buchanan 1974), but has increasingly shifted toward the worker and their role as a social agent within the industrial context (Gupta 1985; Metheny 2002; Shackel 2004). As early as the 1970s, when the study of industrial archaeology was considered relatively novel, there had been calls for a move toward "industrial ecology" - a placement of industry's social past back amidst the monuments of industry (Leary 1979: 178-82). More recently, Bryan Pfaffenberger has argued the importance of combining an examination of the technology of industry with that of the human and social dimensions (Pfaffenberger 1998). Pfaffenberger called for a blurring of the lines between technology and society,

moving the focus from a study of *things* toward that of *activity* (Pfaffenberger 1998: 294) a sentiment shared by Thomas Markus who noted that, without its social dimensions, "technology makes no sense" (Markus 1993: 262).

In a 2006 summary of Australian industrial archaeology, Eleanor Casella suggested that research had engaged with five key themes: continuity and change, production and consumption, settlement patterns and the characterisation of historic landscapes, class status, power and identity, and the international contexts of industrialisation (Casella 2006: 65-6). These encompassed both the study of the products and processes of industry, as well as Leary's "industrial ecology", with Casella approving of the growing trend toward the latter (Casella 2006: 70-1). An increasing focus on labour has formed an essential part of this trend, with archaeologists like Paul Shackel foregrounding aspects such as housing and communities, working conditions, ethnicity, and the relationship of the environment and human health to industry (Shackel 2004). For archaeologists, there is much that can be gained from analysing the spatial and social practices of labour, in which the worker is often viewed as just as responsible for shaping their surrounding economic geography as the managers and capitalists. The ability of the worker "to produce and manipulate geographic space in particular ways" is viewed as a "a potent form of social power." (Herod 1997: 3). Archaeologists have also demonstrated how workplace hierarchy could be extended beyond the workplace and into the town and daily lives of the workforce (Mrozowski *et al.* 1989: 302, 304; Mulrooney 1991: 132-3; Shackel 2006; Ford 2011; Mrozowski 2014: 349-50).

When examining the industrial landscape there is a need to encompass its context. Marilyn Palmer observed that, especially in the European setting, the archaeological investigation of mining landscapes often has a single-minded focus on the immediate site, at the expense of "the wider spatial linkages between mining, transport, industrial production, and use within the human sphere." (Palmer 1999: 1190). Donald Hardesty likened mines to socially and politically isolated islands that were nevertheless linked to economic, transport, communication and demographic global networks (Hardesty 1988: 1). Historian Homer Aschmann linked whether a resource was minable or not to the price it could be ultimately sold for, placing it within an economic context (Aschmann 1970: 174).

Similarly, Peter Bell, in his analysis of patterns of mining settlement in nineteenth century Australia, simply observed that the location of a mine was determined by the presence (or absence) of the resource (Bell 1998: 27). Denise Gaughwin, examining the requisite conditions for the development of industrial enterprises in Tasmania, expanded the prerequisites to include: the presence of the resource, access to transportation networks and labour sources, and the availability of associated natural resources like timber and water (Gaughwin 1992: 58-9).

Though in part overtaken by the study of the social aspects, examining the machines, tools and processes that characterised the industrial landscape is still a vital analytical element. The sites where these work processes took place are vital to our understanding of how people negotiated the spatial and social environment around them. Markus demonstrated how the spatial layout of a mill's industrial architecture influenced and in some cases reflected the social hierarchy of these workplaces (Markus 1993: 264-5). Similarly focussing on space, Michel Foucault read into the spatial organisation of factories in the eighteenth and nineteenth the imposition of supervisory regimes and the regulation of work output (Foucault 1975: 144-5). Historian Neil McKendrick linked the production-line nature of Josiah Wedgwood's pottery factory, to the linear progression of the process from clay to pot (McKendrick 1961: 32). In reference to the spatial form of the industrial landscape, Donald Hardesty has suggested that the features comprising these landscapes can be divided into "feature systems", compartmentalising the landscape through the various activities carried out therein (Hardesty 1988: 9-12). This analytical reduction to component parts can help understand the relatively ephemeral archaeological record left by mining activity (Bell 1998: 28). The transfer and adaptation of industrial technology has also captured the attention of researchers, particularly in colonial contexts like Australia (Palmer 1999: 1189-91; Carter and Cross 2001; Casella 2006).

Labour was intimately tied to the introduction and use of technology in the industrial setting. A.J.P. Taylor has noted that, in the British coal industry, a "plentiful supply of relatively cheap labour hardly provided an incentive to technological innovation" (Taylor 1961: 63). Taylor's observations were supported by the findings of other researchers, who found that the presence of cheap or unfree labour tended to postpone the introduction of advanced technology into industrial processes (Lichtenstein

1996: 149-50; Palmer 1999: 1161, 1176-77). Such findings support the observations of Lewis Binford, who suggested that, just because a process was more technologically advanced, does not mean that it was seen as the “best” way of completing a task (Binford 1962: 221).

The study of the industrial past therefore focuses on the industrial process, as well as the process's "ecological" setting. Examination of the actual industrial processes and tools of industry must be undertaken with reference to the social, economic, legal, political and cultural systems which were instituted alongside it (T.P. Hughes in Pfaffenberger 1998: 296). As part of this, consideration should not only be given to how the process was organised and implemented as an activity, but also how such an activity was triggered (Pfaffenberger 1998: 299). It is the interplay between process - and the inbuilt desire for industrial efficiency - and the surrounding penological ecology which is one of the key themes engaged by this thesis.

Colonisation processes

“Historical archaeology” writes Susan Lawrence and Nick Shepherd “ has a particular relationship with colonisation” (Lawrence and Shepherd 2006: 70). This relationship has arisen due to its longstanding identification with the spread of European cultures and their impact upon the cultures of indigenous societies, although this somewhat restrictive view is increasingly being challenged by both Euro-centric and non-European scholarship alike (i.e. Hall 1993). Colonial sites are often the beachheads of European expansion, detached from a social, political and economic core. They become defined by how they interact with the environment and existing indigenous cultures, remaining as micro-representations of the cultural core they left behind, or, as more often happens, undertaking a process of adaptation which results in irreversible change for them, those indigenous cultures they come into contact with and the environment.

The process of colonisation involves displacement, either voluntary or involuntary, of groups of individuals from the colonising force. Once displaced, processes of replication, exportation and adaption took place, as the colonisers sought to replicate the society and culture they had left behind.

Mitigating factors caused by the environment and the composition of the colonising agents themselves, could result in the adaptation of lifeways, societal hierarchies, economic and technological processes. Lawrence and Shepherd identified the key themes of the archaeology of colonialism as acculturation and adaptation, “creolisation” and the creation of new societies, the experience of the colonised, and power dynamics within and between the colonisers and the colonised (Lawrence and Shepherd 2006).

Power is a pervasive undercurrent when examining colonisation sites and processes. The colonisers exported with them hierarchies and ideologies, often transplanted wholesale into the new environment. They ordered themselves according to these established patterns, the attempted imposition of such patterns onto the colonised being a subject of great interest to historical archaeologists (Trigger 1984; Gosden 2004; Silliman 2005; Delle 2009). These notions of power sometimes became adapted to the new setting, as colonisers reacted to their environments and the cultures with which they interacted. Such adaptation of existing hierarchies and power dynamics resulted in the “creolisation” - the “creation of new identities in colonial situations” - referred to by Lawrence and Shepherd (Lawrence and Shepherd 2006: 73).

There is also a crossover between processes of colonisation and the unfree. Christian DeVito and Alex Lichtenstein have recently discussed the role that the transportation of prisoners played as a part of the colonialism process (Vito and Lichtenstein 2013: 296, 303). Through unfree labour and the management processes, the settlement of newly-claimed lands could be undertaken (Vaidik 2009). By placing the unfree at the forefront of the settlement process, empires, states and nations were able to forward two objectives: an expansion of cultural, political and economic interests, at the same time as ridding the internal borders of troublesome or difficult human elements (Gibson 2011). Martin Hall similarly highlighted how the materiality of lifeways on a frontier can shed light on the hierarchies of power that existed between the free and unfree at the forefront of the colonisation process (Hall 1993).

Adaptation applies not just to the hierarchies and power relationships inherent in colonisation, but also to physical fabric established as part of this process. Michael Pearson illustrated how a distinctive whaling industry arose in colonial Australia, marked by the adaptation of typical technologies to

colonial conditions (Pearson 1983). Also concentrating on Australia, Marilyn Palmer noted the application and adaptation of technology in the colonial context, describing the Australian frontier as “zone of experimentation, often littered with evidence of failure” (Palmer 1999: 1190). William Douglass asserted that mining camps, often a nexus for the introduction of technology, were marked by impermanence, often serving as outliers of settlement located on the frontier (Douglass 1998: 98). Similarly, Eleanor Casella has remarked on the need for the agents of colonisation to undertake a process of technological adaptation, adapting technology to conditions alien to its original intention or design (Casella 2006: 69-70).

Archaeologists are often concerned with scale, in particular the synergistic loop that exists between analyses of material culture and the built environment (the local) and wider patterns and networks of trade and colonialism (the global) (Johnson 1989: 206; Mrozowski *et al.* 1989; Mayne 2008: 98, 105-7; Mrozowski 2014: 343). Through this loop landscapes could be formed and altered, such as through the colonisation process where buildings, settlements and networks could originate on one side of the globe, only to be implemented in a place thousands of miles removed (Hall *et al.* 1990: 24-6; Mrozowski 1999: 158-9). Archaeologists need be sensitive to both global and local context when examining places (Driver 1989; Lenik 2012: 66).

Like penological and industrial processes, the dynamics of power play an important role in the examination of colonisation processes. Through this process, powers and hierarchies are extended and tested. Social, economic, political and technological patterns can be replicated by the process, often undergoing transformative adaptation. Convicts were at the forefront of the British colonisation experience in the Australian colonies, with their residual labour landscapes therefore offering the opportunity to further engage with these processes of replication and adaptation.

A model for places of convict labour: archaeological and historical perspectives

The landscapes of convict labour were where these theories of penology, industry and colonialism intersected. They were also places characterised by the interplay of power dynamics at global and

local scales. Within the spaces that comprised these penological and industrial places, relationships of power between the free and unfree were played out daily. Here the aims of punishment, deterrence, reform and economy moulded the environment which the governed and the governors inhabited. These were landscapes at the frontier of colonial exploration, where convict labour was used to lay the foundations of future prosperity. They were often at the extended edge of Empire, harvesting and processing its resources for the benefit of Britain and the colonies.

As indicated in the review of the historiography, a synthesised approach to landscapes of convict labour has not been created by Australian historical archaeologists. Separate engagements with the concept of power (i.e. Casella 2002), global and local penological practice (i.e. Winter 2013) and convict labour (i.e. Karskens 1986) have been undertaken. However, as yet there is no established synthesis of the influences that shaped these penological and industrial landscapes. This thesis has so far sought to highlight that an understanding of how convict labour landscapes were formed and evolved can only be achieved through engagement with the quantitative and qualitative evidence, both material and documentary, of Australia's convict past. It has also anchored itself to a theoretical foundation, from which a methodology for engaging with these landscapes can be teased. The remainder of this chapter will use this foundation to erect a framework for understanding Australia's places of convict labour.

In 2013 the author of this thesis produced a paper which drew upon research conducted for this study (see Appendix 1). Within this he posited that there were two main analytical elements that needed to be considered when looking at these places. The first was the physical setting within which the labour was carried out. The second was the processes which affected the formation and evolution of these places. The following will provide a summary of these findings. Much of the explanatory material for the settings of labour is contained within the 2013 paper, with a brief outline only provided below. There will be a concentration, however, upon the formation processes, with particular reference to the theoretical approaches discussed above.

Settings of Convict Labour

As prefaced in the above historical overview and literature review, convicts labouring directly for the government did so under a confusing array of systems, at a great number of locations and for a wide variety of purposes throughout Australia’s transportation period. Despite this, it is possible to discern a pattern to the deployment of convict labour. The settings of convict labour can be distilled into five main categories: day gangs, work camps, work stations, industrial stations and establishments. Each of these is distinguished by a series of characteristics (Table 2-1).

Setting Type	Characteristics
Day Gangs	<ul style="list-style-type: none"> • Often attached to a larger institution • Localised work area • Single or multiple gangs could be devoted to a single work outcome
Work Camps	<ul style="list-style-type: none"> • Detached establishment • Often dedicated to a single work outcome • Limited self-sufficiency
Work Stations	<ul style="list-style-type: none"> • Detached establishment • Often dedicated to a single work outcome • Higher degree of self-sufficiency
Industrial Stations	<ul style="list-style-type: none"> • Could have detached establishments of its own • Multi-faceted labour focus • Labour dedicated to self-sufficiency
Establishments	<ul style="list-style-type: none"> • Labour confined to establishment or to day gangs • Often involved in manufacturing or service-related tasks

Table 2-1: Table showing the five main settings of convict labour and their key characteristics

These settings are deliberately expansive, encompassing within them a variety of place-types and systems. Every place where convicts laboured for the government during the period of Australian transportation can be understood in terms of these settings. They are intended to be used as a contextual guide, providing a scale of comparison. It is important to note that the categories are not restrictive. Some places of convict labour could begin and end within one of the categories, others could start as one type, before morphing into another. Those which began and ended their operational life within one of these groupings, are referred to as a *simple labour landscape*. Alternatively, those

which shifted from one definition to another are referred to as *complex labour landscapes*. A full description of each setting type is contained in Appendix 1.

Forming Landscapes of Convict Labour

It is possible to discern a series of factors which determined the formation and evolution of landscapes of convict labour right across the Australian transportation experience. Although punishment, deterrence, reformation and economy were the fourfold aims around which transportation revolved, these motivating forces do not provide a rigorous enough framework for understanding how actual landscapes were created and evolved. Instead, three common factors affecting convict labour and its settings can be defined: organisation, the management and deployment of convict labour; supervision, enforced by the supervisory staff and enabled by the design of the establishment itself, and production, either through the extraction of a resource, or the development of goods (Table 2-2).

Determinative Factor	Key Elements
Organisation	<ul style="list-style-type: none"> • Overarching system of management (global, colonial and local) • Setting of the labour • Method of labour management
Supervision	<ul style="list-style-type: none"> • Military, civil or convict • Built landscape
Production	<ul style="list-style-type: none"> • Type of production (extraction, construction, agrarian, manufacturing, service) • Production processes • To punish or to profit?

Table 2-2: Factors affecting the formation and evolution of landscapes of convict labour

Organisation

Understanding overarching organisational management systems is vital to understanding how and why places of convict labour formed and evolved. Buildings and created spaces did not spring unbidden from the ground. Their origins instead required local, colonial or British direction. These outside motivators could result in the formation of a string of road stations, or the instigation of a wholesale station-building program throughout a colony, making the formative reasoning behind an establishment an important element to trace. Evolution could take place through external and internal stressors, an organic process whereby factors like population, the natural environment, budget, access to materials and administrative competency could all result in deviance from the set path. For the archaeologist, seeking to understand why an establishment was formed naturally leads to an examination of such deviance. The motivation for a site's formation may be discernible through the historical record, yet it is through the actuality of the landscape and material record that its operation and progression can be understood.

Archaeologist Sean Winter has posited that the convict system as envisaged by the British government was a networked series of relationships between Britain and the penal colonies, as well as between the penal colonies themselves (Winter 2013: 140). Information, administrators, convicts and *matériel* flowed along these networks, creating and altering the “convict system”. This has been

similarly suggested by Lisa Ford and David Roberts, who have illustrated global-to-local circularity, showing how British trends in secondary punishment were adapted to meet local penological requirements, with these practices in turn shaping British approaches to secondary punishment (Ford and Roberts 2014).

This thesis expands on these suppositions, adding another layer to the network: that of the immediate locale. It agrees that considerations of British and colonial agendas are essential for understanding the organisational influences which shaped landscapes of convict labour, however it argues that the places themselves must be incorporated into any modelling of influences on convict labour. While Winter's model shows how spheres of British and colonial influence overlapped to affect how places of convict labour were formed and shaped, it does not take into consideration the rebounding influence that the immediate natural, social, economic and political environment of these places could have upon British and colonial penal policy. Considerations of the convict system must take into account what can be termed the *global*, *colonial* and *local*. This approach basically recognises a place of convict labour as a node of colonisation. The social groupings that comprised these places and the hierarchies which defined them were directly transplanted from the colonising core - in this instance, Britain. They were products of this specific culture, often placed on the frontiers of colonial settlement. The dynamics that resulted between the prisoner and gaoler - and therefore the landscape that was created as a result - were what had been exported with them (the global), as well as what arose through the process of adaptation to their immediate situation (the colonial and local).

Within these places, the relationship between prisoner and gaoler was an incredibly complex one, where the efficient extraction of labour power could not be attained through a simple recourse to lash, law or leniency. Convict labour had been "purchased" through the forfeiture of their labour rights to the government, this relationship particularly obvious when convicts were labouring within government gangs or stations (Kercher 2003: 544-5; Robbins 2003: 364). The government controlled the key resource ultimately desired by their unfree charges: freedom. The acquiescence of the prisoners and forfeiture of their labour power was the agreed path to attaining this resource. Forms of spatial and behavioural control were employed in order to direct and encourage their movement

toward this goal. However, the path taken toward it was a scene of constant negotiation between the governors and the governed, as the prisoner sought to forge individual identity in the face of the government's attempt at control.

Those who sought to direct convict labour were required to engage in a series of negotiations that shaped the effectiveness of the end result. This led to what William Robbins has termed the "contested terrain of convict life", where the government sought to shape the convict's social relations through strategies of labour management which controlled and altered their cognitive and physical landscapes (Robbins 2005: 83, 84). These dialectics of power were inherently complex, marked at the extremes by those who sought and exercised control, and those who resisted, actively collaborated or simply acquiesced (Maxwell-Stewart 1999: 98; Roberts 2000: 52). The multiplicity of meanings that resulted play a vital role in understanding the dichotomous landscapes of convict labour, where the same spaces were at once controlling and controlled, and where the free and unfree, skilled and unskilled negotiated their day-to-day existence.

Whether seen as an agent to be punished, reformed, deterred or exploited, the convict who laboured in Australia was subject to a panoply of methods of survey and control. Convicts were guided within the system's bounds by a balance of incentives and disincentives, a mix required because an unmitigated and continuous use of coercive methods did not make for a productive workforce (Roberts 2000: 55, 59; Fredericksen 2001: 52; Robbins 2003: 365). Incentives came in many and varied forms. At the simplest they appeared as direct performance inducements, such as increased amounts of tea, sugar and tobacco in the ration (Maxwell-Stewart 1999: 103). Convicts employed in positions of trust often accrued such ameliorations. Incentives also took the form of sentence shortening, or elevation to a less arduous position (and the further concomitant inducements such an elevation might entail). Convicts could also find themselves placed in a different level of accommodation, either at some remove from the barracks containing their peers, or in less crowded quarters.

The skilled convict was very often the target of these inducements. A sought-after commodity in the colonies, every transport that arrived had a leavening of convicts possessing transferable skills, it being one of the government's aims to identify and co-opt these to their requirements (Karskens 1986;

Dyster 1988: 137-144; Nicholas 1988a: 121-24; Butlin 1994: 51-2; Robbins 2000: 149; Dunning and Maxwell-Stewart 2004: 6). Such skills-targeting was made necessary by an overall lack of control over the composition of convict workforces. In contrast to governing a free workforce, the number, age range and physical fitness of convict labourers was often beyond the control of establishment administrators. By matching existing skills to occupation, the government sought to increase the base level of an establishment's efficiency.

Just as there were many ways for the government to induce the labouring convict to perform, so could they be forced back onto the regulated pathway if they erred. Extended incarceration, corporal punishment, restricted diet, demotion - all could be brought to bear. The changing regulations under which convicts laboured affected the array of disincentives, along with the character of the individual convicts and their supervisors. The work the convict performed was designed to have a punitive aspect, the degree of punishment dependent upon the type of work in which the convict was engaged in. Heavy labour, such as carrying timber, quarrying or breaking stone, had an in-built punitive value that could be augmented by the application of performance inhibitors, such as irons or rations restriction, or lessened through improved treatment. The worst-behaved convicts, or those newly-arrived at an establishment, were often directed to this type of work (Maxwell-Stewart 1997: 146-147; 1999: 104).

Although the convict had no control over the type and frequency of performance inducements, they did retain a modicum of control over their own labour effort, resistance being one line of conduct (Roberts 2000: 67). Alan Atkinson has defined resistance as: outright attack, appeals to authority, withdrawal of labour and compensatory retribution (Atkinson 1979). Through this, convict sought to retain some degree of power over their own labour and the benefit generated, through concealing skills from the government and thereby upsetting attempts at skill-matching (e.g. Robbins 2000: 48-9; 2003: 369). Convicts also subverted the spaces that were created to contain and control them. For example, prisoners held in Hyde Park Barracks, Sydney, escaped the strictures of incarceration by creating their own physical and cognitive spaces (Robbins 2005: 81). This was directly at odds with the creation of the controlled space of the barracks, designed to supplant the hitherto uncontrolled

spaces convicts had lived in from first settlement (Robbins 2005: 92). They also reclaimed or created sexualities at odds with official cognitive and physical restraints (Casella 2000, 2001b; Robbins 2005: 88-9).

Acts of resistance were a direct challenge to the hierarchies instituted by those in the position of power (e.g. Orser 1988: 740). The emplacement of convicts in elevated positions - such as an overseer, flagellator or clerk - denoted an attempt by the authorities to enforce an occupational hierarchy within the convict populace. Passive or active resistance on the part of convicts led to this hierarchy being challenged, with the convicts at times implementing their own positional hierarchy (e.g. Anderson 1999). As convicts were elevated within the official hierarchy, they were conversely presented with more opportunities to commit acts of subversion (e.g. Dunning and Maxwell-Stewart 2004: 8). The physical manifestations of such a hierarchy could also be subverted. Uniforms, often outward markers of a convict's place, could be wilfully damaged, neglected or subverted (e.g. Robbins 2005: 86-7). Rations, similarly used to denote convict hierarchy, could also be augmented through pilfering and external supply, or used as a bargaining tool within black market economies.

Supervision

One of the more readily-recognisable aspects of convict labour was the manner of its supervision. The term, as applied in this thesis, encompasses not only the roles of both the men and women who staffed the gangs, camps, stations and establishments, but also the physical structures which facilitated it, defining the daily-lived experience of the convicts. The fences and walls which delineated and controlled space, as well as the people charged with controlling the application of convict labour, played an integral part in how this labour was managed within its setting.

Those charged with the convicts' supervision were a mixture of civil officers, military personnel and convicts. Often just as ensnared by the regulations as the labouring convict, these administrators were the enforcers - either willing or unwilling - of the system. The military was perhaps the most recognisable element of convict supervision, involved not only in convict and asset security

(Maxwell-Stewart 1997; Wright 2011: 151), but also in the planning and creation of colonial infrastructure (Winter 2013: 138). The civil administrators were a mixture of free and emancipist settlers, drafted into the system to take care of the administrative machinery. They performed every role: from clerk to station superintendent. A discernible trend was the increasing professionalisation of this class, reflecting a similar trend in post-1820s British penal administration (Ignatieff 1978: 189; Wright 2011: 164-165). Convicts were also incorporated into the supervisory structure, invariably fulfilling the role of clerk, overseer or constable, placed in a situation theoretically one step removed from that of their incarcerated peers, they, more than any other group tasked with supervising the implementation of the regulations, were doubly-bound by these selfsame regulations (Maxwell-Stewart 1997: 154-155). On the one hand their role was to enforce the system, while on the other their own performance was measured by the same regulations. They were an integral element, largely made necessary by the paucity of free colonists willing to fulfil similar roles (Robbins 2004: 90). As supervisors, these convicts occupied a key place in the government's strategy for extracting labour from the convict population and were to be found at every establishment where convicts laboured.

These administrators were predominantly divided into two main roles: direct supervision and convict welfare and administration. The former comprised such positions as the commandant, superintendent, assistant superintendents, military, constables, overseers, signal men or watchmen. They had a direct influence over the conduct of the prisoners and the direction and intensity of their labour. Those involved in the maintenance of the convicts' welfare and administration could include religious officers, medical officers, commissariat staff or boats' crew. Though they had direct contact with the convicts and could in some ways influence the treatment that they would receive, those holding these positions were directly responsible for the day-to-day welfare of the convicts and the running of the camp or station to which they were attached.

For those appointed to positions of supervision fell the task of directly implementing penological objectives. This weight fell heaviest upon those toward the top of an establishment's hierarchy, these men and women being the conduit through which the objectives of the colonial and British governments were enacted. Through them these objectives were distilled and passed down to

superintending officers of lower rank. The composition and security of the built fabric, as well as the land annexed for penological purposes, were also their direct concern. The further down the supervisory hierarchy they were, the more actual contact with convict supervision. Toward the very bottom of the hierarchy were the military rank-and-file, constables, sub-constables, overseers and sub-overseers, charged with direct security, gang classification, as well as the direction and control of convict labour output.

There was a similar hierarchy engendered amongst the staff directly responsible for convict welfare and administration. Religious and medical officers were given oversight of the convicts' welfare, as well as their morale reform. The latter were especially tasked with ensuring that the convict was fit to remain a viable and productive element of the labour force. Other officers would manage the material needs of an establishment, responsible for the incoming rations, tools and building materials, as well as any outgoing products.

At convict establishments throughout the colony a mess of departments could be represented: medical, military, roads and bridges, engineering, commissariat, survey, marine and clerical. These departments and their representative/s often had aims and/or methods which may have competed or been in sync with other departments. For example, what may have been an efficient method for moving goods from a boat to an establishment's storehouse for a commissariat officer, may not have been the best from the point of view of the establishment's superintendent, who was responsible for convict security. The holding of religious and educational meetings in mess halls or sleeping barracks may not have been to the satisfaction of the chaplain or catechist, who may have requested the construction of a dedicated space from the establishment's superintendent or commandant. Such interactions had a constant effect upon the spatial arrangements of convict establishment, resulting in the construction of buildings or features to confine, control, accommodate or aid.

These administrators presided over built landscapes that sought to reinforce penal objectives. The design and execution of these built elements varied from camp to camp, establishment to establishment, forming a direct reflection of the penological environment within which they were formed and evolved. James Kerr charted the evolution of convict building design for the entirety of

Australian transportation (Kerr 1984), showing that, although far from uniform, the built residue of convict Australia illustrates that the labours of the convicts were physically directed by the architecture, which served to define, restrict, reform and contain (Casella 2001b: 56). They could be the fences which surrounded compounds, or the walls which formed cells. Buildings could be arranged upon basic principles of hierarchy and surveillance: buildings of importance removed from the barracks, supervisor's quarters overlooking the convicts' quarters (Kerr 1984: 133, 170). Convicts could be accommodated in purpose-built gaols, locked behind high walls and confined in cells and wards (Trinca 1997: 20-21). Alternatively, they might be housed in rough-built work camps, restrained by little more than regulations and a forbidding natural landscape (Karskens 1984). Individual settings or setting types could evolve over time: Wendy Thorp showed that the design of stockades and similar places of convict accommodation in New South Wales passed through four distinct phases (Thorp 1987b: 160-189), a thesis supported by the findings of Grace Karskens (Karskens 1984).

The administrators had to be careful with their built fabric. One of the most obvious formative forces was the size of the prisoner population. Convicts had to be provided with shelter, which was an attainable task. However, this shelter was required to be constructed so as to aid the penological aims of the administrators. Poor accommodation - either in design or quantity - could lead to a rapid degradation of emplaced prisoner management systems. Such systems were themselves a formative force, guiding how and where buildings were constructed. Their deterioration destabilised part of the edifice of the management regime implemented in the colonies.

The analysis of built elements provides insight into the workings of a penal landscape which is not always readily apparent through the historical record alone. Convicts at these places needed to be confined, constrained and directed, with the inevitable internal hierarchies within their population controlled. The built landscape had a very real effect on how this occurred. How this built landscape evolved can also be an important indicator of greater changes taking place in approaches to convict management. The manner in which the convicts were supervised was also a direct reflection of penological aims as experienced at local, colonial or global level.

Production

The final factor which determined the form of a convict labour setting was production. Without this element, the camp, station or establishment reverted to a mere gaol - a holding pen for convicts. The convicts were engaged in an industrial process and, though now prisoners labouring in a far-flung corner of the Empire, many had experienced life in the midst of the Industrial Revolution. Many had worked in the mills and factories, or at the least would have known about the industrial forces which were covering the country with iron and brick. Perhaps more importantly, the men and women charged with the management of the convicts were also of this era (Ignatieff 1978: 62-3, 189-93). Options existed within the remit of the convict system to apply the relatively recent industrial advances in the convict labour process. By its nature, an industrial process is designed to facilitate the efficient extraction and/or production of a resource or product, seemingly bringing it immediately into conflict with the punishment motives prevalent in an Australian convict station. Why and how industrial processes were applied is vital to understanding how motives of punishment were incorporated with those of economy at a convict station.

Central to this thesis is the premise that, at the heart of every situation where the convict laboured, there was an economic motive - or at the least a desire to make their labour economic in some way. Economic considerations permeated Australia's transportation experience, colouring the deliberations of British and colonial administrators alike, and even underpinning entire facets of the experience. Previous studies support this conclusion. They have found that, amidst the ever-more stringent economic requirements of the British Treasury (Ritchie 1970: 18-30), convicts played a central role in the economic progress of the colony from the 1810s (Hirst 1983: 83; Thorp 1987a: 112). As the system was increasingly regulated and systems formalised, the requirement emerged for enhanced self-sufficiency - at the same time as ensuring punitive and reformatory goals were met (Ford and Roberts 2014: 4-5). In the lumber yards of 1820s Sydney, convict labourers were the focus of performance inducements which clearly indicated the placement of profit over punishment (Robbins

2000: 152, 159). Rations and medical care were even part of the government's way of maintaining an effective workforce (Maxwell-Stewart 2011: 29).

The labour of the convicts was also part-colonising force. Through their labour, the bush was tamed and resources exploited, often placing the convict at the very frontier of the colonising experience.

This could be expressly recognised by the government. When probation was introduced in Van Diemen's Land, one of the aims of placing gangs in the unsettled areas of the colony was to make the convicts "pioneers of the colony".²⁷ Such motivation existed well before probation's introduction, David Roberts illustrated how convicts at Wellington Valley, New South Wales, laboured on projects designed to open up new ground for settlement (Roberts 2000: 55). Where technology was employed, it often required adaptation to local conditions (Casella 2006), in the process spawning and supporting fledgling colonial manufacturing industry (i.e. Nash 2003).

The production undertaken at places of convict labour can be subdivided into five main groupings, in part mirroring the traditional primary, secondary and tertiary definitions of industry: *extraction*, the extraction and refinement of a raw material; *construction*, the employment of convicts in building works of a public nature; *agrarian* production, land clearance, agriculture and husbandry of stock; *manufacturing*, the utilisation of a material, or group of materials, for the production of a tertiary good; and *service*, ancillary activities carried out to facilitate the operation of the establishments. Fuller discussion of this six-part classification is provided in Appendix 1.

Understanding the productive end to which convict labour was put is essential to an examination of a landscape of convict labour. At these places, the industrial activity and the manner of its implementation was largely an imposition of outside agencies, in particular by the colonial and British governments. With locations of activity determined by the resource, these agencies were responsible for the formation of the unfree workforce and their supervisors engaged in that resource's attainment. The actual process of resource attainment was governed by the exigencies of the local natural, built and social environment. The industrial landscapes comprised individual or interlinked industrial sites, their form and interrelation providing insight into the processes undertaken and the perceived value of

²⁷ *Secondary Punishment*, Sir John Franklin, Lieutenant Governor, to Lord Glenelg, Secretary of State, 15 February 1839, 1841 (412), p. 81.

the operation. These landscapes directly influenced the way in which convict labour was organised and supervised: collectivised or individual, skilled or unskilled. In this way an examination of the industrial landscape interlinks with the examinations of organisation and supervision outlined above, encouraging an process and social-oriented analysis.

Conclusion

At the beginning of this chapter a summary was undertaken of the current state of archaeological engagement with Australia's convict past. By comparing it to its historical counterpart, it found that a significant dislocation between historical and archaeological analyses of convictism. There have been significant archaeological studies, many of which have engaged with the major themes identified by previous historiography, yet they largely remain disconnected from each other and the general trends being forged by other disciplines. In particular, there has been little attempt to understand and analytically deconstruct the physicality of the places where convicts laboured. The way in which convict labour was appropriated and managed lies at the heart of understanding the convict "experience" in Australia. Historical archaeologists are best placed to engage fully with the physicality of this experience.

This chapter has also flagged the key theoretical underpinnings requiring consideration when engaging with places of convict labour. They were first and foremost places where the power dynamics between free and unfree were played out on a daily basis. Here, the punitive, reformatory, deterrent and economic aims of those who administered the convict system butted up against the individual and collective agency of the convicts. Archaeologists view these landscapes as contested places, where the power negotiations between and within the ranks of the free and unfree shaped the built and cognitive landscapes. This power dynamic has been applied to understanding landscapes of the unfree, particularly penology, slavery and industry. The places where convicts laboured were an amalgam of both penological and industrial landscape types, where the convict was not only an incarcerated entity, but also a productive economic unit. Existing theoretical approaches demonstrate

the methods used in these settings, illustrating how the unfree became the centre of a web of penological practice, or how labour power was co-opted by the managers. Power was expressed in a built landscape designed to confine and direct the prisoners' bodies, or to extract work effort. Neither prisoner or worker were passive agents, reacting to such impositions with strategies of their own.

The places of convict labour were often on the frontiers of settlement, forming markers of Britain's wider colonisation process. They can therefore be tied into larger debates about the landscape of the colonisers and the colonised, in particular those centred around the use of unfree labour in this process. Such landscapes are marked by the imposition of cultural and technological forms, often upon a previously occupied environment. In the context of Australian convictism, the labour of the convicts was often used to form the foundation of future settlement.

A model has been posited for engaging with places of convict labour. Drawing upon Australian convict historiography, as well as the wider theoretical frameworks, it suggests that such places are best examined through the prism of the *setting* and the *formative elements* which powered the construction and evolution of these labour settings. Five distinct settings were identified within which convicts laboured for the government. Each of these were affected by the three factors: *organisation*, *supervision* and *production*, within which are wrapped all the notions of powered penological, industrial and colonised landscapes discussed. This thesis now turns to the application and testing of this model, thereby providing an example of a multi-disciplinary approach to convict labour places. By focussing on five places where the government deployed convict labour in Van Diemen's Land between ca.1822 and 1848, the question first posited at the start of this thesis will be brought into sharp relief: whether these were essentially penological or industrial landscapes.

CHAPTER 3: CONVICT COAL MINING IN VAN DIEMEN'S LAND

To discuss the deployment of convict labour in coal mining between the 1820s-40s in Van Diemen's Land is to delve into the earliest history of this industry in the colony. For, apart from a few desultory forays by private interests, it was through government-run convict labour that the coal resources of the colony were developed. By using the labour power of the convicts, the colonial government was able to undertake a program of testing and resource exploitation as the coal was discovered in ever-increasing amounts. The coal's identification and working was viewed as essential to further development, coal providing a cheap and efficient fuel for public and government purposes, as well as forming the bedrock upon which colonial industry could be built. The deployment of convicts in mining was an answer to a colonial need to create this bedrock, utilising a source of labour that was available, directly answerable to the government agenda and, for all intents and purposes, cheap. The five case studies which form the focus of this research were where this labour was deployed (Figure 1-1). In so doing, they became places where the foundations of Tasmania's coal mining industry were forged.

This chapter is divided into two main parts: a contextual history of the period and the specific case study histories. The former comprises a holistic view of the development of the coal industry during the period. A broad brush will be applied, with the aim of placing each of the places within their context. The colonial coal industry underwent an organic development, as resources were identified, tested and exploited in response to the constantly-evolving economic and social circumstances. The whole was made more complex by the involvement of government-run convict labour, the government providing much of the impetus to coal exploitation during the period under review. Each case study will be inserted within its broader context, the chapter closing with the more detailed histories of each individual case study.

Convict coal mining in Van Diemen's Land

The story of early coal exploration and mining in Van Diemen's Land is inextricably linked to a wider economic and social narrative. Coal, once its presence had been identified in the colony, was regarded as an essential ingredient in the colony's development, with the government and public alike alive to the possibilities that such reserves offered. Each new discovery of coal, no matter how minor, was greeted with hyperbolic acclaim. Coal symbolised industry and progress. It offered a break from the reliance upon a firewood fuel staple, its adoption marking the movement away from the early struggles of settlement and toward a prosperous, industrious future. The harnessing of the coal resource also promised a further step toward independence from the sister colony of New South Wales, from which Van Diemen's Land had hitherto had to purchase its coal. Convicts, a viable source of labour in plentiful and relatively cheap supply, were to inevitably play a key role in the whole process.

The beginnings of coal mining in the Australian colonies pre-dated the settlement of Van Diemen's Land by two years when, in 1801, a small operation was begun to exploit a bed of coal at Newcastle, New South Wales (Eklund 2005: 3). In a preview of the situation that would later occur in Van Diemen's Land, the mine was worked by convicts undergoing punishment, the men supervised by overseers skilled in mining. After two fitful decades of interrupted operation, the mine employed 27 convicts, raising an average of twenty tons per day.²⁸ By 1831 the works had been taken over by the Australian Agricultural Company.

Coal raised at the Newcastle mine was primarily destined for use by the New South Wales government departments, with any surplus sold. During its first two decades of operation, however, its high price prevented many of free settlers from purchasing it.²⁹ Partly as a consequence of this, little attempt was made to improve the efficiency of the workings until they were taken over by the Australian Agricultural Company. Coal from Newcastle did find its way to Van Diemen's Land, but was prohibitively expensive. It was brought down in the holds of vessels as ballast, selling for up to

²⁸ *Report of the Commissioner*, (448), pp. 114-15.

²⁹ *Report of the Commissioner*, [136], p. 93.

50 shillings (s) per ton.³⁰ Only private individuals appear to have purchased the coal, the government departments instead reliant on the procurement of firewood.

Keeping the fires of the colonial government burning was no small matter. The number of fireplaces in civil, convict and military establishments was tightly controlled, with each office receiving a ration of firewood equal to the number of fireplaces. By the mid-1820s, with costs creeping inexorably upwards, suggestions were made to replace a portion of the firewood ration with coal imported from Newcastle.³¹ The idea was put forward by Deputy Assistant Commissary General Peter Roberts that a government vessel could continually engage in trade between the two colonies, taking Van Diemen's Land wheat to New South Wales and bringing Newcastle coal back as ballast. The suggestion was not taken up, with Lieutenant Governor George Arthur recording his strong objection to the idea of a government vessel being used for such purposes.³²

It is likely that Governor Arthur's reluctance also stemmed from the situation of coal exploration and exploitation in his own colony. By the time Roberts had made his proposal in 1826, at least eight separate deposits of coal had been identified in Van Diemen's Land (Bacon 1991: 22). The first of these had been discovered ten years prior to the European settlement of the colony, when a French expedition under Admiral Joseph-Antoine Raymond Bruny D'Entrecasteaux noted the presence of a coal outcrop at South Cape Bay (Marchant 1966: 171-172). Upon British settlement of the colony in 1803, an increasing number of deposits were brought to the attention of the government. In 1803 the surveyor James Meehan recorded the presence of coal at Coal River, Richmond, followed within six years by a report of coal at Schouten Island, off the colony's east coast, by a shipwrecked sailor. Coal was also reported north of Richmond, near the township of Jerusalem, and in 1816 on the rugged west coast at Macquarie Harbour (Bacon 1991: 22).³³ Reports of deposits at Adventure Bay (1820), New Town Hobart (by 1823) and Huon Inlet (1824) all followed in a short, flurried period of exploration (Bacon 1991: 22). The known deposits at Richmond and Schouten Island were described in 1824 by a

³⁰ Peter Roberts, Deputy Assistant Commissary General, to Afleck Moodie, Assistant Commissary General, 24 July 1826, CSO 1/120/3024, T.A.H.O.

³¹ Peter Roberts, Deputy Assistant Commissary General, to Afleck Moodie, Assistant Commissary General, 24 July 1826, CSO 1/120/3024, T.A.H.O.

³² Peter Roberts to Sir George Arthur, Lieutenant Governor, 5 September 1831, note by Arthur 15 September 1831, CSO 1/120/3024, T.A.H.O.

³³ *The Hobart Gazette*, 15 June 1816.

mineral surveyor and, in the same year, the coal at South Cape Bay, first discovered by the French expedition, was re-discovered by James Hobbs. Hobbs, during a five month circumnavigation of the island colony, remarked upon the "superior Coal Strata at South Cape".³⁴

For the first two decades, these discoveries of coal - either accidental or intended - were eagerly reported to the colonists of Van Diemen's Land. The *Hobart Gazette*, after a second expedition by Hobbs to South Cape Bay, opined that: "It is evidently of the first importance to the inhabitants of any country to detect and work the veins of coal or other minerals which may exist under their soil."³⁵ In an earlier article the paper had listed a threefold motivation for the exploitation of the colony's coal: "coal would realize [*sic*] a decided preference [to firewood], furnish employment to our numerous small craft...and prove an article of beneficial export."³⁶ The latter was an attraction when Hobbs undertook his second expedition to South Cape Bay in 1826, the hope being that such coal could be loaded as ballast on vessels headed to India.³⁷

It was against this backdrop that the first attempt was made to mine coal on a more extensive scale. In 1822, work commenced on the eastern shore of Macquarie Harbour, at the site of the coal seam noted in 1816. As well as being the first coal mine in the colony, it was also the first time that convicts had been directly deployed as miners. The gang that was eventually tasked to work the seam was a splinter group of convicts attached to the Macquarie Harbour penal station (1822-33).

The mining operation was a short-lived affair which, by 1824, was no longer pursued. Following the failure of the mining operation at Macquarie Harbour, few efforts were made to open workings elsewhere. In 1826 James Hobbs returned to South Cape Bay, determined to prove the potential of the coal he had surveyed two years previously. Accompanied by a surveyor and miner, Hobbs spent a month examining the coal seam at Adventure Bay and testing the coal at South Cape Bay.³⁸ The expeditioners were eventually discouraged by the coal's poor situation, the seam's isolation making overland passage impracticable and the exposed coast making safe marine transport impossible.

³⁴ *Hobart Gazette*, 20 February 1824; *Hobart Gazette*, 16 July 1824.

³⁵ *Hobart Gazette*, 18 November 1826.

³⁶ *Hobart Gazette*, 16 July 1824.

³⁷ *Hobart Gazette*, 23 September 1826.

³⁸ *Hobart Gazette*, 28 October 1826.

Without an outlet for the coal, any further thought of the operation was shelved. Three years after the expedition to South Cape Bay, an unproductive shaft was sunk at Cascades, Hobart, to trial an outcrop of coal (Bacon 1991: 109).

While convicts picked at the coal at Macquarie Harbour and settlers began to take it upon themselves to test the known coal reserves, New South Wales coal continued to be shipped into the colony in an expensive trickle. High prices meant that the establishments of the colonial government continued to rely upon the plentiful reserves of timber to fuel their fireplaces and furnaces.³⁹ Small gangs of charcoal burners worked in the bush and at penal stations, providing the material for use at engineering depots.⁴⁰ When, by 1831, the colony had still failed to secure its own supply of coal, a scheme was once again put forward to import coal from Newcastle on a large scale. The Australian Agricultural Company had by that time taken over the workings and was selling off its coal in Sydney at 20s per ton.⁴¹ Investigations were made, but the cost of transporting the coal raised the tonnage price to 30s, making it prohibitive to set up importation on a large scale.⁴² Some, firm believers in the as-yet untapped value of Van Diemen's Land's own coal reserves, saw the mooted trade as potentially damaging to the colonial economy. Deputy Assistant Commissary General Roberts complained to Lieutenant Governor George Arthur:

Imports will arrive at Hobart and Launceston that will take from this island not less than
Twenty Thousand pounds per annum. The ruinous effect of which will not be observed
until it be perhaps too late to remedy.⁴³

Arthur was himself fully cognisant of the colony's need to begin exploiting its known coal reserves, remarking: "I have long been desirous that the Coal which has been discovered in various parts of this island should be made available to the public."⁴⁴ Yet, he was also acutely aware that, barring few

³⁹ Civil Engineers' Department: Fuel required for the Offices, etc in the Civil Establishment for 1835, n.d. (ca. 1834), CSO 1/412/9273, T.A.H.O.

⁴⁰ John Archer, Civil Engineer's Office, to J.E. Bicheno, Colonial Secretary, 10 August 1840, CSO 1/472/10482, T.A.H.O.

⁴¹ Peter Roberts, Deputy Assistant Commissary General, to Sir George Arthur, Lieutenant Governor, 5 September 1831, CSO 1/120/3024, T.A.H.O.

⁴² Mr McCleary, Colonial Secretary (New South Wales), to J. Burnett, Colonial Secretary (Van Diemen's Land), 25 January 1831, CSO 1/472/10482, T.A.H.O.

⁴³ Peter Roberts, Deputy Assistant Commissary General, to Sir George Arthur, Lieutenant Governor, 5 September 1831, CSO 1/120/3024, T.A.H.O.

⁴⁴ Peter Roberts, Deputy Assistant Commissary General, to Sir George Arthur, Lieutenant Governor, 5 September 1831, note by Arthur 15 September 1831, CSO 1/120/3024, T.A.H.O.

exceptions, the isolated locations of identified reserves made it difficult for them to be worked with any degree of profitability. This had been proven by the investigations at South Cape Bay and Macquarie Harbour. While coal reserves remained unobtainable beyond the fringes of the settled areas, neither government nor private interests would be able to turn a profit:

...it does not appear that Mines could be worked to advantage by the Government in any of the situations...I could gladly give encouragement to any private speculation directed to this object. I apprehend, however, that a considerable amount of Capital would be required.⁴⁵

The discovery of coal at Norfolk Bay, on the western arm of the Tasman Peninsula, in February 1833 therefore came at a prime moment in this discussion (Brand 1993: 1). Identified as part of an 1833 survey of the wider peninsula, initial reports were positive.⁴⁶ In a description designed to catch the attention of the administrators, the newly-found coal was favourably compared to that imported from Newcastle:

... after a careful search for coal, a promising vein of that mineral has been discovered in Norfolk Bay... the specimens obtained from...this seam resemble - in appearance - the coal which is imported from New South Wales, although it burns less well.⁴⁷

Like Macquarie Harbour or South Cape Bay, the coal on the Tasman Peninsula was located right on the coastal margin. Unlike them, however, it enjoyed a much more favourable situation in the sheltered confines of Norfolk Bay, as well as a prime situation on the existing east coast shipping route. Norfolk Bay was also an area rich in easily-accessible natural resources: stands of timber fringed the bay, outcrops of workable sandstone poked through the coastal crust, and clay and lime waited to be exploited.⁴⁸ What could not be found or grown could be easily imported from Hobart.

It was the presence of the Port Arthur penal station which proved the determining factor in the decision to attempt to work the coal reserve. At the time the coal was discovered, the station had been operating for close to three years. Initially settled as a timber-getting camp, Port Arthur soon grew to

⁴⁵ Ibid.

⁴⁶ George Woodward, Surveyor General, 29 January 1834, Notice – on Tasman's Peninsula with reference to the map constructed from the surveys of George Woodward and James Hughes, CSO 1/635/14379, T.A.H.O. (BT).

⁴⁷ Ibid.

⁴⁸ Ibid.

become a repository for reoffenders.⁴⁹ At first operated in tandem with the penal stations of Macquarie Harbour and Maria Island (1825-32), from 1833 Port Arthur became the colony's sole penal establishment. As its convict population rapidly began to rise, there was a corresponding increase in the administrators and military, as well as all the materials and infrastructure that accompanied such population increase. At first presided over by a commanding military officer who reported to the Hobart-based convict and military departments, from 1833 Port Arthur was administered by Captain Charles O'Hara Booth (Heard 1981: 19-66). Booth was to remain in this position at the station until 1844, playing an instrumental role in the discovery and testing of the coal at Norfolk Bay, as well as the eventual establishment of the mining operation.

The first investigations were undertaken in October 1833 by a group of convicts detached from the penal station.⁵⁰ Buoyed by a favourable report, a second party of convicts, equipped with more suitable tools and under the guidance of experienced miner Joseph Lacey, also a convict, were tasked with a further inspection.⁵¹ On the back of Lacey's promising report, an intensive program of investigation was implemented.⁵² The initial phase -1833-5 - was marked by a cautious investment in men and material, linked to the knowledge that at any point in the proceedings the resource might prove unviable.

From 1834, coal began to make its way to Hobart and Launceston from the peninsula, destined for use by the civil, military and convict government departments.⁵³ Problems with the quality of the coal was experienced, the steadily increasing flow from the Tasman Peninsula matched by a commensurate stream of complaints coming the other way. The coal did not light easily, requiring a larger amount of firewood than would otherwise be necessary.⁵⁴ The Launceston customs department went as far as

⁴⁹ *Secondary Punishment*, Standing Instructions for the Regulation of the Penal Settlement on Tasman's Peninsula, 25 January 1833, (82), p. 60.

⁵⁰ Charles O'Hara Booth, Commandant, to Sir George Arthur, Lieutenant Governor, 15 October 1833, CSO 1/680/15052, T.A.H.O. (UB).

⁵¹ Matthew Forster, Chief Police Magistrate, to John Burnett, Colonial Secretary, 31 October 1833, CSO 1/680/15032, T.A.H.O. (UB).

⁵² *Ibid.*

⁵³ William Moriarty, Port Officer, to John Montagu, Colonial Secretary, 1 April 1835, CSO 1/412/9273, T.A.H.O.

⁵⁴ John Gregory, Treasury, to John Montagu, Colonial Secretary, 15 September 1835, CSO 1/412/9273, T.A.H.O.

describing the coal as "inferior".⁵⁵ Despite these problems, the evident economy and qualified success of the enterprise saw the small work camp morph into a fully-fledged convict station by 1836.⁵⁶

The steady stream of complaints during the latter half of 1835 and early 1836 led to the expertise of mining overseer Joseph Lacey questioned.⁵⁷ It was pointed out that, by 1835, as the mine stood on the brink of becoming a permanent establishment, no proper survey had been completed of the workings.⁵⁸ This led to the accusation that, without such a plan, men and material were being directed in a rather *ad hoc* fashion.⁵⁹ This was of concern to the government, as the supply of coal coming from the peninsula had begun to be relied upon by government department and private households alike. Yet, despite these concerns, it was not until the beginning of 1837 that such an inspection and survey was completed by the naturalist Dr John Lhotsky.⁶⁰

On the back of Lhotsky's report and recommendations, sinking began on a new shaft (Heard 1981: 212). By early 1839, sinking had commenced on another (Brand 1993: 27).⁶¹ The establishment that, in 1833, began as a temporary camp to test a seam of coal in Norfolk Bay had, by 1839, become a large penal industrial enterprise. While in part fulfilling the fuel requirements of the government departments, the coal from the Tasman Peninsula also slowly gained for itself a reputation in the public sphere. At the time that Lhotsky completed his report, *The Hobart Courier* was reporting that a scarcity of firewood had "caused a brisk demand for Port Arthur coals".⁶²

The sinking of the new shaft in 1839 drew labour away from the mining works and interrupted the supply of coal.⁶³ Although the situation had improved by September, the coals still attracted complaints about their quality.⁶⁴ This continued into 1840, by which time the mine was at full

⁵⁵ Customs Department, Launceston, to the Collector and Controller of H.M. Customs, Hobart, 15 June 1836, CSO 1/412/9273, T.A.H.O.

⁵⁶ Charles O'Hara Booth, Commandant, to John Montagu, Colonial Secretary, 30 October 1835, CSO 1/832/17671, T.A.H.O. (BT).

⁵⁷ George Frankland, Surveyor's Office, to John Montagu, Colonial Secretary, 9 July 1835, CSO 1/412/9273, T.A.H.O.

⁵⁸ Charles O'Hara Booth, Commandant, to John Montagu, Colonial Secretary, 20 July 1835, CSO 1/412/9273, T.A.H.O.

⁵⁹ *Ibid.*

⁶⁰ Private Secretary to John Montagu, Colonial Secretary, 24 January 1837, CSO 5/8/115, T.A.H.O. (BT).

⁶¹ Charles O'Hara Booth, Commandant, to Matthew Forster, Colonial Secretary, n.d. (June 1839), CSO 5/199/4778, T.A.H.O.

⁶² *Hobart Courier*, 26 May 1837.

⁶³ Charles O'Hara Booth, Commandant, to Matthew Forster, Colonial Secretary, 16 September 1839, CSO 5/199/4778, T.A.H.O.

⁶⁴ *Ibid.*; J. Paterson, coal contractor, to Peter Roberts, Assistant Commissary General, 22 August 1839, CSO 5/229/5849, T.A.H.O.

production, with a flurry of complaints received by the commissariat department regarding the coal's quality and quantity.⁶⁵ Against this backdrop, in September 1840, a new coal mining operation was begun in the colony, focussing upon a coal deposit identified at Recherche Bay (Figure 3-8).⁶⁶ Linked to the Tasman Peninsula operation by the sharing of personnel and material, it was the third convict coal mine in Van Diemen's Land. The new operation was a strange hybrid: part-shareholder-driven company and part-government-funded convict operation, born of the speculative mania gripping the colony during the economic boom of 1840-42.

While the convicts at Recherche Bay got on with the business of digging for coal, the Tasman Peninsula workings faced a wholesale change in the manner in which the station was administered. In July 1839 Lieutenant Governor Franklin had been advised that the assignment system would be phased out, to be replaced by the new probation system (Brand 1990: 13-14). Four months prior to the construction of the first purpose-built probation station at Salt Water River, Commandant Booth reported his belief that the Tasman Peninsula mine would soon become a probation establishment.⁶⁷ Writing in December 1840, Booth would perhaps not have understood the true implications of this change. In order to meet the new classificatory requirements, existing stations like the Tasman Peninsula required a program of station renovation. A new raft of appointments had to be made of additional officers, overseers and constables, the dearth of suitably-qualified staff leading to the installation of those of varying calibre, drawn from both the limited colonial pool, as well as from further abroad.

As both the convict and free population of the Tasman Peninsula mine increased, the station's accompanying infrastructure was augmented to cope with the influx. Work was slow and, as a result, overcrowding led to a series of complaints about the station's management.⁶⁸ Below ground, the works were not faring any better. By mid-1841 serious problems were besetting the Tasman Peninsula

⁶⁵ Mr Watson, coal contractor, to George Maclean, Assistant Commissary General, 5 February 1840, CSO 5/229/5849, T.A.H.O.; John Hutchinson, Superintendent, Female House of Correction, to William Gunn, Principal Superintendent, 5 February 1840, CSO 5/229/5849, T.A.H.O.

⁶⁶ Charles O'Hara Booth, Commandant, to John Montagu, Colonial Secretary, 25 August 1840, CSO 5/224/5707, T.A.H.O.

⁶⁷ Chaplain, Port Arthur, to Captain Commandant Charles O'Hara Booth, Port Arthur Commandant, 31 December 1840, CSO 5/277/7164, T.A.H.O. (BT).

⁶⁸ Samuel Cook, Superintendent, to Matthew Forster, Director of Probation System, 1841, Tasmania Papers 134, CY 3079, Frames 269-71, M.L. (ST); Matthew Forster, Director Probation Service, to Samuel Cook, Superintendent, 3 March 1842, Tasmania Papers 140, T.A.H.O. (BT).

mine, with portions of the workings inundated by water.⁶⁹ The amount of coal reaching Hobart and Launceston had diminished, forcing the government to purchase expensive coal from New South Wales to supply the departments with their fuel ration.⁷⁰ With the Tasman Peninsula operations beset by problems of an operational and administrative nature throughout 1841 and into 1842, the government must have hoped that the newly-founded operation at Recherche Bay would have been able to fill the void. However, 1841 proved to be an unfruitful and, for both the government and shareholders alike, frustrating year, as the convict miners probed the earth in search of the winnable vein.

By the close of that year, with the coal at Recherche Bay proving elusive and the Tasman Peninsula mine battling water inundation, the government's attention once again turned to a new mining venture. The deposit was located north of Richmond, near the small township of Jerusalem. Until 1841, only one attempt had been made to mine coal in the Richmond basin, when settler James Bonney and his assigned convict James Clare (an experienced coal miner), opened a small working at Richmond between 1840-1841 (Bacon 1991: 122). The deposit at Jerusalem had been identified as early as 1813, though was re-discovered in early 1841.⁷¹ In the usual vein of optimism that characterised the discovery of a new reserve, the coal was deemed to be superior to even the coals of New South Wales.⁷² No doubt encouraged by the prospect of having a coal mine on the doorstep of Hobart, as well as frustrated by the poor returns then coming from the Tasman Peninsula and Recherche Bay, Lieutenant Governor John Franklin authorised the establishment of a small convict work camp under James Clare to investigate the coal.⁷³ Work commenced in September 1841.⁷⁴

As coal was carted from the Jerusalem workings in a thin, slow trickle, work at Recherche Bay continued. Coal was still not forthcoming from the camp, no doubt frustrating investor and government alike. On the Tasman Peninsula, the beginning of 1842 saw concerted efforts to combat

⁶⁹ James Hurst, Mining Overseer, to Charles O'Hara Booth, Captain Commandant, 14 July 1841, Tasmania Papers 134, CY 3079, Frame 283, M.L. (UB).

⁷⁰ *Hobart Courier*, 31 December 1841; George Maclean, Assistant Commissary General, to John Montagu, Colonial Secretary, 8 December 1841, CSO 22/59/909, T.A.H.O.

⁷¹ George Stokell to the Surveyor General, 10 September 1841, LSD 1/1/28 p. 454-88, T.A.H.O.

⁷² Lieutenant Crookshank to John Montagu, Colonial Secretary, 10 May 1841, CSO 5/284/7549, T.A.H.O.

⁷³ Memorandum, William Nairn, to John Montagu, Colonial Secretary, 4 September 1841, LSD 1/1/28 p. 454-88, T.A.H.O.

⁷⁴ James Clare, mine overseer, to Matthew Forster, Chief Police Magistrate, 1 January 1842, CSO 22/145/811, T.A.H.O.

the mine's intermittent output. In March 1842 Lieutenant Governor Franklin ordered that Commandant Booth investigate sinking two additional shafts to ensure against future problems of supply.⁷⁵ While the Executive Council ruminated on the proposal, the coal supply situation in the colony worsened to such an extent that Assistant Commissary General George Maclean suspended the supply of coal to private contractors at the mines, only allowing those supplying the government departments access to the coal.⁷⁶

At the time of this crisis of supply, coal finally began to arrive in Hobart from the operation at Recherche Bay, with Maclean noting the arrival of 100 tons in Hobart in April 1842.⁷⁷ At Jerusalem, the works continued, though little coal was actually forthcoming. By July, in an attempt to improve the mine's production, experienced miner William Dawson had been appointed to the works.⁷⁸

Dawson recommended an extended program of shaft sinking as a means of bolstering productivity.⁷⁹ However, the discovery of an insurmountable fault within the main adit saw the government decide in August to close the beleaguered works after only eleven months operation.⁸⁰

Just prior to Jerusalem's closure, Dawson had been sent to the Tasman Peninsula to report upon the suggestions made by Hurst and Booth four months previous. Dawson found the mine limping along, hampered by water ingress.⁸¹ His eventual report supported Hurst's recommendation for the sinking of a new shaft. As a result, the government likely saw the continuation of the Jerusalem works as a waste of scarce resources. Dawson may have conveyed this information in person to the Lieutenant Governor when the two men met in Hobart after Dawson filed his report in July.⁸² It is not hard to imagine that, provided with a strategy for bringing the Tasman Peninsula mine into full operation, the government had little hesitation in closing the Jerusalem operation and directing the surplus labour to the peninsula.

⁷⁵ Matthew Forster, Director Probation Service, to Charles O'Hara Booth, Commandant, 15 March 1842, Tasmania Papers 140, M.L. (BT); Charles O'Hara Booth, Captain Commandant, to Josiah Spode, Principal Superintendent, 21 March 1842, CSO 22/59/909, T.A.H.O.

⁷⁶ George Maclean, Assistant Commissary General, to John Montagu, Colonial Secretary, 7 May 1842, CSO 22/59/909, T.A.H.O.

⁷⁷ Ibid.

⁷⁸ Josiah Spode, Principal Superintendent, to G.T. Boyes, Colonial Secretary, 6 July 1842, CSO 22/47/190, T.A.H.O.

⁷⁹ James Corrigan to Josiah Spode, Principal Superintendent, 29 July 1842, CSO 22/47/190, T.A.H.O.

⁸⁰ Josiah Spode, Principal Superintendent, to G.T. Boyes, Colonial Secretary, 1 August 1842, CSO 22/47/190, T.A.H.O.

⁸¹ William Dawson to Josiah Spode, Principal Superintendent, 21 July 1842, CSO 22/59/909, T.A.H.O.

⁸² Charles O'Hara Booth, Captain Commandant, to John Montagu, Colonial Secretary, 20 July 1842, note by Josiah Spode, Principal Superintendent, 21 July 1842, CSO 22/59/909, T.A.H.O.

Dawson, along with an indeterminate number of other convicts, was re-directed to the Tasman Peninsula in early August.⁸³ Within two months Dawson was appointed as a mining overseer, responsible for the works alongside James Hurst.⁸⁴ Sinking work did not actually commence until midway through 1843.⁸⁵ By January 1845 this shaft and one of the older shafts was described as being in operation.⁸⁶

While the shaft was still being sunk on the Tasman Peninsula, the government decided to re-open the Jerusalem works.⁸⁷ Under experienced free miner William Jones, a small gang attempted to extend the original works, but was defeated by the fault which pinched out the coal. Further efforts to trace an economic vein were not successful, the workings again abandoned in August.⁸⁸ The impetus to reoccupy the Jerusalem mines so soon after they were closed, while not explicitly stated in the records, was highly likely to have been caused by wider conditions in the colony. In August 1843 Lieutenant Governor John Franklin had been replaced in his position by Sir John Eardley Wilmot, resulting in an administrative change that may have resulted in the mine's resurgence.⁸⁹ In addition, the Depression experienced by the colony from 1842 may have encouraged the re-formation of the small gang, potentially seen as a profitable way for a small gang of otherwise idle convicts to be employed.

The reopening of Jerusalem may also have been linked to the final decline of the Recherche Bay operation. These works had staggered along for nearly four years, producing a fitful supply of coal and drawing off convict labour and materials at a time when the colonial economy and convict labour management systems were experiencing deep difficulty. In November 1843 the government finally cut its losses and withdrew all convict labour from the operation.⁹⁰ Although undocumented, the release of this convict labour into a management system already stretched to breaking point may also have contributed to the short resurgence of the Jerusalem operation. Proceedings were taken against

⁸³ Josiah Spode, Principal Superintendent, to G.T. Boyes, Colonial Secretary, 1 August 1842, CSO 22/47/190, T.A.H.O.

⁸⁴ Charles O'Hara Booth, Commandant, to G.T. Boyes, Colonial Secretary, 29 September 1842, CSO 22/59/909, T.A.H.O.

⁸⁵ *Colonial Times*, 21 February 1843.

⁸⁶ Unknown correspondent to Matthew Forster, Comptroller General, 18 January 1845, Misc 62/10/A1094, T.A.H.O. (UB); Report of the Committee of Officers into convict expenditure, 31 December 1845, CON 103/3, T.A.H.O. (BT).

⁸⁷ J.E. Bicheno, Colonial Secretary, to William Jones, 29 December 1843, CSO 8/108/2279, T.A.H.O.

⁸⁸ J.E. Bicheno, Colonial Secretary, to Matthew Forster, Comptroller General, 21 August 1844, CSO 8/108/2279, T.A.H.O.

⁸⁹ *Australian Dictionary of Biography*, vol. 1, "Eardley-Wilmot, Sir John Eardley (1783 - 1847)", pp. 345-346.

⁹⁰ George Maclean, Deputy Commissary General, to J.E. Bicheno, Colonial Secretary, 19 February 1844, GO 1/84, p.400, no. 2862, T.A.H.O.

the company by the colonial and British governments for the substantial debt owed for the cost of labour and superintendence. The thousands of pounds was never retrieved, marking a shambolic end to the whole affair.

Whatever the aim of reopening the works at Jerusalem, they did not last beyond 1844. After the second failure of the works, William Jones left the colony. His departure disappointed the colonial administrators, who had entertained hopes that Jones would superintend yet another operation being contemplated in the colony.⁹¹ In July 1844 Jones had been detached from the Jerusalem mine to inspect the coal deposits on Schouten Island, with a mind to its development by the government or by a well-financed company.⁹² By September the colonial government had decided to open a probation station on the island, any profits from which would be fed back into the colony's coffers.⁹³ Although permission was granted to open the station, displacing a small group of free miners who had already begun working the coal, the mine was never commenced.

By the beginning of 1845 the only convict coal mine still operational in the colony was on the Tasman Peninsula. All others had failed due to the poor quality of the coal that the gangs were attempting to work. On the peninsula, over a hundred convicts worked below ground in a maze of drives, levels and galleries, the coal they won feeding a product chain that extended to Hobart and Launceston. Two main shafts accessed the coal, while an extensive program of testing and boring had taken place around the periphery of the coal basin. A huge amount of money and labour had been sunk into the station, the ever-growing infrastructure built to house a constantly fluctuating number of convicts and their military and civil overseers.

Yet, despite all the investment, the story of convict mining on the peninsula had only a few years left to run. These years were marked by a degradation of both the mining capacity of the station and its administrative efficiency. From the mid-1840s the burgeoning anti-transportation movement latched on to reports from the mines of apparent depredations being carried amongst a poorly-supervised

⁹¹ William Jones to J.E. Bicheno, Colonial Secretary, note by Matthew Forster, Comptroller General, 6 September 1844, CSO 8/108/2279, T.A.H.O.

⁹² William Jones to J.E. Bicheno, Colonial Secretary, 11 July 1844, CSO 8/108/2279, T.A.H.O.

⁹³ J.E. Bicheno, Colonial Secretary, to Matthew Forster, Comptroller General, 21 September 1844, CSO 8/108/2279, T.A.H.O.

convict population. In response, the government sought to upgrade the incarcerative infrastructure at the mines, at the same time as decreasing the size of the convict population. Although such moves improved the convicts' supervisory conditions, it resulted in a deterioration of the station's mining capacity. This all led to the decision to discontinue government operations on the Tasman Peninsula, opening it instead to private lease. Comptroller General John Hampton reported the decision in May 1848.⁹⁴ Hampton cited a diminishing supply of convict labour, plus the nature of the labour, which "interfered with strict and systematic discipline", as the reasons for halting the operation. In addition, despite attempts to upgrade the station's infrastructure, the whole establishment was aging, with both mining, incarcerative and administrative infrastructure falling to pieces from want of attention. For the station to keep operational, large capital investment was required, necessitating substantial outlay at a time when the government was seeking to diminish such expenditure.⁹⁵

The leasing of the mines to private interests was symptomatic of the changing face of coal mining in the colony. Until the late 1840s, few private individuals or companies had been willing to take the substantial pecuniary risk mining entailed. Unproven resources, poor communications and the unsteady availability of labour had all deterred private investment. Only the government was in any position to test and prove the colony's known coal resources during the first four decades of settlement. Those few private individuals who had attempted to emulate the government's qualified success on the Tasman Peninsula had all given up in the face of poor coal and mounting costs. From the late 1840s, however, as the colony began to shake free of its economic depression, a steadily-growing free population began to look at the involvement of the government in mining activity in an increasingly hostile light, seeing it as a block on free enterprise. For its part, the government, in the end eager to divest itself of the expense of maintaining the peninsula mining station, was all too willing to hand over the supply of the "essential article of domestic comfort" to the private sector.⁹⁶

Recognising the burgeoning interest in free mining, the colonial government had appointed naturalist Joseph Milligan, doctor and skilled naturalist who had served as superintendent of the Aboriginal

⁹⁴ *Convict Discipline and Transportation*, Enclosure 1, Report by John Hampton, Comptroller General, 30 May 1848, B.P.P. 1849 (1022) (1121), p. 253.

⁹⁵ *Ibid.*

⁹⁶ *Convict Discipline and Transportation*, George Maclean, Deputy Commissary General, to John Hampton Comptroller General, 23 November 1847, (1022) (1121), p. 105.

establishment at Flinders Island, to carry out a survey of the coastal coal basins of the colony in 1848, with a view to aiding the future formation of any private mining companies.⁹⁷ Milligan's resultant report was published later that year and encompassed the deposits at Schouten Island, South Cape Bay, Fingal and the east coast, Richmond and Jerusalem (Milligan 1848). Milligan surveyed the remains of the private workings - at that point abandoned - on Schouten Island, the former works of James Bonney at Richmond, as well as the abandoned government mines at South Cape Bay and Jerusalem.

The Tasman Peninsula, already leased to private operator Alexander Clark, was not visited by Milligan, indicating that his report was aimed at encouraging interest in relatively untapped coalfields. Within five years, a number of mining operations had begun on these fields, including the formation of a company by Milligan himself to exploit some east coast seams he had identified (Bacon 1991: 21, 24). Interest in Schouten Island was also reinvigorated. In August 1848, the month Milligan completed his report, two applications to let the island were received by the government.⁹⁸ The successful applicant, the Australian Smelting Company, was required to pay land rent and royalties on every ton of coal raised - a very different agreement to that given to the company formed to work Recherche Bay nine years previous.⁹⁹ Although the company held the lease until the 1850s, mining on the island was only ever carried out on a small scale.¹⁰⁰

The decision by the government to cease work at the Tasman Peninsula mine marked a final chapter in the story of convict coal mining in Van Diemen's Land. Its cessation corresponded with the growth of free mining in the colony, encouraged by the measured success of the government operation and driven by a requirement to generate other avenues of supply once the government had ceased its involvement (Bacon 1991: 21, 24). Up until 1848, the government, through the labour of the convicts, had been primarily responsible for the testing and proving of the coal reserves which were identified

⁹⁷ J.E. Bicheno, Colonial Secretary, to Joseph Milligan, Superintendent Oyster Cove, 31 January 1848, CSO 24/40/1257, T.A.H.O.

⁹⁸ Richard Cleburne to J.E. Bicheno, Colonial Secretary, 12 August 1848, CSO 24/58/2076, T.A.H.O.; George Whitcomb, Australian Smelting Company, to J.E. Bicheno, Colonial Secretary, 17 August 1848, CSO 24/58/2076, T.A.H.O.

⁹⁹ J.E. Bicheno, Colonial Secretary, to The Collector of Revenue, 5 December 1849, CSO 24/58/2076, T.A.H.O.

¹⁰⁰ Memorandum by unnamed correspondent, 3 July 1852, CSO 24/58/2076, T.A.H.O.

during the progression of colonial exploration and settlement. The qualified success of the Tasman Peninsula operation saw its product utilised and relied upon across the colony, the coal used by the government and public alike. Although they never emulated the same level of success, the other convict mining operations at Macquarie Harbour, Recherche Bay, Jerusalem and South Cape Bay played an important part in testing the colony's coal resource and, in the case of Jerusalem, laying the foundation for future mining.

The following section separates the histories of these five places from the holistic narrative outlined above, providing detailed historical overviews of each case study. Each will be discussed in chronological order, with the focus centred upon the development of the mining operation - the case study's context having been outlined in the section above. This detailed historical grounding will provide the necessary background for the discussions in the chapters to come.

Case study histories

Macquarie Harbour, ca. 1822-4

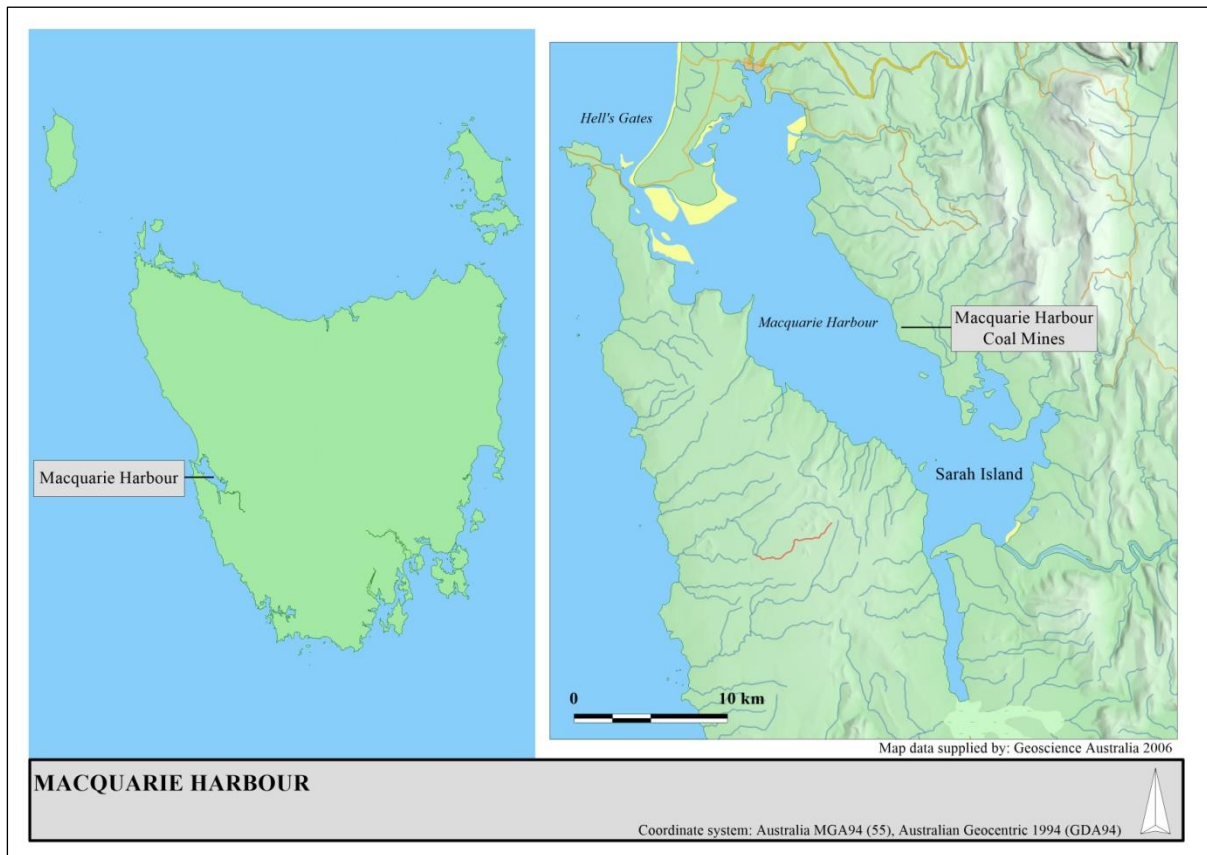


Figure 3-1: Macquarie Harbour, site location

Worked by convicts attached to the larger penal settlement of Sarah Island, the mine at Macquarie Harbour was undertaken in what appears to have been a rather desultory fashion. As a result, the historical record is particularly thin, with only a few contemporary references to indicate that such activity had been carried out at all. Unlike South Cape Bay, where the poor contemporary record is augmented by a number of post-convict descriptions, there are also no documentary sources relating to the Macquarie Harbour coal works beyond their actual period of occupation.

As outlined above, the coal at Macquarie Harbour was discovered in early 1816 by Dennis McCarty, who had been undertaking a survey of the harbour. McCarty described:

...having advanced about 10 miles further we found on the Northern shore a quantity of
Coal - the first we observed was on the Beach, and washed by the salt water an immense

Bed, but how deep we could not ascertain; on further inspection we found the Bank from the River was nearly all Coal, in strata 6 feet thick...¹⁰¹

Macquarie Harbour is an expanse of water fed by three major river systems, linked to the open ocean by a narrow treacherous passage known as Hell's Gates. Here, in the isolated wilderness, well beyond the slowly expanding boundaries of the European colonial frontier, the British government had decided to place a penal settlement for reoffenders in January 1822 (Brand 1984b: 15; Maxwell-Stewart 2008: 6). Between 1822-33 a small island in the southern reaches of the harbour, Sarah Island, became the hub from which an extended network of convict labour and punishment gangs worked. Gangs of convicts were stationed around the fringes of the harbour, engaged in timber-getting, lime-burning, brick-making and agriculture (Maxwell-Stewart 2008: 21-41). The isolated gangs were linked by signal and whaleboat to Sarah Island, to and from which flowed a constant stream of men, material and information. The coal, just one of a number of potentially rich resources offered by the harbour, naturally became the target of attention soon after the station's establishment.



Figure 3-2: Sketch showing convicts returning from a timber-getting outstation, Macquarie Harbour. Sarah Island is just visible on the left, with the punishment island of Grummet Island to the right. Coal Head is in the distance on the right

(Thomas Lempriere, 'Grummet Island off Sarah Island', ca.1828, Allport Library and Museum of Fine Arts, Tasmanian Archive and Heritage Office)

¹⁰¹ *The Hobart Gazette*, 15 June 1816.

The dearth of historical evidence means that the size of the workings and the amount of coal raised is unknown. Indeed, the presence of the mine is only briefly hinted at, sources appearing as oblique references in unrelated material. In his deposition on his now-infamous escape, Alexander Pearce recorded the presence of miners and at least one hut in the harbour in September 1822:

...Greenhill being at the mines, we had to call for him...six of us went on shore, and one stopped in the boat; Greenhill took hold of an axe and went to the hut, and broke open the miners' chests and took all their provisions...¹⁰²

The scant evidence suggests that the mining operation was a short-lived affair: Pearce's evidence indicates that it was operating by September 1822, nine months after initial settlement, but by June 1824 Lieutenant Governor Sorell was reporting to the Secretary of State that the enterprise had failed due to a "want of Scientific Research" (Brand 1984a). Only weeks before the Lieutenant Governor had penned this missive, Sorell had reported that the mine was still a going concern, the miners attempting to prove the extent of the coal (Brand 1984a). Such evidence suggests that, by the first week of June 1824, word had been received from Macquarie Harbour that the mine had been abandoned, indicating that, at most, the works were occupied for under two years.

¹⁰² *Report from the Select Committee*, No. 56 (C), Documents relative to the Absconding of Pierce and Cox from Macquarie Harbour, (669), p. 313.

(To be read with reference to Appendix 7)

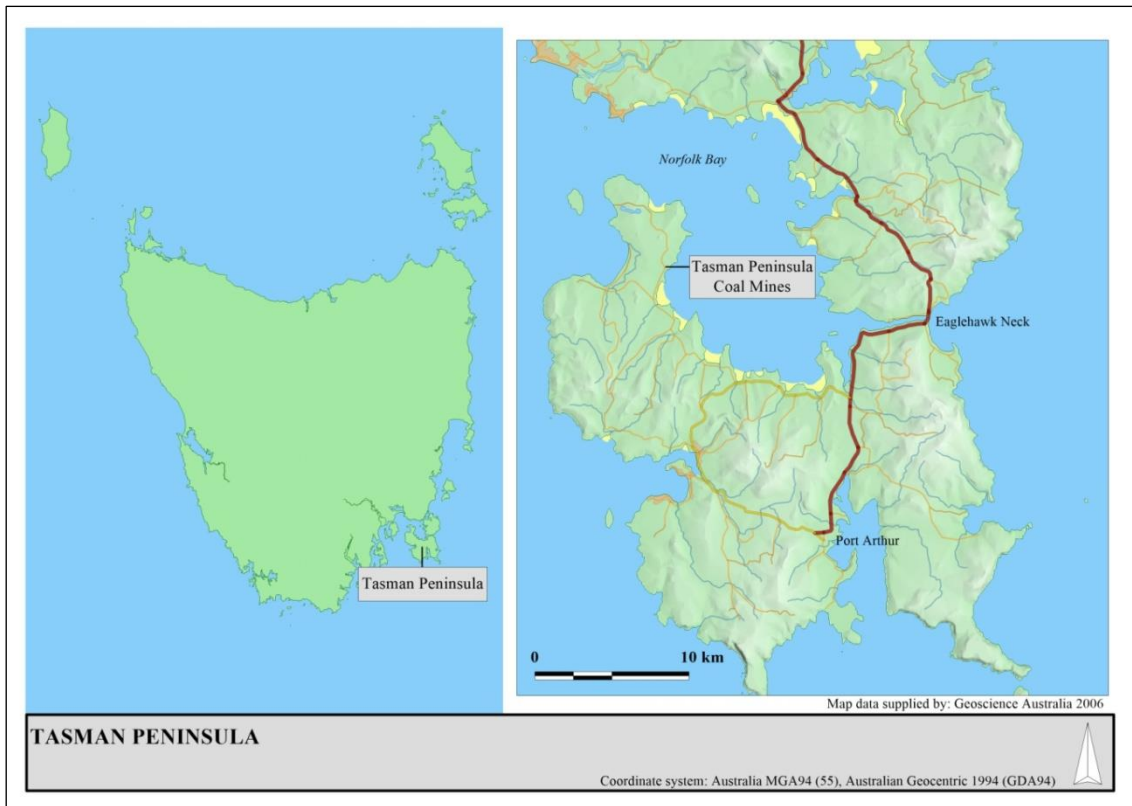


Figure 3-3: Tasman Peninsula, site location

When the reports of coal on the margins of Norfolk Bay were first received, it was a party of convicts from Port Arthur penal station who were detailed with the task of inspecting the coal.¹⁰³ Upon the party's return, Booth forwarded their favourable report, which noted the presence of a six foot seam of good burning coal, with a cautious addendum that "...it would be requisite for a person who has knowledge of mining to examine it before going to any further trouble."¹⁰⁴ Taking on board Booth's advice, the colonial government despatched to the site experienced miner Joseph Lacey to further inspect the coal.¹⁰⁵ Lacey's favourable report to the Chief Police Magistrate, Josiah Spode, triggered the formation of a small gang of "useful" convicts to begin test excavations at Norfolk Bay.¹⁰⁶

¹⁰³ Charles O'Hara Booth, Commandant, to Sir George Arthur, Lieutenant Governor, 15 October 1833, CSO 1/680/15052, T.A.H.O. (UB).

¹⁰⁴ Ibid.

¹⁰⁵ Matthew Forster, Chief Police Magistrate, to John Burnett, Colonial Secretary, 31 October 1833, CSO 1/680/15032, T.A.H.O. (UB).

¹⁰⁶ Ibid.

By April 1834, six labourers and five miners were at work at the mines, the latter increasing to 11 in the following month, the increase in the labour force commensurate with the appearance of coal in the first exploratory shaft.¹⁰⁷ A second shaft was soon sinking and an adit driven from the first shaft to the beach (Heard 1981: 179). The first coals from the mine had been sent up to Hobart in June, consisting of twelve tons of unsorted surface coal.¹⁰⁸ This poor quality coal and the early winnings from the shafts were all that was exported from the mine until September 1834, when a cargo of 120 tons was shipped to Hobart.¹⁰⁹ At the end of 1834 a timber railroad was built leading from the working faces to the beachhead, increasing the supply capacity of the mine (Heard 1981: 188).

By the beginning of 1835 the convict population had reached 42, reflecting the increased need to work the visible coal, expand the workings and enhance the capacity of the existing settlement.¹¹⁰ Such a small workforce generated few requirements, other than temporary accommodation, tools and supply. In keeping with the small workforce, accommodation comprised a cluster of rudimentary huts for the convict miners and their overseers (see Figure 3-4).¹¹¹ Throughout the course of 1835 the potential of the mine was proven to the decision-makers. Toward the end of the year Booth wrote of his belief that the camp was about to transition into a "permanent station".¹¹² Measures to enhance the security of the establishment were taken, with Slopens Island, west of the mines, closed to private lease and a constable's outpost placed overlooking Slopens Main beach.¹¹³ The landing of private boats upon the peninsula was also prohibited.¹¹⁴ A constable and overseers were appointed to the station in that year, with the station's incarcerative and mining infrastructure augmented in reflection of the increased

¹⁰⁷ Return of Crown Prisoners at Port Arthur shewing [sic] the number of each Trade in the Month of April 1834, 1 May 1834, CSO 1/511/11180, T.A.H.O. (UB); Return of Crown Prisoners at Port Arthur shewing [sic] the number of each Trade in the Month of May 1834, 1 June 1834, CSO 1/511/11180, T.A.H.O. (UB).

¹⁰⁸ Charles O'Hara Booth, Captain Commandant, to John Burnett, Colonial Secretary, 7 June 1834, CSO 1/412/9273, T.A.H.O.

¹⁰⁹ William Moriarty, Port Officer, to John Montagu, Colonial Secretary, 1 April 1835, CSO 1/412/9273, T.A.H.O.

¹¹⁰ Charles O'Hara Booth, Captain Commandant, to William Moriarty, Port Officer, 20 January 1835, CSO 1/412/9273, T.A.H.O.

¹¹¹ Charles O'Hara Booth, Commandant, to Matthew Forster, Chief Police Magistrate, 26 November 1833, Tasmania Papers 35, M.L. (BT).

¹¹² Charles O'Hara Booth, Commandant, to John Montagu, Colonial Secretary, 30 October 1835, CSO 1/832/17671, T.A.H.O. (UB).

¹¹³ Charles O'Hara Booth, Commandant, to John Montagu, Colonial Secretary, 21 September 1835, CSO 1/829/17594, T.A.H.O. (UB).

¹¹⁴ Charles O'Hara Booth, Commandant, to John Montagu, Colonial Secretary, 30 January 1835, CSO 1/784/16725, T.A.H.O. (UB).

bond and free population, as well as the mine's increasingly productive capacity.¹¹⁵ The addition of a cookhouse and oven to the camp toward the close of the year, enabled a form of commissary autonomy, increasing the potential to accommodate the burgeoning workforce accompanying the mine's upgrade from work camp to convict station.¹¹⁶

A further indication of the camp's evolution came with the placement of a military detachment at the station in early 1836.¹¹⁷ The first commanding officer was probably Lieutenant MacKnight (21st Fusiliers), who was later replaced by Lieutenant Stuart in September.¹¹⁸ Barracks for rank and file, as well as the commanding officer's quarters, were constructed at the station (Figure 3-4). By the commencement of 1837, there were thirteen men and officers at the station (Brand 1993: 11). Security was further enhanced by the construction of a signal station, linking the station to both Port Arthur and Hobart (Heard 1981: 202). As the camp became a station, the coal works and its accompanying infrastructure were expanded and enhanced. By March 1835 an estimated 579 tons of coal had been distributed to Hobart and Launceston, passing to the government departments and public through auction.¹¹⁹ The tonnage began to increase as the workings followed a north westward trend away from the coast. By early 1836 the construction of a wharf furthered the mine's efficiency (Figure 3-4).¹²⁰

¹¹⁵ Charles O'Hara Booth, Commandant, to William Moriarty, Port Officer; 20 January 1835, CSO 1/412/9273, T.A.H.O.; Nominal List of Crown Prisoners receiving Tea and Sugar as an indulgence for the services rendered in the situations placed opposite each Individual's name for the month of October 1835, October 1835, CSO 1/731/16936, T.A.H.O. (UB); Charles O'Hara Booth, Commandant, to John Montagu, Colonial Secretary, 30 October 1835, CSO 1/832/17671, T.A.H.O. (UB); *Hobart Courier*, 1 April 1836.

¹¹⁶ Charles O'Hara Booth, Commandant, to John Montagu, Colonial Secretary, 30 October 1835, CSO 1/832/17671, T.A.H.O. (UB).

¹¹⁷ Charles O'Hara Booth, Commandant, to John Montagu, Colonial Secretary, 7 March 1836, CSO 1/635/14379, T.A.H.O. (UB).

¹¹⁸ Edward Owen, Town Adjutant, to John Montagu, Colonial Secretary, 30 September 1836, CSO 1/843/17844, T.A.H.O. (UB).

¹¹⁹ William Moriarty, Port Officer, to John Montagu, Colonial Secretary, 1 April 1835, CSO 1/412/9273, T.A.H.O.

¹²⁰ *Hobart Courier*, 1 April 1836.

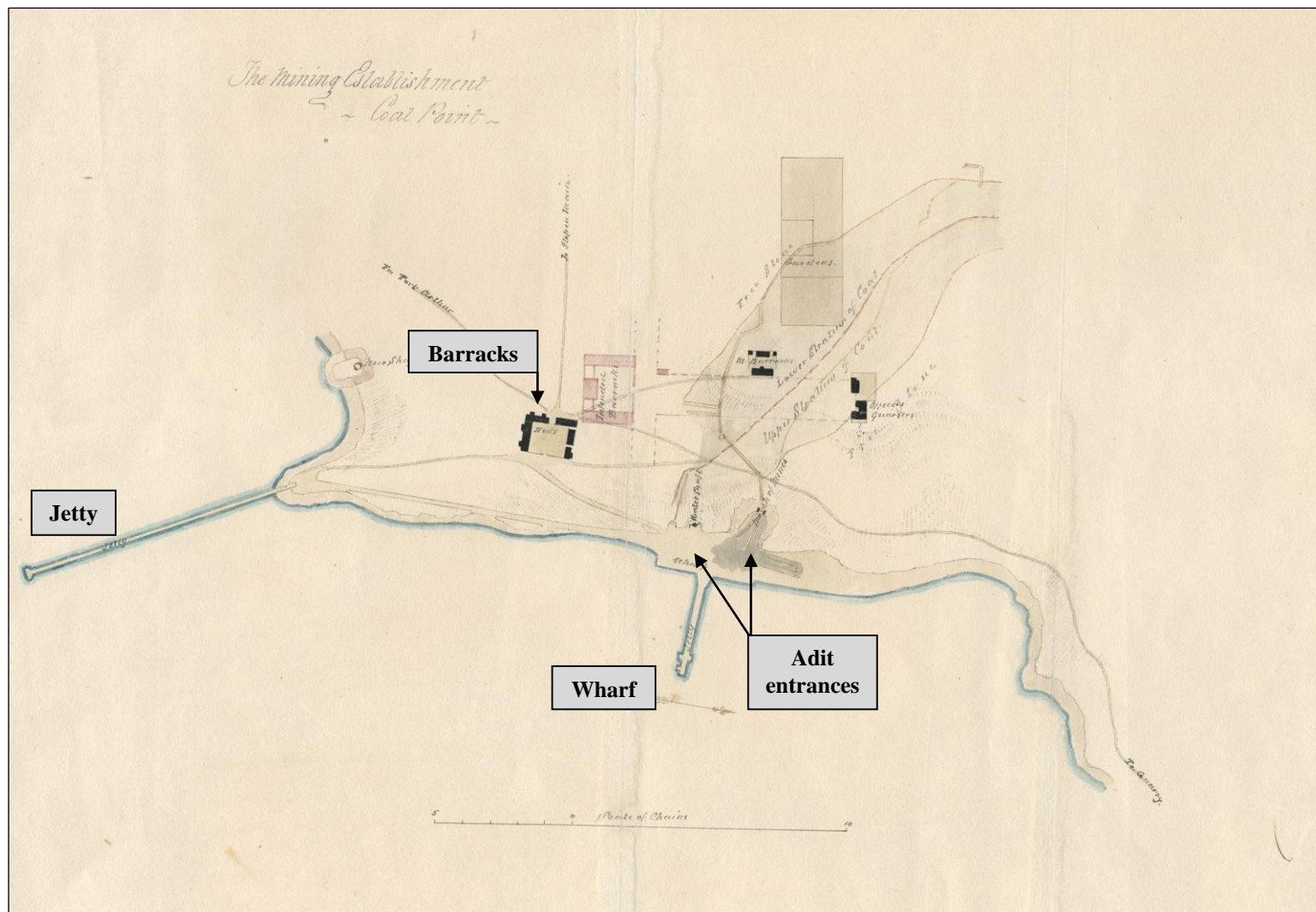


Figure 3-4: Plan of the Tasman Peninsula coal mine ca.1837. The main features have been noted. The red tinted structures were extant at the time the plan was completed, with proposed buildings shown in a black tint
(Unknown artist [Henry Laing?], 'The Mining Establishment, Coal Point', ca.1837, CSO 5/72/1584, T.A.H.O.)

Toward the close of 1836 the convict population at the mines was close to 100.¹²¹ A superintendent - also the commanding military officer - oversaw the running of the station, with military and civil constabulary under his charge. The actual mining works were managed by the mining overseer, Joseph Lacey.¹²² The religious and medical needs of the station were administered by the religious instructor and assistant surgeon attached to the Port Arthur penal station.¹²³ Along with these two officers, Commandant Booth made regular trips from Port Arthur to the mine to inspect the progress of the works and attend to convict regulatory matters.

The year 1837 began with the appointment of Dr John Lhotsky to inspect and report on the Tasman Peninsula workings (Whitley 1967: 114-115).¹²⁴ Lhotsky's report, and in particular the plans that it accompanied, provided one of the first accurate depictions of the workings since their commencement (see Figure 3-4 and Appendix 3, Figures A3-26 - A3-27). Lhotsky provided his report in May 1837.¹²⁵ In it he made a series of recommendations, including commencing an extensive campaign of boring to test the limits of the coal reserve. Recommendations were also made on how the day-to-day operation of the mine could be improved, as a way of bringing more order to the works. Although calling Lacey a man of "steadiness, perseverance and experience", Lhotsky did recommend that a "gentleman of higher extraction" be put in charge of the only government-run coal mine in the colony, relegating Lacey to the position of head overseer. These recommendations were not to be followed, with Lacey remaining in place as mining overseer. Indeed, Lacey's value to the establishment was such that, when he achieved his absolute pardon early the following year, his salary was increased from £45 per annum to £70, with a further recommendation that it rise to £90 in 1839.¹²⁶

Lhotsky's plan of the settlement (Figure 3-4) showed it situated within a short distance of Norfolk Bay's western coast, the black-inked squares denoting the prisoners' and administrative compound, as

¹²¹ Gavin Casey, Assistant Surgeon, to John Arthur, General Inspector of Hospitals, 4 October 1836, CSO 1/884/18754, T.A.H.O. (UB).

¹²² List of Officers, 1837, CSO 50/1/11, T.A.H.O.

¹²³ Gavin Casey, Assistant Surgeon, to John Arthur, General Inspector of Hospitals, 4 October 1836, CSO 1/884/18754, T.A.H.O. (UB).

¹²⁴ Private Secretary to John Montagu, Colonial Secretary, 24 January 1837, CSO 5/8/115, T.A.H.O. (BT).

¹²⁵ Dr John Lhotsky to Charles O'Hara Booth, Commandant, 25 May 1837, CSO 5/72/1584, T.A.H.O.; Dr John Lhotsky to George Arthur, Lieutenant Governor, 176 May 1837, CSO 5/8/115, T.A.H.O. (BT).

¹²⁶ Minutes of the Executive Council, no. 80, 12 April 1838, EC 4/6, T.A.H.O. (BT); List of Officers, 1837, CSO 50/1/11, T.A.H.O.

well as that of the military, perched on the rising ground overlooking the adit entrances to the workings. Tracks criss-crossed the ground, linking the compounds with the workings and jetties. Of the latter there were two, including the one constructed in early 1836 and another 360ft (280m) jetty to its south commenced in early 1837. This jetty was topped by a double-tracked timber tramroad, allowing the rapid movement of coal from the adit workings to the jetty (Brand 1993: 11). By 1838 it was recorded that both jetties had "rail and tram road" running on them (Lempriere 1839: 79). Also traced upon the map was the outline of the underground workings, extending north west from their coastal entrance and passing under the military compound. Lhotsky's second plan, which was possibly completed with the aid of convict draughtsman Henry Laing, was compiled around the same time as the first (see Appendix 3, Figure A3-27).¹²⁷ This highly detailed chart of the underground workings depicted the maze of drives and cross-cuts that had been cut by the convict miners in just over three years of operation.

Lhotsky's plan of the aboveground establishment depicted it at a time when the number of convicts at the station hovered around 122, overseen by a military detachment of fourteen.¹²⁸ This population was split between the two prisoner and military compounds. The prisoners' compound also served as the administrative hub, where a joint superintendent's and constables' quarters, as well as a blacksmith, had been added. The gradually-increasing population at the mine meant that the original cluster of timber huts which had once been adequate for the small mining camp became completely unsuitable. With every possibility that the operation was set to expand even further, the authorities recognised the need to upgrade the existing prisoner accommodation. Plans for a new sandstone barracks compound were drawn up in 1837 and the building completed sometime the following year.¹²⁹ Toward the end of 1838 Commissariat Officer Thomas Lempriere described a compound formed from three rectangular buildings surrounding a central square, with a gated wall enclosing the one open side (Lempriere 1839: 80). The stone-built buildings of the compound comprised dormitories, chapel and schoolroom, cookhouse, bakehouse and washhouse. Built on a slope, the east wing was afforded a basement level,

¹²⁷ Dr John Lhotsky to George Arthur, Lieutenant Governor, 176 May 1837, CSO 5/8/115, T.A.H.O. (BT).

¹²⁸ William Simpson, Port Arthur Chaplain, to Charles O'Hara Booth, Commandant, 31 January 1837, CSO 5/16/252, T.A.H.O. (UB).

¹²⁹ Henry Laing, *Design for a New Prisoners' Barracks*, ca.1837, CON 87/82, T.A.H.O.

in which was placed a gaol, commissariat store and sixteen solitary cells (see Figure 3-5 and Figure 3-6).

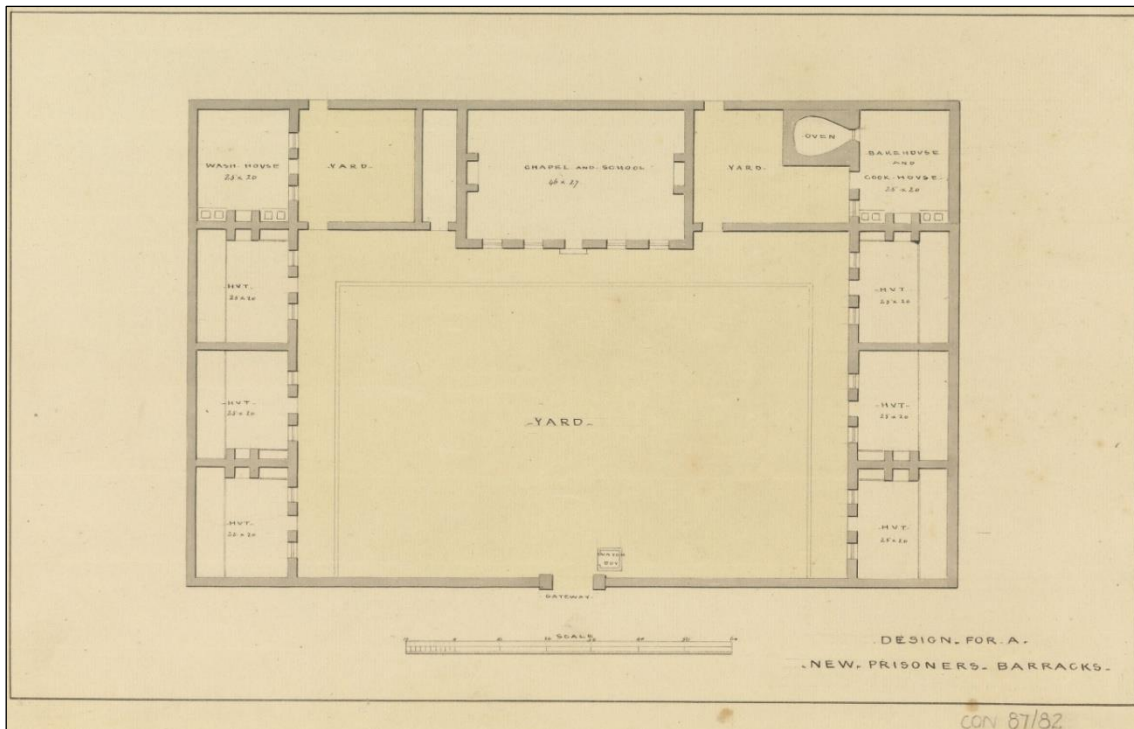


Figure 3-5: Proposed plan of second barracks, Tasman Peninsula. The finished layout of the actual barracks closely resembled this proposal
(Henry Laing, *Design for a New Prisoners' Barracks*, ca.1837, CON 87/82, T.A.H.O.)



Figure 3-6: Illustration from ca.1841 looking south over the completed prisoners' barracks
(Owen Stanley, *Penal Settlement VDL, Convict prison near the Coal Mines*, n.d. [January 1841], Tasmanian Museum and Art Gallery)

Commensurate with the gradually increasingly spread of the establishment aboveground, was the growth of its underground workings and ancillary infrastructure. Within a month of Lhotsky's plan being received in Hobart, sinking began on a new shaft (Heard 1981: 212). The addition of this shaft to the workings resulted in an increase of daily output from 35 tons to 50 tons (Lempriere 1839: 79; Brand 1993: 11). At the close of 1838, over 200 convicts were recorded at the station, their labour dedicated to the sole task of ensuring that a constant supply of coal was maintained to the waiting holds of the coal-carriers.¹³⁰

From 1839 mining operations were marked by labour shortages, the administrators continually having to balance the requirements of working existing seams, against the need to explore new ground and start new workings. Productivity was once again hampered when work commenced on sinking a new shaft.¹³¹ Work on this new shaft drew labour away from the other workings to such an extent that the output of the mines was drastically reduced for four months.¹³² From May to September monthly tonnage (shipped by private contractors) peaked at 828 in June, but otherwise did not go beyond 600.¹³³ It was not until October, the first full month of uninterrupted operation, that some 1004 tons of coal was shipped from the mine, followed by 1089 tons the following month.¹³⁴

Productivity was also affected by problems in the supply of convict labour to the station. In August 1839 Booth complained of a want of "additional 'Miners' as the Works at the Mines are considerably retarded at the present moment for want of more efficient Men of this description."¹³⁵ The following year Booth again commented that lack of skilled miners was hampering the progress of the works, which he believed were otherwise in a very promising state.¹³⁶ Booth's difficulties were exacerbated

¹³⁰ Surgeon Superintendent, *Minerva*, to Sir John Franklin, Lieutenant Governor, 15 October 1838, CSO 5/146/3551, T.A.H.O. (BT).

¹³¹ Charles O'Hara Booth, Commandant, to Matthew Forster, Colonial Secretary, n.d. (June 1839), CSO 5/199/4778, T.A.H.O.

¹³² Charles O'Hara Booth, Commandant, to Matthew Forster, Colonial Secretary, 16 September 1839, CSO 5/199/4778, T.A.H.O.

¹³³ Charles O'Hara Booth, Commandant, to Matthew Forster, Colonial Secretary, Return of coals shipped from the Coal Mines, Slopem Main, from the 1st November 1838 to 1st May 1840, For Private Service, 16 September 1839, CSO 5/199/4778, T.A.H.O.

¹³⁴ *Ibid.*

¹³⁵ Charles O'Hara Booth, Commandant, to Matthew Forster, Colonial Secretary, 31 August 1839, CSO 5/199/4778, T.A.H.O.

¹³⁶ Charles O'Hara Booth, Commandant, to Matthew Forster, Colonial Secretary, 29 April 1840, CSO 5/199/4778, T.A.H.O.

by the discovery of coal at Recherche Bay and the eventual detachment of Lacey and a group of convicts to inspect and then work the camp.¹³⁷ In April 1840 Booth highlighted the need for skilled convict miners on the Peninsula:

...for want of Miners - if we had more at present it would be of great service as all we have are employed getting coal others might be more beneficially employed in Sinking Operations for New Seams - but from there we cannot spare a man.¹³⁸

At least ten experienced miners were sent to Recherche Bay, greatly exacerbating the labour shortage, Booth recorded that in June there were only twenty miners at the coal mines, the latter removal of ten of these to Recherche Bay representing a 50% drop in the effective workforce.¹³⁹ The appointment of experienced miner and ticket-of-leave holder James Hurst as a mining overseer in December 1840 was probably an attempt to alleviate the division of Lacey's attention between the two works.¹⁴⁰ So too was the purchase of a steam engine which, although arriving in July 1840, was not to be put in working order until August 1841.¹⁴¹ By the start of 1841 the new 1839 shaft was serviced by an inclined plane linking it to a new jetty at Plunkett Point.¹⁴²

At the start of 1841, Lieutenant Governor Franklin had toured the Tasman Peninsula with the principal aim of judging its suitability for the establishment of new probation stations.¹⁴³ In December the previous year Commandant Booth had foreshadowed the conversion of the mining station into a probation establishment, the first of which was established on the Tasman Peninsula at Salt Water River in March 1841 (Brand 1990: 16).¹⁴⁴ Over the course of 1841 the mine's administrative population substantially increased.¹⁴⁵ In line with staffing requirements at new probation stations, a

¹³⁷ Charles O'Hara Booth, Commandant, to John Montagu, Colonial Secretary, 10 February 1840, CSO 5/224/5707, T.A.H.O.; John Montagu, Colonial Secretary, to Charles O'Hara Booth, Commandant, 5 June 1840, CSO 5/224/5707, T.A.H.O.

¹³⁸ Charles O'Hara Booth, Commandant, to John Montagu, Colonial Secretary, 29 April 1839, CSO 5/199/4778, T.A.H.O.

¹³⁹ Charles O'Hara Booth, Commandant, to John Montagu, Colonial Secretary, 25 August 1840, CSO 5/224/5707, T.A.H.O.

¹⁴⁰ James Hurst, mining overseer, to Charles O'Hara Booth, Commandant, 8 August 1842, CSO 22/22/880, T.A.H.O. (BT).

¹⁴¹ Alexander Clarke to J.C. Victor, Commanding Royal Engineer, 30 July 1840, CSO 5/207/5127, T.A.H.O. (BT);

Alexander Clarke to John Montagu, Colonial Secretary, 5 August 1841, CSO 22/4/56, T.A.H.O. (BT).

¹⁴² Owen Stanley, *Penal Settlement 1841. Commencement of the inclined plane*, n.d. (January 1841), Tasmanian Museum and Art Gallery; Owen Stanley, *Penal Settlement VDL end of inclined plane and jetty*, n.d. (January 1841), Tasmanian Museum and Art Gallery.

¹⁴³ John Montagu, Colonial Secretary, to Charles O'Hara Booth, Commandant, 12 January 1841, CSO 5/274/7120, T.A.H.O. (BT).

¹⁴⁴ Chaplain, Port Arthur, to Captain Commandant Charles O'Hara Booth, Port Arthur Commandant, 31 December 1840, CSO 5/277/7164, T.A.H.O. (BT).

¹⁴⁵ List of Officers, 1841, CSO 50/1/16, T.A.H.O.

superintendent, assistant superintendent, storekeeper and additional overseer had been appointed by the end of that year, in addition to the attachment of a medical officer and Church of England catechist.¹⁴⁶ By the end of the following year, four more assistant superintendents had been appointed, as well as an additional overseer.¹⁴⁷ As staff numbers increased, more buildings were required for accommodation and offices. A plan from 1842 shows that, although the settlement retained the basic layout surveyed five years previously, the number of buildings had substantially increased (see Figure 3-7).

By early 1841 there were 235 convicts recorded at the station, the increasing numbers causing severe overcrowding.¹⁴⁸ These conditions continued into 1842, when the newly-appointed Director of Probation System, Matthew Forster, demanded that the situation be resolved.¹⁴⁹ The nature of the labour too was changing, due to probation's introduction. By October 1842 the station was being populated by newly-arrived prisoners fresh from the transports and offenders from other probation stations, with all the old penal convicts withdrawn.¹⁵⁰ This withdrawal of convicts sentenced under the previous system to other stations in the colony, resulted in a loss of skilled labour.¹⁵¹ When he was elevated to the position of mining overseer in late 1841 upon the departure of Joseph Lacey, James Hurst recorded that the introduction of this breed of convict had made his job more "arduous".¹⁵² David Burn reported that the convicts themselves abhorred the prospect of being sent to the mines:

The mines are esteemed the most irksome punishment the convict encounters, because he is not a practiced miner, and because he labours night and day, eight hours on a spell... I cannot therefore, wonder at the abhorrence of the compulsory miner in loathing what I conceive to be a dreadful vocation, a vocation, I should think, that those who had once been forced to would in future, when relieved, most earnestly avoid. (Burn 1850: 43)

¹⁴⁶ List of Officers, 1841, CSO 50/1/16, T.A.H.O.

¹⁴⁷ List of Officers, 1842, CSO 50/1/17, T.A.H.O.

¹⁴⁸ Samuel Cook, Superintendent, to Matthew Forster, Director of Probation System, n.d. (ca. 1841), Tasmania Papers 134, CY 3079, frames 269-71, M.L. (ST).

¹⁴⁹ Matthew Forster, Director of the Probation System, to Samuel Cook, Superintendent, 3 March 1842, Tasmania Papers 140, M.L. (BT).

¹⁵⁰ *The Courier*, 8 October 1841.

¹⁵¹ John Montagu, Colonial Secretary, to George Maclean, Assistant Commissary General, 22 July 1842, CSO 22/59/909, T.A.H.O. (BT).

¹⁵² James Hurst, mining overseer, to Charles O'Hara Booth, Commandant, 8 August 1842, CSO 22/22/880, T.A.H.O. (BT).



Figure 3-7: Plan of the station during ca.1842
 (Unknown artist, Probation Station "Coal Point" Tasman's Peninsula, ca.1842, Tasmania Papers 156, State Library of New South Wales.)

Problems also beset the works below-ground, as water ingress began to steadily claim portions of the 1839 workings. Gangs of convicts at the force pumps battled to stem the flow, but could only just keep the water at bay. A new shaft was begun in 1841, drawing much-needed labour away from attaining coal from other parts of the works (Brand 1993: 40). These problems led to an inevitable decrease in the amount of coal exported from the station. Commandant Booth warned the government that, as the winter of 1841 drew closer, the supply of coal for private and public purposes would once again be jeopardised by the station's reliance upon a skeleton mining crew.¹⁵³ As exportation of coal slackened, government and contractor vessels were delayed for days on end due to low supply, resulting in a raft of complaints.¹⁵⁴

After visiting the mines in March 1842, Lieutenant Governor Franklin ordered that Commandant Booth investigate sinking two additional shafts, further to the west of those already working.¹⁵⁵ Booth duly submitted his proposal, accompanied by a detailed plan of the existing workings.¹⁵⁶ Experienced miner (and serving convict) William Dawson was also sent to the Peninsula, his report forwarded to the Executive Council in July.¹⁵⁷ Both reports agreed that two further shafts should be sunk, bottoming out at the seam's dip and thereby helping drain the works. Dawson postulated that over 2/3 of the coal reserve still remained to be extracted, with 15 acres having already been mined and an estimated 30 acres remaining.¹⁵⁸ Although Dawson believed that the situation of the mine was "very promising indeed", he warned that, unless a new shaft was begun immediately along the lines suggested by Hurst and Booth, the already small trickle of coal would cease altogether within eighteen months. Dawson recommended that the works be expedited by moving the presently useless

¹⁵³ Charles O'Hara Booth, Commandant, to John Montagu, Colonial Secretary, 17 February 1842, CSO 5/208/5150, T.A.H.O.

¹⁵⁴ George Maclean, Assistant Commissary General, to John Montagu, Colonial Secretary, 8 December 1841, CSO 22/59/909, T.A.H.O.

¹⁵⁵ Matthew Forster, Director Probation Service, to Charles O'Hara Booth, Commandant, 15 March 1842, Tasmania Papers 140, M.L. (BT).

¹⁵⁶ Charles O'Hara Booth, Commandant, to Josiah Spode, Principal Superintendent, 21 March 1842, CSO 22/59/909, T.A.H.O.

¹⁵⁷ Charles O'Hara Booth, Commandant, to John Montagu, Colonial Secretary, 20 July 1842, CSO 22/59/909, T.A.H.O.

¹⁵⁸ William Dawson to Josiah Spode, Principal Superintendent, 21 July 1842, CSO 22/59/909, T.A.H.O.

steam engine to the site of the new shaft and an inclined plane laid to the Plunkett Point jetty to facilitate the removal and shipment of the 50-60 tons expected per day.

Dawson was duly employed at the mines from October 1842 to aid Hurst in the sinking of the new shaft, tasked with surveying the works, keeping a tally of daily production and superintending surface works (tramways and roads).¹⁵⁹ Hurst, who had achieved his emancipation by August 1842, remained responsible for the underground works, including the sinking of the new shaft.¹⁶⁰ In addition he received a salary of £110 per year, which would increase to £135 with the completion of the new shaft and to £160 when it had been in full operation for a year.¹⁶¹

The sinking of the new shaft did not appear begin immediately, work finally commencing in the latter half of 1843.¹⁶² A new jetty was also underway by May 1844, replacing the earlier one at Plunkett Point.¹⁶³ By January 1845 both the new shaft and the 1839-43 shafts were described as in operation, with Hurst's salary increasing to £160 in December in recognition of that fact.¹⁶⁴ The shaft was serviced by a self-acting inclined plane, taking the cartloads of coal down to the jetty. The steam engine had also been removed to the new shaft, leaving pumping and winding at the old 1842 shaft to be carried out by hand.¹⁶⁵

By the close of 1844 the convict population at the station was 583, overseen by a civil establishment of 21 and a military guard of 62 (McLachlan and Macfie 1995: 74).¹⁶⁶ Convict, civil and military continued to be housed in the same structures that had served the station for close to a decade. Accommodation and administrative infrastructure was degraded and unsatisfactory, the military barracks described in late 1846 as "unfit for the occupation of the Troops" and even worse than the

¹⁵⁹ Charles O'Hara Booth, Commandant, to John Montagu, Colonial Secretary, 29 September 1842, CSO 22/59/909, T.A.H.O.; John Montagu, Colonial Secretary, to Josiah Spode, Principal Superintendent, 15 October 1842, CSO 22/59/909, T.A.H.O.

¹⁶⁰ Charles O'Hara Booth, Commandant, to John Montagu, Colonial Secretary, 29 September 1842, CSO 22/59/909, T.A.H.O.

¹⁶¹ Report of the Committee of Officers into convict expenditure, 31 December 1845, CON 103/3, T.A.H.O. (BT).

¹⁶² *Colonial Times*, 21 February 1843; James Hurst, Mining Overseer, to Charles O'Hara Booth, Captain Commandant, 1 May 1843, CSO 22/22/880, T.A.H.O. (BT); Charles O'Hara Booth, Captain Commandant, to Colonial Secretary, 10 May 1843, CSO 22/22/880, T.A.H.O. (BT).

¹⁶³ Unknown correspondent to Major Mainwaring, Visiting Magistrate, 29 May 1844, Misc 62/6 A1089, T.A.H.O. (UB).

¹⁶⁴ Unknown correspondent to Matthew Forster, Comptroller General, 18 January 1845, Misc 62/10/A1094, T.A.H.O. (UB); Report of the Committee of Officers into convict expenditure, 31 December 1845, CON 103/3, T.A.H.O. (BT).

¹⁶⁵ *Convict Discipline and Transportation*, (941), p. 69.

¹⁶⁶ *Convict Discipline*, Matthew Forster, Comptroller General, to Sir John Eardley-Wilmot, Lieutenant Governor, 31 January 1845, Enclosure No. 1, (659), p. 71, 78-9.

quarters provided to the convicts.¹⁶⁷ Poor accommodation and overcrowding amongst the convict population led to a steadily-increasing level of focus upon the perceived prevalence of homosexuality amongst the convicts. With mounting official concern, reports into the "problem" increasingly appeared from 1844, lamenting its "evils", but proposing few remedies other than the station's closure.¹⁶⁸ The government's reaction was to upgrade existing buildings to improve separation between classes and individuals, as well as the construction of purpose-built separate apartments and solitary cells (Reid 2007: 206, 214).¹⁶⁹

During the mid-1840s the acute pressure on convict accommodation at the mine lessened, the population declining from a high 548 at the close of 1845, to 345 six months later.¹⁷⁰ By this time the station had been re-classified as a punishment station for colonially-convicted offenders, with all other classes of convict removed to other stations.¹⁷¹ It was hoped that the reduction would allow a focus upon mining operations and a shrinking in the size of the administrative apparatus required to superintend them.¹⁷² However, the mining efficiency at the station was steadily decreasing. James Hurst resigned his position in August 1847, the loss of such skilled mining overseers leading to further decline of the station's mining capabilities.¹⁷³ In that same month Deputy Commissary General George Maclean wrote that "everything is crumbling to pieces - works - railroad - wagons - wharf and shoot - and all apparently for want of system, proper management and attention."¹⁷⁴

Eventually, inefficiencies in the administrative structure, the manner in which the coal was being mined and the management of the convict workforce, in combination with a colony-wide shift in how

¹⁶⁷ Captain W.C. Hadden, Royal Engineers, to J.C. Victor, Commanding Royal Engineer, 11 April 1836, Misc 62/10 A1095, T.A.H.O. (UB).

¹⁶⁸ For example: *Convict Discipline and Transportation*, Sir Eardley Wilmot, Lieutenant Governor, to Lord Stanley, Secretary of State, 6 February 1846, Robert Pitcairn to Lord Stanley, Secretary of State, 4 February 1846, Sir Eardley Wilmot, Lieutenant Governor, to Lord Stanley, Secretary of State, 17 March 1846, William Champ to Sir Eardley Wilmot, Lieutenant Governor, 14 March 1846, the Reverence Henry Phibbs Fry to Lord Stanley, Secretary of State, 17 August 1846, B.P.P. 1847 (785), pp. 34, 38, 46, 187.

¹⁶⁹ J.C. Victor, Commanding Royal Engineers, to J.E. Bicheno, Colonial Secretary, 13 April 1846, Misc 62/10 A1095, T.A.H.O. (UB).

¹⁷⁰ *Convict Discipline and Transportation*, Enclosure No. 6, Return of the State of the Schools at Probation Gang Stations, for the Half Year ending 31st December, 1845, John Hampton, Comptroller General, to Eardley-Wilmot, Lieutenant Governor, 1 August 1846, (785), pp. 24, 122.

¹⁷¹ *Convict Discipline and Transportation*, John Hampton, Comptroller General, to Eardley-Wilmot, Lieutenant Governor, 1 August 1846, (785), p. 122.

¹⁷² *Convict Discipline and Transportation*, John Hampton, Comptroller General, to Lieutenant Governor, 6 May 1847, (941), p. 92.

¹⁷³ Henry Smith, former Superintendent, to unknown recipient, 16 September 1847, Misc 62/22/A1118, T.A.H.O. (UB).

¹⁷⁴ George Maclean, Deputy Commissary General, to John Hampton, Comptroller General, 29 August 1847, CO 280/235/569, T.A.H.O. (BT).

probation was administered, resulted in the closure of the mine as a convict station and its transformation into a privately-leased mining operation. Comptroller General John Hampton reported in May 1848 that the mines would soon be let, the operation having proved costly. A diminishing supply of convict labour, plus the nature of the labour, which "interfered with strict and systematic discipline" was making it undesirable to continue with the operation.¹⁷⁵ In addition, as recorded by Maclean, the whole establishment was ageing, the mining and administrative infrastructure falling to pieces from want of attention. For the station to keep operational, large capital investment was required, beginning with a new military barracks and hospital, necessitating large outlay at a time when the government was seeking to diminish such expenditure.¹⁷⁶

When the mines were transferred to the private lessee, Alexander Clarke, a small detachment of military was retained at the station 'to prevent absconding and to afford such assistance and support to the Resident Magistrate as might be found necessary.'¹⁷⁷ By October 1849, however, with a constabulary in place to manage the hired probationers working for the lessee, it was recommended that the military be withdrawn.¹⁷⁸ Although their removal was not recorded, it is likely that it took place within a short period of this recommendation being made. The mines continued to be worked by private lessee until the 1890s (Bairstow and Davies 1987: 38)

¹⁷⁵ *Convict Discipline and Transportation*, John Hampton, Comptroller General, 30 May 1848, (1022) (1121), p. 253.

¹⁷⁶ *Ibid.*

¹⁷⁷ John Hampton, Comptroller General to Sir William Denison, Lieutenant Governor, 15 October 1849, Misc 62/22 A1118, T.A.H.O. (UB).

¹⁷⁸ *Ibid.*

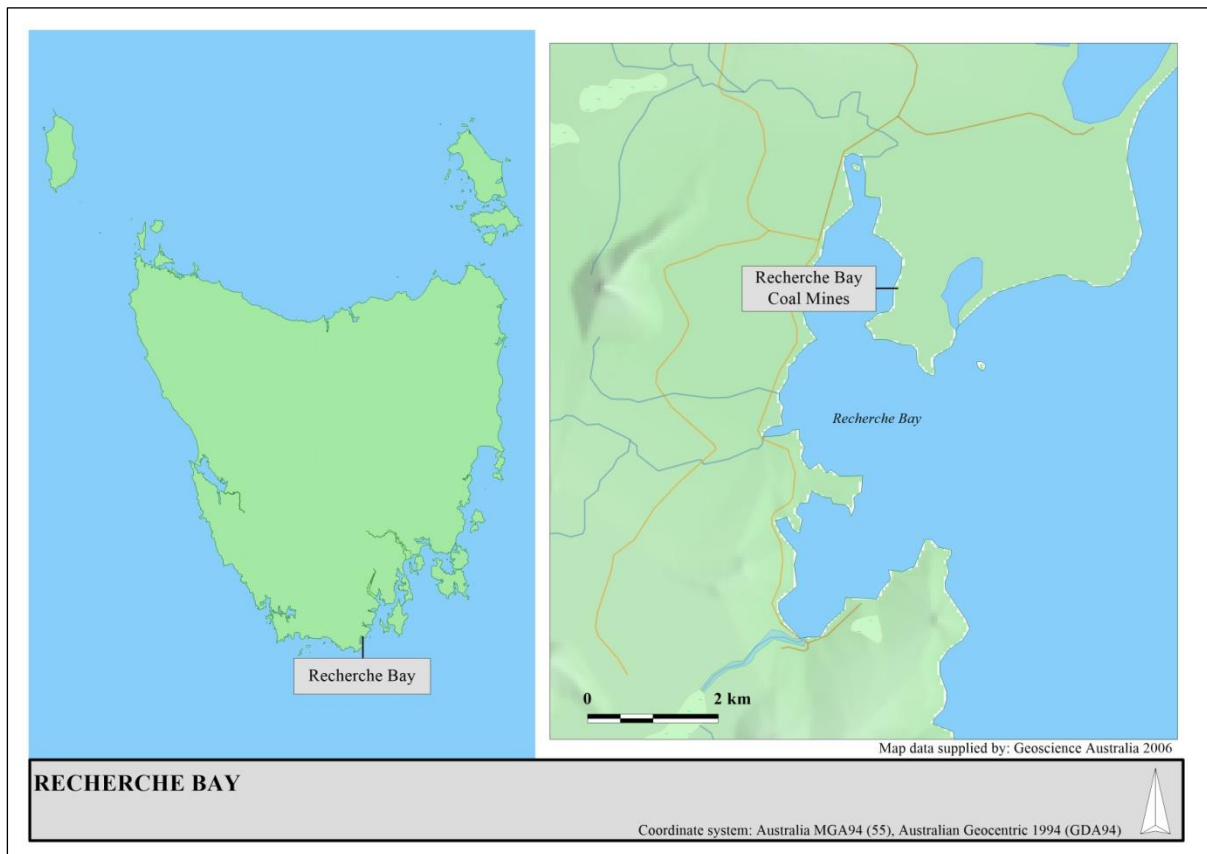


Figure 3-8: Recherche Bay, site location

Coal at Recherche Bay was first noted in 1793 by the French during their voyage of discovery (Woolley and Smith 2004: 163). In the 1830s, Lady Jane Franklin, wife of the then-Lieutenant Governor John Franklin, noted the presence of coal in the northern reaches of Recherche Bay, with a sample taken from the area corresponding with today's Pigsties Bay (Woolley and Smith 2004: 163). The first serious moves to exploit the coal came in 1839 when James Smith, the Assistant Police Magistrate stationed at nearby Southport, undertook to inspect the coal noted by Lady Franklin. Smith reported that, having taken some coal and burned it, it appeared to be of a superior quality to that currently being worked by the mines on the Tasman Peninsula.¹⁷⁹ The colonial government were encouraged by this news, Lieutenant Governor Franklin immediately requesting that Joseph Lacey be

¹⁷⁹ James Smith, Assistant Police Magistrate, to Matthew Forster, Acting Colonial Secretary, 28 December 1839, CSO 5/224/5707, T.A.H.O.

sent from the Tasman Peninsula mine to inspect the coal reported by Smith.¹⁸⁰ Lacey's report was made within three weeks of the request, finding that the coal was of good quality and extended at least sixty yards along the coast.¹⁸¹ The government was quick to act, a flurry of letter-writing taking place as they saw an opportunity to open a profitable enterprise. At this time, the only viable labour that the government could turn to were the convicts working in the mines of the Tasman Peninsula.

Commandant Booth reluctantly authorised the dispatch of Lacey and four other convict miners to Recherche Bay on the 9th February 1840.¹⁸²

While Lacey and his men went about testing the coal, a series of rapid negotiations were taking place in Hobart concerning the future of any mining operation. Two days after Lacey's arrival at Recherche Bay, the Hobart newspaper the *Colonial Times* was reporting with some astonishment:

A New Coal Monopoly...

We learn, with extreme surprise, that a number of favourite individuals have obtained, from the Colonial Government, a lease of the South Port Colliery, for 90 years, with the condition, that the lessors shall be at the expense of opening the shaft; and, that the *favourite few* have divided the lease amongst themselves into so many shares at a given price, *which they have been selling at a considerable profit.*¹⁸³

A week later the *Colonial Times* elaborated further on the "favourite few" to whom the lease had been issued:

We next find...that the Colonial Secretary, the Assistant Colonial Secretary, the Chief Police Magistrate, the Port Officer, the Postmaster-general, the Clerk of the Councils, and one of our Legislative Councillors, together with a number of wealthy non-official favourite gentlemen, have formed themselves into a Company, divided their interest into shares, and have been selling these shares at a considerable profit!¹⁸⁴

¹⁸⁰ Ibid, note by Lieutenant Governor Franklin, 3 January 1840.

¹⁸¹ James Smith, Assistant Police Magistrate, to Matthew Forster, Acting Colonial Secretary, 27 January 1840, CSO 5/224/5707, T.A.H.O.

¹⁸² Charles O'Hara Booth, Commandant, to Matthew Forster, Acting Colonial Secretary, 10 February 1840, CSO 5/224/5707, T.A.H.O.

¹⁸³ *Colonial Times*, 11 February 1840.

¹⁸⁴ *Colonial Times*, 18 February 1840.

The *Colonial Times*' rival, the *Hobart Courier and Van Diemen's Land Gazette*, however, merely believed the naysayers to be suffering from sour grapes, having themselves failed to take up shares in a company that promised to turn a considerable profit.¹⁸⁵ The newspapers were, in fact, reporting a mixture of truths. Within days of Lacey's first investigations into the coal, a joint-stock company selling 400 shares at £50 each had been formed, its Treasurer, James Murdoch, presenting a petition to the government on 6 February requesting that the company be allowed to work the coal.¹⁸⁶ Indeed, such a company was at that time an attractive proposition. The Tasman Peninsula mine had only just recovered from an operational hiatus which had seen the price of coal skyrocket. Even though operations were back to normal by early 1840, the quality and quantity of the coal was still the subject of numerous complaints. Anybody who could offer coal in competition to the unreliable Tasman Peninsula operation stood to capitalise. Of the "favourite few" listed by the *Colonial Times*, only two - the Chief Police Magistrate Josiah Spode and the Assistant Colonial Secretary W.F. Mitchell - were present in the list of shareholders, although the inclusion of any government officers was cause for concern.¹⁸⁷

Lacey eventually reported his findings in April 1840.¹⁸⁸ He and his men had spent some weeks testing the coal, with Lacey advising that an "ultimate advantage" would be achieved by opening a mine in the area. He recommended that a gang of 44 convicts be given the task, which he believed would take eighteen months to win remunerative coal. Commandant Booth recommended to the Lieutenant Governor that, if the operation were to go ahead, it be made a punishment station for convicts.¹⁸⁹

With the findings and recommendations known, the government discussed the proposition in an Executive Council meeting in May. The company, with either abundant confidence in the outcome, or prior inside knowledge, had by that time invested in a schooner, the *Recherche*, to carry coals between

¹⁸⁵ *Hobart Courier and Van Diemen's Land Gazette*, 14 February 1840.

¹⁸⁶ James Murdoch, Acting Secretary and Treasurer, to Matthew Forster, Acting Colonial Secretary, 10 April 1840, CSO 5/224/5707, T.A.H.O.

¹⁸⁷ George Maclean, Deputy Commissary General, to John Montagu, Colonial Secretary 30 October 1843, GO 1/84, p. 400, (copy) 2632, T.A.H.O.

¹⁸⁸ Charles O'Hara Booth, Commandant, to Matthew Forster, Acting Colonial Secretary, 18 April 1840, CSO 5/224/5707, T.A.H.O.

¹⁸⁹ Charles O'Hara Booth, Commandant, to John Montagu, Colonial Secretary, 29 April 1839, CSO 5/199/4778, T.A.H.O.

the mine and Hobart.¹⁹⁰ Until a decision was made by the government, the schooner was employed running coal from the Tasman Peninsula to Hobart.¹⁹¹ At the meeting, which was held days after the purchase of the schooner, support for the enterprise was forthcoming, with the Council members suggesting the following points: 1/ that the Crown retain 1/20 of all coal raised, 2/ that fifty convicts from the Tasman Peninsula mine be used, their upkeep paid for by the company, 3/ that the government have first pick of coal raised, 4/ the government sink the first shaft, the company covering all expenses bar labour, 5/ the company to pay for the cost of a police establishment, and 6/ that Joseph Lacey or others not be employed in private service without government approval.¹⁹² The only dissenting voice on the council was the Archdeacon, W. Hutchins, who expressed concern that any mines at Recherche would operate in opposition to the government-run mines on the Tasman Peninsula. Hutchins also believed the employment of convicts by a private company went against the aims of penal discipline.

The following month, Lieutenant Governor Franklin nevertheless approved the commencement of shaft-sinking at Recherche. Despite Booth's protestations that the loss of labour could cripple the operation on the Tasman Peninsula, a request was sent for Joseph Lacey and a party of convicts to be sent to Recherche with immediate effect.¹⁹³ Within a week, Franklin had also written to the Secretary of State in England, Lord John Russell, informing him that a 21 year lease had been issued to the company.¹⁹⁴ Franklin strongly believed that supporting a private company with convict labour would be beneficial to the colony, meeting a shortfall in the quantity and quality of coal coming from the Tasman Peninsula operation.

Lacey and at least 22 other prisoners - including six skilled miners - were sent down to Recherche Bay in late August 1840.¹⁹⁵ Although Commandant Booth saw the folly of removing men from works which were "comparatively efficient" to "a work of uncertainty", the company's shareholders had not

¹⁹⁰ James Murdoch, Secretary, to Matthew Forster, Acting Colonial Secretary, 13 May 1840, CSO 5/224/5707, T.A.H.O.; James Murdoch, Secretary, to W.F. Mitchell, Assistant Colonial Secretary, 24 September 1841, CSO 22/2/270, T.A.H.O.

¹⁹¹ *Hobart Courier and Van Diemen's Land Gazette*, 15 May 1840.

¹⁹² Minutes of the Executive Council, Minute No 57, 19 May 1840, EC 4/7, T.A.H.O.

¹⁹³ Matthew Forster, Acting Colonial Secretary, to Charles O'Hara Booth, Commandant, 5 June 1840, CSO 5/224/5707, T.A.H.O.

¹⁹⁴ Sir John Franklin, Lieutenant Governor, to Lord John Russell, Secretary of State, 13 June 1840, GO 25/1/8, no. 76, T.A.H.O.

¹⁹⁵ Charles O'Hara Booth, Commandant, to John Montagu, Colonial Secretary, 25 August 1840, CSO 5/224/5707, T.A.H.O.

such concerns as they watched their shares increase in value: shares that had cost 10s each in February were selling in October for £5.¹⁹⁶

Throughout 1841 no coal was forthcoming from the new operation, proving correct Lacey's prediction that coal would not be won on an economic scale during the early period of working. As an aid to progress, Lacey had requested that a gin (winding engine) be erected at the Recherche operation.¹⁹⁷ Initially, an intact gin was to be sent from the Tasman Peninsula, but the poor state of the apparatus and the time needed to dismantle and re-erect it, led Lacey to decide to erect the machinery on site.¹⁹⁸ The materials were forwarded to the establishment and, by June that year, the camp's carpenters had almost completed its construction, with general labourers engaged in levelling a race along which the gin's horses could circulate.¹⁹⁹ In keeping with Lacey's original recommendations, the camp at this point accommodated 43 convicts. Three horses were also stationed at the establishment to be worked on the gin.²⁰⁰ By June 1841 two shafts had been sunk, but were at that stage held up for want of gunpowder, which had been requisitioned from Port Arthur along with a selection of other stores.²⁰¹

All was not well in the camp, as the paying coal continued to prove elusive. As Booth had foreshadowed, the camp infrastructure was insecure, resulting in a series of escapes, a situation made worse by the enforced idleness in June.²⁰² Convicts were apparently making their way to a nearby whaling station, where they were complaining of having nothing to do.²⁰³ Even more troubling, some of the convicts were showing signs of poor health. Toward the end of the year several men were diagnosed with scurvy, the diet at the station having primarily consisted of salt meat and very few vegetables.²⁰⁴ A number of men had also been injured in accidents. Compounding the company's ill-

¹⁹⁶ Charles O'Hara Booth, Commandant, to John Montagu, Colonial Secretary, 10 June 1840, CSO 5/224/5707, T.A.H.O.; *The Courier*, 9 October 1840.

¹⁹⁷ Joseph Lacey, Mining Overseer, to Charles O'Hara Booth, Commandant, 16 February 1841, CSO 5/224/5707, T.A.H.O.

¹⁹⁸ Charles O'Hara Booth, Commandant, to Assistant Colonial Secretary, 17 February 1841, CSO 5/208/5150, T.A.H.O.

¹⁹⁹ Extract from the Diary of the Mining Party at North Port Recherche Bay from the 18th to 26th June 1841, CSO 8/13/301, T.A.H.O.

²⁰⁰ *Ibid.*, 22 June 1841.

²⁰¹ *Ibid.*, 26 June 1841.

²⁰² Charles O'Hara Booth, Captain Commandant, to Matthew Forster, Acting Colonial Secretary, 18 April 1840, CSO 5/224/5707, T.A.H.O.; James Smith, Constable, to W.F. Mitchell, Assistant Colonial Secretary, 2 August 1841, CSO 8/13/301, T.A.H.O.

²⁰³ James Murdoch to W.F. Mitchell, Assistant Colonial Secretary, 30 June 1841, CSO 8/13/301, T.A.H.O.

²⁰⁴ John Montagu, Colonial Secretary, to Principal Medical Officer, 9 November 1841, CSO 22/12/494, T.A.H.O.

fortune, they had been forced to put their newly-acquired schooner, the *Recherche*, on the market in September.²⁰⁵

It was not until 1842 that coal from Recherche Bay actually began to reach the Hobart market in any quantity. Coming eighteen months after the mine had first opened, it was a vindication of Joseph Lacey's initial predictions about how long it would take for the mine to be made even remotely productive. The arrival of 100 tons of coal from Recherche Bay was noted by Assistant Commissary General George Maclean in April, Maclean snidely remarking that such a small amount hardly made up for the damage done by the removal of efficient miners from the Tasman Peninsula in the first place.²⁰⁶ Maclean's comment drew a defensive response from an unnamed member of the government, who believed the coal from the "valuable and abundant vein" at Recherche Bay to be superior to those from the Tasman Peninsula.²⁰⁷ In May, coal from Recherche Bay, labelled "Southport Coals" made their first appearance at Hobart's New Wharf market and by September were arriving on a regular basis.²⁰⁸

With coal starting to make its way to Hobart, the company approached the government for an injection of more convict labour. Considering their request in June 1842, the Executive Council decided that a further twenty prisoners could be sent to bolster the operation.²⁰⁹ This, however, was on the explicit understanding that no further impediment to the work on the Tasman Peninsula would be forthcoming, the output of this operation having markedly slowed due to the sinking of a new shaft. The *Colonial Times* believed the reinforcement of men to be a futile measure - too late to meet the acute demand in Hobart that winter.²¹⁰

Within government, one of the sharpest critics of the whole undertaking was Assistant Commissary General George Maclean. He had been scathing of the damage caused to the Tasman Peninsula operation by the relocation of a significant proportion of its workforce to Recherche Bay, writing in May 1842:

²⁰⁵ James Murdoch, Secretary, to W.F. Mitchell, Assistant Colonial Secretary, 24 September 1841, CSO 22/2/270, T.A.H.O.

²⁰⁶ George Maclean, Assistant Commissary General, to John Montagu, Colonial Secretary, 7 May 1842, CSO 22/59/909, T.A.H.O.

²⁰⁷ Ibid., undated note by unnamed person.

²⁰⁸ 20 May 1842, 30 December 1842, *The Courier*.

²⁰⁹ Report on the Coal Mines at Recherche Bay, No. 189, 11 June 1842, EC 4/7, T.A.H.O.

²¹⁰ *Colonial Times*, 21 June 1842.

...a considerable body of efficient Miners were removed from the Public Service at the Mines to that of a private Company at Recherche Bay... the success of this latter undertaking has long been considered doubtful, 100 tons only having as yet been obtained and sent up to town for sale after upwards of a twelvemonths operations.²¹¹

As a representative of the commissariat department of the imperial government, Maclean was required to account for departmental outgoings - which included the cost of the tools, stores and salaries so far expended on the Recherche operation, as well as the increased expense of buying coal from Newcastle (New South Wales) when the supply from the Tasman Peninsula dwindled.²¹² As early as 1841, Maclean had sought payment for the services of convict engineers involved in the gin's construction, but these had been dismissed by Colonial Secretary John Montagu as the company was not considered a private undertaking - meaning that the costs had to be covered by the government.²¹³ Maclean had not heard anything since that date, later believing that information had been "studiously" kept from him.²¹⁴ Maclean took matters to a higher level and wrote to the Lords of the Treasury, in Britain, to explain the increased costs borne upon his accounts.²¹⁵ This elicited a protestation from the colonial government that everything within the government's power had been done to make the workings productive.²¹⁶

As 1842 gave way to 1843, concerns with the company's operations continued. In March 1843 Maclean requested Booth supply all the accounts relating to the upkeep of Recherche Bay.²¹⁷ No answer is recorded as forthcoming from Booth. Of more immediate concern was the recurrence of a scurvy outbreak at the mines. In July, two convicts arrived in Hobart "in a state of imminent danger

²¹¹ George Maclean, Assistant Commissary General, to G.T. Boyes, Colonial Secretary, 7 May 1842, GO 1/50, p. 127, no. 5, T.A.H.O.

²¹² George Maclean, Assistant Commissary General, to G.T. Boyes, Colonial Secretary, 7 May 1842, GO 1/50, p. 127, no. 5, T.A.H.O.

²¹³ George Maclean, Deputy Commissary General, to John Montagu, Colonial Secretary 30 October 1843, GO 1/84, p. 400, (copy) 2632, T.A.H.O.

²¹⁴ George Maclean, Deputy Commissary General, to John Montagu, Colonial Secretary 30 October 1843, GO 1/84, p. 400, (copy) 2632, T.A.H.O.

²¹⁵ George Maclean, Assistant Commissary General, to G.T. Boyes, Colonial Secretary, 14 July 1842, GO 1/50, p.127, no. 7, T.A.H.O.

²¹⁶ G.T. Boyes, Colonial Secretary, to George Maclean, Assistant Commissary General, 22 July 1842, GO 1/50, p.127, no. 7, T.A.H.O.

²¹⁷ George Maclean, Assistant Colonial Secretary, to W.T. Boyes, Colonial Secretary, 4 March 1843, CSO 22/75/1632, T.A.H.O.

from Scurvy in its most aggravated form".²¹⁸ Evidently few steps had been taken to remedy the situation upon its first appearance in November 1841, the closest medical officer at Southport often unable to make the trip due to inclement weather. The company was immediately informed that a medical officer would be stationed at Recherche Bay at its expense.²¹⁹

Work at the mines continued, a trickle of coal making its way for sale in Hobart. The company was still being pursued by the indomitable George Maclean who, in August, had forwarded to them a bill of £4,316 for the cost of stores, tools and convict labour. Alfred Garrett's, manager of the company's mine, reply was blunt:

In reply I beg to state that according to the Agreement between the Government and the Company, the Company is not indebted to the Government in any sum whatever, but on the contrary, has been put to heavy expenses, which ought not to have fallen on it in furnishing the Station at Recherche Bay with many articles which were omitted to be supplied to the Requisition of the parties in charge, and which were necessary to prevent an absolute stoppage of the Works, and as I have therefore no doubt the Account is forward to me by mistake I beg to return it enclosed.

Alfred Garrett

Manager VDL Coal Company²²⁰

Whereas before the company had apparently avoided providing a direct response, this was an absolute refusal to defray the costs borne by the government. The matter was brought before the Crown Law Officer, with a hunt taking place through the archives of various government departments for a letter from the company agreeing to pay for the government's aid.²²¹ In November Maclean added a further

²¹⁸ Director Inspector General of Hospitals to J.E. Bicheno, Colonial Secretary, 1 July 1843, CSO 22/80/1744, T.A.H.O.

²¹⁹ J.E. Bicheno, Colonial Secretary, to Alfred Garrett, Manager, VDL Coal Company, 13 July 1843, CSO 22/80/1744, T.A.H.O.

²²⁰ Alfred Garrett, Manager, VDL Coal Company, to J.E. Bicheno, Colonial Secretary, 31 August 1843, GO 1/84, p.400, no. 5425, T.A.H.O.

²²¹ J.E. Bicheno, Colonial Secretary, to, George Maclean, Deputy Commissary General, 30 October 1843, GO 1/84, p.400, no. 5366, T.A.H.O.

charge of £339 for rations supplied during the year.²²² He evidently held out little hope of seeing the bill paid, a letter written the next day to the British government stating that there was "little prospect of obtaining a settlement of this transaction".²²³

The last coal from Recherche Bay was sold in Hobart in October 1843. On the 2nd of November the convicts were finally withdrawn from the service of the company.²²⁴ The closure of the operation did not stop Maclean from pursuing a monetary settlement with the company, with Maclean adding a further charge of £180 in February 1844 for convict rations.²²⁵ The British government, having received Maclean's November 1843 letter, was equally adamant that the company should settle the claim.²²⁶ The Colonial Secretary, having consulted with the Crown Law Officer, was of the opinion that no claim for the money could be made until a letter from the company explicitly agreeing to the original terms was forthcoming.²²⁷

At this point the government appears to have given up pursuing the company for its debts. In 1847, four years after the mine had ceased operation, Maclean, summarised the whole affair in a report to the British government:

The result therefore [of the mine's failure], was its dissolution and a loss in labour, provisions, stores, and tools to the British Treasury of a sum of £4656.10s., besides nearly ruining the Port Arthur Mines, owing to the withdrawal of a number of the best miners...I sent accounts...with a request that the company might be proceeded against by the law officers of the Crown for the amount; but I was informed in reply, that, after a search amongst the records of the Secretary's office, no copy of the agreement entered into between the Colonial Government and the company could be found...²²⁸

²²² George Maclean, Deputy Commissary General, to J.E. Bicheno, Colonial Secretary, 14 November 1843, GO 1/84, p.400, no. 2670, T.A.H.O.

²²³ George Maclean, Deputy Commissary General, to CG Trevelyan, Treasury, 16 November 1843, GO 1/84, p.400, T.A.H.O.

²²⁴ George Maclean, Deputy Commissary General, to J.E. Bicheno, Colonial Secretary, 19 February 1844, GO 1/84, p.400, no. 2862, T.A.H.O.

²²⁵ Ibid.

²²⁶ Lord Stanley, Secretary of State, to Sir Eardley Wilmot, Lieutenant Governor, 9 May 1844, GO 1/54, p.90, no. 195, T.A.H.O.

²²⁷ J.E. Bicheno, Colonial Secretary, to George Maclean, Deputy Commissary General, 5 March 1844, GO 1/84, p.400, no. 5872, T.A.H.O.

²²⁸ *Convict Discipline and Transportation*, George Maclean, Deputy Commissary General, to John Hampton, Comptroller General, 23 November 1847, (1022) (1121), p. 105.

The matter was once again brought before the British government in 1850 and again in 1852, when enquiries were made into the debt.²²⁹ The colonial government had not provided satisfactory answers for the whole affair and was once again requested to explain what steps had been taken for the liquidation of the claim.²³⁰ Sir William Denison, Lieutenant Governor of the colony, replied in March 1853.²³¹ He admitted that no action had been taken since 1844 to recover the debt, with key papers having since gone missing and former shareholders of the company having died or become insolvent. Denison believed that the opinion expressed in 1844, that there was little legal basis to prosecute the claim, still stood. No reply is recorded from the British government, marking a close of the whole affair.

Seven months after its closure, William Jones, mining overseer at the Jerusalem mines, inspected the abandoned workings.²³²

...the Vein is to be seen in intermediate places along the beach, from Recherche [*sic*] Bay, to the South West Cape, the distance from the Mine to a shipping place, is by 6 Miles of Road. The Vein is a 4ft Vein, yielding 3ft 6 of good Coal, Anthracite quality...About 1300 Tons of Coal was sent up to Hobart, but this quantity was not got from any regular winning, but chiefly from the outcrop at the Beach, and it was sent up in a very dirty manner, having much rubbish mixed with it. The Vein is workable only by shaft, it has been bored to at the depth of 90 ft, and giving a range or breast of Coal to the outcrop at the Beach of 500 yards.

Joseph Milligan also visited the site, in 1848. At the time of his visit Milligan noted the presence of the two shafts, as well as the original adit: "The shafts, at the time of my visit, were full of water, and water stood so deep in the low-roofed adit-way, that I could not conveniently enter it." (Milligan 1848: 19). Although he did not visit the site of the convict mine, when government geologist W.H. Twelvetrees produced a report on some coal works on the western side of Recherche Bay in 1902, the included map showed the presence of the convict works on the eastern side of the bay (Figure 3-9) (Twelvetrees 1902).

²²⁹ Charles Trevalyn, Treasury, to H. Merivale, 31 May 1852, GO 1/84, p. 400, T.A.H.O.

²³⁰ Secretary of State to Sir William Denison, Lieutenant Governor, 20 June 1852, GO 1/84, p. 400, T.A.H.O.

²³¹ Sir William Denison, Lieutenant Governor, to J.S. Pakington, Secretary of State, 31 March 1853, GO 1/84, p. 400, T.A.H.O.

²³² William Jones, mining overseer, to J.E. Bicheno, Colonial Secretary, 13 July 1844, CSO 8/108/2279, T.A.H.O.

No coal mining is recorded as having taken place after the convict period, though the area was extensively logged in the early 20th century (Kostoglou 1994: 81, 84).

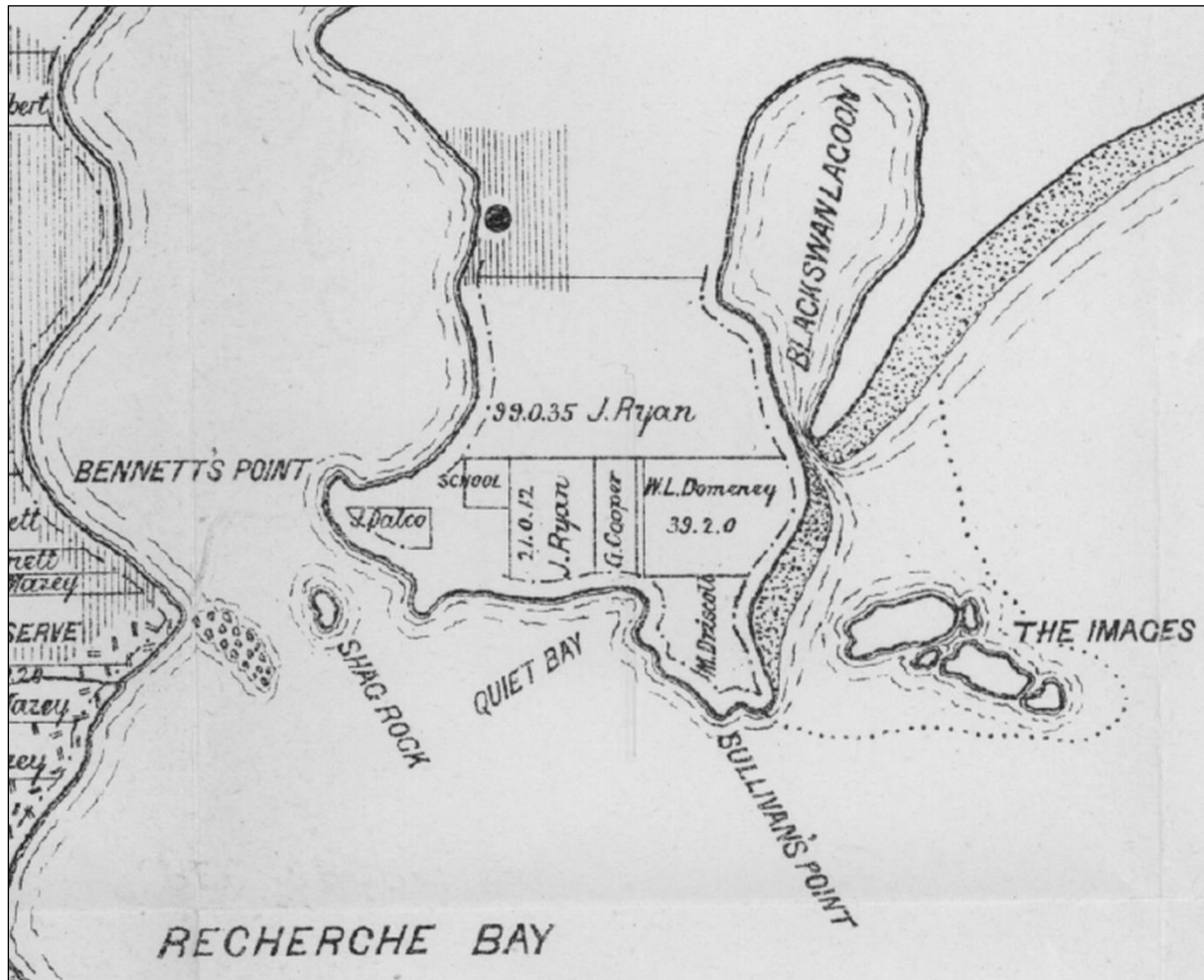


Figure 3-9: Map included with Twelvetrees' 1902 report showing the location of the convict-period workings (black circle)

(W.H. Twelvetrees, *Report on the Coal Field in the Neighbourhood of Recherche Bay* (Hobart: Mineral Resources of Tasmania, 1902), p. 15)

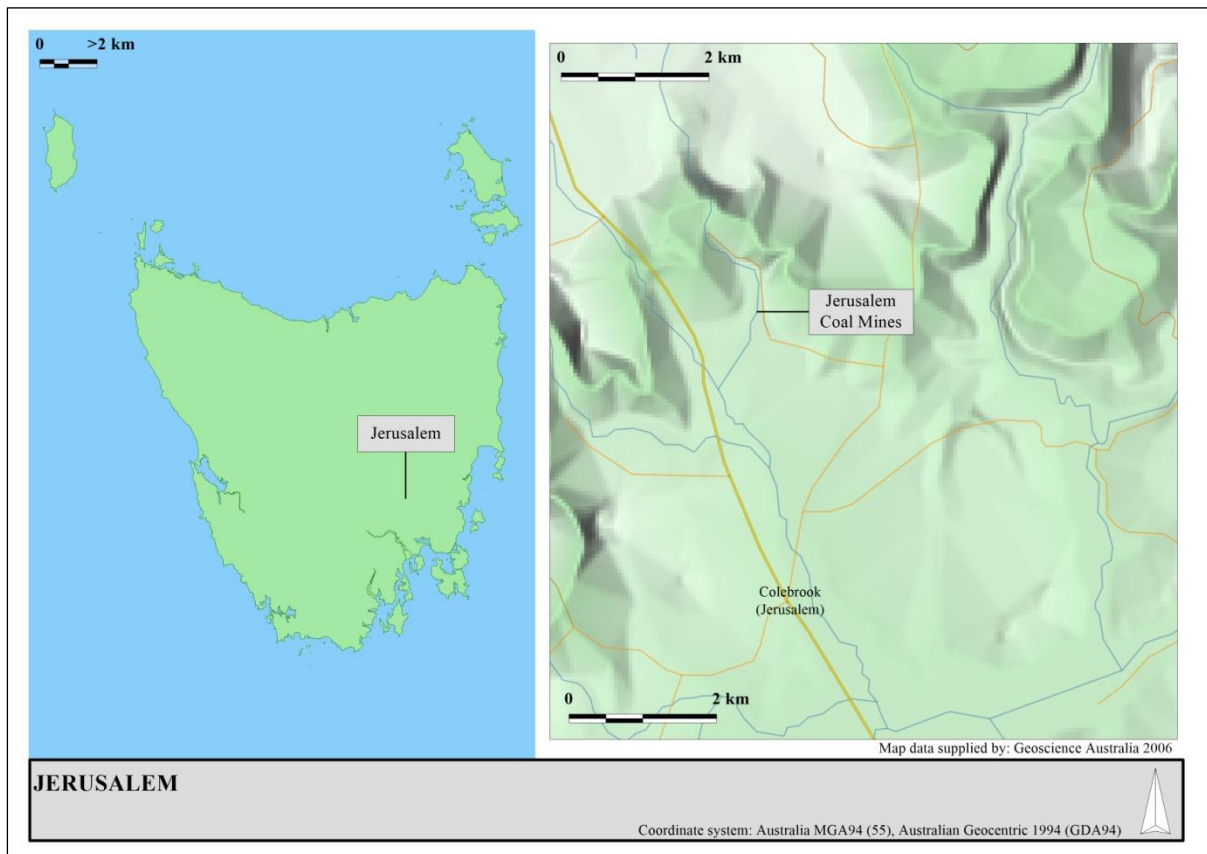


Figure 3-10: Jerusalem, site location

The Jerusalem coal deposit was discovered in early 1841 by a Lieutenant Crookshank, on the bank of Coalmine Creek north of Jerusalem. Crookshank's "discovery" of the coal followed in the footsteps of at least one local landowner, who had, prior to the advent of the Government's interest, been using the coal in his forge.²³³ Dispatched by Lieutenant Governor Franklin to further investigate the outcrop, Crookshank reported favourably on the coal and its situation, claiming that there would "be no impediment to the Mine being worked all the year round" (see Figure 3-11).²³⁴ Crookshank forwarded samples of the coal to Government House and had it tested by Count Paul Edmund de Strzelecki, who pronounced it to be the "superior" of the famed coals of Newcastle, New South Wales.²³⁵ Evidently moved to action by the prospect of a valuable colliery on Hobart's doorstep, as well as perhaps dissatisfied with the progress being made at Recherche Bay and frustrated by the trickle of coal

²³³ George Stokell to the Surveyor General, 10 September 1841, LSD 1/1/28 p. 454-88, T.A.H.O.

²³⁴ Lieutenant Crookshank to John Montagu, Colonial Secretary, 10 May 1841, CSO 5/284/7549, T.A.H.O.

²³⁵ Ibid.

coming from the Tasman Peninsula, Lieutenant Governor Franklin ordered that the parcel of land on Coalmine Creek be surveyed and reserved for government use.²³⁶

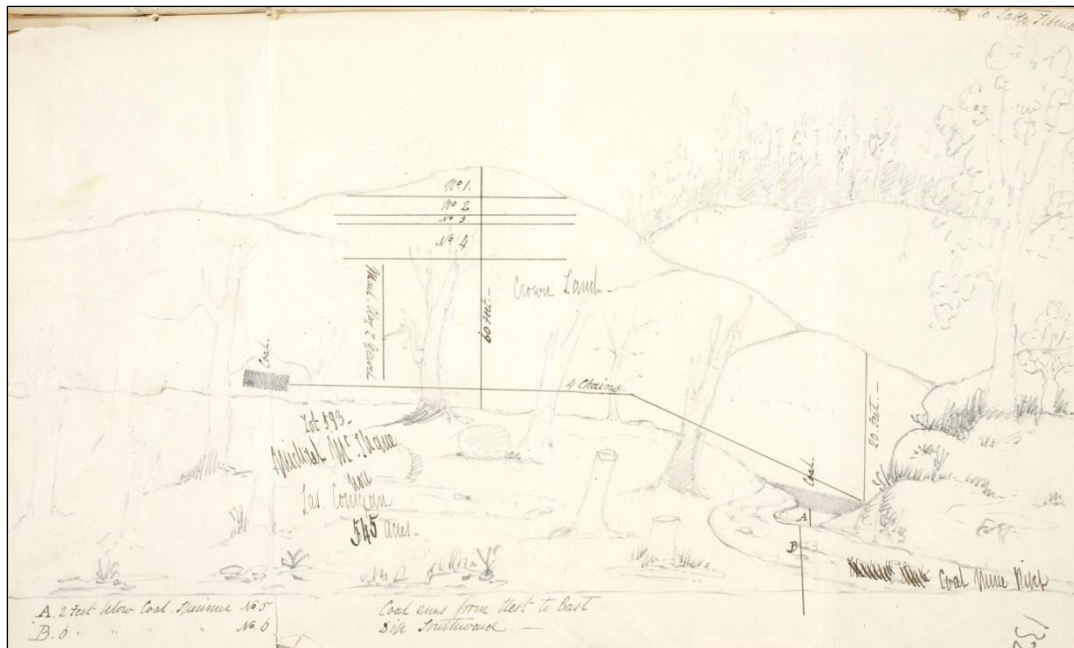


Figure 3-11: Sketch accompanying Crookshank's initial report into the coal at Jerusalem
(Lieutenant Crookshank to John Montagu, Colonial Secretary, 10 May 1841, CSO 5/284/7549, T.A.H.O.)

Within the space of two months the government had the plot inspected by miner James Clare, an emancipated convict.²³⁷ Clare reported that the coal he obtained from Crookshank's location was of an excellent quality, the blacksmiths he gave the coal to supporting Strzelecki's claim that the coal was superior to that from New South Wales.²³⁸ Clare believed that with the aid of ten men the coal could be satisfactorily worked.²³⁹

The Executive Council deliberated and, less than a month after Clare's report was received, agreed to provide Clare with a salary of 5s per day (with rations) to oversee, with the assistance of a constable, a gang of ten convicts.²⁴⁰ In addition, evidently in anticipation of the great amount of coal that was to be hewn from the workings, the council also asked that the landowners between Jerusalem and Richmond be approached to allow a survey to be undertaken for "a tram or Rail Road for the

²³⁶ Ibid, note by the Surveyor General, 8 June 1841.

²³⁷ *Colonial Times*, 15 September 1840, 27 May 1845.

²³⁸ James Clare to Matthew Forster, Chief Police Magistrate, 6 August 1841, LSD 1/1/28 p. 454-88, T.A.H.O.

²³⁹ Ibid.

²⁴⁰ Memorandum, W. Nairn, to John Montagu, Colonial Secretary, 4 September 1841, LSD 1/1/28 p. 454-88, T.A.H.O.

conveyance of the Coal".²⁴¹ With the landowners' agreement, surveyor James Sprent was dispatched to assess the feasibility of running a road to either Richmond or Bridgewater from Jerusalem.²⁴²

While Sprent was searching for avenues along which the coal could be transported, Clare and his work gang busied themselves with the work of actually proving and winning the resource.

Commencing in September 1841, the miners had, within the space of four months, sunk a shaft and driven an adit in the area where coal had been observed, finding two seams of coal (Figure 3-12).²⁴³

The coal from the works was sent to the Jerusalem convict station, where the station blacksmiths pronounced it "very good". In addition to the shaft and adit, the work gang had also erected two huts to live in, laid timber rails in the adit and a bridge over Coalmine Creek, enabling coal to be moved from the workings and to the west over the creek.²⁴⁴ The creek had also been diverted on a more westerly course, taking it away from the workings.

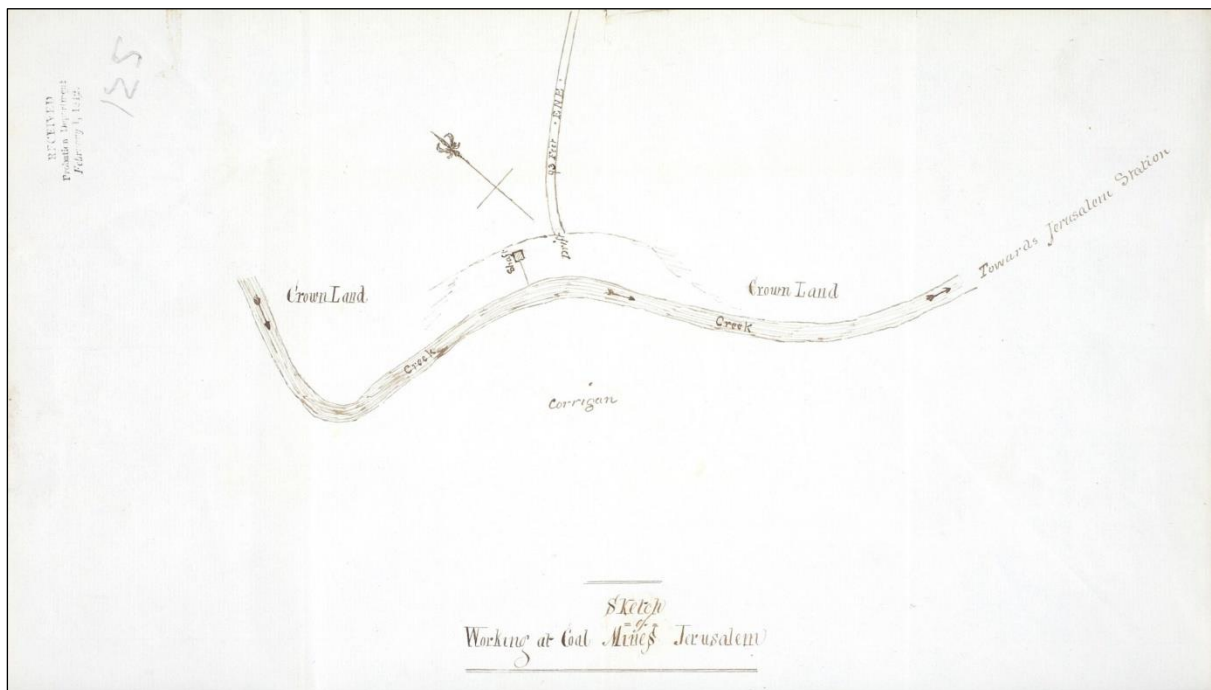


Figure 3-12: Sketch by the superintendent of Jerusalem station showing the shaft and adit on the eastern side of the watercourse

(Mr Ballentine, Superintendent, to Matthew Forster, Chief Police Magistrate, 31 January 1842, CSO 22/145/811, T.A.H.O.)

²⁴¹ Ibid.

²⁴² James Sprent to R. Power, Surveyor General, 4 December 1841, LSD 1/1/28 p. 454-88, T.A.H.O.

²⁴³ James Clare, mine overseer, to Matthew Forster, Chief Police Magistrate, 1 January 1842, CSO 22/145/811, T.A.H.O.

²⁴⁴ James Clare, mine overseer, to Matthew Forster, Chief Police Magistrate, 1 January 1842, CSO 22/145/811, T.A.H.O.; John Hall to Josiah Spode, Principal Superintendent, 7 March 1842, CSO 22/47/190, T.A.H.O.

By the end of February the gang had extended the adit, the seam described as "excellent" and improving as the adit lengthened.²⁴⁵ Ominously, however, Clare did report that the workings had encountered a stone fault in the seam at the end of the drive, but optimistically believed that the obstruction would soon be passed through and coal continue to be won.²⁴⁶ At this stage, some 200 tons of coal were "on hand" at the workings, with a further ton being sent weekly for use by the Jerusalem convict station.²⁴⁷

In March complaints were brought against Clare by the Visiting Magistrate attached to the Jerusalem station.²⁴⁸ The magistrate considered Clare "to be a very improper person to have anything to do with prisoners" apparently constantly quarrelling with the men under his charge, in addition to losing a gallon of rum to an absconding convict. Clare's further services were considered unnecessary, as by that time John Hall, another experienced miner, had been appointed as sub-overseer to the gang.²⁴⁹ Hall appears to have taken over the superintendence of the operation, Clare's name no longer appearing in the records after March 1842. In that month four additional workmen were requested for the operation: three general labourers to replace one man who had absconded and to assist with timbering the adit, and one carpenter to lay rails and repair tools.²⁵⁰ The extra men were duly sent to the mine.²⁵¹

In mid-1842 William Dawson was sent to the Jerusalem establishment to act as a sub-overseer for the gang.²⁵² Dawson's skill was soon recognised and he was asked by Principal Superintendent Josiah Spode to advise on the additional stores and men required to carry on the operation.²⁵³ Dawson's report, which included the recommendation to increase the size of the gang by nine was quickly acted on.²⁵⁴ The decision was also taken to sink additional shafts across the immediate area of the mine,

²⁴⁵ James Clare, mining overseer, to Josiah Spode, Principal Superintendent, 28 February 1842, CSO 22/47/190, T.A.H.O.

²⁴⁶ Ibid.

²⁴⁷ Ibid.

²⁴⁸ Visiting Magistrate to Josiah Spode, Principal Superintendent, 28 March 1842, CSO 22/47/190, T.A.H.O.

²⁴⁹ Ibid.

²⁵⁰ John Hall, mining overseer, to Josiah Spode, Principal Superintendent, 7 March 1842, CSO 22/47/190, T.A.H.O.

²⁵¹ Ibid., note by the Lieutenant Governor, 9 March 1842, CSO 22/47/190, T.A.H.O.

²⁵² Josiah Spode, Principal Superintendent, to G.T. Boyes, Colonial Secretary, 6 July 1842, CSO 22/47/190, T.A.H.O.

²⁵³ Ibid.

²⁵⁴ Ibid., List of articles required at the Coal Mines, Jerusalem, 5 July 1842.

with the works to be supervised by Dawson.²⁵⁵ Within a month of Dawson's report, however, word was received that the party was to be broken up, the principal superintendent of convicts writing:

I beg to inform you that having received verbal instructions from His Excellency to break up the party at the Jerusalem Coal Works I have issued the necessary instructions for that purpose and the Director of Probation System has allowed the Storekeeper at Jerusalem Station to take charge of the Stores Tools etc in case they may be required at some future period.²⁵⁶

At the time of the operation's cessation, the main adit had been driven to the fault, which neither Clare, Hall nor Dawson had penetrated.²⁵⁷

The memory of the colonial authorities was, however, decidedly short. Within the space of a year the workings had been reinspected, with a view to stationing a convict gang at the works. Accordingly, orders were issued for William Jones to proceed to Jerusalem in late December 1843 "for the purpose of examining the Coal found in the neighbourhood, with a view to the employment of a gang of Convicts in the working of it on Crown Property."²⁵⁸ Jones subsequently surveyed the abandoned workings during January 1844.²⁵⁹ He found that the entrance to the main adit had fallen in, but managed to gather enough information about the quantity and quality of the coal in the immediate area. In addition to the main adit and two smaller waterlogged shafts, Jones noted the presence of further coal outcrops north and south of the main adit.²⁶⁰ Jones was confident that the fault which had stopped the earlier workings could be surmounted, but warned that it could take upward of twelve months before the stone could be breached and the coal once again accessed. The placement of a gang of "12 or 13 hands and one Overseer" with Jones in charge was approved by the Lieutenant Governor within days of the report's submission.²⁶¹

²⁵⁵ James Corrigan to Josiah Spode, Principal Superintendent, 29 July 1842, CSO 22/47/190, T.A.H.O.

²⁵⁶ Josiah Spode, Principal Superintendent, to John Montagu, Colonial Secretary, 1 August 1842, CSO 22/47/190, T.A.H.O.

²⁵⁷ William Jones, mining overseer, to John Montagu, Colonial Secretary, 15 January 1844, CSO 8/108/2279, T.A.H.O.

²⁵⁸ G.T. Boyes, Colonial Secretary, to William Jones, 29 December 1843, CSO 8/108/2279, T.A.H.O.

²⁵⁹ William Jones, mining overseer, to J.E. Bicheno, Colonial Secretary, 15 January 1844, CSO 8/108/2279, T.A.H.O.

²⁶⁰ Ibid.

²⁶¹ Ibid., note by Lieutenant Governor John Eardley Wilmot.

Jones and his party arrived at the mine in February 1844 and, within the space of a week had broken into the old workings and cleared out the rubbish.²⁶² With the help of an intake of convict miners from a recently-arrived convict transport (the *Anson*), Jones spent the following month shoring up the adit and working into the stone fault.²⁶³ Work was initially slow, as the miners were required to use only hand tools, but sped up with the introduction of blasting powder in early March.²⁶⁴ Jones forwarded a sketch plan of the main adit as it appeared at this stage (Figure 3-13).

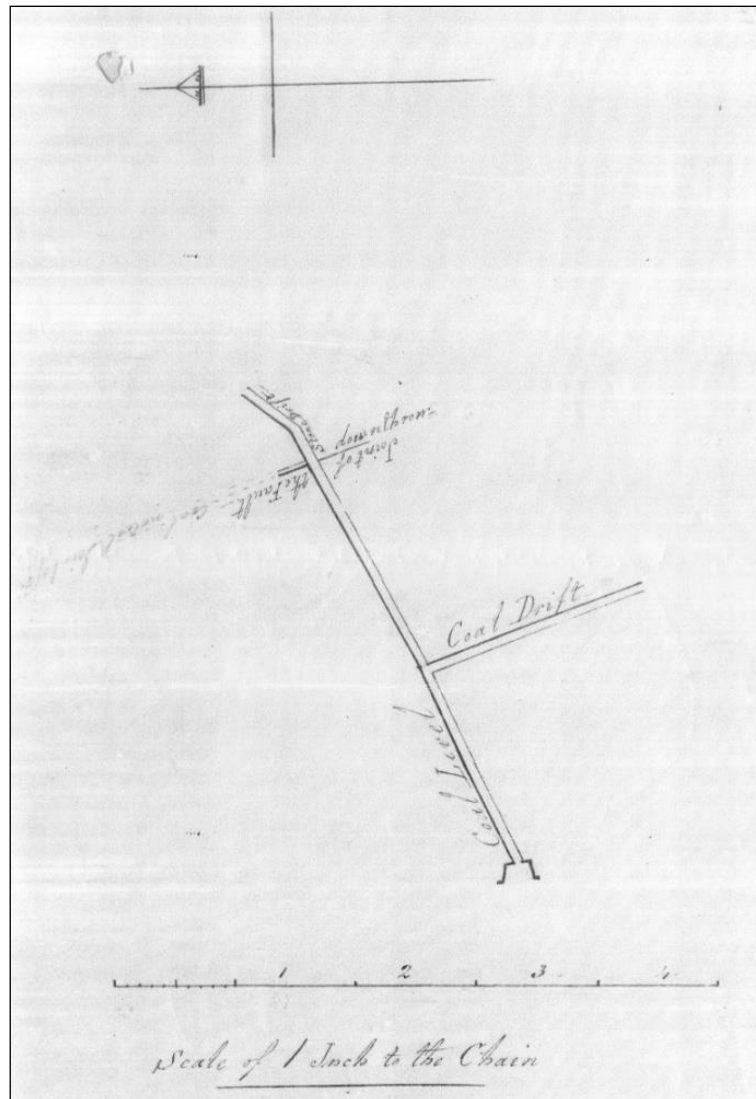


Figure 3-13: Survey of the adit in March 1844, a month after the mine had been reopened
 (William Jones, mining overseer, to J.E. Bicheno, Colonial Secretary, 11 March 1844, CSO 8/108/2279, T.A.H.O.)

²⁶² William Jones, mining overseer, to J.E. Bicheno, Colonial Secretary, 7 February 1844, CSO 8/108/2279, T.A.H.O.

²⁶³ William Jones, mining overseer, to J.E. Bicheno, Colonial Secretary, 11 March 1844, CSO 8/108/2279, T.A.H.O.

²⁶⁴ *Ibid.*

Over the following four months Jones and the gang continued to work at the fault, but the coal did not improve.²⁶⁵ This lack of success drove Jones to test the coal east (on the opposite side of the hill) and to the north. In the latter area he bored for coal in the creek without success, but did test one of the northern coal outcrops.²⁶⁶ In addition, Jones also drove another adit just south of the first, presumably to test the extent of the fault.²⁶⁷ A sketch map produced at the time shows these workings (Figure 3-14).

Despite the fact that Jones had warned that it might take upwards of a year for the fault to be circumvented, the colonial authorities soon grew impatient of the non-productive mine. After only six months of working, the order was given to abandon the mine, Jones being required to secure the timbering in the open adits and close their entrances with dry-walling.²⁶⁸ This was duly done, with Jones leaving the colony soon after.²⁶⁹

Four years after its abandonment, Joseph Milligan undertook his detailed survey of the colony's coal resources (Milligan 1848). As part of this report, Milligan visited the abandoned Jerusalem convict workings. Milligan praised the quality of the coal, recommending that "a more exact and systematic examination be made in the neighbourhood" (Milligan 1848: 80). His report was accompanied by a section showing the relation of the two convict-period adits to the geology, as well as a plan illustrating the main adit (Figure 3-15). Milligan described the old workings, including the various shafts and adits driven into the earth in the hope of tracing the vein (Milligan 1848: 75-6).

Although not worked again during the convict period, the Jerusalem coal bed was extensively tested during the 1870s-90s (Austral Tasmania 2010: 27-36).

²⁶⁵ William Jones, mining overseer, to J.E. Bicheno, Colonial Secretary, 10 August 1844, CSO 8/108/2279, T.A.H.O.

²⁶⁶ Ibid.

²⁶⁷ Ibid.

²⁶⁸ J.E. Bicheno, Colonial Secretary, to Matthew Forster, Comptroller General, 21 August 1844, CSO 8/108/2279, T.A.H.O.

²⁶⁹ William Jones, mining overseer, to J.E. Bicheno, Colonial Secretary, 6 September 1844, CSO 8/108/2279, T.A.H.O.

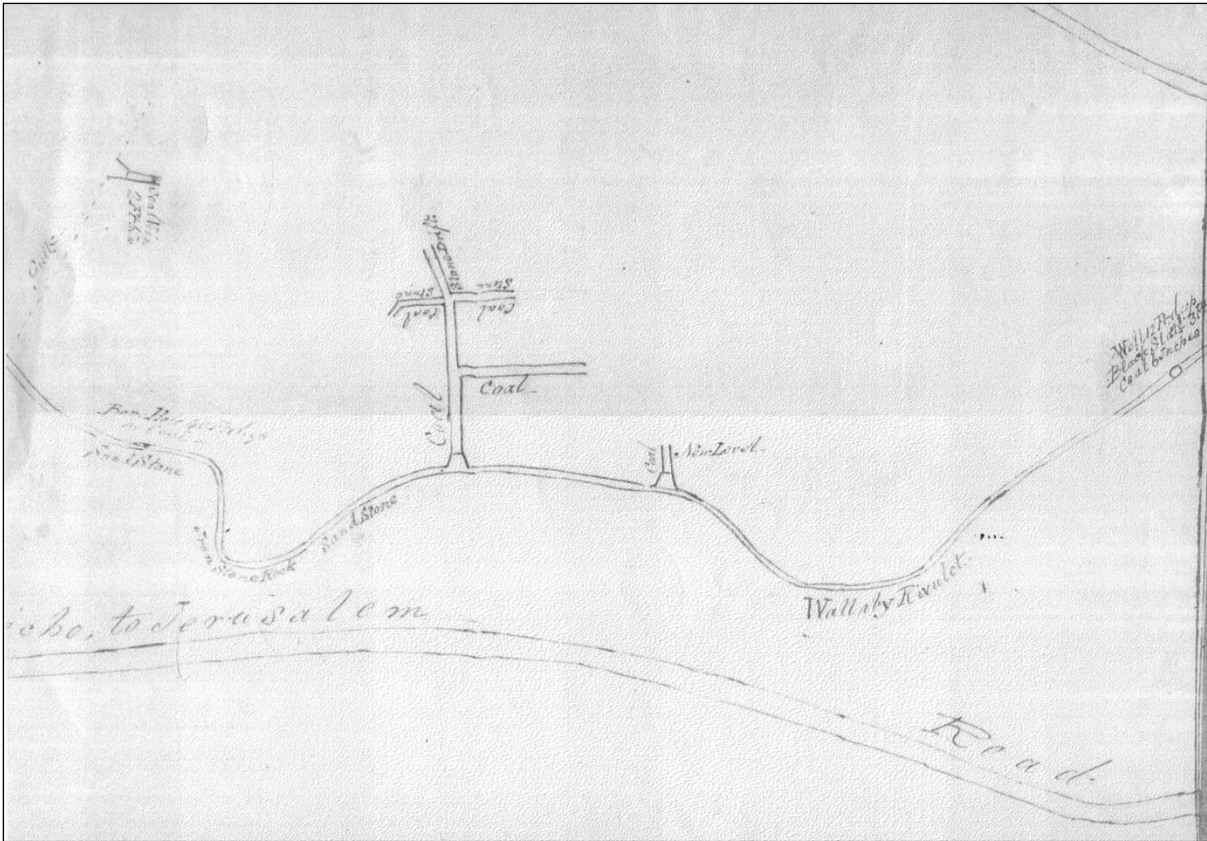


Figure 3-14: Sketch of the extent of the works in August 1844

(William Jones, mining overseer, to J.E. Bicheno, Colonial Secretary, 10 August 1844, CSO 8/108/2279, T.A.H.O.)

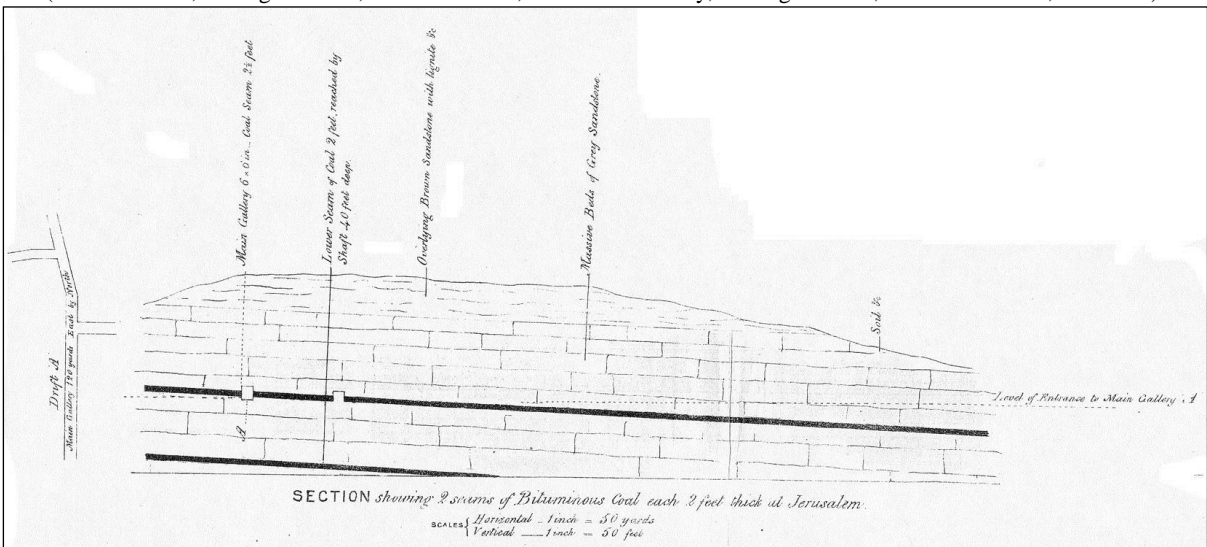


Figure 3-15: Joseph Milligan's survey of the coal strata at Jerusalem. The main adit is shown to the left

(Milligan, J. 1848, *Reports on the Coal Basins of Van Diemen's Land*, Tasmania, Royal Society of Van Diemen's Land)

South Cape Bay, ca.1840s

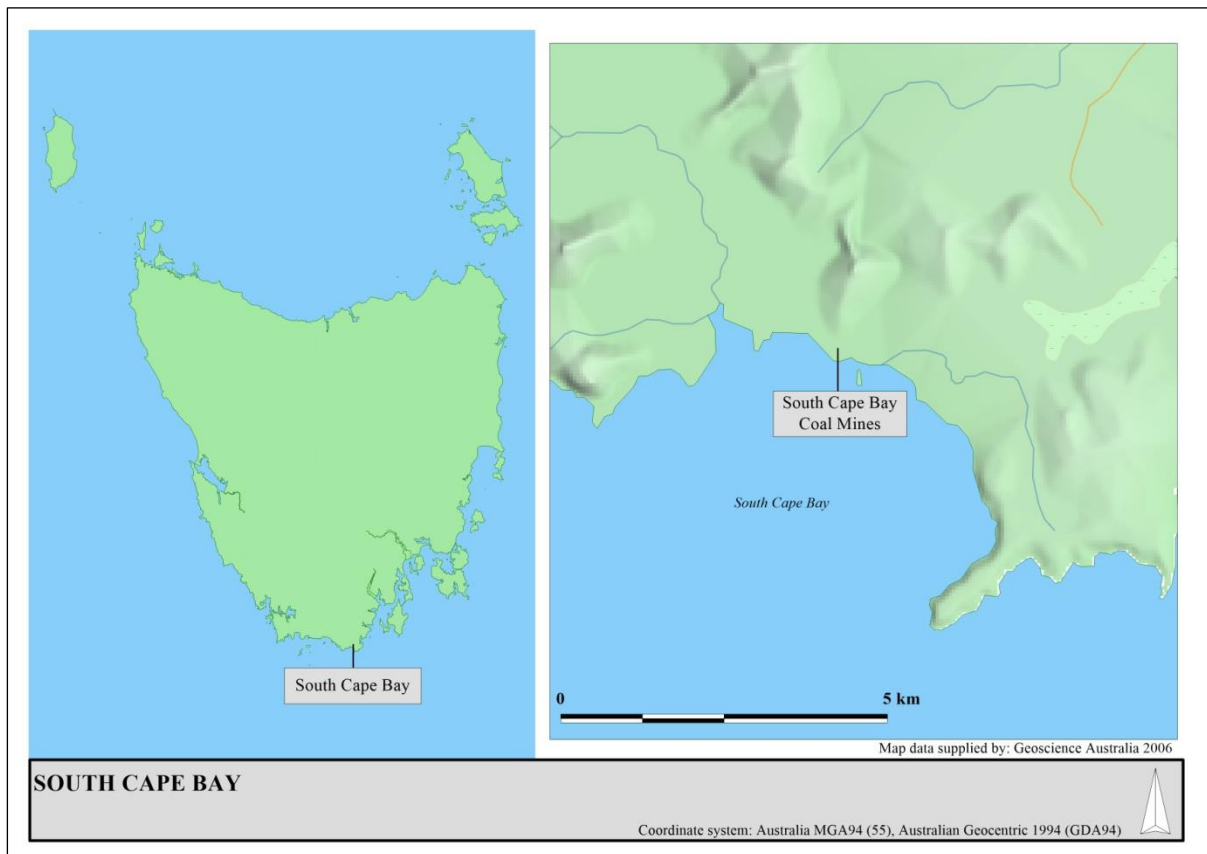


Figure 3-16: South Cape Bay, site location

The coal at South Cape Bay was the first such deposit identified in Van Diemen's Land, noted in 1793 by the French during their voyage of discovery (Woolley and Smith 2004: 163). Three decades later, after European settlement had taken place in the colony, the coal was again noted during an 1824 voyage of discovery.²⁷⁰ The discoverer, James Hobbs, along with Robert Arthur Roberts and Thomas Scott, later returned in 1826 to ascertain the nature of the coal in the region, in particular focussing on coal outcropping from sea cliffs at South Cape Bay.²⁷¹ They drove an adit into a coastal seam, recovering samples to take with them back to Hobart. Although the coal showed promise, it was deemed too inaccessible to be worked for profit.

²⁷⁰ James Hobbs to Sir George Arthur, Lieutenant Governor, 10 September 1824, OS 001, pp. 19-26, M.R.T.

²⁷¹ Report on Coal at South Cape Bay and Adventure Bay, 25 October 1826, OS 002, M.R.T.

The next reference to mining in the area came after the cessation of activity at Recherche Bay, when William Jones inspected the works (see quote above).²⁷² Although ambiguous, Jones' report provides the first indication that the miners at Recherche Bay may have also been sent to work at South Cape Bay. The mines at Recherche Bay were situated right on the coast, within a very sheltered bay ideal for shipping, suggesting that Jones was in fact describing the operation at South Cape Bay. As Hobbs, Roberts and Scott had noted, the coal at South Cape Bay was over five miles from a good shipping place, supporting Jones' observation. In addition, the coal vein at Recherche Bay was described as being only three feet thick, while that at South Cape was four feet.²⁷³

The first solid evidence of mining at South Cape Bay comes from 1848, when Joseph Milligan examined the coal outcropping along the sea cliffs at South Cape Bay, finding it to be good enough for blacksmiths' work, though "inadmissible for domestic purposes" (Milligan 1848: 22). Milligan reported that an adit had been driven into the cliff seam north of Lion Rock by the Southport Coal Company, the adit still being in good repair (Milligan 1848: 22). In further support of Jones' observations four years earlier, Milligan also reported that,

...about 500 or 600 yards inland from where the 4-foot seam appears in the cliff in South Cape Bay, and in a direction nearly east from it, two shafts have been sunk; but in neither have the projectors carried their operations through the greenstone to the coal, which, at that point, I should reckon to be rather more than 400 feet below the grass... (Milligan 1848: 28-9)

Milligan also recorded that an unsuccessful attempt had been made to sink another shaft on the marshes between Recherche Bay and South Cape Bay. This may also have been the work of convict miners attached to the Recherche Bay mining camp.

²⁷² William Jones, mining overseer, to J.E. Bicheno, Colonial Secretary, 13 July 1844, CSO 8/108/2279, T.A.H.O.

²⁷³ Charles O'Hara Booth, Commandant, to Matthew Forster, Acting Colonial Secretary, 18 April 1840, CSO 5/224/5707, T.A.H.O.

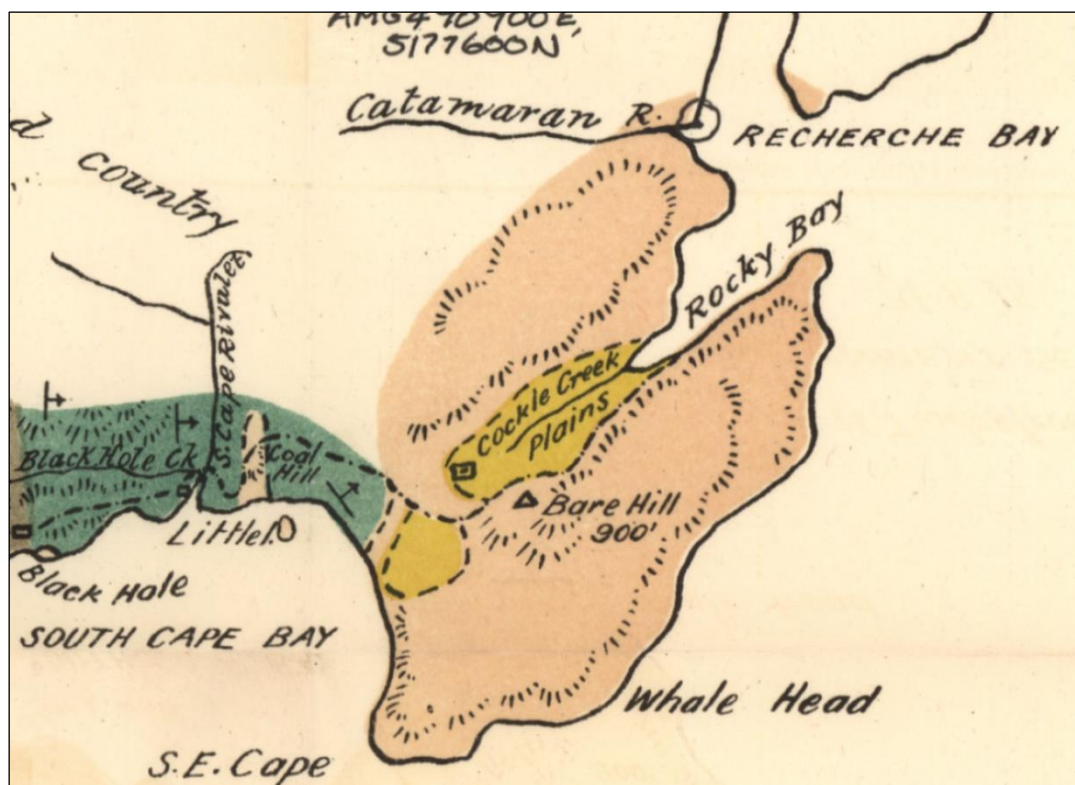


Figure 3-17: Twelvetrees' sketch map showing South Cape Bay. The spot marked 'Coal Hill' is where he located the "government" workings
 (W.H. Twelvetrees, "Reconnaissance of Country between Recherche Bay and New River, Southern Tasmania." *Geological Survey Bulletin*, No.24 (1915): plate. I)

South Cape Bay was not again visited until 1915, when government geologist W.H. Twelvetrees undertook a reconnaissance of the country between Recherche Bay and New River (Figure 3-17) (Twelvetrees 1915: 24). Twelvetrees noted that instability in the sea cliffs had caused the collapse of the original coastal adit, although found that the shaft located by Milligan was still present:

Three or four hundred feet back from the edge of the cliff at Coal Hill Point is an ancient coal shaft, which has been sunk in diabase clay. It is circular, and apparently shallow, and is now full of water. It is said to have been a Government shaft. Four ruined chimneys of Government huts are on the banks to the east. (Twelvetrees 1915: 24)

No other primary accounts of the site have been located.

Conclusion

Between the ca.1822 and 1848 convicts were at the forefront of coal exploration and exploitation in Van Diemen's Land. Although the five case studies varied in size and longevity, each use of the convicts to test and procure coal was judged by many contemporaries as a positive step toward the full development of the colony. Coal was what fed the fires of the government and private sector. It was what kept the offices and homes of hundreds of colonists warm, or fuelled the forges and engines of the manufactories. Won by the labours of the unfree, the coal that was sent from these places became viewed as a staple, to be complained of when the supply did not meet expectation.

Few of these case study sites have been subject to a comprehensive historical overview. The Tasman Peninsula and Recherche Bay have been analysed, but only from a very local perspective. This study has set them - and the other case studies - within a much wider perspective. Because of this, the five case studies should be considered as pieces that fit within a wider economic and social mosaic. They were not isolated, but rather interconnected events which resulted in the deployment of tens - if not hundreds - of convict labourers. As will be elaborated within Chapter 8, these were never isolated operations, but part of a whole that sought to employ convict labour in the most efficient way possible. These operations were never divorced from their economic, political and social surroundings, their formation and development influenced by variable factors.

This section has also demonstrated how much can be learnt of these places by recourse to the historical record. The impression one gets is of places driven by the need to be productive, at the same time as fighting to retain a punishment value. Were they places where punishment superceded profit? Or were they where a balance was sought in order to satisfy both the penological and industrial objectives?

CHAPTER 4: METHODOLOGY, RESULTS AND INTERPRETATION

The previous chapter has used historical inquiry to show how the five case studies worked as places of incarceration and labour, placing their individual historical narratives within their wider social, economic and political systems. The complexity and depth of the historical record varies, some sites accompanied by a wealth of documentary evidence, others by very little. This evidential disparity is also reflected in the archaeological record. All are united by their shared historical purpose, however, the formation and development of these sites has produced very disparate types of archaeological landscape. Such disparity makes them ideal platforms for testing the analytical model outlined in Chapter 2. The following chapter will illustrate the methodology used during the archaeological investigations of these sites: establishing the tools used to extract the archaeological data and outlining the results of this research. The fieldwork and analysis drew upon existing sources of archaeological enquiry and applied different forms of technical and interpretive archaeological method to extract interpretations from these landscapes. The first section will discuss the workings of this process, displaying how the data was gathered and the approach used to query it. The remainder of the chapter will be formed from the raw results of the fieldwork, describing the individual sites and the features contained therein. A basic level of interpretation will be applied to these results, laying the foundation for their further analysis in the following chapter.

Of the five case studies, the Tasman Peninsula coal mine has the largest body of historical and archaeological research attached to it, with the latter spanning over thirty years of research. The results of this previous research has never been satisfactorily synthesised and presented, so this thesis contains an extensive re-evaluation and reinterpretation of this available data. Three of the sites - Recherche Bay, South Cape Bay and Jerusalem coal mines - have required full archaeological survey. The former two sites had been subject to previous archaeological reconnaissance surveys, however the level of analysis required for this research meant that the sites required an intensive level of survey. Jerusalem has never been subject to archaeological survey and similarly required an extensive survey. Macquarie Harbour was subject to a reconnaissance survey in order to confirm the limited potential of the archaeological resource.

Methodology

The following section outlines the approaches taken to extract archaeological data from these landscapes. Where sites were fully surveyed, data was collated through a combination of fieldnotes, sketches and photographs, with Global Positioning System (G.P.S.) points taken to locate each feature. In the cases of Jerusalem and Macquarie Harbour, this level of information was sufficient for the purposes required. At Recherche Bay and South Cape Bay an extra level of detail was required to aid the analysis, with a Total Station (Leica TCR 805) used at the two sites to collect the survey data. The methodology used during this survey is discussed in the relevant sections.

The surveys completed for this research, as well as those undertaken by previous archaeologists, generated a library of documentary, illustrative and spatial records. The former two record types were able to be incorporated into the descriptive and pictorial aspect of this research without a high degree of post-processing. The spatial records, however, required an additional level of processing in order to extract the highest possible quality of information. Consequently, the data gathered by G.P.S. and Total Station was first reduced to an Excel spreadsheet containing the spatial co-ordinates and attached coding information (*x*, *y*, *z*, *name* and *code*). This was then exported as a Comma Separate Values (.CSV) file and imported into a Geographic Information System (G.I.S.) program. The resulting mapping data was then manipulated and queried to further the analysis of the individual sites in question. Background mapping (such as georectified topographic maps and aerial photographs) were used to help locate the data within its local and wider setting. The presentation of the data for each site is discussed in their relevant sections.

In some instances, historical maps and plans, as well as previous archaeological surveys, were of sufficient accuracy to be directly input into the G.I.S., enabling them to be directly referenced to each other and located within a modern geographical reference system. A G.I.S. process called georectification allowed the historic sources to be related to a real-world setting. This involved a series of control points being plotted on both the already georectified base map, as well as the historic

source. These control points were placed on points of reference - such as the corner of a building, or a natural feature - shared by both sources (Figure 4-1 and Figure 4-2). Increased accuracy could be achieved by placing more control points. The G.I.S. program would then use the points to position the historic map or plan in relation to the relevant geographical reference system.

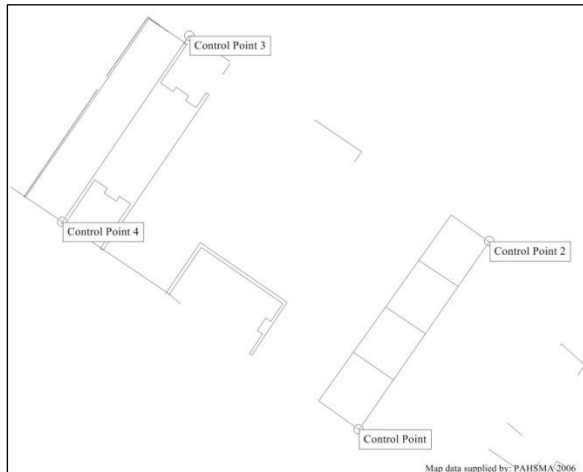


Figure 4-1: Survey of the prisoners' barracks at the Tasman Peninsula coal mine showing placement of control points

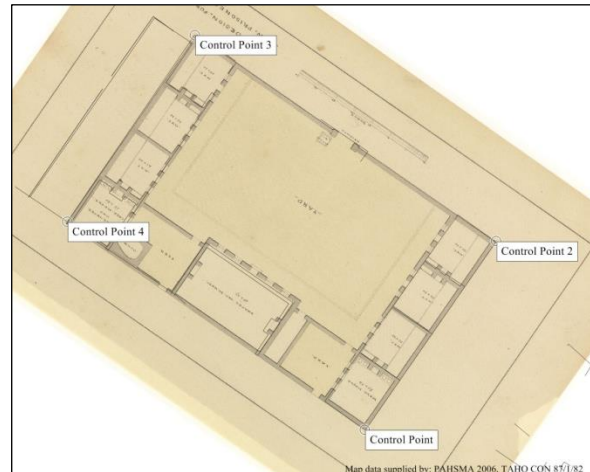


Figure 4-2: The survey with the georectified historical image

The accuracy of this digital rectification process relied upon the control point choices made by the operator, in addition to the accuracy of the original source material. A growing body of literature details this process in G.I.S. applications, focussing upon the positional accuracy and representation of spatial relationships within such georectified sources (Hu 2001; Pearson 2005; Armstrong *et al.* 2009; Lloyd and Lilley 2009; Vetch, Clarke and Lilley 2011; Lilley 2012). The positional accuracy of the majority of the cartographic sources available was of a precision sufficient for the required purposes. Some of the sources used were individual plans of buildings, which could be overlaid without significant positional error. Others were plans produced on a relatable geographical reference system. In some instances, the low accuracy of the historic source did mean that the georectified image was only useful as an interpretive aid, or only sections of it could be rectified. Note will be made in the following section where maps and plans have been rectified, with reference to their positional accuracy.

Tasman Peninsula coal mine

Previous archaeological work

The Tasman Peninsula mine has been a focus of archaeological work since the late 1970s, after the National Parks and Wildlife Service (Tasmania) took over management of the site (Bairstow and Davies 1987: 3). To aid the site's management, a feature inventory was produced, which, although an unsystematic site catalogue, formed the basis of the later 1985 survey. This latter survey, directed by archaeologists Damaris Bairstow and Martin Davies, was carried out as part of the Port Arthur Conservation and Development Project (PACDP) annual summer volunteer program (Bairstow and Davies 1987). The survey's objectives were to build upon the existing inventory and to map the full extent and sensitive areas of the historic site in order to aid future site management. Hundreds of features were identified and mapped as part of this program, the subsequent report still forming the most comprehensive published record of the site's archaeological resource. The survey was carried out by small teams, who walked evenly-spaced transects across the site. Features were located by tape-and-compass survey, with their locations noted on a 1:2000 plan. Where a number of features were located together, a theodolite was used to survey their locations, with the survey base stations plotted on the main plan. All features were recorded by photographs and sketches, with a site recording sheet also completed.

Since the 1985 survey, a number of smaller archaeological surveys have been undertaken, with the aim of adding to and improving on the existing survey. In 2006 a team of volunteers re-surveyed sections of the site, with the aim of re-locating features from the 1985 survey and comparing their descriptions.²⁷⁴ In 2008 the coal mines were comprehensively re-surveyed, with the results tied into the national grid (Map Grid of Australia 94 - Zone 55) through the use of a Total Station. In 2009 the mining activity carried out by the convicts was investigated in a thesis by Greg Maiden (Maiden 2009). A mining engineer by training, Maiden brought an expert understanding of the nature of coal mining to his analysis of the convicts' undertaking. Maiden was able to bring new interpretation to the surface remains of the workings, using this to plot the extent and form of the below-ground workings

²⁷⁴ Greg Jackman, email message to author, 6 February 2014.

through computer modelling of the original plans. Maiden's work has facilitated a much better understanding of how the site evolved as a mine during and after the convict period of occupation.

In March 2014 PAHSMA, in partnership with the Tasmanian Department of Primary Industries, Water and Environment (DPIWE), commissioned A.A.M. to undertake a LiDAR (Light Detection and Ranging) survey of the Tasman Peninsula coal mine (A.A.M. 2014). Carried out as an airborne laser survey, it captured an average of 10 points per m². Access to this data for the purposes of this research was kindly granted by PAHSMA.

Fieldwork methodology

These previous archaeological surveys and studies provide a rich data set for anybody engaging with the Tasman Peninsula coal mine site. The LiDAR data, in particular, provides a highly accurate model from which the landscape and archaeological features can be queried. The 1985 data is freely available in hardcopy, with the Port Arthur Historic Sites Management Authority providing access to the results of the later surveys. All of this information was digitised and filtered through a G.I.S. program. The results of this desk-based approach were constantly ground-truthed over the life of the research (2007-15).

The G.I.S. mapping was based upon two main sources of accurate survey data: the 2008 topographic survey and the 2014 LiDAR results. The latter data comprised over 6.5 million points representing the 'bare earth' returns of the laser survey. Using FugroViewer (used for reading and exporting the LiDAR data) and G.I.S., these points were converted into a georeferenced terrain model of the station (see Appendix 3, Figures A3-1 - A3-3). This formed the basemap, upon which was layered topographical data from other sources - including the 2008 survey of the site's built heritage.

All other sources of information, such as the 1985 survey, were georectified to this base map, using common heritage and landscape features as the control points. Although positional discrepancies did exist between the 2008 and 2014 surveys and that undertaken in 1985, it must be noted that this was rarely beyond 10m +/- . The relative accuracy of the earlier survey is particularly remarkable

considering the difficulty of the vegetation and terrain and the survey methods being utilised. Where required, historic cartographic sources of sufficient accuracy were also georectified, providing them with coordinates relatable to a modern geographic reference system (see Appendix 3, 'Georectified historic plans' and Figure 4-3).



Figure 4-3: Excerpt from the 1842 probation plan showing the image georectified against the 2008 survey data (red)

With the 1985, 2008, 2014 and historic survey data compiled, a process of digitisation took place. This created a data set that would aid the interpretation of the archaeological landscape. All the features identified during 1985 and as part of this research were digitised, each feature having an attribute table containing specific descriptive and interpretive data (see Appendix 3, 'Feature tables'). Through this features were classified according to their period of use, as well as the type of activity that they represented. The end result of this exercise was that the typological and chronological separation of the various features became much clearer, allowing a more refined understanding of the site's formation and development.

The site was visited numerous times over the course of the research, including two reconnaissance surveys to locate peripheral sites of interest. The final piece of fieldwork was undertaken over 22 - 25 February 2015 after the LiDAR data had been made available by PAHSMA. This was a final exercise to check the results of the 1985 survey and to ground-truth new features which were visible in the LiDAR data.

Constraints and limitations

Features were plotted directly from the LiDAR mapping data. As such, they have a high level of positional accuracy. As noted, discrepancies were experienced between the data sets from 2008/2014 and 1985, however these were not as large as would have been expected. Sections of the 1985 survey had been completed with a high degree of accuracy, with those areas containing notable features surveyed with theodolite. Isolated features, roads and tramways were plotted with the less rigorous tape-and-compass method (Bairstow and Davies 1987: 11). The collection of the original survey data in 1985 and 2008 was constrained by the environment that the surveyors were working in, the heavily-vegetated nature of the site making feature location and identification difficult (Bairstow and Davies 1987: 7). Thick vegetation also caused problems during the ground-truthing undertaken for the present study, with some minor features visible in the LiDAR data unable to be located.

The Tasman Peninsula coal mine were extensively worked after the convicts had been withdrawn in 1848. Indeed, free mining activity continued for almost 50 years - much longer than the 16 years the convicts worked the mine. This has resulted in a multi-period site of great complexity. While historical sources from the convict period can be used to positively link the majority of structures and features to this phase of activity, the post-convict phase is not as rich in these documentary resources. However it has been possible to use a process of exclusion, in combination with the few post-convict period documentary resources, to identify those features likely to relate to this phase of occupation. Though based upon archaeological and historic evidence, this process has in part been interpretive and

therefore contains a margin for error. Where features were not able to be confidently attributed to any period, they were classified as "unidentified".

Recherche Bay, South Cape Bay and Macquarie Harbour

Previous archaeological work

Unlike the Tasman Peninsula mine, Recherche Bay, South Cape Bay and Jerusalem had not had accurate archaeological surveys carried out. All of them had been the focus of previous archaeological reconnaissance surveys: Recherche Bay having been surveyed by Parry Kostoglou (Kostoglou 1994; Kostoglu ca.2007), South Cape Bay by Cosmos Coroneos (Coroneos 1993) and Macquarie Harbour by David Bannear (Bannear 1991). These had been undertaken with a varying degree of detail. Completed in 1989, Bannear's survey was a photographic and descriptive record accompanied by basic locational information. Kostoglou's 1994 and Coroneos' 1993 surveys were done to a higher level of detail, with rough location mapping and site gazetteers. In these three instances, the coal mining sites had been recorded as part of larger archaeological surveys of the local area and as such were subject to necessarily brief attention. Kostoglou's later ca.2007 survey was a more targeted re-survey of the area.

During his 1989 survey, David Bannear located the probable site of the convict mining activity in Macquarie Harbour. His notes record the presence of the c.50m high coal-bearing cliff which first attracted the attention of the early European explorers (Bannear 1989). Although no archaeological evidence of mining activity was encountered, Bannear did note the presence of levelled areas near a watercourse, north of the coal cliffs. Fieldnotes and photographs of the general area were taken.

At South Cape Bay, the presence of a chimney butt had been noted during track-cutting in 1986 (National Parks and Wildlife Service 1986). When the site was surveyed by Cosmos Coroneos in 1993, he identified four stone-built chimney butts, in association with at least one possible source of quarried stone (National Parks and Wildlife Service 1993). Although he noted the possibility that the

historically-recorded shaft may have been located in the area, he was unable to locate it due to the dense ground cover. Fieldnotes, a sketch plan and photographs were taken.

The archaeological features at Recherche Bay were noted by Parry Kostoglou during an extensive survey of the area between Cockle Creek and Lune River (Kostoglou 1994). Kostoglou identified the site of Kemsley's Crescent sawmill, which comprised of a saw bench/cutting, sawdust heap, wharf and house site (Kostoglou 1994: 81, 84). A tramway cutting was also identified running north from the mill site, toward a second wharf and tramway system. Kostoglou re-surveyed the site in more detail in c.2007 (Kostoglu ca.2007). In addition to sites from the post-convict timber-getting phase, Kostoglou identified a further six features which he attributed to the convict period of occupation (see Figure 4-4). These comprised a mine shaft, four paired chimney butts and a single chimney butt.

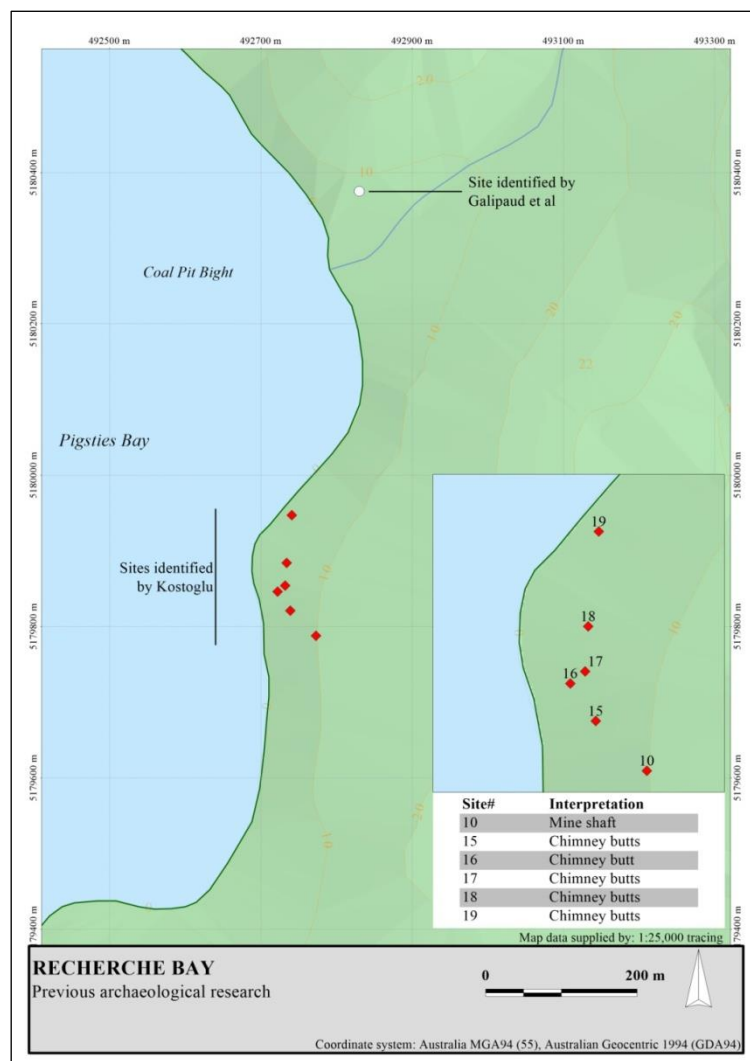


Figure 4-4: Recherche Bay area showing sites identified by Kostoglou (2007) and Galipaoud *et al* (2007)

An extensive archaeological investigation was carried out in 2006 by a joint-French and Australian team in the Recherche Bay area (Galipaud *et al.* 2007). Their focus was on locating and investigating evidence of sites associated with the French d'Entrecasteaux expedition of 1792/1793. As part of this, a potential garden site was surveyed and part-excavated at Coal Pit Bight. The site was situated north of the features identified by Kostoglou (Figure 4-4). Although evidence for the garden proved elusive, they concluded that the site was in fact related to the post-convict timber getting phase (Galipaud *et al.* 2007: 49).

Fieldwork methodology

The survey of these three sites required significant logistical preparation due to their isolated locations. The fieldwork for Recherche Bay and South Cape Bay was assisted by a Carlyle Greenwell grant from the University of Sydney and was carried out during 17-20 December 2012 (South Cape Bay) and 30 January - 2 February 2013 (Recherche Bay). Permission was sought and granted by the relevant land managers: the Tasmanian Land Conservancy Trust for Recherche Bay and the Tasmanian Parks and Wildlife Service for South Cape Bay and Macquarie Harbour. Although statutory permission was not required, Heritage Tasmania was informed of the 2012/2013 fieldwork as a courtesy.

As Recherche Bay had no established foot access, a boat had to be sourced to ferry personnel and equipment across the bay. South Cape Bay was accessible on foot, being located part-way along the South Cape Track. A walk of three hours (8km) was required to access it. The survey team camped for three nights at each location, allowing for three full days of survey to be carried out. The Macquarie Harbour fieldwork was undertaken in April 2010 and was linked to a larger project being jointly undertaken by the University of Manchester and the Tasmanian Parks and Wildlife Service. Boat access to the site was provided by the latter organisation.

At South Cape Bay and Recherche Bay the initial part of the survey involved the relocation of features identified by the previous surveys. Much of the first day at both locations was spent

relocating the known sites and undertaking an extended walkover survey of the area, during which sites not located by the earlier surveys were identified. The walkovers were conducted as transect surveys, with a close spacing of 10m due to the highly-vegetated nature of the areas (Figure 4-5 and Figure 4-6). Sites were located by handheld G.P.S. (with an accuracy of +/- 6m) and recorded with fieldnotes, sketches and photographs. Sites were individually numbered and, where required, cross-reference made to the previous archaeological surveys.

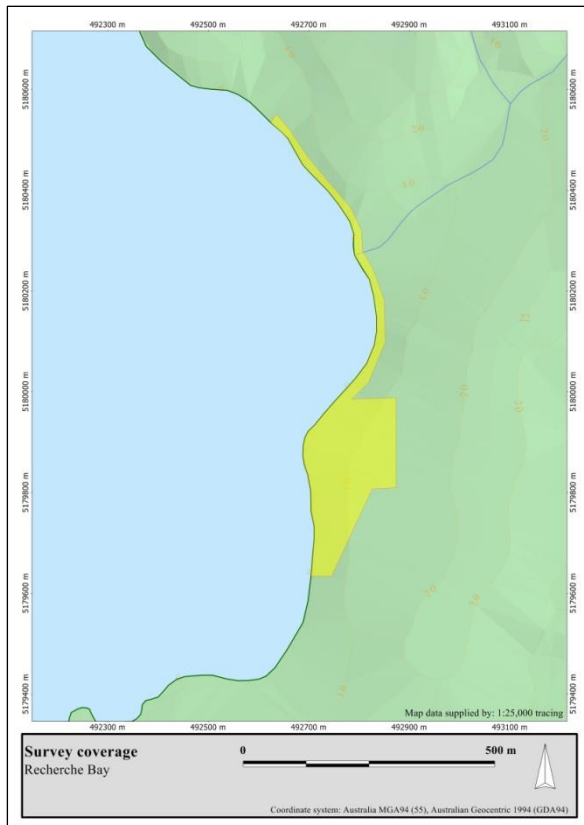


Figure 4-5: Recherche Bay, showing area covered by intensive survey

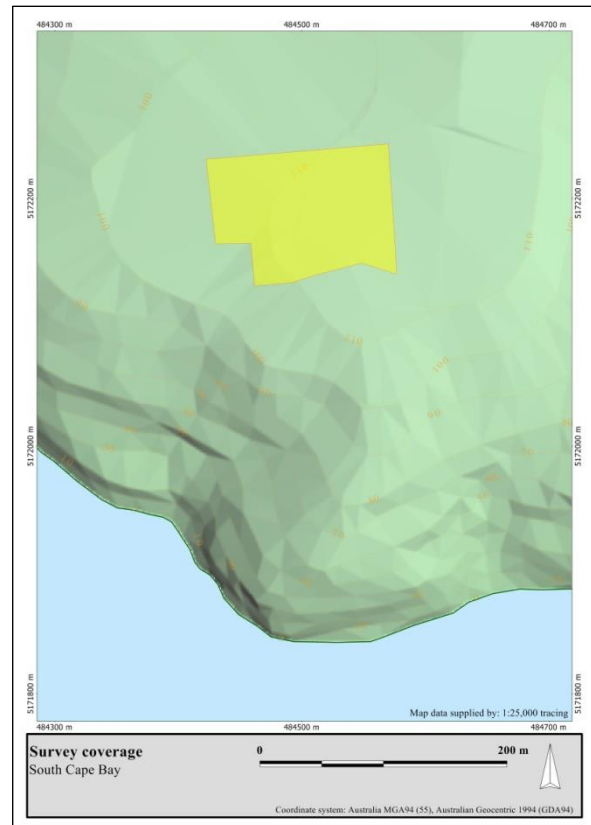


Figure 4-6: South Cape Bay, showing area covered by intensive survey

A Total Station survey of the Recherche Bay and South Cape Bay sites was carried out. A series of stations were installed across the sites, forming the permanent reference points. At South Cape Bay the concentrated nature of the site (the core features located within a 30m x 30m area) meant that only three stations were required. At Recherche Bay, where the features were scattered widely across a 200m x 100m heavily vegetated area, fifteen separate stations were emplaced. The stations were not tied into the national grid, as this would have required access to a differential G.P.S. Instead, a floating grid aligned to magnetic north was established at both sites and a random x, y, z number

assigned to the first station. Although of more limited accuracy, the handheld G.P.S. meant that all sites were linked to real-world coordinates.

At both sites the key elements of each feature were surveyed: extents, bases, tops, breaks and level points. Topographic features were recorded - such as the South Cape Track at South Cape Bay and the edge of the coast at Recherche Bay - to tie it in to the immediate environment. Hundreds of level points were taken on the natural ground surface, allowing a comprehensive model to be formed of the terrain surrounding the features. Where the terrain had been modified by human agency - such as a cut-and-benched area or test pit - a higher number of level points were taken to capture the subtleties of the modification.

At Macquarie Harbour the potential coal mining site was relocated. Features were recorded through photographs and fieldnotes and located with a G.P.S. (accuracy +/- 6m). No Total Station survey was required.

Once out of the field, the data collected was collated. In the case of Recherche Bay and South Cape Bay the survey data was queried using G.I.S. Unlike on the Tasman Peninsula, no contemporary plans exist of these sites, so no further georectification was required. Sections of relevant 1:25,000 maps were digitised to provide the basemapping for the G.P.S. data. As the information gathered by the Total Station was not georegistered, its data was situated within a free-floating survey. Two short reports containing comprehensive site gazetteers were created for the land managers (see Appendices 4 and 5).

Constraints and limitations

All three of these sites were heavily forested, which affected visibility for the locating and identification of features, as well as their actual recording. At Macquarie Harbour the stretch of coastline surveyed was eucalypt forest, with a thick scrub understorey. At Recherche Bay the ground was similarly forested, though the undergrowth was in sections less dense. Further back from the coastline the understorey was primarily dense cutting grass, which completely restricted visibility and

hindered movement. Similarly, at South Cape Bay the ground cover comprised dense cutting grass situated below a medium-density eucalypt canopy.

At both Recherche Bay and South Cape Bay a number of features mentioned in the historical sources could not be located. At the former site, the presence of two deep shafts was recorded by historical sources. Kostoglou was only able to locate one such shaft, with the survey completed for this research also unable to find the additional shaft. Should time have allowed, the survey would have been pushed further east of the located shaft in an effort to confirm or deny this other shaft's presence. Extending the survey onto the flatter ground to the north might also have yielded results, however this would have required more time and resources due to it being extensively covered by cutting grass. Similarly, at South Cape Bay a deep shaft was also recorded as being in close proximity to the main site located during the survey. Despite an extensive reconnaissance of the area the main mining site could not be found. The area it was thought to be was located in extremely thick cutting grass, with the presence of snakes making survey through this vegetation unacceptably hazardous.

At Recherche Bay the survey was made difficult by the presence of features relating to sawmilling activity from the early 20th century. An extensive mill site was recorded in the south of the area, with other features scattered throughout the area's remainder. Some of these could be positively attributed to the later period through reference to feature typology and the earlier work of Kostoglou, while others could have related to either the convict or later phases of activity. Those with an obvious mining origin could be attributed to the convict period, but others of a more general nature (such as chimney butts) could only be tentatively related to this phase.

Jerusalem

Previous archaeological work

No archaeological surveys or excavations had previously been completed at the Jerusalem coal mining site.

Fieldwork methodology

Situated in the Midlands of Tasmania, the site of the Jerusalem coal mine did not require any particular logistical special measures. The site was located on private property, within easy walking distance of road access and was situated within mostly un-vegetated country (Figure 4-7). The site was visited on numerous occasions, for both reconnaissance as well as a full archaeological survey. The latter took place over a four day period in May and July 2010. It was undertaken as part of a commercial archaeological contract held by heritage consultants Austral Tasmania Pty Ltd, for whom the author was employed at the time. It was agreed with the client (G.H.D.) that research and results from this work could be incorporated into the research, as long as commercially-sensitive information was not included.²⁷⁵ All research and post-fieldwork reporting was conducted by the author, with the fieldwork conducted in tandem with a colleague (David Parham).

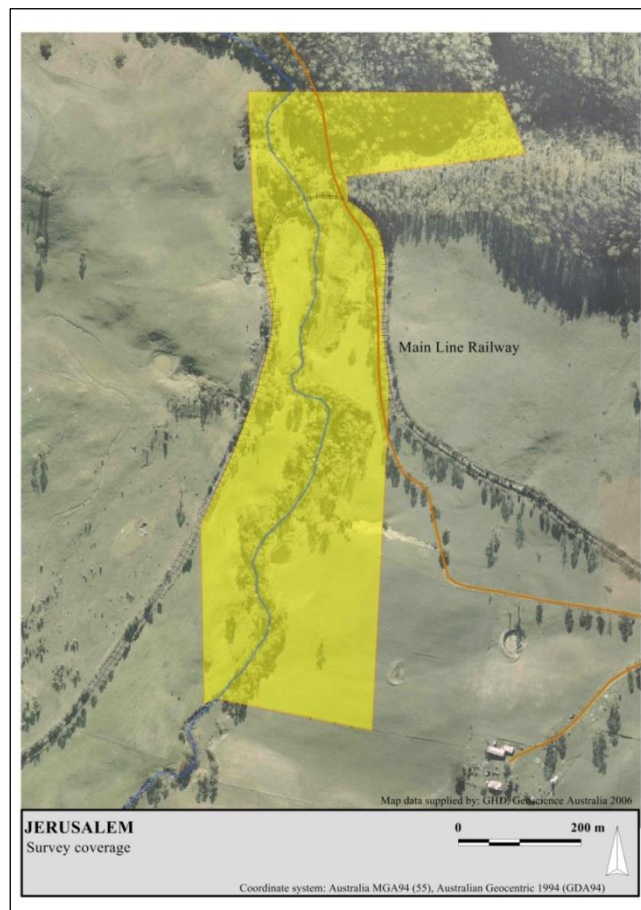


Figure 4-7: Jerusalem, showing the area covered by survey

²⁷⁵ Laine Glade-Wright, email to author and David Parham, 14 May 2010.

The site survey comprised an intensive investigation of the area centring upon Coalmine Creek. Historical research indicated that this area had a high probability of containing archaeological features relating to the convict period of activity. A wider area (approximately 1000m x 400m) was surveyed less intensively, with transects walked at 20m intervals. Much of the area was cleared grazing land, though the strip along the line of Coalmine Creek was more heavily vegetated, with extensive patches of impenetrable blackberry. The northern extent of the area was forested and marked by steeper terrain.

The features were located using a handheld G.P.S. (+/- 6m) and were recorded by fieldnotes, sketches and photographs. The survey data was queried using G.I.S., the basemapping for which was supplied by G.H.D. A number of historic plans were available of the site. Although those from the convict period were not of sufficient enough accuracy to warrant georectification, those relating to the later phase of mining could be treated in this way (see Appendix 6, 'Illustrated notes on the mine workings').

Constraints and limitations

The survey encountered a number of constraints. The area of high archaeological potential was situated in a heavily-vegetated area, immediately to the east of Coalmine Creek. Blackberries had colonised the site, resulting in nil-to-low visibility. Similarly, the forested section of the study area to the north resulted in low ground visibility, the canopy cover also affecting the accuracy of the G.P.S. readings. Even though the cleared ground increased survey visibility, the intensive grazing and, in some instances, ploughing, of the ground had also undoubtedly affected the above and below-ground survival of relatively ephemeral archaeological features.

Like the Tasman Peninsula and Recherche Bay, the Jerusalem mines were extensively worked during the post-convict period. This had resulted in a palimpsest of archaeological features dating from the 1840s and 1870s-90s. The small-scale and low-technological nature of the later enterprises makes them hard to distinguish from the earlier convict period of activity. Historical research to some degree

allowed the sites to be classified, with historic maps from both periods of activity allowing for some spatial separation. However, many features obviously escaped the notice of the surveyors, or post-date the maps' creation. This created a situation where a limited number of sites can confidently be identified as originating from the convict period.

Results of the archaeological surveys

The following section outlines the results of the archaeological research, using the mapping data generated by the surveys. The data will be presented as an overview of the features and the landscape within which they were situated. It is designed to be read in conjunction with the relevant appendices (3-6). As well as the raw results, this section also provides a baseline interpretation for the sites' features. This is designed to provide a basic understanding of the sites as they appear today, in relation to the activities which are known to have been historically undertaken at them. A basic level of interpretation is required to highlight the infrastructure built to serve incarcerative and more industrial concerns, as well as the residue left by the mining activity.

The loss of the data from Macquarie Harbour has meant that only a minimum of information can be shown in the results section for this particular site.

Tasman Peninsula coal mine

Both the spatial and documentary records were queried to extract the required level of information, which is displayed as maps and a gazetteer (see Appendix 3). Due to the high quantity of maps required, the figures combine both the locational information with the basic interpretation. The gazetteer provided for the site is not as detailed as the others undertaken for this research, as the in-depth recording of these features has been carried out elsewhere (i.e. Bairstow and Davies 1987).

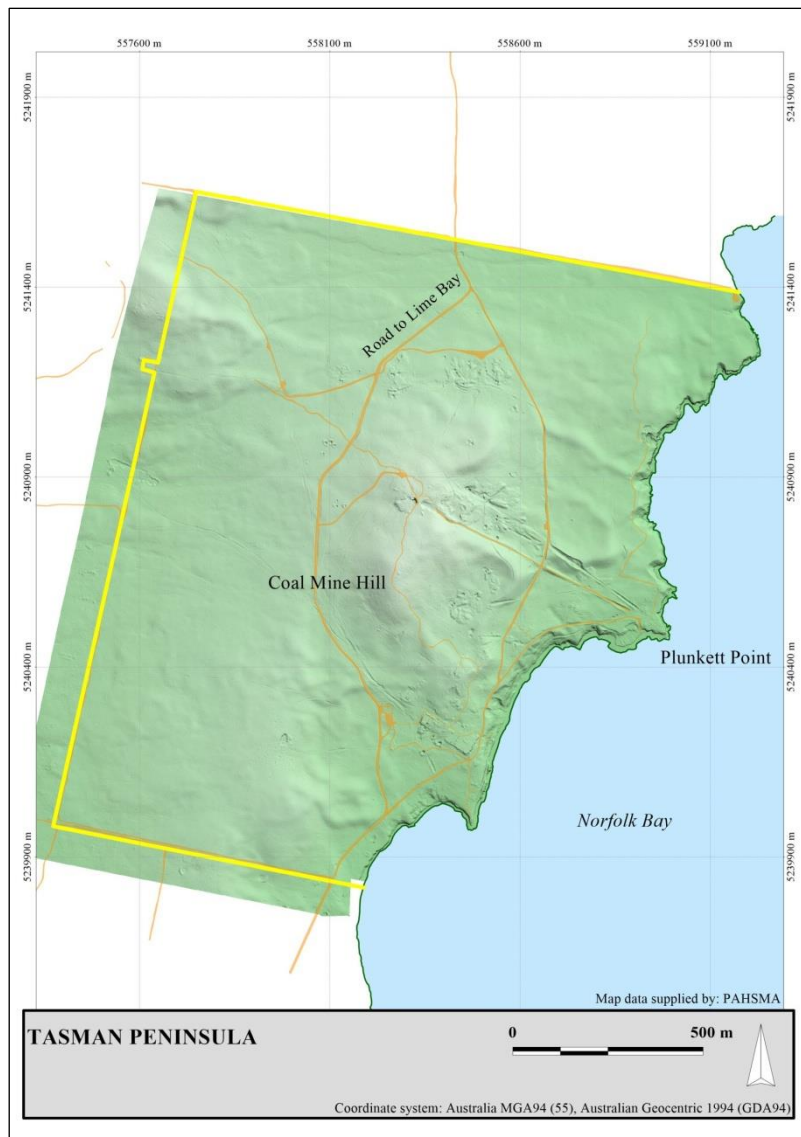


Figure 4-8: Tasman Peninsula coal mine, showing topographic features and World Heritage Area reserve (yellow)

Features overview

The features are located throughout the 214 ha comprising the World Heritage Area reserve (see Figure 4-8). The area is marked by the prominence of Coal Mine Hill, marking the highest point in the area at approximately 80m ASL. The ground drops away on all sides from the summit, with the steepest slope situated on the coastal side. There is a more gentle gradient on the hill's western flank. On the eastern slope, there are two noticeable terraces, situated one atop the other, below which is a steep gradient to the shoreline. The sharp relief along the shoreline lessens northward toward Plunkett Point, where there is a gentle, more continuous gradient westward toward Coal Mine Hill. The site is vegetated with medium-density dry eucalypt forest and woodland, with a bracken and scrub understorey. Alluvial sand covers the area's extent, overlying a sandstone and mudstone bedrock with doleritic intrusions (Bacon 1991: 85, 87).

The synthesis of the 1985, 2008 and 2014 surveys showed that there were a total of 271 features associated with the convict and post-convict period (see Appendix 3, "Feature tables").²⁷⁶ There was a marked concentration of features stretching on a north-south axis from the coast, toward the summit of Coal Mine Hill and further north into the hinterland. These comprised a mixture of built remains (upstanding or low-level) and areas of topographic modification. Of the 271 features identified, 61 were built features. These comprised largely upstanding features formed from brick and/or sandstone, or single or associated mounds and/or in situ brick or sandstone footings.

There were 210 features comprising topographic modifications such as cuttings, embankments and depressions. Of these, 77 were depressions or steep-sided excavations made into the superficial geological profile. Five features pertained to the sites of historic jetties and a wharf. The remaining 128 were lineally-aligned features encompassing a variety of topographic modifications: cuttings, embankments and cut-and-benched sections. A single feature represented an extensive area of topographic modification as a result of cultivation.

²⁷⁶ This does not include those features identified by the 1985 survey as relating to 20th century infrastructure.

Of the 271 features, 60 were new features not accounted for in the original 1985 survey. These were identified by the prefix 'NF_' and a unique numerical identifier. The site numbering for the 1985 features was retained.

Interpretation of features

The historical record which accompanies the archaeology of this site is of such resolution that it is in many instances possible to directly link the archaeological evidence with historically-recorded activities and moments in time. As part of the 1985 survey, the archaeologists had compared their survey data to the available historical resources to build up a basic identification of the features and their chronological ordering. This interpretation has remained largely unchallenged, bar Greg Maiden's 2009 refinement of our understanding of the mining practices. As part of this study, these previous understandings have been synthesised and refined. The following will briefly place the known elements in the landscape, without currently providing anything more than this spatial interpretation.

Of the 61 built features identified, 38 were structures that could be linked to historical occupation during the convict period. The accommodation buildings were primarily located on the two terraces on the south eastern slope of Coal Mine Hill. Six separate structures (225, 227, 228, 240, 241, 938), comprising the military buildings at the station, were situated on the upper terrace. Below this was the main settlement area at the station, where 17 structures were arranged in a north west to south east alignment to take advantage of the space offered by the terrace. Nine of these could be positively identified as accommodation buildings - four for convicts (125, 128, 145, 165) and an additional five for the free officers (115, 116, 118, 150, 155). Two features (130, 944) potentially related to the First Barracks. Accommodation buildings and their associated outbuildings were also situated along the line of the coast, running from just south of the settlement northward toward Plunkett Point. To the south was situated two such buildings (100, 110) and an outbuilding (764) associated with the latter.

To the north, on the southern slope below the military barracks, was 210 and, on the east-facing gradient, 245. Further north around the bay were buildings 255 and 260.

At Plunkett Point were the footings of the commissariat store (275). A store was also situated within the main settlement complex (117). Three additional buildings were also identified as guardhouses (119, 129, 943) within this area, as well as a chapel (127), possible bakehouse (135) and hospital (195). At the top of Coal Mine Hill was situated the remains of the semaphore station (290). Two kilns were also located, a single lime kiln at the coast (415) and a brick kiln to the north west of the main settlement (295). A number of built features (497-99, 938, 952-56, 441, 852, 854) were situated adjacent to main shafts 440 and 495. A total of 10 built features, comprising footings, rubble scatters and mounds, could not be positively attributed to a particular function, though were thought to relate to the convict-period of occupation.

Four built features associated with mine shafts (500, 862, 864-65) likely related to the post-convict phase of occupation. A single feature (280) was an upstanding sandstone structure potentially built during the post-convict occupation. A further seven features were thought likely to originate from this period, or were from an unidentified period.

Evidence of the mining and other industrial activity carried out during the convict and post-convict periods formed the largest body of archaeological evidence at the site. Of the 209 topographic modifications, 103 were thought to relate to the convict period, 38 from the post-convict occupation and a further 68 from an unidentified period. Of the identified convict period features, forty-four features were classified as relating to production: 25 shafts, seven cuttings associated with mining, three drainage channels (841, NF_19, NF_20), two adits (401, 403), two sandstone quarries (461, 748), two clay pits (296-97), a reservoir (497), a hut platform (NF_55) and an area associated with cultivation (NF_36). In addition, 60 features were likely associated with convict period transport routes: 34 roads, 13 road or tramways, eight tramways and five features associated with the convict period jetties and wharf.

A further 14 shafts and a single cutting were likely attributable to the post-convict period of activity, as were 23 land routes: 19 roads/fire trails and four road or tramways. An additional 30 roads and six roads or tramways could not be attributed to a particular period.

Recherche Bay

The results for this site were drawn from a Total Station survey and a wider-ranging G.P.S. survey. As such, the results comprise those features located within the core area (surveyed by Total Station) and those without (surveyed by handheld G.P.S.). A detailed gazetteer has been provided, in addition to a full photographic record (see Appendix 4).

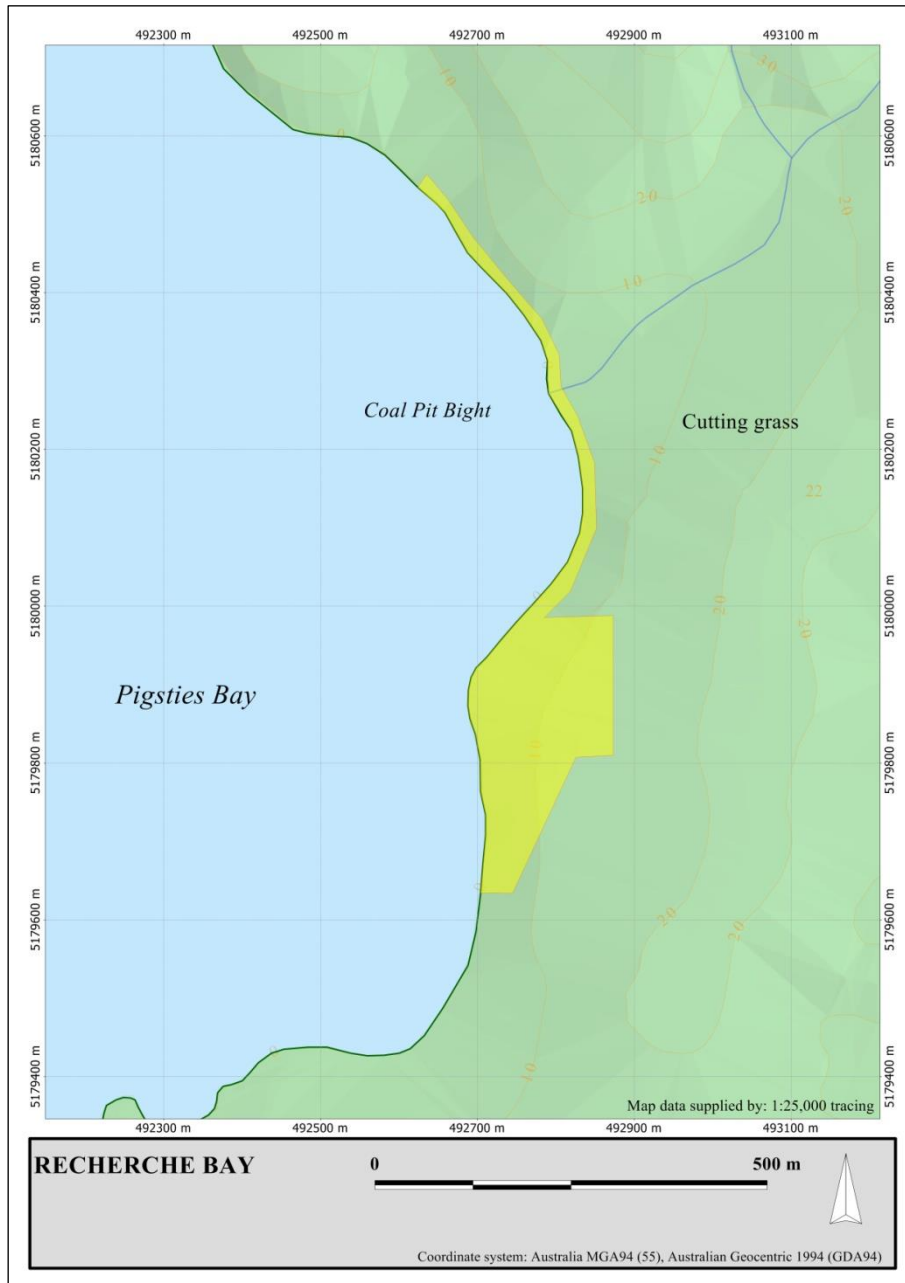


Figure 4-9: Recherche Bay, showing topographic locations and survey area (yellow)

Features overview

Twenty-one features were identified within the surveyed area, on ground closely associated with the coastal margin. Progressing from the south, the ground gently sloped upward to the east and north, progressing to a height of c.10m ASL where it met the shallow headland marking the southern extent of Coal Pit Bight (Figure 4-9). Past this point it sloped downward in a northerly direction toward a small streamlet running into Coal Pit Bight. The vegetation was primarily medium-density wet eucalypt forest and woodland, with a scrub understorey. An extensive area of cutting grass occupied the ground extending from the rise to the streamlet. The geological profile was characterised by dolerite and sedimentary stone, overlain by sandy soils (Galipaud *et al.* 2007: 13).

The sites previously identified by Parry Kostoglou were successfully relocated, with a number of additional sites located (Appendix 4, Figures A4-1 - A4-2 and gazetteer). Fifteen features were identified within the core site area. These were situated on ground stretching approximately 90m inland from the eastern coast of Pigsties Bay. They extended approximately 220m (north to south) along this coastal strip. There were nine built features, of which five were upstanding stone remains (features 5, 7, 8, 11 and 12), two were structures (features 3 and 6) and two were low mounds incorporating brick and stone rubble (features 1 and 2). Features 4, 9, 10, 13, 14 and 15 were areas of topographic modification. Of these, feature 9 represented an extended period of excavation and deposition, with feature 4 potentially representing the same, but over a shorter period of time. Features 10, 13, 14 and 15 were topographic modifications that had been carried out to allow the construction of a structure, or the performance of an activity.

A further six features were located on the periphery of the main study area. These comprised two small depressions (features 19 and 20) situated between sites 1-5 and the coast, as well as a linear cutting (feature 18) running north-south located 50-90m east of the core site features. To the east of this was an upstanding brick structure (feature 21). Further north were located a cluster of three mounds (sites 17a - 17c). A circular excavation made into the coastal sandstone was also located on the margin of Coal Pit Bight (feature 16).

Interpretation of features

Convict mining activity and post-convict activity has left discernable archaeological traces across the landscape of eastern Recherche Bay. A number of the features within the core research area could be clearly identified (Appendix 4, Figures A4-3 - A4-8 and gazetteer). Three of the features were upstanding chimney butts (features 3, 8 and 12), with feature 3 comprising two butts placed side-by-side. A further two features (features 1 and 2) potentially represented the sites of built structures, the depression associated with feature 1 potentially marking the former site of a hut while the mounds may have represented associated built elements. Four features (features 5, 6, 7 and 11) could not be identified definitively as chimney butts, their square form marking them out as possible bases or plinths.

Of the areas of topographic modification (features 4, 9, 10, 13, 14 and 15), feature 9 was clearly the site of a shaft. The shaft had been excavated into the gentle west-facing slope, with excavated material built up around it. A working platform appeared to have been levelled on top of this spoil, to the west of the shaft. A water race (feature 10) also led from the western edge of the spoil, downhill toward the coast. In the north, feature 4 potentially represented a short-lived trial pit, with a depression and associated spoil in evidence. In the core area's southern extent, the elongated depression (feature 13) was identified as a sawpit, with feature 14, to the west, interpreted as a levelled working/storage area. The complex arrangement of cut-and-benched areas and linear cuttings (feature 15) was the site of a sawmill.

Within the peripheral research area, the built feature (feature 21) was identified as a brick-built chimney. The other five sites comprised two pits (features 19 and 20) of unknown purpose, a c.100m long cutting for a tramway (feature 18), a series of unidentified mounds (feature 17) and a cut-and-benched area containing a part-excavated shaft (feature 16).

Of these features, thirteen were identified that are highly likely to relate to the 1840-1843 convict period: twelve within the core area and the coastally-located shaft. In addition, the sawpit (feature 13) and potential working/stockpile area (feature 14). The sawpit (feature 15) was of definite post-convict origin, being Kemsley's sawmill previously identified by Kostoglou. In the peripheral area, three

features (features 17, 19 and 20) were potentially from the convict period, though the mounds more likely related to post-convict timber-getting activity. Two of the peripheral features were of definite post-convict origin, being related to a timber-getting tramway (feature 18) and related structure (feature 21).

South Cape Bay

As with Recherche Bay, the results for this site were drawn from a Total Station survey and a wider-ranging G.P.S. survey. The results comprise those features located within the core area (surveyed by Total Station) and those without. A detailed gazetteer has been provided, in addition to a full photographic record (see Appendix 5).

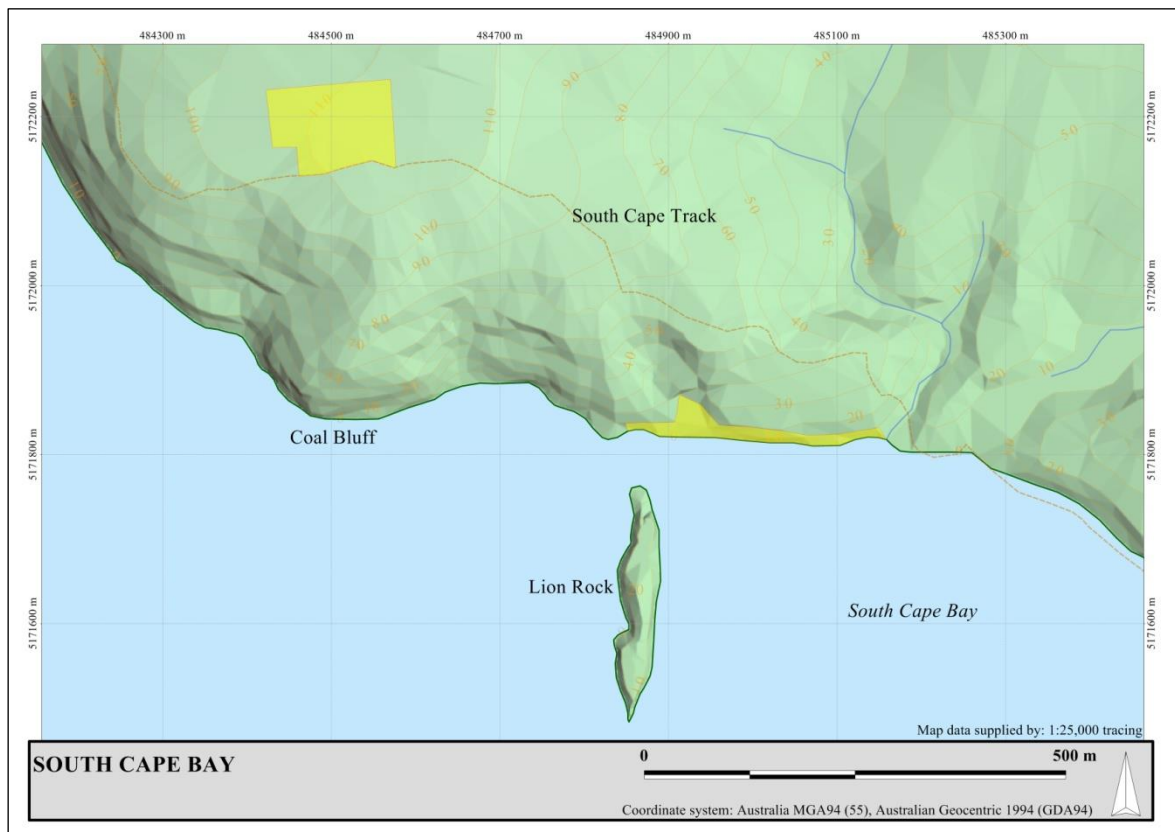


Figure 4-10: South Cape Bay, showing topographic features and surveyed area (yellow)

Features overview

The survey of this site identified nine features within the research area. The core site was situated within a heavily-vegetated area, characterised by south west-sloping ground (Figure 4-10). The particular location where the features were sited was a noticeably flatter area, set back approximately 100m from the cliffs of Coal Bluff. The vegetation was primarily medium-density wet eucalypt forest and woodland, with a dense understorey comprising scrub and cutting grass. The coastal margin that was surveyed was a shingled shore terminating in steeply-sloping and vertical-sided cliffs. A large

landslip immediately north of Lion Rock had brought down sections of the cliff and obscured the shingle. Coal veins were visible in the cliff, with the remainder of the geology comprising sandstone. The features were sited on a large dolerite dyke which intruded through the sandstone (Twelvetrees 1915: 5-8).

The archaeological survey re-identified the features previously identified by Cosmos Coroneos's 1993 survey. As Coroneos had found, the features were all located north of the present alignment of the South Cape Track (Appendix 5, Figures A5-1 - A5-2, gazetteer). The features identified comprised four stone-built structures, in association with two areas of topographic modification. Three additional features were identified within the peripheral study area, consisting of two potential worked areas of outcropping stone and the possible location of the coastal adit. The location of the shaft/s was not positively identified, in part due to the limitations noted in the section above.

The four stone features within the core study area were all constructed from sub-angular pieces of sandstone of varying sizes. In all cases, the stone was unmortared and was roughly-coursed, the in-situ stonework forming an open-sided 'C' shape. Feature 1 was the best preserved example, standing to a height of at least 1.8m, with a minimal scatter of surrounding tumbled stone. Its open side faced to the ESE. Feature 3 was a less well-preserved feature, standing up to 0.5m high, with a large associated spread of sandstone rubble. Feature 4, situated 4m to the east of feature 3, was slightly more intact, with in-situ elements standing up to 1.45m in height. Both feature 3 and feature 4 were oriented to the SSW. A 5m x 4m rectilinear depression was also associated with feature 4, running SSW-NNE. Like feature 1, feature 5 was a well-preserved feature, standing 1.25m high and oriented to the SSW. Feature 2 was just to the south west of the stone-built features and comprised a circular depression with a low mound of associated spoil. Feature 6 was similarly formed from modified ground, being a partially-levelled area to the south of the other sites.

Two of the sites within the peripheral study area were quite closely associated with the sites within the core area, being two locations of outcropping sandstone (features 7 and 8) that may have been quarried. Feature 9 was situated on the coast, opposite Lion Rock, and marked the location where the

visible coal seam dipped to the level of the beach. The area has witnessed considerable landslip activity, obscuring any potential evidence of mining.

Interpretation of features

All of the features identified during this survey are thought to relate to the convict period of occupation (Appendix 5, Figures A5-3 - A5-4, gazetteer). Within the core area, four of the sites were undoubtedly stone-built chimney butts (features 1, 3-5). One of the butts (feature 4) had an associated depression extending to the south which potentially marked the outline of a structure. To the south west of feature 1 was a circular depression, with an associated mound of excavated material (feature 2). Although non-conclusive, this depression potentially marked the location of at least one of the shafts attempted by the convicts. It was unlikely to represent quarrying, as the stone could have easily been accessed from the western side, where it outcrops. Alternatively, it could have formed a cistern for the small settlement's water supply. A cut-and-benched area to the south east of feature 2 potentially marked a working or stockpile area.

In the periphery area, the two outcrops (features 7 and 8) potentially represented the sources of the stone quarried for the chimney butts - although it is likely that such stone would have been attained from the excavation of the shaft itself. Although no archaeological evidence for its presence could be found, feature 9 represented the possible location of the coastal adit known to have been worked by the convicts.

Jerusalem

The survey of the Jerusalem coal mining site was undertaken with a G.P.S. The widely-scattered and ephemeral nature of the features meant that a Total Station survey was unfeasible and unnecessary to the aims of the survey. The results outlined below have been separated into the raw location information, accompanied by a site gazetteer and a basic feature interpretation (see Appendix 6).

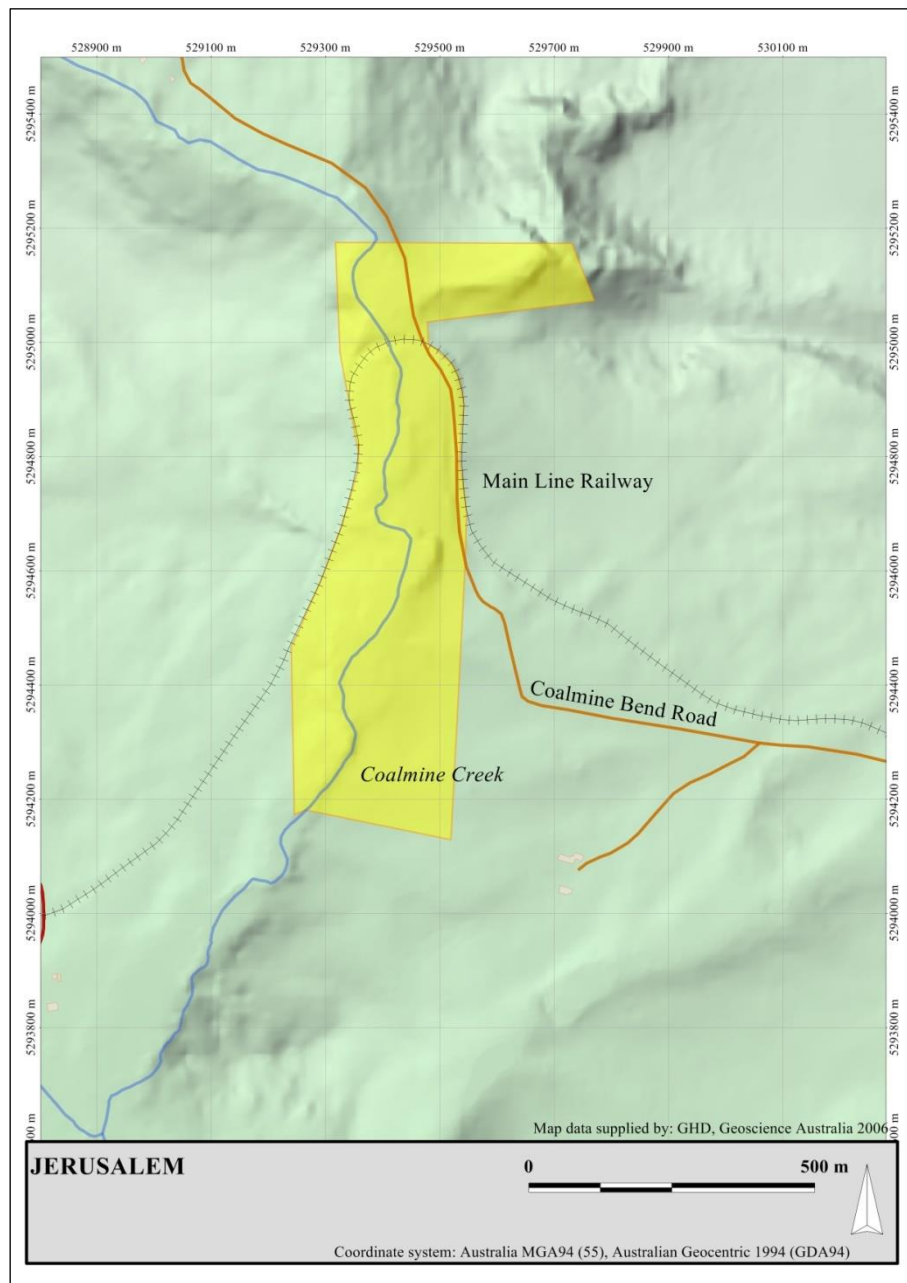


Figure 4-11: Jerusalem, topographic locations and surveyed area (yellow)

Features overview

The survey of Jerusalem identified 38 features. These were situated on ground either side of the small watercourse (Coalmine Creek) which ran north-south through the area. The ground sloped toward the line of the watercourse and primarily comprised open farmland, the course of the creek being more heavily vegetated. Toward the centre of the area, the former course of the creek was marked by the presence of a high curving bank to the east. Further north, past the curve of the railway easement (known as Coalmine Bend), the ground became increasingly vegetated with a medium-density eucalypt forest and medium-dense undergrowth. The relief increased in this area, the forested ground sloping down into an east-west running ravine. The underlying geology comprised sandstone (to the east of the creek) and dolerite (to the west of the creek), overlain by a sandy soil (Bacon 1991: 119).

The features were located in two main clusters: one in the north of the study area and one toward the centre (Appendix 6, Figures A6-1 - A6-4, gazetteer). In the northern extent of the area, corresponding with the location of the ravine, were six depressions of varying dimensions (features 1, 2, 3, 6, 13, 18 and 21). A further six features comprised depressions of various dimensions, associated with excavated mounds (features 4, 5, 9, 15, 16 and 19). Three features (features 7, 8 and 12) were circular or square-cut, vertical-sided excavations, two of which (features 8 and 12) have associated excavated mounds. A single quarried section of sandstone cliff (feature 10) was also recorded, in addition to a horizontal excavation made into the face of this cliff (feature 11). Extending southward from the main cluster of features, tracking the line of the contour, was a linear feature (feature 14). This had been cut-and-benched in places, as well as elevated on mounded earth. A built feature was also recorded in association with the railway (feature 17).

The other concentration of features was located in the centre of the study area. At least four depressions of varying dimensions with associated mounds of spoil were identified (features 24, 29, 34 and 38). In addition, horizontal depressions (features 29, 31 and 33) were located along the former alignment of Coalmine Creek, as well as an extensive elongated mounded alignment of spoil (feature 30). A linear channel cut in the bedrock to the west of the creek alignment was recorded (features 22 and 26), as well as a sandstone footing (feature 25) and walling (feature 26). A linear alignment was

located running from the eastern side of Coalmine Creek to the western extent (feature 28). It comprised both mounded and cut-and-benched sections. A cut-and-benched metalled alignment was also located west of the creek (feature 32). An isolated artefact scatter in association with a cut-and-benched area was identified east of Coalmine Creek (feature 23).

In the southern extent, an artefact scatter and stone alignment was located east of Coalmine Creek (feature 36). Two depressions of varying dimensions in association with spoil mounds were also identified (features 35 and 37).

Features interpretation

The survey of Jerusalem yielded features relating to both the convict and post-convict periods of occupation (Appendix 6, Figures A6-5 - A6-8, gazetteer). These features were predominantly representative of the coal mining activity of the 19th century, but also included features relating to the construction of the railway in the late 19th century. In the north of the research area, the six depressions comprised one borrow pit associated with the construction of the nearby gravel road (feature 1), four likely test pits associated with mining activity (features 2, 6, 18 and 21) and an ambiguous depression (feature 13). A further six features (features 4, 5, 9, 15, 16 and 19) were identified as mining shafts and their associated tailings mounds. One of these (feature 9) was located in the ravine, with the remainder situated in the flatter ground north and south of Coalmine Bend. Three deep, vertically-sided shafts were located within the ravine (features 7, 8 and 12), the latter two with associated tailings mounds. A sandstone quarry (feature 10) and an adit (feature 11) were also recorded. A stretch of tramway was identified stretching south of the ravine, following the contour of the hill toward Coalmine Bend (feature 14). An imposing sandstone culvert was also located on the line of railway (feature 17).

South of Coalmine Bend, four further shafts and associated tailings mounds were identified (features 24, 29, 34 and 38). Elongated tailings mounds (feature 30) were also located within the former course of Coalmine Creek, as well as the potential collapsed entrances of two adits (features 31 and 33) and

the site of a shaft (feature 29). Evidence of creek diversion works was also found, represented by the rock-cut channel (feature 22) and brick footings (feature 26). A length of tramway (feature 28) ran from the east side of the creek to the west, in part overprinting a section of metalled roadway (feature 32) adjacent to the line of the railway. A modified culvert (feature 27) was also found in association with the railway line. A scatter of 19th century artefacts and a cut-and-benched area (feature 23) was located east of Coalmine Creek.

Further south were two shafts and their associated tailings mounds (features 35 and 37), the latter located on the western side of the railway easement. An extended scatter of 19th century artefacts was also identified on the eastern slopes above the creek (features 36a - 36c).

The majority of these features were related to the 19th century mining activity. Of these six were likely to relate to the convict period. The location of the shaft and adits (features 29, 31 and 33) and the associated tailings' mounds (feature 30) was where historical research indicated mining activity during the convict period was carried out. Creek diversionary works were carried out by the convicts, potentially accounting for the footings implanted in northern bank of the former creek bed (feature 26). The metalled roadway (feature 32) was also of an earlier period, having been overprinted by the later tramway (feature 28) which serviced a post-convict period shaft (feature 34). In addition, a further two features potentially originated during the convict period. Documentary evidence suggested that a number of huts known to have been on the site in the later 19th century may have been survivors from the convict period. Two locations were identified where artefacts and topographic modification suggested such historic occupation.

The remainder of features were dateable to the post-convict period. Twenty-three features were related to the mining carried out during the late 19th century, comprising a mixture of shafts, test pits, tramways, creek diversion and an adit. Three features (features 10, 17 and 27) were likely to be associated with the 1870s construction of the Main Line Railway, representing two railway culverts and a sandstone quarry. A further four features (features 1, 3, 13 and 25) could not be positively identified.

Macquarie Harbour

The survey of the Macquarie Harbour coal mining site was undertaken with a handheld G.P.S. Few sites were identified, with none able to be positively attributable to convict-period activity. Due to the loss of all data generated from this survey, the results below are an outline only. However, the dearth of archaeological evidence in the area means that the lack of data has not been detrimental to this research.



Figure 4-12: Macquarie Harbour, site location

Features overview

The probable site of convict coal mining at Macquarie Harbour was located on the eastern coastal fringe of the harbour (Figure 4-13). The area targeted for the survey was characterised by a very shallow bay edged by a stony shingle shore. A vegetated strip stretched back from the coast up to 200m, comprising wet eucalypt forest and woodland, giving way to moorland. The terrain sloped steeply up to the east, rising to approximately 50m ASL within 100m of the shore. A small watercourse passed through a heavily vegetated ravine, emptying into the harbour just north of Coal Head. The underlying geology was sedimentary, overlain by sandy soils.

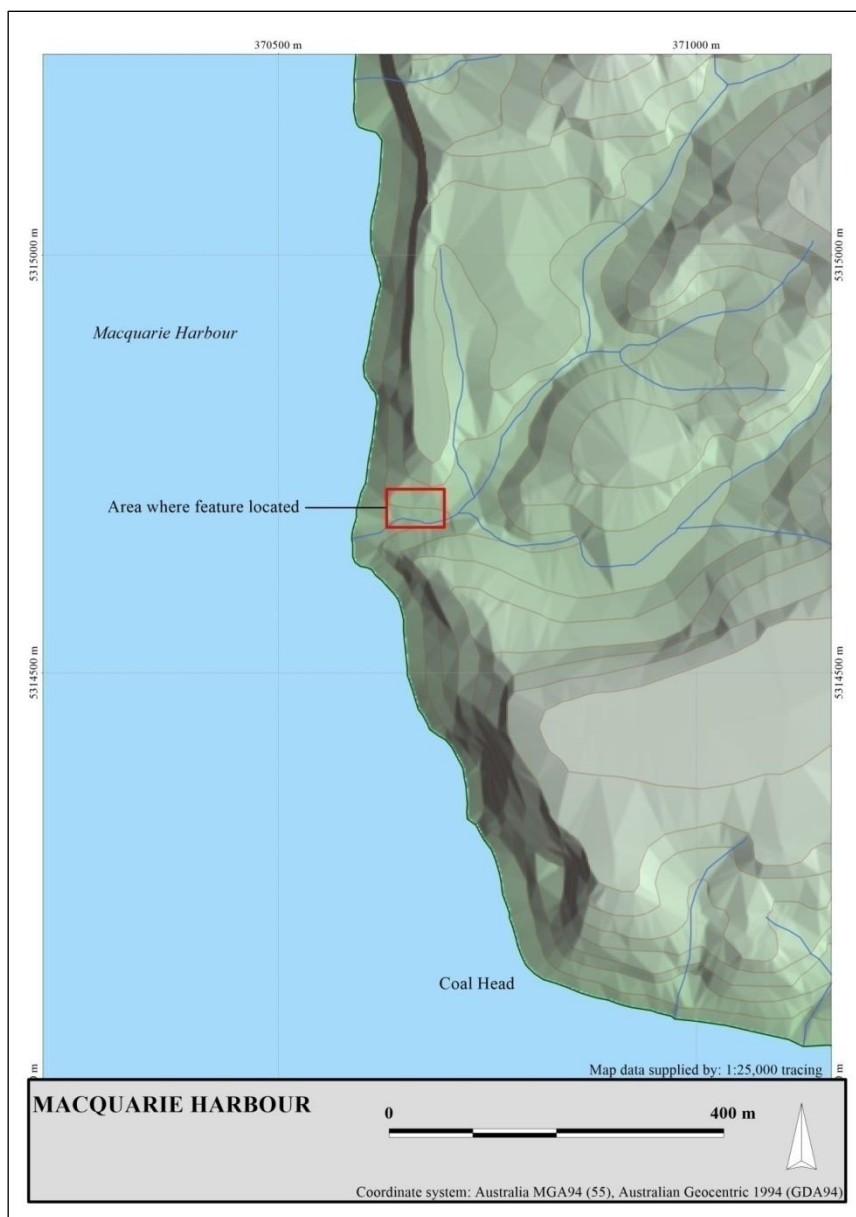


Figure 4-13: Macquarie Harbour, feature location

The survey of this site located a single archaeological feature. The site was situated on the northern bank of the watercourse, in an area of dense vegetation. It comprised an indistinct cut-and-benched area within 20m of the creek and approximately 50-100m inland from the coast. The bench measured approximately 15m by 5m.

Interpretation of features

The single feature potentially represented a bench cut into the south-facing slope to accommodate a structure. Its position adjacent to a watercourse would support this hypothesis.

Conclusion

This chapter has detailed the methodology used to undertake the archaeological fieldwork at the five case study sites. In addition, it has outlined the results attained and provided a basic interpretation of the features. The variable complexity of these archaeological landscapes closely mirrors the disparity that exists within the historical record. The Tasman Peninsula site presents a dense and entangled archaeological landscape. Recherche Bay and Jerusalem are landscapes of medium complexity, with a palimpsest of convict and post-convict features requiring careful sifting to extract even a basic understanding of their archaeological form. South Cape Bay and Macquarie Harbour are linked by their small, almost ephemeral, natures. Their archaeological legacies are easier to link to the convict period, despite their spatial limitations. Each of the five sites presents an historical and archaeological record which can be deconstructed according to the analytical framework devised in Chapter 2, such deconstruction enabling an enhanced insight into these places of convict labour.

CHAPTER 5: APPLYING THE MODEL - ORGANISATION

The analytical deconstruction of the five case studies will take place over the following four chapters, with each chapter focussing on a separate section of the model: *organisation*, *supervision* and *production*. The first analytical chapter (Chapter 5) will examine the organisational framework that existed at these places. It will consider the form that these landscapes took, using the five settings of convict labour to understand the place that the case studies occupy in a basic contextual framework. This analysis will then widen to encompass the influences that shaped the formation and development of the case studies. Following the framework outlined toward the end of Chapter 2, this chapter will demonstrate how consideration should be given to the overarching systems of management that influenced the form and progression of these places of convict labour. It will also show the methods through which the direction and effort scales of the convicts' labour power were directed.

Chapter 6 then focuses on a group of convicts unique to these case studies: the convict miners. Through these prisoners, it will be demonstrated the way in which convict skills were co-opted and the continual balance sought between penology's four aims. A particular focus of attention, the convict miner is an excellent illustration of the power dynamics that characterised these places. On the one hand, a skilled industrial asset, upon whom a mine's productivity relied, while on the other an object requiring incentive or coercion, the convict miner stands as the perfect embodiment of the dichotomy that existed between "profit and punishment" within all convict labour landscapes.

Chapter 7 looks in detail at the supervisory elements present in these landscapes. The penological management methods discussed in the preceding chapters required the presence of a supervisory regime that encompassed the human and built element. As such, the changing role that these supervisors had in the management of convict labour must be examined, as well as how the power hierarchies between free and unfree also extended to the ranks of the supervisors. Their roles were supplemented by the addition of a built environment which sought to confine and control the convict body. An examination of this environment provides further opportunities to discuss the power dynamics which defined the daily lived experiences of both the unfree and free.

The final chapter to focus on the case studies is Chapter 8, which concentrates on the industrial aspect of these places. The industrial processes that made up these landscapes will be examined, linking to the classificatory grouping outlined at the close of Chapter 2. A particular emphasis will be upon the extractive activities carried out by the convicts. Such activities defined these places and, through analysing them in light of the penological discussions of the preceding chapters, it will be possible to gain insight into the positioning of economic motive within Australian penology.

Setting of the labour

As outlined in Chapter 2, the convict labour landscapes that were created as a result of interaction between local, colonial and British influences can be separated into five main groupings: day gangs, work camps, work stations, industrial stations and establishments. Such settings represent the various environments experienced by the convicts during the transportation period, providing a way of immediately engaging with the archaeological and historical record. Of the five case studies, four of them can be referred to as *simple labour landscapes*, beginning and ending their operational lives within one of the categories. Only one, the Tasman Peninsula mine, is considered to be a *complex labour landscape*. It progressed through two categorical incarnations between 1833 and 1848.

Simple labour landscapes

The mining operations at Macquarie Harbour, Recherche Bay, South Cape Bay and Jerusalem all represent simple labour landscapes. Although they differed in size and longevity, their situation as outstations reliant upon another convict establishment for their continued existence, as well as their complete lack of self-sufficiency, meant that they should be considered as *work camps*. All four mining operations relied upon larger settlements for the supply of labour and materials. At Macquarie Harbour, the mine was situated 8km north of the main convict settlement on Sarah Island. It, along with the nearby farming gang on Phillips Island, was supplied by boat, the hut platform recorded at the site likely used for the accommodation of the convict labourers and their overseer/s (Brand 1984b:

36).²⁷⁷ Although not explicitly stated, it is unlikely that the mining gang was stationed on Sarah Island, the daily round trip introducing an unviable level of inefficiency to the operation. Similarly, at South Cape Bay, the mining was highly likely to have been undertaken by a detached party from Recherche Bay. Situated on an inhospitable stretch of coastline, the gang would have relied upon supply parties braving the surf beach, or an overland route of 7km. Regular contact with Recherche Bay would have been unlikely, the larger operation itself reliant on other stations for its supply. Both Macquarie Harbour and South Cape Bay were operated as dedicated mining camps, with neither historical nor archaeological evidence indicating that any attempt was made at self-sufficiency. Both Recherche Bay and Jerusalem were larger and more long-lived operations, neither developed beyond work camps, nor was convict labour directed toward tasks that would have increased their self-sufficiency. In June 1841, all 43 convicts at Recherche Bay were either mining, or working as carpenters, blacksmiths, general labourers and sawyers to facilitate the works.²⁷⁸ This situation continued even with the increase in population between 1842-43. At Jerusalem, both stages of mining (1841-42, 1844) were conducted by a small work party dedicated to mining-related labour. Although not attached to the nearby station at Jerusalem, the mining camp relied on the larger settlement for its supply and was also attended by the visiting magistrate from that station during both periods.²⁷⁹

The archaeological landscapes at these four places support their definition as work camps. At Macquarie Harbour and South Cape Bay the identified features were situated within a very limited area. At the latter, potentially up to four huts were situated adjacent to what appeared to be the beginnings of a mine shaft (see Appendix 5, Figure A5-3). A small gang would have been dedicated to the sinking of this shaft and the excavation of the coastal adit, in an attempt to test the quality of the coal. No evidence for ancillary activities relating to attempts at self-sufficiency, such as ground clearance for agriculture, was identified. Similarly, the archaeological evidence pertaining to Recherche Bay and Jerusalem indicated places dedicated to a single primary task. At Jerusalem, at

²⁷⁷ *Report from the Select Committee*, No. 56 (C), Documents relative to the Absconding of Pierce and Cox from Macquarie Harbour, (669), p. 313.

²⁷⁸ Extract from the Diary of the Mining Party at North Port Recherche Bay from the 18th to the 26th June 1841, Friday 18 June 1841, CSO 8/13/301, T.A.H.O.

²⁷⁹ John Montagu, Colonial Secretary, to Matthew Forster, Chief Police Magistrate, 31 December 1841, CSO 22/13/593, T.A.H.O.

least two huts were known to have been built during the convict period, with a further two potential convict-period huts identified in post-convict maps (see Appendix 6, Figures A6-7 - A 6-10).²⁸⁰ All were located in close proximity to the convict-period workings, indicating that the huts' occupants were primarily involved in tasks associated with mining.

The archaeological landscape at Recherche Bay is more complex. Structures originating from the convict-period were spread over an extended area, interpreted as being associated with both accommodation and production (see Appendix 4, Figures A4-3 - A4-7). The mine shaft was located toward the south of the occupied area, with at least two structures in loose association. The buildings likely to have been occupied by the convicts were situated 100m to the north, in possible association with a second trial shaft. The whole site was situated on the coast of a sheltered bay, with no historical or archaeological evidence to indicate that any foreshore infrastructure was constructed to aid the landing of stores or the export of coal.

The four work camps can be interpreted as being relatively static landscapes. Macquarie Harbour and South Cape Bay were short-lived operations which did not have the opportunity to progress beyond their initial formative stage, either through their unworkable isolation or a poor quality coal resource. Recherche Bay and Jerusalem, while more sizeable places which enjoyed marginally greater mining success, were similarly restricted. That they did not progress beyond a work camp was enforced upon them by unfavourable geographic or geological circumstances.

Complex labour landscapes

As a place of convict labour, the Tasman Peninsula mine demonstrates the transition from one form of labour landscape to another, the operation following a path of development from a work camp to a work station. For its first two years, the mine was unambiguously a work camp. In adherence to the classificatory criteria developed for this thesis, it was a detached establishment dedicated to a single work outcome that enjoyed only a limited self-sufficiency. It was reliant upon the larger settlement of

²⁸⁰ James Clare, mine overseer, to Matthew Forster, Chief Police Magistrate, 1 January 1842, CSO 22/145/811, T.A.H.O.

Port Arthur for its supply of labour and materials, being constantly inspected by that settlement's commandant. When stores were required at the mines, they were sent from Port Arthur.²⁸¹ Larger orders, such as a shipload of building materials, could be sent direct from Hobart, though their requisition still originated at Port Arthur.²⁸² The convict labour at the mining camp at this stage was entirely dedicated to the act of winning coal from the earth, with the only other work to which they had been diverted was the construction of their living quarters.²⁸³

The small gang size and reliance upon Port Arthur meant that the operation could be abandoned at any stage, the convicts re-absorbed within the labour pool of the penal station. As a result, the camp occupied a liminal position between 1833 and 1835, on the cusp of abandonment, or progression to a more developed stage. As it was, 1835 marked a key turning point, Charles O'Hara Booth declaring toward the end of that year that the camp was on the way to becoming a "permanent station", the value of the coal having been proven.²⁸⁴

The transition was marked by a move toward a higher degree of self-sufficiency, although the station continued to be directly linked, and administratively subordinate, to Port Arthur. At this time the prisoner population had risen to 42.²⁸⁵ The addition toward the end of 1835 of a cookhouse and oven, as well as the employment of two additional overseers and a constable, was triggered by this increase in convict population and the attendant requirement to meet supply and supervisory needs.²⁸⁶ With such infrastructure beginning to be built, a proportion of the workforce had to be diverted to the new projects, which, in addition to construction, also included sourcing timber and lime from the surrounding area. The new barracks, erected in ca.1838, allowed for the proper housing and

²⁸¹ For example, see: Afleck Moodie, Assistant Commissary General, to John Burnett, Colonial Secretary, 30 May 1834, CSO 1/484/10750, T.A.H.O. (UB); Charles O'Hara Booth, Commandant, to John Montagu, Colonial Secretary, 26 November 1834, CSO 1/641/14418, T.A.H.O. (UB).

²⁸² Charles O'Hara Booth, Commandant, to John Montagu, Colonial Secretary, 30 October 1835, CSO 1/832/17671, T.A.H.O. (UB).

²⁸³ Return of Crown Prisoners at Port Arthur shewing [sic] the number of each Trade in the Month of May 1834, 1 June 1834, CSO 1/511/11180, T.A.H.O.; Charles O'Hara Booth, Commandant, to Matthew Forster, Chief Police Magistrate, 26 November 1833, Tasmania Papers no. 35, M.L. (BT).

²⁸⁴ Charles O'Hara Booth, Commandant, to John Montagu, Colonial Secretary, 30 October 1835, CSO 1/832/17671, T.A.H.O. (BT).

²⁸⁵ Charles O'Hara Booth, Commandant, to William Moriarty, Port Officer, 20 January 1835, CSO 1/412/9273, T.A.H.O.

²⁸⁶ Ibid.; Nominal List of Crown Prisoners receiving Tea and Sugar as an indulgence for the services rendered in the situations placed opposite each Individual's name for the month of October 1835, October 1835, CSO 1/731/16936, T.A.H.O. (BT); Charles O'Hara Booth, Commandant, to John Montagu, Colonial Secretary, 30 October 1835, CSO 1/832/17671, T.A.H.O. (BT).

classification of an expanded workforce. Commensurate with this was the addition of the infrastructure - tramways, roads, wharf and jetties - which enhanced the mining efficiency of the station. The continual accretion of spaces for accommodation, surveillance, punishment, storage and labour throughout the late 1830s and into the 1840s was the result of the relative success of the primary task.

It is interesting to note that, although the number of convicts at the station increased exponentially between 1835 and 1848, its role as a work station did not change. This was largely due to the fact that the core business of the station - coal mining - remained in place until its cessation as a convict operation. By the definition laid out in Chapter 2, the station's focus on coal mining meant that it did not develop into an *industrial station*, on a par with Port Arthur. This was despite the fact that, by the early 1840s, labour at the mines was directed toward a myriad of different tasks unrelated to the actual task of mining. Labour returns from 1841 illustrate the variety of tasks (Table 5-1).²⁸⁷

It is significant that, while there were many non-mining related tasks carried out at the station, the number of convicts actually employed in them was in the minority - in this instance only 51 (22%) of the 235 prisoners. The majority of convicts were dedicated to winning the coal, with those employed in seemingly unrelated tasks working toward the steady completion of this goal. By this time a number of small gangs were detached from the main settlement, employed in the tasks of charcoal-burning or timber-getting (Becke 1899: 73).²⁸⁸

²⁸⁷ *Secondary Punishment*, No. 5, Daily Abstract of Work performed by Gangs at Port Arthur, Tasman's Peninsula, 1 January 1841, (412), p. 137.

²⁸⁸ Samuel Cook, Superintendent, to Charles O'Hara Booth, Commandant, 8 December 1841, Tasmania Papers 134, CY 3079, M.L. (BT).

Mining	110
Coal-checkers	2
Blacksmith	4
Carpenters	5
Splitters	4
Sawyers	5
Timber-getters	68
Lime-burning	5
Quarrymen	2
Masons	2
Wardsmen/watchmen	10
Dispenser	1
Sub-constables	2
Writer	1
Barber	1
Messengers	2
Cooks/bakers	5
Servants	3
Groom	1
Woodcutter	1
Gardener	1
	235
Of whom related to mining	184 (78%)

Table 5-1: Enumeration of convicts at the Tasman Peninsula coal mine in January 1841, showing number employed in mining-related occupations (red)

This contrasts with a labour return from 1846, by which time the station had experienced a number of administrative and efficiency setbacks.²⁸⁹ Table 5-2 illustrates that, although it continued to be a work station dedicated to coal mining, there had been an increase in the number and percentage of convicts employed in tasks not directly related to mining. The convict and free population had greatly increased under probation, resulting in an evident need to augment the number of convicts required in service positions. More staff required more servants, more convicts meant an increased need for buildings' maintenance and victualling. There was also an increased need for self-sufficiency, with some convicts making bricks and working at agriculture, others making and mending footwear and clothes.

²⁸⁹ *Convict Discipline and Transportation*, No. 30, Return of the Number of Convicts at each Station on October 29, 1847, showing how they were employed on that day, (1022) (1121), p. 184.

Mining	213
Masons	6
Bricklayers	7
Carpenters	14
Blacksmiths	9
Quarrymen	4
Construction	10
Charcoal-burning	4
Lime-burning	2
Sawing	10
Brickmaking	4
Agriculture	6
Road-making	23
Labourers	7
Engineer	2
Cooper	1
Boatmen	12

Servants	16
Cooks/bakers	6
Watchmen	16
Clerk	1
Tailors/shoemakers	6
Barbers	2
Washermen	4
Wardsmen	5
Signalmen	2
Woodcutters	2
Water carrier	16
Messengers	2
Loan	2
Scavenger	6
Sick	19
Awaiting trial	1
Punishment	5
Light work	5
	450
Of whom related to mining	225 (50%)

Table 5-2: Enumeration of convicts at the Tasman Peninsula coal mine in October 1846, showing number employed in mining-related occupations (red)

Such figures indicate that, in some respects, the station did take the first steps toward becoming an industrial station, with gangs detached from the main settlement to facilitate the gathering of timber, lime and charcoal. However, unlike Port Arthur, the Tasman Peninsula mine never diversified its operation enough to concentrate on anything other than coal mining. The ratio dedicated to the task did decrease in the mid-late 1840s, a higher percentage of convicts having been directed to achieving a level of self-sufficiency at the station under the requirements of probation. However, the station never moved beyond its mining focus. Similarly, the other case studies occupied a liminal situation, on the cusp of transitioning from one classification to another. Recherche Bay, although effectively an outstation of Port Arthur for its operational life, was of a size that would suggest it could have transitioned into a work station. Macquarie Harbour and Jerusalem could potentially have been worked by day gangs detached from nearby larger settlements.

Although this classificatory system can lead to some ambiguity in interpretation, this section has illustrated how the simplified settings for convict labour discussed in Chapter 2 can provide an immediate way of understanding the comparative form of a place of convict labour. Such a place may pass through a number of separate settings, thereby becoming a complex labour landscape, or remain static for its operational life as a simple labour landscape. The reasons why such a transition could occur are varied. In the instance of these case studies, the influence of their geographical and geological setting were instrumental. Poor coal resources, difficult mining conditions or geographic isolation hampered the operations of all but the Tasman Peninsula coal mine, contributing to their inability to transition from one state to another. Better conditions on the peninsula, including its favourable situation within the penal hub of the colony, enabled it to develop into a large and complex station.

Global, colonial and local systems of management

These local labour landscapes and the convict system which resulted in their formation were the result of interaction between British, colonial and local scales of governance. Those who oversaw the formation and development of these landscapes operated within parameters defined by the administrative bases of power in British and colonial centres. Yet, in a cyclical flow, the methods and results of convict labour at a local scale could alter the direction of thought and policy at the global and colonial. Examining of this exchange of influence provides the necessary foundation for understanding the formation and development of all places where convicts laboured.

In Van Diemen's Land, the relationship between the British and colonial scales has been characterised as one that shifted from an early period of harmony, to one marked by competing aims (Tuffin 2007). Although a broad summation of incredibly complex situations, these two epochs are related to the two convict labour management systems operational in the colony during the convict period: assignment and probation. Until the late 1830s, colonial and British approaches to convict management were largely in unison, since the provision of convict labour through assignment and the treatment of

reoffenders broadly satisfied both colonial and British aims. With probation's introduction, however, the dynamic altered and a rift grew between what the colony desired and could achieve, and what the British government expected. Tracing the evolution of convictism during these two periods and the influence of local and global factors upon it, is essential to understanding the places of convict labour which were formed during this time. Of the five case study sites, Macquarie Harbour, operated during the assignment era, while three others, Recherche Bay, South Cape Bay and Jerusalem, opened and operated during the probation era. The Tasman Peninsula spanned both periods of labour management and thereby provides a rare example of how the influence of such differing systems could alter the physical composition of a convict station.

The earliest of the case studies, at Macquarie Harbour and on the Tasman Peninsula, began as attachments to penal stations. The formation of such establishments in the Australian colonies had initially provided the colonial authorities with a means of separating a more turbulent prisoner element from the remainder of the convict population (Shaw 1966: 188-189). As the colonies progressed, penal settlements became the coercive-based foundations upon which convict management strategies were built (Maxwell-Stewart 1997: 145). The colonial and British governments therefore had a deep interest in the methodology behind the deployment of convict labour at these places, which J.T. Bigge had recommended be a "constant and salutary occupation to the convicts".²⁹⁰ There was a requirement that the punitive value of the labour at a penal settlement form a deterrent to the general prisoner population. The convict was not to be employed in their own trade, the type and severity of labour instead defined by their conduct.²⁹¹ The labour was also to provide a reformatory element, inculcating habits of industry that would stand the convict in good stead upon their eventual release.²⁹²

The place of the penal station was further cemented by the findings of the 1831 Select Committee, amongst which was the recommendation that penal settlements be reserved for "criminals of the most

²⁹⁰ *Report of the Commissioner*, (448), p. 165.

²⁹¹ *Ibid.*, p. 181.

²⁹² *Ibid.*, p. 186.

hardened character".²⁹³ Lieutenant Governor George Arthur, largely responsible for the hierarchical system then in place in Van Diemen's Land, strongly agree that penal settlements were absolutely essential to the prevention of crime amidst the remainder of the prisoner population.²⁹⁴

The deployment of convicts in coal mining at Macquarie Harbour and on the Tasman Peninsula was part of the labour management strategies employed at the penal stations of those places. It fulfilled the requirement that labour be hard, any skills learnt by the convicts meeting Bigge's requirement that labour also provide a reformatory element. While coal's potential failed to materialise at Macquarie Harbour, on the Tasman Peninsula it was proven, allowing the mine to become a staple part of labour management on the peninsula. Having been made the sole penal settlement in the colony after the closure of Maria Island (1832) and Macquarie Harbour (1833), Port Arthur's prisoner population had rapidly increased, doubling in size from 475 in 1833, to 911 in 1835.²⁹⁵ The mine was one of a number of outstations built on the peninsula which performed as transport, communication, security and resource-gathering nodes for the larger penal settlement. Situated too far from the settlement to be worked by day gangs, the mining outstation was established along the lines laid out by Bigge: with enough buildings for "an overseer, a store for provisions, and a place of confinement".²⁹⁶

The immediate importance of the enterprise was indicated by the hand-picked nature of the exploratory mining gang sent to test the coal, all of whom were offered ameliorations to their sentences if the coal proved worthwhile.²⁹⁷ This, it would seem, was in direct contravention of the colonial government's own guidance on the type of prisoner and labour that was to be carried on at a penal settlement, where "The smallest indulgence beyond the scanty ration provided by the Government is withheld".²⁹⁸ Such was the importance of the enterprise that the situation was allowed to continue until 1835, when the mine became a permanent establishment.²⁹⁹

²⁹³ *Secondary Punishment*, E.G. Stanley, Secretary of State, to George Arthur, Lieutenant Governor, 21 March 1833, B.P.P. 1834 (82), p. 18.

²⁹⁴ *Secondary Punishment*, George Arthur, Lieutenant Governor, to Viscount Goderich, 15 February 1833, (82), p. 56.

²⁹⁵ *Statistical Returns of Van Diemen's Land, from 1824 to 1839*, No. 37 Number of Convicts Remaining at Port Arthur, (1839).

²⁹⁶ *Report of the Commissioner*, Appendix 7, Directions and Regulations for the conduct of the New Settlements at Moreton Bay, Port Bowen, and Port Curtis, 6 May 1822, (448), p. 185.

²⁹⁷ Unknown correspondent to Josiah Spode, Chief Police Magistrate, 31 October 1833, CSO 1/680/15032, T.A.H.O. (UB).

²⁹⁸ *Secondary Punishment*, Memorandum by Josiah Spode, Principal Superintendent, (82), p. 72.

²⁹⁹ Charles O'Hara Booth, Commandant, to John Montagu, Colonial Secretary, 20 January 1835, CSO 1/412/9273, T.A.H.O.; Charles O'Hara Booth, Commandant, to John Montagu, Colonial Secretary, 21 September 1835, CSO

The successful formation of the mining gang caused it to occupy an ambiguous situation on the peninsula: on the one hand under the aegis of Port Arthur, while on the other, an establishment in its own right. Until the early 1840s, CSO 50, the returns of the colonial departments, listed the mines' officers under the heading "Commandant's Department, Tasman Peninsula".³⁰⁰ Some of these officers, such as Joseph Lacey, the mining overseer, resided at the mine. Others were required to devote their energies to both Port Arthur and the smaller mining establishment. Gavin Casey, the assistant surgeon stationed at Port Arthur, was required to attend to the prisoners and officers at the mines whenever he was needed, no matter the weather or time of day.³⁰¹ A similar situation existed for Port Arthur's chaplain who, until the appointment of a catechist at the station in 1841, visited the mine once every three weeks.³⁰²

Throughout the 1830s, the pivotal figure in the mine's development was the Port Arthur commandant. His decisions effected the direction and success of the mining operation, as well as shaped the penological form of the establishment. During this period the commandant, Charles O'Hara Booth, was a regular visitor to the mines, the embodiment of Bigge's earlier stipulation that commandants should constantly attend to their outstations.³⁰³ Correspondence from the mines was regularly addressed to Booth, who would then answer if required, or pass it on to Hobart. During the first period of investigation, Booth took a close interest in proceedings, with Joseph Lacey reporting the operation's progress directly to him, instead of to extra-peninsula officers. When the mines began to produce coal on a saleable scale between 1834 and 1835, the commandant played an active role in devising the procedure and costs associated with shipping and auctioning the coal.³⁰⁴ When John Lhotsky was appointed in 1837, he addressed his findings to Booth, who passed them to the colonial secretary.³⁰⁵

1/829/17594, T.A.H.O. (UB); Charles O'Hara Booth, Commandant, to John Montagu, Colonial Secretary, 30 October 1835, CSO 1/832/17671, T.A.H.O. (BT).

³⁰⁰ List of Officers, 1833-1843, CSO 50/8-18, T.A.H.O.

³⁰¹ Charles O'Hara Booth, Commandant, to John Montagu, Colonial Secretary, 10 October 1836, CSO 1/884/18754, T.A.H.O. (UB).

³⁰² Rev. Manton, Chaplain, to Charles O'Hara Booth, Commandant, 31 December 1840, CSO 5/277/7164, T.A.H.O.

³⁰³ *Report of the Commissioner*, Appendix 7, 'Directions and Regulations for the conduct of the New Settlements at Moreton Bay, Port Bowen, and Port Curtis', 6 May 1822, (448), p. 186.

³⁰⁴ See examples of correspondence from 1833-36 in CSO 1/412/9273, T.A.H.O.

³⁰⁵ Dr John Lhotsky to Charles O'Hara Booth, Commandant, 25 May 1837, CSO 5/72/1584, T.A.H.O.

Booth was a decision-maker at a local scale, able to have an immediate impact upon the form and development of the labour landscape. As commandant of the Tasman Peninsula, he was part of a much wider colonial-scale command and control network. Throughout the convict period all the major departments had an interest in how convict labour was managed, often making for a complicated and convoluted system. As the mine grew in importance throughout the 1830s, the number of departments adhering to the station's management apparatus increased alongside the convict population. Figure 5-1 shows the departmental hierarchy at the time the mine became a permanent station in 1835. This shows that Lacey, the mining overseer, was directly responsible to Commandant Booth, who in turn had an array of departments he was required to refer to. The red and blue arrows show the progress of a personnel appointment request, demonstrating the convoluted process required for even the simplest of procedures.³⁰⁶

The expansion of the Tasman Peninsula mine resulted in a complicating of this hierarchy, as more positions were created at the station. Figure 5-2 shows the departmental chain two years later in 1837. By this time the military barracks had been built at the station, and the prison population also attended by Port Arthur's chaplain and medical officer. Overseers, constables and the military were all employed to affect the day-to-day security and control requirements of the establishment. The figure shows the passage of a minor investigation into the suitability of the station's convict medical dispenser, who had been found wanting by Dr Casey, the attending assistant surgeon from Port Arthur. In this instance, Casey went outside of the established communication conduit to Commandant Booth. His direct correspondence with the principal medical officer in Hobart, as well as with Booth, illustrates the capacity of some officers, particular the military, to bypass the established chain of command.

³⁰⁶ William Moriarty, Port Officer, to John Montagu, Colonial Secretary, 2 July 1835, CSO 1/612/13966, T.A.H.O. (UB).

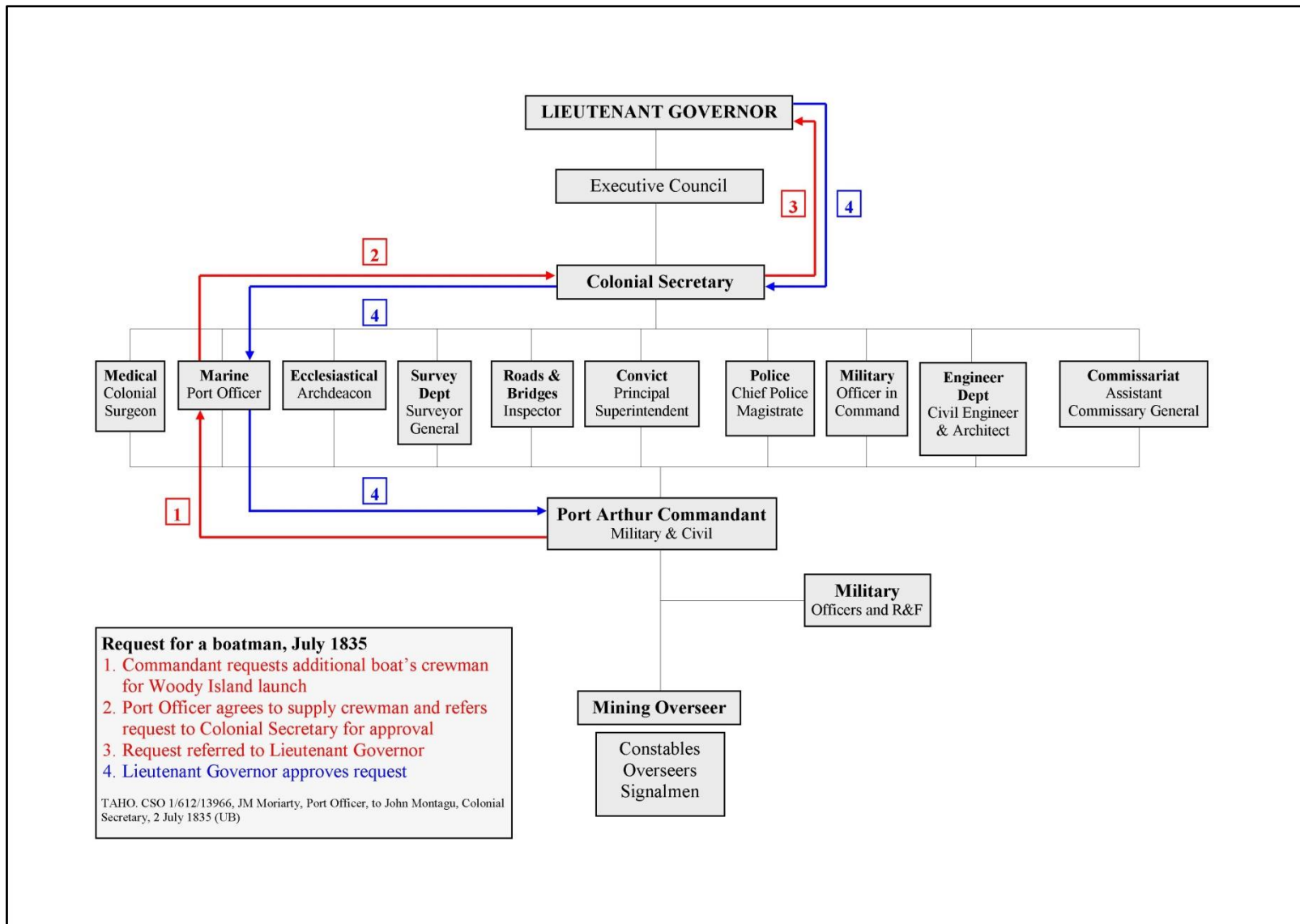


Figure 5-1: Chart showing a simplified chain of command for the Tasman Peninsula coal mine, ca.1835. The progress of a personnel request has been shown

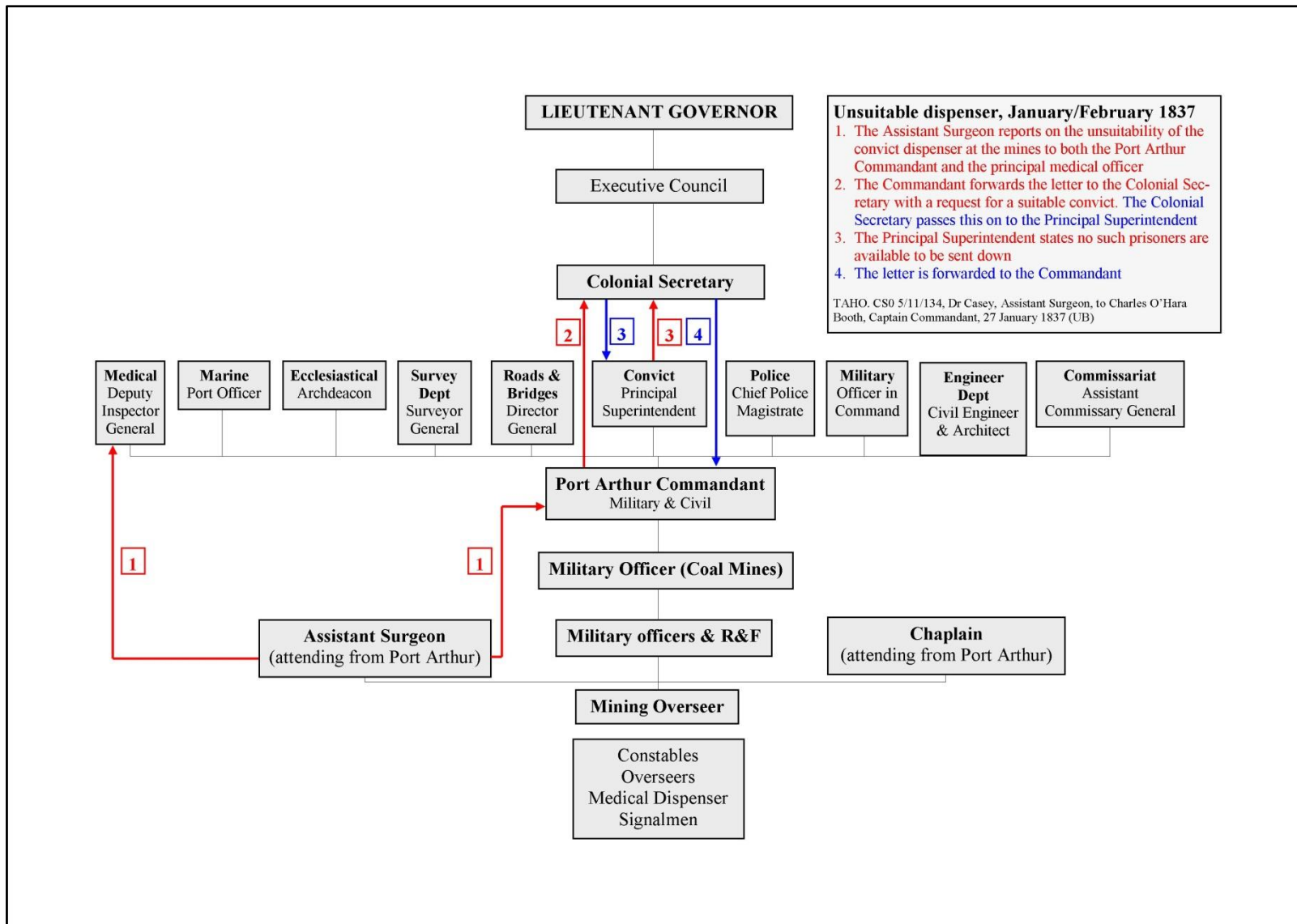


Figure 5-2: Chart showing a simplified chain of command for the Tasman Peninsula coal mine, 1837

Toward the end of the 1830s the place of the Tasman Peninsula coal mine in colonial convict management altered. Whereas convicts sent to the works had formerly been offered indulgences as an inducement to good behaviour and performance, now an increasing number of prisoners were sent there to undergo punishment. "The term 'Mine'" wrote Thomas Lempriere in ca.1838 "appears to inspire them with dread" (Lempriere 1839: 80). Such an alteration had been brought about by the increase in population and infrastructure following the continued success of the mining operation. More prisoners required tighter security, which in turn required more investment. The appointment of a large military detachment to the establishment also contributed towards making the station a place of punishment on a par with Port Arthur (Lempriere 1839: 80).

At the same time that the station was brought onto a more punishment-oriented footing, the whole hierarchical apparatus of the Tasman Peninsula faced complete reconfiguration as part of the changes wrought by the findings of the 1838 Molesworth Committee. The resultant overhaul of the system of convict labour management was imposed upon Van Diemen's Land by Britain and reached to the very roots of penological management in the colony. The Tasman Peninsula was initially unaffected by the introduction of probation, having been retained as an establishment for reoffenders under the administration of Commandant Booth.³⁰⁷ This had been confirmed in November 1840, when the peninsula was proclaimed as the only place in Van Diemen's Land "to which any offender convicted...and being under sentence or order of transportation, shall be sent or transported".³⁰⁸ Lieutenant Governor John Franklin later stressed the importance of Port Arthur's role in the colony's convict management:

[Port Arthur] has become a safeguard to this community, which it would be extremely dangerous to impair...in this colony we labour under the disadvantage of being without the punishment of expatriation as a terror to doubly and trebly-convicted felons of the most

³⁰⁷ *Secondary Punishment*, Sir John Franklin, Lieutenant Governor, to Lord John Russell, Secretary of State, 18 November 1840, (412), p. 103; *Convict Discipline*, Sir John Franklin, Lieutenant Governor, to Lord John Russell, Secretary of State, 15 April 1841, B.P.P. 1843 (158), p. 29.

³⁰⁸ *Convict Discipline*, John Montagu, Colonial Secretary Van Diemen's Land, to E.D. Thomson, Colonial Secretary New South Wales, 6 July 1841, Enclosure, (158), p. 57.

determined character, Port Arthur, a settlement at our very doors, is the only penalty which we can hold out to produce upon such men.³⁰⁹

However, when Franklin visited the Tasman Peninsula in January 1841, he decided that its natural advantages, in addition to the well-established penal infrastructure already in place, made it an ideal location for the colony's first dedicated probation station. Situated at Salt Water River, south of the mine, the first prisoners arrived at the station in March of that year (Brand 1990: 16).

Reclassified as a probation station in mid-1841, the coal mine continued as a place of punishment alongside Port Arthur, the two between them providing the only repositories for reoffenders.³¹⁰ The increased classificatory demands of probation had an immediate impact, as a raft of new positions was inserted into the station's bureaucratic network. These were filled by the end of 1841, resulting in a marked increase to the establishment.³¹¹ A superintendent had been inserted into the station's administrative hierarchy, alongside an assistant superintendent and two more overseers. This situation was replicated on a larger scale in the colony, with probation's introduction causing a colony-wide re-shuffling of departmental positions. In mid-1841 the old assignment board was done away with, its duties taken up by the principal superintendent and the newly-created office of registrar of the probation system. A new position, the director of the probation system, was also introduced, filled by the chief police magistrate, Matthew Forster (Figure 5-3).³¹²

³⁰⁹ *Convict Discipline*, Sir John Franklin, Lieutenant Governor, to Lord Stanley, Secretary of State, 1 April 1842, (158), p. 72.

³¹⁰ *Convict Discipline*, E.D. Thomson, Colonial Secretary New South Wales, to John Montagu, Colonial Secretary Van Diemen's Land, 24 March 1841, (158), p. 34.

³¹¹ List of Officers, 1841, CSO 50/16, T.A.H.O.

³¹² *Convict Discipline*, Sir John Franklin, Lieutenant Governor, to Lord John Russell, Secretary of State, 9 July 1841, (158), pp. 36-8.

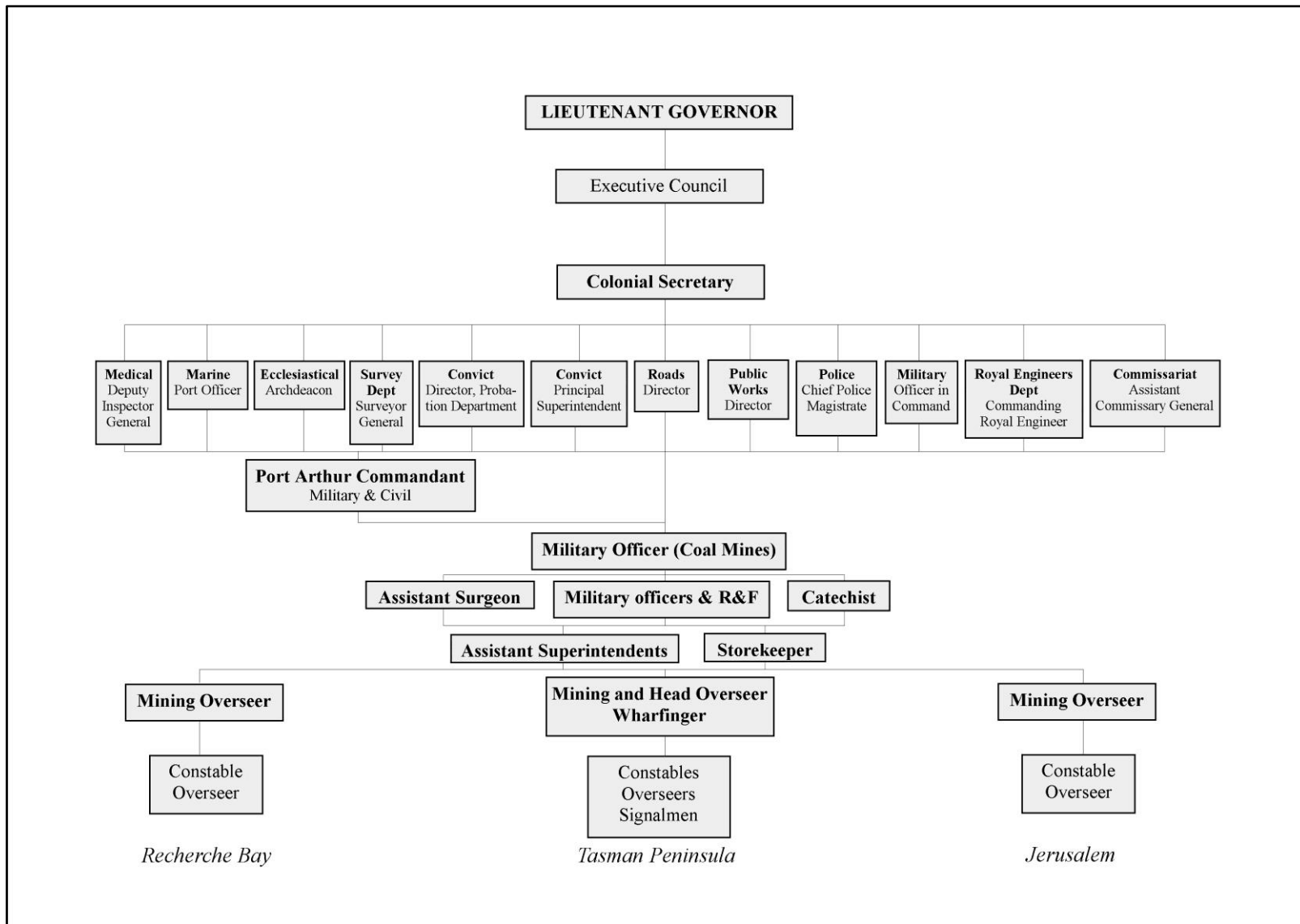


Figure 5-3: Simplified chain of command relating to the establishments on the Tasman Peninsula, Recherche Bay and Jerusalem, 1841

The early years of probation led to the commencement of operations at Recherche Bay, Jerusalem and South Cape Bay. Although opened during the probation era, none of these mining operations were accorded probation station status in their own right. Recherche Bay, essentially a detachment of the Tasman Peninsula mine, was staffed and supplied from that establishment. South Cape Bay was likely to have been an outstation of Recherche Bay. The mines near Jerusalem operated as an independent party during its first phase, though it was increasingly dependent on the nearby probation station during its second phase. As it operated as an outstation of Port Arthur, Recherche Bay's (and therefore potentially South Cape Bay's) convict population comprised a mixture of prisoners who had been transferred from that station, as well as new arrivals. This mixture of old and new convicts contravened one of probation's founding classificatory principles, the authorities believing that such a situation would lead to the newer arrivals becoming contaminated by the influence of the old hands:

...the sooner a complete separation takes place the better it will be...as regards all the detail of their discipline and reformatory treatment; and this separation it is my desire to render as effectual as possible with proper regard to economy.³¹³

At Jerusalem, during the first phase of operation the convicts were those transported under the old assignment system.³¹⁴ Its overseer and constable were included in returns for probation gangs attached to the road department, but were paid for from the principal superintendent of convict's department.³¹⁵ During the abortive second phase, the overseers and prisoners, as well as stores and tools, were all drawn from the nearby probation station of Jerusalem.³¹⁶ This change in Jerusalem's labour base over this short period reflected the altered situation in the colony, as the old assignment convicts gradually filtered through the system, to be replaced by those transported under the probation system.

On the Tasman Peninsula, the mine continued to comprise a mixture of secondarily-convicted convicts and probationers, although there was a continued gradual diminution of the former. Forster berated the mine's superintendent, Samuel Cook, to improve the situation, expressing an "extreme

³¹³ *Convict Discipline*, Sir John Franklin, Lieutenant Governor, to Lord John Russell, Secretary of State, 9 July 1841, Enclosure, (158), p. 42.

³¹⁴ John Hall to Josiah Spode, Principal Superintendent, 7 March 1842, note by Lieutenant Governor, 9 March 1842, CSO 22/47/190, T.A.H.O.

³¹⁵ List of Officers, 1841, CSO 50/16, T.A.H.O.

³¹⁶ William Jones, mining overseer, to J.E. Bicheno, Colonial Secretary, 25 January 1844, note by Lieutenant Governor, CSO 8/108/2279, T.A.H.O.

regret at Mr Cook's want of attention to his instructions".³¹⁷ By mid-1842 it was reported that only two miners under punishment (secondarily-convicted) remained at the establishment, although more convicts of this class were working at other trades throughout the settlement.³¹⁸

Although Port Arthur continued to operate as a place of punishment, the mine was still administratively linked to it. Throughout his tenure, Samuel Cook continually referred to Commandant Booth for advice and material aid. Supplies and tools were sent from the larger station, as the mine sought to cope with the growing influx of probation convicts. Indeed, it was Booth, rather than Cook, who was primarily involved in the expansion of the mining operations in 1842, reporting on the suggestions of James Hurst and William Dawson to sink extra shafts.³¹⁹

By 1843, as the colony began to feel the effects of the economic depression, three systems of convict management were being run simultaneously in the colony: one for convicts transported during the assignment period, one for those who began their sentence after its cessation and another for convicts transported to the colony after the release of Secretary of State Lord Stanley's new probation regulations in November 1842.³²⁰ Where before the nascent probation regulations had largely been devised by members of the colonial government and therefore those best-placed to witness their effect upon convict management, Stanley's regulations were an imposition of British interests at the expense of colonial (Shaw 1963: 5). Probation's original aims, as hammered-out by the Franklin administration, had been to accrue benefit to the colony through convict labour.³²¹ Stanley's new regulations saw this attitude swept away:

The primary object to be kept in sight in the employment of convicts is the raising by them of the produce necessary for their subsistence, and the consequent diminution of the

³¹⁷ Matthew Forster, Director Probation Service, to Samuel Cook, Superintendent, 3 March 1842, Tasmania Papers 140, T.A.H.O. (BT).

³¹⁸ Samuel Cook, Superintendent, to Charles O'Hara Booth, Commandant, 12 May 1842, Tasmania Papers 134, CY 3079, Frame 360, M.L. (UB).

³¹⁹ Charles O'Hara Booth, Commandant, to Matthew Forster, Director of Probation System, 21 March 1842, CSO 22/59/909, T.A.H.O.

³²⁰ *Convict Discipline*, Sir Eardley Wilmot, Lieutenant Governor, to Lord Stanley, Secretary of State, 5 October 1843, Enclosure No. 1, Matthew Forster, Comptroller General, to Sir Eardley Wilmot, Lieutenant Governor, 28 September 1843, (659), p. 1.

³²¹ *Secondary Punishment*, Sir John Franklin, Lieutenant Governor, to Lord Glenelg, Secretary of State, 15 February 1839, (412), p. 81.

expense now entailed on the mother-country. The benefit to accrue from their labour to Van Diemen's Land...is still but a secondary and subordinate consideration.³²²

The extraction of coal locked beneath colonial soil by convicts funded from British and colonial coffers served to highlight the growing fracture lines between British and colonial interests. The rights to minerals in the colony were vested in the Crown, bestowing upon it the right to work mines for its own advantage and profit.³²³ Prior to probation's introduction this had not been a concern, the Tasman Peninsula mine being the only operation of note, with its profits channelled into the British commissariat. The commencement of probation and the new divergence between colonial and British interests, as well as the increase in the number of mining establishments, forced a reassessment as both parties sought to define who should derive the profit from the miners' labour.

On the Tasman Peninsula, where "the labour of the convicts is not productive of any benefit to the colony" the majority of the establishments' costs were borne by Britain, including the mine.³²⁴ As it operated as an extended outstation of the Tasman Peninsula, the cost of convict labour at Recherche Bay was also borne by the British government, though the private company managing the labour was also in theory liable for the expense.³²⁵ During the second stage of operation, the mines at Jerusalem were worked by convicts drawn from a nearby station. That the colony was charged for their superintendence and supply indicates that the colonial government expected to accrue some economic benefit through the sale of the coals.³²⁶

By the end of 1843 the role of the Tasman Peninsula mine had altered. Having evolved from outstation to probation station, it now became a hub of punishment within the probation system. The new comptroller-general, Matthew Forster, noted that the station was "the real punishment station of the probation department", the superintendent of the mines, J.C. Smith, reporting in early 1844 that

³²² *Convict Discipline*, Lord Stanley, Secretary of State, to Sir Eardley-Wilmot, Lieutenant Governor, 26 March 1844, (659), p. 17.

³²³ Memorandum by Sir Eardley Wilmot, 5 September 1844, CSO 8/108/2279, T.A.H.O.

³²⁴ *Convict Discipline*, Extract from the Minutes of an Executive Council, 21 June 1841, (158), p. 45.

³²⁵ Minutes of the Executive Council, no. 57, 19 May 1840, EC 4/7, T.A.H.O.

³²⁶ William Jones, mining overseer, to J.E. Bicheno, Colonial Secretary, 25 January 1844, note by Lieutenant Governor, CSO 8/108/2279, T.A.H.O.

the station's convict population comprised the outcasts of the probation system.³²⁷ At this time the mine's population had risen to 579 convicts, by far the largest of the 25 stations in the colony at the time.³²⁸ Its new situation and vastly increased population resulted in its final separation from Port Arthur, the mine being enumerated in official returns as a separate probation station in 1843.³²⁹

The mines' reclassification as a punishment probation station, continually increasing population and its resultant inability to house this population satisfactorily caused consternation in government circles, leading some, such as J.D. Motherwell, who had served as a surgeon at the mine, to describe the station as a "sink hole of vice and infamy".³³⁰ The station quickly became a centrepiece in a long-running campaign by members of both the British and local governments, as well as members of the public, against the terrible impact of probation's failures upon the prisoner population. The chief targets for criticism were the perceived evils that arose when prisoners were placed in such close confinement. Wrote one Hobart solicitor:

...the basis of [probation] is the regulation that convicts shall for a length of time be assembled together in large masses - in gangs. It is needless to enquire how such a fatal and obvious error could have arisen. To keep a man from bad companions is the first rule of moral discipline. Your rule is that each man shall have the worst companions that can be collected, and that it shall be impossible for him to have any others.³³¹

As early as 1843 Lieutenant Governor Sir John Eardley-Wilmot had raised concerns about the prevalence of homosexuality amongst the population of the probation gangs (Gilchrist 2007: 232; Reid 2007: 206). However, it was not until early 1846 that there was any form of official commission. Conducted by William Champ, this perfunctory investigation found 70 cases of sexually-transmitted

³²⁷ *Convict Discipline*, Sir Eardley Wilmot, Lieutenant Governor, to Lord Stanley, Secretary of State, 5 October 1843, Enclosure No. 1, Matthew Forster, Comptroller General, to Sir Eardley Wilmot, Lieutenant Governor, 28 September 1843, (659), p. 3; Henry Smith, Superintendent, to Matthew Forster, Comptroller General, 18 March 1844, Misc 62/9/A1087/1053, T.A.H.O. (BT).

³²⁸ *Convict Discipline*, Sir Eardley Wilmot, Lieutenant Governor, to Lord Stanley, Secretary of State, 5 October 1843, Enclosure No. 1, Matthew Forster, Comptroller General, to Sir Eardley Wilmot, Lieutenant Governor, 28 September 1843, Enclosure A, Return of Probation Stations, (659), p. 3.

³²⁹ List of Officers, 1843, CSO 50/18, T.A.H.O.

³³⁰ J.D. Motherwell, former surgeon Tasman Peninsula coal mine, to John Hampton, Comptroller General, 10 June 1846, CO 280/202/549, T.A.H.O. (UB).

³³¹ *Convict Discipline and Transportation*, John Eardley-Wilmot, Lieutenant Governor, to Lord Stanley, Secretary of State, 6 February 1846, Enclosure 4, 'Extract of a letter from Robert Pitcairn, Esq., to Lord Stanley', 4 February 1846, (785), p. 135.

diseases in the 26 probation gangs - 20 of which were reported at the Tasman Peninsula mine.³³² The solution, as seen by the authorities, was increased "separation, single cells, and constant superintendence".³³³ In an effort to curtail the influence that re-convicted prisoners could have on their fellow convicts, better-behaved prisoners were removed to nearby Salt Water River, leaving 345 convicts undergoing punishment at the mine.³³⁴ By the end of 1847 the mine was solely reserved for convicts undergoing punishment.³³⁵

From 1845 until its close in 1848, the Tasman Peninsula mine saw a continual fall in the number of convicts and a gradual improvement in the calibre of the staff. It was only in the late 1840s that poor officers were weeded out of the system's workings, a process greatly aided by a rapid reduction in the number of probation establishments in the colony from the mid-1840s. This problem with staffing convict establishments with experienced officers was endemic to the wider probation system, one of the system's major problems highlighted by an investigation carried out by C.J. La Trobe during 1846-1847.³³⁶ Although La Trobe found the Tasman Peninsula coal mine better-run than he had anticipated, his findings for the whole of the system were much more condemnatory: "the probation system, so called, has been a fatal experiment so far as it has proceeded, and the sooner it is put an end to the better for the credit of the nation and of humanity"³³⁷ La Trobe believed that probation had failed in its aims to replace the uncertain punishment of assignment. His recommendations were that, if transportation continued at all, it should continue as the "Exile" system, whereby convicts served part of their sentence in Britain prior to transportation.³³⁸

La Trobe's report and subsequent alterations to the probation system were set against a growing backdrop of anti-transportation sentiment. From at least the mid-1840s an increasing proportion of the free colonial populace had been calling for an end to transportation, their arguments made more

³³² *Convict Discipline and Transportation*, John Eardley-Wilmot, Lieutenant Governor, to Lord Stanley, Secretary of State, 17 March 1846, (785), p. 142.

³³³ *Ibid.*

³³⁴ *Convict Discipline and Transportation*, Sir Eardley-Wilmot, Lieutenant Governor, to W.E. Gladstone, Secretary of State, 29 August 1846, Enclosure No. 1, William Champ, Comptroller-General, to Sir Eardley-Wilmot, Lieutenant Governor, 1 August 1846, (785), p. 129.

³³⁵ *Convict Discipline and Transportation*, John Hampton, Comptroller-General, Memorandum and Map referring to all the Convict Stations and Establishments in Van Diemen's Land, November, 1847, (1022) (1121), p. 128.

³³⁶ *Convict Discipline and Transportation*, Copy of a despatch from C.J. La Trobe, Esq, Acting Governor of Van Diemen's Land, to Earl Grey, 31 May 1847 (941).

³³⁷ *Ibid.*, p. 45.

³³⁸ *Ibid.*, p. 45.

vociferous by the difficult economic climate, an increasing number of reports showing the immorality prevalent amongst the convict population and a perceived indifference on the part of Britain to the conditions in the colony (West 1852: 309). Probation's failures had been acutely felt in the colony, where local resources had been strained by the glut of convict labour. Throughout the late 1840s the movement against transportation grew, reaching its zenith with the creation of the anti-transportation Australasian League, eventually a key influence in the cessation of transportation to Van Diemen's Land (Blackton 1940: 119; Kerr 1953: 38; Reid 2007: 212-46). The Tasman Peninsula mine, which had been particularly singled-out as a place where lax administration had led to a sharp decline in prisoner morality, could not survive the outrage stirred up by the campaigners or La Trobe's enquiry (Reid 2007: 216-7). Desperately seeking a way to divest itself of the operation, the government was only too willing to pass it on to Alexander Clarke when he sought to lease it from them in 1848.

It is necessary to understand how decisions made in Britain could directly influence the form and management of convict labour. System-changing interventions, such as those of Bigge in 1821-23 or the Molesworth Committee in 1837-39, affected transportation's whole apparatus, the changes wrought by such intercessions flowing through to the system's roots and altering how individual establishments operated. In this way, Bigge's recommendations triggered the consolidation of penal settlements, which in turn led to the first government-run forays into coal mining. In the same vein, probation's introduction irrevocably altered the penal landscape of Van Diemen's Land, leading to wholesale changes to existing stations like the Tasman Peninsula mine.

The colonial government acted as an intermediary within the system, its acceptance or otherwise of imposed policies guided by its immediate understanding of the social, economic and political situation in the colony. Prior to Molesworth, colonial and British penological management had been largely in accordance, affecting often indistinguishable influences upon the mining operations. Probation altered this balance, the colony seeking to implement a new system in the face of an unready penal infrastructure and mounting economic and social pressure. Growing division between British and colonial funding streams saw the colony increasingly divorced from such places as the Tasman

Peninsula mine, where the upkeep of the convicts was paid by the British government. In places where it retained more influence, such as Jerusalem and Recherche Bay, fickle economic conditions and poor resource base saw hopes of a profitable enterprise evaporate.

The flow of influence was not, however, just from the top downward. Events at establishments could influence decision-making at both a colonial and British level. This is demonstrated by the place of the Tasman Peninsula mine within the wider debate about the moral efficacy of transportation during the 1840s. The condition of the mine in the 1840s was used as an example of the degeneracy that probation was seen to have engendered amongst the convict population. Lurid descriptions of the immoral practices at the mines made their way back to Britain, subtly influencing the transportation debate. The decisions made here then flowed back to the colony and thence back to the station. Changes to the cognitive and physical landscapes resulted.

Labour management methods

This chapter now turns to the management strategies that the government used to direct and cajole work output from the convict labour base. An analysis of how this was achieved must focus on the type of work and the balance struck between the penological aims of punishment, deterrence, economy and reform. Convict management relied upon a mixture of incentive and disincentive: a shortening of sentence or addition of ration on the one hand; solitary cells, the lash, sentence increase or ration-shortening on the other. The convicts sent to these places of labour were a mixture of different skill types, to which variable degrees of management had to be applied. Like many convict camps and stations throughout the colony, the case studies required a mix of different types of convict labour forms to achieve their aims, each of which necessitated different approaches to its management.

As pointed out in Chapter 2, the convict was not a passive agent pressed into government service. Every single convict was actively resisting, colluding or acquiescing to the demands placed upon their unfree bodies - creating Robbins' "contested terrain of convict life" (Robbins 2005: 83). Just as each

place of convict labour was overlaid by the controls of regulation, routine, ritual, prohibition and sanctioned indulgence, a separate skein of understanding could be woven by the convicts. The material record and, as will be demonstrated in Chapter 7, the built landscape provides a glimpse into these “public” and “hidden” transcripts of this contested terrain (James Scott in Hall 1991: 42).

Organising the labour

Throughout the 1820s-40s, the type and severity of the labour carried out by the convicts did not markedly alter. Whether during the assignment or probation periods, there were still convicts undergoing hard labour in chains, as well as those given skilled work or lighter duties. What did change was the manner in which this labour was classified, thereby affecting the type and duration of the labour a convict could be directed to. Through the application of a classificatory system, the government intended that the levels of punishment, indulgence and reform that were brought to bear would be certain, measurable and commensurate to the crime. To do this, hierarchical systems were applied, each level designed to have a formulated method of appropriating, directing and accounting for the labour of the convicts. Each of these methods comprised a combination of overt and more imperceptible means, through which a convict would be aware of their position in the hierarchy, as well as the behavioural and productive expectations that were attached to it.

From the classificatory perspective, convicts labouring at the mines of Macquarie Harbour and on the Tasman Peninsula in the 1820s-30s did so amidst very different conditions to those who did so in the 1840s. During the former decades, both the species and severity of the labour performed by the prisoners was supposedly governed by the strictures of penal settlements. At Macquarie Harbour, labour for every convict was to be of the most severe, unremitting form (Brand 1984b: 15-6). The punitive value attached to the work was meant to be of the highest kind, the prisoners "condemned to hard labour, and shut out from the world".³³⁹ Yet, it was impossible even for an ultra-penal station to employ all convicts at such labour. The many trades and ancillary service roles required at such a

³³⁹ *Secondary Punishment*, The Report of a Visit to the Penal Settlement of Macquarie Harbour, Van Diemen's Land, by James Backhouse and George Washington Walker, 23,27 July 1832, (82), p. 9.

large settlement resulted in the implementation of a hierarchy of labour, with the attendant gradations of privilege and punishment.

At Port Arthur, and therefore its outlying coal mine, regulations specified the hierarchy of labour that convicts faced at a penal station (Table 5-3).³⁴⁰ There were four different classes of punishment, to which was attached a different species of labour. The type of labour performed was informed by the punishment value attached to the class.

	Labour	Severity
Educated convicts	Gardening, fencing, farming	Less severe labour, under strict superintendence
Relief gang	Timber-getting and hard labour	Less severe labour than the first class
First class	Timber-getting and hard labour	Severe labour
Chain gang	All forms of hard labour	Severe labour in chains

Table 5-3: Hierarchy of labour and punishments, Port Arthur 1833

Although a simplistic model, it does in part demonstrate how the convicts' labour was organised and directed at the Tasman Peninsula mine. Though the mine never received those convicts classed as “educated” (or “gentlemen”), its labour pool from 1835 primarily comprised convicts working in the other three classes. These convicts were put to work in the mine or servicing its needs and those of the growing station.

The very worst class of men are worked in chains at the hardest labour, of dragging wood, and so forth. Another class are worked out of chains, at hard labour, and those who are best conducted are kept at the lightest labour that is required.³⁴¹

There were no stipulations about convicts being allowed to work at their professed trade, allowing the administrators to undertake a certain level of skill-matching, as will be discussed in Chapter 6.

When, from 1841, the station was placed under the probation system, the existing classificatory system was replaced. The prisoner population was henceforth separated into three distinct classes, the convict progressing from third to first class prior to their release into service. The worst behaved members of the population, as well as new arrivals, were to be placed in third class, progressing

³⁴⁰ *Secondary Punishment*, 'Standing Instructions for the Regulation of the Penal Settlement on Tasman's Peninsula', 25 January 1833, (82), pp. 64-5.

³⁴¹ *Report from the Select Committee*, Evidence of Colonel George Arthur, 30 June 1837, (518), p. 308.

upward as time was served and the rules observed. As previously, a convict was elevated or demoted through the classes by reference to his behaviour:

This [ganged labour] is a stage through which all must pass, and in which the incorrigible must remain, even to the termination of his period of transportation, but from which good conduct and industry will hasten his escape.³⁴²

Yet, probation also introduced the notion that such progression could also be based upon the amount of time that a convict had served. Whereas before, appointments to easier positions at the Tasman Peninsula mine were to have been made with sole reference to the convict's behaviour, probation regulations stipulated that only those convicts who had served 2/3 of their time in the gang could be placed in these situations, with such elevation barred to the poorly-conducted.³⁴³

The mining camps at Recherche Bay, Jerusalem and South Cape Bay existed under a different form of management. Although all commenced during the probation period, their size and situation meant that little attempt was made to bring their labour management methods into line with probation's ideals. Recherche Bay operated effectively as a detached outstation of the Tasman Peninsula mine and, like that station, was administered from Port Arthur. At no point does the historical record suggest that the convicts at the camp were organised into the three classes required by probation, or that the required number of officers and overseers were appointed for their superintendence. What was more, Recherche Bay commenced its operation with a labour base drawn from convicts sentenced under the former assignment system, but went on to receive convicts who had arrived in the colony under probation. At Jerusalem, the first phase of works was undertaken by assignment-period convicts, with the later phase by probation convicts. As at Recherche Bay, no reorganisation of the camp took place to bring it into adherence with the stated aims of probation.

While the manner of classification may have changed, the actual labour that the convicts undertook altered very little. At each of the five case studies, labour was organised to take advantage of the convicts' collective labour power, their own individual skills, or for the purposes of distinguishing an

³⁴² *Convict Discipline and Transportation*, Rules and Regulations for the first stage of Convict Probation in Van Diemen's Land, 1847, 17 September 1847, (1022) (1121), p. 150.

³⁴³ *Convict Discipline*, Regulations for the First Stage of Convict Probation in Van Diemen's Land, October 1843, (659), p. 14.

individual or a group from the remainder of the convict population. With reference to Stefano Fenoaltea's theorisation of the relationship between skilled/unskilled labour, punishment and effort scales (see Chapter 2), ganged labour, where the labour power of a group of convicts was pooled, very often resided at the bottom of the classification hierarchy and was commonly attached to tasks that necessitated heavy, repetitive work. Such a task may have required little direct skill for its completion, and could therefore be carried out by convicts under punishment or, during the probation period, by convicts in the lower classes. As Fenoaltea suggested, and historians like Hamish Maxwell-Stewart investigated (Maxwell-Stewart 1999), these convicts attracted the highest level of superintendence and consequently were subject to the greatest number of punishments.

Smaller gangs could be deployed where less gross labour input was required, though such tasks may have been no less intensive and difficult to accomplish and therefore could still be carried out by convicts undergoing punishment. Toward the upper end of the scale was the labour of the skilled convicts, allowed to labour at their own trade for the benefit of the government. According to Fenoaltea's theorisation and Maxwell-Stewart's findings, this form of labour attracted the least level of supervision and therefore received fewer negative incentives. This end of the scale was rounded out by those convicts carrying out necessary lighter tasks, often the domain of the well-behaved or time-served, as well as those few convicts elevated to supervisory positions over their fellows.

The deployment of ganged labourers was practiced in each of the five case studies. It was most prevalent on the Tasman Peninsula. Convicts in this situation were primarily involved in the felling and carrying of timbers and assisting in the attainment of coal. Timber was required for an establishment's buildings and infrastructure, including within the mine itself. Working in concert with sawyers, the gangs were responsible for the arduous, but utterly necessary, task of fetching and carrying timbers between the point of fall and where they were to be used. This type of work required the collective labour input of many convicts, as the description of a timber-getting gang at Port Arthur demonstrates:

I was removed to another department, this party being employed in carrying beams 12x12 and forty feet long from the saw pit... We were placed all round the beam... and at the word

‘Pick it up’, being given, every man stooped and laid hold of the beam, raising it gradually until all had it on their shoulders and when the word ‘Forward’, was given, proceeded with our burden. (Cash 1991: 99)

Below ground, ganged labour performed a similarly essential role. During the early phase of exploration at the Tasman Peninsula mine, the selected gang of five miners was accompanied by six labourers of this class, no doubt to aid with the excavation.³⁴⁴ As the camp grew into a station, the requirement for such labourers increased commensurate with the success of the mining operation. They shovelled the coal, ran the carts and sleds, wound men and coal to the surface, manned force pumps and loaded coal into waiting ships. In 1841 it was reported that, for every miner at the Tasman Peninsula mine, there were an additional three labourers to convey the coal out of the works, making for a total of 110 convicts working underground.³⁴⁵ The opening of new shafts throughout the 1840s saw this number increase. By the close of 1846 there were 196 miners and labourers in the works, increasing to 213 toward the end of the following year.³⁴⁶ Although the numbers were smaller, after work began on shaft sinking at Recherche Bay in 1841, at least 24 labourers worked on the winding gear were employed in excavating overburden.³⁴⁷ At Jerusalem, general labourers were required to transport the coal cut by the miners, as well as cut and prepare timber for use at the camp.³⁴⁸

The manning of the winding and pumping gear required at some of the operations was considered to be a most arduous form of labour. Both types of machine required upwards of eight men to work them, the constant movement of men and coal, as well as the need to keep the workings free of inundation, making the work a very "severe description" (Clark 2009: 69).³⁴⁹ The work was often undertaken by men undergoing punishment in irons, who were considered suited to such repetitive and physically-draining tasks. The addition of irons turned the grinding form of labour encountered at

³⁴⁴ Return of Crown prisoners at Port Arthur shewing [sic] the number of each Trade in the month of May 1834, 1 June 1834, CSO 1/511/11180, T.A.H.O. (UB).

³⁴⁵ *Secondary Punishment*, No. 5, Daily Abstract of Work performed by Gangs at Port Arthur, Tasman's Peninsula, 1 January 1841, (412), p. 137.

³⁴⁶ *Convict Discipline and Transportation*, Copy of a despatch from C.J. La Trobe, Esq, Acting Governor of Van Diemen's Land, to Earl Grey, Enclosure No. 1, A Return of Convict Stations in the Colony of Van Diemen's Land, visited at the close of 1846, (941), p. 48; *Convict Discipline and Transportation*, No. 30, Return of the Number of Convicts at each Station on October 29, 1847, showing how they were employed on that day, (1022) (1121), p. 184.

³⁴⁷ Extract from the Diary of the Mining Party at North Port Recherche Bay from the 18th to the 26th June 1841, Friday 18 June 1841, CSO 8/13/301, T.A.H.O.

³⁴⁸ John Hall, mining overseer, to Josiah Spode, Principal Superintendent, 7 March 1842, CSO 22/47/190, T.A.H.O.

³⁴⁹ *Secondary Punishment*, No. 5, Daily Abstract of Work performed by Gangs at Port Arthur, Tasman's Peninsula, 1 January 1841, (412), p. 137.

many contemporary mining sites (see Chapter 8), into a severe punishment. Irons were frequently used in the labouring gangs both above and below ground, although those labouring below would have their irons split (the chain removed) leaving the burden of the leg rings alone (Clark 2009: 68). The necessity of work below ground in the cramped and confined workings meant that these ironed men undergoing punishment mixed with the general labour gangs, as well as the convict miners. This was in complete contravention of both penal and probation-period classificatory regulations, but which was overlooked at all of the mining establishments.

Smaller labour gangs were primarily centred on a single task or trade associated with the welfare of the establishment. Blacksmiths, carpenters, brickmakers, limeburners, sawyers and quarrymen were all employed in this way. Returns for the Tasman Peninsula in 1841 (see Table 5-1, above) show that these small work gangs generally consisted of five men, including the overseer. The expansion of the station resulted in an increased number appropriated to these gangs (see Table 5-2, above). While carpenters, blacksmiths and brickmakers worked on the buildings and infrastructure of an establishment, other detached gangs worked where the resource was to be found. The limeburners recorded at the Tasman Peninsula mine would have been required to scour the coast for shell to use in their kiln. Sawyers worked where the trees were felled.³⁵⁰ The convict miners, although working as a single unit when in the mine, were a small gang unto themselves, under the oversight of the mining overseers.

Some convicts were engaged in tasks that did not require a pooling of labour, or close supervision. They could be clerks, scavengers (ward cleaners), wardsmen and watchmen, signalmen, messengers, gardeners or officers' servants. The number of these required at the smaller camps would have been minimal, although Recherche Bay was large enough at one time to require the use of a convict clerk.³⁵¹ The Tasman Peninsula mine, particularly as it expanded during the 1840s, employed a large number of convicts in these positions. Elevation to positions such as these was meant to be strictly based upon the good behaviour of the convict and, during the probation period, upon the completion

³⁵⁰ Extract from the Diary of the Mining Party at North Port Recherche Bay from the 18th to the 26th June 1841, Saturday 19 June 1841, CSO 8/13/301, T.A.H.O.; Samuel Cook, Superintendent, to Charles O'Hara Booth, Commandant, 8 December 1841, Tasmania Papers 134, CY 3079, Frame 549, M.L. (ST).

³⁵¹ 'Extract from the Diary of the Mining Party at North Port Recherche Bay from the 18th to the 26th June 1841', Friday 18 June 1841, CSO 8/13/301, T.A.H.O.

of at least two-thirds of his sentence at the establishment. A small number of convicts were elevated to positions of authority over their fellows. Primarily employed as overseers, although they could be made constables, they were responsible for the day-to-day management of large and small work gangs. During the probation period the regulations strictly forbade the appointment of convicts to such positions of trust.

The labour which the convicts performed at the five case study sites was therefore based upon their position within a labour hierarchy. During the 1820s and 1830s, with Macquarie Harbour and the Tasman Peninsula mine operating under the auspices of penal stations, three levels of labour were implemented. Convicts required to undertake labour with a higher punishment value occupied the lower position, with those levels above having a lessening level of punishment attached to the labour. While the introduction of probation saw the retention of the three classes of labour, it altered the manner in which convicts were to progress through the system. Previously, a convict's progression was designed to be based upon their conduct, with the lightest or more responsible forms of labour to be provided to those who had displayed outward signs of repentance and reformation. Probation enshrined the idea that such positions were to be entirely barred to the majority of convicts, or only offered to those who had served a certain proportion of their sentence in the gangs and displayed the desired form of conduct.

While the manner in which the convicts could pass through these labour gradations altered, the form of labour that they were required to undertake remained the same. Throughout the period in question the convicts were organised into gangs, smaller work parties, or performed individual roles. Ganging lent itself to the more punishment-oriented forms of labour, where low-skill collective input was required to complete the work. Work parties often comprised a more skilled element, to which was attached more responsibility and autonomy, though a punishment value could still be attached to their work. Individual convicts could be detailed with the necessary labours which were generated at all establishments, their labour often having the highest level of responsibility. This was particularly the case for those elevated to positions of authority over their fellow convicts.

Incentivising labour

Whether labouring in a gang or individually employed, a convict's position within the labour hierarchy was central to management of the labour force. The situation they occupied was meant to have connotations, obvious to them and their fellows, with their status signalled by a series of overt markers that could be read by all. Uniform, rations, accommodation and the manner in which their labour was accounted for were all methods whereby the status of the convict could be communicated. The progression or regression of a convict through these status markers was linked to the application of positive and negative incentives. On the one hand these were designed to ameliorate a convict's situation as a reward for past adherence to the desired behavioural pattern and to encourage continued acquiescence. On the other, they offered a means of punishing those who refused to submit to the desired pattern of behaviour and work output.

One of the most overt status markers was the uniform worn by the convict. During the 1830s, convicts undergoing labour in the first class or chain gang on the Tasman Peninsula wore yellow slops (a suit comprising jacket, trousers, shirt, footwear and cap), with those in the relief gang or educated convicts in blue or grey.³⁵² The clothing altered during the probation period, with the issuing of a grey uniform to the new probationers. At some point a further distinction was implemented between the types of uniform worn by the prisoners: yellow for third class, "magpie" (yellow and black) for second class and grey for first (Becke 1899: 73).³⁵³

The convicts' status at these places was also measured in the rations that they drew. During the penal period there were varying scales applicable to the separate labour classes at Macquarie Harbour and Port Arthur. The basic level of rations, described as No. 3 scale, was to be bread (substituted from time to time by a mix of flour, vegetables or meal), fresh or salt meat, vegetables, salt and soap.³⁵⁴ Rations augmented by the addition of tea, sugar and tobacco were offered to those in the higher

³⁵² *Secondary Punishment*, Standing Instructions for the Regulation of the Penal Settlement on Tasman's Peninsula, 25 January 1833, (82), pp. 64-5.

³⁵³ Depositions made to Chief Justice J.L. Pedder, 16 December 1845, CSO 20/17, T.A.H.O. (UB).

³⁵⁴ Government Order, 17 December 1834, CSO 1/641/14418, T.A.H.O (UB).

positions of No. 2 and No. 1 scale. At the lowest level were the convicts actively undergoing solitary confinement and placed on a diet of bread, salt and water. Probation's introduction stripped away all distinctions, with a flat ration of flour, vegetables, fresh or salt meat, salt and soap to be issued to convicts in all three classes.³⁵⁵

The accommodation that a convict was afforded also acted as a marker for the convicts' status and will be further discussed in Chapter 7. During the penal period, the majority of the convict population at the Tasman Peninsula mine was placed in barracks accommodation with little overt distinction made as to their class. This was a reversal of the rations, where classification of the convicts was reinforced by its gradations. The only concession made was to the miners, who were provided with a separate hut, and to those undergoing punishment in the solitary cells. At Macquarie Harbour, the removal of the miners to the other side of the harbour, where they presumably resided during the working week, was also a reminder of their hierarchical separation. The probation period introduced a new system of physical classification and separation. On the Tasman Peninsula it resulted in the compartmentalisation of the new barracks wards according to the class of the convict, with the first class eventually removed to a row of temporary huts built outside the barracks, the barracks given over to second and third classes. At Jerusalem, Recherche Bay and South Cape Bay the resolution of archaeological and historical data is such that the accommodation appropriation can only be hypothesised.

As well as uniform, ration and accommodation, the manner in which the convict's labour was measured was a powerful way of marking a prisoner's hierarchical position. Most of the convicts laboured to a set day, working at their task from morning to afternoon muster. There was some latitude for the imposition of task work, whereby the prisoners were required to perform a set daily amount of labour, although such labour did not necessarily meet the need of incessant hard labour required at a penal station. Those who did frequently work under the task work system were the miners. It was vital that their labour output be quantified in ways other than time, as such an approach could not facilitate the steady and constant extraction of the coal required.

³⁵⁵ *Convict Discipline*, Regulations of the Probation System, 1 July 1841, (158), p. 39.

Yet, as simple as it may have seemed to measure status based upon these markers, examination of the records indicates that all of them could in some way be subverted, either intentionally by the convicts, or through circumstance. This was part of the “hidden transcript” of the convicts’ daily life which operated in parallel with the sanctioned “public transcript”. Within this hidden transcript the convicts forged for themselves opposing networks of power and meaning. Evidence suggests that the supervisors were aware of the existence of this oppositional power structure, at times seemingly happy to allow it to co-exist as a sort of internal regulator, despite the flagrant contravention of the established official framework. They were even at times active participants within the unofficial network.

Circumstance could work to the detriment of the supervisors. Classification through uniform was entirely reliant upon a suitable store of such clothing being available. The numerous accounts of deficiencies in the commissariat make it clear that such was not always the case.³⁵⁶ This was especially so during the probation period when the government was required to clothe an unexpected influx of prisoner arrivals. At the Tasman Peninsula mine, convicts were fortunate if they had a full and intact uniform during the early 1840s, let alone one that adhered to the correct classificatory system. In 1842 Superintendent Cook complained that there were not enough uniforms for all the new arrivals, with the men being in an unfit state.³⁵⁷ An extra toll was taken on the clothing stores by those working in the mine, their uniforms worn out by the constant need to crawl through the workings (Becke 1899: 57). Although three suits of clothing had been issued to the underground workers in the 1830s, the exigencies of probation meant that no such allowance could be made, leading to the men having the appearance of a "ragged army" when on the muster ground (Clark 2009: 79).³⁵⁸

The authorities attempted to keep a tight control of the issue and circulation of the slops, ensuring that convicts were punished when found to have lost, damaged or altered any part of their uniform.

Convict James Richardson was charged with "making away" with or losing his waistcoat in May

³⁵⁶ *Convict Discipline*, John Franklin, Lieutenant Governor, to Lord Stanley, Secretary of State, 1 April 1842, (158), p. 75.

³⁵⁷ Samuel Cook, Superintendent, to Charles O'Hara Booth, Commandant, 17 February 1842, Tasmania Papers 134, Roll CY 3049, Frame 340, M.L. (UB).

³⁵⁸ Charles O'Hara Booth, Commandant, to John Montagu, Colonial Secretary, 12 September 1834, CSO 1/680/15052, T.A.H.O. (UB).

1845, while another, John Brereton, was charged the same for his boots in 1844.³⁵⁹ George Birks employed another convict to tailor a pair of slops trousers which he had illicitly gained.³⁶⁰ Through losing, selling or attempting to make transactions around elements of their own uniforms, convicts either deliberately or unwittingly challenged the hierarchies that had been imposed about them.

They were also challenged through subversion of ration hierarchies. Rations were a continual problem, with the convicts seeking to augment them wherever possible - often through non-official channels. Convicts were continually brought before the bench at the Tasman Peninsula mine for offences involving food and tobacco. Convicts Robert Heyes and John Greenhead both broke into the bakehouse and made away with bread at separate times.³⁶¹ James March took advantage of his position as a charcoal burner in December 1842 to illicitly cook some of his rations in the kiln.³⁶² Some convicts extorted the rations allotted to other prisoners.³⁶³ At the Tasman Peninsula coal mine, and presumably the other establishments, there was a black market trade in commodities, particularly tobacco. As the convict "William Derricourt"³⁶⁴ recounted:

...a fig of tobacco six inches long would supply me with many little luxuries. Tobacco cut into inch lengths was our money. An inch of tobacco would buy two cubes of bread - one man's ration. (Becke 1899: 56)

Such luxuries were obtained either through trade with fellow convicts, intra-convict theft, the robbing of stores, or even through the complicity of the supervisors. William Thompson, incarcerated at the Tasman Peninsula mine between 1841-43, recorded that boots and trousers made by convicts at the station would be exchanged with the soldiers and officers for figs of tobacco, the buyers knowingly fuelling the black market economy (Clark 2009: 83, 86). Possession of tobacco and a smoking pipe was a constantly recorded offence at this mine, especially during the probation period when access to this luxury was heavily curtailed. On the ship bringing him from Hobart to the peninsula, the prisoner

³⁵⁹ James Richardson, 11699, *Anson*, CON 33/1/49, T.A.H.O.; John Brereton, 12708, *Equestrian*, CON 33/1/54, T.A.H.O.

³⁶⁰ George Birks, 2791, *Neptune*, CON 31/1/3, T.A.H.O.

³⁶¹ Robert Heyes, 2733, *Lady Raffles*, CON 33/1/6, T.A.H.O.; John Greenhead, 1601, *Duncan*, CON 33/1/8, T.A.H.O.

³⁶² James March, 3738, *Barossa*, CON 33/1/16, T.A.H.O.

³⁶³ Robert Holt, 2310, *Layton (4)*, CON 33/10, T.A.H.O.

³⁶⁴ For a discussion of "Derricourt's" narrative and his possible identity, see Appendix 3 'Notes on the narrative of "William Derricourt"'

John Chandler was strongly suspected of having illicitly gained tobacco by robbing the ship's hold.³⁶⁵ Being a form of currency, it could buy the convict small indulgences that ameliorated their condition, or even purchase lighter treatment at the hand of the flagellator (Becke 1899: 63).

The inability of the government to supply sufficient rations could also undermine the implementation of a camp or station's hierarchy. In May 1834, the men deployed to the Tasman Peninsula mine had to have their ration augmented by the addition of vinegar as they had begun to display signs of scurvy.³⁶⁶ Nine years later, two men from Recherche Bay arrived in Hobart suffering from acute signs of the same.³⁶⁷ The poor health of these convicts indicated their subsistence on a diet devoid of vegetables, a situation that would not have occurred if the regulated quota of vegetables had been included in their ration. The appearance of scurvy in more than one convict indicated that the requisite ration had consistently not been met, either through a lack of the item, a faulty supply chain, or the convict bartering away their ration. Similar problems of supply occurred with the meat and flour rations. On the Tasman Peninsula, the meat, supplied by contractor from abattoirs on the Forestier Peninsula and Hobart, could be rejected if poor or too lean.³⁶⁸ Yet the necessities of supply would sometimes mean that the poor meat would be issued, leading in some cases to discontent amongst the prisoner population.³⁶⁹ Where the authorities failed to provide an adequate ration, the prisoners were drawn into a situation where they illicitly appropriated the shortfall, or extorted it from their fellow convicts - thereby alleviating their condition by relying upon the unofficial power relationships. "William Derricourt" recorded the type of extortive behaviour that must have been experienced day-to-day in wards and huts throughout the colony:

When the meat pot was put on the table the contents were divided into six shares...When all was ready one man stood up with his back to the table, and another, tapping each successive lot of victuals with his knife, asked 'Who shall have this?' If there was a particularly bony portion, the auctioneer would strike the bone smartly with the knife, and

³⁶⁵ John Chandler, 2021, *Asia (4)*, CON 33/1/9, T.A.H.O.

³⁶⁶ Charles O'Hara Booth, Commandant, to John Burnett, Colonial Secretary, 12 May 1834, CSO 1/735/15912, T.A.H.O. (UB).

³⁶⁷ J. Clarke, Inspector General of Hospitals, to J.E. Bicheno, Colonial Secretary, 10 July 1843, CSO 22/80/1744, T.A.H.O.

³⁶⁸ T.J. Lempriere, Assistant Commissary General, to Matthew Forster, Comptroller General, 19 October 1845, Misc 62/14/A1101, T.A.H.O. (UB).

³⁶⁹ J.D. Motherwell, former surgeon Tasman Peninsula coal mine, to Lord Littleton, Colonial Officer, 19 June 1846, CO 280/202/549, T.A.H.O. (UB).

then he always got from his assistant the answer 'Newchum'. Because of my well-known skill with my fists I, however, soon escaped from being put upon in this way. (Becke 1899: 57)

The subversion of the rules and regulations surrounding such things as clothing and rations was a direct means of undermining the authorities' control of status markers and therefore served to undermine the emplaced hierarchies. Ideally, the government controlled the movement of convicts through the labour hierarchy by the application of positive and negative incentives: augmented rations, improved accommodation, a less burdensome billet. By taking themselves outside of the official system of ration and indulgence, the convict had chosen an unsanctioned path to status elevation. This was why, when convicts were caught subverting the official hierarchical progression, the authorities sought to reassert control through the means at their disposal. The threat of punishment hung over every convict, no matter what level they had achieved in the labour hierarchy. Its threat was designed to keep in check the impulses that might result in deviation from the desired pattern of conduct, with the actual implementation of punishment seen as offering a form of deterrence to the remainder of the convict population. The restraint of convict misconduct was achieved at these camps and stations through recourse to a series of castigatory measures. From the 1820s to the 1840s the lash, incarceration and the removal of indulgences were all utilised to direct convict behaviour.

The lash was used directly or indirectly at all the establishments. As its use required the sanction of a magistrate, the smaller camps were required to refer to the main settlements to which they were attached (as in the case of Macquarie Harbour, Recherche Bay and South Cape Bay), or to a visiting magistrate (in the case of Jerusalem). Only at the Tasman Peninsula mine was the punishment able to be carried out at the establishment, approved during the penal period by Commandant Booth, or from 1841 by the visiting magistrate. The number of lashes issued at this place varied from 25-100, with the upper number reserved primarily for those guilty of a higher class of crime, such as absconding. Floggings were supervised by the surgeon and an officer, though it was a convict who was tasked with carrying out the punishment. Often carried out in a controlled and ritualised setting with the full

muster of convicts in attendance, the act of flogging was designed to have a salutary impact upon both the person receiving the punishment and those observing it (i.e. Gilchrist 2007: 8).

Solitary confinement, often on a restricted diet of bread and water, was similarly utilised at all the establishments. The limited size of the South Cape Bay operation would have potentially required only a form of lock-up in which to temporarily confine recidivist convicts. As will be discussed in Chapter 7, the location and number of the solitary cells changed at the Tasman Peninsula mine, in response to the alterations in the administrative environment at the station. The location and form of the cells at Recherche Bay are not recorded historically or archaeologically. During both the penal and probation periods, solitary confinement was the main method for punishing prisoners at the Tasman Peninsula mine. It was applied in cases ranging from insolence to absconding, with the period of incarceration ranging from a few hours to days at a time. Continually superintended, the prisoners were only allowed two hours of exercise a day, which was carried out under the watchful eye of an officer (Clark 2009: 88-9). During the 1840s, the number of solitary cells at the station increased, partly in response to the probation system's increased focus on the separation of convicts, and also simply because station's population was growing.

The withdrawal of indulgences was also a powerful tool for seeking compliance in the convict population. By obtaining such indulgences the prisoner had managed to ameliorate their condition. The withdrawal, threatened or actual, acted as a negative incentive, a way of extracting the desired pattern of behaviour. During the penal period, indulgences at the Tasman Peninsula mine and Macquarie Harbour had been granted with reference to the conduct and, in many instances, the ability of the convict. In some instances, the granting of indulgences could occur in recognition of the particular circumstance of convicts, such as in 1839 when Booth ordered that 24 convicts working on the winding gear at the 1839 shaft be allowed an addition to their flour ration, owing to the arduous nature of their work.³⁷⁰ With probation's introduction, there was a wholesale change in how indulgences were administered across the system. Only well-conducted convicts who had already served a period of their sentence in the gangs could be elevated to positions of trust, or work in their

³⁷⁰ Charles O'Hara Booth, Commandant, to Afleck Moodie, Assistant Commissary General, 25 September 1839, CSO 5/215/5408, T.A.H.O. (BT).

trade, and the indulgence of extra rations were to be completely removed.³⁷¹ If this new arrangement were to work, it was essential that convicts undergoing sentence on the Tasman Peninsula were brought under a similar system, lest the whole punitive hierarchy be undermined. The paradoxical situation could not be allowed to occur whereby:

... convicts who are sent down to Port Arthur for the most dreadful crimes and who for the most part will be found men of the most useful description are selected to fill places of trust and ease without proper regard to their infamous characters and long career of crime.³⁷²

There was a belief in executive circles that Booth had granted indulgences to too many convicts, John Montagu, the colonial secretary, believing that Booth was merely "purchasing good conduct and quiet".³⁷³ Port Arthur and its associated mine were brought into line with the other stations in the colony, a process that was essential when the mine was made a probation station in ca.1841.

Conclusion

At the most basic level, these landscapes of convict labour can be classified according to the five-part model devised in Chapter 2. Approaching them as either *work camps* or *work stations*, a framework is immediately established which fosters understanding of their historical and archaeological context.

Four of the case studies were work camps, operationally restricted to a single work outcome and wholly reliant upon exterior sources for their continued existence. The larger Tasman Peninsula mine developed to become a work station, retaining its focus on coal mining at the same time as attaining a level of operational and autonomous sustainability. The progression from camp to station created a complex labour landscape.

The formation and progress of these places were set within a labour management framework constructed at the local, colonial and global level. This was exemplified by the systematic changes wrought by the report of Commissioner Bigge, the 1832 select committee, or the Molesworth Report.

³⁷¹ John Montagu, Colonial Secretary, to Charles O'Hara Booth, Commandant, 3 April 1840, CSO 5/236/6021, T.A.H.O. (BT).

³⁷² John Montagu, Colonial Secretary, to Sir John Franklin, Lieutenant Governor, 7 March 1840, CSO 5/236/6021, T.A.H.O. (BT).

³⁷³ Ibid.

Decisions made locally were often a reaction to those taken at a global and colonial level. During the period in question, the different systems of labour management represented by the assignment and probation eras were the two biggest influences. Throughout the assignment period, when Macquarie Harbour and the Tasman Peninsula mine were administered as penal establishments, methods of labour management were geared toward an adherence to punishment goals, with British and colonial aims, for the most part, in cohesion. Probation's introduction irrevocably altered this balance, as a widening gulf formed between the aims of Britain and colony. At the local level, there was a reactionary expansion of such places as the Tasman Peninsula mine triggered by probation's introduction. Such a local level of decision-making, exemplified by the role of Commandant Booth in the formation and development of the Tasman Peninsula mine, had a formative effect upon convict labour management. This thesis also posits that the flow of influence across the global, colonial and local scales was not one way and local scale decisions had the power to influence those taken at the global and colonial level. How all these influences shaped the physicality of convict labour landscapes will be demonstrated further in Chapter 7.

The framework that was created by local, colonial and global influences affected how convict labour was managed. Whether administered during the penal or probation periods, there were emplaced classificatory systems to categorise the type of labour performed and its punitive value. Documentary evidence describes the division of the convicts into various labour hierarchies, the form these hierarchies took entirely dependent upon the period of operation and the overarching penological motivation laid down by the British or colonial governments. Similarly, the progression of convicts through the labour hierarchy was reliant upon the temporal setting of the operation, with convicts of the penal period facing a very different system of promotion and demotion from the system in place during probation. When the operations at Macquarie Harbour and the Tasman Peninsula were carried out as part of a penal system of management, there was an emphasis on the punitive aspect of the labour. A hierarchical labour progression was in place, with convicts progressing according to conduct and, in some instances, native skill. The administration of the Tasman Peninsula mine, as well as Jerusalem, Recherche Bay and South Cape Bay, under the probation system, witnessed the

creation of classificatory bounds, within which the severity and species of the labour was set. The progression of convicts within these bounds was to be determined by conduct and the passage of sentence, with innate ability removed from the equation.

Whether serving their sentence during the penal or probation periods, the passage of the convict through the labour hierarchy was denoted by a series of markers, their progression or demotion controlled by the application of positive or negative incentives. These markers were an overt demonstration of hierarchical status designed to be read by free and unfree alike. At all of these case studies, as with the majority of such sites throughout the colonies, uniform, ration, accommodation and the way in which their labour was accounted for were the major markers of a convict's status. However, despite all governmental attempts to enforce the emplaced hierarchy, convicts found ways to subvert it to their own ends. Each of the status markers could be appropriated, ameliorating the condition of the convict through illicit means and countering the official methods of status progression with their own. The government had recourse to a programme of negative incentives in its attempts to wrest back hierarchical control.

In the next chapter this thesis will turn to an examination of the convict miners, a body of convicts unique to these case study sites. The authorities, particularly at a local and colonial level, took an active interest in the methods used to appropriate and control these men. The treatment of the convict miners is symptomatic of the management approaches discussed in this chapter. As part of the labouring elite, these convicts were an integral part of the labour hierarchy and were the target of a dedicated programme of positive and negative incentives to their performance. Examination of the conditions of convict miners reveals the application of punitive and economic objectives. The convict miner also brings into stark relief the operation of the parallel transcripts, the miner seemingly caught in the middle of the “hidden” and “public” power dynamics characterising these places.

CHAPTER 6: APPLYING THE MODEL - USING CONVICT SKILLS

It has been previously posited that the use of skilled convicts was fundamental to the management of convict labour throughout the assignment and probation periods. As previous studies have noted - and as this research will further highlight - these convicts often formed the core of a work gang or station, set amidst a larger unskilled workforce which was often dedicated to facilitating their work. The inclusion of skilled convicts enabled the efficient implementation of a place's economic goals, and the manner of their deployment and treatment provided an indication of the weighting placed on the aims of punishment, deterrence, reform and economy. From the moment that they stepped ashore from the transports, convicts with mining skills became the focus of active governmental attention, their labour appropriated and directed to meet very specific goals. Often, the convict miners occupied an elevated situation within the camp and station labour hierarchies, potentially providing them with benefits and opportunities for subversion not experienced by other prisoners. As a result they were a particular focus for performance incentives - both negative and positive. By focussing on the treatment of the miners, as well as how their labour power was co-opted, rewarded and cajoled, this chapter will demonstrate how emplaced strategies of labour management derived from political and moral exigencies could be overridden in favour of the economic imperatives of the British and colonial governments.

Counting the labour

Three of the better-documented case study sites - Tasman Peninsula, Recherche Bay and Jerusalem - have left records pertaining to the deployment of convicts with mining experience. Convict miners were utilised from the initial exploration phases through to the cessation of operations. The proportion of miners employed varied, according to the labour management system in place at the time and the progress of the works themselves. The early exploration phases of the operations were characterised by a high ratio of miners, with later consolidation and expansion phases marked by a decrease in the ratio as the number of prisoners at the places increased. Of the three case study sites, all experienced

the initial phase of exploration, with Recherche Bay passing on to a limited consolidation. On the Tasman Peninsula, the mine went through multiple waves of consolidation and expansion over its 16 years of operation, with convict miners at the centre of its development.

When coal was first discovered on the Tasman Peninsula and its exploitation first proposed in 1833, the then colonial secretary, John Burnett, had stipulated that the tests should be undertaken by a "small but useful gang of miners".³⁷⁴ Joseph Lacey's work gang initially comprised five miners and six labourers, later increasing to 11 miners and five labourers.³⁷⁵ Visitors to the mine in 1834 noted that the men had been selected to work at the mines, possibly due to good behaviour, though prior skill in mining would have been a prerequisite.³⁷⁶ Although Burnett believed that the mine would provide a "most bountiful employment to the convicts of the worst class", the explorative nature of the works meant that the convict workforce remained a targeted and elite grouping until the mine's expansion after 1835.³⁷⁷

Similarly, the initial phase of exploration at Recherche Bay and Jerusalem was undertaken by convicts and overseers conversant with coal mining. At the former, four miners and their overseer (Lacey) were detached from Port Arthur in February 1840 to test the coal.³⁷⁸ At Jerusalem, the first works were commenced by James Clare and a party of ten convicts "chosen to work under his instructions", Clare likely to have selected at least some men versed in mining.³⁷⁹ During the second phase, under overseer William Jones, there was an initial difficulty in finding skilled miners for the works, Jones soon finding progress retarded due to their absence.³⁸⁰ Although undocumented, such small and efficient gangs would have also likely characterised the limited mining attempts at Macquarie Harbour and South Cape Bay.

³⁷⁴ Charles O'Hara Booth, Commandant, to John Montagu, Colonial Secretary, 15 October 1833, note by John Burnett, Colonial Secretary, 31 October 1833, CSO 1/680/15052, T.A.H.O. (UB).

³⁷⁵ Return of Crown prisoners at Port Arthur shewing [*sic*] the number of each Trade in the month of April 1834, 1 May 1834, CSO 1/511/11180, T.A.H.O. (UB); Return of Crown prisoners at Port Arthur shewing [*sic*] the number of each Trade in the month of May 1834, 1 June 1834, CSO 1/511/11180, T.A.H.O. (UB).

³⁷⁶ James Backhouse to George Arthur, Lieutenant Governor, November 1834, CSO 1/807/17244, T.A.H.O. (BT).

³⁷⁷ Matthew Forster, Chief Police Magistrate, to John Burnett, Colonial Secretary, 31 October 1833, note by John Burnett, Colonial Secretary, 1 November 1833, CSO 1/680/15052, T.A.H.O. (UB).

³⁷⁸ Charles O'Hara Booth, Commandant, to Matthew Forster, Acting Colonial Secretary, 10 February 1840, CSO 5/224/5707, T.A.H.O.

³⁷⁹ John Montagu, Colonial Secretary, to Matthew Forster, Chief Police Magistrate, 4 September 1841, LSD 1/1/28, p. 454-88, T.A.H.O.

³⁸⁰ William Jones, mine overseer, to J.E. Bicheno, Colonial Secretary, 25 January 1844, CSO 8/108/2279, T.A.H.O.; William Jones, mine overseer, to J.E. Bicheno, Colonial Secretary, 7 February 1844, CSO 8/108/2279, T.A.H.O.

These initial periods of exploration were marked by a convict labour force dominated by miners, as the quantity and quality of the coal resource was tested. The relative success of the early exploratory stages at Recherche Bay and the Tasman Peninsula meant that this ratio necessarily decreased, as more prisoners were directed to the station to fulfil vital ancillary service positions. At the latter place (see Appendix 7), it was recorded that in 1837, out of a population of over 120, there were 24 miners (20% of the workforce).³⁸¹ Thomas Lempriere noted a similar percentage the following year, by which time the population had reached 170, of whom 29 (19%) were recorded as miners (Lempriere 1839: 79). Six months after the initial exploration, Lacey had returned to Recherche Bay with 22 prisoners to undertake full-scale works.³⁸² Six (27%) of these convicts were experienced miners, transferred directly from the Tasman Peninsula mine. This proportion decreased as the works progressed, labour returns from June 1841 showing that, although the population had risen to 43, the number of miners had only increased to seven (16%).³⁸³

The number of convict miners placed at Jerusalem, Recherche Bay or on the Tasman Peninsula was in part responsive to the developments taking place within the coal field itself. Coal at the former two failed to be proven, resulting in the abandonment of both these camps by 1844. On the Tasman Peninsula, a programme of exploration and shaft-sinking between 1837-43 had opened out the workings on a scale not yet seen in the colony. Even though experienced miners were required to enable these works, the number of convict miners at the station remained proportionally static. This was at a time when the general convict population was dramatically increasing as more and more probation convicts were directed to the station. In 1845, with works at the new shaft in full swing, the number of convicts working underground were reported to number between 150-200, of which 30-40 were miners working at the face.³⁸⁴ With 548 convicts reported at the mine at the end of this year, that meant that miners only accounted for between 5-7% of the workforce. Two years later, in April 1847,

³⁸¹ Mr Carr, Commissariat Officer, to unnamed recipient, 18 August 1837, CSO 5/23/449, T.A.H.O. (UB).

³⁸² Charles O'Hara Booth, Commandant, to John Montagu, Colonial Secretary, 10 June 1840, CSO 5/224/5707, T.A.H.O.

³⁸³ Extract from the Diary of the Mining Party at North Port Recherche Bay from the 18th to 26th June 1841, CSO 8/13/301, T.A.H.O.

³⁸⁴ J.D. Motherwell, former surgeon Tasman Peninsula coal mine, to John Hampton, Comptroller General, 10 June 1846, CO 280/202/549, T.A.H.O. (UB).

the figures were broadly similar: 31 convicts were working as miners, accounting for 8% of a population approximately 412 strong.³⁸⁵

Appropriating the labour

The supply of convicts with mining experience was a continual source of concern for the administrators of the individual camps and stations, as well as the colonial authorities. The period from 1840 in particular corresponds with an era of heightened concern with the quantity and quality of mining labour, as newly-arrived convicts began to be directed into the fledgling probation gangs and the Tasman Peninsula mine underwent its transformation into a probation station. Even with the influx of transports from Britain, the Tasman Peninsula mine, as well as the smaller operations of Recherche Bay, Jerusalem and South Cape Bay, drew upon a finite pool of experienced labour.

As previously noted in Chapter 3, the commencement of operations at Recherche Bay in 1840 triggered the first serious concerns about the capacity of the existing convict labour force to supply experienced miners. The removal of seven miners to that place from the Tasman Peninsula, saw the number of miners working on the peninsula drop by a third to 20.³⁸⁶ Booth immediately requested additional miners, but the colonial pool had run dry.³⁸⁷ Such was the drastic effect upon the colonial supply of coal that Assistant Commissary General George Maclean took the step of reporting the irregularity to the Board of Treasury, in Britain, complaining that the removal of the experienced men had crippled the output of the Tasman Peninsula mine.³⁸⁸ The dearth of miners was still being felt the following year, with Booth again complaining that their lack meant that only immediate orders for coal could be met.³⁸⁹ Exploratory work was also at a standstill as all available miners were engaged in the works.³⁹⁰ Although five convict miners were despatched by the principal superintendent, the

³⁸⁵ R.V. McGregor to Henry Smith, Superintendent, 8 April 1847, note by Henry Smith, Superintendent, CO 280/227/565, T.A.H.O. (UB).

³⁸⁶ Charles O'Hara Booth, Commandant, to Matthew Forster, Acting Colonial Secretary, 10 June 1840, CSO 5/224/5707, T.A.H.O.

³⁸⁷ *Ibid.*, note by Josiah Spode, Principal Superintendent.

³⁸⁸ George Maclean, Assistant Commissary General, to G.T. Boyes, 7 May 1842, 14 July 1842, GO 1/50, p. 121, T.A.H.O.

³⁸⁹ Charles O'Hara Booth, Commandant, to John Montagu, Colonial Secretary, 17 February 1841, CSO 5/208/5150 (BT).

³⁹⁰ Charles O'Hara Booth, Commandant, to John Montagu, Colonial Secretary, 5 August 1841, CSO 22/4/49 (BT).

commissariat again experienced a shortfall in available coals and could not meet the demands of coal contractors.³⁹¹

When the expansion of mining operations on the Tasman Peninsula was planned in 1842, the report was accompanied by a further request for additional labour - in particular miners.³⁹² Although the mine had been given precedence over Recherche Bay or Jerusalem, Matthew Forster, Director of the Probation Service, was still forced to deny the request due to the lack of any such miners within the probation department.³⁹³ At the same time as this was occurring, the colonial government had requested that any men at Port Arthur who had formerly been at the Tasman Peninsula mine prior to it becoming a probation station, be sent to work at Recherche Bay.³⁹⁴ Such a request probably irked Booth, whose own request for miners for the Tasman Peninsula was not met until June, three months after the initial request.³⁹⁵ In this same month an additional 20 labourers were directed to Recherche Bay.³⁹⁶

The completion of further shafts on the Tasman Peninsula between 1842-43 did nothing to alleviate the need for skilled miners. When a serious downturn in production occurred in 1844, the colonial government suggested that convicts of "proper description" (miners) be removed from nearby Wedge Bay or Impression Bay, although it is unclear if this suggestion was followed through.³⁹⁷ Only three months prior, a batch of 11 convict miners had been sent direct from the transport *Anson* to the restarted works at Jerusalem. Matthew Forster, the Comptroller General, had forwarded the men in response to a request from overseer William Jones.³⁹⁸ Within three weeks Jones was able to report,

³⁹¹ George Maclean, Assistant Commissary General, to John Montagu, Colonial Secretary, 8 December 1841, CSO 22/59/909 (BT); George Maclean, Assistant Commissary General, to John Montagu, Colonial Secretary, 7 May 1842, CSO 22/59/909 (BT)

³⁹² Charles O'Hara Booth, Commandant, to John Montagu, Colonial Secretary, 21 March 1842, CSO 22/59/909.

³⁹³ Minutes of the Executive Council, No. 189, 11 June 1842, EC 4/7, T.A.H.O.; Charles O'Hara Booth, Commandant, to Matthew Forster, Director of Probation Service, 6 April 1842, note by Matthew Forster, Director of Probation Service, CSO 22/59/909 (BT).

³⁹⁴ Matthew Forster, Director of Probation Service, to Charles O'Hara Booth, Commandant, 19 April 1842, Tasmania Papers 140, M.L. (BT).

³⁹⁵ Charles O'Hara Booth, Commandant, to Matthew Forster, Director of Probation Service, 6 April 1842, note by Clerk of Council, 17 June 1842, CSO 22/59/909 (BT).

³⁹⁶ *Colonial Times*, 21 June 1842

³⁹⁷ Unknown correspondent to Major Mainwaring, Visiting Magistrate, 29 May 1844, Misc 62/6/A1089, T.A.H.O. (UB).

³⁹⁸ William Jones, mine overseer, to J.E. Bicheno, Colonial Secretary, 7 February 1844, note by Matthew Forster, Comptroller General, 15 February 1844, CSO 8/108/2279, T.A.H.O.; *Anson* appropriation list, 4 February 1844, CON 27/10, T.A.H.O.

"The Colliers per the *Anson* arrived in very convenient time, and some of them are good miners".³⁹⁹

Yet, illustrative of a cycle of feast-or-famine, when the new 1845 shaft was opened on the Tasman Peninsula and a further 30 miners requested, the colonial government was forced to shelve their plans to place a probation gang on Schouten Island to work the coal there, in part due to a dearth of miners to work it.⁴⁰⁰

From 1844, the continued call for miners on the Tasman Peninsula became intermingled with accusations within colonial government circles and the colonial press of inefficiency at the station. The probation system had introduced a separation between the management of the station's mining and convict aspects, the superintendent primarily concerned with the latter and the mining overseer the former. This led to inevitable problems when, under the superintendence of Henry Smith (1844-47), a marked degradation took place in the mine's output. The experienced James Hurst had taken on the role of mine overseer, but gave up that position in August 1846.⁴⁰¹ In that year George Maclean of the commissariat had highlighted the need for further miners at the station.⁴⁰² J.C. Victor, Commanding Royal Engineer, had also complained of a lack of suitable persons in the colony to inspect the mining establishment.⁴⁰³ This situation was exacerbated by the removal of Hurst's replacement, R.V. McGregor, for poor performance.⁴⁰⁴ Superintendent Smith was himself replaced in September 1847, due to "his want of effective arrangement in the general appropriation of the labour".⁴⁰⁵ His successor, the experienced officer James Skene, was in place long enough to oversee the final withdrawal of the convicts from the mine.

On the Tasman Peninsula, as well as at Recherche Bay and Jerusalem, there was therefore a deliberate and concerted strategy to direct convicts with stated mining experience to the coal works. The

³⁹⁹ William Jones, mine overseer, to J.E. Bicheno, Colonial Secretary, 11 March 1844, CSO 8/108/2279, T.A.H.O.

⁴⁰⁰ Unknown correspondent to Matthew Forster, Comptroller General, 18 January 1845, Misc 62/10/A1094, T.A.H.O. (UB); Report of the Committee of Officers into convict expenditure, 12 February 1845, CON 103/1, T.A.H.O. (UB).

⁴⁰¹ Henry Smith, Superintendent, to John Hampton, Comptroller General, 16 September 1847, Misc 62/22/A1118, T.A.H.O. (UB).

⁴⁰² George Maclean, Deputy Commissary General, to JE Bicheno, Colonial Secretary, 17 April 1846, Misc 62/16/A1104, T.A.H.O. (UB).

⁴⁰³ J.C. Victor, Commanding Royal Engineer, to W Nairn, Colonial Secretary, 10 December 1846, Misc 62/19/A1111, T.A.H.O. (UB).

⁴⁰⁴ Henry Smith, Superintendent, to John Hampton, Comptroller General, 16 September 1847, Misc 62/22/A1118, T.A.H.O. (UB).

⁴⁰⁵ Memorandum by John Hampton, Comptroller General, 7 September 1847, Misc 62/22/A1118, T.A.H.O. (UB); John Hampton, Comptroller General, to Sir William Denison, Lieutenant Governor, 20 May 1848, CO 280/227/565, T.A.H.O. (UB).

recognition of these convicts' value extended from those who directly oversaw their labour at the works, right through to the colonial government. The section above might suggest that the strategy was driven by local administrators reacting to their immediate situation. However, examination of the Appropriation Lists (CON 27), held by the Tasmanian Archives and Heritage Office, indicates that the strategy of the colonial government went beyond this (see Appendices 9 - 11). These lists describe where thousands of convicts were sent when they first arrived in the colony, as well as the convict's offence, origin and trade. By comparing the latter descriptor with the eventual appropriation of the convict, it is possible to ascertain the extent to which the colonial government sought to match the supply of incoming skills with the labour demands generated by local administrators. Examination of these lists support the hypothesis that there was a deliberate and proactive policy of skill-matching being undertaken in the colony, from the moment that a convict stepped aboard a colony-bound transport.

For the purposes of this research, a total of 13,438 individual appropriations were tabulated, accounting for approximately 20% of the estimated 67-69,000 male convicts transported to Van Diemen's Land. The appropriations spanned both the assignment and probation periods (1835-46), with 4,431 from the former and 9,007 from the latter (see Appendix 10). This difference is in part explained by the fact that, of the 63 ships included in the list, only 18 were from the assignment period, with a much higher number of transportees arriving during the 1840s (see Appendix 9). CON 27 is not a complete record of all convicts appropriated, with gaps during both periods. Of the 31 transports known to have arrived in the colony between 1834 and the end of assignment in mid-1839, there are appropriation lists for only 18. During the relevant period during probation (mid-1839 to the end of 1848) 92 ships arrived, of which CON 27 provides appropriations for 45. There are particular gaps in the coverage, most notably between April 1842 - October 1843 and July 1844 - July 1845. The records for these ships are held elsewhere and were not consulted as part of the survey.

The particular focus of this survey was to establish if there was a deliberate policy within government of identifying and appropriating convicts who professed to have experience in mining. As such, the details of all convicts who listed their trade as either collier or miner were taken down, as well as the

associated trade of wellsinker. In total 190 such convicts were identified: 122 coal miners or labourers, 58 miners and 10 wellsinkers (Table 6-1).

Year	Trade					Total
	Collier	Miner	Coal Lab.	Wellsinker	Mining	
1835	2				2	2
1836	9	3	1	2	13	15
1837	18	3		2	21	23
1838	6	1			7	7
Total Assignment	35	7	1	4	43	47
1839	1	1			2	2
1840	6	3			9	9
1841	21	16	1		38	38
1842	12	4			16	16
1843	2	1			3	3
1844	28	17		6	45	51
1845	15	9			24	24
Total Probation	85	51	1	6	137	143
Total	120	58	2	10	180	190

Table 6-1: Summary of convicts with a mining-related trade identified from CON 27

These 190 convicts arrived in the colony between 1835-45, their appropriations reflective of the system under which they were transported (Table 6-2). Of the 47 convicts who were appropriated during the assignment period, 22 were sent to places where mining was being carried out. A further six were forwarded to Morven, where their experience in underground works assisted with the excavation of the Morven tunnel. The appropriation lists for the 13 transports that arrived between 1836 and 1837 were complete, providing a full account of how convicts were appropriated during this period. This showed that over 60% of convicts in these two years were sent to mining operations, increasing to over 80% when the Morven works are taken into consideration. Over 1835-38, covered in less detail by the available appropriation lists, a total of 28 (60%) of the 47 convicts with mining experience were directed to places where their skills would be best adapted.

During 1839-46 the number of convicts with mining experience increased to 143. Of these, 88 (62%) were sent to mining operations. Seventy-two were sent to the Tasman Peninsula mine and 16 to Jerusalem when its mine was being worked. The majority of the remainder of the convicts were sent

to other probation stations (44). Of the years listed in CON 27, 1840 and 1841 have the best coverage (100%), with 1844 (60%) and 1845 (70%) also having a good inclusion of appropriations. During 1840 and 1841, the percentage of convicts sent to mining operations was low - 56% and 42% respectively - the majority sent to probation stations. Although only a few of the appropriations made during 1842 are known, what there is indicates that a high (over 90%) number of convicts were sent to mines - predominantly the Tasman Peninsula. This pattern continued in 1844 and 1845, when upwards of 70% of convicts with mining experience were sent to mining operations.

These figures indicate that, during either the assignment or probation periods, there was a very good chance that a convict with stated mining experience would be directed to a place where mining was being carried out with those during probation appearing to have had slightly better odds in being so directed. The fact that very few non-miners were sent to these places direct from transports also supports this. Between 1835-38, 22 convicts were sent direct to the Tasman Peninsula coal mine, all of whom had coal mining experience. During the probation period, 91 convicts were directed to the station, the majority (66) of these men professing to have mining experience (Table 6-3).

Year	Appropriation													
	TP - Coal Mines	Port Arthur	Jerusalem	Morven	Public Works	Assignment	Probation	Other	Unknown	Total	Mining	+ Morven	% Mine	% + Mor.
1835					2					2	0			
1836	9			3	2	1				15	9	12	69	92
1837	13			3	1	4		1		22	13	16	62	81
1838					1	5		2		7	0	0	0	0
Total Assignment	22	0	0	6	6	10	0	3	0	47	22	28	47	60
1839		1							1	2	1		50	
1840		5							4	9	5		56	
1841	14		2				17	1	4	38	16		42	
1842	12		3				1			16	15		94	
1843							3			3	0		0	
1844	23		11				16		1	51	34		76	
1845	17						7			24	17		71	
Total Probation	66	6	16	0	0	0	44	1	10	143	88		62	
Total	88	6	16	6	4	10	44	5	11	190	110	116	58	60

Table 6-2: Summary of appropriations from CON 27 of convicts with mining-related trades

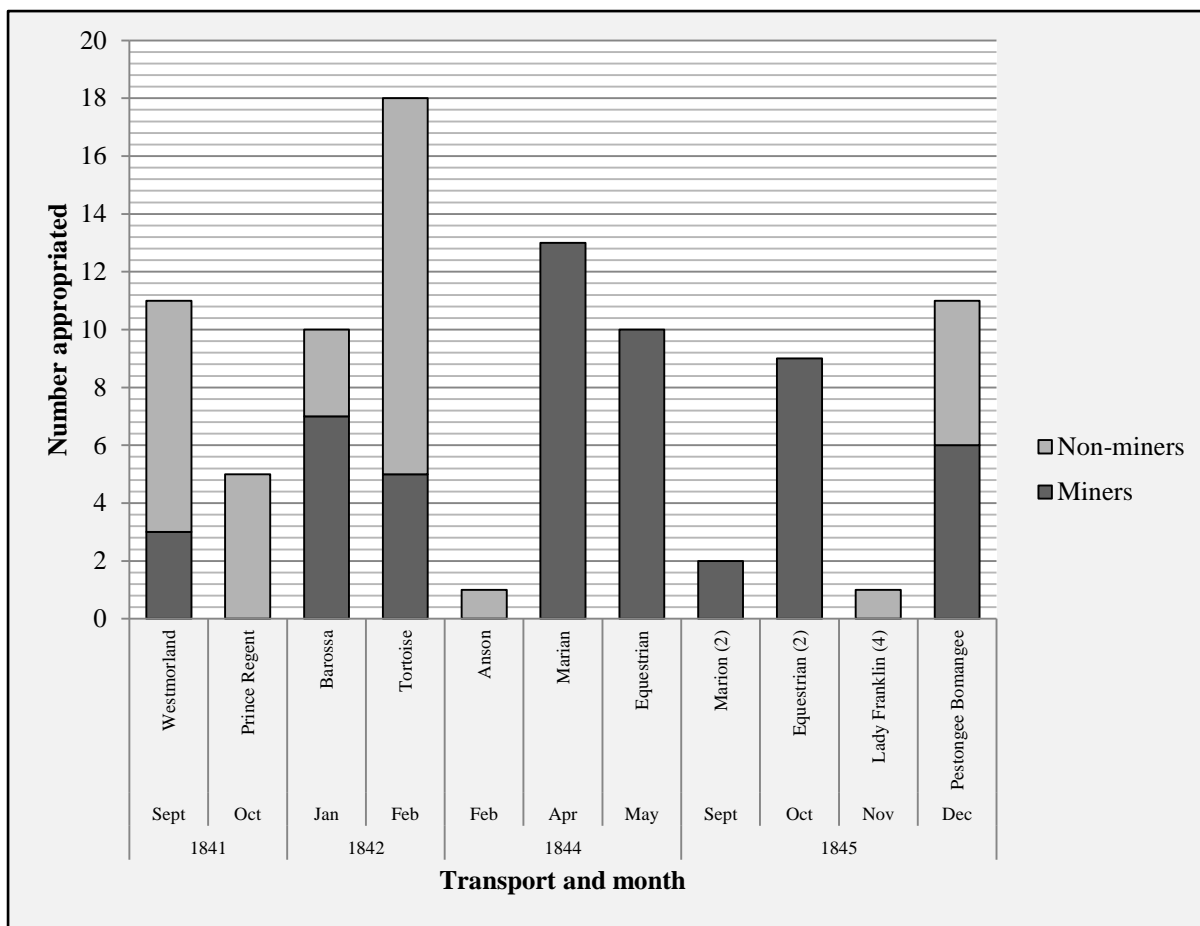
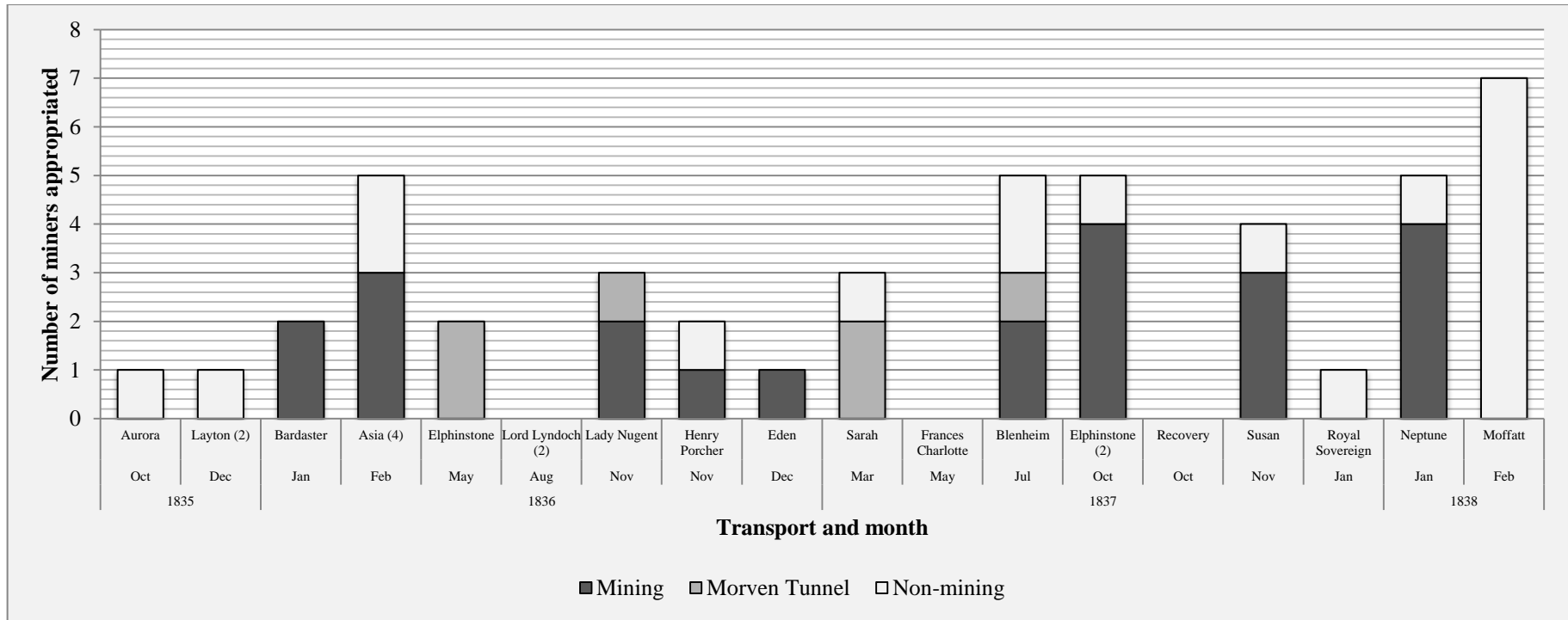


Table 6-3: Appropriations to Tasman Peninsula coal mine, showing number of miners

The number of convicts with mining experience sent to mining establishments fluctuated throughout the period studied. Table 6-5 and Table 6-7 show summaries of the appropriation destinations for the 190 miners during both the assignment and probation periods. These tables demonstrate the fluctuations in appropriation destination that could occur, with a notable number of ships having all of their miners appropriated to non-mining operations. There are, however, significant groupings where the majority, if not all, convict miners were appropriated with reference to their professed trade.



6-4: Miners appropriated 1835-38 (chart)

	1835		1836							1837					1838			Total	
	Oct	Dec	Jan	Feb	May	Aug	Nov	Nov	Dec	Mar	May	Jul	Oct	Oct	Nov	Jan	Jan		Feb
Miners	1	1	2	5	2	0	3	2	1	3	0	5	5	0	4	1	5	7	47
Tasman Peninsula - Coal Mines			2	3			2	1	1			2	4		3		4		
Morven					2		1			2		1							
Non-mining	1	1	0	2	0	0	0	1	0	1	0	2	1	0	1	1	1	7	

Table 6-5: Miners appropriated 1835-38 (table)

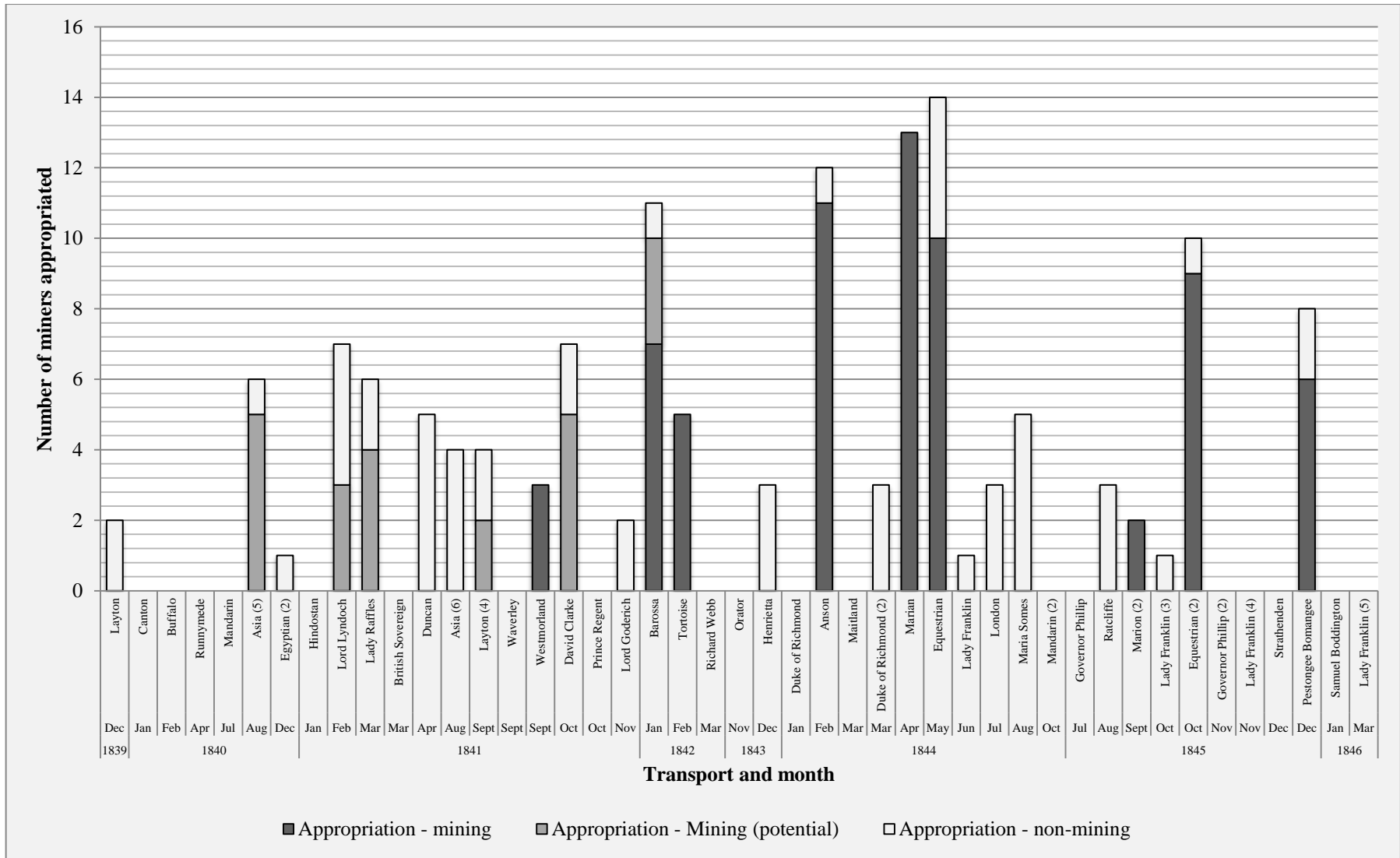


Table 6-6: Miners appropriated 1839-46 (chart)

	1839		1840				1841												1842			
	Dec	Jan	Feb	Apr	Jul	Aug	Dec	Jan	Feb	Mar	Mar	Apr	Aug	Sept	Sept	Sept	Oct	Oct	Nov	Jan	Feb	Mar
	Layton	Canton	Buffalo	Runnymede	Mandarin	Asia (5)	Egyptian (2)	Hindustan	Lord Lyndoch	Lady Raffles	British Sovereign	Duncan	Asia (6)	Layton (4)	Waverley	Westmorland	David Clarke	Prince Regent	Lord Goderich	Barossa	Tortoise	Richard Webb
Miners	2	0	0	1	1	6	1	0	7	6	0	5	4	4	0	3	7	0	2	11	5	0
Appropriation - TP Coal Mines																3				7	5	
Appropriation - Jerusalem																						
Port Arthur						5			3	4												
Appropriation (potential) - Jerusalem														2			2			3		
Appropriation (potential) - Tasman Peninsula																	3					
Appropriation - Non-mining	2					1	1		4	2		5	4	2			2		2	1		

	1843		1844								1845										1846		Total	
	Nov	Dec	Jan	Feb	Mar	Mar	Apr	May	Jun	Jul	Aug	Oct	Jul	Aug	Sept	Oct	Oct	Nov	Nov	Dec	Dec	Jan		Mar
	Orator	Henrietta	Duke of Richmond	Anson	Maitland	Duke of Richmond (2)	Marian	Equestrian	Lady Franklin	London	Maria Somes	Mandarin (2)	Governor Phillip	Ratcliffe	Marion (2)	Lady Franklin (3)	Equestrian (2)	Governor Phillip (2)	Lady Franklin (4)	Strathenden	Pestonjee Bomangee	Samuel Boddington	Lady Franklin (5)	
Miners	0	3	0	12	0	3	13	14	1	3	5	0	0	3	2	1	10	0	0	0	8	0	0	143
Appropriation - TP Coal Mines							13	10							2		9				6			
Appropriation - Jerusalem				11																				
Port Arthur																								
Appropriation (potential) - Jerusalem																								
Appropriation (potential) - Tasman Peninsula																								
Appropriation - Non-mining		3		1		3		4	1	3	5			3		1	1				2			

Table 6-7: Miners appropriated 1839-46 (table)

The fluctuations in appropriations could potentially have been linked to the administrative situation in the colony and at the individual stations. Throughout the 1830s, it is evident that a steady flow of convicts with mining experience were directed primarily to the Tasman Peninsula coal mine.

Although the data does not extend much into 1835, there is a possible increase in the number of miner appropriations from 1836, commensurate with the general increase in the mining and prisoner infrastructure of the settlement. Another increase in the number of miners sent to the mine from the beginning of 1842 could also be associated with the station's reclassification as a probation station at this time, although the commensurate general increase in the number of appropriations makes a definitive statement difficult.

It is actually noteworthy how divorced from the appropriation fluctuations were to the surrounding administrative changes. Throughout the 1830s, in particular the latter part of this decade, the Tasman Peninsula mine was considered to be a place of dread for convicts, a punishment outpost of a penal station (Lempriere 1839: 80). However, at a time when the station was being used to quarantine only the worst characters, the number of miner appropriations direct to the station increased. The 13 convicts concerned were labouring under a mixture of sentences - eight had the shorter sentence of seven years, two of 14 years and only three of life - and therefore they had not all been sent down as punishment. This same situation occurred in 1844, when the Tasman Peninsula mine became a punishment hub of the probation system. Instead of taking only the leavings of the other probation stations, it received a higher number of convicts with mining experience direct from the transports. These two instances potentially demonstrate that, while administrative changes might have been taking place at the station, the operative needs of the mine meant that it continued to receive experienced miners from the ships.

It is highly likely that these operative requirements were what had the greatest effect upon the appropriation fluctuations. All the works were in need of experienced labour, the government attempting to meet demand where it could. In some instances, direct appointment of convict miners from the transports occurred, a situation which would be reflected in the listed appropriations. A good example is the high number of appropriations to Jerusalem from the *Anson* in January 1844, a direct

response to the request of William Jones for more miners.⁴⁰⁶ On the Tasman Peninsula, the sinking of a new shaft in June 1837 likely accounted for the increased number of miners directed to the station during that year. Similarly, the excavations of shafts toward the end of 1841 and in 1842-43 may be reflected in the increased number of miner appropriations at these times.

Another way in which the requirement for experienced miners could be met was through recycling those convicts already in the system. Historical documentation makes it clear that certain convicts, or those who had served their time as convicts, could be continually cycled through the system to oversee or advise on mining operations. Joseph Lacey and William Dawson were two well-known examples of such convicts, both these men having started their mining careers in the colony as transportees. Lacey had been transported on the *Asia* (3), arriving in Van Diemen's Land in December 1827.⁴⁰⁷ Serving time in assignment and on public works, he was selected by Josiah Spode, the principal superintendent, to report on the coal identified on the Tasman Peninsula in 1833. Lacey was instrumental in that mine's initial phases of exploration and consolidation, even after his 1838 free pardon, and oversaw the early works at Recherche Bay in the early 1840s. Dawson was a mineral surveyor by trade and, although not as active at the coal face as Lacey, his opinion was still sought on the operations of Jerusalem, Recherche Bay and the Tasman Peninsula. He had spent time at Port Arthur penal station during 1841, after which time his talents were utilised to report on the prospects of the Recherche Bay operation in 1842. Shortly after this he prepared a report on Jerusalem, after which he was sent back to the Tasman Peninsula to report on the plan to sink additional shafts, prior to returning to Jerusalem to act as sub-overseer.⁴⁰⁸

An examination of the conduct records of the 190 convict miners found that, while 108 of them had been directly appropriated to a place where mining was being carried out during 1835-45, a further 16 had at a later point in their sentence been sent to a mining operation - in all cases the Tasman Peninsula. In the majority of instances, their removal to the peninsula was due to continued instances of bad conduct on the part of the convict, supporting the mine's situation as a place of punishment in

⁴⁰⁶ William Jones, mine overseer, to J.E. Bicheno, Colonial Secretary, 11 March 1844, CSO 8/108/2279, T.A.H.O.

⁴⁰⁷ Joseph Lacey, 384, *Asia* (3), CON 31/1/27, T.A.H.O.

⁴⁰⁸ William Dawson, 1472, *Cabotia*, CON 35/1/1, T.A.H.O.

the colony. This occurred during both the penal and probation eras. One convict, John Ashwood, had been sent to the Tasman Peninsula mine to undergo hard labour for absconding from the works at the Morven Tunnel.⁴⁰⁹ Arriving in 1837, he was still labouring at the mine in late 1839. Only two convicts were sent to the mine with no prior record of poor conduct to warrant such a removal. William and James Templeton, either brothers or cousins from Glasgow, had both been sent from the *Maria Somes* to Impression Bay in August 1844.⁴¹⁰ After nearly eight months at that station they had been removed to the mine, both spending over six months there before being released as passholders. That the redeployment of these men corresponded with the opening of a new shaft in 1845, suggests they were to be employed in the workings. Other than the Templetons, there is only one other instance from the 17 cases where there evidence that convicts were actually employed as miners when they were sent to the station.⁴¹¹

This ambiguity about whether these convicts were employed as miners extends to the other cases identified by the survey. Just because a convict with professed mining experience was sent to a mining operation, might not have meant that he was necessarily employed in that trade. Of the 190 miners identified in the appropriation, 43 were either mentioned in documentary records as having been employed as miners, or had this employment noted in their conduct records. The latter records, in particular those from the assignment period, were often very unclear as to the labour a convict carried out. Evidence of mining could only be attained if the convict committed a mining-related offence or, in the probation period, if remarks about their behaviour mentioned such employment. If a prisoner was well-conducted there was little chance that there would be any historical indication of them having been employed as a miner. By implication, this also applied to those convicts with no previously-recorded mining experience, but who ended up as miners. Added to this is the administrative overlap that occurred during the penal period, when the Tasman Peninsula mine operated under the oversight of Port Arthur. Convicts being sent to the mine may have had their

⁴⁰⁹ John Ashwood, 724, *Elphinstone*, CON 31/1/2, T.A.H.O.

⁴¹⁰ William Templeton, 13608, *Maria Somes*, CON 33/1/57, T.A.H.O.; James Templeton, 13609, *Maria Somes*, CON 33/1/57, T.A.H.O.

⁴¹¹ Barnet Widdowson, 2432, *Moffat (2)*, CON 31/1/48, T.A.H.O.

destination noted as Port Arthur, with any offences committed during their tenure similarly registered to this location.

However, there are very few examples of convict miners definitely *not* being employed at their trade. One of the few examples is John Tregoning, sent to the Tasman Peninsula mine in February 1842, a miner from Cornwall who was employed as a general labourer for the first year, after which time he was made an officer's servant.⁴¹² Similarly, convict miners who committed an offence could also find themselves removed from the coal face and placed in a labouring gang. Behavioural remarks pertaining to convicts during the probation period show that many of the miners appear to have been employed as general labourers during some part of their sentence. However, the very intermittent nature of these records means that it cannot be taken as absolute proof that the convicts were definitely not employed in their trade. The deliberate appropriation of at least 60% of the 190 convicts to a place of mining (67% including those who were later sent to a mining operation) indicates a deliberate pattern of appropriation, which in turn suggests that the skills held by these convicts would have been utilised in the most suitable way.

When considering the position that the convict miner occupied, it is also cogent to consider that it was entirely based upon the trade that the convict himself had stated. There was no mechanism for ascertaining if the trade they had given was accurate, other than through judgement of a convict's ability when they were placed in the works. Convicts are known to have deliberately falsified such information, especially during the assignment period, where an assignee skilled in a particular trade could attract a high level of indulgence (e.g. Robbins 2000: 48-9; 2003: 369). Although the benefits of concealing a skill lessened during the probation period, with convicts ostensibly being sent to a gang with no reference to their former trade, the evidence presented so far shows that convict miners could attract special attention and the benefits that might entail. If newly-arrived convicts somehow knew that the position of miner could attract better treatment, the question must be asked if all the convict miners who ended up at a mining operation were sufficiently experienced.

⁴¹² John Tregoning, 4222, *Tortoise*, CON 33/1/17, T.A.H.O.

There is little direct evidence that enables this question to be satisfactorily answered, with what evidence there is pertaining only to the Tasman Peninsula operation. Toward the very end of the operation there, the mining overseer R.V. McGregor complained of a group of men "called" miners, whom he could not trust to safely and competently extract the coal.⁴¹³ There are a further two cases which help shed more light on the actual level of skill that convict miners had. The first of these was from 1837, when Commandant Booth drew up a list of 17 non-sentenced miners at the works.⁴¹⁴ All of these men he considered to be "well conducted" and "industrious", bar one man who was described as "indifferent - but much improved". Of the 17 convicts, 13 had listed mining-related trades. Three of these - Abraham Leighton, John Stokes and Thomas Rogers - had been at the mine since 1834, with a further two - John Turnbull and William Butley - having been part of Lacey's 1833 gang.⁴¹⁵ All these men bar Leighton had been recommended for and received a Ticket of Leave by the end of 1837, indicating that Booth's satisfaction with their behaviour merited an official amelioration of their sentence.

The second example occurred four years later, after the mine had become a probation station. In 1841 the superintendent, Samuel Cook, had drawn up a list of the 25 men who were then working as miners, commenting on those he thought to be "useful" or "useless".⁴¹⁶ In this list were 18 men who had professed to have mining experience, with another being a quarryman. Of the nine men considered to be useless, eight of them had mining experience, meaning that just under half the men with mining experience were thought by Cook to be no good at the trade. The majority of the 25 convicts on Cook's list had committed one or more offences while at the mine, meaning that Cook had not based his judgement on behaviour alone. At this time the experienced miners Joseph Lacey and James Hurst were both present at the station, with presumably any decision on the utility or otherwise of the men likely to have been based upon Lacey and Hurst's judgement. Therefore, if Cook's

⁴¹³ R.V. McGregor to Henry Smith, Superintendent, 8 April 1847, CO 280/227/565, T.A.H.O. (UB).

⁴¹⁴ Charles O'Hara Booth, Commandant, to Josiah Spode, Principal Superintendent, 18 July 1837, CSO 5/57/1290, T.A.H.O. (UB).

⁴¹⁵ Abraham Leighton, 954, *Bardaster*, CON 31/1/28, T.A.H.O.; John Stokes, 1908, *Pestongee Bomangee*, CON 31/1/40, T.A.H.O.; Thomas Rogers, 954, *Moffat*, CON 31/1/37, T.A.H.O.; John Turnbull, 767, *Isabella*, CON 31/1/43, T.A.H.O.

⁴¹⁶ Samuel Cook, Superintendent, Memo of men at Coal Point sent there as Miners shewing [*sic*] their ability as such or otherwise, 14 July 1841, Tasmania Papers 134, CY 3079, Frame 285, M.L. (ST).

descriptions can be taken at its face value, the want of ability on some of these convicts' part may have reflected inexperience, or potentially even the outright fabrication of their former trade.

The inclusion of at least six non-miners on Cook's list hints at another aspect of skilled convict labour: that of on-the-job training. A known feature of convict labour management (e.g. Robbins 2000: 151) which not only encouraged increased labour efficiency, but also the equipping of convicts with new skills for life post-incarceration, it is not surprising that training was implemented. Although nowhere overtly stated, analysis of the records illustrates a number of instances where convicts with no professed skill in mining were counted amongst this skilled grouping. Of the six non-miners on Cook's list, two were ploughmen, two were labourers and two did not have their trades listed.⁴¹⁷ One of these, William Edmunds, had his trade recorded as a ploughman, but on his record it stated that he had been sent to the Tasman Peninsula due to his being a miner. Edmunds had either originally concealed his trade, picked up training since he had been in the colony, or had simply lied about being a miner. Of the 17 men referred to by Booth in 1837, the four listing non-mining trades comprised three labourers and a brewer.⁴¹⁸ All of them were considered by Booth to be good miners.

Directing the labour

The efforts taken to acquire and retain the labour of experienced miners, as well as in some cases train new miners, could lead to the erosion of the foundations of the emplaced labour management systems. During the assignment period, when the Tasman Peninsula mine functioned as an outstation of Port Arthur, its population was meant to comprise prisoners who had been secondarily convicted, or convicted of serious crimes in Britain. Yet, the appropriation lists show that convicts *were* sent direct from the transports to the Tasman Peninsula, many of these men serving shorter seven or 14 year sentences. Even though pains were taken to keep such convicts administratively separate from those

⁴¹⁷ Joseph Bates, 2663, *Elphinstone* (2), CON 31/1/3, T.A.H.O.; William Edmunds, 452, *Norfolk*, CON 31/1/11, T.A.H.O.; William Harrison, 1817, *John Barry*, CON 31/1/21, T.A.H.O.; Robert Jones, 703, *Isabella*, CON 31/1/24, T.A.H.O.; 'Reece Polley, 1185, *Layton* (2), CON 31/1/35, T.A.H.O.; Thomas Haines, 2659, *Asia* (5), CON 33/1/2, T.A.H.O.

⁴¹⁸ John Lethart, 832, *John Barry*, CON 31/1/28, T.A.H.O.; Thomas Meek, 1223, *John Barry*, CON 31/1/28, T.A.H.O.; John Turnbull, 767, *Isabella*, CON 31/1/43, T.A.H.O.; John Williams, 1742, *Moffatt*, CON 31/1/47, T.A.H.O.

undergoing colonial sentences, they had still been placed in the midst of a penal station thanks solely to their mining experience.

The exigencies placed upon the whole convict apparatus by probation's introduction is particularly interesting for the light it casts on the value given to convict skills. One of the core tenets of the probation system was that convicts were to be placed within the classificatory confines of the gang with reference only to their conduct, not their ability. The 1841 and 1843 regulations were clear on this point, with both sets of regulations stipulating:

Nothing can be more contrary to the dictates of justice...than allowing men on account of their ingenuity to escape that severity of labour, which their fellow-convicts of less capacity, although not of greater guilt, are enduring.⁴¹⁹

By sending convicts direct from the transports to work in a trade in which they had experience was a direct contravention of this regulation. Evidence from the conduct records of some of these men supports such a situation. Both John Inskip and William Lockett were made miners within a month of their arrival at the station in March 1842.⁴²⁰ Similarly, Isaac Hemmingsley and Edward Hancock, found themselves working as miners a month after having arrived in February 1842 on board the *Tortoise*.⁴²¹

That miners often attracted significant indulgences and ameliorations to their sentence further contradicted probation regulations. These clearly stated that "Great care is to be taken to prevent indulgences of any kind from being introduced. Tobacco and every other luxury are strictly prohibited."⁴²² During the first exploratory stage of work on the Tasman Peninsula, the miners had received a higher class of rations, augmented with tobacco and tea.⁴²³ As a further performance inducement, they were offered a Ticket of Leave at the end of 1833, conditional on their good

⁴¹⁹ *Convict Discipline*, Regulations of the Probation System, 1 July 1841, (158), p. 38; *Convict Discipline*, Regulations for the First Stage of Convict Probation in Van Diemen's Land, October 1843, (659), p. 12.

⁴²⁰ John Inskip, 1341, *Barossa*, CON 33/1/16, T.A.H.O.; William Lockett, 1368, *Barossa*, CON 33/1/16, T.A.H.O.

⁴²¹ Isaac Hemmingsley, 4045, *Tortoise*, CON 33/1/17, T.A.H.O.; Edward Hancock, 4046, *Tortoise*, CON 33/1/17, T.A.H.O.

⁴²² *Convict Discipline*, Regulations of the Probation System, 1 July 1841, (158), p. 39.

⁴²³ Matthew Forster, Chief Police Magistrate, to John Burnett, Colonial Secretary, 31 October 1833, CSO 1/680/15032, T.A.H.O. (UB); Government Order, 17 December 1834, CSO 1/641/14418, T.A.H.O. (UB).

behaviour.⁴²⁴ With the increase in the establishment, there was a resultant introduction of a second class of miners: those undergoing penal punishment. Although classed as sentenced convicts, they do not appear to have been the object of any other form of punishment, other than not receiving an increased ration. From 1836, all miners, bar those under sentence, were allowed to draw extra tea and sugar rations.⁴²⁵ An extra ration of flour, which had been given to convicts working on the winding gear at the shaft, had also been extended to the convict miners not undergoing colonial sentence.⁴²⁶ Probation's introduction had altered this situation, all convicts supposedly placed on the same scale of rations, no matter what their situation. Although tea and sugar was withdrawn from the miners on the Tasman Peninsula, the flour ration for non-sentenced men was kept up despite the regulations.⁴²⁷ In a similar contravention of these regulations, the miners at Jerusalem and Recherche Bay were permitted to continue receiving additional tea and sugar.⁴²⁸ All convict miners, no matter where they worked, had their tobacco ration withdrawn in 1840, the issuing of which had been a further contravention of the regulations.⁴²⁹ Within three months, the non-sentenced miners on the Tasman Peninsula responded with a petition.⁴³⁰ This stated their grievance that, instead of being assigned as was their due, they had been sent direct to a penal station and placed under the strictures of penal discipline. The tobacco ration which had been allowed to them, had been one of the only indulgences which they were permitted. What was more:

...the practice of smoking, being in general use among the colliers in Mother country as a preservation of health from the fowl [*sic*] air to which they are exposed which practice, Your Excellency's petitioners have unfortunately imbibed, which causes the want of it to be severely felt.

⁴²⁴ Matthew Forster, Chief Police Magistrate, to John Burnett, Colonial Secretary, 31 October 1833, CSO 1/680/15032, T.A.H.O. (UB).

⁴²⁵ Charles O'Hara Booth, Commandant, to John Montagu, Colonial Secretary, 15 May 1840, CSO 5/236/6021, T.A.H.O. (BT); Henry Smith, Superintendent, to Charles O'Hara Booth, Commandant, 16 September 1844, Misc 62/3, T.A.H.O. (BT).

⁴²⁶ Henry Smith, Superintendent, to Matthew Forster, Comptroller General, 29 August 1844, Misc 62/2/A1092/2065, T.A.H.O. (BT); Henry Smith, Superintendent, to Charles O'Hara Booth, Commandant, 16 September 1844, Misc 62/3, T.A.H.O. (BT).

⁴²⁷ Henry Smith, Superintendent, to Matthew Forster, Comptroller General, 29 August 1844, Misc 62/2/A1092/2065, T.A.H.O. (BT); Henry Smith, Superintendent, to Charles O'Hara Booth, Commandant, 16 September 1844, Misc 62/3, T.A.H.O. (BT).

⁴²⁸ James Erskine, Visiting Magistrate, to Matthew Forster, Chief Police Magistrate, 20 December 1841, CSO 22/13/593, T.A.H.O.

⁴²⁹ Settlement Order, 30 April 1840, CSO 5/236/6021, T.A.H.O. (BT).

⁴³⁰ Petition of Colliers working at the Government Mines, 14 August 1840, Misc 62/5, T.A.H.O. (UB).

The Lieutenant Governor dismissed their claim, on the grounds that it was "contrary to all regulation" and the miners lost their tobacco ration.⁴³¹

As members of the labour hierarchy, the convict miners at the Tasman Peninsula mine were provided with accommodation separate from the remainder of the prisoner population, although it is unclear if only the non-sentenced men were afforded such a benefit. During both the penal and probation periods, the miner's accommodation was situated in a timber hut within the compound of the first barracks (Figure 6-1 and Figure 6-2). Measuring 5.5m x 4.5m, the hut had been situated on the western side of the compound, at the end of a row of three huts given over to the accommodation of the general prisoners. At the time it was constructed (1834/1835) it had accommodated 6-11 miners, the sleeping berths situated along the southern wall leaving the remainder of the space for messing.

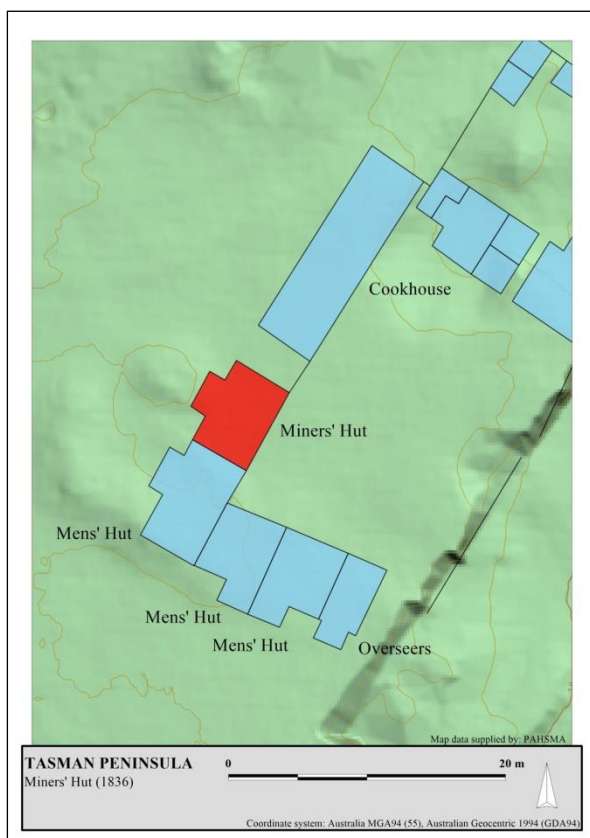


Figure 6-1: Situation of the miners' hut ca.1836

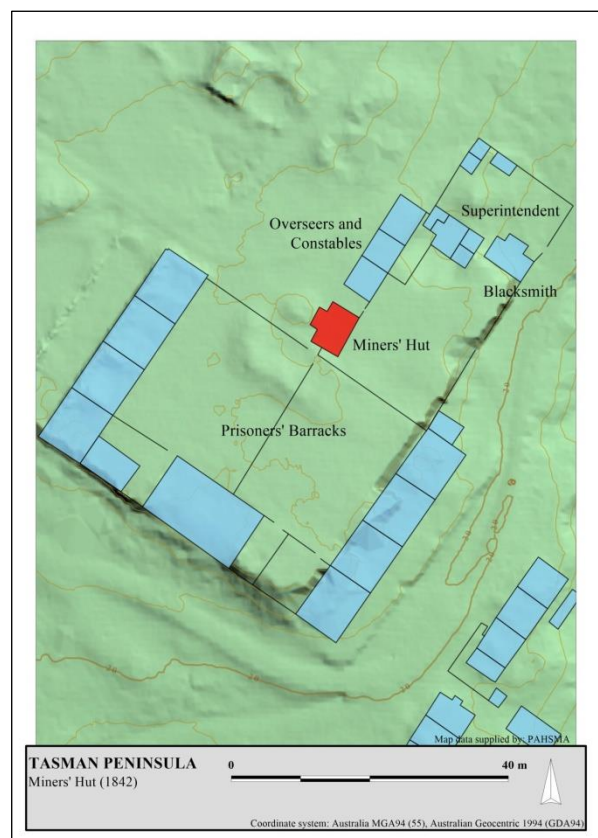


Figure 6-2: Situation of the miners' hut ca.1842

The situation of the hut, in between the general prisoners and the administration buildings, signified the slightly elevated status of the miners within it. This was enhanced by the position of the men's

⁴³¹ Ibid., note by Sir John Franklin, Lieutenant Governor, 14 August 1840.

huts, which faced inward toward the administration buildings, while the miners' hut looked out toward the open side and the bay beyond. The hierarchical distinction was made even more pronounced with the completion of the new barracks in ca.1838, which entirely removed their hut from the main compound. Though still accommodating convicts, it was placed in a smaller compound with the quarters for the superintendent, overseers and constables. It is unclear if the hut was required to house all the convict miners, which, by 1842 had reached 25. It possible that the miners were provided another building when a number of structures were built to the north west after 1843.

The labour of the miners was also accounted for differently from the remainder of the convict population. During the initial exploration phase, as the miners were cutting exploratory adits and test pits to locate the coal seams, their work would most likely have been measured by the clock, like the majority of convicts. As the works deepened and, in the case of Recherche Bay, Jerusalem and the Tasman Peninsula, the coal proven to a certain extent, the task work system took over as a measurable quantity of coal could then be obtained. At the latter place, Thomas Lempriere reported that in ca.1838 the miners were given the task of obtaining 5,880 lbs (2 tons) of coal in a 24 hour period (Lempriere 1839: 39). With upward of 11 miners in the works, this was the equivalent of over 40 tons per day. By the early 1840s, with a general population at the station rapidly increasing, the work of the miners had been organised into two shifts: one of a morning and one of an afternoon.⁴³² The mining shifts usually took 5-6 hours each and, when a shift was completed, the miners were employed at jobs around the settlement.⁴³³

The position of the convict miner, be they a sentenced or non-sentenced prisoner, placed them in a unique position to subvert the workings of the camp or station to which they were appropriated. Whether seen as outright forms of resistance, or merely attempts to lessen the burden of a day's labour, their offences encompassed insubordination, insolence, idleness and endangering the works. John Harper and Thomas Townend were insolent to their overseers, with Harper also accused of

⁴³² Henry Smith, Superintendent, to undisclosed recipient, 20 May 1845, Misc 62/12/A1069, T.A.H.O. (UB).

⁴³³ Ibid.; J.D. Motherwell, former surgeon, to John Hampton, Comptroller General, 10 June 1846, CO 280/202/549, T.A.H.O. (UB).

incessant idleness.⁴³⁴ Some miners simply refused to labour. Thomas Reece "positively" refused to work when at Recherche Bay.⁴³⁵ John Ashwood attempted to avoid being sent down the works on the Tasman Peninsula by pleading inability.⁴³⁶ Others simply absented themselves from the works, thereby depriving the mines of their labour.⁴³⁷

Miners could be caught attempting to hamper the works in some way, or bypassing the checks on their labour. In July 1834, Nathan Sowden was caught for "Gross misconduct in moving back his fellow miners working mark 7 inches for the purpose of deceiving his overseer".⁴³⁸ By moving back the mark, Sowden had been attempting to lighten the labour of a fellow convict, thereby robbing the works of his output. Similarly, John Halls was suspected of keeping a false tally in 1836, an act which required the connivance of his labourer, James Camble.⁴³⁹ Mark Edwards bribed labourers to enhance his tally by picking up coal from the sides of the roads.⁴⁴⁰ Other miners tried to get away with cutting poor coal. This latter problem plagued the Tasman Peninsula mine throughout its operational life. Overseers, contractors and even the users of the coal often complained that it contained a high degree of rubbish (waste rock) or that the coal was too fine. During the initial period, it had been difficult to keep a check on the miners, the first weighing machine only installed in 1837.⁴⁴¹ Shortly after its installation Joseph Grainger had been punished for "Sending out from the mines a quantity of rubbish in lieu of coals & subsequently procuring coals from a [illegible] working place without authority".⁴⁴² Joseph Mayon was punished the following year for a similar offence.⁴⁴³

More serious were the attempts by miners to hamper the works in more detrimental ways. In 1841 Superintendent Cook, complained that "many men have been punished for [injuring] the passage or taking the Coal from the sides to the imminent danger of the roof falling in".⁴⁴⁴ John Williams and George Perry had been found picking coal from the sides of the underground roads in 1838, thereby

⁴³⁴ John Harper, 2336, *Neptune*, CON 31/1/22, T.A.H.O.; Thomas Townend, 994, *Lady Nugent*, CON 31/1/34, T.A.H.O.

⁴³⁵ Thomas Reece, 1237, *Elphinstone (2)*, CON 31/1/36, T.A.H.O.

⁴³⁶ John Ashwood, 724, *Anson*, CON 33/1/49, T.A.H.O.

⁴³⁷ John Ashwood, 724, *Anson*, CON 33/1/49, T.A.H.O.

⁴³⁸ Nathan Sowden, 1824, *Moffat*, CON 31/1/40, T.A.H.O.

⁴³⁹ John Halls, 1729, *Moffat*, CON 31/1/21, T.A.H.O.

⁴⁴⁰ Mark Edwards, 515, *Blenheim*, CON 31/1/11, T.A.H.O.

⁴⁴¹ Charles O'Hara Booth, Commandant, to John Montagu, Colonial Secretary, 31 July 1837, CSO 5/37/773, T.A.H.O.

⁴⁴² Joseph Grainger, 1151, *Asia (4)*, CON 31/1/16, T.A.H.O.

⁴⁴³ Joseph Mayon, 1604, *Neptune*, CON 31/1/32, T.A.H.O.

⁴⁴⁴ Samuel Cook, Superintendent, to Matthew Forster, Director of Probation Service, 19 November 1841, Tasmania Papers 134, CY 3079, M.L. (UB).

endangering the stability of the works.⁴⁴⁵ In August 1838 Joseph Bates and William Edmunds were both charged with endangering the works by doing the same.⁴⁴⁶ George Froggart wilfully or accidentally endangered the roof of the mine in 1842.⁴⁴⁷

The relatively privileged position of the convict miners did not shield them from punishment. For his first count of insolence, Thomas Townend was placed on a lower scale of rations, with his second case met with four days solitary confinement. John Harper was punished three times for being idle, receiving a total of 86 lashes. John Ashwood, who absented himself from the works twice, received a total of 125 lashes. Thomas Reece, when refusing to work at Recherche Bay, was sent back to Port Arthur for hard labour. For endangering the works, Mark Edwards lost his extra rations and was demoted to a labourer. For similarly endangering the mine, George Perry was demoted to a chain gang, while George Froggart received four days solitary confinement. In attempting to lighten the work of a fellow convict, Nathan Sowden received 25 lashes, as did Mark Edwards for employing other convicts. Joseph Grainger was demoted to the chain gang for mixing rubbish with his coal, while Joseph Mayon received 48 hours and was deprived of his extra rations for the same.

Conclusion

This section has sought to show the lengths that were gone to appropriate the labour of convicts with professed mining experience. On the one hand, archaeologists have previously found evidence for a convict labouring elite in the things that they built, reading skill into neat assemblies of stone and brick (e.g. Karskens 1986; Fredericksen 2001). On the other hand, the skills of the convict miner have no lasting memorial, the product of their labour almost immediately consumed in colonial fires. Instead, evidence of their skill has been found amidst the documentary archive, between the ruled lines of ledgers and their individual records. A survey of appropriations between 1835-46 has shown that, when a convict with such experience arrived on a transport, they had a good chance of being directly sent to a place where a mining operation was being carried out. The chances of being sent to

⁴⁴⁵ George Perry, 1346, *Elphinstone (2)*, CON 31/1/36, T.A.H.O.

⁴⁴⁶ Joseph Bates, 2663, *Elphinstone (2)*, CON 31/1/3, T.A.H.O.; William Edmunds, 452, *Norfolk*, CON 31/1/11, T.A.H.O.

⁴⁴⁷ George Froggart, 980, *Lord Lyndoch*, CON 33/1/5, T.A.H.O.

such a place over the life of their sentence was greater still, with some prisoners cycled through a number of places, presumably to take advantage of their experience. The picture that emerges is of a body of convict labour that was the focus of active government management. Although the administrative conditions at these places changed, the convict miner continued to be directly appropriated and moved to camps and stations throughout the whole period. The rate of appropriations did fluctuate, potentially being more responsive to the operational requirements at the mining places, than to the overarching convict labour system under which they operated.

This serves to reinforce the complex relationship that existed between the local and global scales of convict labour management. It demonstrates that, while the imposition of system-wide changes such as probation could heavily alter the flow and direction of convict appropriation, and the ill-conceived formation of such places as Recherche Bay drastically affect the availability of convict skills, there was an obvious attempt by the administrators, at least at the colonial level, to meet the labour requirements of the local administrators. The latter evidently experienced frustration as the progress of works were retarded by a dearth of skilled miners, yet, such frustrations were largely borne of the nature of the transported labour base, rather than of the attempts to co-opt it.

It is difficult to know how good some of them were at their trade, or how many of them may have fabricated the skill. What evidence there is suggests that they were a mixture of efficient and incompetent, diligent and destructive - in other words, they were like any other penal workforce. It is likely that these convicts were aware of the efforts made to appropriate and retain their labour. The convict miner was towards the top of the labour hierarchy, the efficiency or otherwise of the mining operations completely reliant on their competency with pick and bar. Hence the miner was able to attract a high rate of indulgence and was seemingly quick to challenge threats to it. Their favourable treatment sometimes contravened the regulations, the introduction of probation's new classificatory demands being particularly difficult to reconcile with the indulgences offered the miner. The manner of their management provides a useful yardstick for measuring the value that was placed upon the economic operation of the mines. From all appearances, it was economy that formed a preeminent concern.

This chapter and that preceding have examined the methods that were used to appropriate and manage convict labour, emphasising how important it is to read these against their penological contexts. By examining the role of the convict miner, the continual interplay between punitive and economic motives has also been highlighted. As demonstrated, the documentary record plays an essential role in providing insight into the multi-scalar motivations that formed and developed these places. However, it is the actuality of these landscapes' remnant physical fabric that conveys the realities of what was achieved. In the following chapters, the analytical elements discussed in Chapter 2 will be brought to bear to answer the question of how the penological and industrial motivations which drove the formation and progression of these places are reflected in the archaeological landscapes.

CHAPTER 7: APPLYING THE MODEL - SUPERVISION

To keep a man from bad companions is the first rule of moral discipline.⁴⁴⁸

Space at a convict station was heavily controlled. The day-to-day life of the prisoner was governed by the minute hand of the overseer's watch, the inked word of the settlement rules and regulations, and the brick, timber and stone boundaries that criss-crossed an establishment. All moments of the convict's life were to be carefully regulated to ensure that individual and collective behaviours were controlled. Physical and psychological boundaries defined the space that surrounded the convict, forcing their movements into set parameters, or directing their gaze to or from desired points. How space at a station was controlled was in part a direct reflection of the aims of the governors, yet it also reflected local responses to internal and external pressures. It was not just the convicts who were controlled. The free at these places were bound by the inked word and locked gate as much as the convicts. They had zones they could not transgress, either imposed by the government or by unofficial forces. They lived in places provided by the government, on rates of pay set by the government and were fed from the government stores. Infraction, perceived or otherwise, of the rules and regulations could result in the removal of all this. Like convicts, the free at a convict station were engaged in a daily negotiation of their environment. The forces affecting both convict and free moulded the landscapes visible today.

Incarcerating the convicts

The first and foremost task of a convict establishment was to incarcerate. This requirement separated an unfree labour force from a free one. Every convict establishment in the Australian colonies required a place to accommodate the convict population: be it a tent, moveable stockade or stone barracks. The built fabric and organisation of a convict camp or station's landscape was designed to

⁴⁴⁸ *Convict Discipline and Transportation*, John Eardley-Wilmot, Lieutenant Governor, to Lord Stanley, Secretary of State, 6 February 1846, Enclosure 4, Extract of a letter from Robert Pitcairn, Esq., to Lord Stanley, 4 February 1846, (785), p. 135.

limit and control the movement of prisoners and their interaction with each other. The formation and progression of these places was a result of the hierarchical power structures and relationships discussed in the previous chapters, their influence generated at the global, colonial and local scales. The day-to-day implementation of regulatory systems and the reaction of the convicts to them was carried out amidst the architecture of confinement and separation. Such architecture was intended to control and direct the behaviour of the convicts, leading them in the desired reformatory or, if required, punitive directions.

Of the five case studies, it is the Tasman Peninsula mine that provides the ideal opportunity for the study of spatial control. Straddling the assignment and probation periods, it also provides an opportunity to illuminate how alterations to the convict system's administrative architecture could result in commensurate changes to the station's physical composition. At the other case studies, a dearth of historical evidence means that the identification of components of the physical landscape is difficult. However, by applying an understanding of how such powered landscapes may have operated, it is possible to hypothesise how these places may have used the built environment to confine and control their bond populations.

At the Tasman Peninsula mine, the first barracks was a series of timber huts, constructed on the terrace immediately overlooking the adits (Figure 7-1 and Appendix 3, Figures A3-14 - A3-17). Construction began on them as soon as Lacey and his party arrived at the end of 1833.⁴⁴⁹ Designed to accommodate the miners, labourers and their supervisors, the barracks were required to house a growing prisoner population between 1833-36. Their architectural form suggested a staggered development, with a simple two-roomed structure potentially constructed to accommodate the initial party (Figure 7-1). By 1836 a second wing had been added to the first, with the blacksmith also likely to have been constructed at this time. Both barracks' blocks and blacksmith were built from vertical-board, with the chimneys of the former likely built from rough-hewn stone. Shortly after the blacksmith was constructed, the cookhouse and bakehouse, as well as the quarters for the

⁴⁴⁹ Charles O'Hara Booth, Commandant, to Josiah Spode, Chief Police Magistrate, 26 November 1833, Tasmanian Papers 35, M.L. (BT).

superintendent and constable, were likely added to the station. Both utilised bricks that were imported to the settlement, as evidenced by their more ornate chimneys.

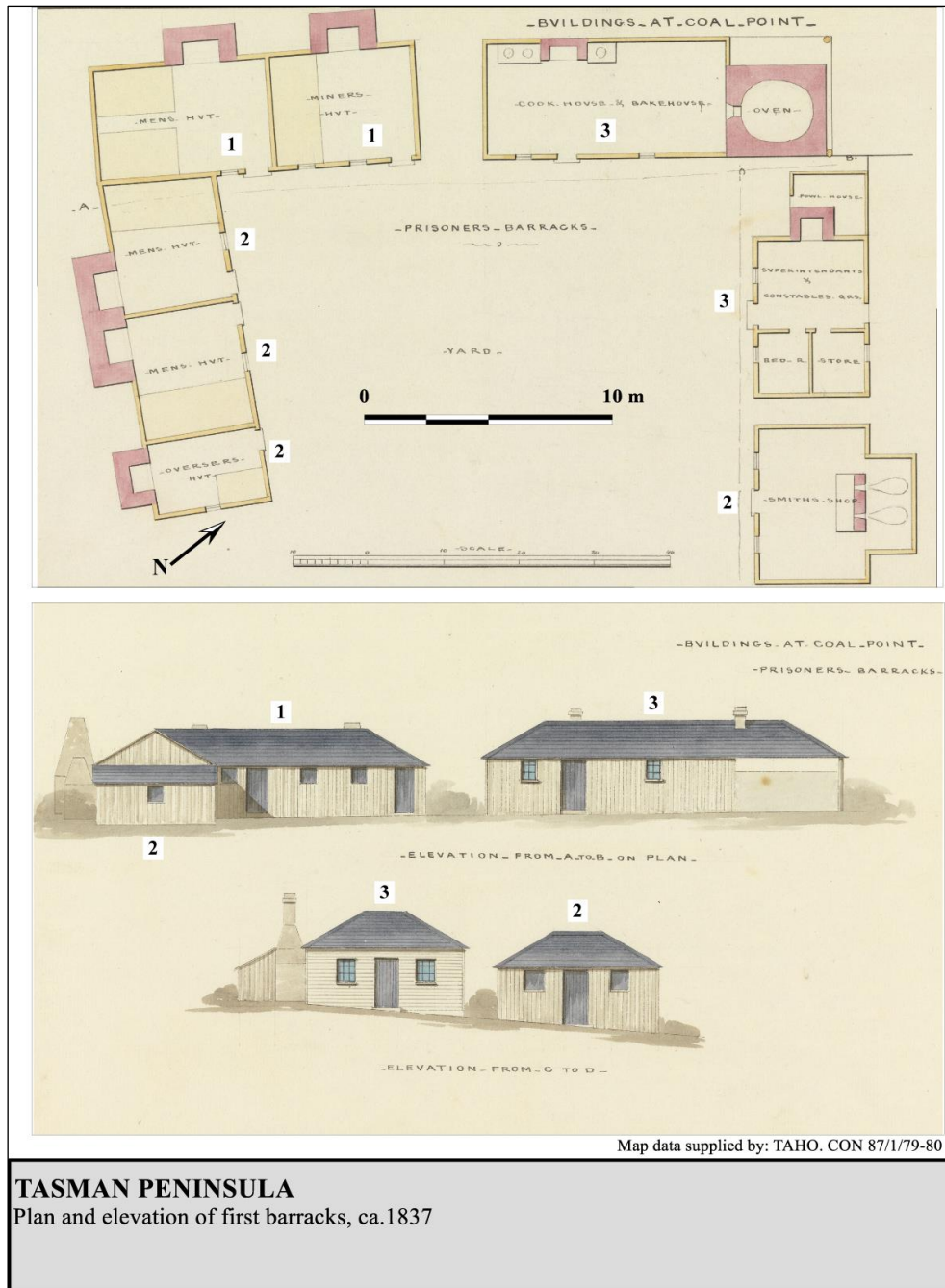


Figure 7-1: Tasman Peninsula, first barracks showing suggested phasing between 1833-36
(Henry Laing, *Buildings at Coal Point*, ca.1837, CON 87/79, *Buildings at Coal Point, Prisoners' Barracks*, ca.1837, CON 87/80, T.A.H.O.)

Despite the expansion of the barracks, the timber huts would have become increasingly cramped as more and more convict labour was directed to the station. The first two-roomed structure would have

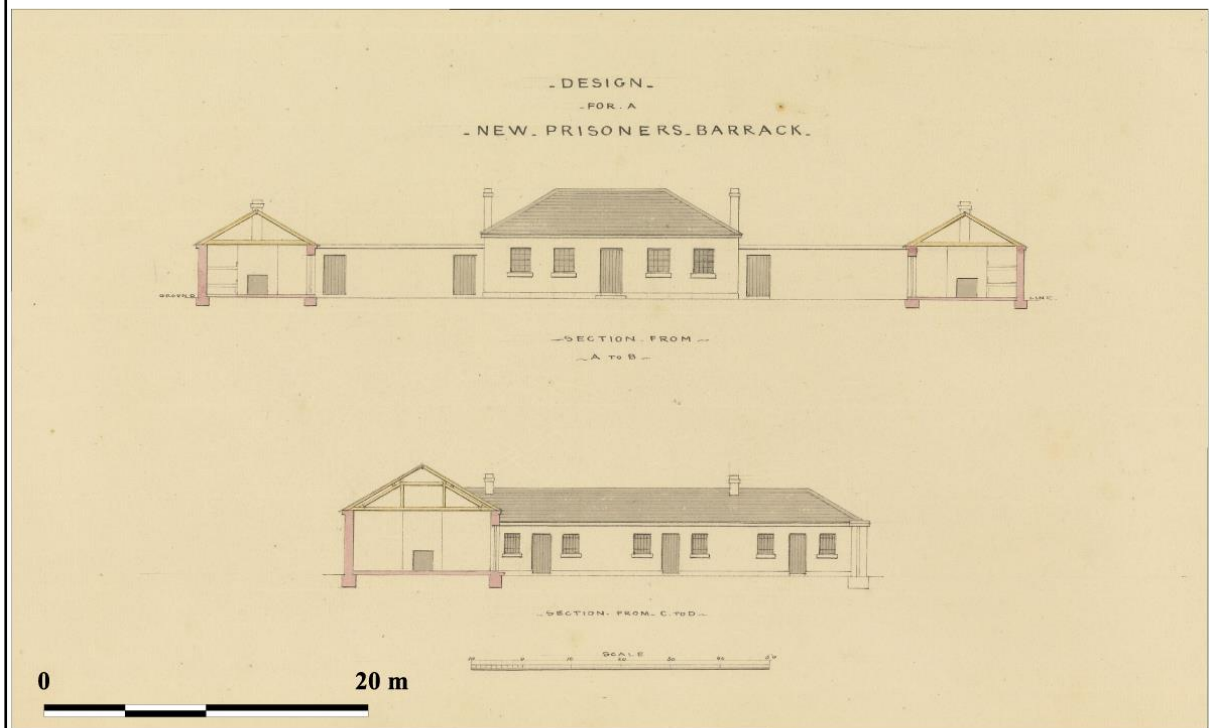
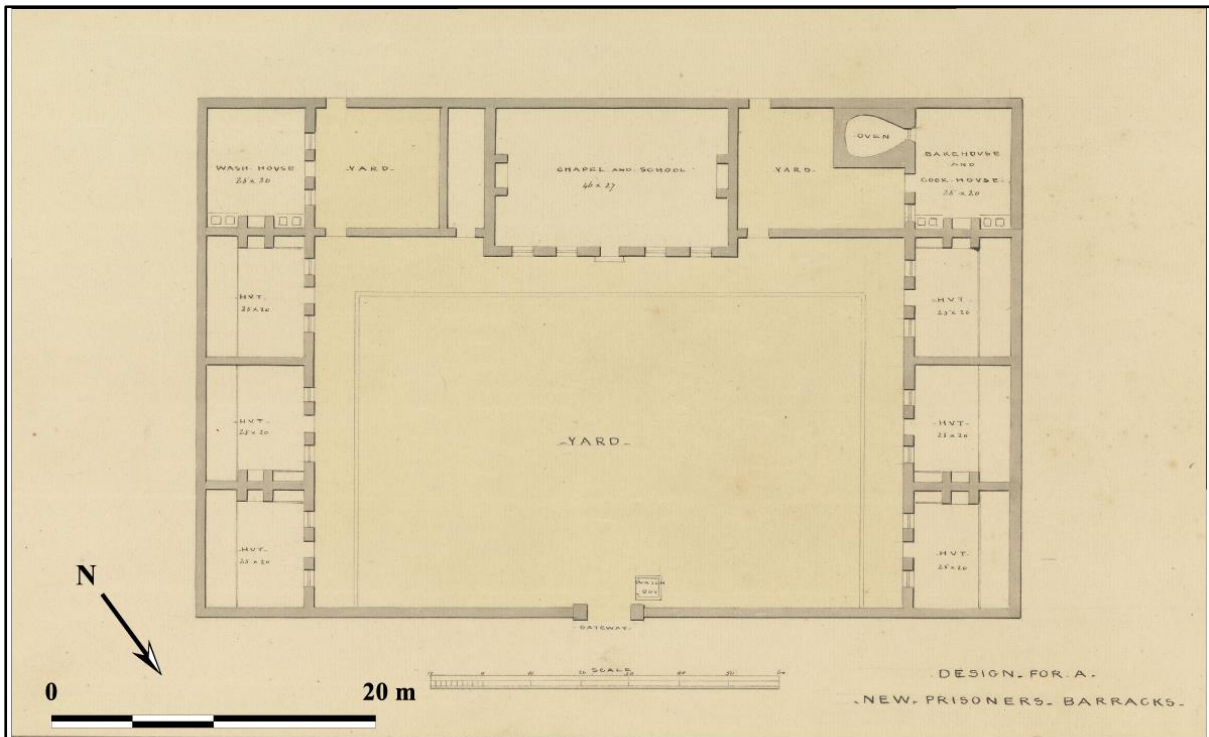
comfortably accommodated the 11-16 convicts labouring at the camp in 1834.⁴⁵⁰ The increase to 42 by the start of 1835 probably triggered the addition of the second wing, made even more necessary when the population reached at least 100 a year later (Brand 1993: 11-13).⁴⁵¹ Based upon this figure, the capacity of the four prisoners' huts would have varied from between 25-30. Henry Laing's ca.1837 plan indicates that almost half the internal space of each hut was occupied by sleeping places (most likely bunks) (Figure 7-1).

The construction of the larger second barracks was direct response to the increasing size of the convict population, which was in turn a response to the mining operation's success. This barracks was potentially constructed in ca.1838, although proposals and planning had commenced the year previous (Figure 7-2). Built largely as planned, the barracks formed a 'C' shape, with a central compound surrounded on three sides by buildings and open on the north east. The bulk of the built space was given over to accommodation, with the convicts barracked in six conjoined wards - three along each side. A chapel building occupied the side opposite the entrance, with a hospital and cookhouse and bakehouse in the spaces flanking it. Below the eastern range was situated the commissariat stores and sixteen solitary cells (Lempriere 1839: 78). Later pictorial evidence suggests that the compound was enclosed along its north-eastern side by a timber paling fence (Figure 7-4).⁴⁵² The enclosed nature of the compound was aimed at the control of convicts within the space. This had been replicated at the earlier barracks, where the eastern side of the compound had been marked by a high retaining wall.

⁴⁵⁰ Return of Crown Prisoners at Port Arthur shewing [*sic*] the number of each Trade in the Month of April 1834' 1 May 1834, CSO 1/511/11180, T.A.H.O. (UB); Return of Crown Prisoners at Port Arthur shewing [*sic*] the number of each Trade in the Month of May 1834, 1 June 1834, CSO 1/511/11180, T.A.H.O. (UB);

⁴⁵¹ Commandant Charles O'Hara Booth, Port Arthur Commandant, to William Moriarty, Port Officer, 20 January 1835, CSO 1/412/9273, T.A.H.O.

⁴⁵² Owen Stanley, *Penal Settlement VDL, Convict prison near the Coal Mines*, n.d. (January 1841), Tasmanian Museum and Art Gallery.



Map data supplied by: TAHO. CON 87/1/79-80

TASMAN PENINSULA
 Proposed plan and elevation of second barracks, ca.1837

Figure 7-2: Tasman Peninsula, plan and elevation of proposed second barracks ca.1837
 (Henry Laing, *Design for a New Prisoners' Barracks* (plan), ca.1837, CON 87/82, *Design for a New Prisoners' Barracks* (elevation), ca.1837, CON 87/83, T.A.H.O.)

There are no surface traces of the original barracks block in today's archaeological landscape, later building and mining works having overprinted the area where they were known to have been situated. Historical sources indicate the position of the block, alongside Henry Laing's ca.1837 plans and a later plan from ca.1842 providing the information necessary to plot its original position (Figure 7-3). It is clear that the construction of the ca.1838 barracks resulted in the destruction of three men's huts and an overseers' quarters, but highly likely left the miners' hut still standing. This is supported by a January 1841 depiction of the barracks by Owen Stanley, which showed the new barracks, with a row of buildings adjoining the compound's north eastern side (Figure 7-4).

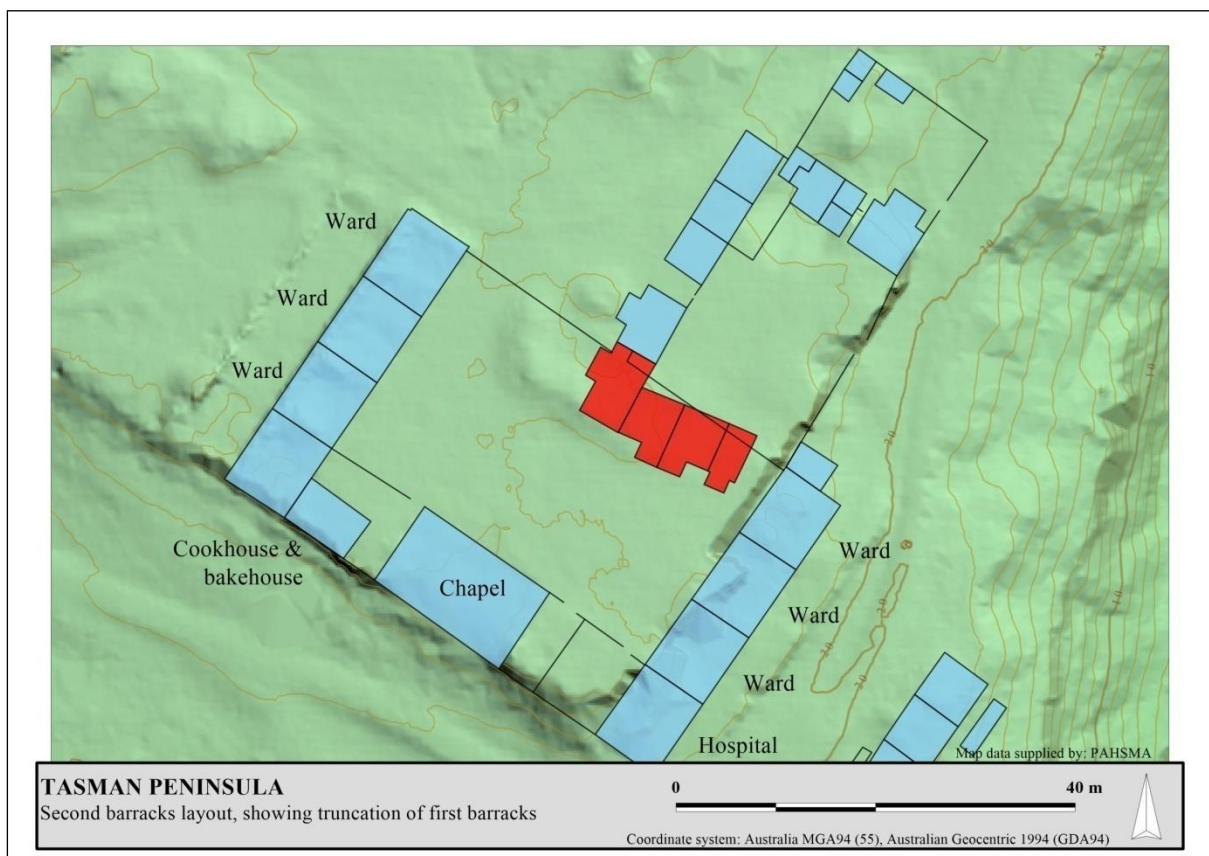


Figure 7-3: Tasman Peninsula (1838), showing layout of second barracks and resultant truncation of the first (in red)



Figure 7-4: Watercolour depiction looking south west toward the barracks by Owen Stanley in ca.1841
(Owen Stanley, Penal Settlement VDL, Convict prison near the Coal Mines, n.d. (January 1841), Tasmanian Museum and Art Gallery)

It is more difficult to work out where the convicts were quartered at the other case study sites. The paucity of historic documentation for these sites means that deducing which structures were used for what purpose becomes a comparative exercise, linking the composition and spatial situation of recorded features to known archaeological indicators from other similar sites. At Macquarie Harbour, where only one ambiguous feature was recorded, such deductions would be primarily guesswork, the feature yielding little structural or situational detail. The other three sites provided more archaeological information.

At Recherche Bay, at least three of the sites can be identified as having been used for accommodation purposes (Figure 7-6 and Appendix 4 'Gazetteer'). The largest of these, feature 3, was formed from two stone chimney butts placed side-by-side within a slightly-benched area. It may have been divided into two conjoining segments, with a fireplace heating each. To the north west were features 1 and 2, possibly marking the site of a single elongated structure, or two smaller buildings. Feature 8, 70m to

the south on a lower terrace, marked the location of another structure, with another located further to the south (feature 12). Historical sources indicate that these structures were primarily timber. Amongst the initial requisition list of tools and equipment sent to the camp was an order for nails and wedges, with the latter being used for splitting timber slabs for huts.⁴⁵³ Little timber was requisitioned, suggesting that the required buildings were to be built from scratch, splitting the trees that were felled, as well as perhaps utilising stone excavated from the shaft. A small number of planks were brought down for use as floorboards. There is no record that stone or bricks were utilised on an extensive scale. This is supported by a probable illustration of the camp by Owen Stanley in 1841, which shows at least two timber slab buildings (Figure 7-30).

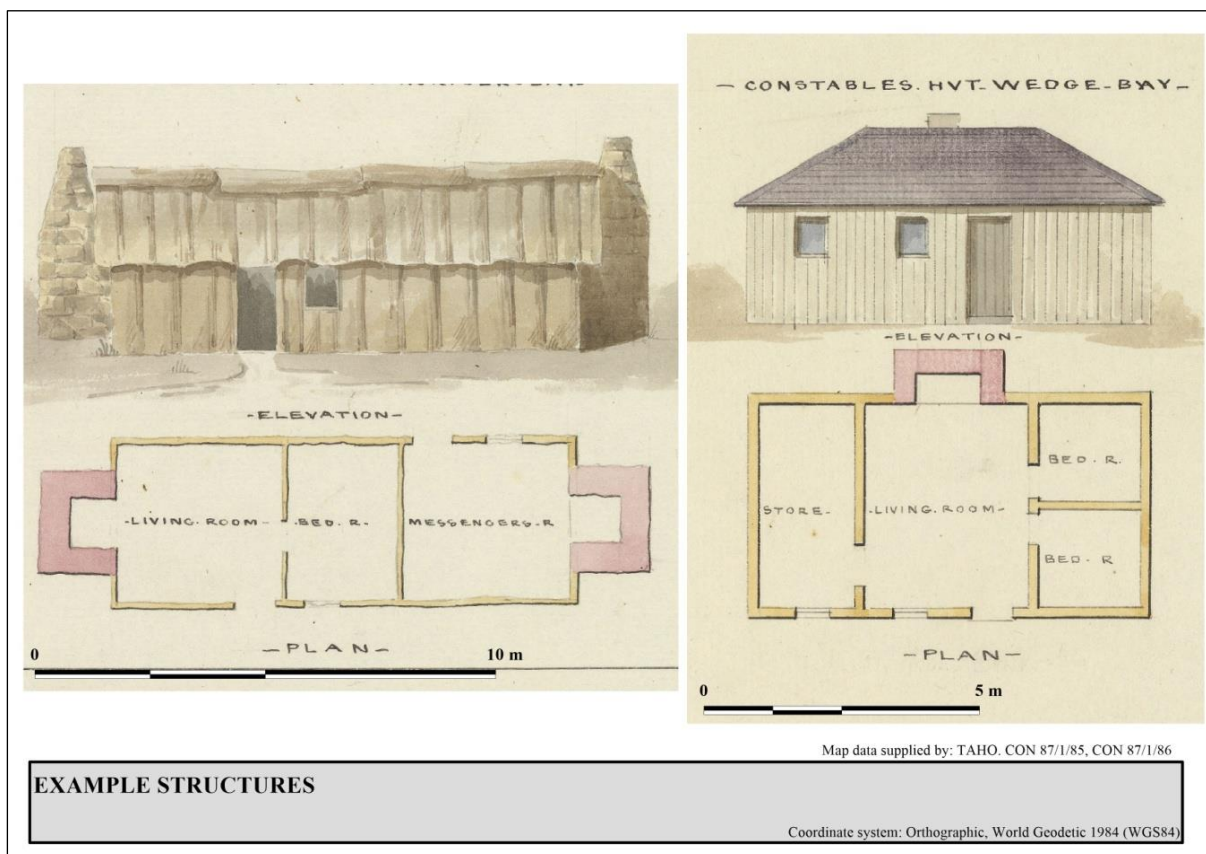


Figure 7-5: Illustrations by Henry Laing (1836/1837) showing structures potentially similar to those built at Recherche Bay

(Henry Laing, *Constable's Hut, Norfolk Bay*, ca.1837, CON 87/85, *Constable's Hut, Wedge Bay*, ca.1837, CON 87/86, T.A.H.O.)

⁴⁵³ Supplementary Estimate of Iron, Tools Etc required for opening the Coal Mines at Recherche Bay, 24 August 1840, CSO 5/224/5707, T.A.H.O.

Contemporary plans of structures used for the convict service support the idea that the features recorded at Recherche Bay mark the location of accommodation buildings. Henry Laing's plans of convict buildings depict an assortment of small timber structures of the type that might have been built at the camp (Figure 7-5). With chimneys built from stone, the buildings were constructed from either weatherboard or rough-cut timber slabs. The chimneys could be located on either the long or short axis, one structure having chimneys placed at either end. The structure at Recherche Bay represented by features 1 and 2 may have been similar to the slab hut recorded by Laing. The potential double fireplace supports the hypothesis that it was at least a two-roomed structure. If these features did indeed represent structures, it is in part possible to recreate the built landscape at Recherche Bay (Figure 7-6).

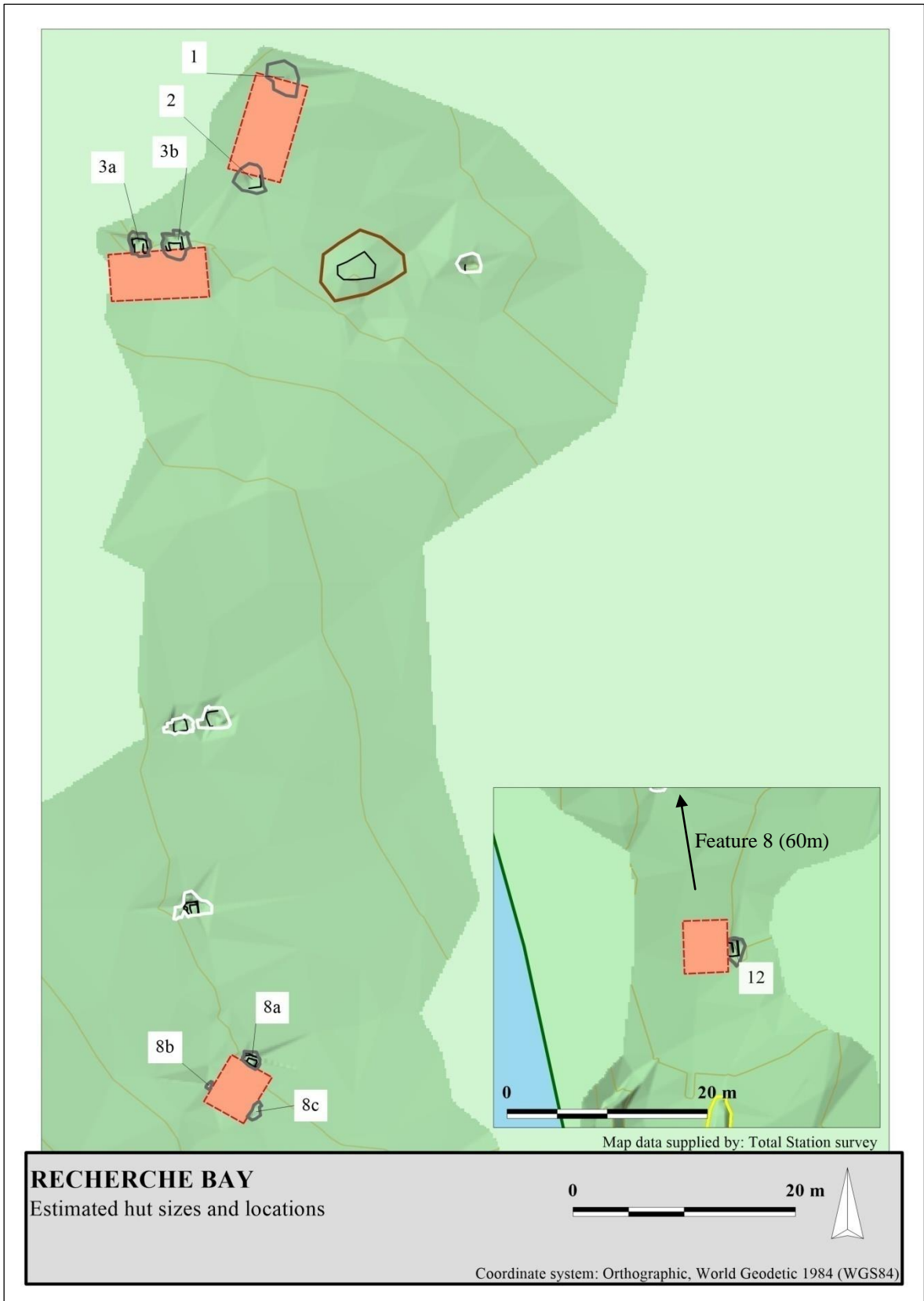


Figure 7-6: Estimated hut sizes and locations at Recherche Bay

Using the calculations included in Appendix 12, it is possible to estimate the number of prisoners that could have been accommodated in these structures. These calculations suggest that convicts accommodated in huts generally had between 15-20ft² each. Using this estimate, the structures potentially held between 20-25 convicts each, the structure at feature 8 likely accommodating 15-20. The size of the structure at feature 12 could only be hypothesised. Although only estimates, such numbers suggest that, if these buildings had been used for accommodation, then between 55-70 convicts could have been housed in these structures. The known population of Recherche Bay varied from 23 (1840), 43 (1841) and 70 (1843).⁴⁵⁴ If, as the presence of a chimney would suggest, feature 12 was also an accommodation building, then enough structures have been accounted for to accommodate the known number of prisoners at the camp.

As at Recherche Bay, it is possible to estimate the size of the huts occupied by the convicts at South Cape Bay. At this site, rectilinear depression associated with feature 4 potentially marked the outline of a structure (Figure 7-7). Although no such depressions were found associated with the other three stone chimney butts, their placement does provide a hint as to their potential original arrangement, with it possible to infer the position of the huts. This inferred arrangement bears a close resemblance to the layout of the earliest barracks at the Tasman Peninsula (Figure 7-1), forming an 'L' shaped compound. Although by no means a definitive link, such a similarity is interesting, considering the possibility that the men working at the South Cape mines had been drawn directly from the peninsula operation. The potential size of the huts were also commensurate with the timber structures recorded by Laing (Figure 7-5). Using the calculations in Appendix 12, each hut would have been able to hold an estimated 10-15 convicts, making a theoretical population of 40-60 possible. That one or more of the structures would have been used for stores and the accommodation of at least one overseer, makes it likely that the population was less than this.

⁴⁵⁴ Commandant Charles O'Hara Booth, Port Arthur Commandant, to John Montagu, Colonial Secretary, 10 June 1840, CSO 5/224/5707, T.A.H.O.; Extract from the Diary of the Mining Party at North Port Recherche Bay from the 18th to 26th June 1841, CSO 8/13/301, T.A.H.O.; Director Inspector General of Hospitals to J.E. Bicheno, Colonial Secretary, 1 July 1843, CSO 22/80/1744, T.A.H.O.

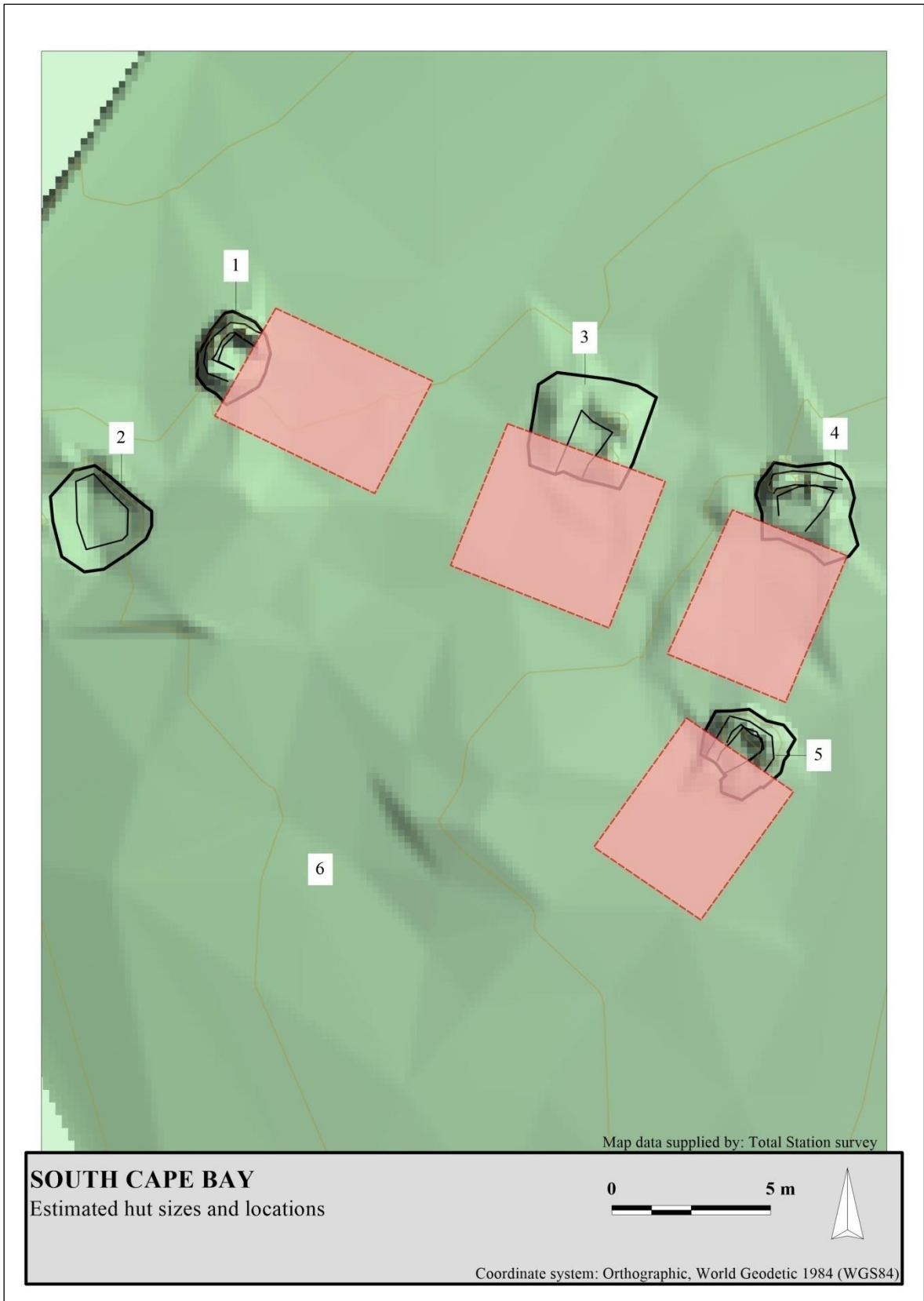


Figure 7-7: Estimated hut sizes and locations at South Cape Bay

The dearth of archaeological evidence at Jerusalem means that identifying the form and location of the convicts' accommodation is heavily reliant upon recourse to the historical record. At least two huts were built during the convict period, with the post-convict maps from 1890-96 depicting four huts at the site: two in the north near the original convict workings and two further south (see Appendix 6, "Illustrated notes on the mine workings").⁴⁵⁵ The position of these four huts correlated with the limited archaeological signatures picked up during the survey. It is difficult to know which of these structures were from the convict period, or from the later period of mining. The dimensions of the structures is not known, though do not appear to have been large, potentially on par with those recorded at South Cape Bay. If all four huts were in use during the convict period, it would suggest a theoretical prisoner population of 60 convicts. However, as at South Cape Bay, one or more of the structures would have been utilised for storage and potentially the accommodation of the mining overseer. Added to this was the fact that the large convict depot at Jerusalem was relatively close (4km) and that some or all of the convicts may have been quartered in the much more secure accommodation offered by that location.

So far, the built environment constructed to control the convicts at these case study sites has been described in static terms. Yet, as discussed, the power negotiations between the governed and the governors was constant and dynamic, with the landscape inevitably reflecting this dynamism. These power negotiations occurred within each and every place and space that was formed by the government, however not all have left archaeological and historical traces with which to recreate these environments. Of the five case studies, it is at the Tasman Peninsula mine that it is possible to move beyond a static understanding of these spaces, enabling an examination of how the boundaries of control constantly shifted at the station in response to internal and external stimuli.

The historical and archaeological record of the Tasman Peninsula mine tells of a constant requirement to react to an ever-increasing convict population. The decision to upgrade from the old to the new barracks was to only meet requirements for a very short time. At the time of construction, the barracks were supposed to have a capacity of 170, meaning that each ward could hold approximately 30

⁴⁵⁵ James Clare, mine overseer, to Matthew Forster, Chief Police Magistrate, 1 January 1842, CSO 22/145/811, T.A.H.O.

convicts (Lempriere 1839: 78). However, returns from 1838 indicate that the prisoner population had already grown in excess of what could be comfortably housed in the new barracks building. In October, some 203 convicts were at the station, equating to 34 prisoners per ward.⁴⁵⁶ It is clear that the station was suffering from chronic overcrowding almost as soon as the barracks were finished. In 1841, with the station about to be reclassified as a probation establishment, the population had increased to 235, with prisoners sleeping on the floor of the wards.⁴⁵⁷ The situation only worsened the following year when the station was opened up to an influx of probationary men upon Lieutenant Governor Franklin's orders.⁴⁵⁸

The only solution was to construct enough structures to meet demand. Consequently, in 1841, a program of building was approved to combat the growing prisoner population, overseen by a Foreman of Works from the Royal Engineers.⁴⁵⁹ At that stage, there were six wards, as well as a temporary structure that had been erected within the barracks' compound.⁴⁶⁰ Superintendent Samuel Cook reported toward the end of that year that an additional four wards were to be constructed.⁴⁶¹ However, when he visited in January 1842, David Burn found that these additions were yet to be made, a situation which continued for at least part of the year, a plan dating to 1842 showing no additions to the barracks (Burn 1850: 43).⁴⁶² A series of wards had, however, been added to the south west. Built of bark (timber slab), these structures were a temporary solution to alleviate the accommodation crisis and were designated for first class probationers (Figure 7-8).⁴⁶³

⁴⁵⁶ Surgeon Superintendent, *Minerva*, to Sir John Franklin, Lieutenant Governor, 15 October 1838, CSO 5/146/3551, T.A.H.O. (BT).

⁴⁵⁷ *Secondary Punishment*, John Franklin, Lieutenant Governor, to Lord John Russell, Secretary of State, 'Weekly State of the Prisoner Population on Tasman's Peninsula', 1 January 1841, (412), p. 126; Samuel Cook, Superintendent, to Mathew Forster, Chief Police Magistrate, n.d. (1841), Tasmania Papers 134, CY 3079, Frames 269-271, M.L. (ST).

⁴⁵⁸ George Maclean, Assistant Commissary General, to G.T. Boyes, Colonial Secretary, 3 June 1842, CSO 22/14/618, T.A.H.O. (BT).

⁴⁵⁹ J.C. Victor, Commanding Royal Engineer to John Montagu, Colonial Secretary, 14 October 1841, CSO 22//7/212, T.A.H.O. (BT).

⁴⁶⁰ Samuel Cook, Superintendent, to Mathew Forster, Chief Police Magistrate, n.d. (1841), Tasmania Papers 134, CY 3079, Frames 269-271, M.L. (ST).

⁴⁶¹ Samuel Cook, Superintendent, to Mathew Forster, Chief Police Magistrate, n.d. (1841), Tasmania Papers 134, CY 3079, Frames 269-271, M.L. (ST).

⁴⁶² Unknown artist, *Probation Station "Coal Point" Tasman's Peninsula*, ca.1842, Tasmania Papers 156, State Library of New South Wales.

⁴⁶³ *Ibid.*

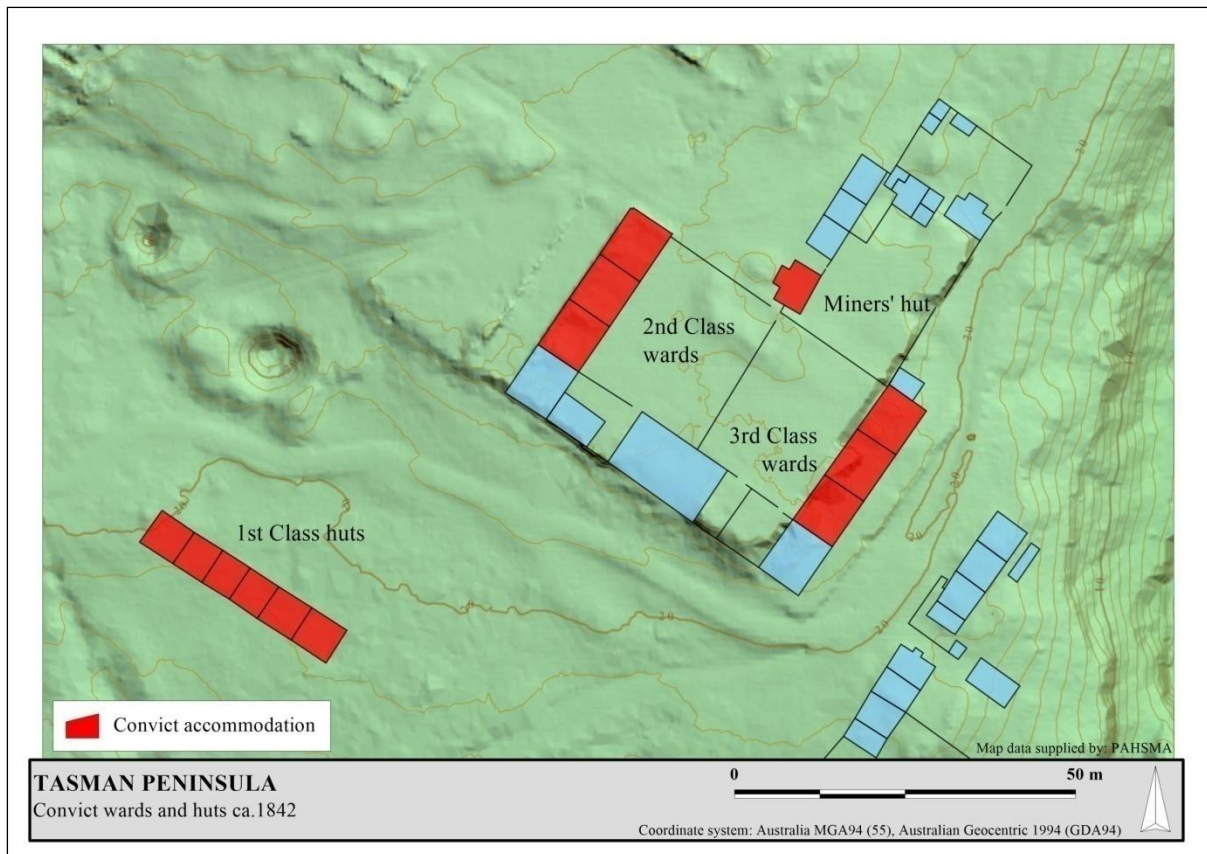


Figure 7-8: Tasman Peninsula mine, convict accommodation buildings ca.1842

The increasing numbers decreased the ability of the administrators to implement the strict system of classification and separation required by probation. What had once been a controlled compound had increasingly become uncontrolled, with overcrowding and temporary structures severely hampering separation and classification. The compound yard had also been divided into second and third class yards by the addition of a paling fence, with a second third class yard added to the north west by 1843.⁴⁶⁴ However, this spatial separation failed to improve the situation at the station. When Superintendent Henry Smith took over the administration of the coal mines in 1843, he remarked that the wards were "anything but clean and regular".⁴⁶⁵ Smith went on to complain of the problems caused by having to run a station where a continual balance between profit and punishment had to be sought:

⁴⁶⁴ Ibid.; Unknown artist, *Coal Mines*, 9 June 1843, Dixson Library, State Library of New South Wales.

⁴⁶⁵ Deposition to Chief Justice J.L. Pedder, 16 December 1845, CSO 20/17, T.A.H.O.(UB); Henry Smith, Superintendent, to Comptroller General, 18 March 1844, Misc 62/9/A1087/1053, T.A.H.O. (BT).

The station labours under many disadvantages as regards carrying out the regulations, the Royal Engineer Departments and the Mines interfere with the classification and the proper messing of the gang, the carpenters, stone masons also miners of different classes who are all required for carrying on the public works, are when handed over to Mr. Hurst or to Mr. Barnard necessarily worked by them with a view to the forwarding of their respective operations, and without reference to the separation of classes, as required by the regulations...⁴⁶⁶

Between 1843-45 the station had to sustain very high population levels, the number of prisoners hovering at around 500, with a recorded peak of 644 in June 1844. There was an increase in the buildings available for their accommodation, but not nearly enough to match demand. Delays in seeking building approval, sourcing materials and labour and commencing the works meant that, during the years when accommodation was most required, it was not forthcoming. A visitor to the station, H.P. Fry, observed: "piers, barracks and stores [had] been erected while the sleeping huts were disregarded" (Fry 1850: 178). A sketch plan by Superintendent Cook in June 1843 indicated that the only expansion in prisoner accommodation had been the addition of four more wards - one of which was used as a hospital - abutting the north western wall of the barracks (Figure 7-9).⁴⁶⁷ The plan also indicated that further extensions were mooted, including the addition of solitary and separate cells, as well as administration buildings to the north.

⁴⁶⁶ Henry Smith, Superintendent, to Comptroller General, 18 March 1844 (BT), Misc 62/9/A1087/1053, T.A.H.O.

⁴⁶⁷ Unknown artist, *Coal Mines*, 9 June 1843, Dixson Library, State Library of New South Wales.

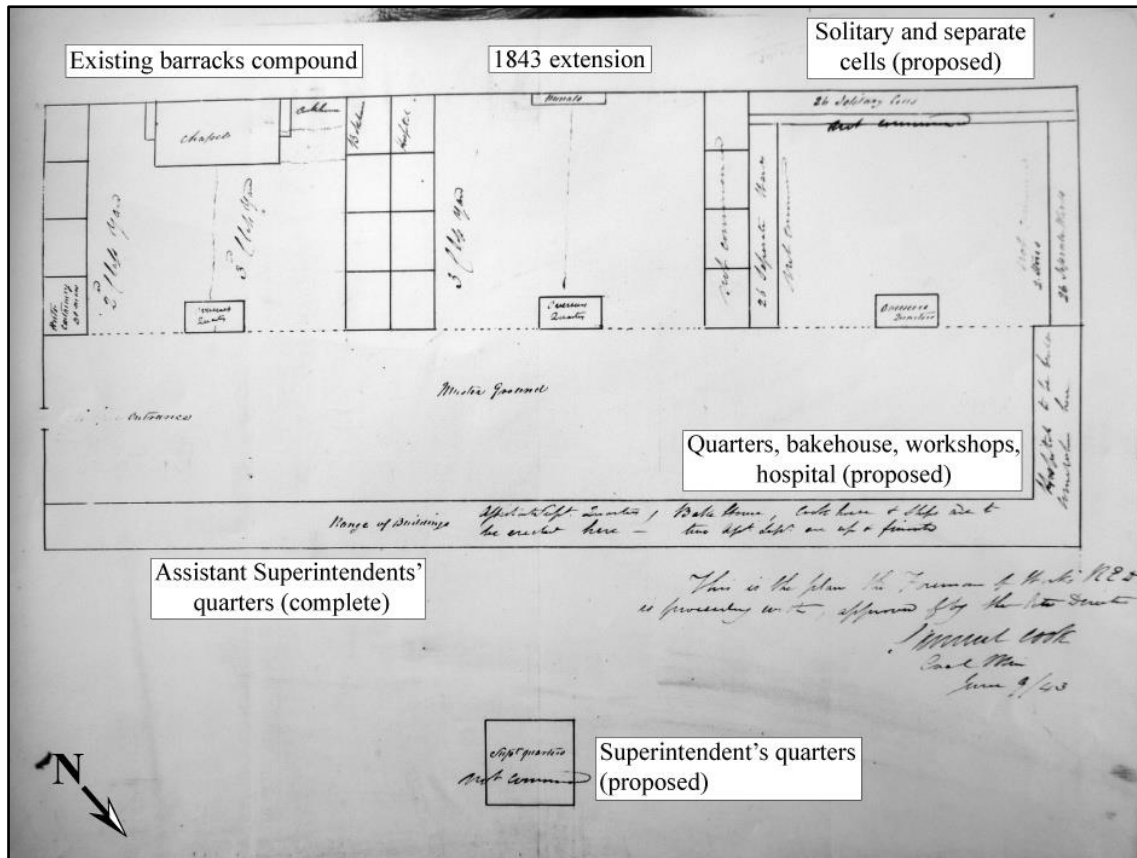


Figure 7-9: Samuel Cook's 1843 plan showing proposed extensions to the station
 (Unknown artist, *Coal Mines*, 9 June 1843, Dixson Library, State Library of New South Wales)

Cook's planned extensions were not carried out immediately. Although historical evidence is incomplete for this period, it is likely that by 1844 only 16 hut and ward spaces were available for the accommodation of over 600 convicts (Figure 7-10). A gradual improvement evidently took place over the following two years, as by June 1846 the number of wards had risen to 23, providing 560 bed places.⁴⁶⁸ One hundred temporary (likely timber) separate cells had also been erected, resulting in what was believed to be "a considerable decrease in both disease and crime".⁴⁶⁹ Yet, by the time that these additional buildings had been built, the population pressure had lessened, falling from close to 600, to 346 by June 1846.⁴⁷⁰

⁴⁶⁸ *Convict Discipline and Transportation*, John Eardley-Wilmot, Lieutenant Governor, to Lord Stanley, Secretary of State, 29 August 1846, No. 19, William Champ, Comptroller General, to John Eardley-Wilmot, 1 August 1846, Enclosure 17, Return, showing the number of huts, 30 June 1846, (785), p. 268

⁴⁶⁹ *Convict Discipline and Transportation*, John Eardley-Wilmot, Lieutenant Governor, to Lord Stanley, Secretary of State, 17 March 1846, Enclosure 4, Dr J.D. Motherwell, surgeon, to M Forster, Comptroller General, 13 December 1845, (785), p. 148.

⁴⁷⁰ *Convict Discipline and Transportation*, John Eardley-Wilmot, Lieutenant Governor, to Lord Stanley, Secretary of State, 29 August 1846, No. 19, William Champ, Comptroller General, to John Eardley-Wilmot, 1 August 1846, Enclosure 17, Return, showing the number of huts, 30 June 1846, (785), p. 268

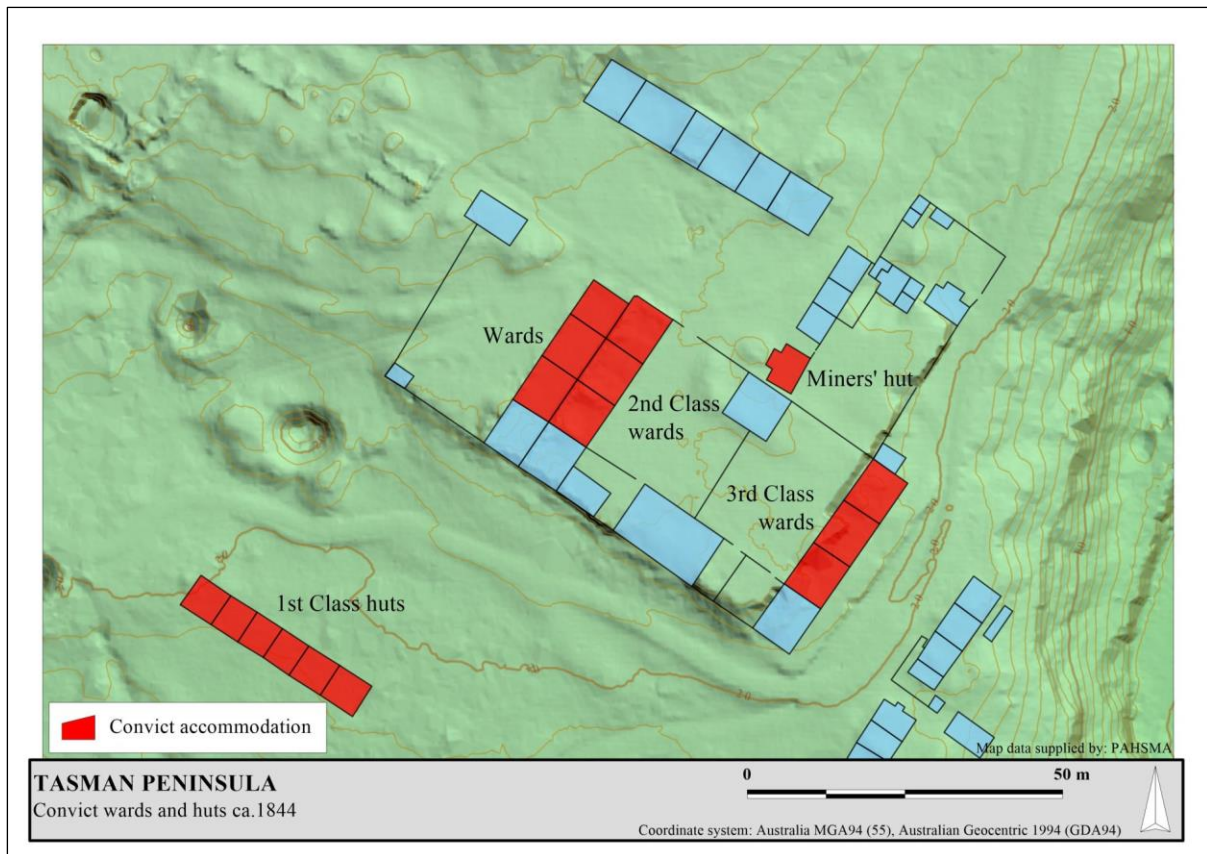


Figure 7-10: Tasman Peninsula mine, convict accommodation buildings ca.1844

The exact location of the seven additional wards constructed between 1844 and 1846 is not historically recorded, although the archaeological landscape offers probable candidates. Situated between the separate cells and the prisoners' barracks is a range of brick-built buildings (Figure 7-11). Comprising eight separate wards, this row has previously been interpreted as officers' quarters and was modified during the post-convict period when it was used for miners' accommodation (Bairstow and Davies 1987: 36). If using Cook's 1843 plan as a guide, it is clear that the proposed additional compound to the west of the prisoners' barracks was to be utilised solely for convict accommodation, with the officers' accommodation located further to the north (Figure 7-9). That the later separate cells and solitary cells commenced in 1845 were situated in the location planned by Cook, suggests that the basic premise of a series of compounds extending south east to north west along the terrace was adhered to. This was further supported by the eventual construction of what are likely administration and staff quarters to the north of the prisoners' barracks. This would suggest that the brick-built wards were to be used for convict accommodation, possibly for the first class probationers, creating an

elongated zone of incarceration between the prisoners' barracks and separate cells and accounting for the additional wards recorded by the sources (Figure 7-11).

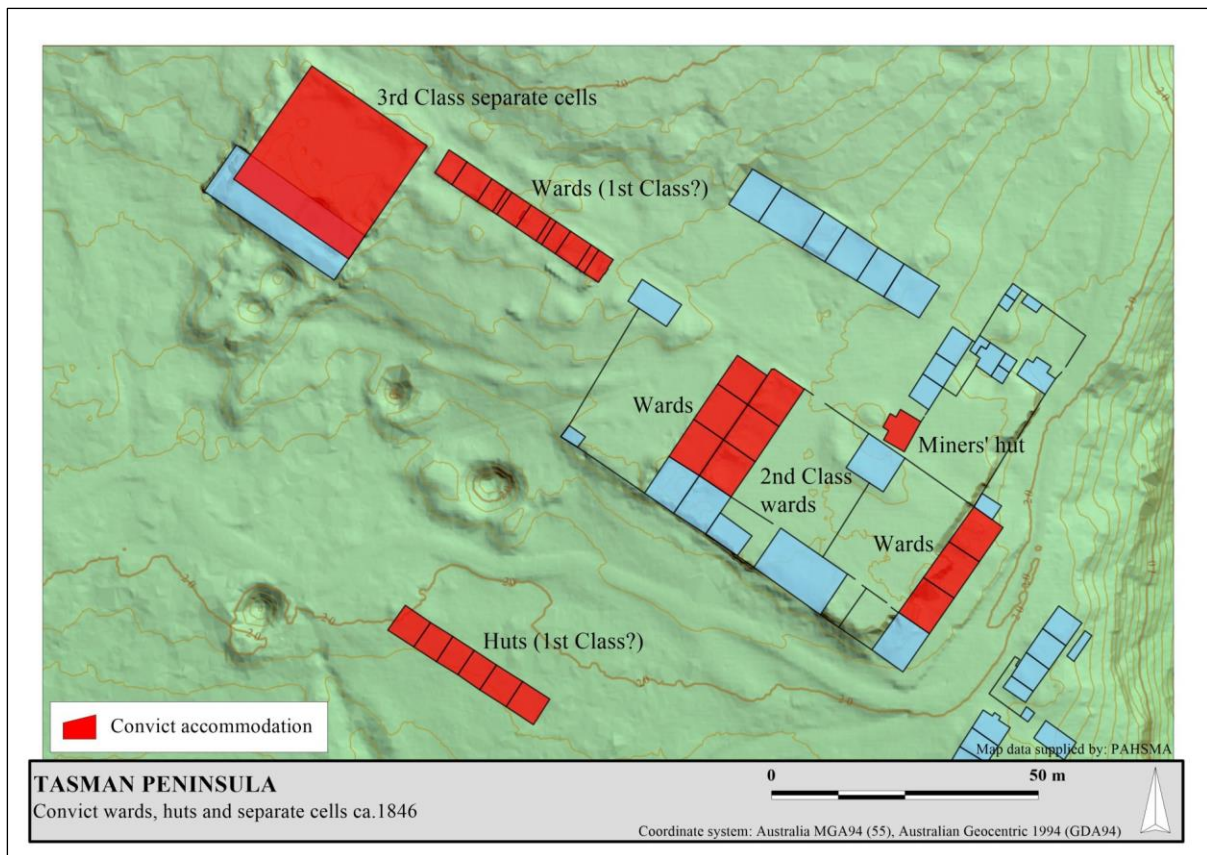


Figure 7-11: Tasman Peninsula mine, convict accommodation buildings ca.1846

The 23 wards recorded in 1846 represented the station at the peak of its expansion, although the extent of its physical size lagged by at least two years in comparison to its population size. The gradual increase in the fabric of the station between 1841-46 was linked to the need to introduce more effective classification and separation, on the back of increasing concerns about the prevalence of “immorality” at convict establishments. The 1846 investigations by William Champ into the perceived prevalence of homosexuality amongst the population of the probation gangs found 20 cases at the Tasman Peninsula mine, by far the largest number recorded at the 26 stations in the colony at the time (Gilchrist 2007: 232).⁴⁷¹ The solution, as the authorities saw it, was increased "separation,

⁴⁷¹ *Convict Discipline and Transportation*, John Eardley-Wilmot, Lieutenant Governor, to Lord Stanley, Secretary of State, 17 March 1846, (785), p. 142.

single cells, and constant superintendence".⁴⁷² Such increasing concern with the spatial-sexual dynamics of the station had a direct impact upon the physicality of the establishment.

A particular focus of attention was the separation (or lack of it) between their sleeping places. When the second barracks had first been built, its internal composition likely matched that in Henry Laing's ca.1837 plan and elevation (Figure 7-2). This showed twin-tiered bunks lining the rear wall of each ward, with fireplaces situated on one of the shorter walls. William Thompson, present at the mines between 1841-43, recollected that each of the wards had sixteen bunks arranged in two tiers. Each bunk had a partition 2ft (0.6m) high between them (Clark 2009: 86). When he visited the mines in 1848, Reverend Henry Phibbs Fry recorded that 20 men slept in bunks of two tiers, with three feet six inches between the bed spaces. A number, but not all, of the bed berths had partitions put up between them (Fry 1850: 178). The emplacement of such battens or sideboards between the beds was, by the mid-1840s, considered essential at all convict stations. Official returns began to enumerate not only how many buildings and beds the convicts had, but also those beds which were separate by such devices. Of the 292 bedplaces in wards at the Tasman Peninsula mine in 1847, 160 were separated by battens, with the remainder separated by sideboards. Separate and solitary cells provided 152 additional segregated spaces.⁴⁷³

Accompanying the attempted physical separation was the surveillance routines. William Thompson recorded that, in 1842, after convicts had retired for the night, the wards were locked and lights extinguished, with the watchman performing an hourly round throughout the night (Clark 2009: 92). In 1846, with concerns mounting about the condition of the convicts at the station, it was reported that prisoners were visited in their wards at irregular hours by officers, with holes provided in windows and doors for constant observation.⁴⁷⁴ Lamps were kept burning throughout the night (Fry 1850: 178). The constant illumination, in combination with watchfulness on the part of the station's officers, was designed to create a space within which it was impossible to transgress the rules of the settlement.

⁴⁷² Ibid.

⁴⁷³ *Convict Discipline and Transportation*, John Hampton, Comptroller General, to W.T. Denison, Lieutenant Governor, 15 November 1847, Enclosure No. 18, Return of huts etc, (1022) (1121), p. 546.

⁴⁷⁴ *Convict Discipline and Transportation*, John Eardley-Wilmot, Lieutenant Governor, to W.E. Gladstone, Secretary of State, 4 September 1846, Enclosure No. 2, E Hill, Superintendent, to William Champ, Comptroller General, 3 September 1846, (785), p. 192.

A key element in the improvement of the classificatory regime at the station was the introduction of the separate cells. The separation of third class convicts through nightly incarceration in individual cells had been one of the foundational tenets enshrined within probation's regulations as early as 1841.⁴⁷⁵ However, the cells were a victim of the paucity of funds, materials and labour experienced during the early 1840s, meaning that these type of cells did not appear at the mines until 1845, their construction coinciding with the heightened concerns about homosexuality amongst the convicts. One hundred temporary timber cells were constructed, designed as a stop-gap measure until more substantial stone and brick structures had been completed.⁴⁷⁶ This more permanent compound was commenced in 1845, immediately soaking up all available labour at the station.⁴⁷⁷ It was located at the north western extent of the terrace upon which the prisoners' barracks was situated, where the ground began to slope to the south west (Figure 7-11). By the close of 1846, 54 of the new separate apartments had been completed, the whole range finally completed by October the following year.⁴⁷⁸

With no historic depictions of the apartments, its exact form and location can only be estimated. In keeping with a number of similar separate apartments built at convict stations throughout the colony, the apartment was twin-tiered and arranged around a central courtyard, potentially accessed from the compound's north eastern side.⁴⁷⁹ Comparison with other separate cells from the period (Figure 7-12) provides an indication of the type of structure that would have been built at the station, allowing for a tentative reconstruction of the apartments (Figure 7-13).

⁴⁷⁵ *Convict Discipline*, Regulations of the Probation System, 1 July 1841, (158), p. 40.

⁴⁷⁶ *Convict Discipline and Transportation*, John Eardley-Wilmot, Lieutenant Governor, to Lord Stanley, Secretary of State, 17 March 1846, Enclosure 4, Dr J.D. Motherwell, surgeon, to Matthew Forster, Comptroller General, 13 December 1845, (785), p. 148.

⁴⁷⁷ Matthew Forster, Comptroller General, to J.C. Victor, Commanding Royal Engineer, 16 July 1845, CSO 22/120/2472, T.A.H.O. (BT).

⁴⁷⁸ *Convict Discipline and Transportation*, Copy of a despatch from C.J. La Trobe, Esq, Acting Governor of Van Diemen's Land, to Earl Grey, Enclosure No. 7, No. 12 - Coal Mines, 31 May 1847, (941), p. 69; *Convict Discipline and Transportation*, Return showing the number of huts, separate apartments and solitary cells, 31 October 1847, (1022) (1121), p. 178.

⁴⁷⁹ *Convict Discipline and Transportation*, Copy of a despatch from C.J. La Trobe, Esq, Acting Governor of Van Diemen's Land, to Earl Grey, Enclosure No. 7, No. 12 - Coal Mines, 31 May 1847, (941), p. 69.

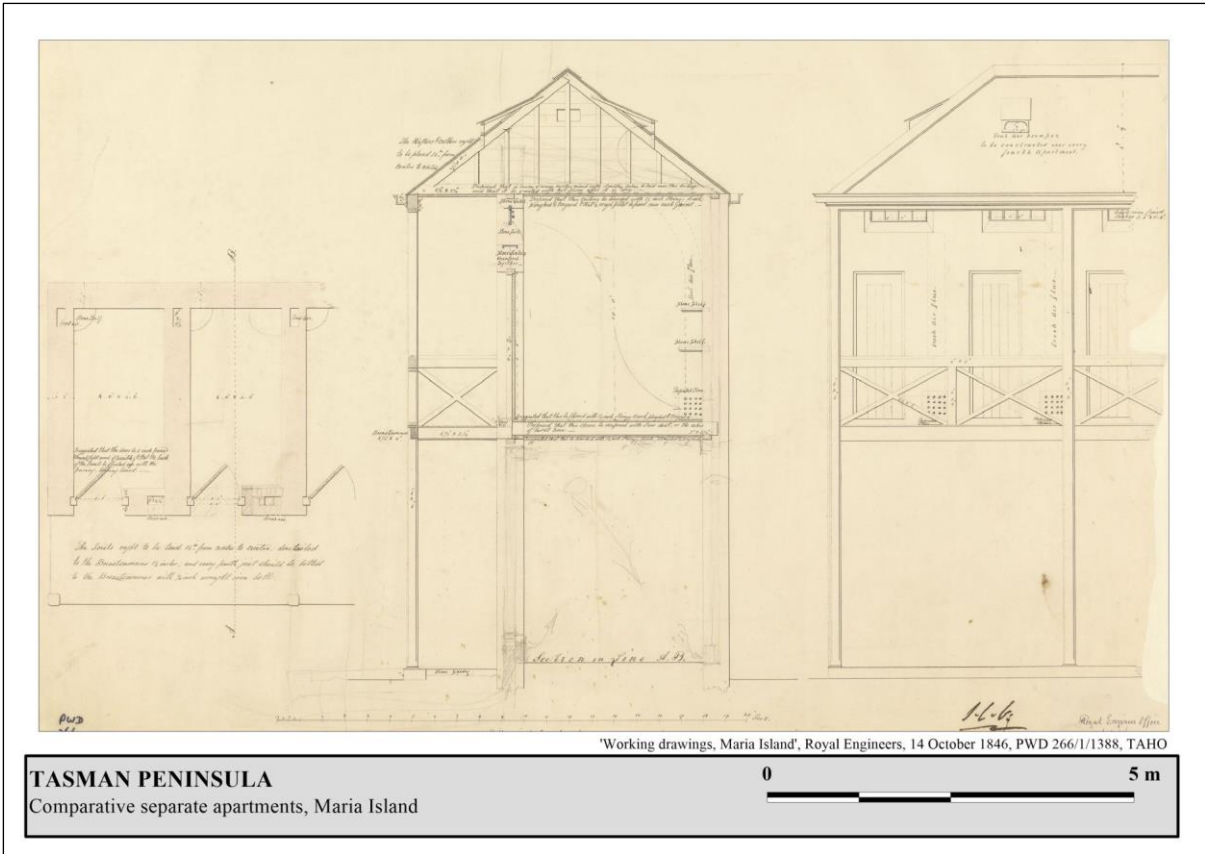


Figure 7-12: Plan from October 1846 showing the separate apartments to be built at Maria Island
(Unknown artist, *Working drawings, Maria Island'*, 14 October 1846, PWD 266/1/1388, T.A.H.O.)

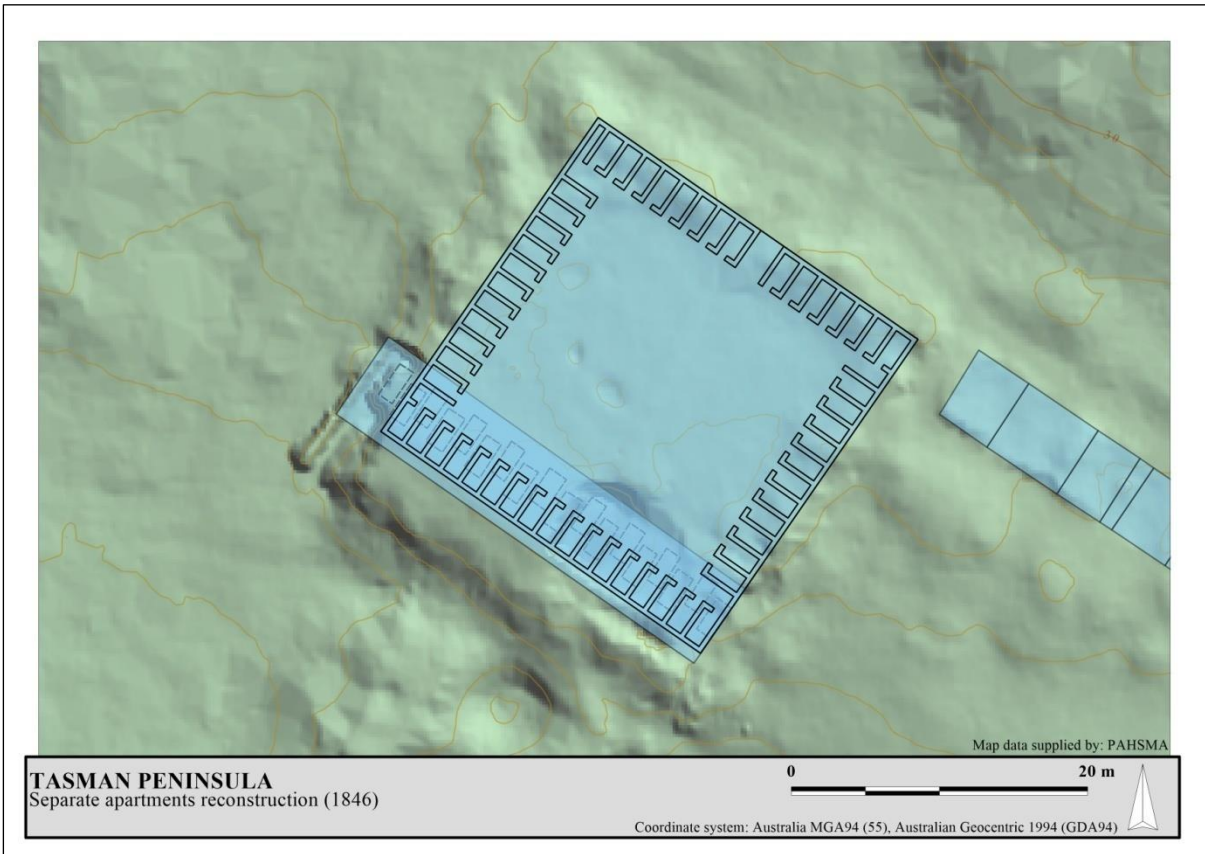


Figure 7-13: Reconstruction of the separate apartments (ground plan), showing underground solitary cells

The separate apartments were built above a row of 18 solitary cells. These cells had been completed prior to the completion of the separate cell block (Figure 7-14).⁴⁸⁰ Solitary cells had been used at the station since its first inception, forming an important part of the architecture of punishment (Heard 1981). The first solitary cells had actually been placed within the mine workings, forming an effective, if not controversial, method of restraint (see Figure 7-15). Visiting in November 1834, James Backhouse and George Walker were concerned about the potential "prejudicial influence" the confinement of convicts in the dark and damp of the mine could have.⁴⁸¹ Four cells were situated approximately 50m in from the original adit entrance. Hewn from an area containing poor coal, the cells were lined by timbers placed against round log uprights. These cells were likely to have been the only ones used between 1833-ca.1838, as the first barracks chiefly comprised sleeping quarters and offices, with no indication that cells had been constructed above-ground. The cells were used for confinement both day and night, with convicts known to have spent from one night to 48 hours in the cells as punishment.⁴⁸² Located on a side passage, off the main level leading to the shaft, communication between the cells would have been next to impossible, separated by two metres of earth and coal, with the cell's exterior likely patrolled by an overseer or wardsman.

⁴⁸⁰ *Convict Discipline and Transportation*, Copy of a despatch from C.J. La Trobe, Esq, Acting Governor of Van Diemen's Land, to Earl Grey, Enclosure 2 in No. 18, A Return of Convict Stations in the Colony of Van Diemen's Land, visited at the close of 1846, (941), p. 51.

⁴⁸¹ James Backhouse to George Arthur, Lieutenant Governor, November 1834, CSO 1/807/17244, T.A.H.O. (BT).

⁴⁸² John Crank, 416, *Claudine*, CON 31/1/6, T.A.H.O.; William Tomkinson, 1661, *England*, CON 31/1/43, T.A.H.O.

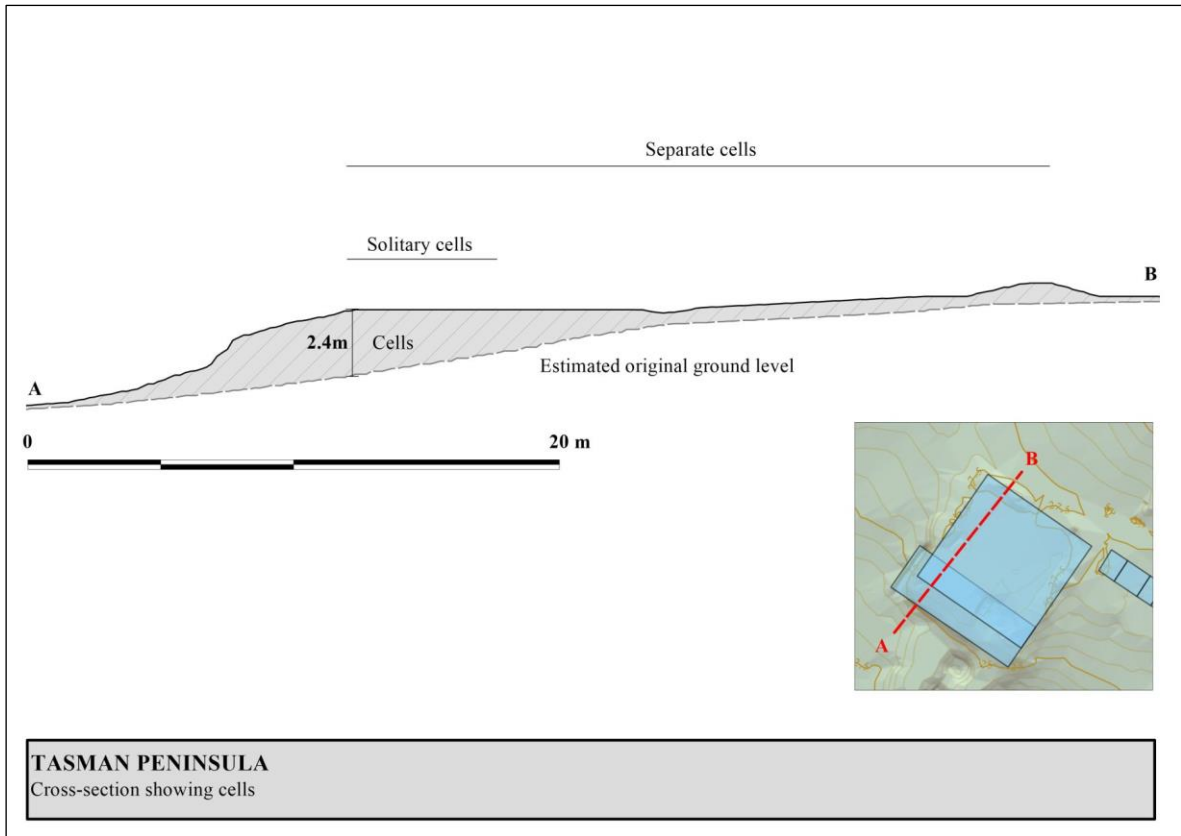


Figure 7-14: Cross-section through solitary and separate cells, showing estimated original ground level

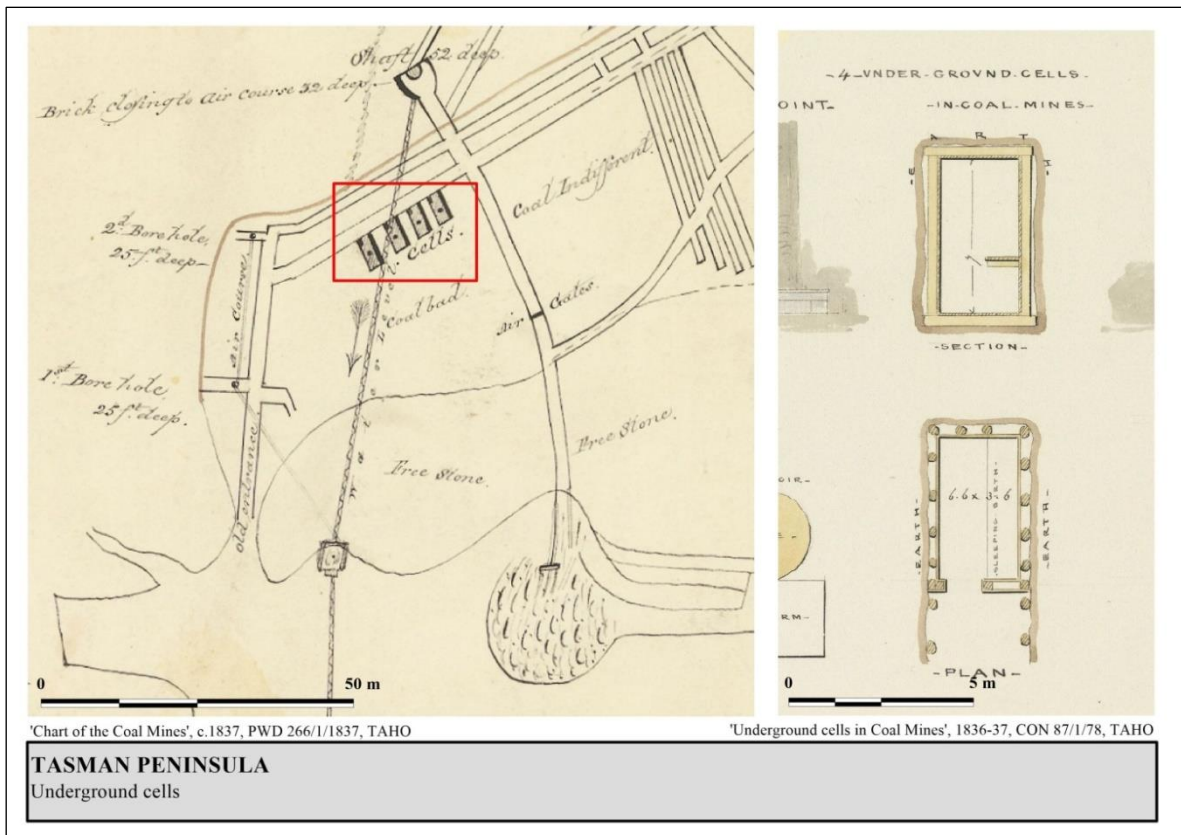


Figure 7-15: Depictions of the underground cells
(Unknown artist (Henry Laing?), *Chart of the Coal Mines*, ca.1837, PWD 266/1/1837, T.A.H.O.; Henry Laing, *Underground cells in Coal Mines*, ca.1837, CON 87/78, T.A.H.O.)

Although not explicitly stated, the cells were likely abandoned when the new barracks were constructed in ca.1838, the completion of which added 16 new solitary cells to the station (Lempriere 1839: 78). When visiting the station in ca.1837, correspondents for Elliston's Hobart Town Almanac noted that the solitary cells in the mine were "seldom used".⁴⁸³ William Thompson, when he arrived at the station toward the end of 1841, also recorded the cells within the early mine workings, but noted that they were never used when he was at the station (Clark 2009: 78).

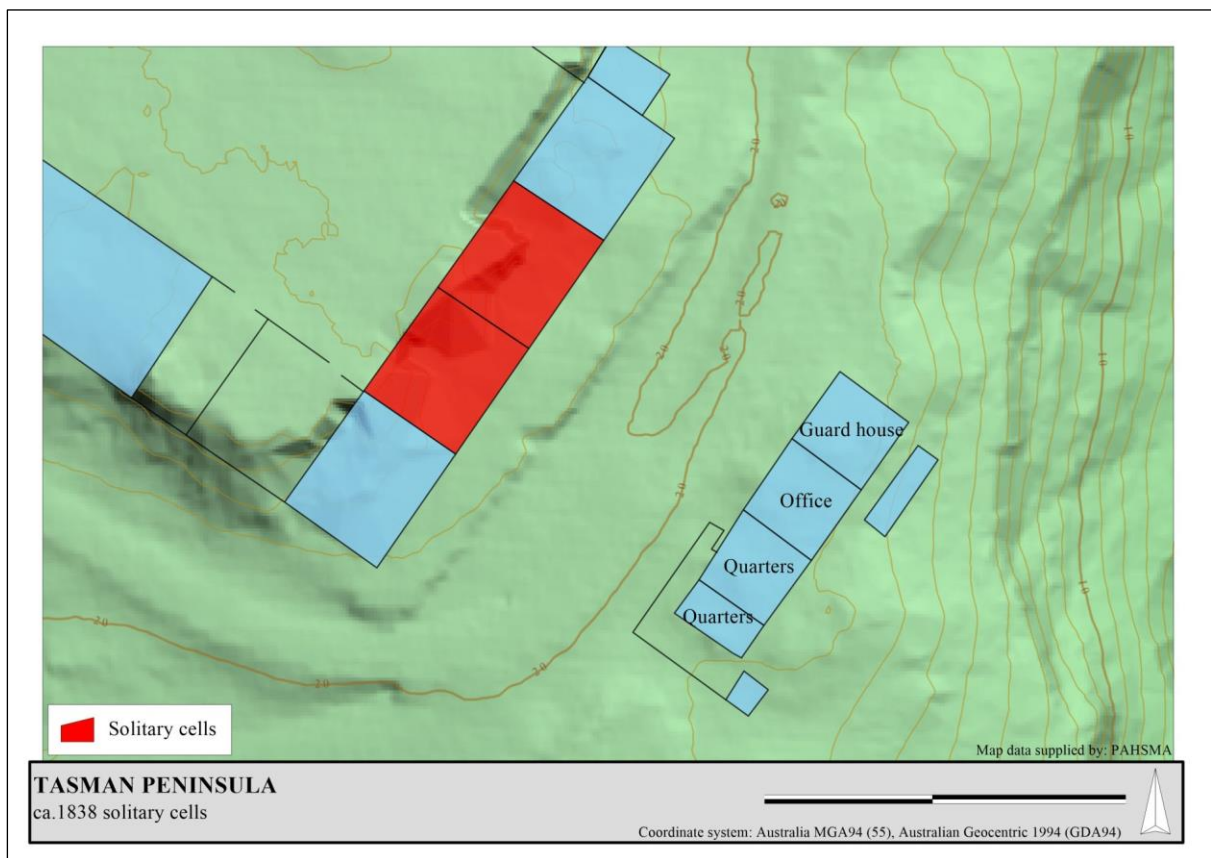


Figure 7-16: Location of the ca.1838 solitary cells, as at 1839

Henry Laing's original plan for the barracks had not included cells, the compound to be built as a single storey on the flat ground to the north west of the existing compound (Figure 7-2).⁴⁸⁴ Changing the barracks' location to the south, where the ground sloped sharply to the east, enabled the addition of four spaces on a second level below the wardrooms and hospital on the eastern wing. Built from sandstone, these spaces were occupied by the cells and commissariat stores, the cells located within

⁴⁸³ Elliston's Hobart Town Almanac and Ross's Van Diemen's Land Annual, 1837 (BT, p. 372).

⁴⁸⁴ Unknown artist (Henry Laing?), *The Mining Establishment, Coal Point*, ca.1837, CSO 5/72/1584, T.A.H.O.

the two central rooms, each space comprising two rows of four flanking a central passage (Figure 7-16). The stores and cells were accessed via entrances along their eastern side. While they were an improvement, the solitary cells were not as secure as would have been expected. Their placement opposite the guard house, in addition to their thick sandstone walls and single point of access were not able to stop a new level of porosity being introduced, which had not existed when the cells had been located in the mine. The placement of the cells directly below one of the wards, within which upward of 30 men were housed, meant that communication was possible between those in the cells and wards, indicated by a number of recorded instances where convicts managed to make their way from the wards into the commissariat stores flanking the cells.⁴⁸⁵ Prisoners at one stage also managed to break their way through to the stores *from* the solitary cells.⁴⁸⁶

The transference of the punishment of solitary confinement from the mine to the new barracks was also symbolic of the changes that were then taking place at the station. The shift from work camp to station that occurred after 1835 heralded the firm emplacement of the coal mine within the penal infrastructure of the Tasman Peninsula. While coal mining remained the focus of the station, it was increasingly required to accommodate and incarcerate a rising number of convicts. The cells in the mine, used to incarcerate recidivists amongst a small, elite mining gang, were no longer suitable for the needs of the expanding station. As the station's penal character changed, an augmentation of the infrastructure was required to adequately meet incarcerative requirements. In addition, with more convicts being devoted to activities other than mining, four cells in the deeps of a mine were no place for timber-getters, carpenters or boatmen from the general convict population. The confinement of men with little experience of life below ground in the underground cells might have reached the extreme limit of the "prejudicial influence" to health that concerned Backhouse and Walker.

The post-1838 solitary cells continued to serve the station through the remainder of the 1830s and into the probation era. As with the separate cells, when the population increased with probation's introduction, the infrastructure for solitary punishment was only slowly augmented. The eventual

⁴⁸⁵ George Maclean, Assistant Commissary General, to John Montagu, Colonial Secretary, 3 June 1842, CSO 22/14/618, T.A.H.O.

⁴⁸⁶ George Maclean, Assistant Commissary General, to John Montagu, Colonial Secretary, 17 May 1842, CSO 22/22/875, T.A.H.O.

addition of 18 cells in 1846 doubled the station's solitary, but came at a time when the population was declining (Figure 7-17). By the time the government closed the station, the number of solitary cells in use had increased again to 52.⁴⁸⁷

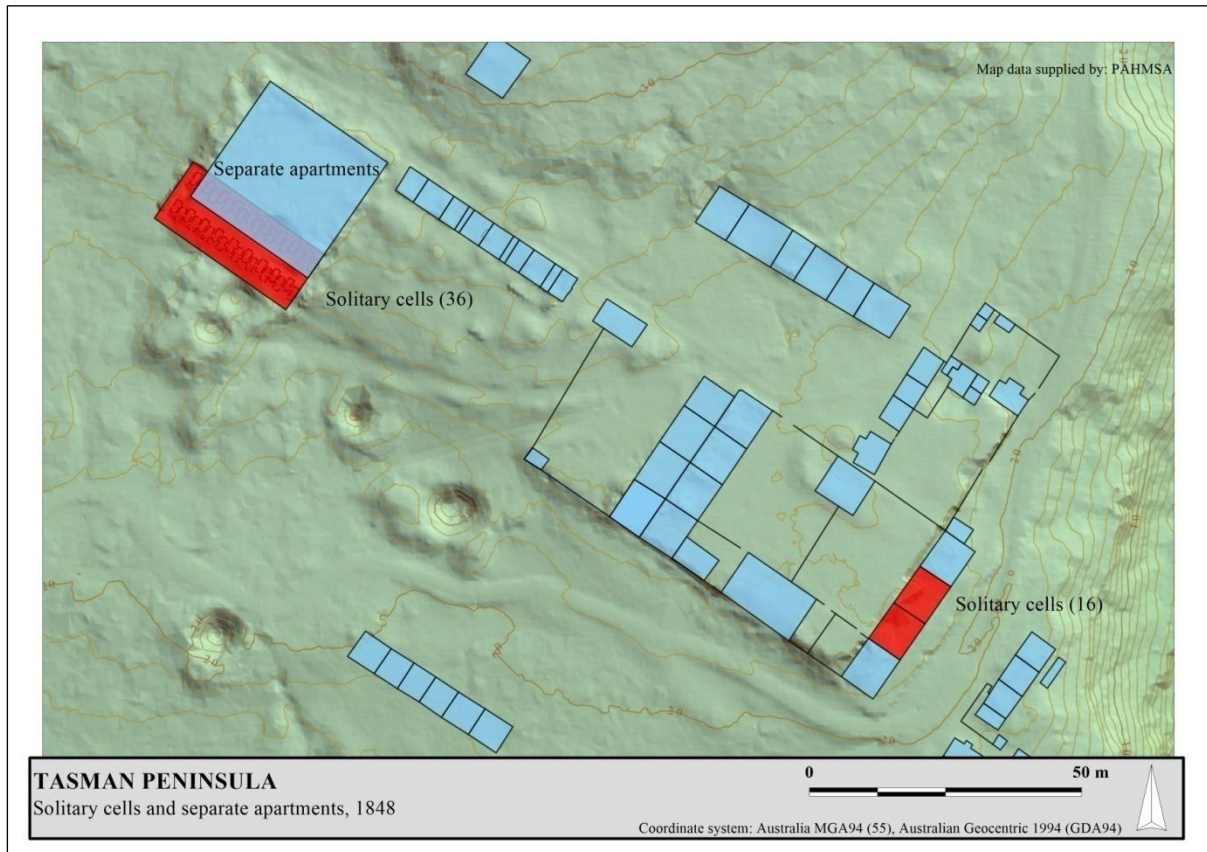


Figure 7-17: Tasman Peninsula, showing location of solitary cells in 1848

The increase in the number of solitary and separate cells at the Tasman Peninsula mine was symptomatic of the improvements in accommodation that were taking place in the colony's remaining probation stations. With upward of 100 places available for separate confinement from late-1846, there was a reduced need for the problematic communal wards. Correspondingly, by the end of 1847, the number of wards had decreased to 14, with approximately 400 convicts at the station.⁴⁸⁸ With over 100 convicts held in separate confinement, it meant that each ward potentially held, on average, 20-25 convicts. By April 1848, three months before it ceased as a government operation, there were 13

⁴⁸⁷ *Convict Discipline and Transportation*, Return showing the number of Huts, Separate Apartments and Solitary cells, 30 April 1848, (1022) (1121), p. 258.

⁴⁸⁸ *Convict Discipline and Transportation*, Return showing the Number of Huts, Separate Apartments, and Solitary Cells, 31 October 1847, (1022) (1121), p. 178.

wards, with just over 320 convicts, each ward therefore holding 15-20 convicts.⁴⁸⁹ Although unsupported by the historical evidence, it is likely that it was the timber-built wards which ceased to be used for convict accommodation, as well as possibly the timber-built miners' hut and the western addition to the prisoners' barracks. The removal or discontinued occupation of these structures would have left 13-14 brick and stone-built wards in place at the station (Figure 7-18).

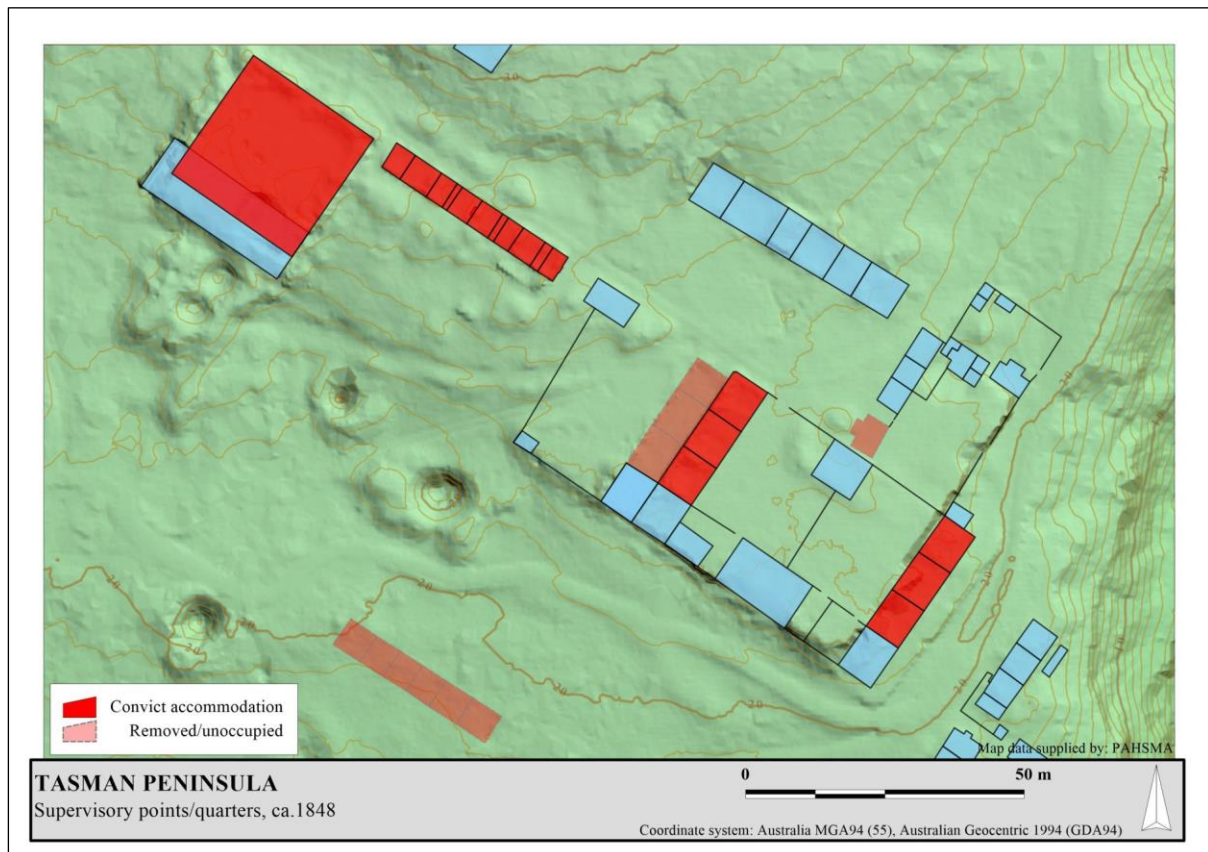


Figure 7-18: Tasman Peninsula, convict accommodation ca.1848

At these five case studies the spaces within which the convicts were accommodated reflected the dominant ideology governing penological practice at the time and the local responses to it. At Recherche Bay, South Cape Bay, Jerusalem and, to a lesser extent, Macquarie Harbour, the archaeological record supports the idea that these were small-scale operations, characterised by relatively ephemeral structures rapidly built to accommodate small work gangs. Even Recherche Bay, the longest-lived and largest of the four, relied upon small timber-built structures that convey more of

⁴⁸⁹ *Convict Discipline and Transportation*, Return showing the Number of Huts, Separate Apartments, and Solitary Cells, 30 April 1848, (1022) (1121), p. 258.

a sense of temporality than permanency. On the Tasman Peninsula, a larger and more dynamic archaeological landscape allows links to be drawn between historical developments and the built fabric. From the earliest exploration phase, where small timber-built structures reflected the liminal nature of the operation, to the later failures of the station to meet probation's classificatory aims, the formation and development of the landscape provides insight into how global and local factors could influence a place's built fabric.

Supervising the convicts

The controlling landscapes at these places were formed from timber, brick and stone. They were inert, lines on the ground which could be bypassed or ignored. Paling fences and brick walls could not on their own define and direct the convicts' interaction with the landscape. The power to do this came from the presence of the supervisors. They were invested with the power to control, confine and appropriate the convict labour within the limits of the law. The will of the British and colonial government, distilled into rules and regulations, was to be implemented by the commandant and convict overseer. Each level of the supervisory hierarchy was responsible for different aspects of the convicts' control. It was the vigilance of the military and constabulary that kept the convict within the limits of the camp or station. The watchfulness of the overseer was meant to ensure that the labour and conduct of the convicts remained within the defined parameters. Commandant and, during the probation period, superintendent, were responsible for the oversight of all. The interaction of each level of supervision with the built landscape was designed to ensure that the overarching penological objectives were adhered to. As outlined in Chapter 2, staff at a convict establishment were divided into two main roles: direct supervision and welfare and administration. With its larger size and longevity, the Tasman Peninsula operation had a greater number and variety of free people and prisoners placed in these positions, the smaller populations of the other mines requiring less staff for supervision and administration.

During the 1830s, Commandant Booth, stationed at Port Arthur, had oversight of the military and civil officers on the Tasman Peninsula, constables, head overseers and overseers responsible for the direct supervision of convicts. The peculiarities of the mining establishments meant that some of these convicts were able to attain very high levels of responsibility and autonomy. The prisoner Joseph Lacey, for example, was responsible for the early phase of exploration on the Tasman Peninsula and its later consolidation throughout the 1830s. He received his free pardon in 1838, while still overseeing the works at the mines, continuing as an emancipist until at least 1842.⁴⁹⁰

Probation's introduction theoretically ended the inclusion of convicts amongst the supervisory hierarchy, however the acute staffing shortages which plagued probation's first years meant that special dispensation had to be given to Commandant Booth to appoint Ticket of Leave men, or convicts who were close to receiving a ticket, to fill vacant positions.⁴⁹¹ At the end of 1840, after the new regulation had been passed, the only addition to the supervisory staff at the Tasman Peninsula mine was free overseer Henry Miller and Ticket of Leave convict James Hurst.⁴⁹² The beginning of the following year an increase in absconding at the station was ascribed to a lack of suitable supervisory staff.⁴⁹³ As a consequence, by the end of 1841 the number of staff at the station increased dramatically, with four overseers and an assistant superintendent in place.⁴⁹⁴

As well as triggering an increase in the number of lower-ranked staff, probation also introduced the positions of station superintendent and assistant superintendent. The 1841 regulations drawn up by the director of the probation system, Matthew Forster, stipulated that probation gangs were to be under the superintendence of a superintendent and three assistant superintendents, the latter each responsible for one of the convict classes.⁴⁹⁵ By the close of 1842 there were five assistant superintendents at the Tasman Peninsula mine, assisted by a further five overseers.⁴⁹⁶ By 1845 five assistant superintendents

⁴⁹⁰ Joseph Lacy [*sic*], 384, *Asia* (3), CON 31/1/27, T.A.H.O.; List of Officers, 1841-42, CSO 50/1/16-8, T.A.H.O.

⁴⁹¹ John Montagu, Colonial Secretary, to Charles O'Hara Booth, Commandant, 3 April 1840, CSO 5/236/6021, T.A.H.O. (BT).

⁴⁹² List of Officers, 1840, CSO 50/1/14, T.A.H.O.; James Hurst to Charles O'Hara Booth, Commandant, 23 June 1841, CSO 22/4/46, T.A.H.O. (BT).

⁴⁹³ John Montagu, Colonial Secretary, to Charles O'Hara Booth, Commandant, 12 January 1841, CSO 5/274/7120, T.A.H.O. (BT).

⁴⁹⁴ List of Officers, 1841, CSO 50/1/16, T.A.H.O.

⁴⁹⁵ *Convict Discipline*, Regulations of the Probation System, 1 July 1841, (158), pp. 38-42; *Convict Discipline*, Matthew Forster, Director of the Probation System, to John Montagu, Colonial Secretary, 25 June 1841, (158), p. 49.

⁴⁹⁶ List of Officers, 1842, CSO 50/1/17, T.A.H.O.

and ten overseers were charged with the oversight of the prisoners.⁴⁹⁷ This year proved to be the peak for the number of staff employed at the station, the amount of staff required for superintendence diminishing in response to the decreasing convict population.⁴⁹⁸

Probation's introduction also caused an increase in the number of welfare and administrative staff required at the station. Formerly, the medical and religious requirements of the convicts had been met by officers stationed at Port Arthur.⁴⁹⁹ The formal transformation of the mine into a probation station and the resultant separation from Port Arthur saw dedicated medical and religious officers appointed in 1841.⁵⁰⁰ A wharfinger (wharf keeper), commissariat officer and coxswain, who had all been employed at the station prior to probation's introduction, also continued on staff.

When staff were appointed, great trouble was experienced in ensuring that they carried out their duty to satisfaction. Lieutenant Governor Franklin made frequent requests to Britain for suitably-qualified staff, complaining that, without such officers "neither the work of coercive punishment, nor of reformation, can be properly carried out".⁵⁰¹ Toward the end of 1841, Superintendent Cook reported that, of the officers and overseers under his command at the Tasman Peninsula mine, only one had proved to be of any use.⁵⁰² In addition, two free overseers resigned at the end of the year, leaving the station drastically short-handed (Table 7-1).⁵⁰³ It was little surprise, therefore, when the station received a dismal report from the director of the probation system in March 1842.⁵⁰⁴ Forster found both convicts and establishment in a disorganised state, the lack of assistant superintendents and overseers resulting in poor classification. Convicts were also being appointed to positions restricted

⁴⁹⁷ List of Officers, 1845, CSO 50/1/20, T.A.H.O.

⁴⁹⁸ List of Officers, 1845-48, CSO 50/1/20-23, T.A.H.O.

⁴⁹⁹ Charles O'Hara Booth, Commandant, to John Montagu, Colonial Secretary, 10 October 1836, CSO 1/884/18754, T.A.H.O. (UB); Rev. Manton, Chaplain, to Charles O'Hara Booth, Commandant, 31 December 1840, CSO 5/277/7164, T.A.H.O.

⁵⁰⁰ J.F. Clarke, Principal Medical Officer to John Montagu, Colonial Secretary, 9 June 1841, CSO 5/288/7604, T.A.H.O. (BT); John Montagu, Colonial Secretary to George Maclean, Assistant Commissary General, 21 September 1842, CSO 22/47/243, T.A.H.O. (BT).

⁵⁰¹ *Convict Discipline*, Sir John Franklin, Lieutenant Governor, to Lord John Russell, Secretary of State, 15 April 1841, Enclosure No. 1, Extract from the Minutes of the Executive Council, 29 March 1841, (158), p. 31; *Convict Discipline*, Sir John Franklin, Lieutenant Governor, to Lord Stanley, Secretary of State, 1 April 1842, (158), pp. 72-3.

⁵⁰² Samuel Cook, Superintendent, to Matthew Forster, Director of the Probation System, 19 November 1841, Tasmania Papers 134, Roll CY 3079, M.L. (UB).

⁵⁰³ Samuel Cook, Superintendent, to Matthew Forster, Director of the Probation System, 18 December 1841, Tasmania Papers 134, Roll CY 3079, M.L. (UB).

⁵⁰⁴ Matthew Forster, Director of the Probation System, to Samuel Cook, Superintendent, 3 March 1842, Tasmania Papers 140, M.L. (BT).

by probation's regulations, resulting in their premature advancement through the classes in complete contravention of probation's regulations.

	1841	1842	1843	1844	1845	1846	1847
Supt.	Samuel Cook	Samuel Cook	James Purslowe	Henry Smith	Henry Smith	Henry Smith	J Skene
Asst. Supt	J Southmeir	J Southmeir	H Kerr	J Boyd	R Frewin	Benjamin Burman	Joseph Irwin
Asst. Supt		G Duncan	G Duncan	J Duncan	R Jennings		WJ Maden
Asst. Supt		JB Miles	James Fulton	James Fulton	James Fulton	James Fulton	James Fulton
Asst. Supt		G Duncan	Charles Madden	J Milchale	William Evans	William Evans	William Evans
Asst. Supt		WC Mabuley					
Overseer	Henry Miller	Henry Miller	Henry Miller	Henry Miller	Henry Miller		
Overseer	Thomas Griffin	Thomas Griffin	W Percy	J Smell	J Marshall		
Overseer	H Miller	James Hurst	James Hurst	James Hurst	J Hurst		
Overseer	Joseph Lacey	J Armstead	James Simmonds	James Simmonds	James Simmonds		
Overseer		J Simpson	J Thomas	J Thomas	J Thomas		
Overseer			J Small	JE Thomas	JE Thomas		
Overseer			J Leonard	William Kerry	J Rothwell		
Overseer				J McLeland	G Gatehouse		
Overseer					CW Sieburg		
Overseer					J Garland		
						No names provided (x8 overseers)	No names provided (x6 overseers)

■ = Continuation of personnel

Table 7-1: Tasman Peninsula, assistant superintendents and overseers 1841-47

The consequent augmentation of the number of assistant superintendents and overseers at the mine appeared to improve the superintendence of the convict population, with an increased number of personnel being appointed and retained at the station (Table 7-1). James Purslowe, when he took over as superintendent in October 1843, oversaw the appointment of free overseers and the final removal of convicts from that position (Becke 1899: 72). His successor in February 1844, Henry Smith, was able to report that, although problems were still experienced with the classification of the convicts, the supervisory staff were satisfactory.⁵⁰⁵ Smith himself was eventually displaced in October 1847, his removal recommended by three separate government officers during 1846.⁵⁰⁶ With contemporary

⁵⁰⁵ Henry Smith, Superintendent, to Matthew Forster, Comptroller General, 18 March 1844, Misc 62/9/A1087/1053, T.A.H.O. (BT).

⁵⁰⁶ William Champ to John Hampton, Comptroller General, 2 April 1846, CO 280/223/562, T.A.H.O. (BT); William Nairn, Assistant Comptroller General, to Henry Smith, Superintendent, 7 July 1846, CO 20/227/565, T.A.H.O. (UB); Memorandum by Charles La Trobe, 6 December 1847, CO 280/223/562, T.A.H.O.; For removal: Memorandum by John Hampton, Comptroller General, 7 September 1847, Misc 62/22 A1118, T.A.H.O. (BT).

concern increasing about the proper separation and superintendence of convicts, the perceived reappearance of poor supervision under Smith was not to be tolerated. A particular focus was brought to bear upon the superintendence of the mining operation, with the removal of the mining overseer, R.V. McGregor, recommended in both November 1846 and April 1847.⁵⁰⁷ Later that same year, James Hurst was reappointed and recommendations made to make convict and mining supervision mutually exclusive.⁵⁰⁸

Of the five case study sites, the Tasman Peninsula mine was unique in the number and variety of staff required to superintend and administer to the convicts (see Appendix 8). Although documentary evidence is lacking, it is clear that the staff required at the other sites was small, largely due to the limited size of the convict parties involved. At Macquarie Harbour, at least one convict overseer would have been placed in charge of the mining camp. Similarly, Recherche Bay's overseer was likely to have been a serving convict, the camp also visited by Joseph Lacey. An overseer would also have been required at South Cape Bay. At Jerusalem, an overseer and constable were placed in charge of the works.⁵⁰⁹ Even when Recherche Bay's operation expanded, reaching a population of at least 70 by 1843, the staff deployed to oversee their superintendence was limited to a temporary constable and visiting magistrate (both free), as well as an indeterminate number of overseers.⁵¹⁰

In addition to an expanded supervisory staff, the Tasman Peninsula also had a large military detachment. Although the convict miners at the penal settlement of Macquarie Harbour may have had a military guard posted over them, the camps at Recherche Bay, South Cape Bay and Jerusalem are known to have relied entirely upon civil security. A military force had been stationed at the Tasman Peninsula mine from at least late-1836, their posting commensurate with that station's expansion post-1835. By the following year the detail comprised an officer, sergeant and 12 rank-and-file (McLachlan and Macfie 1995: 70). This small detachment was an offshoot of a larger military

⁵⁰⁷ E. Hill, Visiting Magistrate, to John Hampton, Comptroller General, 28 November 1846, Misc 62/19 A1111, T.A.H.O. (UB); R.V. McGregor, overseer, to Henry Smith, Superintendent, 8 April 1847, CO 280/227/565, T.A.H.O. (UB).

⁵⁰⁸ List of Officers, 1847, CSO 50/1/22, T.A.H.O.; George Maclean, Deputy Commissary General, to John Hampton, Comptroller General, 28 August 1847, CO 280/235/569, T.A.H.O. (UB).

⁵⁰⁹ Josiah Spode, Principal Superintendent, to John Montagu, Colonial Secretary, 13 November 1841, CSO 22/47/190, T.A.H.O.; J.E. Bicheno, Colonial Secretary, to William Jones, overseer, 27 January 1844, CSO 8/108/2279, T.A.H.O.

⁵¹⁰ John Montagu, Colonial Secretary, to Charles Swanston, Southport Coal Company, 18 May 1841, CSO 8/12/195, T.A.H.O.; J. Clarke, Inspector General of Hospitals, to J.E. Bicheno, Colonial Secretary, 10 July 1843, CSO 22/80/1744, T.A.H.O.

garrison stationed on the peninsula, which, in 1837, numbered three officers and 109 rank-and-file, making it a major military garrison in the Australian colonies (McLachlan and Macfie 1995: 5). The size of the garrison at the mine was reflective of the convict population, growing and shrinking in response to its fluctuations. So, as the numbers of convicts steadily increased, so too did the military garrison (Table 7-2).⁵¹¹

	Convict	Military
1837 (August)	122	14
1838 (October)	203	21
1839 (May)	170	28
1841 (October)	235	33
1844 (November)	503	62
1847 (April)	412	52

Table 7-2: Tasman Peninsula, military and convict population 1837-39, 1841, 1844, 1847

When the military had first been posted at the mine in ca.1836 it is probable that a barracks had immediately been constructed for the rank-and-file troops. Built of weatherboard, it was potentially simultaneously constructed with the cookhouse and bakehouse and superintendent's quarters erected contiguous to the first prisoners' barracks (Figure 7-1). Like the soldiers' barracks, the superintendent's quarters was built from weatherboard, supporting the notion that the two were built simultaneously. At the end of 1836, the superintendent at the mines was John Ramsey Stuart, a Lieutenant in the 21st Fusiliers and therefore commander of the mine's small military detachment.⁵¹² Stuart may have resided in these quarters (Figure 7-19), but had by early 1837 been provided with dedicated quarters to the north east of the soldiers' barracks (Figure 7-20).

⁵¹¹ Military figures (McLachlan and Macfie 1995).

⁵¹² List of Officers, 1836, CSO 50/1/11, T.A.H.O.

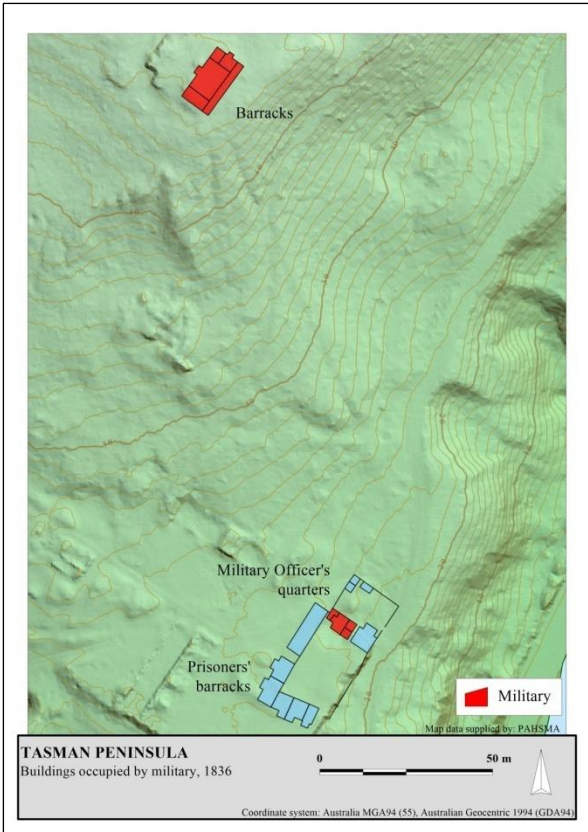


Figure 7-19: Tasman Peninsula, military 1836

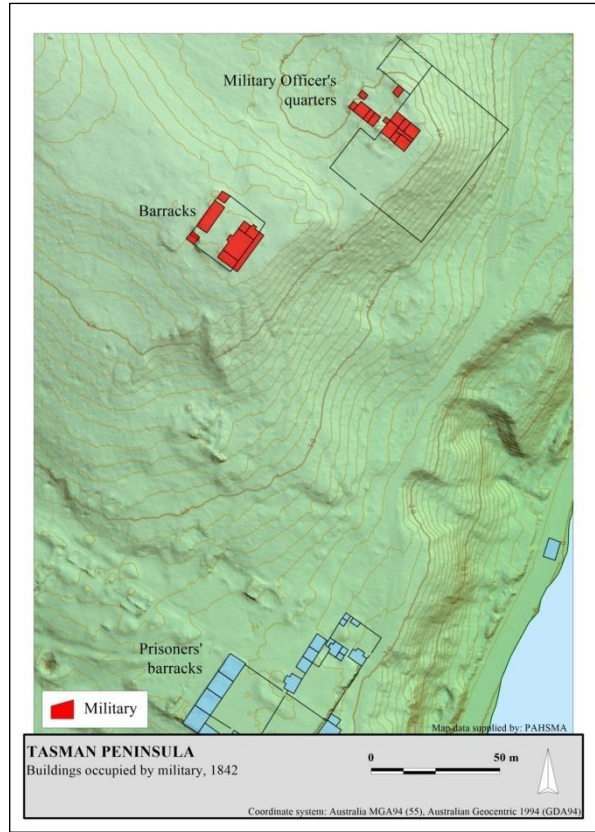


Figure 7-20: Tasman Peninsula, military 1842

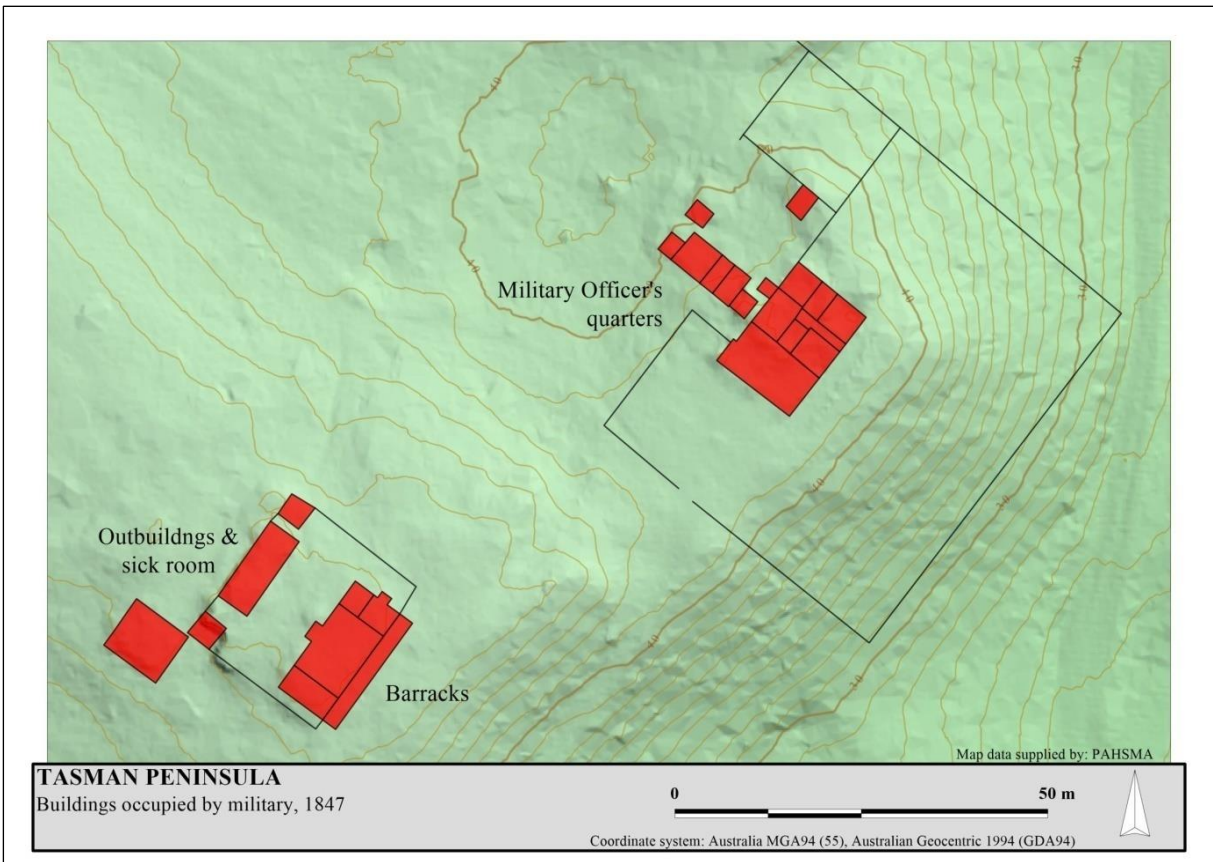


Figure 7-21: Tasman Peninsula, military 1847

Despite the continual increase in the military, the accommodation provided for them was not substantially altered or added to during the life of the station. In mid-1842, it was proposed to expand the barracks to accommodate ten extra soldiers.⁵¹³ Whether this extension was carried out went unrecorded, though the inability of the station to provide adequate accommodation for the convicts at this time suggests that the works did not proceed. Lack of labour also shelved plans for the construction of a brand new military barracks at the station in 1845 and 1846, all available convicts engaged in the construction of the new separate apartments.⁵¹⁴ Although the new barracks were not built, it is likely that a small hospital was added at this time (Figure 7-21).⁵¹⁵

The linking of the military to the convict population meant that the actual ratio of the military to prisoners stayed relatively steady. The available figures indicate that, between 1837-39, there were between 7-11 convicts for every member of military personnel at the station (see Appendix 7). In 1841 the ratio was eight convicts for every member of the military, slightly increasing in 1844 and 1847 to a ratio of 1:9. Although there is a paucity of figures for the 1840s, what is available appears to indicate that, unlike the convict department, the military was able to match the increased supervisory needs generated by probation. Whereas the convict department had been required to pluck its staff from thin air and consequently experienced problems in quantity and quality, the military had been able to draw upon reserves at its Hobart headquarters. As their role did not markedly alter, there was little concern about their quality, other than the usual problems of discipline and morale experienced throughout the colonies.

The military occupied a unique place in the peninsula supervisory hierarchy, at once integral and separate to its workings. Whereas other branches represented on the Tasman Peninsula - marine, ecclesiastical and medical - were tied and in some way beholden to the same bureaucracy that enveloped the convict department, the military jealously guarded its independence. On the peninsula,

⁵¹³ Minutes of the Executive Council, No. 87, 10 August 1842, EC 4/8, T.A.H.O. (BT).

⁵¹⁴ John Hampton, Comptroller General, to J.C. Victor, Commanding Royal Engineer, 16 July 1845, CSO 22/120/2472, T.A.H.O. (BT); J.C. Victor, Commanding Royal Engineer, to J.E. Bicheno, Colonial Secretary, 13 April 1846, Misc 62/10 A1095, T.A.H.O. (BT).

⁵¹⁵ Major of Brigades to J.E. Bicheno, Colonial Secretary, 18 March 1846, CSO 20/26/586, T.A.H.O. (BT).

the presence of Charles O'Hara Booth, a commissioned officer of the 21st Fusiliers, served to bridge the gap, enabling the administration of the penal station to be carried out smoothly. Booth occupied the apex of the peninsula's military hierarchy, fulfilling both the role of the settlement commandant and commanding military officer (McLachlan and Macfie 1995: 16). At the coal mine, a Lieutenant had command of the small garrison, directly responsible to his commanding officer, Booth.

This situation did not continue past January 1840, when Booth resigned his commission (McLachlan and Macfie 1995: 16). With Booth remaining at Port Arthur as a civilian commandant, the officer commanding troops on the peninsula was removed from that settlement, his place taken by a more junior officer, to whom Booth could provide advice if called upon (McLachlan and Macfie 1995: 17).

The mine was chosen as the new location for the commanding officer, likely favoured due to its advantageous location on Norfolk Bay. The first officer to command was Captain Hare, of the 51st, later replaced at the end of 1840 by Captain Percy Rice, also of the same regiment (McLachlan and Macfie 1995: 17). The officer commanding troops on the peninsula remained at the coal mine until the late 1840s, after which time he was once again stationed at Port Arthur.

Associated with the military were the Royal Engineers. Toward the end of 1841, in recognition of the pressures placed upon the Tasman Peninsula mine to increase the quantity of barracks space available for both free and bond, a Royal Engineer foreman of works was first appointed.⁵¹⁶ Tasked with the erection of additional barracks for the convicts, the engineer, Robert Bernard, immediately encountered problems, unable to begin construction due to lack of timber, lime for mortar and a shortage of convict labour.⁵¹⁷ By mid-1842 Bernard had overseen the construction of the timber huts for the first class convicts. Although undocumented, Bernard or a successor potentially superintended the additions to the station after 1842, including the commissariat store, new wards and quarters. However, by the close of 1846 it was reported that a foreman of works was no longer at the mine, meaning construction work on the solitary cells and separate apartments had proceeded without the

⁵¹⁶ Commanding Royal Engineer to John Montagu, Colonial Secretary, 14 October 1841, CSO 22/7/212, T.A.H.O. (BT).

⁵¹⁷ Samuel Cook, Superintendent, to Charles O'Hara Booth, Commandant, 18 December 1841, Tasmania Papers 134, CY 3079, Frame 544, M.L. (UB); Samuel Cook, Superintendent, to Charles O'Hara Booth, Commandant, 17 March 1842, Tasmania Papers 134, CY 3079, Frame 346, M.L. (UB).

guidance of an engineer.⁵¹⁸ The reason for the engineer's removal was not documented, although clashes in the chain-of-command meant that convicts placed under the foreman were not afforded a satisfactory level of supervision, the engineer refusing to allow the convict department officers to interfere with the convicts.⁵¹⁹ When a new convict hospital was started in late 1846, the lack of a competent engineer resulted in the work's abandonment and the reappointment of a foreman of works at the station.⁵²⁰

Controlling the landscape

Having examined the structures built to confine the convicts, as well as the composition of the supervisory staff emplaced to affect control over their day-to-day lives, the powered landscape that was created by the interaction between the supervised and the supervisors will now be analysed. In Chapter 5, the methods used to direct and control convict labour, as well as the convicts' reaction to this, were discussed. This section will turn the gaze outward, to take in how the spatial environment was altered by the play of these power dynamics. In their ideal form, these labour landscapes provided a setting where penological aims could be implemented, where every moment of the convict's waking life was directed towards the desired ends. In order to achieve this, the supervisors attempted to create landscapes of control which defined the convict's interaction with each other, their supervisors and their environment.

The siting of structures within the landscape was an essential element in this attempt to control convicts' daily interactions. At the Tasman Peninsula station, the newer ca. 1838 barracks had been constructed on the same levelled terrace occupied by the first timber barracks, overlooking the adits on the shore. It was situated within a landscape that had been denuded of its tree-cover, its imposing stone walls marking it out from the few other buildings that surrounded it. As is clear from Owen

⁵¹⁸ J.C. Victor, Commanding Royal Engineer, to William Champ, Comptroller General, 24 September 1846, Misc 62/17 A1107, T.A.H.O. (BT).

⁵¹⁹ Memorandum by William Champ, Commandant, 1 February 1847, Misc 62/20/A1112, T.A.H.O. (UB).

⁵²⁰ J.C. Victor, Commanding Royal Engineer, to William Champ, Comptroller General, 24 September 1846, Misc 62/17 A1107, T.A.H.O. (BT); Report of the Committee of Officers into convict expenditure, 22 October 1846, report no. 7, CON 103/1, T.A.H.O. (UB).

Stanley's depiction, it was a structure designed to impose a sense of permanency, to make clear that it was an immovable fixture in the landscape (Figure 7-4). Whereas the old barracks had been oriented to the coast, the open side of the compound directed out to Norfolk Bay, the new barracks faced away from the water. The buildings themselves and the high compound walls to the south west forcibly directed the convict's gaze toward the military barracks and, beyond that, the mine shafts where many of them were made to labour.

Internally, the barracks' spatial arrangements were similarly representative of the evolving penological aims governing the station. Permeability maps of the first and second barracks illustrate how spatial interaction within the barracks' compounds altered as the increasingly penal nature of the settlement resulted in enhanced spatial control and classification (Figure 7-22). The layout of the first barracks placed a range of spatial types (incarcerative, supervisory, victualling and maintenance) at the same level of accessibility, representative of the mining-focussed nature of the earlier period. The construction of the second barracks introduced a new level of accessibility, with access to welfare and victualling spaces controlled through enclosed yards which physically and visually removed them from the spaces of incarceration. The barracks became a fundamentally incarcerative space, with supervisory and maintenance completely removed. With probation's introduction, the spatial arrangement of the barracks was altered to reflect the new classificatory requirements, with the division of the compound yard into second and third class areas adding an additional layer of permeability.

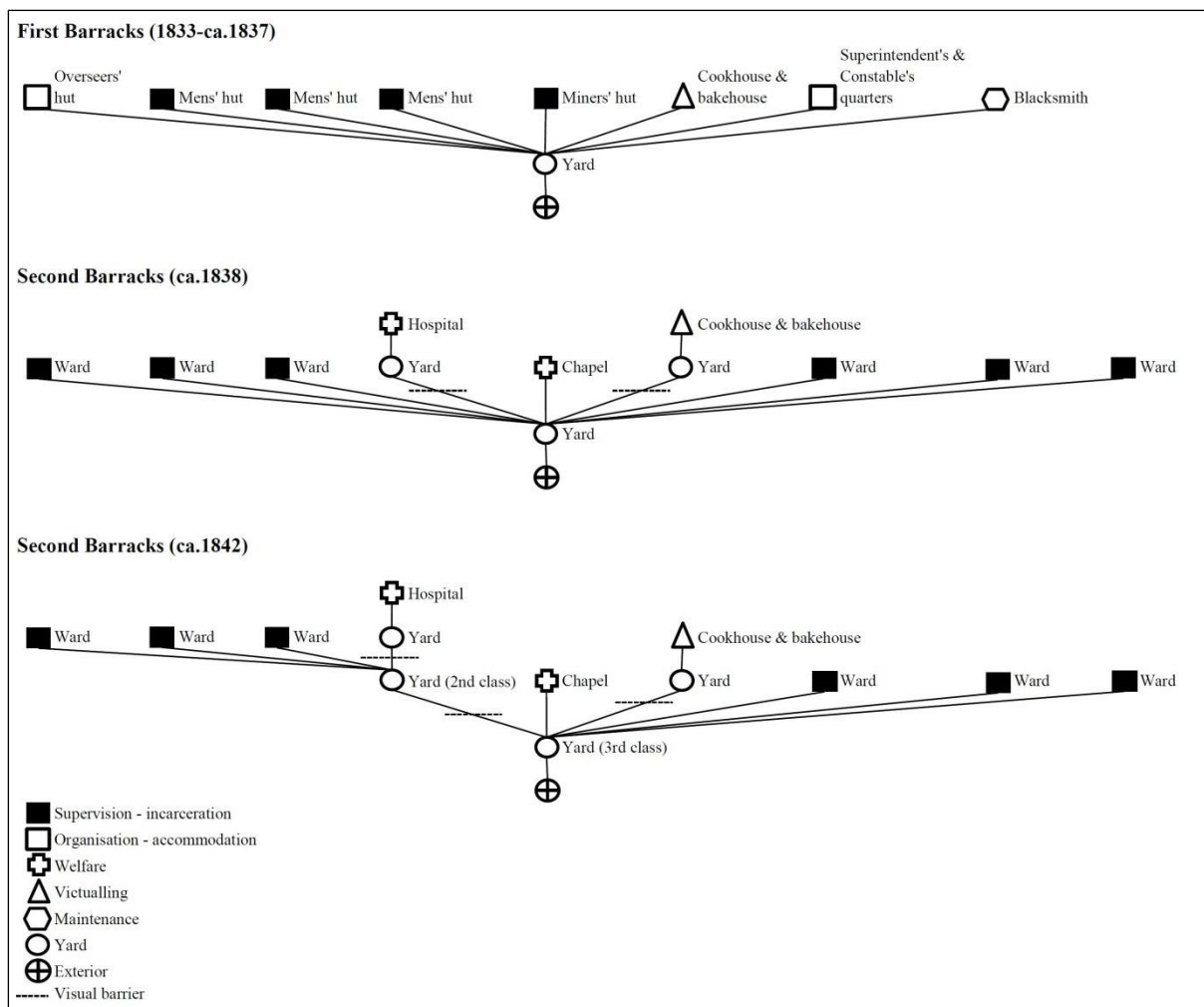


Figure 7-22: Tasman Peninsula. Permeability map illustrating the increasing spatial classification of the barracks spaces

As the convicts looked out, so too were they looked upon. The clearance of the site's vegetation greatly increased the level of surveillance that could be brought to bear upon the occupants of the barracks, making for clear sightlines around the entirety of the structure. This effect was heightened by the placement of the military buildings on the terrace above the barracks. At a height above sea level of 45m, compared to the prisoner's barrack's 24m, the military had a clear and intended supervisory and defensive advantage - a particular requisite considering the garrison's isolation from immediate reinforcement (Figure 7-23). Sentry boxes and military piquets served to extend the oversight. The original plan for the new prisoners' barracks indicated that a watch box had been intended for the gate of the compound (Figure 7-2). Although Stanley's 1841 illustration shows that this was not initially constructed, later sources indicate that quarters for overseers were added to the

compound "so as to command a view of all that [was] passing" (Figure 7-9).⁵²¹ As the station expanded to the north west post-1843, the number of nodal command and control points commensurately increased, with the addition of another overseers' quarters, as well as a guard room for the military (Figure 7-24 and Figure 7-25).

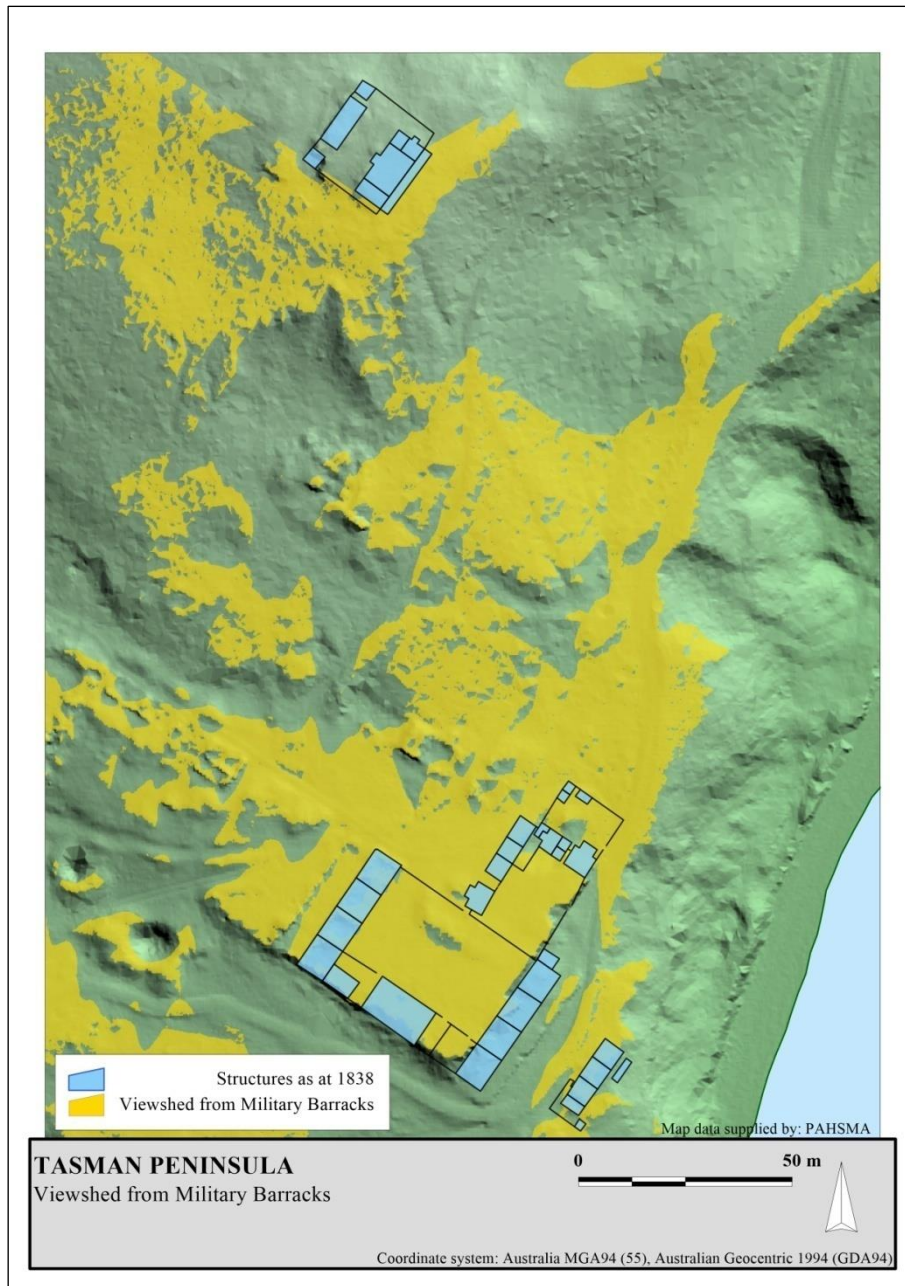


Figure 7-23: Map showing the area visible from the Military Barracks (no vegetation). The structures shown are those present in 1838

⁵²¹ *Convict Discipline and Transportation*, Copy of a despatch from C.J. La Trobe, Esq, Acting Governor of Van Diemen's Land, to Earl Grey, Enclosure No. 7, No. 12 - Coal Mines, 31 May 1847, (941), p.69.

The site was overlain by a palimpsest of areas to which different levels of access were allotted. Miners and labourers were permitted at the workings, servants at their assigned officer's quarters, boats' crew at the boats, wardsmen at the barracks during the day, or gardeners tending the vegetables. Those who did not belong in these zones invited query and sanction. Overseers, constables, wardsmen and the military guards were all put in place to ensure that convicts did not step beyond their allotted areas. In 1846 William Johnson had his probation extended six weeks as punishment for being found at the military barracks without permission.⁵²² John Place was punished in 1843 for being outside his allotted class yard.⁵²³ John Greenhead was caught pilfering vegetables from Dr J.D. Motherwell's garden in the same year, receiving six weeks hard labour in chains.⁵²⁴ At the other end of the scale, those charged with ensuring the sanctity of the zones were accordingly punished when their boundaries were transgressed. For example, Martin Quorish, employed as a watchman, was punished with solitary confinement on the two occasions that the gardens he was supposed to be minding were robbed.⁵²⁵

⁵²² William Johnson, 16813, *Equestrian* (2), CON 33/1/5, T.A.H.O.

⁵²³ John Place, 3062, *David Clarke*, CON 33/1/13, T.A.H.O.

⁵²⁴ John Greenhead, 1601, *Duncan*, CON 33/1/8, T.A.H.O.

⁵²⁵ Martin Quorish, 1454, *Egyptian* (2), CON 33/1/3, T.A.H.O.

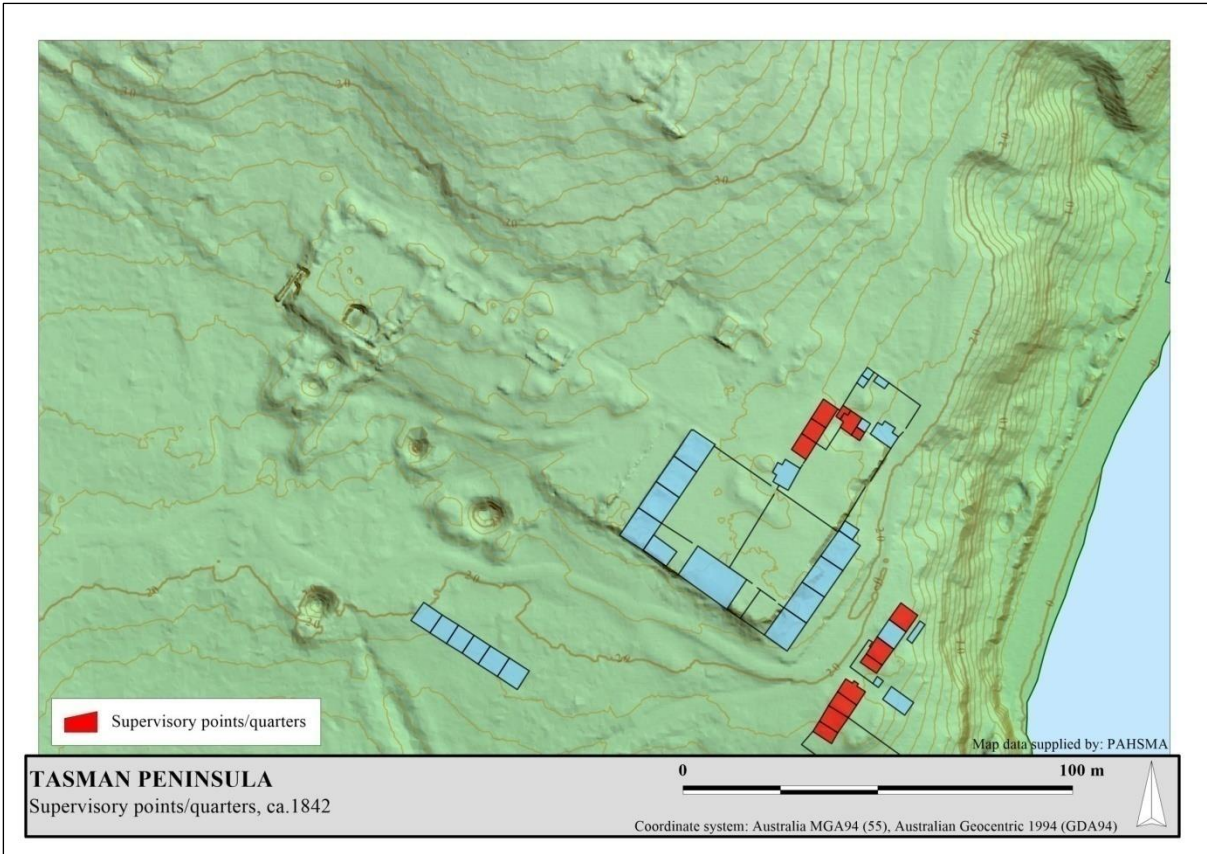


Figure 7-24: Tasman Peninsula, supervisory points ca.1842

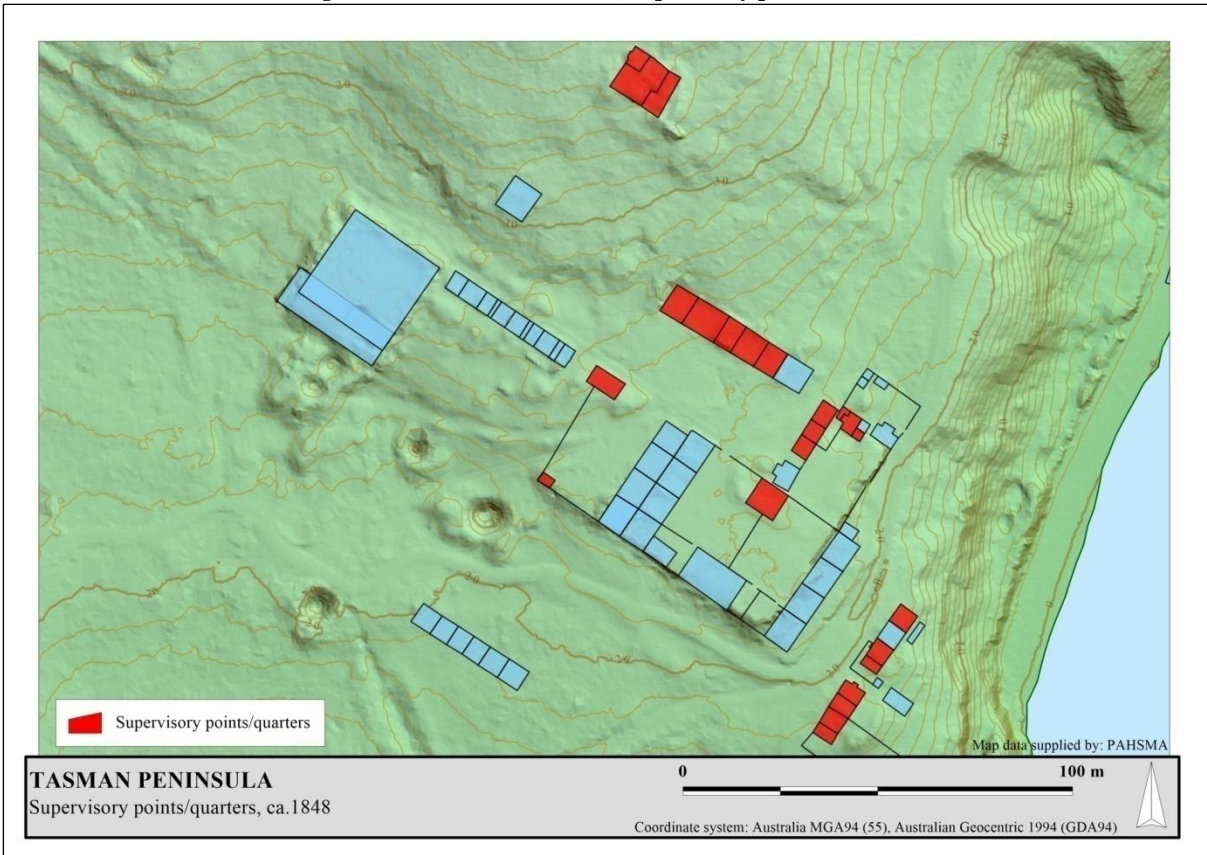


Figure 7-25: Tasman Peninsula, supervisory points ca.1848

These zones could be demarcated by direct means. Just as the new barracks were contained within a compound wall, so too were many of the other buildings at the station. Fences, primarily low paling and picket fences, were used to define these areas (Figure 7-26). Though not as obviously secure as the barracks' wall, such fences served to overtly display those areas where control was enforced. Heightening the demarcation was the careful clearance of vegetation. In the same way that the ground had been cleared around the prisoners' barracks, so too did other buildings at the settlement reside within their own controlled environments. Contemporary illustrations show that scrub and trees were removed from around buildings, with fences placed to mark the boundaries between the "cultivated" and the "wild" (Figure 7-4, Figure 7-27).



Figure 7-26: Tasman Peninsula. Detail from ca.1842 plan showing the use of fences around officer accommodation at the station. They separated the controlled space (yellow and light brown ink) from the surrounding vegetated areas (green wash)
 (Unknown artist, *Probation Station "Coal Point" Tasman's Peninsula*, ca.1842, Tasmania Papers 156, State Library of New South Wales.)



Figure 7-27: Illustration by Bishop Nixon looking south west from the Commissariat Store. Note the contrast between the uncleared and cleared bush, the latter forming oases of control around the built structures
(Bishop Francis Nixon, Unnamed artwork, January 1848, Port Arthur Historic Site Resource Library [original Dixon Library, State Library of New South Wales])

This all served to create islands of control across the station, interspersed by stretches of uncleared bushland or fallow land. These islands were linked by a network of paths and roadways, along which convicts, officers, supplies and products moved. These pathways served to mark the approved conduits along which prisoners could travel. Convicts, when mustered for work in the morning, were marched along them to their places of work. Many paths were placed to facilitate the movement of materials around the station and were therefore sited with ease of transport in mind (Figure 7-28). A series of tramways serviced the major shafts and adits, linking the sites of coal extraction to the water carriage points. A number of roads ran from sites of quarrying or manufacture, bringing materials to the heart of the station. Others were placed primarily for the transportation of prisoners and those who oversaw them. Roads and paths linked all of the major buildings, be they convict or officer, as well as provided access to work sites or transport nodes.

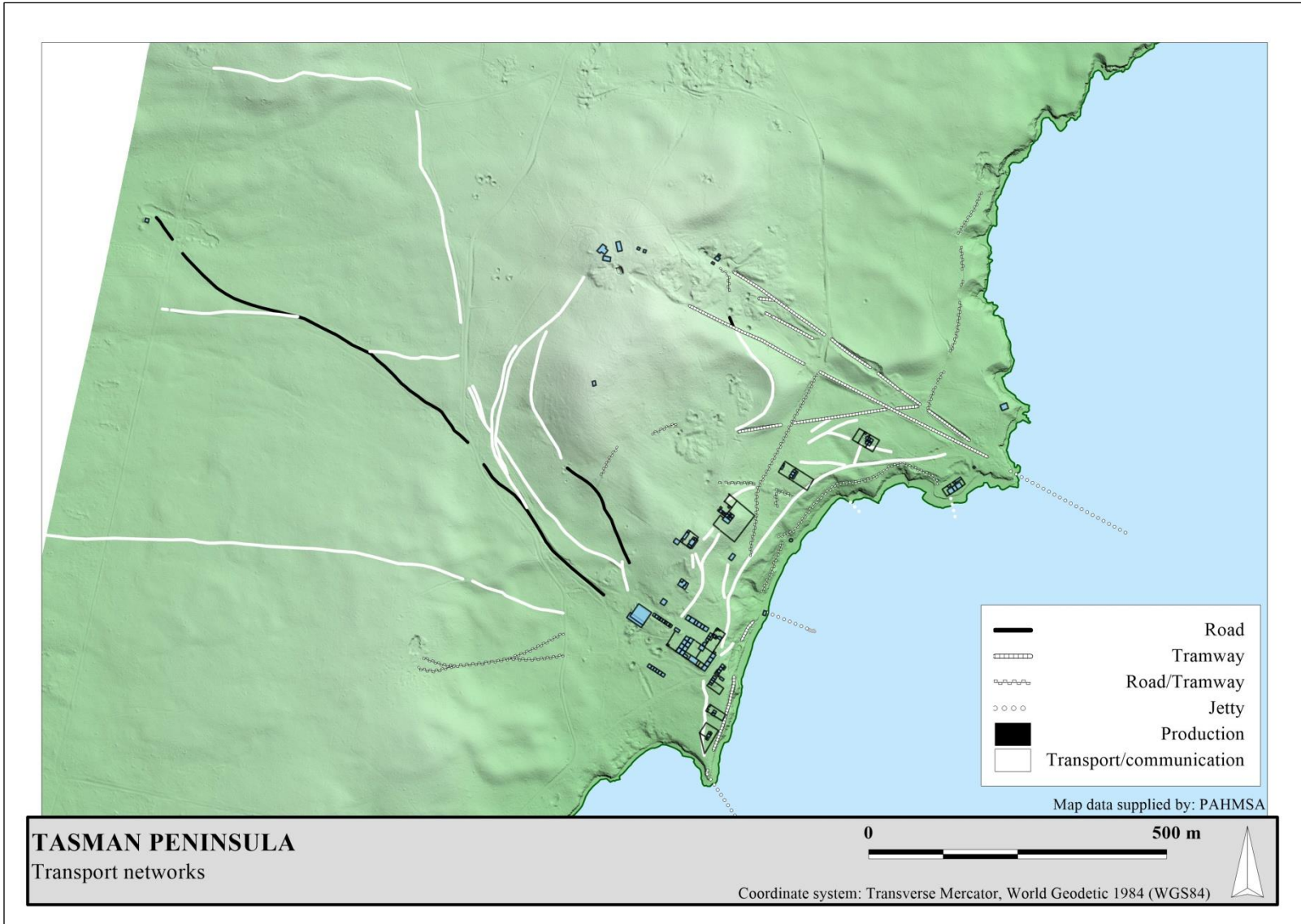


Figure 7-28: Tasman Peninsula, extent of the known internal transport networks 1833-48 (station as at 1848)

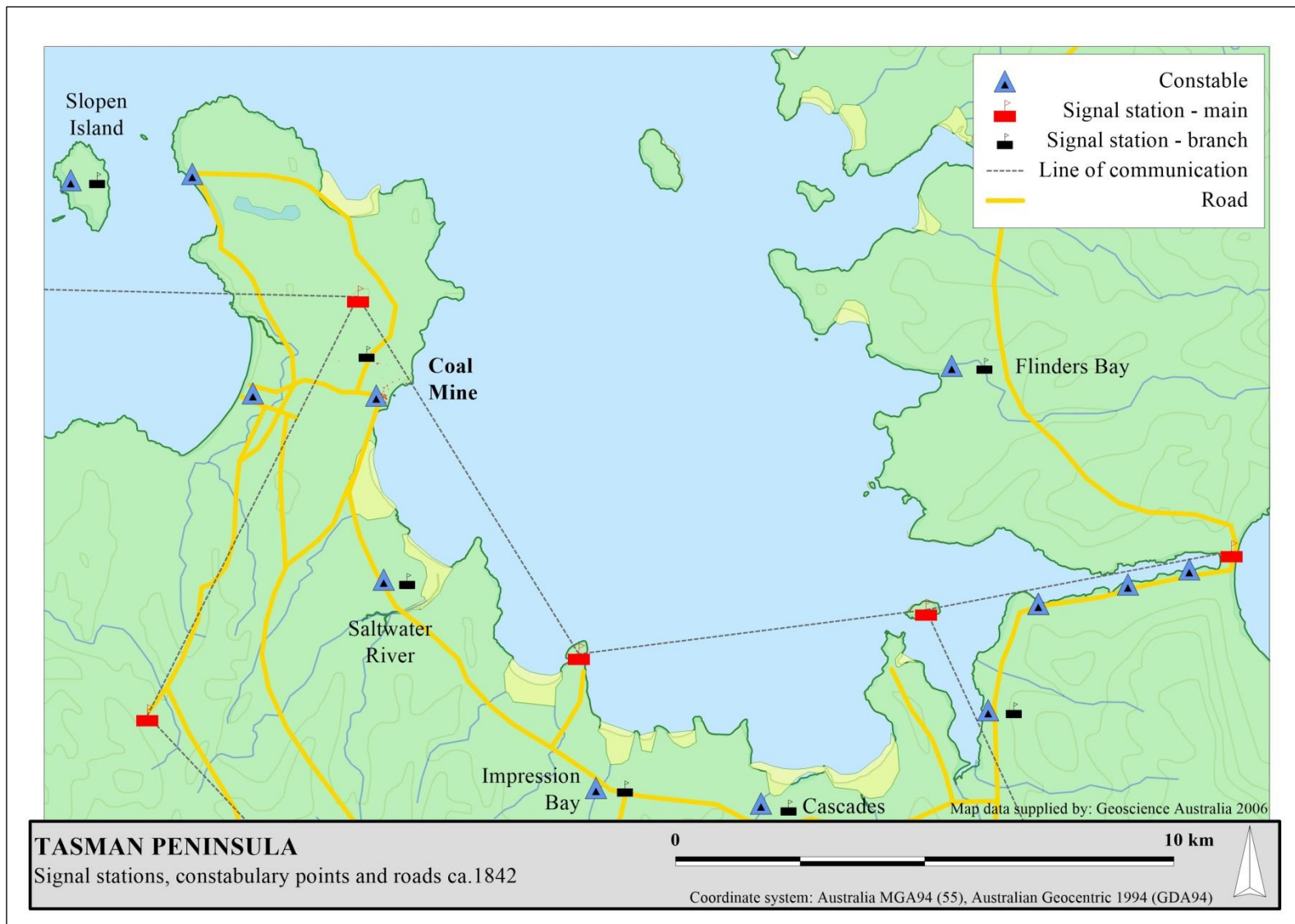


Figure 7-29: Tasman Peninsula, showing the network of signal stations, constabulary points and interlinking roads ca.1842

This controlled and defined landscape extended beyond the main settlement. Roads linked the station to external places, westward to Slopem Main, north to the lagoon and south to Saltwater River. With the majority of supplies and produce shipped over water, such roads were primarily for the movement of convicts and officers. They were tied in with an extensive communication and security network which covered the peninsula. This network found its full expression during the early 1840s, when six probation stations dotted the fringes of Norfolk Bay (Figure 7-29). Each of these formed a hub, a secure point in the landscape which was tied to the other stations through the road, water and signal network. The latter provided a rapid means of communication, with each signal point at a station able to tap into the main line linking Hobart to Port Arthur. Notice of absconders could be communicated within minutes to Eaglehawk Neck and other security checkpoints north on Forestier's Peninsula. The signals also allowed the more mundane requests for information, personnel or provisions to be efficiently communicated throughout the peninsula.

A series of constable stations were also located across the Tasman and Forestier's peninsulas. While tasked with the responsibility of keeping convicts within the bounds of their stations, or, failing that, the peninsula, the constables were also required to ensure that the peninsula remained secure from unauthorised visitation from outside. In January 1835 two men were detained and their boat impounded after they landed near the coal mines to go bird shooting at the lagoon.⁵²⁶ A year later a shooting party containing John Montagu, the colonial secretary, was similarly detained.⁵²⁷ After this, an Act was passed which entirely prohibited landing on the peninsula without due cause. Shipping traffic was heavily curtailed, with the signalling system used to ascertain the identity and purpose of all craft that entered the peninsula's waters. Impoundment and fines awaited those who breached the exclusion zone.⁵²⁸ The small colonial marine fleet servicing the peninsula stations were also tasked

⁵²⁶ Charles O'Hara Booth, Commandant, to John Montagu, Colonial Secretary, 30 January 1835, CSO 1/784/16725, T.A.H.O. (UB).

⁵²⁷ Charles O'Hara Booth, Commandant, to John Montagu, Colonial Secretary, 7 March 1836, CSO 1/635/14379, T.A.H.O. (UB).

⁵²⁸ For example: Charles O'Hara Booth, Commandant, to John Montagu, Colonial Secretary, 25 August 1840, CSO 5/255/6633, T.A.H.O. (BT).

with ensuring this nautical no-mans-land was maintained, the launches and boats themselves subject to stringent regulations which governed their use and security.⁵²⁹

The Tasman Peninsula was the ultimate expression of a controlled landscape. For the whole of its operation, a security net was erected over both the coal mine and the landscape which enclosed it, the convict situated in the midst of a controlled environment formed from interlocking patterns of surveillance, communication and physical restriction. At the other case study sites, such landscapes were more limited, either through their impermanency or isolation. The architecture of control blanketing the Tasman Peninsula was formed over years, requiring a constant input of personnel and resources. Such an investment was simply not available for the majority of the other sites.

At the small camp at South Cape Bay, the buildings were concentrated into a limited area, set close to the place of their work. Today it is impossible to deduce if the structures were surrounded by a fence to create an enclosed compound, or how far back the vegetation was cut to create a clear space, although the limited area occupied by the camp suggests that the cleared area would have been minimal. It is likely that the features surveyed represent the total of structures erected at the camp, meaning that the isolated knot of huts would have sat huddled amidst the surrounding bush, the view very much directed away from the external and instead toward the internal workings of the camp.

A similar arrangement existed at Recherche Bay. A probable illustration of the camp by Owen Stanley in 1841 shows at least two timber slab structures, set either side of a timber-lined sawpit or mouth of a mining shaft (Figure 7-30). Although conjecture, the picture may depict a west-facing view of features 3 (structure), 4 (test pit) and 5 (structure). It is clear that some attempt was made to clear the ground around the structures, although the trees were evidently not cleared very far back, as the looming presence of the eucalypts behind the hut testifies. Unlike South Cape Bay, the buildings at Recherche were spread over an extended area - at least 150m - with at least two buildings in the north, one in the centre near the workings and one toward the south. No compound existed, resulting in a level of surveillance that would have had to have been multi-directional, if possible at all. Such an

⁵²⁹ Instructions for the Coxswain of the Woody Island and Eagle Hawk Neck Boats, 13 March 1841, Tasmania Papers 144, M.L. (BT).

arrangement may have resulted in the high level of porosity at the camp, the prisoners constantly escaping from the works to make their way north.

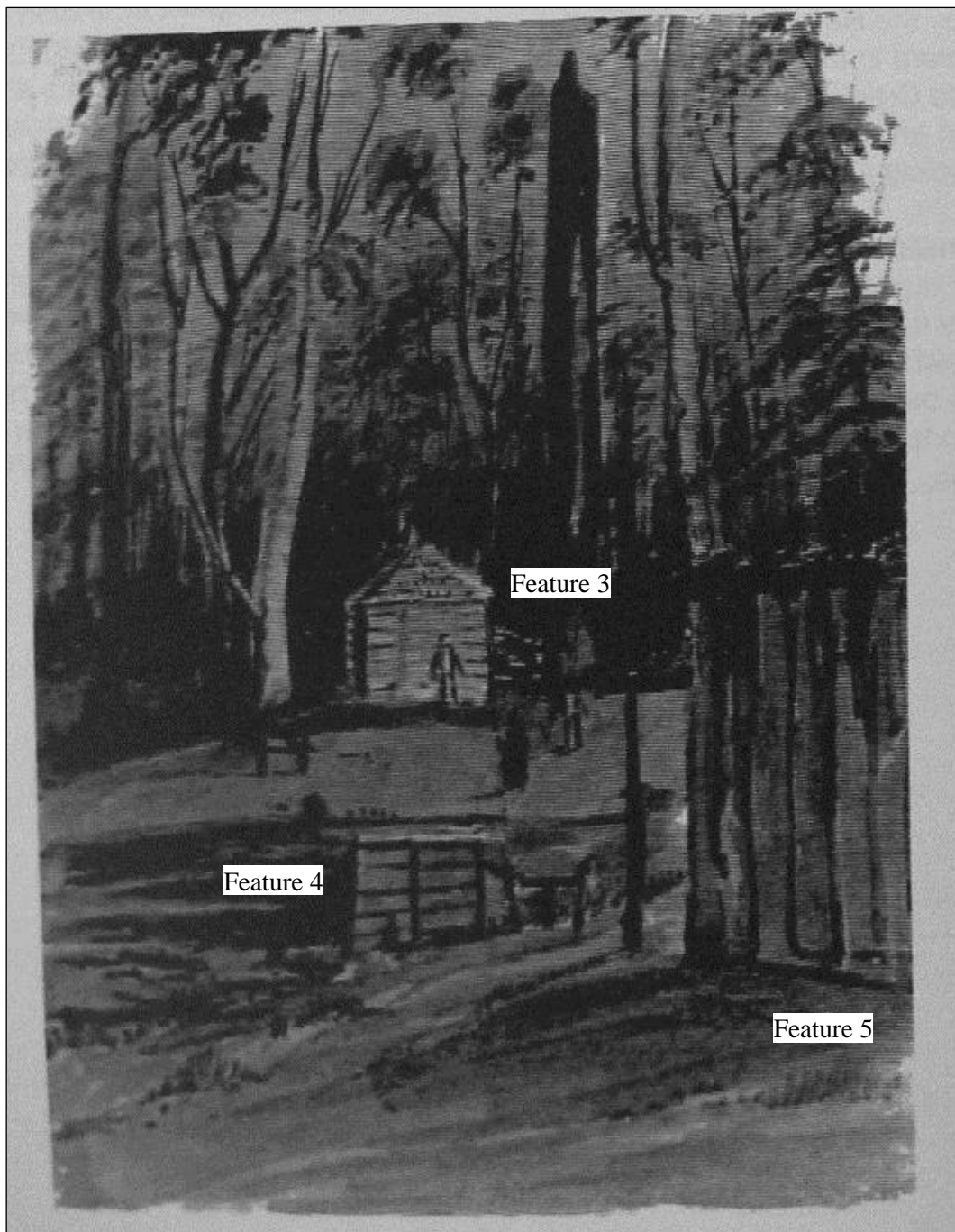


Figure 7-30: Recherche Bay, illustration by Owen Stanley likely showing buildings at the camp ('Mr Lacy's [*sic*] timber station, Recherche Bay', Owen Stanley, ca.1840-1841, from: Kostoglou, Parry. Historic Timber Getting between Cockle Creek and Lune River. Archaeology of the Tasmanian Timber Industry. Vol. Report No. 4, Tasmania: Forestry Commission)

The continuation of the Recherche Bay mine for nearly three years meant that a small investment was made in attempting to secure the camp within its environment, although no constable was placed

permanently at the mine itself for the entirety of its operation. Instead, James Smith, assistant police magistrate at Southport, voluntarily took on the role until his official appointment as a constable in 1841.⁵³⁰ Smith was responsible for the camp's security, a task made difficult by his placement 12 miles (20 km) to the north (Figure 7-31). His ability to properly superintend the convicts at the works was further hampered by the establishment of the Southport probation station in 1841, of which Smith was made visiting magistrate with purview over that station, as well as the mine. This separation of the camp from its security hub, as well as its administrative links to the distant Tasman Peninsula, could only have contributed to the poor record of absconding and convict welfare that occurred at the mine.



Figure 7-31: Recherche Bay, showing its relation to Southport

⁵³⁰ John Montagu, Colonial Secretary, to Charles Swanston, Southport Coal Company, 18 May 1841, CSO 8/12/195, T.A.H.O.

Similarly, the sparse nature of the historical record at Recherche Bay makes assumptions about the position and form of supervisory accommodation a matter of conjecture. Returns from June 1841 indicate the presence of a single overseer.⁵³¹ The camp was visited on occasion by Joseph Lacey, as well as a constable, medical attendant and visiting magistrate from Southport. The permanent overseer, as well as the visiting officers, would have required accommodation separate from the convicts. It is possible to make an informed estimate as to the location of the administrators' buildings. When examining the surveyed area, it is immediately apparent that a number of possible accommodation structures (sites 1-3) were afforded controlling views of the surrounding landscape.

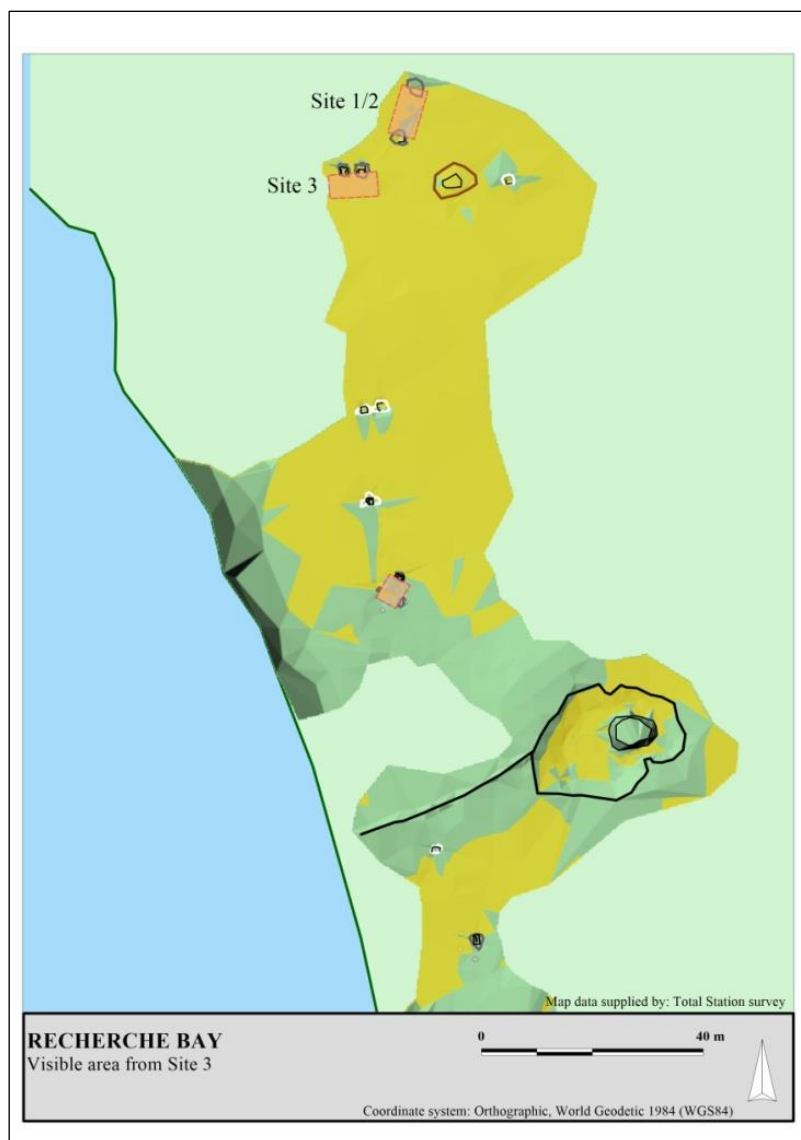


Figure 7-32: Recherche Bay. Visible area from feature 3 (yellow)

⁵³¹ Extract from the Diary of the Mining Party at North Port Recherche Bay from the 18th to the 26th June 1841, Friday 18 June - Saturday 26 June, 1841, CSO 8/13/301, T.A.H.O.

The viewsheds from these locations took in not only the immediate area, but also the middle and lower terraces, where a number of other structures (possibly of industrial use) were located (Figure 7-32). The main shaft site was also visible from these structures. With their slightly elevated positions, these structures would have provided a heightened level of surveillance of the workings and ancillary buildings. In addition, the elevation of buildings of administration play to ideas of the powered landscape, imbuing those who occupied the elevated position with a modicum of authority over those who toiled below. Whether this authority actually translated on the ground, where there were a limited number of figures of government authority, is however arguable.

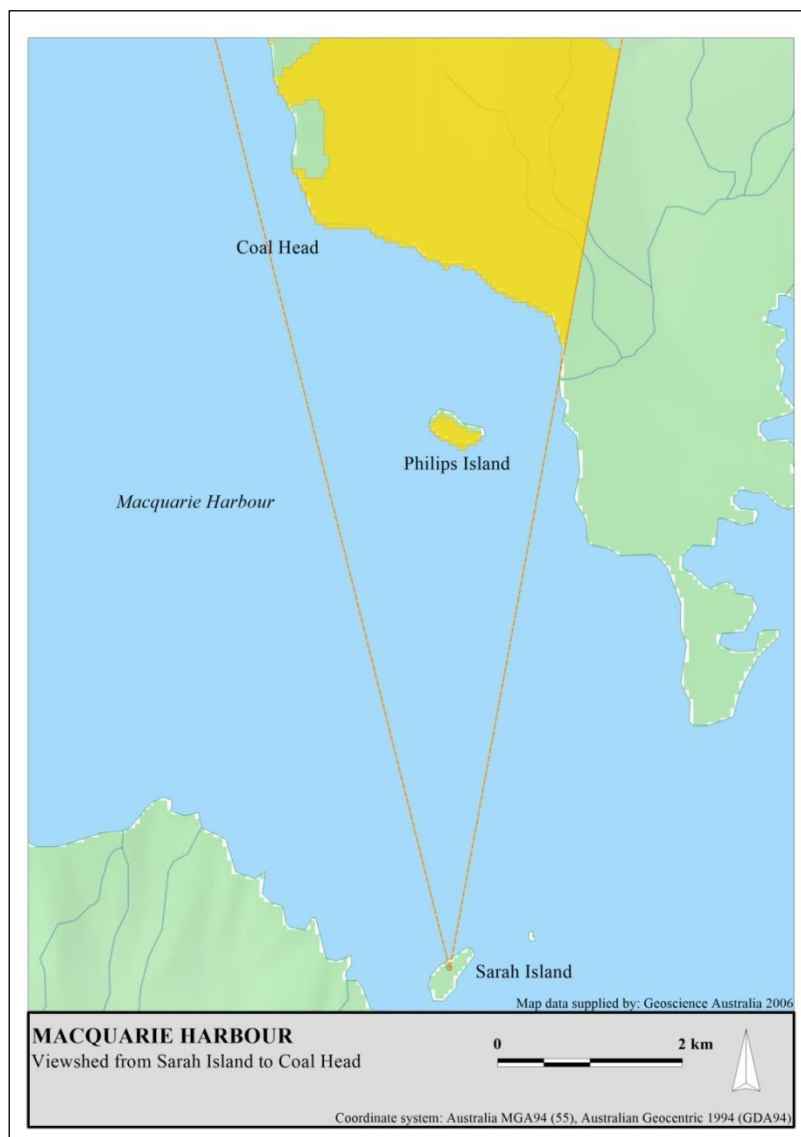


Figure 7-33: Viewshed between Sarah Island and Coal Head

Both Jerusalem and Macquarie Harbour were semi-independent camps serving as outliers to larger stations. In both instances, the trappings of control were centred at the hubs, with the outer camps serving as detached, semi-autonomous security elements. At Jerusalem, the need for security arrangements was nullified by the relative proximity of the probation station, with constabulary and a visiting magistrate quartered at this location. At Macquarie Harbour, there existed a direct (clear weather) sightline between the potential coal mining site and the settlement hub at Sarah Island, enabling direct communication if the need arose (Figure 7-33).⁵³² The mining operation was only one of a number of other activities carried out by the convicts around the harbour, some of which were accessed by boat every day from the settlement, while convicts were permanently quartered at others (Brand 1984b: 34-36). Philips Island, close to the site of the coal mines, had a convict gang quartered in a hut upon it (Brand 1984b: 36). The convicts mining the coal were likely to have had a similar arrangement, supported by the single reference to a miners' hut containing storage chests and provisions.⁵³³

Hierarchical landscapes

Just as the composition of the built fabric reflected the authorities' attempts to exert control over the convict population, so too did it reflect the internal hierarchies of the supervisors. A hierarchy was applied at these places, ensuring the separation of the higher-ranked officers from the lower. Their spatial arrangement was designed to reinforce status, at the same time as conveying the requirements attached to an officer's position. Similar to the classification of convicts, the ability that a place had to implement such a classification amongst the officers was governed by the size and resources available. At the smaller camps, operational necessities and restricted access to infrastructure resources meant that less separation could be engendered. A larger establishment had an increased ability - as well as a requirement - to implement such separation.

⁵³² *Report from the Select Committee on Transportation*, (669), Documents relative to the Absconding of Pierce and Cox from Macquarie Harbour, No. 56 (C), p. 313.

⁵³³ *Ibid.*

At the Tasman Peninsula mine, records of the officers employed at the mine are available for the period 1836-48, providing the names, position and salary of the personnel (Appendix 8).⁵³⁴ This latter set of data acts as a crude marker for the status of the officer, the level of enumeration equating with their official standing at the station. Therefore, in 1843, overseers had a salaried position of £63.17s 6p per annum, compared to the superintendent, who was remunerated at £200 per year.⁵³⁵ Such salary disparity was attached to the employment of all officers at all establishments throughout the colony. When combined with the spatial dataset, through which the accommodation locations of officers within a settlement can in part be established, it allows for further insight into the hierarchical landscape of the station.

With the completion of the new prisoners' barracks by the end of 1838, the majority of the former timber barracks were given over to the accommodation of the station's officers. Two additional quarters had also been constructed to the south. As demonstrated by Figure 7-34, the quarters occupied by the lower paid overseers and constables were situated within the old barracks, directly adjacent to the prisoners' barracks. The positioning of these officers contiguous to the barracks at once reinforced their primary role as supervisors of the convicts, as well as their lower standing at the station. At some remove south of the barracks were two separate quarters, housing the wharfinger and surgeon in one and the catechist in the other. The removal of these quarters from the barracks compound signified their higher salary and status at the station, although the two latter officers were only infrequent visitors to the mine, being based at Port Arthur. Overlooking the whole, to the north, were the military.

⁵³⁴ This series is known as the 'Blue Books' and comprise copies of the official statistics forwarded to Britain. CSO 50, T.A.H.O.

⁵³⁵ List of Officers, 1843, CSO 50/1/18, T.A.H.O.

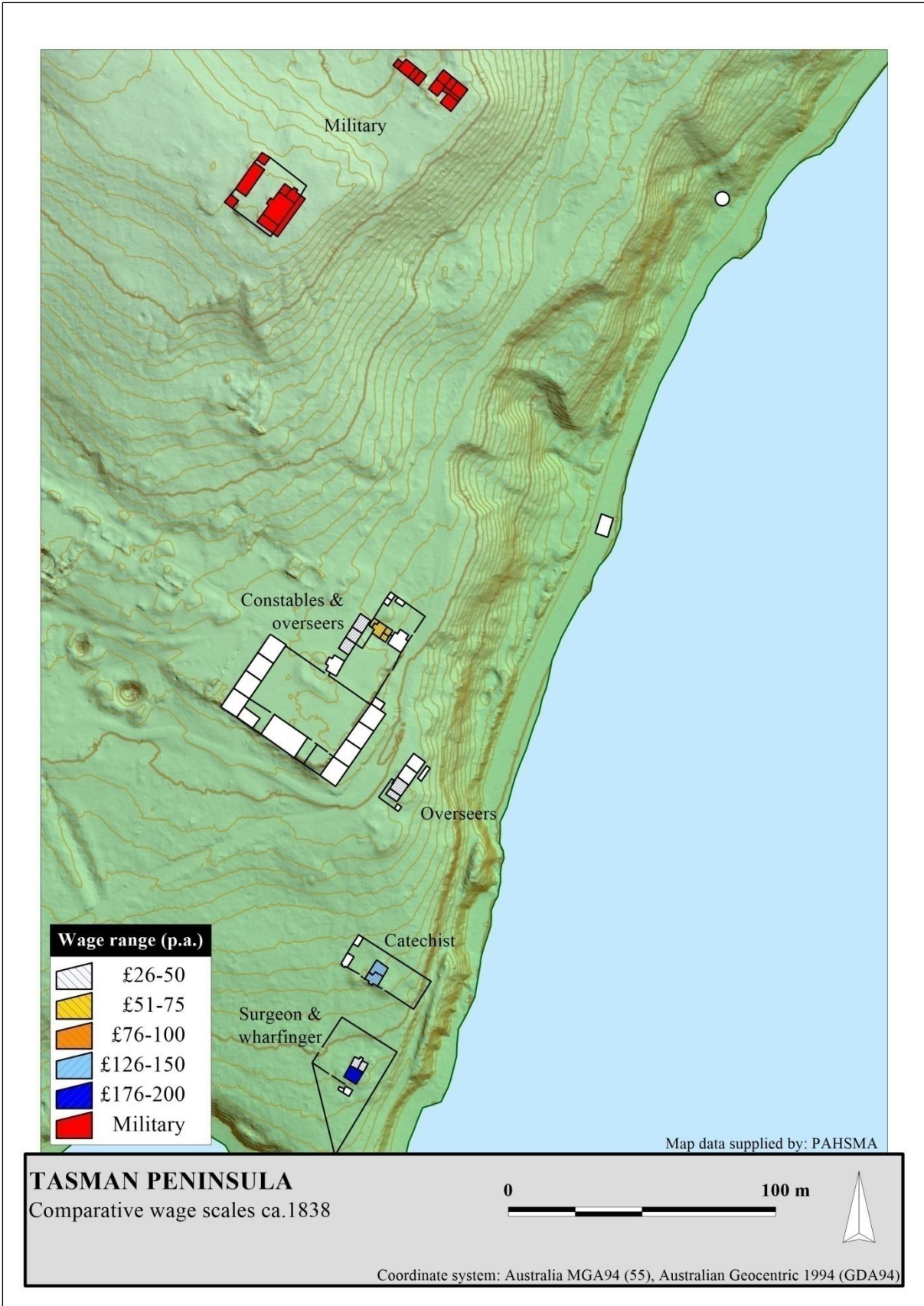


Figure 7-34: Tasman Peninsula, wage scales ca.1838

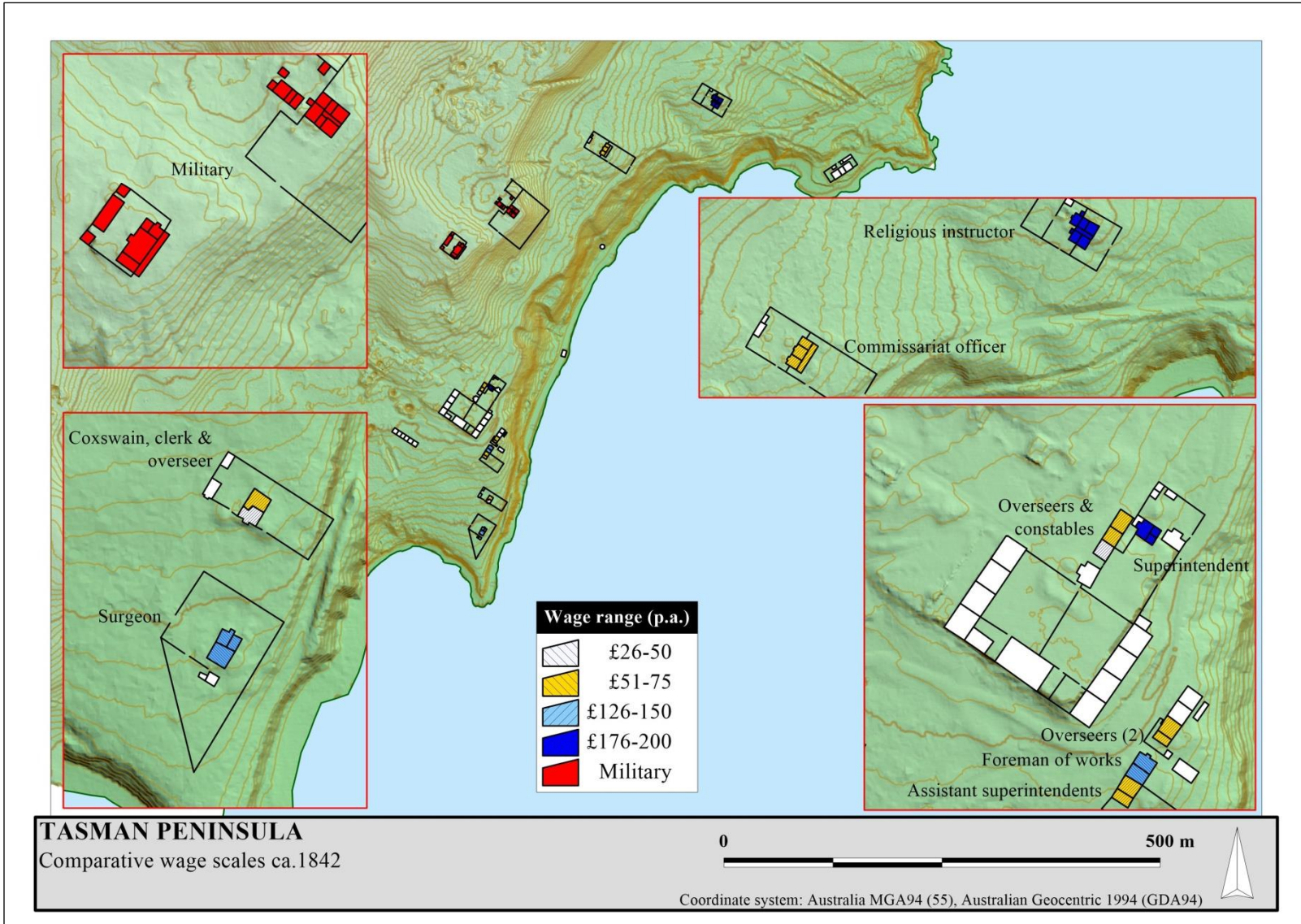


Figure 7-35: Tasman Peninsula, wage scales ca.1842

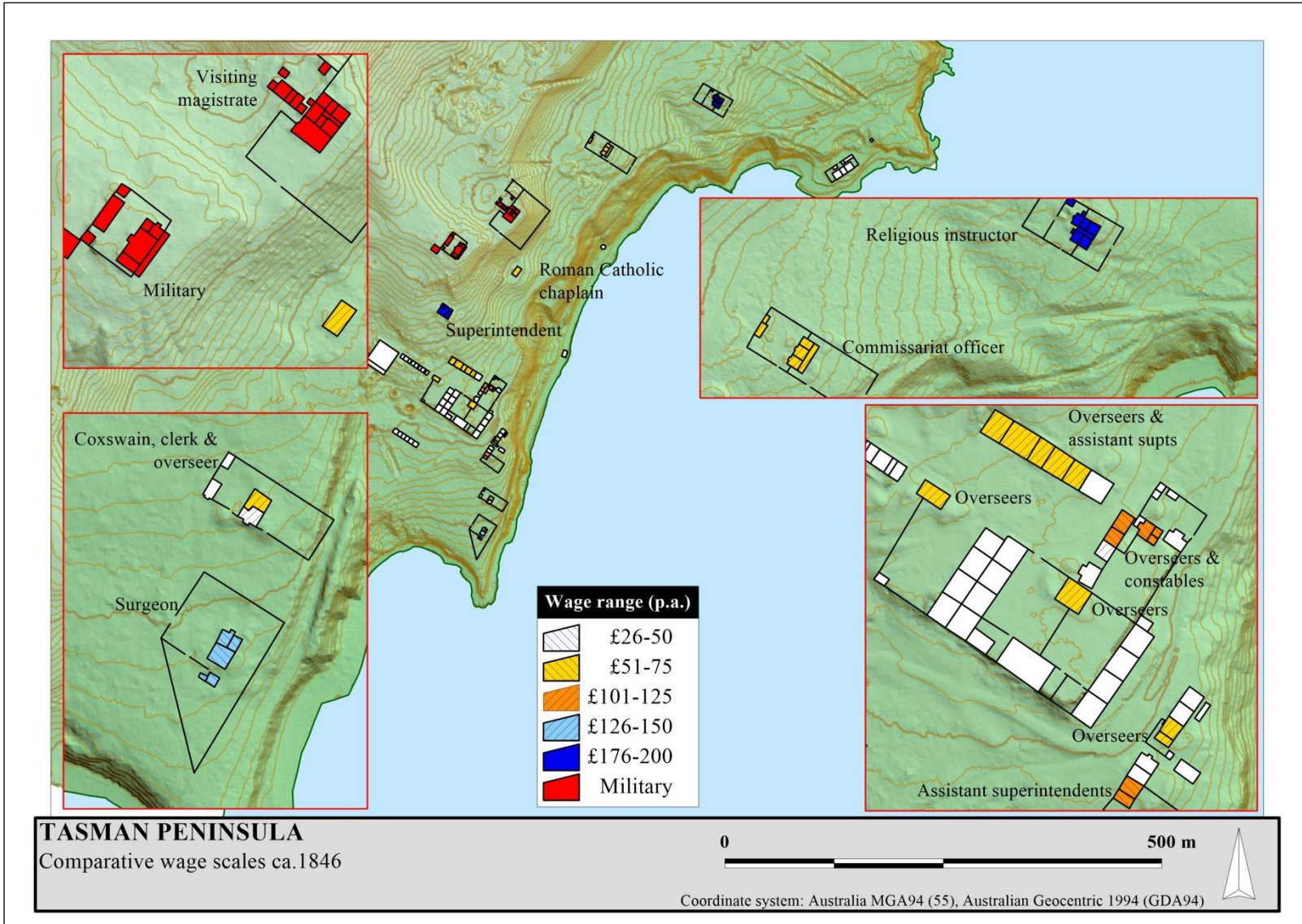


Figure 7-36: Tasman Peninsula, wage scales ca.1846

A new officer hierarchy was instigated by the introduction of probation, with the number of accommodation quarters available at the station increased as a result (Figure 7-35). In addition to the separated southern quarters, new buildings were constructed for the commissariat officer and religious instructor to the north, the latter one of the highest paid officials at the station. One of the quarters south of the prisoners' barracks was occupied by the coxswain and overseer. In adherence to the new regulations, both these were free appointments. Their position away from the barracks was a reflection of this, despite their lower grade of salary. The old timber barracks, as well as the brick and weatherboard row built to the south east of the prisoners' barracks, was occupied by other overseers, assistant superintendents and constables. The station superintendent resided in one of the former barracks' buildings.

The accommodation arrangements during the early 1840s convey an indication of the strain that had been placed upon the station by probation's introduction. In mid-1840, prior to the establishment of the first probation station, the officer hierarchy at the coal mine had been defined by Booth (Table 7-3).⁵³⁶

Officers 1st Class	The Commandant
	Officer commanding troops
	Medical officer (Port Arthur)
	Chaplain (Port Arthur)
Officers 2nd Class	Commissariat and ordnance clerks (1st class)
Officers 3rd Class	Wharfinger
	Overseers (1st class)
	Clerks (2nd class)
	Coxswains (1st class)
Officers 4th Class	Overseers (2nd class)
	Coxswains (2nd class)
	Ticket of Leave convicts

Table 7-3: Coal mines officer hierarchy in April 1840

When the superintendent and assistant superintendent were appointed the following year, they were made first and second class officers respectively. A year later it was evident that the station's infrastructure was failing to convey this hierarchy. Two officers of the first and second class (religious instructor and commissariat officer) had been quartered in newly-constructed buildings to the north.

⁵³⁶ Settlement Order, 30 April 1840, CSO 5/236/6021, T.A.H.O. (BT).

Similarly, the medical officer had been provided with their own quarters south of the barracks. However, the majority of officers were forced to reside in older structures, or had to share cramped spaces with others. One of the southern quarters was split between the coxswain, a clerk and an overseer. Another, located in the row, had two overseers within the one quarters. There was little coherency to the appropriation of buildings, with the more numerous overseers and assistant superintendents spread throughout the settlement, interspersed by quarters for the more senior officers. The superintendent himself was provided with quarters in the midst of the barracks complex. Alongside the foreman of works, the superintendent was the only officer of a higher class who was accommodated within the main settlement hub.

As the accommodation situation improved throughout the 1840s, the distribution of the officers began to better reflect the salary hierarchy (Figure 7-36). Although the documentary and pictorial evidence for this period is sparse, the addition of two separate quarters north of the prisoners' barracks were likely to have been for the accommodation of the roman catholic chaplain and the superintendent. The addition of these buildings marked a general outward spread from the core, as the higher-ranked officers were provided with separate quarters away from the settlement hub. Those quarters remaining near the barracks were likely occupied by officers of lower rank: overseers, constables and assistant superintendents. Their accommodation arrangements were improved by the addition of a row of quarters to the north of the prisoners' barracks. The construction of additional quarters across the station at this time was commensurate with the general improvement experienced across the convict system, as the number of convicts and probation stations throughout the colony began to decrease. Infrastructure for convicts and officer alike were improved at the remaining stations, part of which was the ability to more overtly convey the positional hierarchy amongst the officer population. This saw the removal of officers of a higher classification to the periphery of the settlement and the concentration of the lower-ranked officers nearer the barracks.

Bypassing control

As has been made clear in Chapters 5 and 6, convicts and the supervisors were not passive fixtures in these generated landscapes. Each individual was a willing or unwilling participant, reacting to the environment that had been created around them. Some chose to adhere to the patterns of behaviour that were sought by the imposition of regulation and physical boundaries. Others chose to push against these behavioural and spatial limiters, seeking to wrest for themselves a modicum of control over their own social and environmental interactions. Such occurrences can be difficult to discern in the archaeological and historical record, the illicit nature of their reactions meaning that they could go unrecorded and unremarked - the success of the act making it historically invisible. That both bond and free sought to bypass the limits imposed on them is known due to the failure of some of those acts, as well as through the resultant reaction of the authorities as those limits were re-imposed.

For the convicts, there were myriad of ways to push against the authoritative boundaries. As discussed in Chapter 6, the convict miners were able to use their relatively high status in the workforce to push for improvements in living conditions, or merely to wilfully hamper the progress of the labour they were being forced to carry out. For the remainder of the convict workforce, the conduct records are full of instances of refusing to work, damaging government property, insolence to overseers, or trespassing beyond established boundaries. Each offence was born from frustration, anger or a desire to expand the limits of their fettered existence. The ultimate expression of the latter was the act of absconding, where the convict completely removed themselves from the imposed hierarchies of a camp or station. Poor management and insecure built environments could offer opportunities that could not be resisted by some convicts. The inability of the Tasman Peninsula mine to adequately meet the increased accommodation and supervisory demands placed upon it by the influx of probation men in 1840-41 led to an increase in absconding at that station.⁵³⁷ The insecure nature of the Recherche Bay camp led to a spate of absconding, with 18 men (including five instances of two or more escapees on the same day) escaping from the settlement in the eight months between November 1840 and June

⁵³⁷ John Montagu, Colonial Secretary, to Charles O'Hara Booth, Commandant, 12 January 1841, CSO 5/274/7120, T.A.H.O. (BT).

1841.⁵³⁸ Of the eleven miners forwarded to the Jerusalem mine in February 1844, four were punished for absconding - two on the same day.⁵³⁹ These absconders took advantage of small and insecure places, as at Recherche Bay and Jerusalem, or the administrative disarray, as at the Tasman Peninsula mine. The trigger for absconding may have been maltreatment (perceived or otherwise), or the simple driving desire for freedom. Escape attempts could be pre-meditated, or, as in the case of the convict "William Derricourt", an opportunistic act (Becke 1899: 59-62). Whatever the cause, the absconders sought to gain for themselves a measure of unrestricted freedom which the emplaced supervisory controls simply did not allow.

Deficiencies in the supervisory regime and fabric of these places also provided opportunities for the convict to temporarily escape the official gaze, affording them a chance to improve their condition, gain respite, or to commit further depredations. "William Derricourt", having been elevated to the second class at the Tasman Peninsula, was made a charcoal-burner. Detached from the settlement, he supplemented his ration with illicitly caught game, which he sold to officers' servants for tobacco (Becke 1899: 73). Deficiency in internal supervision meant that William Thompson and his associate "Peg Leg" Johnstone, were able to repair and make boots and clothes using government stores, paid in tobacco by prisoners, overseers and soldiers alike (Clark 2009: 86). Other convicts, perhaps not afforded the opportunities presented to "William Derricourt" or Thompson, created for themselves small oasis of seclusion where illicitly gained goods could be sequestered. Though ultimately caught, Robert Heyes and Joseph McDonald shared such a cache of stolen property.⁵⁴⁰

The workings of the mine provided ample means to escape official surveillance. Although those at Macquarie Harbour, Recherche Bay, South Cape Bay and Jerusalem were not extensive, the workings at the Tasman Peninsula were on such a scale that they provided ample opportunity for convicts to bypass surveillance. Toward the end of the 1840s, over five miles of workings had been cut, a mining overseer reporting that it would take him three hours to progress through the works (Fry 1850:

⁵³⁸ 'List of men who have absconded from the mining party at Recherche Bay since the date of that party being stationed there', James Smith, Visiting Magistrate, 1841, CSO 8/13/301, T.A.H.O.

⁵³⁹ Aaron Ashwood, 11352, *Anson*, CON 33/1/49, T.A.H.O.; Hugh Liddle, 11616, *Anson*, CON 33/1/49, T.A.H.O.; Henry Mellor, 11637, *Anson*, CON 33/1/49, T.A.H.O.; James Richardson, 11699, *Anson*, CON 33/1/49, T.A.H.O.

⁵⁴⁰ Joseph McDonald, 1545/1274P, *Lady Raffles*, CON 33/1/6, T.A.H.O.; Robert Heyes, 2733/1312P, *Lady Raffles*, CON 33/1/6, T.A.H.O.

176).⁵⁴¹ When he visited the mines in 1848, Henry Phibbs Fry recorded that a single constable and overseer (both convicts) oversaw the works below ground, making it impossible to exert effective supervision over the prisoners (Fry 1850: 177). The drives and galleries were only intermittently lit by lamps.⁵⁴² J.D. Motherwell, surgeon at the mine between 1842-45, wrote of convicts working "in comparative darkness and therefore under the control of their overseers almost unseen and unseeing of each other - in close foul atmosphere, in filth and dirt and absence of personal cleanliness".⁵⁴³ Some convicts took advantage of the supervisory gaps, slipping into the shadows in order to gain respite, or commit depredations upon fellow convicts. A particularly brutal example of the latter in 1845 led to the execution of two prisoners, the case used in part to justify later investigations into probation.⁵⁴⁴

Acts of defiance were not limited to the convict population. While perhaps an understandable reaction for members of the convict population, it was perhaps not as obvious why members of the supervisory echelons may have felt the need to resist the imposition of control. Many of them were free and therefore clear of the restraints that shackled those in bondage. Those who were sentenced or Ticket of Leave convicts serving in supervisory positions had the threat of loss of elevation and a return to the sentenced ranks. Yet, they found cause to push against the behavioural and spatial limits that their environments imposed upon them. Like the sentenced convicts, the supervisors could overtly challenge the very regulations they were required to enforce. Both "William Derricourt" and Thompson recorded the connivance of soldiers, constables and overseers in the appropriation and misuse by convicts of government property (Becke 1899: 77; Clark 2009: 86). Such transactions served to ease the condition of both parties, though were considered to be a serious contravention of the regulations. Alcohol, always heavily regulated at a convict settlement, also provided a similar respite, though over-indulgence attracted severe censure.⁵⁴⁵ James Clare, mining overseer at

⁵⁴¹ Depositions of John Thomas, overseer, made to Chief Justice J.L. Pedder, 16 December 1845, CSO 20/17, T.A.H.O. (UB).

⁵⁴² Depositions of James Hurst, overseer, made to Chief Justice J.L. Pedder, 16 December 1845, CSO 20/17, T.A.H.O. (UB).

⁵⁴³ J.D. Motherwell, former surgeon Tasman Peninsula coal mine, to John Hampton, Comptroller General, 10 June 1846, CO 280/202/549, T.A.H.O. (UB).

⁵⁴⁴ James Wilson to Dr Motherwell, former surgeon Tasman Peninsula coal mine, 12 January 1846, CO 280/202/549, T.A.H.O. (BT); Robert Harris, 11556, *Anson*, CON 33/1/49, T.A.H.O.

⁵⁴⁵ For example: Brigade Major to Charles O'Hara Booth, Commandant, 26 June 1838, CSO 5/130/3102, T.A.H.O. (BT); Henry Mottram 1109, to Percy Rice, Commanding Officer, 26 May 1840, CSO 5/243/6322, T.A.H.O. (BT).

Jerusalem, was removed from the works for having allowed alcohol in his possession to be stolen by a convict.⁵⁴⁶

More rare were the occurrences of those in supervisory positions who sought to push against the whole apparatus of the system. When he took over as superintendent in October 1843, James Purslowe apparently oversaw an improvement in conditions at the Tasman Peninsula mine. The system of classification was improved and convicts allowed to work at their trade. The chains of the men were also lightened. For this, as well as an apparent disregard for regulations, Purslowe was replaced in February 1844 by Henry Smith. On paper, Purslowe's dismissal was puzzling, as his four months in charge had resulted in a lessening of absconding and absences, and an improvement in the convicts' condition (Syme 1848: 315). This was supported by "William Derricourt's" account, who referred to Purslowe as a "humane superintendent" (Becke 1899: 75). Purslowe, a military officer who had resigned his commission to join the convict service, had been an early detractor of the probation system, appalled at the systematic disarray of the early 1840s: "Startled at the monstrosities I witnessed - the corruption of officers - the subversion of all discipline, the utter want of system prevailing throughout the stations" (Syme 1848: 319). This had led him into conflict with some of his superiors, including the visiting magistrate at the Tasman Peninsula mine, Frederick Mainwaring, whom Purslowe accused of appropriating convict labour illegally (Syme 1848: 313). Mainwaring countered by accusing Purslowe of elevating convicts to positions to which they were not entitled, also dismissing Purslowe's claims to have improved the station.⁵⁴⁷ Mainwaring also labelled Purslowe "a clever and smart Sergeant had been thus transformed into a vulgar and illiterate Gentleman". Mainwaring, with his connections to Matthew Forster and Lieutenant Governor Eardley Wilmot, subsequently had Purslowe removed (Syme 1848: 318).

⁵⁴⁶ Mr Erskine, Visiting Magistrate, to Principal Superintendent, 28 March 1842, CSO 22/47/190, T.A.H.O.

⁵⁴⁷ Unreferenced memorandum, n.d. (1846?), CO 280/221/560, T.A.H.O. (UB).

Conclusion

The incarcerative spaces of these case studies were formed and developed in response to the multi-scalar ideological and practical factors discussed in Chapter 5. At the smaller case studies, these spaces were primarily formed as a response to the immediate requirement to accommodate a small convict workforce. The tenuous nature of their existence, entirely reliant upon the successful exploitation of the coal resource, meant that the amount of material and labour invested in these places was negligible. Hence, when the coal failed to be proven at Macquarie Harbour, South Cape Bay and Jerusalem, the actual footprint left behind from these operations was limited. This was also the case at Recherche Bay which, despite being longer-lived, was ultimately abandoned before there was a requirement to improve the spaces within which the convicts were incarcerated. The physicality of these places is today characterised by ambiguity. Limited corresponding documentary evidence means that even a basic interpretation of their penological landscapes is difficult, entirely reliant upon comparative modelling.

Where a place moved beyond the fledgling operational requirements, it becomes possible to discern the effect of influences beyond the immediate need to provide shelter. At the Tasman Peninsula station the success of the mining operation led to an influx of prisoners, which in turn triggered the need for expanded accommodation. A second wave of expansion was required when it became a probation establishment and the prisoner population once again increased. Yet, with the colony unable to match the necessary material and labour requirements, there was a severe lag between when accommodation was needed and when it was constructed. A disconnect arose between demand and supply, caused by factors beyond the immediate control of the station administrators. As a result, the greater aims that were supposed to be guiding the formation of the built fabric - separation and classification - were implemented with difficulty. It was only as colony-wide pressures began to ease, coupled with an increasing focus on the interior morality of convict establishments, that an improvement in the accommodation at the station was able to be affected.

Each of these places was overseen by a supervisory staff, without whom the fabric of the camps and stations were a meaningless and ineffective means of control. Divided according to whether they were

involved in the direct supervision of convicts, or their administration and welfare, the staff at these places existed in an environment as stratified as the one that was imposed upon the prisoners. At a station like that on the Tasman Peninsula, a large number of both free and bond were required to fulfil the required roles, leading to a complex supervisory arrangement. At the smaller camps, less staff resulted in more simplified arrangements. As with the built fabric, the composition of the staff, as well as their relationship to each other, changed in response to wider shifts in convict labour management. At the Tasman Peninsula mine, this was evidenced by the massively increased supervisory requirements that were introduced by probation. Although meant to increase commensurate with the size of the convict population, a lag similar to that experienced in the expansion of the station's built environment meant that the number of staff did not keep pace. Added to this were the problems of filling the positions with experienced free people, made necessary by probation's regulations. As with the built environment, it was not until the mid-1840s that the ranks of the supervisory personnel began to be satisfactorily filled.

The built environment and the supervisory regime that was erected within and around it was designed to control the internal and external landscape of these places. At the smaller camps, the control of the landscape was hampered by a lack of labour and materials, as well as the ephemeral nature of the majority of these places which worked against such investment. At the larger Tasman Peninsula station, all the hallmarks of the powered landscape were displayed, its historic landscape a shifting patchwork of controlled zones restricting the day-to-day existence of convict and free alike. Within this landscape it is possible to understand the attempts made to mould and define the prisoners' environment to elicit the desired behavioural responses and labour output. At the same time this environment sought to reinforce the internal hierarchy within the ranks of the prisoners, as well enforce the more obvious separation between the supervisors and the supervised. These hierarchical landscapes also extended to the supervisors themselves, the social and economic divisions inherent with the staff at the station replicated in the form and placement of the accommodation afforded to them. Yet, free and bond alike retained agency, the ability to push against and move beyond the

boundaries imposed upon them, able to remove themselves entirely from these restricted environments, or question the very system they had been called upon to enforce.

So far there has been a concentration upon the penological aspect of these places of convict labour. The influences which shaped their landscapes and the way in which their physicality reflect this have been examined in reference to the punitive, deterrent and reformative aims which characterised the management of an unfree workforce. As an answer to the question of “punish or profit”, this would suggest that these places were directed by the punishment motive. However, as the discussion in Chapter 6 attests, the “profit” motive was very much present at these places. The next chapter turns to an engagement with this economic motive, a motive that was primarily responsible for the creation and maintenance of the industrial elements of these landscapes.

CHAPTER 8: APPLYING THE MODEL - PRODUCTION

I am come now to the article of *pecuniary Economy*...

Jeremy Bentham, *Panopticon; or, the Inspection-House*, Letter IX, 1791

It is a central tenet of this thesis that economic motives always formed part of the reasoning behind the deployment of convicts in productive activities. Such activities could be the primary productive focus of an establishment, or the ancillary activities complementing this primary productive focus, either by directly contributing to the primary work or through bolstering levels of self-sufficiency. As outlined in Chapter 2, the deployment of the convicts in productive activities and the landscapes that were created can be understood through the lens of five key activity categories: *extractive*, *agrarian*, *manufacturing*, *service* or *transport*. The following chapter will examine the five case studies from the perspective of these categories, with a particular focus on the deployment of the convicts in the extractive activities which dominated the labour regimes of these places. Their residual archaeological landscapes will be examined, providing insight into the manner in which convict labour was deployed, as well the methods that they utilised as part of the industrial process. Often carried out on the colonial frontier, these industrial processes will also be examined from the perspective colonisation processes, whereby the convicts became unwilling participants in the settlement and exploitation of the colony. Also under consideration will be the social and economic context within which the case studies operated, with the intention of understanding how the balance between profit and punishment motives was managed.

Productive landscapes

The following section is primarily concerned with an analysis of process. Industrial process, particularly the extractive process, often concerns the interaction between labour and the environment. The environment dictated where a resource was located, or where it could grow, with the scale of labour deployment reflecting the desirability of attaining the particular resource. The convicts' labour

at a camp or station could be focussed upon one particular activity, or divided amongst a number. From the felling of timber and quarrying of stone, to the repairing of footwear or tools and the tending of ration-augmenting crops, the productive activities carried out at these case study sites were completely geared toward the enhancement of the primary mining activity. The extent to which they became part of a place's labour regime was a reflection of the size and complexity of the operation being undertaken, as well as the particular convict labour management system under which it was being carried out. The relative longevity and larger operational size of the Tasman Peninsula mine meant that its archaeological and historical record contains evidence of all aspects of the key activity categories. The four remaining operations are less complex, the type and variety of productive categories directly scaleable to the size and longevity of their operations.

The presence of the agrarian form of production provides an example. At Jerusalem, Recherche Bay, South Cape Bay and Macquarie Harbour there is little archaeological or historical evidence that the convicts were engaged in agrarian activity. All were camps reliant upon larger establishments for the provision of rations and material. Only at Recherche Bay is there evidence of any form of such activity, with the stabling of at least three horses in 1841 to work the winding gin at the shaft.⁵⁴⁸ At the Tasman Peninsula station, the convicts were eventually tasked with pursuing agricultural self-sufficiency. No agricultural or pastoral activity was carried out between 1833-35 and rations for convicts and overseers alike were wholly sourced from Port Arthur. By 1837, however, the establishment's more permanent standing was indicated by the presence of an enclosed garden to the west of the military barracks (Figure 8-1).⁵⁴⁹ The produce of this garden supplied a proportion of the convicts' vegetable ration (Lempriere 1839: 78).

⁵⁴⁸ Extract from the Diary of the Mining Party at North Port Recherche Bay from the 18th to the 26th June 1841, Tuesday 22 June 1841, CSO 8/13/301, T.A.H.O.

⁵⁴⁹ Unknown artist (Henry Laing?), *The Mining Establishment, Coal Point*, ca.1837, CSO 5/72/1584, T.A.H.O.

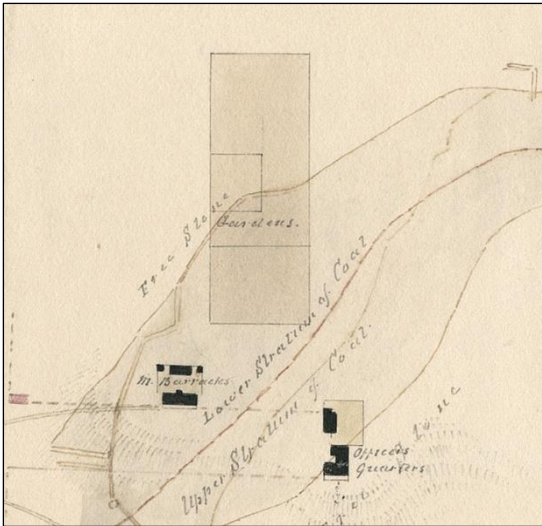


Figure 8-1: Detail from Lhotsky's 1837 plan showing the location of the garden to the west of the military barracks
 (Unknown artist (Henry Laing?), *The Mining Establishment, Coal Point*, ca.1837, CSO 5/72/1584, T.A.H.O.)



Figure 8-2: Detail from illustration by Bishop Nixon, showing rig-and-furrow cultivation between the military barracks and the semaphore
 (Bishop F. Nixon, *Coal Mines, Tasman Peninsula*, n.d. [ca.1837-9], Port Arthur Historic Site Resource Library, [original Dixson Library, State Library of New South Wales])

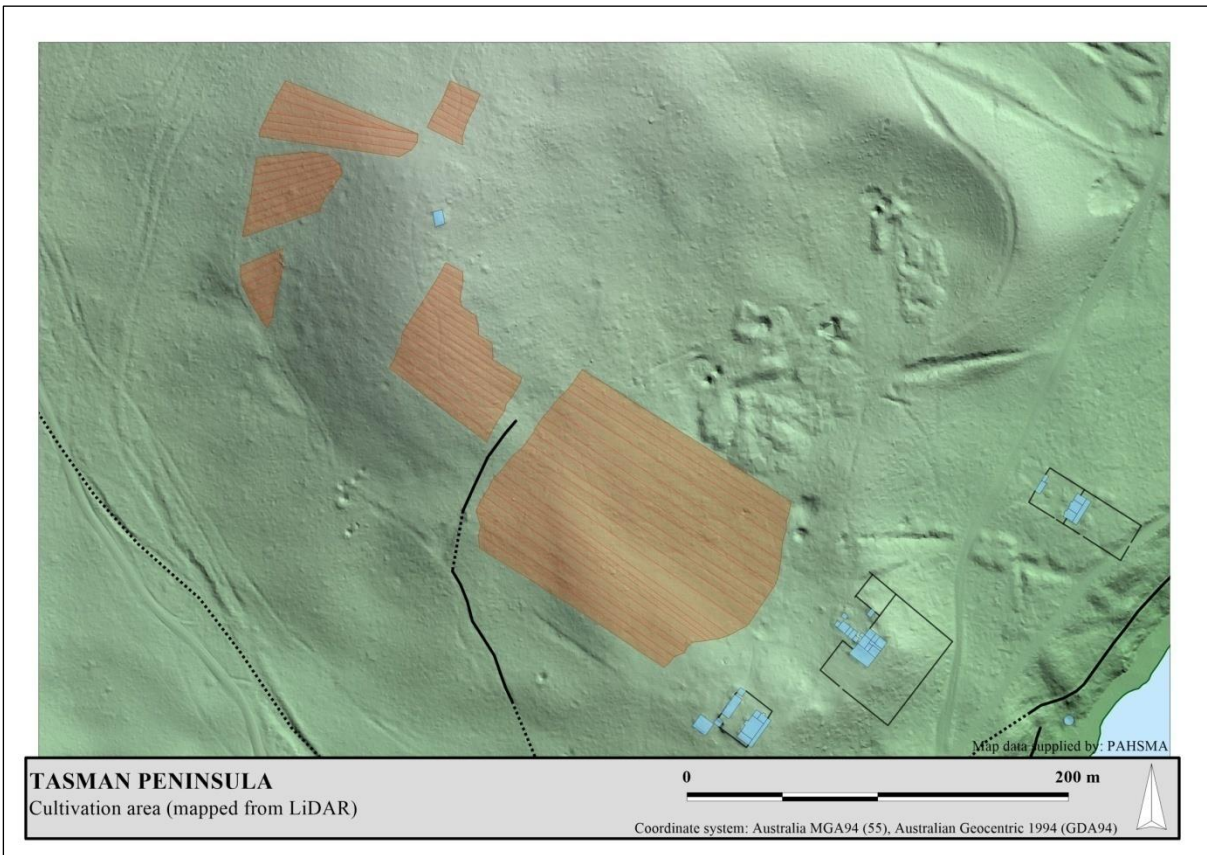


Figure 8-3: Tasman Peninsula. Area under cultivation, mapped from LiDAR

As the station progressed, the area given over to cultivation slightly increased, with more land to the west of the barracks taken up, as well as smaller plots around the officer's accommodation (Figure

8-2).⁵⁵⁰ By the close of 1844 the area under cultivation was five acres.⁵⁵¹ When he visited the station at the end of 1846, Charles Joseph La Trobe noted that fifteen acres were under cultivation, although by the time the station was taken over by private lease, this had fallen to nine acres.⁵⁵² The energy spent on agriculture was low, compared to the specialised agricultural hub of Saltwater River, which recorded an acreage of 113 in 1844.⁵⁵³ Whereas the mines employed 14 (4%) of its 313 convicts in agriculture toward the end of the 1846, 129 (30%) of Saltwater River's 428 convicts were directly engaged in agriculture.⁵⁵⁴ Traces of this cultivation at the mine are clearly visible across the eastern and western slopes of Coal Mine Hill, the different widths of the rig-and-furrow relating to the type of crop originally planted (Figure 8-3). This area of cultivation accounts for 5.6 acres, likely being that cultivated until the late-1840s. The location of the additional acreage is not known.

Although all manufacturing activity at these places was intended to aid the overall goal of coal extraction, some processes did so more directly than others. The employment of blacksmiths to make and repair elements required in the mine was one such activity. At both Recherche Bay and the Tasman Peninsula, blacksmiths shops were established to forge and repair the tools, equipment and fastenings required in the mine. In the space of one week in 1841, the two convicts employed as blacksmiths at Recherche Bay had made 36 tools for excavating and boring, as well as 80 fastenings of different types.⁵⁵⁵ At the larger Tasman Peninsula station, the blacksmith was similarly engaged in meeting the needs of the mine, La Trobe reporting that "the work for it takes up most of the

⁵⁵⁰ Unknown artist, *Probation Station "Coal Point" Tasman's Peninsula*, ca.1842, Tasmania Papers 156, State Library of New South Wales.

⁵⁵¹ *Convict Discipline*, Matthew Forster, Comptroller General, to Sir John Eardley Wilmot, Lieutenant Governor, Enclosure no. 7, Return of land in crop and prepared for agriculture, 31 December 1844, (659), p. 81.

⁵⁵² *Convict Discipline and Transportation*, Copy of a despatch from C.J. La Trobe, Esq, Acting Governor of Van Diemen's Land, to Earl Grey, 31 May 1847, (941), p. 69; *Convict Discipline and Transportation*, John Hampton, Comptroller General, to Sir William Denison, Lieutenant Governor, 15 November 1847, Enclosure no. 22, Return showing the Extent of Land in Cultivation at Probation Stations and Port Arthur, 31 October 1848, (1022) (1121), p. 181.

⁵⁵³ *Convict Discipline*, Matthew Forster, Comptroller General, to Sir John Eardley Wilmot, Lieutenant Governor, Enclosure no. 7, Return of land in crop and prepared for agriculture, 31 December 1844, (659), p. 81.

⁵⁵⁴ *Convict Discipline and Transportation*, Copy of a despatch from C.J. La Trobe, Esq, Acting Governor of Van Diemen's Land, to Earl Grey, 31 May 1847, Enclosure no. 1, A Return of Convict Stations in the Colony of Van Diemen's Land, visited at the close of 1846, (941), p. 48.

⁵⁵⁵ Extract from the Diary of the Mining Party at North Port Recherche Bay from the 18th to the 26th June 1841, Friday 18 June - Saturday 26 June, 1841, CSO 8/13/301, T.A.H.O.

blacksmith's time".⁵⁵⁶ At the time of his visit in 1846, five convicts were working as blacksmiths, a slight increase on the four recorded at the beginning of 1841.⁵⁵⁷

At Recherche Bay and the Tasman Peninsula mine a concerted program of timber-felling, splitting and sawing resulted in the provision of the props, planking, beams and rails required by the mine works - as well as for the construction and maintenance of the establishments' structures. Although unrecorded, the local timber resources were also likely to have been utilised at Jerusalem, South Cape Bay and Macquarie Harbour. In addition to the timber resource, stone, lime and clay were also utilised for the buildings works at these operations. At the Tasman Peninsula mine, the earliest barracks had likely incorporated chimneys constructed from fieldstone, no workable clay deposits having been identified at the settlement and bricks only imported to the camp on a limited scale.⁵⁵⁸ Shell lime had begun to be manufactured and the construction of the military officers' outbuilding in ca.1837 from sandstone indicates that the quarry was also worked at this time.⁵⁵⁹ The scale of the quarrying operation was enough to supply the sandstone required for the construction of the new prisoners' barracks in ca.1838.

By the time the Tasman Peninsula mine became a probation station in 1841, the manufacturing processes had been well established (Table 8-1).⁵⁶⁰ Five carpenters, four splitters and five sawyers (as well as over 68 men in the carrying gangs) supplied and worked the timber required at the mines. Five convicts collected and burnt lime and converted timber into charcoal, with a further four men working as quarrymen and masons. At Recherche Bay, four sawyers provided the timber to two carpenters.⁵⁶¹

⁵⁵⁶ *Convict Discipline and Transportation*, Copy of a despatch from C.J. La Trobe, Esq, Acting Governor of Van Diemen's Land, to Earl Grey, 31 May 1847, (941), p. 69.

⁵⁵⁷ *Secondary Punishment*, John Franklin, Lieutenant Governor, to Lord John Russell, Secretary of State, Daily Abstract of Work performed by Gangs at Port Arthur, Tasman's Peninsula, 1 January 1841, (412), p. 137.

⁵⁵⁸ Charles O'Hara Booth, Commandant, to John Montagu, Colonial Secretary, 30 October 1835, CSO 1/832/17671, T.A.H.O.

⁵⁵⁹ Unknown artist (Henry Laing?), *The Mining Establishment, Coal Point*, ca.1837, CSO 5/72/1584, T.A.H.O.

⁵⁶⁰ *Secondary Punishment*, John Franklin, Lieutenant Governor, to Lord John Russell, Secretary of State, Daily Abstract of Work performed by Gangs at Port Arthur, Tasman's Peninsula, 1 January 1841, (412), p. 137.

⁵⁶¹ Extract from the Diary of the Mining Party at North Port Recherche Bay from the 18th to the 26th June 1841, Friday 18 June - Saturday 26 June, 1841, CSO 8/13/301, T.A.H.O.

	1841 ⁵⁶²	1846 ⁵⁶³	1847 ⁵⁶⁴
Blacksmiths	4	5	9
Brickmakers	-	4	4
Carpenters/coopers	5	15	15 (14 carpenters, 1 cooper)
Construction	-	12	17 (7 bricklayers, 3 builders, 7 jetty builders)
Lime/charcoal burners	5	8	6 (2 lime burners, 4 charcoal burners)
Masons/quarrymen	4 (2 quarrymen, 2 masons)	2	10 (4 quarrymen, 6 masons)
Splitters	4	5	-
Sawyers	5	12	10

Table 8-1: Table showing convicts employed in manufacturing activities at the Tasman Peninsula mine, 1841, 1846 and 1847

Tasman Peninsula convicts were also employed in shoemaking during the 1840s. From at least the early 1840s a small number of men were tasked with repairing the boots and shoes required at the station. The convict William Thompson, a shoemaker by trade, was placed in this occupation after his stretch down the mine (Clark 2009: 83, 86). Including himself, there were three prisoners at work in the shop, repairing the clothes and footwear of convicts and officers. By 1846 there were still two men employed as shoemakers and tailors, rising to two tailors and four shoemakers by 1847.⁵⁶⁵

The larger the establishment, the more convicts were required to act in service roles. These convicts kept the establishment in trim, either through providing goods and materials, or by performing essential maintenance services. Only at Recherche Bay and the Tasman Peninsula were convicts recorded as having been employed in this capacity. The smaller labour forces at Jerusalem, South

⁵⁶² *Secondary Punishment*, John Franklin, Lieutenant Governor, to Lord John Russell, Secretary of State, Daily Abstract of Work performed by Gangs at Port Arthur, Tasman's Peninsula, 1 January 1841, (412), p. 137.

⁵⁶³ *Convict Discipline and Transportation*, Copy of a despatch from C.J. La Trobe, Esq, Acting Governor of Van Diemen's Land, to Earl Grey, 31 May 1847, Enclosure no. 1, A Return of Convict Stations in the Colony of Van Diemen's Land, visited at the close of 1846, (941), p. 48.

⁵⁶⁴ *Convict Discipline and Transportation*, John Hampton, Comptroller General, to Sir William Denison, Lieutenant Governor, 15 November 1847, Enclosure no. 30, Return of the Number of Convicts at each Station on October 29, 1847, showing how they were employed on that day, (1022) (1121), p. 184.

⁵⁶⁵ *Convict Discipline and Transportation*, Copy of a despatch from C.J. La Trobe, Esq, Acting Governor of Van Diemen's Land, to Earl Grey, 31 May 1847, Enclosure no. 1, A Return of Convict Stations in the Colony of Van Diemen's Land, visited at the close of 1846, (941), p. 48; *Convict Discipline and Transportation*, John Hampton, Comptroller General, to Sir William Denison, Lieutenant Governor, 15 November 1847, Enclosure no. 30, Return of the Number of Convicts at each Station on October 29, 1847, showing how they were employed on that day, (1022) (1121), p. 184.

Cape Bay and Macquarie Harbour making such roles unnecessary. At Recherche Bay, five (11%) of the 43 convicts in 1841 were recorded in service roles.⁵⁶⁶ One of these doubled as a clerk and overseer, the remainder performing the roles of watchman, groom, cook and messenger.

On the Tasman Peninsula, a proportionally greater number of convicts were placed in service roles, reflecting the larger population of the station. Thomas Lempriere recorded that, of a population of 150, 36 (24%) were employed in roles directly servicing the requirements of the station and staff (Lempriere 1839: 79). By 1841 a population of 235 convicts supported 26 (11%) service workers (Table 8-2). Five years later, with probation firmly established, the number of convicts employed in service roles had risen to 58, accounting for 14% of the 403 convicts at the station. By 1847, 76 (17%) of the 450 convicts at the Tasman Peninsula mine were employed in service activities.

	1841 ⁵⁶⁷	1846 ⁵⁶⁸	1847 ⁵⁶⁹
Barbers	-	1	2
Carriers	-	13	15
Clerks/monitors	-	1	1
Cooks/bakers	5	5	6
Dispenser	1	-	-
Messengers	2	1	2
Scavengers	-	-	6
Servants to officers	6	16	16
Signalmen	2	-	2
Store porters/labourers	-	2	1
Wardsmen/watchmen	10	22	22
Washermen	-	-	2
Woodcutters	-	-	1
Unspecified barracks duties	-	2	-

Table 8-2: Table showing convicts employed in service activities at the Tasman Peninsula mine, 1841, 1846 and 1847

The networked landscape

Whether drawing upon a hinterland for the attainment of resources, or part of a larger transport chain for the delivery and removal of people, produce and material, each of these places relied upon linkages between nodes of supply and demand. Places of extraction needed to be linked to nodes of

⁵⁶⁶ Extract from the Diary of the Mining Party at North Port Recherche Bay from the 18th to the 26th June 1841, Friday 18 June - Saturday 26 June, 1841, CSO 8/13/301, T.A.H.O.

⁵⁶⁷ *Secondary punishment*, John Franklin, Lieutenant Governor, to Lord John Russell, Secretary of State, Daily Abstract of Work performed by Gangs at Port Arthur, Tasman's Peninsula, 1 January 1841, (412), p. 137.

⁵⁶⁸ *Convict Discipline and Transportation*, Copy of a despatch from C.J. La Trobe, Esq, Acting Governor of Van Diemen's Land, to Earl Grey, 31 May 1847, Enclosure no. 1, A Return of Convict Stations in the Colony of Van Diemen's Land, visited at the close of 1846, (941), p. 48.

⁵⁶⁹ *Convict Discipline and Transportation*, John Hampton, Comptroller General, to Sir William Denison, Lieutenant Governor, 15 November 1847, Enclosure no. 30, Return of the Number of Convicts at each Station on October 29, 1847, showing how they were employed on that day, (1022) (1121), p. 184.

manufacturing or transport. Sites of manufacturing required an outlet for their product. Often the positioning of these nodal points was a result of an interaction between the abilities or limitations of convict labour and the dictates of the natural environment. Stone, clay and timber could only be worked where the resources outcropped or grew in accessible stands. In such circumstances the environment in large part controlled *where* the convict labour would be deployed, with the *how* left up to the constraints of organisation and management discussed in the previous chapters. The limitations of transport further affected where such extractive or manufacturing activity could be located, the size and complexity of the supply/demand nodes and the accompanying transport linkages dependent upon the extent of the operation to which they were attached. As an operation grew in size, so too did the form and function of a place's internal networks, as well as those networks linking it to external nodes of supply or demand.

During the initial stage of exploration and testing, the production and supply networks were geared to support the operation's establishment, key to which was the accommodation of the convicts and their overseers. At each of these sites, this was achieved through a combination of exploitation of the local resources and the importation of required materials. How much the new operation relied upon importation depended upon its geographical situation and any pre-existing linkages. The closer a place was to established networks, the less was its reliance upon the immediate attainment of natural resources.

At South Cape Bay, its isolation from established networks, meant that very little of the materials required for its formation could have been imported to the camp. Tools and fixtures would have been imported, but the stone and timber from which the huts were constructed was sourced from the immediate area. Contrast this to Recherche Bay, where its links to the Tasman Peninsula and an easier supply network meant that its establishment was achieved through both importation and the immediate attainment of surrounding resources. A manifest of the equipment sent with the first miners in 1840 shows that, alongside the tools, fastenings, fixtures and raw iron for metalworking, were

boards, beams and planks for the construction of the infrastructure.⁵⁷⁰ Similarly, when the operation on the Tasman Peninsula was newly-commenced, the construction of huts was delayed due to the non-arrival of a ship carrying the requisite tools, suggesting that the convicts were expected to construct their own accommodation.⁵⁷¹

As a place progressed beyond exploration and moved toward exploitation, its links to productive and supply networks were consolidated and, sometimes, expanded. The successful exploitation of the coal triggered an increased requirement for labour, resulting in a heavier draw upon the networks of supply, with the increasing infrastructure needs having a commensurate effect upon the productive network. Added to this was the creation of new supply networks, as other stations or supply hubs were established, and the exploitation of new product. At Recherche Bay, useable timber had been worked-out within the immediate area of the mining camp by mid-1841, at which time a team of sawyers was deployed to the opposite side of the bay (Figure 8-4).⁵⁷² Although undocumented, as mining continued over the following two years, it is likely that this area of exploitation grew as the timber-getters were required to go further and further from the main camp. As Recherche Bay operated under the auspices of Port Arthur, requisitions for supplies were required to be forwarded to that establishment, Commandant Booth either sending the requested supplies directly by the Eaglehawk Neck boat, or forwarding the requisition on to Hobart.⁵⁷³ The small amount of coal that made its way from the operation was sent direct to Hobart for sale. The line of supply at Jerusalem was shorter, the mining camp able to draw upon the resources of the large probation hiring depot at Jerusalem. A small workforce meant that the camp was rarely in a position to spare men to cut and work the timber required, necessitating the supply of this article from the larger station.⁵⁷⁴ Other stores were acquired as needed from Hobart.⁵⁷⁵

⁵⁷⁰ Supplementary Estimate of Iron, Tools Etc required for opening the Coal Mines at Recherche Bay, 24 August 1840, CSO 5/224/5707, T.A.H.O.

⁵⁷¹ Charles O'Hara Booth, Commandant, to Josiah Spode, Chief Police Magistrate, 26 November 1833, Tasmanian Papers No. 35, M.L. (BT).

⁵⁷² Extract from the Diary of the Mining Party at North Port Recherche Bay from the 18th to the 26th June 1841, Friday 18 June - Saturday 26 June, 1841, CSO 8/13/301, T.A.H.O.

⁵⁷³ *Ibid.*, Saturday 26 June, 1841.

⁵⁷⁴ John Hall, mining overseer, to Josiah Spode, Principal Superintendent, 7 March 1842, CSO 22/47/190, T.A.H.O.

⁵⁷⁵ Josiah Spode, Principal Superintendent, to G.T. Boyes, Colonial Secretary, 6 July 1842, CSO 22/47/190, T.A.H.O.

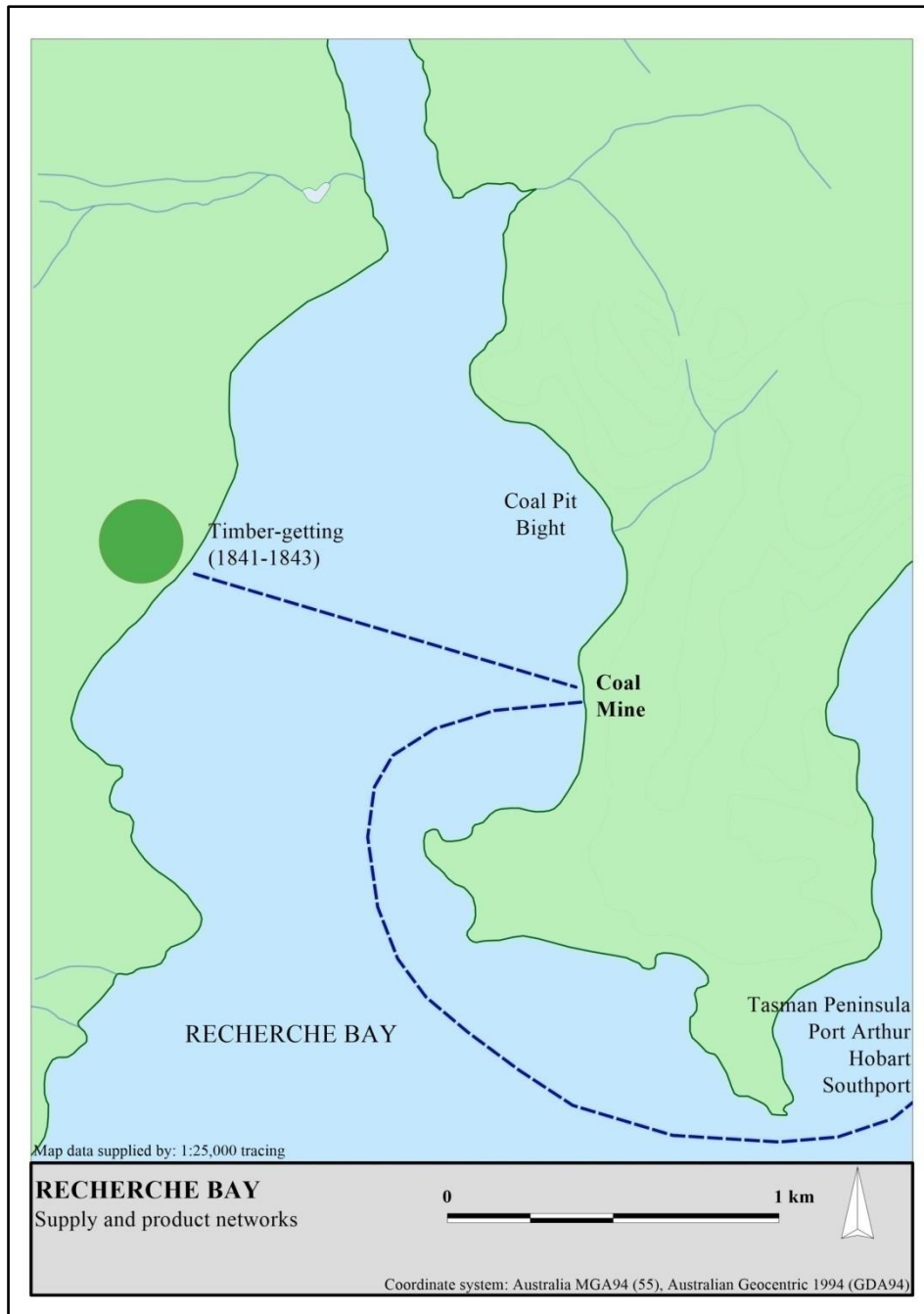


Figure 8-4: Recherche Bay supply and product networks

Only on the Tasman Peninsula were the productive and supply networks fully expressed, the mine situated within a complex network of resource exploitation, supply and demand extending over land and sea linkages. From its commencement, the mine was part of a supply network that stretched from Port Arthur to Hobart. During the penal period, it was linked to Port Arthur via a terminus at Norfolk Bay which served as a nodal point for the overland delivery of stores from Port Arthur (Figure 8-5). Further to the north was the military outstation at Eaglehawk Neck, as well as Woody Island, where

the supply boat was secured. The commissariat had a depot at Eaglehawk Neck, from which the mine's rations were issued. The ever-increasing amount of traffic shuttling across Norfolk Bay required a continued improvement of the supply network. In July 1835 the Woody Island boat was upgraded to cope with the increased supply demands.⁵⁷⁶ By 1837 rations were conveyed to the mine by means of the *Fusilier*, an 18 ton launch built at the Port Arthur shipyard.⁵⁷⁷ The overland route linking Port Arthur to Norfolk Bay was also improved by the construction of a convict-powered tramway. The direct link to Hobart was plied by vessels of the colonial marine department, transporting supplies and convicts to the station. Coal was shipped the other way in the holds of contractors' vessels.

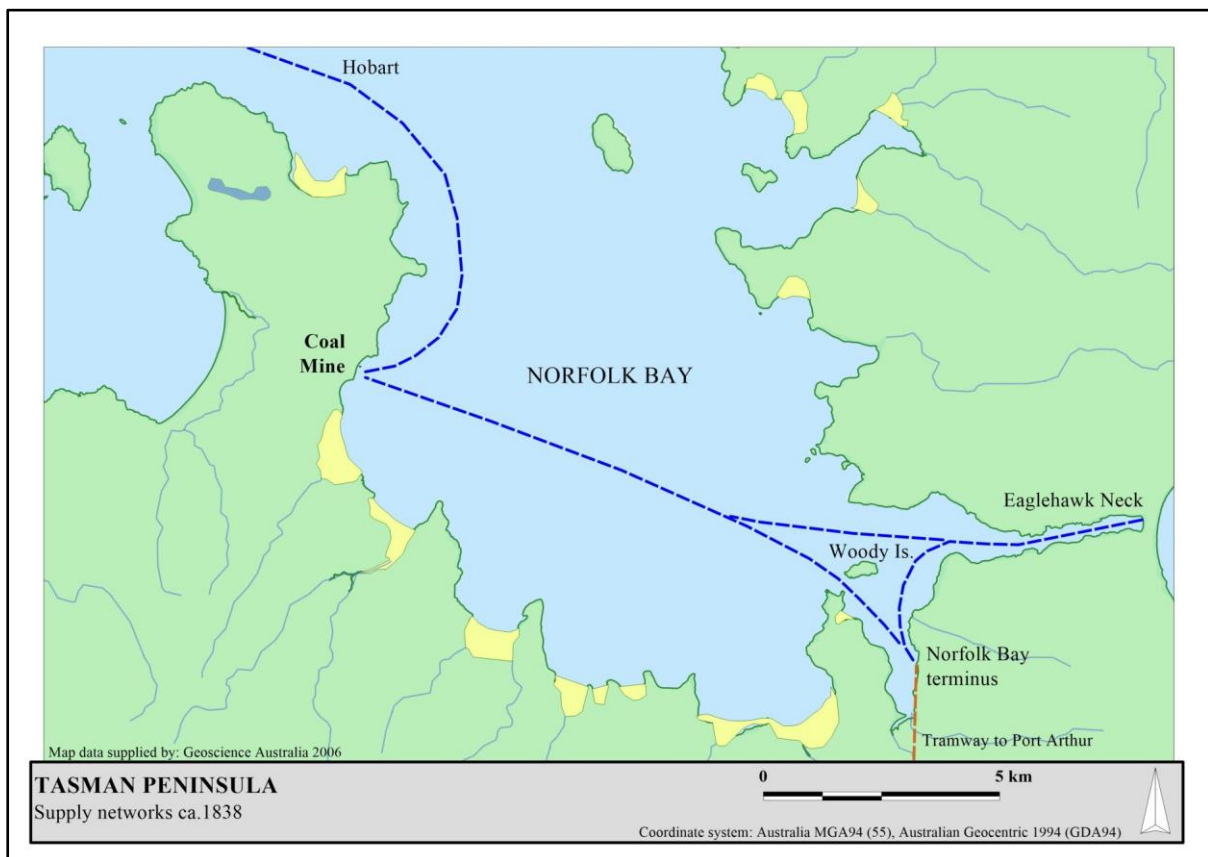


Figure 8-5: Tasman Peninsula supply networks ca.1838

Probation's introduction caused a burgeoning of the supply networks, as an increasing number of probation stations were formed on the peninsula. By 1843, Saltwater River (1841), Impression Bay

⁵⁷⁶ J.M. Moriarty, Port Officer, to John Montagu, Colonial Secretary, 2 July 1835, CSO 1/612/13966, T.A.H.O. (UB).

⁵⁷⁷ Charles O'Hara Booth, Commandant, to John Montagu, Colonial Secretary, 1 July 1837, CSO 5/52/1103, T.A.H.O. (UB).

(1841), Slopens Island (1841) and Cascades (1842) had all been emplaced around the periphery of Norfolk Bay, each requiring their own supply network (Figure 8-6). As an existing station, the coal mine provided an established point from which to service these new stations, the commissariat officer there taking on responsibility for their provisioning. The capacity of the mine to fill this role was increased in 1842 with the approval of the enlarged commissariat store, capable of holding provisions for upwards of 2,000 officers and convicts.⁵⁷⁸ Together with the commissariat at the Norfolk Bay tramway terminus, it formed a supply hub for the whole peninsula.⁵⁷⁹ Further to this, a slaughterhouse had been established at King George's Sound, in the north of Norfolk Bay, from which a contractor supplied meat to the stations around the peninsula.⁵⁸⁰ Two launches served this establishment, with one supplying the mine, Slopens Island and Saltwater River during its run.⁵⁸¹

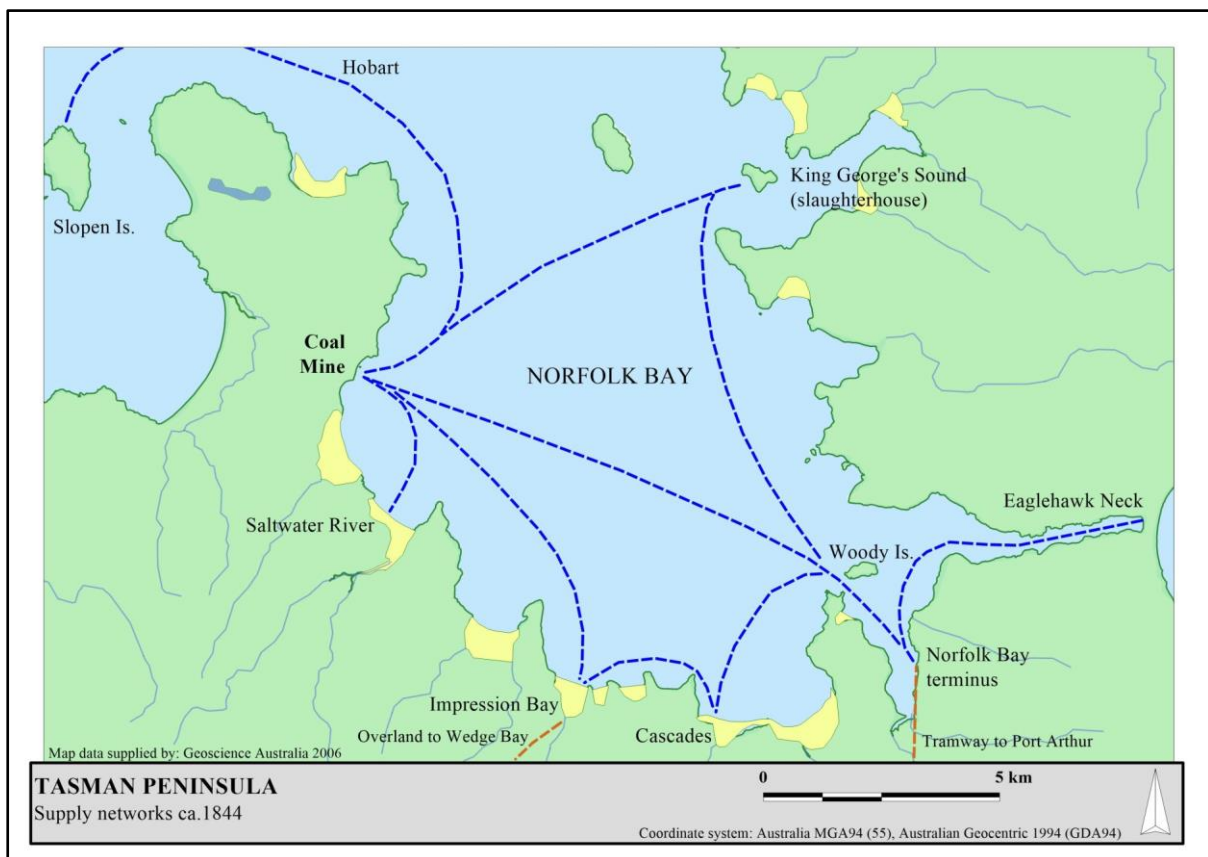


Figure 8-6: Tasman Peninsula supply network ca.1844

⁵⁷⁸ George Maclean, Assistant Commissary General, to G.T. Boyes, Colonial Secretary, 17 May 1842, CSO 22/22/875, T.A.H.O. (BT).

⁵⁷⁹ T.J. Lempriere, Deputy Assistant Commissary General, to Charles O'Hara Booth, Commandant, 17 March 1843, CSO 22/71/1553, T.A.H.O. (BT).

⁵⁸⁰ Charles O'Hara Booth, Commandant, to Matthew Forster, Chief Police Magistrate, 9 February 1843, CSO 22/67/1481, T.A.H.O. (BT).

⁵⁸¹ T.J. Lempriere, Assistant Commissary General, to G.T. Boyes, Colonial Secretary, 31 December 1842, CSO 22/43/1391, T.A.H.O. (BT).

Although the network altered very little during the remainder of the 1840s, there were continual refinements of its components. Toward the end of 1841, as the number of probation stations in the colony continued to grow, William Moriarty, Port Officer, had requested the addition of a steamer to the colonial marine.⁵⁸² This vessel was purchased in 1844 and deployed to Norfolk Bay, allowing for a more regular supply and more frequent inspection of the coastal stations (Jackman 2004: 25). By 1846 only steamers were plying the blue networks of the Tasman Peninsula.

In addition to its place within a complicated chain of supply and demand, the operations at the Tasman Peninsula mine also generated a constantly changing internal network. Like at Recherche Bay, a similar outwards movement of the timber-getters occurred, as large tracts of harvestable timber were felled to feed the station's voracious appetite (Figure 8-7). At the mine's commencement, the convict timber-getters felled timber close to the settlement, but were required to move further south as the stands of workable timber were harvested. By 1841 they had worked out an area as far as Saltwater River, the formation of which took advantage of the ground cleared by the timber-getting. That station's settlement forced the mine's timber-getters to look for new stands, reverting to cutting timber between Saltwater River and the mine, prior to moving over the bay to Half Way Bluff.⁵⁸³ By 1843 the convicts at the station had stopped large-scale timber-getting completely, with the newly-established probation station at Impression Bay supplying timber requirements.⁵⁸⁴ When Impression Bay became an invalid depot in 1846, Cascades probation station took over supplying timber to the mines.⁵⁸⁵

⁵⁸² *Convict Discipline*, William Moriarty, Port Officer, to John Montagu, Colonial Secretary, 8 September 1841, (158), p. 62.

⁵⁸³ Samuel Cook, Superintendent, to Charles O'Hara Booth, Commandant, 8 December 1841, Tasmania Papers 134, CY 3079, Frame 549, M.L. (UB).

⁵⁸⁴ Requisition for stores for Impression Bay, 6 June 1843, CSO 22/72/1574, T.A.H.O. (BT).

⁵⁸⁵ *Convict Discipline and Transportation*, Copy of a despatch from C.J. La Trobe, Esq, Acting Governor of Van Diemen's Land, to Earl Grey, 31 May 1847, (941), p. 69.

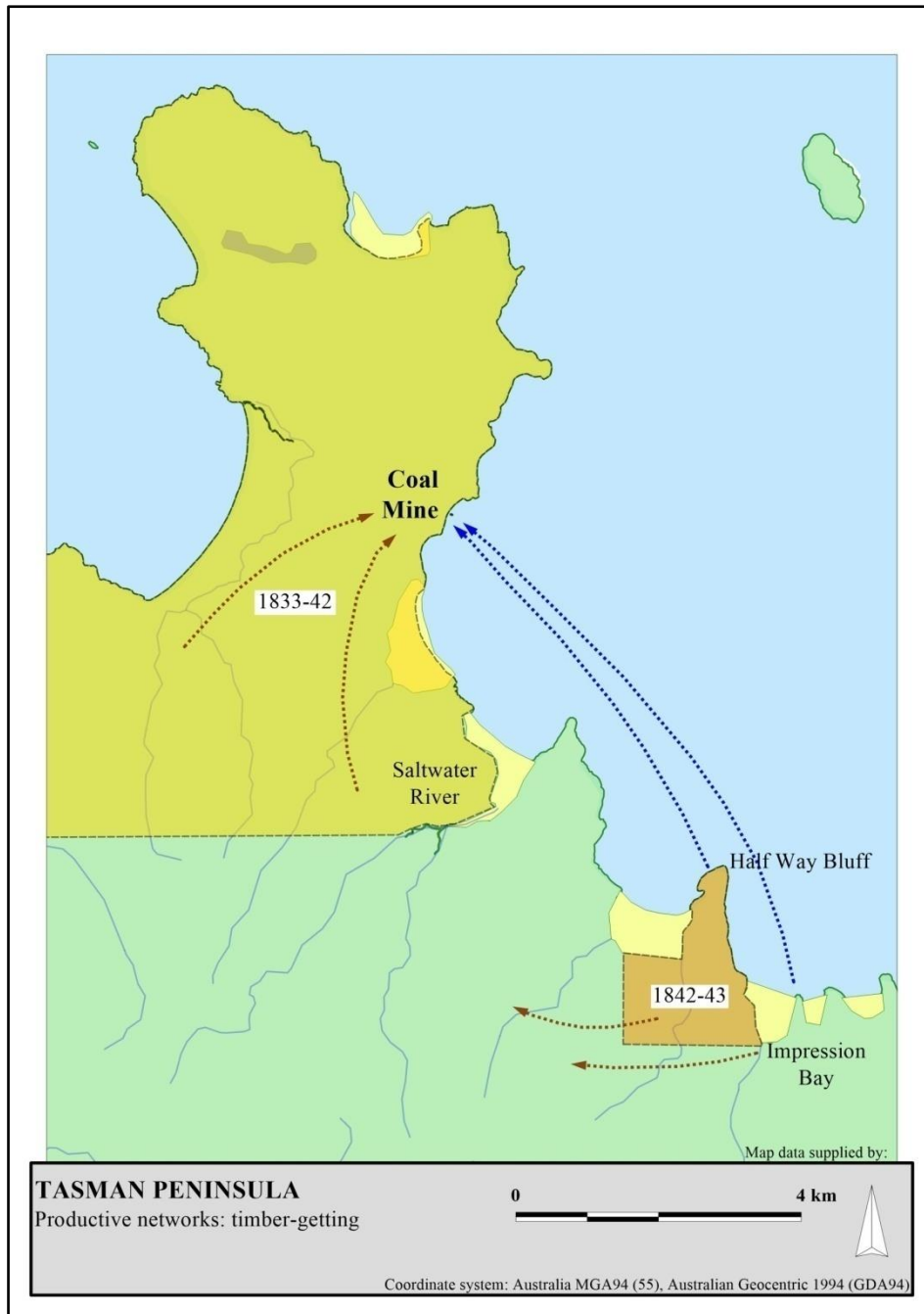


Figure 8-7: Tasman Peninsula coal mine, showing estimated areas of timber extraction 1833-43 (coloured areas)

The expansion of the station from 1835 and the resultant need for buildings of accommodation, superintendence and incarceration meant that new resources needed to be accessed. Where before a limited amount of timber-getting had been augmented with the importation of required materials, the new infrastructure requirements at the station meant that sources closer to the settlement needed to be worked (Figure 8-8). Sandstone quarries were opened to the west and north east, within easy transport distance of the station. Lime was supplied from the shore-side kiln, which was itself supplied with

shells gathered from the coast of Norfolk Bay. Although some buildings at the settlement incorporated bricks into their construction, it was not until ca.1842, with the expanded building program triggered by probation, that there was any large-scale requirement for this material.⁵⁸⁶ The bricks for the new wards, quarters and cells built between ca.1843 and 1846 were made at the clay fields to the north west of the station. Convicts were also deployed in the surrounding bush burning charcoal for use in the blacksmiths' forges.

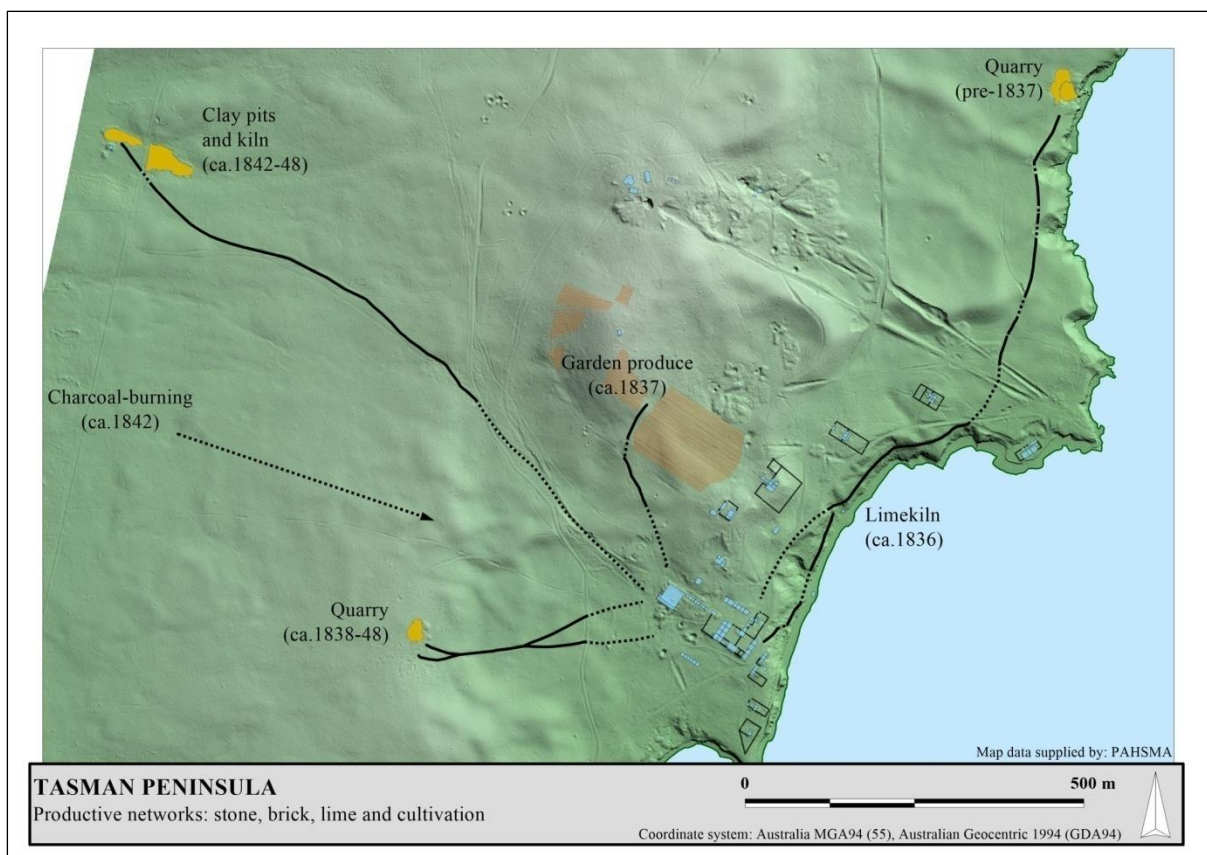


Figure 8-8: Tasman Peninsula productive network (showing estimated dates of first working)

The extent and form of these productive and supply networks was determined by the stage in which they were implemented. The early period of exploration required smaller networks, which were often reliant upon the exterior provision of supply for their survival, but were also expected to access and exploit any available resources. Macquarie Harbour and South Cape Bay provide examples of this early network stage. As the operations developed, the associated networks expanded to cope with

⁵⁸⁶ Charles O'Hara Booth, Commandant, to John Montagu, Colonial Secretary, 30 October 1835, CSO 1/832/17671, T.A.H.O. (BT).

increased infrastructure and personnel requirements. Recherche Bay and Jerusalem began to enter this stage, both either increasing their draw upon natural resources, or planning upgraded networks to facilitate the swift movement of coal. On the Tasman Peninsula the supply and productive networks found full expression, the station demonstrating how these networks developed in tandem with the requirements of the station. In particular, they highlight the important place that the mine fulfilled on the peninsula, performing as a nodal supply point for the peninsula networks.

The extractive landscape

I was picked out for 'below' and was marched off with the rest of the gang to the mine shaft, or the 'Coal hole' as we called it

William Thompson, *The Career of William Thompson, Convict*

The most complex and enduring element of these labour landscapes was that associated with the extraction and transport of coal. How this coal was extracted represents wider discussions about economy within the convict system. Destined to offset the costs of the convict department, as well as through public sale, a profit motive was attached to every ton of coal won by the convicts. Bound up within the heart of each piece was a conflict of penological considerations, representative of wider discussions about the balance between punishment, deterrence, reformation and economy. The archaeological residue associated with mining at the five case studies highlights how the administrators sought to deploy the convict labour to attain the valuable resource. Each adit or shaft formed a nodal point, from which sprang underground, overland or over-water linkages. These nodes and linkages are signifiers of the industrial process that was employed at these places, with this process indicative of the methodology and technology that was brought to bear. The process was the result of largely British mining methodology and technology imported and adapted to a colonial setting. As shown in Chapters 5 and 6, many of the convicts and free who oversaw the development of mining in Van Diemen's Land had been miners in Britain. When transported, they exported with

them a knowledge and practice of coal mining that had been implemented during their free working lives. The mining landscapes that were formed as a result of their labour and oversight were therefore an amalgam of the practices they had brought with them, as well as a reaction to the peculiar circumstances within which the mining was carried out.

Winning the coal

(To be read with reference to Appendix 3)

The primary aim facing any coal mine operator is to locate an economic reserve, extract and work the coal and sell it

(Duckham 1969: 22)

By time convicts were first used to mine coal in Van Diemen's Land in the early 1820s, the procedures and processes to facilitate coal extraction were undergoing a process of accelerated advancement and refinement in Britain, industrialisation encouraging the sinking of more and greater coal pits and the expansion of great canal and rail distribution networks (Taylor 1961; Turnbull 1987; Freese 2003). The early decades of the nineteenth century saw great advancement in the techniques and technology of coal mining, in particular the refinement of steam technology to facilitate coal extraction, as well as mine dewatering and ventilation. Despite these technological advancements, coal mining was still a labour-intensive occupation. The pits' voracious workforce requirements saw greater and greater amounts of labour drawn to these industrial centres. By the 1830s it was estimated that in Britain alone approximately 100,000 men, women and children produced over 23 million tons of coal (Pollard 1980: 213).⁵⁸⁷ By 1851 it was estimated 255,000 miners were producing 57 million tons (Taylor 1961: 49). The five case studies were products of this great leap forward in technique and technology. Like mines the world over, they needed to facilitate the extraction and transport of the coal as efficiently as possible, draining the water and providing adequate ventilation as they did so. In their pursuit of this, they were technologically typical of the period (Maiden 2009: 129).

⁵⁸⁷ The labour statistics are estimated: J.R. McCulloch, *A Statistical Account of the British Empire* (Charles Knight & Co: London, 1837), p.6.

By the nineteenth century, four main types of mine had been favoured in the quest for coal: open quarries, slope, adit and shaft (Daddow and Bannan 1866: 411-28). In Van Diemen's Land, the convicts only ever experienced the latter two, with each of the case studies deploying shaft and adit-based methods as part of their extraction methodology. On the Tasman Peninsula, the twin coastal adits provided the main form of access to the workings until ca.1839, through which men, coal, water and air were expected to circulate. Adits were also recorded at the other case studies, although their foreshortened operational existence meant that they remained largely unrealised.

The adits of the Tasman Peninsula mine were cut during the early phase of testing and exploitation. This had seen the excavation of a shaft in 1834 (Heard 1981: 166, 177).⁵⁸⁸ At the same time, an adit was driven from the shaft toward the beach, allowing the direct transport of the coal from the working faces to the coast (Heard 1981: 179). By 1837 an extensive network of levels for production and haulage had been driven westward, the progress of the works recorded in two plans produced in this year at the behest of Dr John Lhotsky (Figure 8-9 and Appendix 3, Figure A3-26 and Figure A3-27).⁵⁸⁹ The underground plan showed the mine divided into a lower and upper set of workings, targeting the two seams found during sinking. A shaft linked the upper and lower works, which at that stage extended for at least 2.8km: 1.96km accessing the upper seam, 850m the lower. The ventilation and haulage access was provided by the two adits.

⁵⁸⁸ John Burnett, Colonial Secretary, to Police Office, Hobart, 31 October 1833, CSO 1/680/15032, T.A.H.O. (UB); Charles O'Hara Booth, Captain Commandant, to Matthew Forster, Chief Police Magistrate, 23 June 1834, Tasmania Papers 35, M.L. (BT).

⁵⁸⁹ Private Secretary to John Montagu, Colonial Secretary, 24 January 1837, CSO 5/8/115, T.A.H.O. (BT).

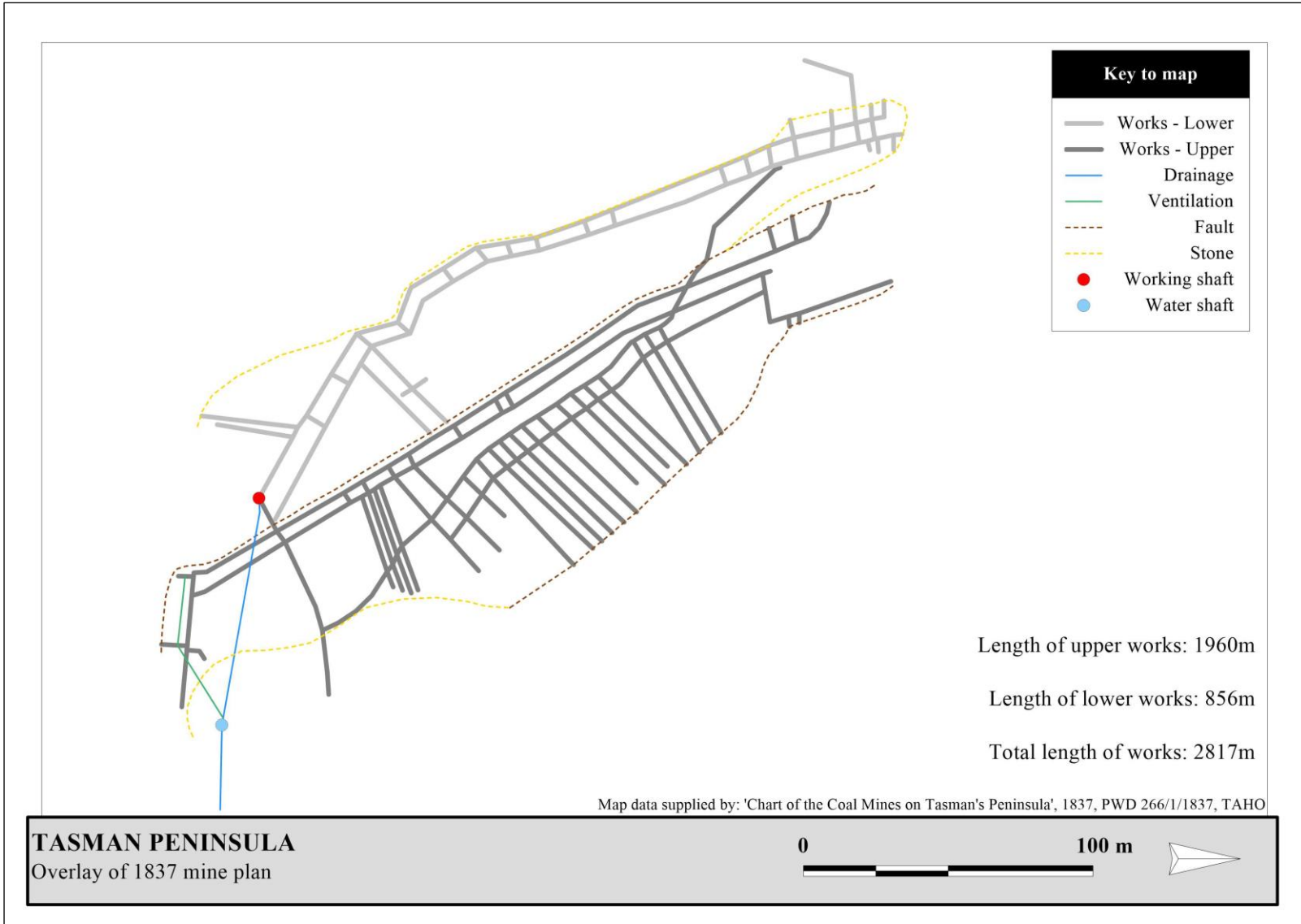


Figure 8-9: Overlay of 1837 plan showing upper and lower works

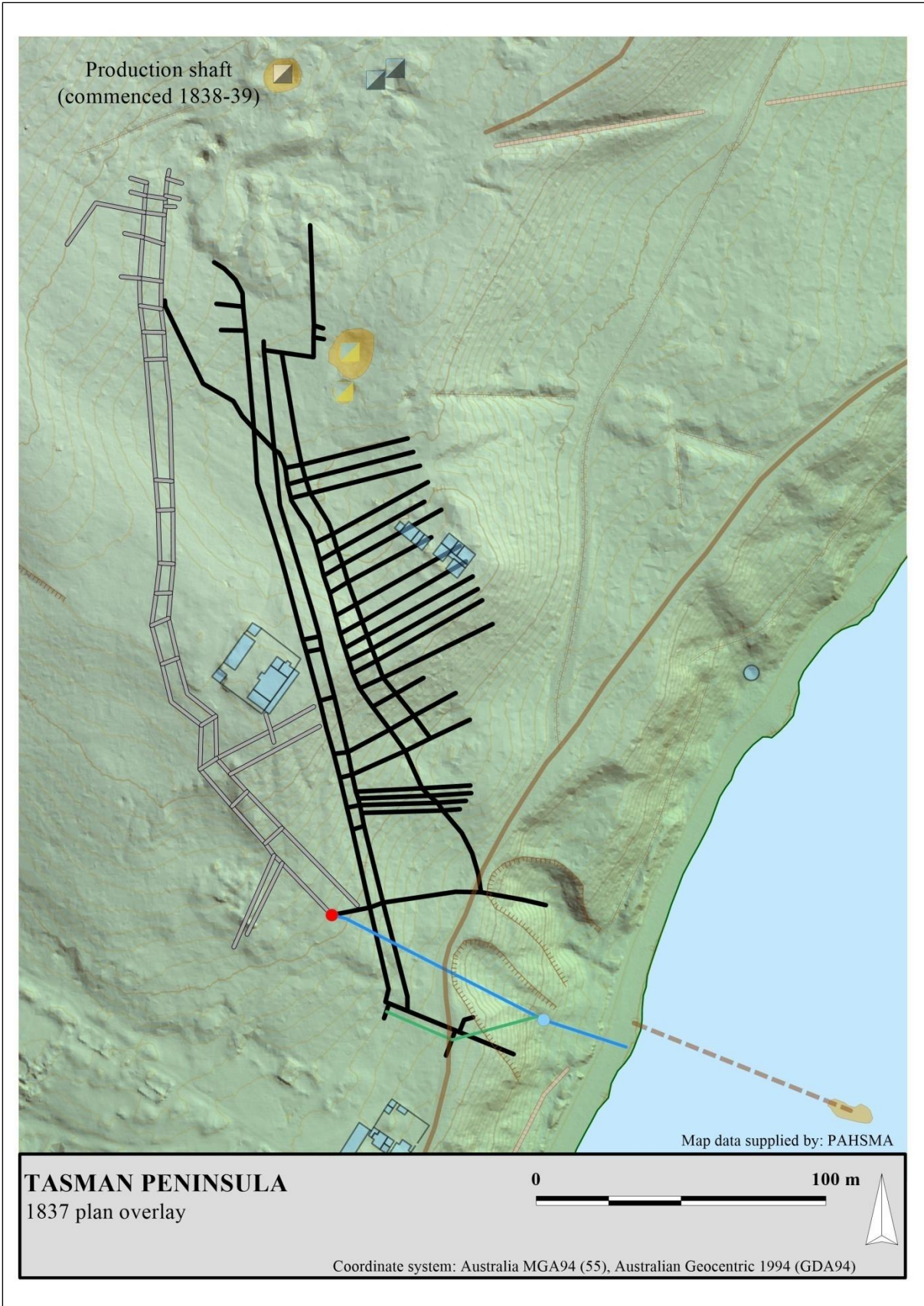


Figure 8-10: Plan showing the estimated location of the underground workings as mapped by Lhotsky in 1837

When visiting the mines in March 1837, Lady Jane Franklin had noted the cramped timber-lined adit providing access to the shaft (Brand 1993: 13). Later sources also mentioned the cramped nature of the mine's passages, recording how prisoners had to stoop (Fry 1850: 176) or move around almost on hands and knees (Becke 1899). At Jerusalem, the adit measured 6.5ft by 6.5ft (2m) and was heavily timbered along its 160ft (50m) length.⁵⁹⁰ The timbering of the works was a vital undertaking, with William Thompson recording that it was undertaken by the night shift at the Tasman Peninsula works



Figure 8-11: Example of miner at work
(S.H. Daddow and B. Bannan, *Coal, Iron and Oil*, Pennsylvania: Benjamin Bannan, 1866: p. 104)

(Clark 2009: 78). In their size and need for timber, these mines replicated those being worked the world over at this time, where miners and hauliers were required to work in cramped conditions, relying on timber props and good judgement to keep the roof in place (Figure 8-11).

The lighting available for the convicts was unsophisticated, despite

the introduction of safety lamps to British mines in the 1810s (Daddow and Bannan 1866: 443). In 1841, *The Cornwall Chronicle* recorded its consternation that the prisoners were being sent down the Tasman Peninsula works without safety lamps, although the concern was apparently not shared in government circles.⁵⁹¹ When the Franklins visited in 1837, they noted the use of candles (Brand 1993: 13). These were either fixed to the walls of the drives and galleries, or carried by the miners into the works. Each candle burnt for about five hours and, as each shift was between five to six hours, convicts were generally issued with two - although rationing could limit supply to one each.⁵⁹² Oil

⁵⁹⁰ William Ballantine, Superintendent Jerusalem Hiring Depot, to Matthew Forster, Director of Probation Department, 31 January 1842, CSO 22/145/811, T.A.H.O.; James Clare, Superintendent Jerusalem Mines, to Josiah Spode, Principal Superintendent, 28 February 1842, CSO 22/47/190, T.A.H.O.

⁵⁹¹ *The Cornwall Chronicle*, 29 May 1841.

⁵⁹² Henry Smith, Superintendent, to unknown recipient, 20 May 1845, Misc 62/12/A1069, T.A.H.O. (UB); E.Hill to Matthew Forster, Comptroller General, 21 May 1845, Misc 62/12/A1069, T.A.H.O. (UB).

lamps were also used in the mine, simultaneously with candles.⁵⁹³ Amongst the tools to be sent from the Tasman Peninsula to Recherche Bay in late 1840 were six “Lamp tins with pack”, as well as wicks, whale oil and 112 candles - all for use in the mine.⁵⁹⁴ Similarly, requisitions were made from Jerusalem for “common tin lamps”, wicks, oil and candles.⁵⁹⁵ Whether lamps or candles, the lights had limited power to cut through the black of the mine, convicts reportedly only able to recognise each other from two to three yards away.⁵⁹⁶ Henry Phibbs Fry likened them to “sparks glimmering in the mist” (Fry 1850: 177).

Adits were also excavated at Recherche Bay, South Cape Bay and potentially Macquarie Harbour. At the latter, the coal-bearing cliffs noted by James Kelly may have been tunnelled into to test the seam, although no documentary or archaeological evidence was found of this. At the former two locations, adits were excavated to test coal strata outcropping on the coast, much like at the Tasman Peninsula. At Recherche Bay, Lacey and his small party had similarly driven an adit into the visible coastal coal vein.⁵⁹⁷ When sinking began on the inland shafts, work on the adit was probably abandoned, although it is possible that Lacey was intending to link it to the shaft as he had done with the Tasman Peninsula works. When he visited the site in 1848, Joseph Milligan recorded the presence of the “low-roofed drift-way [adit]” (Milligan 1848: 19). At South Cape Bay, Milligan recorded a coastal adit, although this had likely been covered by a landslip when government geologist W.H. Twelvetrees visited the site in 1915 (Figure 8-12) (Milligan 1848: 28-9; Twelvetrees 1915: 6-7). It is highly unlikely that this adit could have ever been productive, situated as it was upon a weather-beaten and inaccessible stretch of coastline. It is possible that the adit may have been intended to link up with the shaft/s excavated inland. However, the distance (at least 250m horizontal) and depth (over 110m vertical) would have rendered this unlikely. Instead, the adit was probably intended to test the quality and yield of the outcropping coal, perhaps in preparation for its exploitation by the inland shaft/s.

⁵⁹³ Deposition to Chief Justice J.L. Pedder, 16 December 1845, CSO 20/17, T.A.H.O. (UB).

⁵⁹⁴ Supplementary Estimate of Iron, Tools Etc required for opening the Coal Mines at Recherche Bay. Port Arthur 24th August 1840, CSO 5/224/5707, T.A.H.O.

⁵⁹⁵ Required for the Public Service at the Coal Mines Station Jerusalem, 7th April 1842, CSO 22/47/190, T.A.H.O.

⁵⁹⁶ Deposition to Chief Justice J.L. Pedder, 16 December 1845, CSO 20/17, T.A.H.O. (UB).

⁵⁹⁷ Charles O'Hara Booth, Captain Commandant, to Matthew Forster, Acting Colonial Secretary, 18 April 1840, CSO 5/224/5707, T.A.H.O.

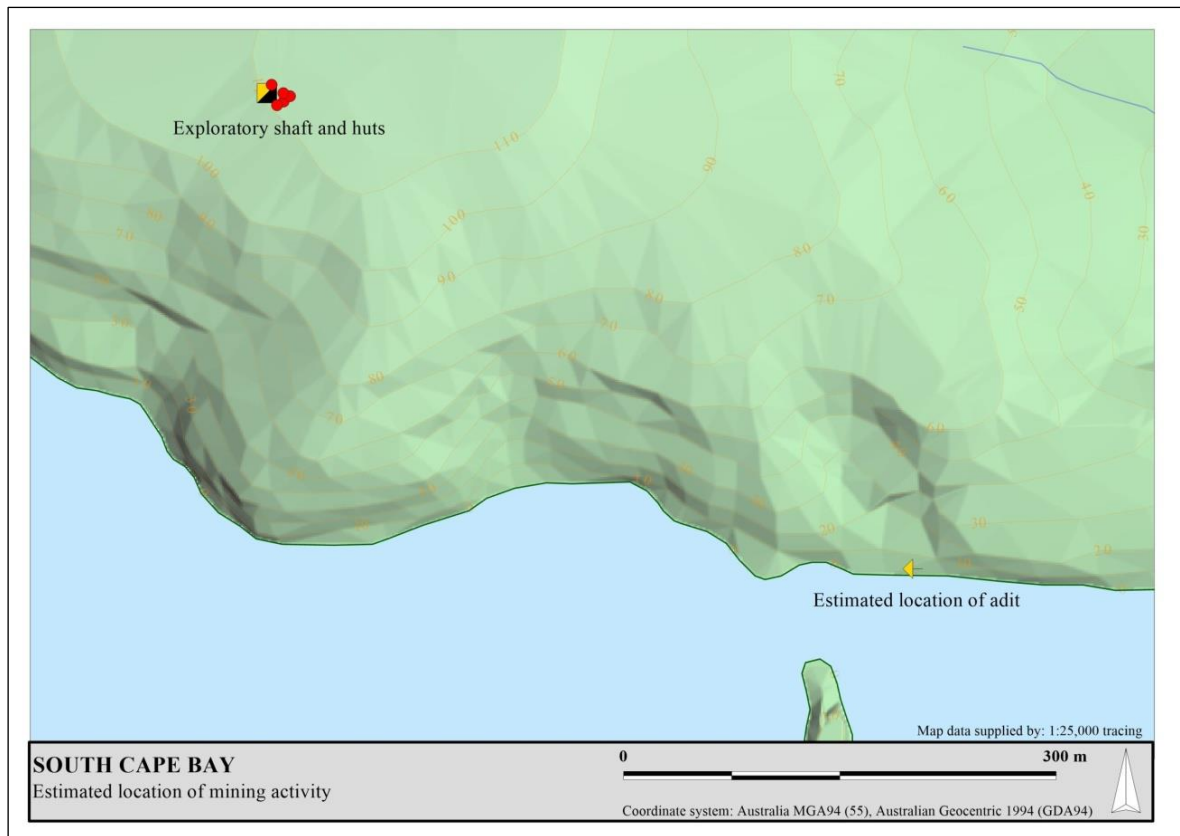


Figure 8-12: South Cape Bay. Map showing estimated location of exploratory adit in relation to the site of the exploratory shaft and huts

At Jerusalem, an adit had been driven to access the visible seam of coal on the eastern bank of the creek.⁵⁹⁸ Commencing in September 1841, it took the small gang of miners four months to drive a 93ft (28m) long adit from the bank of the creek.⁵⁹⁹ By the end of February 1842 the gang had extended the adit to 162ft (49m).⁶⁰⁰ When the first phase of working came to a close in August 1842, the adit had been driven 100 yard (92m) to the fault, which neither James Clare nor John Hall had penetrated.⁶⁰¹ A further level had been driven off the central drive, running to the south, apparently in an effort to test the coal vein's limits.

⁵⁹⁸ James Clare, mining overseer, to Matthew Forster, Chief Police Magistrate, 6 August 1841, LSD 1/1/28 p. 454-88, T.A.H.O.; James Clare, mining overseer, to Matthew Forster, Chief Police Magistrate, 1 January 1842, CSO 22/145/811, T.A.H.O.

⁵⁹⁹ James Clare, mining overseer, to Matthew Forster, Chief Police Magistrate, 1 January 1842, CSO 22/145/811, T.A.H.O.

⁶⁰⁰ James Clare, mining overseer, to Josiah Spode, Principal Superintendent, 28 February 1842, CSO 22/47/190, T.A.H.O.

⁶⁰¹ William Jones, mining overseer, to John Montagu, Colonial Secretary, 15 January 1844, CSO 8/108/2279, T.A.H.O.

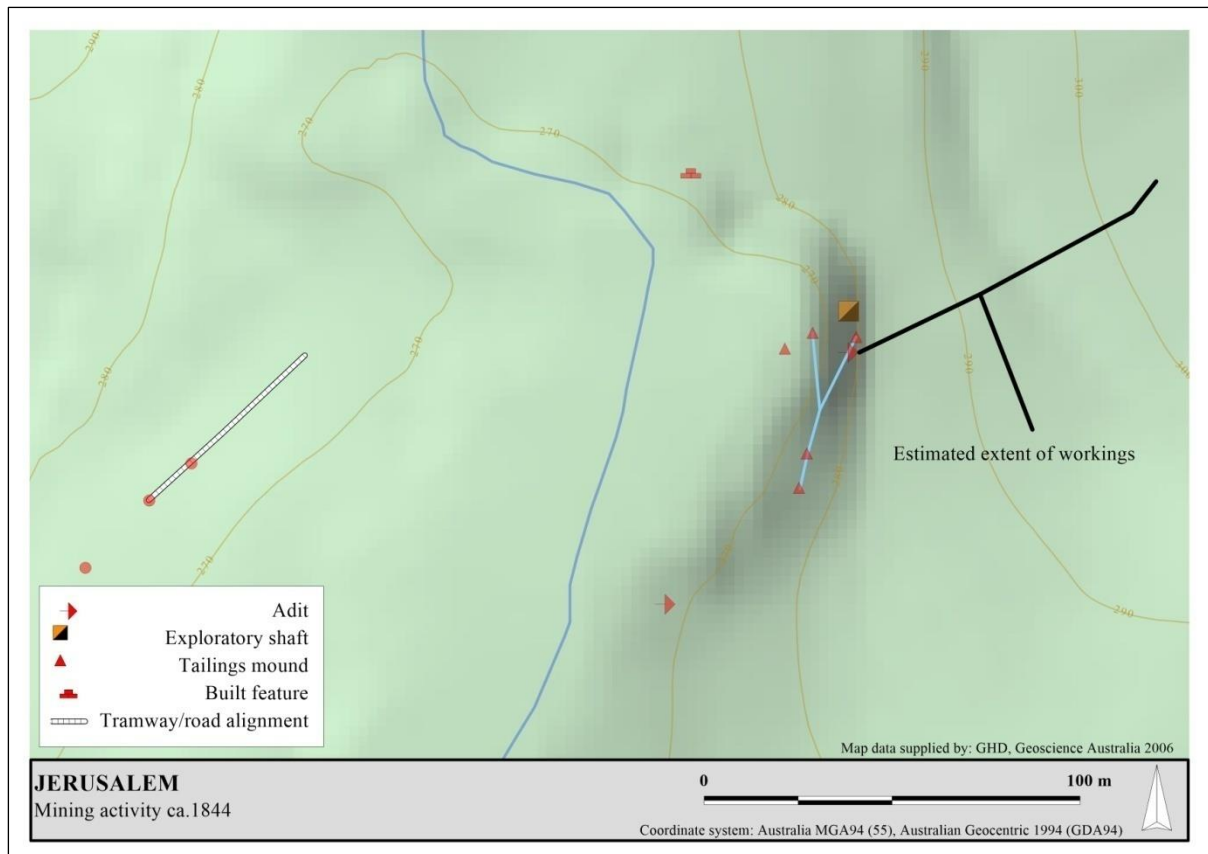


Figure 8-13: Jerusalem. Showing the features identified by the archaeological survey and the estimated extent of the underground 1841-42 workings (as recorded in 1844)

When the workings were reopened in February 1844, William Jones continued to extend the adit, at first driving half a chain (10m) eastward into the fault, before tracing it to the north and south for a further chain (20m).⁶⁰² Even though Jones drove the main level until it was 120 yards (110m), the coal did not improve, causing him to undertake a program of exploratory adits and shafts throughout the area.⁶⁰³ This was the limit of the works before the government closed the operation in August 1844.

With only a single access, the Jerusalem mine was dogged by ventilation problems, restricting the amount of time the prisoners spent in the workings.⁶⁰⁴ The ventilation of mines was a particular concern of the nineteenth century mine manager. The five predominant forms of ventilation used to promote airflow in mines of this time were: natural, updraught and downdraught pits, waterfall (the encouragement of air circulation through means of water falling into the shaft), furnace, steam-jet (the

⁶⁰² William Jones, mining overseer, to J.E. Bicheno, Colonial Secretary, 10 August 1844, CSO 8/108/2279, T.A.H.O.

⁶⁰³ Ibid.

⁶⁰⁴ William Jones, mining overseer, to J.E. Bicheno, Colonial Secretary, 11 March 1844, CSO 8/108/2279, T.A.H.O.

forceful removal of foul air through pressurised steam), and mechanical (through fans or similar machinery) (Keating 1821: 64; Ayton 1825: 256; Daddow and Bannan 1866: 105). Sails, air doors, brattices and fireboxes were all installed in mines for this purpose. The Tasman Peninsula was the only case study site where these methods were used, with air doors present in the earliest workings (see Appendix 3, Figure A3-27). The numerous shafts sunk throughout the mine's life also promoted airflow throughout the mine, creating updraught and downdraught cycles through the works.

On the Tasman Peninsula, the period 1833 to 1838 witnessed the sinking of at least three shafts, as well as one at Half Way Bluff. Attention had briefly turned to the bluff, where a shaft had been commenced in late 1836 to test the appearance of coal there (Heard 1981: 204).⁶⁰⁵ Work quickly refocused upon the main mine, when the workings from the adit began to encounter an east-west fault which blocked the northward advancement of the works. To counter this, a new shaft was started in June 1837 (Heard 1981: 212). Either situated just to the north of the fault, or well inland, the new shaft had reached the first seam at 45ft (14m) by September (Heard 1981: 215). By October 1838 the shaft had reached 150ft (46m) (Heard 1981: 223).⁶⁰⁶ Boring was carried out for a further 60ft (18m) beyond this depth, suggesting that the coal encountered was poor in quality or thickness.⁶⁰⁷ While work proceeded on this shaft, the coal was once again tested at Half Way Bluff, though this work was abandoned by the end of 1838 (Heard 1981: 226).⁶⁰⁸

Despite the massive investment of time and labour embodied by the 1838 shaft, it does not appear to have yielded paying coal. A program of boring was carried out across the works, with work focussing on the area immediately north of the fault.⁶⁰⁹ A major new shaft was commenced in 1839 and had reached the first seam by June 1839 - although its sinking caused noticeable disruption to the station's

⁶⁰⁵ Dr John Lhotsky to Charles O'Hara Booth, Captain Commandant, 25 May 1837, CSO 5/72/1584, T.A.H.O.

⁶⁰⁶ Surgeon Superintendent, *Minerva*, to Sir John Franklin, Lieutenant Governor, 15 October 1838, CSO 5/146/3551, T.A.H.O. (BT).

⁶⁰⁷ *Ibid.*

⁶⁰⁸ *Ibid.*

⁶⁰⁹ *Hobart Town Gazette*, 13 July 1839.

coal supply by drawing labour away from mining tasks.⁶¹⁰ Two shafts were reported as in operation in September 1839.⁶¹¹

The excavation of the shafts represented a great expenditure in time and labour, whether they were for coal, water, air or personnel - or a combination of all four. In the first half of the nineteenth century the excavation of a shaft was completed by hand in a series of stages, with the edges shored by brick or timberwork as each level was excavated (Harcourt 1835: 102). Greg Maiden posits that the shafts at the Tasman Peninsula mine were lined by either timber or masonry until bedrock was encountered (Maiden 2009: 45). This is supported by the recollection of "William Derricourt", who recorded the placement of circular timbers (corves) around the perimeter of the shaft as it was excavated (Becke 1899: 71). Often shafts would be divided to allow ventilation, pumping and coal-raising to occur from the same shaft, although greater efficiency was gained if a mine had numerous shafts (Ayton 1825: 252; Harcourt 1835: 112; Holland 1835: 180, 211-25). William Thompson, when he arrived on the Tasman Peninsula in January 1842, recorded that the 1839 shaft was used for both coal and men, as well as pumping water out of the mine (Clark 2009: 73, 76).

At Recherche Bay, a shaft 25ft (7.5m) deep had been sunk as part of the initial exploratory works.⁶¹² By June 1841 two shafts were recorded at the works, though at this time only shaft "no. 2" was underway, suggesting that work on the first shaft (perhaps the one started by Lacey) had been abandoned.⁶¹³ The second shaft had been excavated to a depth of 102ft (31m), with ironstone encountered toward the base. When he visited the mine in ca.1841 Sir Paul Edmund de Strzelecki recorded that two shafts had been excavated to 150ft (46m), suggesting that the first shaft had already been sunk to this depth early on in the working, or was re-commenced after June (Strzelecki 1842: 197). The presence of two shafts was also confirmed by Joseph Milligan (Milligan 1848: 19). Only

⁶¹⁰ Charles O'Hara Booth, Captain Commandant, to Matthew Forster, Colonial Secretary, 7 June 1839, CSO 5/199/4778, T.A.H.O.; Charles O'Hara Booth, Captain Commandant, to Matthew Forster, Colonial Secretary, n.d. (June 1839), CSO 5/199/4778, T.A.H.O.

⁶¹¹ Charles O'Hara Booth, Captain Commandant, to Matthew Forster, Colonial Secretary, 16 September 1839, CSO 5/199/4778, T.A.H.O.; *Hobart Courier and Van Diemen's Land Gazette*, 20 September 1839.

⁶¹² Charles O'Hara Booth, Captain Commandant, to Matthew Forster, Acting Colonial Secretary, 18 April 1840, CSO 5/224/5707, T.A.H.O.

⁶¹³ Extract from the Diary of the Mining Party at North Port Recherche Bay from the 18th to 26th June 1841, 26 June 1841, CSO 8/13/301, T.A.H.O.

one such shaft was identified during the archaeological survey, situated near the main cluster of convict-period buildings (Figure 8-15).

At South Cape Bay, Milligan recorded the presence of two inland shafts in association with the coastal adit, although government geologist W.H. Twelvetrees found only one shaft when he visited the site in 1915 (Figure 8-14) (Milligan 1848: 28-9; Twelvetrees 1915: 6-7). The shaft/s would never have yielded productive coal. Over 100m of clay and sandstone lay between the top of the shaft and the coal strata, a fact highlighted by both Milligan and Twelvetrees (Milligan 1848: 29; Twelvetrees 1915: 7). The labour was entirely wasted in even attempting to do this. On the Tasman Peninsula, where the workforce numbered in the hundreds, it had taken over a year for a shaft to be sunk 50m between 1837-1838. At South Cape Bay, with its much smaller workforce, such an undertaking would have taken years.

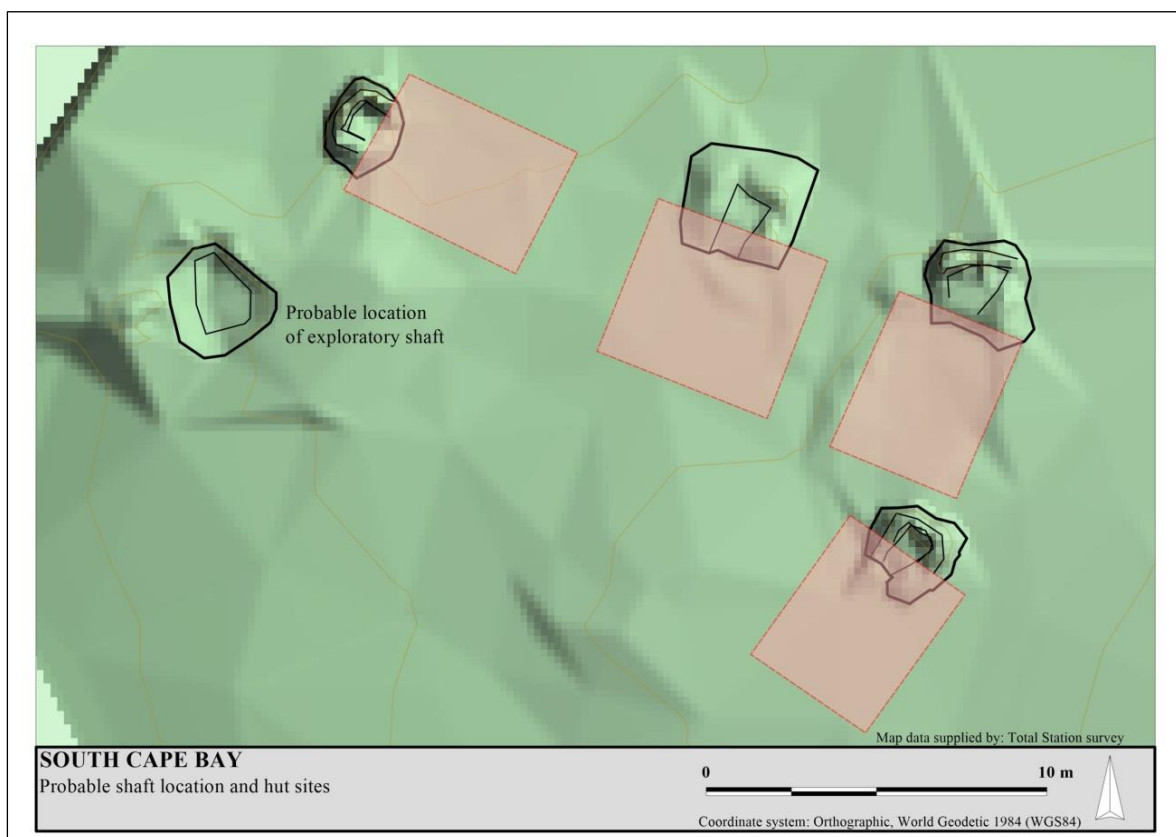


Figure 8-14: South Cape Bay. Map showing the probable location of the exploratory shaft in relation to the huts

At Jerusalem, at least two unproductive shafts were sunk, intersecting with the two known coal veins. During the initial period the miners excavated a single 53ft (16m) deep 7ft (2m) diameter shaft, but

water ingress soon caused this shaft to be abandoned (Figure 8-13).⁶¹⁴ During the second phase of works a smaller 12ft (3.6m) shaft had been sunk to the south of the main area of workings. This shaft, possibly excavated under Hall and William Dawson's supervision, had encountered a seam of coal at 4ft, but, like the first shaft, had been abandoned due to ingress of water.

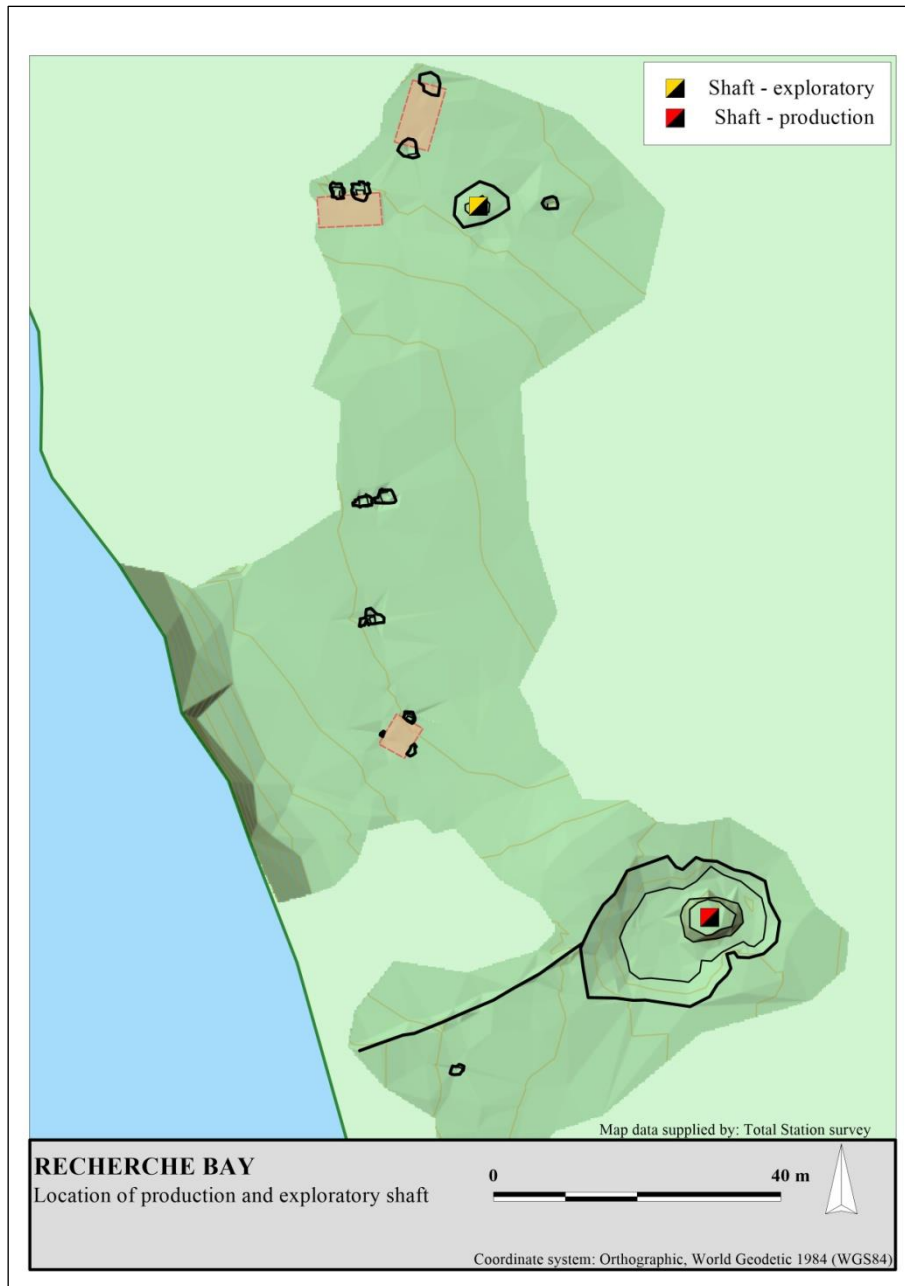


Figure 8-15: Recherche Bay. Showing the location of the main production shaft and probable exploratory shaft. The location of the adit mentioned in historical sources could not be identified

⁶¹⁴ James Clare, mining overseer, to Matthew Forster, Chief Police Magistrate, 1 January 1842, CSO 22/145/811, T.A.H.O.

On the Tasman Peninsula, by the time sinking on the new shaft began in 1839, Joseph Lacey was extracting coal following the pillar-and-stall method, a form of mining favoured in Britain until the mid-nineteenth century (Taylor 1961; Maiden 2009: 125). This involved the working of parallel roadways branching from the spinal drives, between which passages were cut to leave pillars of coal. Having reached the limits of the coal, the miners worked back, removing the coal pillars and collapsing the works as they went (Daddow and Bannan 1866: 431). The pillar-and-stall method was likely utilised at the Tasman Peninsula coal mine for most of its working life. Although little is known of the state of the works at the other case studies, it is clear from the plan of the Jerusalem mine that James Clare and John Hall were in the early stages of the pillar-and-stall method before the faulting closed the mine.

The process of extraction in the Tasman Peninsula mine was carried out in stages. Hewers worked at the coal face, from where one or a number of labourers dragged the filled boxes of coal to the haulage road (Becke 1899: 54-5; Clark 2009: 76-7). Up to four men, harnessed to a wagon, would then run the coal to the shaft's bottom. The wagons, weighing 150kg each, were formed from boxes sitting on wheeled frames (Brand 1993: 13). These boxes would be hauled up to the surface. Each box was chalked with the tally mark of the hewer, enabling a count to be kept of his task and an eye kept out for poorly-cut coal (Becke 1899: 55). At the tallying point the coal was weighed using beam and scales, and then shot on board the waiting ship through a screen (Brand 1993: 15).⁶¹⁵ From mid-1837 the more primitive beam and scale method of weighing the coals was replaced by the introduction of a dedicated weighing machine, the change necessitated by the need for correct weight to be apportioned to the shipping contractors.⁶¹⁶

At the Tasman Peninsula, the miners worked in three shifts: morning, afternoon and evening, with the first two dedicated to working the mine, the latter to its maintenance (Clark 2009: 77-8). This shift system was replicated at Recherche Bay.⁶¹⁷ Excavation was carried out with pick, bar and shovel, with black powder known to have been used at Jerusalem, Recherche Bay and the Tasman Peninsula

⁶¹⁵ Charles O'Hara Booth, Commandant, to John Montagu, Colonial Secretary, 31 July 1837, CSO 5/37/773, T.A.H.O.

⁶¹⁶ Ibid.

⁶¹⁷ Extract from the Diary of the Mining Party at North Port Recherche Bay from the 18th to 26th June 1841, CSO 8/13/301, T.A.H.O.

(Becke 1899: 71; Clark 2009: 96). In British mines, powder had been used to both shaft-sinking and mining since the early nineteenth century, becoming standard practice by the mid-1800s (Taylor 1961: 57). Both William Thompson and "William Derricourt" recorded the use of powder in shaft-sinking to aid excavation through rock, although there is no evidence for its use during the actual attainment of the coal, where convicts were under less supervision. "William Derricourt" recollected that powder was only introduced for the sinking of the last major shaft in 1843-5, indicating that all the other shafts had been excavated without such assistance. Powder was used in the shaft-sinking at Recherche Bay, with gunpowder employed at in the adits at Jerusalem in an attempt to get through the stone fault.⁶¹⁸

Productivity of the case study mines was also augmented by the use of tramways. The installation of a tramway network was an important part of facilitating the movement of coal from the site of extraction to transport nodes. Timber tramways were recorded on a small scale at Jerusalem, where it was used in the adit, and on a much larger scale at the Tasman Peninsula works.⁶¹⁹ At the latter, a timber tramroad had been laid along the adit from the internal shaft to the head of the wharf (Brand 1993: 13). When the 1837 jetty was built, a second double timber tramroad leading from the jetty to the adits was constructed.⁶²⁰ With the sinking of the 1838 shaft, proposals were made to lay another double timber tramroad from the shaft to the end of the 1837 jetty, although this was never completed.⁶²¹ Proposals were once again raised toward the end of 1839, this time to lay cast iron track.⁶²² Iron rails had first begun to make their appearance in British mines from the 1760s, though timber was still used well into the nineteenth century due to its cheapness and malleability (Dunn 1844: 39). Although the iron rails were available in Hobart, having recently been shipped from Britain, their use required the retirement or conversion of the 60 wagons then in operation at the mine. The iron rails were rejected by Booth, who favoured his own plan of laying iron plate on top of timber

⁶¹⁸ William Jones, mining overseer, to J.E. Bicheno, Colonial Secretary, 11 March 1844, CSO 8/108/2279, T.A.H.O.

⁶¹⁹ John Hall to Josiah Spode, Principal Superintendent, 7 March 1842, CSO 22/47/190, T.A.H.O.

⁶²⁰ Henry Laing, *Survey of jetties at Coal Point*, ca.1837, CON 87/74, T.A.H.O.

⁶²¹ Charles O'Hara Booth, Captain Commandant, to Commanding Royal Engineer, 22 February 1838, CSO 22/103/2329, T.A.H.O. (BT).

⁶²² Overseer, Coal Mines, to Charles O'Hara Booth, Captain Commandant, 29 October 1839, CSO 5/217/5507, T.A.H.O. (BT).

rails and thereby retaining the use of the wagons.⁶²³ A new double-line timber tramway had been laid by 1841 to service the 1839 shaft and a new loading jetty constructed at Plunkett Point (Clark 2009: 73).

Throughout the course of 1839-40 the miners on the Tasman Peninsula expanded the workings, the works' progress marked by the excavation of minor shafts to aid ventilation and drainage. Exploratory shafts and boreholes bracketed the main area of the works, as Lacey and Hurst sought the limits of the coal bed. The extent to which these additional works could be pursued was constrained by the limited availability of skilled convict labour, with the men directed to coal-getting activities to keep up the supply, rather than sinking major shafts.⁶²⁴ Finally, when water inundation of the workings began to drastically affect productivity at the beginning of 1841, Hurst found it necessary to direct labour to the sinking of another new production shaft.⁶²⁵ The limited pool of labour, exacerbated by the withdrawal of miners to Recherche Bay in August 1840, meant that production suffered as sinking continued. By the end of 1841 the workings south of the 1839 shaft were described by Samuel Cook as "done", with work still progressing on the new shaft.⁶²⁶

The removal of water was an art the mine manager of the nineteenth century needed to master. In workings accessed by adit, it was possible for water to be removed with the help of gravity via the adit or a specially-cut tunnel (Holland 1835: 189). On the Tasman Peninsula, the coal worked from the adits during 1833-39 dipped away from the coast, with the second seam located at an even lower level. A small water shaft had to be sunk below the level of the lowest seam, from which a narrow tunnel led to a second water shaft on the coast. Continual pumping from this shaft was required to keep the mine free of water, with two convicts using winch and buckets able to raise 100 gallons an hour (Lempriere 1839: 80). At Jerusalem, the adit also likely served as mine drainage.

⁶²³ Charles O'Hara Booth, Captain Commandant, to John Montagu, Colonial Secretary, 28 December 1839, CSO 5/217/5507, T.A.H.O. (BT).

⁶²⁴ Charles O'Hara Booth, Captain Commandant, to Matthew Forster, Colonial Secretary, 19 April 1840, CSO 5/199/4778, T.A.H.O.; Charles O'Hara Booth, Captain Commandant, to Assistant Colonial Secretary, 17 February 1841, CSO 5/208/5150, T.A.H.O. (BT).

⁶²⁵ James Hurst, Mining Overseer, to Charles O'Hara Booth, Captain Commandant, 14 July 1841, Tasmania Papers 134, CY 3079, Frame 283, M.L. (UB); *The Courier*, 18 December 1840.

⁶²⁶ Samuel Cook, Superintendent, to Charles O'Hara Booth, Captain Commandant, 8 December 1841, Tasmania Papers 134, CY 3079, Frame 549, M.L. (UB).

Where gravity was unable to assist, water had to be raised from mines through force pumps and bucket-chains, powered by engines, water, wind, animals or humans (Holland 1835: 193-200; Dunn 1844: 40). At Recherche Bay, a gin (winding engine) was in place by June 1841.⁶²⁷ The gin was horse-powered, the walking of a horse around the circumference of the gin providing the motive power, with three horses brought to the station for that purpose.⁶²⁸ The presence of a flattened working area adjacent to the shaft at Recherche was likely where the gin was established, with the raised water emptied into the nearby surface drain (Figure 8-15). At the Tasman Peninsula mine, in addition to the water sump of the 1833-39 works, the 1838 shaft had a machine manned by up to 24 convicts to pump water from the sump at the base of the shaft (Becke 1899: 54; Clark 2009: 73).⁶²⁹ This was filled by a secondary pump worked by prisoners in the mine's depths.

At the 1838 shaft, eight convicts were also recorded at work on the roller and flywheel used for raising and lowering the men, coal and materials (Becke 1899: 53; Clark 2009: 68). A similar roller arrangement had been in place in the internal shaft of the 1833-39 workings (Brand 1993: 13). The use of hand-powered rollers, or windlasses, was one of the simplest and earliest methods for raising the excavated coal and personnel to the pithead (Holland 1835: 200-203; Dunn 1844: 39). It was superseded as a technology by the horse gin in the eighteenth century, which allowed pits to be sunk to a deeper level (Dunn 1844: 39-40). The gin was in turn superseded by the introduction of the steam engine, which further increased the depths mines could go (Daddow and Bannan 1866: 125).

Steam-power had first appeared in British mines in 1714 and were used principally for mine drainage (Dunn 1844: 40; Daddow and Bannan 1866: 103). By the first decade of the nineteenth century inefficient low-pressure engines had given way to their high-pressure successors, with these engines used in mines for drainage and haulage (Keating 1821: 64; Temin 1966: 188). Of the case studies, the Tasman Peninsula was the only mine where steam technology was employed. The first proposals for its use had been made toward the end of 1839, when the Executive Council approved the purchase of

⁶²⁷ Required for the Establishment at Recherche Bay, 16 February 1841, CSO 5/224/5707, T.A.H.O.

⁶²⁸ Extract from the Diary of the Mining Party at North Port Recherche Bay from the 18th to 26th June 1841, 21 June 1841, CSO 8/13/301, T.A.H.O.

⁶²⁹ William Derricourt refers to this as a "Walmsley" pump. William Thompson called it a "Womsey". They were likely referring to a whimsey, a general term applied to pumping or lifting machinery (including steam-powered) employed at mines.

an engine for the works.⁶³⁰ Alexander Clarke successfully tendered to supply and fit a 20 h.p. engine imported from Edinburgh, Scotland.⁶³¹ There was a delay of six months in its importation, with work proceeding on the engine house in the interim.⁶³² Despite the arrival of the engine at the mine in July 1840, a change to the location of the engine house meant that it still had not been installed by April 1841.⁶³³ This change was likely the result of the commencement of the new shaft in early 1841, with Clarke's first engine house potentially located at the soon-to-be-superseded 1838 shaft. The engine was finally in working order by August 1841, situated to the north of the 1839 shaft, but does not appear to have aided sinking of shafts or raising of coal.⁶³⁴

Water inundation continued to plague the Tasman Peninsula works, with the new area of workings north of the 1839 shaft requiring constant pumping to be kept dry.⁶³⁵ In addition to the water, the presence of old workings to the south hampered the mine's expansion.⁶³⁶ The continuance of these problems led to the March 1842 proposal to sink two additional shafts, further to the west of those already working.⁶³⁷ Booth duly submitted his proposal, accompanied by a detailed plan of the northern extent of the 1838-42 workings (Appendix 3, Figure A3-34).⁶³⁸ Three months later William Dawson was sent to provide a further report, later forwarded to the Executive Council in July (Appendix 3, Figure A3-35).⁶³⁹ Both reports agreed that two further shafts should be sunk, bottoming out at the seam's dip and thereby draining the workings. With the aid of the relocated steam engine, drainage at the mine would be greatly improved, with water able to drain from the higher working faces toward the lower sump at the base of the new shaft (Maiden 2009: 80). With the plan acceded

⁶³⁰ Minutes of the Executive Council, No. 127, 15 October 1839, EC 4/6, T.A.H.O. (BT).

⁶³¹ Alexander Clarke to John Montagu, Colonial Secretary, 20 October 1839, CSO 5/207/5127, T.A.H.O. (BT).

⁶³² Charles O'Hara Booth, Captain Commandant, to John Montagu, Colonial Secretary, 11 May 1840, CSO 5/207/5127, T.A.H.O. (BT).

⁶³³ Alexander Clarke to J.C. Victor, Commanding Royal Engineer, 30 July 1840, CSO 5/207/5127, T.A.H.O. (BT); Alexander Clarke to John Montagu, Colonial Secretary, 20 April 1841, CSO 5/207/5127, T.A.H.O. (BT).

⁶³⁴ Alexander Clarke to John Montagu, Colonial Secretary, 5 August 1841, CSO 22/4/56, T.A.H.O. (BT).

⁶³⁵ Charles O'Hara Booth, Captain Commandant, to John Montagu, Colonial Secretary, 21 March 1842, CSO 22/59/909, T.A.H.O. (BT).

⁶³⁶ William Dawson to Josiah Spode, Principal Superintendent, 21 July 1842, CSO 22/59/909, T.A.H.O.

⁶³⁷ Matthew Forster, Director Probation Service, to Charles O'Hara Booth, Commandant, 15 March 1842, Tasmania Papers 140, M.L. (BT).

⁶³⁸ Charles O'Hara Booth, Captain Commandant, to Josiah Spode, Principal Superintendent, 21 March 1842, CSO 22/59/909, T.A.H.O.

⁶³⁹ Charles O'Hara Booth, Captain Commandant, to John Montagu, Colonial Secretary, 20 July 1842, CSO 22/59/909, T.A.H.O.

to, Dawson was employed at the mines from October 1842 to aid Hurst in the sinking of the new shaft.⁶⁴⁰

The sinking of the proposed new shaft did not begin immediately. Instead the works continued to the northern extremity of the coal, with the intention of working back to the 1842 shaft once the coal's limits had been reached.⁶⁴¹ A minor working shaft was also brought into production by mid-1843, boosting productivity by some 15 tons per day.⁶⁴² By that time the steam engine had been dismantled and the process begun of relocating it to the site of the proposed shaft.⁶⁴³

Work finally got underway on the new shaft sometime in the latter half of 1843, with Alexander Clark reporting in August the following year that the shaft had a diameter of 13ft (4m), from which standing water was being pumped out by the operational engine.⁶⁴⁴ "William Derricourt" recorded the improvement that was effected by having the steam engine assist with dewatering the shaft and the haulage of spoil (Becke 1899: 71). By January 1845, both the new shaft and the 1839-43 shafts were in operation.⁶⁴⁵ The new shaft, 303ft (92m) in depth, was serviced by a self-acting inclined plane, taking the cartloads of coal down to the jetty at Plunkett Point (Fry 1850: 176).⁶⁴⁶

⁶⁴⁰ John Montagu, Colonial Secretary, Josiah Spode, Principal Superintendent, 15 October 1842, CSO 22/59/909, T.A.H.O.

⁶⁴¹ Alexander Clark to J.C. Victor, Commanding Royal Engineer, 28 February 1843, Letterbook of Alexander Clark, University of Tasmania Archives (BT).

⁶⁴² James Hurst, Mining Overseer, to Charles O'Hara Booth, Captain Commandant, 1 May 1843, CSO 22/22/880, T.A.H.O. (BT); Charles O'Hara Booth, Captain Commandant, to Colonial Secretary, 10 May 1843, CSO 22/22/880, T.A.H.O. (BT).

⁶⁴³ Alexander Clark to J.C. Victor, Commanding Royal Engineer, 28 January 1843, Letterbook of Alexander Clark, University of Tasmania Archives (BT).

⁶⁴⁴ Alexander Clark to J.C. Victor, Commanding Royal Engineer, 3 August 1844, 26 September 1844, Letterbook of Alexander Clark, University of Tasmania Archives (BT).

⁶⁴⁵ Unknown correspondent to Matthew Forster, Comptroller General, 18 January 1845, Misc 62/10/A1094, T.A.H.O. (UB); Report of the Committee of Officers into convict expenditure, 31 December 1845, CON 103/3, T.A.H.O. (BT).

⁶⁴⁶ *Convict Discipline and Transportation*, Copy of a despatch from C.J. La Trobe, Esq, Acting Governor of Van Diemen's Land, to Earl Grey, 31 May 1847, (941), p. 69.

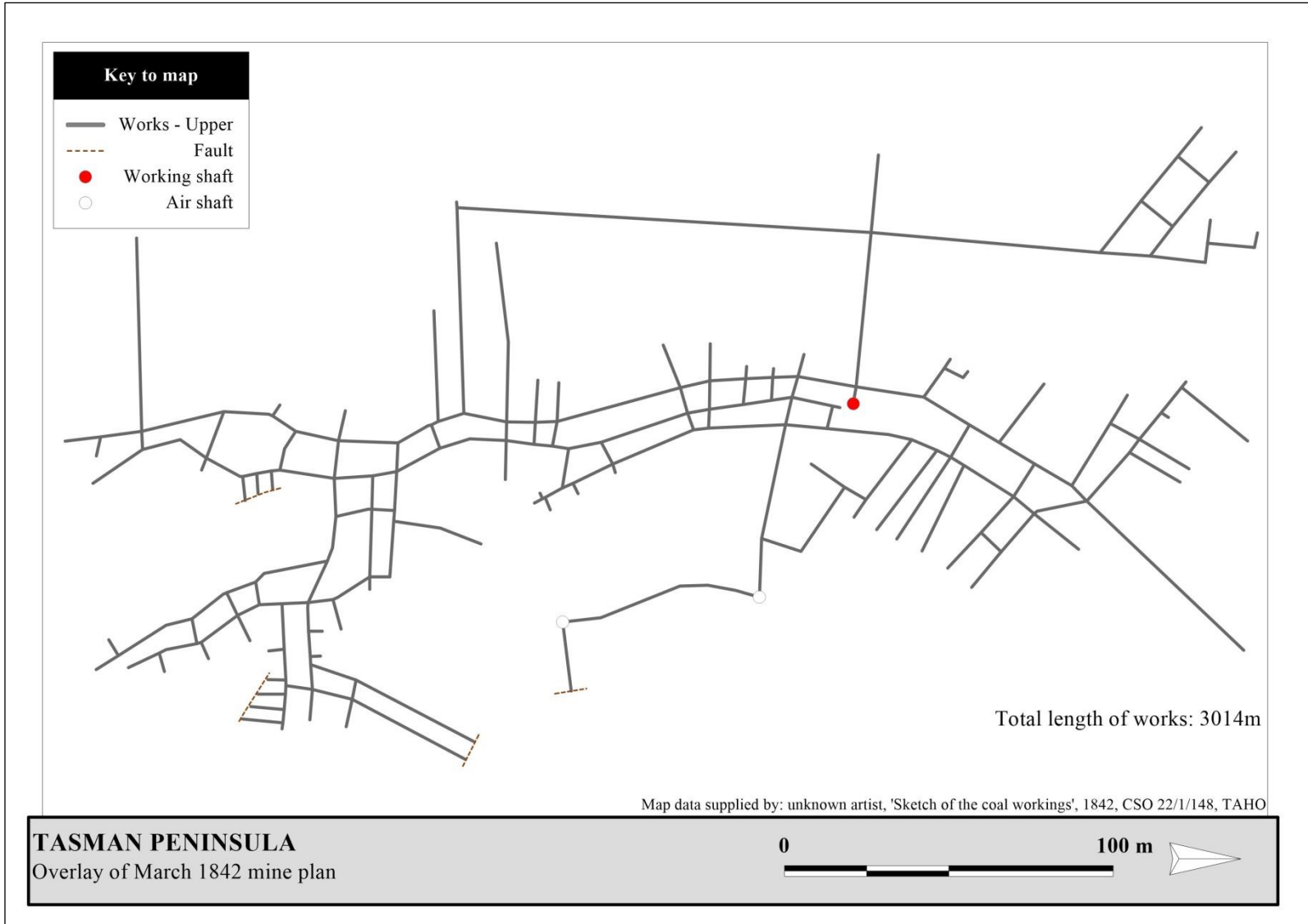


Figure 8-16: Overlay of March 1842 mine plan

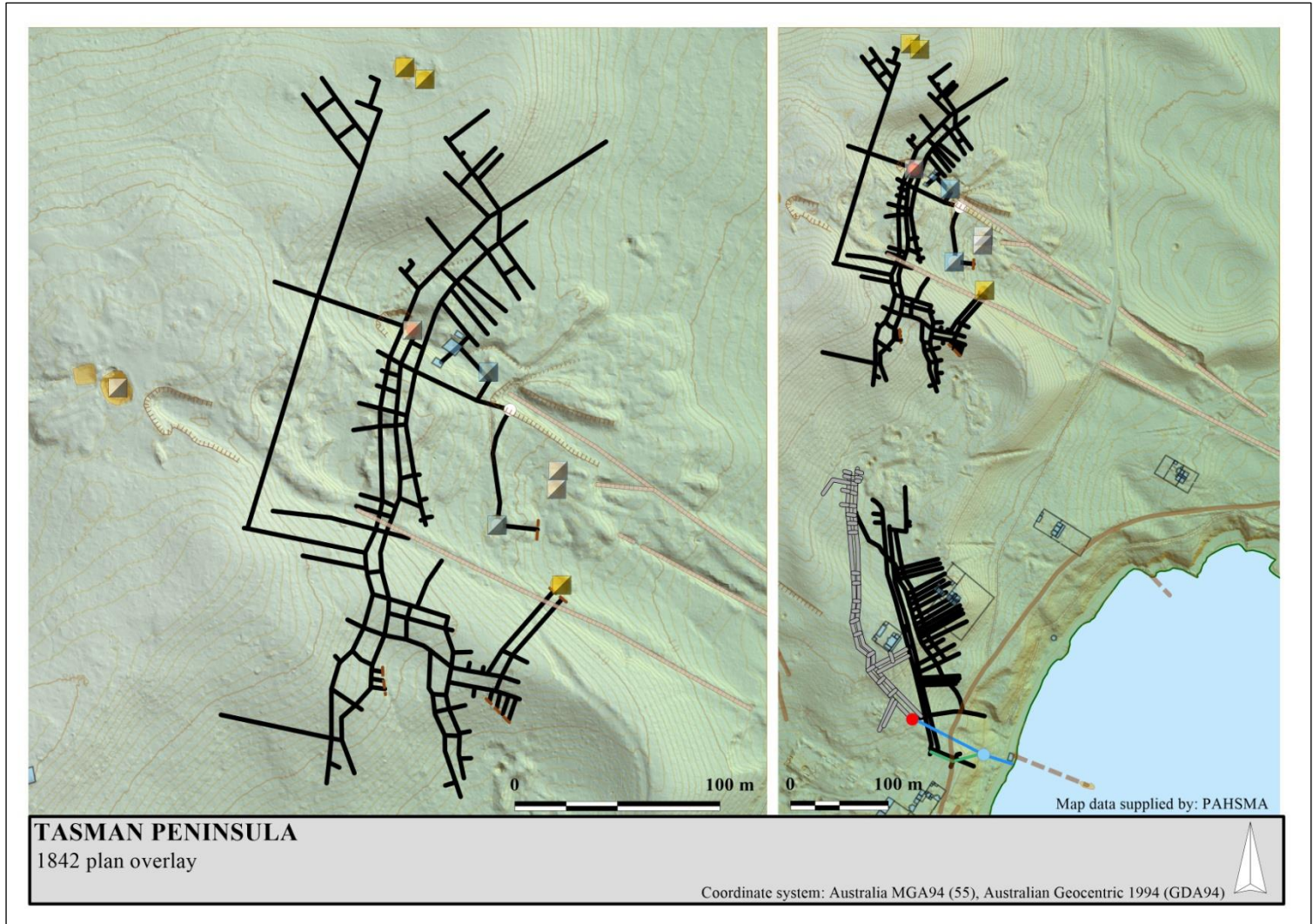


Figure 8-17: Plan showing the estimated location of the underground workings as mapped in March 1842. The workings are also shown in relation to those mapped in 1837. Together they show the two main periods of working to that point: 1833-38 and 1838-42.

The extent and even the location of the mining activity carried out on the Tasman Peninsula over the period 1845-48 is poorly documented, with the archaeological evidence ambiguous. When he visited the station toward the end of 1846, Charles Joseph La Trobe recorded that activity was focussed upon the "new" and "old" shafts, the latter likely that sunk in 1839.⁶⁴⁷ Henry Phibbs Fry, who visited the station in early 1848, reported that at that time the "new" shaft still served as the main access to the works, making no mention of any associated works (Fry 1850: 176). At the time of Fry's visit, the workings were said to have extended for five miles (Fry 1850: 176). In comparison, the workings cut between 1833-37 measured some 1.7 miles (2.8km) (Figure 8-9), with a further 1.9 miles (3km) of workings added between 1838-42 (see Figure 8-16). Although a crude measurement, these latter two sets of figures indicate that the convicts were able to open between 5-600m of new workings every year until 1842: this estimate including the earliest period of exploration, periods where production slowed due to lack of labour, labour absorption by shaft and exploratory sinking and where system-wide change caused significant administrative upheavals. Tonnage raised at the station improved when the new shaft started production in 1845, especially compared to the low yields experienced during the early 1840s: the 50 tons raised daily in 1846 was double that recorded in 1842.⁶⁴⁸ However, such rates had been experienced in the 1830s, when the 1837 shaft was in full production (Lempriere 1839: 79). Coupled with this were the accusations of administrative and industrial inefficiency levelled against the station's administrators during the 1840s, suggesting that works did not proceed with any particular alacrity between 1845-48.⁶⁴⁹

With this in mind, it is likely that the works would not have continued to expand at a rate faster than that experienced between 1833-42. If 500m of new workings were added every year between 1843-48, an additional 2.5km (1.5 miles) of underground works could have been excavated from the 1839 and 1845 shafts. Taken together with the meterage recorded between 1833-42, this would indicate that the total extent of the underground workings excavated by the convicts between 1833-48 totalled

⁶⁴⁷ Ibid.

⁶⁴⁸ J.D. Motherwell, former surgeon Tasman Peninsula coal mine, to John Hampton, Comptroller General, 10 June 1846, CO 280/202/549, T.A.H.O. (UB); William Dawson to Josiah Spode, Principal Superintendent, 21 July 1842, CSO 22/59/909, T.A.H.O. (BT).

⁶⁴⁹ For example: George Maclean, Deputy Commissary General, to John Hampton, Comptroller General, 28 August 1847, CO 280/235/569, T.A.H.O. (BT).

around five miles - matching the rough estimate provided by Fry. The extent and direction of the final period workings are unknown, although they were likely to have continued the northward trend which had been the hallmark of the mine's expansion until that point. Bairstow and Davies, as well as Maiden, suggest that a band of workings located between 300-450m north of the shaft sunk in 1843 (see Appendix 3, Figure A3-24) may represent the last of the convict-period workings on the Tasman Peninsula (Bairstow and Davies 1987: 39-41; Maiden 2009: Appendix, xxxii-iii).

The commencement and progression of the mining works was obviously linked to the presence or absence of coal reserves. Where coal was proven, both the underground and overground landscape was dramatically altered by the rapid proliferation of the infrastructure associated with the cutting, raising and transportation of the coal. The underground levels and drives expanded as the coal beds were followed. Further shafts for ventilation and production were sunk, while exploratory shafts and boreholes could be driven to seek the limits of the coal. Above ground, tailings mounds grew around the mouths of shafts, while roads and tramways facilitated the movement of the mine's produce, material and personnel. The extent and form of the archaeological residue associated with the mining operations speaks of the success or otherwise of a camp or station at attaining its primary labour goal.

To profit - not to punish?

At all places where convicts laboured, there existed tension between the demands of punishment and economy. Without the former, a place of convict incarceration reverted to being a mere prison, a holding pen for convicts. Without the latter, it became a free labour operation, stripped of its penal overlay. At places of convict labour, the motives of punishment and economy were required to coexist. The previous chapters have focussed on the organisation of convict labour and the supervisory regimes and built landscape which sought to control it, while the previous section has concentrated on the industrial landscape that they created. This section now turns to an examination of the relationship between these penological and economic aims. Although striking a balance between these aims was always going to be difficult, none of the mining operations were begun with failure in

mind. Rather, they commenced with a hope that the requirements of punishment could be operationally combined with the demands of economy.

These mines were a strange entity, where every ton of coal was imbued with the obvious economic value, as well as more intangible punitive one: "I think it is not possible that better employ will be found for some of the most refractory convicts than employing them in working coal mines" wrote Lieutenant Governor George Arthur.⁶⁵⁰ Just as the extraction of the punitive value from convict labour was affected by British, colonial and local modifiers, so too was its economic value. Camps and stations were expected to attain a level of productivity that would offset their substantial running costs, if not return a profit. With the coal that was raised destined for both government and public use, patterns of supply and demand were affected by - and could also affect - the productivity of the convict mining operations. Both government and public came to rely upon the coal produced by the convicts, particularly at the large Tasman Peninsula mine. As this operation was the only substantial local producer of coal until the 1850s, anything that affected its level of production had a echoing effect upon those reliant on its supply. With fuel and light a necessity, especially during the winter months, the efficient and productive working of the convict mines became of interest to many outside of government circles.

The productivity of convicts occupied in coal mining was a key consideration from their earliest deployment in the Australian colonies. When, in 1822, Commissioner John Bigge visited the Newcastle coal mine, he recorded that the convicts who laboured in the works were recidivists who had been sent there as punishment.⁶⁵¹ Yet, in the same paragraph Bigge also noted that the extraction and supply of coal superseded the punitive value of the exercise.

...the exclusive supply of the same articles [coal] to government was considered to be the *principal object* of the establishment, and the punishment of the convicts thither, to be a subordinate one. [original emphasis]

⁶⁵⁰ Charles O'Hara Booth, Commandant, to John Burnett, Colonial Secretary, note by Lieutenant Governor George Arthur, 31 October 1833, CSO 1/680/15052, T.A.H.O (UB).

⁶⁵¹ *Report of the Commissioner*, John Thomas Bigge to Earl Bathurst, Secretary of State, 6 May 1822, (448), p. 114.

Echoes of the same reasoning were found behind the later establishment of the mines in Van Diemen's Land. The expense of importing coal from Newcastle encouraged the search for the colony's own resources and their eventual exploitation by convicts. When Lacey and his party first began to look for coal on the Tasman Peninsula, there was great optimism that an alternative had been found to expensively shipping coal from the northern colony. The colonial treasury and commissariat staff made rapid calculations of the saving that would be made in substituting Port Arthur coal for the convict department's fuel ration. One of the more immediate demonstrations of this interconnect between the operations and the wider colonial economy were the fluctuations experienced in the price of coal. During the 1830s-40s, the coal transported from the Tasman Peninsula and, to a lesser extent, Recherche Bay, was sold by the contractors at New Wharf, Hobart. The coal's average weekly price was recorded in the local newspapers, alongside the average cost of coals imported from Newcastle. As part of this research, these costs were tabulated, enabling the pricing trends to be mapped and comparison made between coal-pricing and the development of the case study sites (see Appendix 13).

Between the March 1836 (when the records began) and mid-1839, the price of coals fetching up at New Wharf from the Tasman Peninsula hovered between 8-15 shillings (s) per ton. In comparison, Newcastle coals wavered between a much more volatile 28-60s per ton. The auction costs reflected what the public were willing to pay for coal, as well as the cost to the government in procuring it. At the beginning of 1835, Commandant Booth had estimated that each ton of coal raised cost the government 5s 8d, taking into account the maintenance and supervision of the convict workforce.⁶⁵² The cost of transporting it to Hobart was estimated a 4s 10d per ton, making for a total cost of 10s 6d per ton raised at the mine.⁶⁵³ At this rate, the coal raised contributed toward, but did not cover, the expenses incurred by the settlement.⁶⁵⁴ Initially, government vessels had been the sole means of transporting coal from the Tasman Peninsula, with the marine department responsible for its shipment

⁶⁵² Charles O'Hara Booth, Commandant, to John Montagu, Colonial Secretary, 20 January 1835, CSO 1/412/9273, T.A.H.O.

⁶⁵³ William Moriarty, Port Officer, to John Montagu, Colonial Secretary, 22 January 1835, CSO 1/412/9273, T.A.H.O.

⁶⁵⁴ *Report from the Select Committee*, Evidence of Colonel George Arthur, 30 June 1837, (518), p. 308.

and the commissariat responsible for its sale.⁶⁵⁵ By mid-1835 the government had in part transferred the transportation role to the private sector, with contractors receiving 5s per ton to transport the coal to Hobart and 15s per ton to Launceston - although the government still retained tight control of the security arrangements pertaining to these vessels.⁶⁵⁶ Two years later contractors were required to tender to the commissariat to pay for coals delivered on board at the Tasman Peninsula mine, undertaking to supply coals to the government and for public auction.⁶⁵⁷

From the coal landed in Hobart and Launceston, a sizeable tonnage was directed to meet the government's fuel requirements. Coal not required for these purposes was sold at public auction, where it fetched between 10s to 19s per ton during late 1834 and throughout 1835.⁶⁵⁸ Such was the faith in the quantity and quality of the Tasman Peninsula coal, that the government's dependence on firewood to meet the fuel ration was predicted to be at an end, leading to a flurry of minor office renovations as fireplaces were retro-fitted with coal-burning grates.⁶⁵⁹ The commissariat estimated Hobart's 1835 departmental monthly coal demand at 60 tons (Summer) to 150 tons (Autumn and Winter), requiring over 1300 tons for the year.⁶⁶⁰ With Launceston's departments included, over 1800 tons was required to keep the fires of government burning. The commissariat estimated that, as fires required less coal than firewood, a healthy saving in the fuel ration would be generated.⁶⁶¹ Although the initial poor quality of the Tasman Peninsula coal meant that firewood needed to be used in association with the fuel, the tonnage raised during this time was not inconsiderable (Table 8-3).⁶⁶²

⁶⁵⁵ John Montagu, Colonial Secretary, to Afleck Moodie, Assistant Commissary General, 12 September 1834, CSO 1/412/9273, T.A.H.O.

⁶⁵⁶ Afleck Moodie, Assistant Commissary General, to John Montagu, Colonial Secretary, 31 March 1835, CSO 1/412/9273, T.A.H.O.; Afleck Moodie, Assistant Commissary General, to John Montagu, Colonial Secretary, 24 December 1835, CSO 1/412/9273, T.A.H.O.

⁶⁵⁷ *The Hobart Courier*, 2 June 1837.

⁶⁵⁸ Afleck Moodie, Assistant Commissary General, to John Montagu, Colonial Secretary, 12 September 1834, CSO 1/412/9273, T.A.H.O.; Account Sales of Coals Sold on Account of H M Government at Public Auction by Macdougall and Stracey, 1 October 1835, CSO 1/412/9273, T.A.H.O.

⁶⁵⁹ James Harrison, Kings Yard Office, to John Montagu, Colonial Secretary, 12 January 1835, CSO 1/412/9273, T.A.H.O.

⁶⁶⁰ Afleck Moodie, Assistant Commissary General, to John Montagu, Colonial Secretary, 18 November 1834, CSO 1/412/9273, T.A.H.O.

⁶⁶¹ Civil Engineers Department, Fuel required for the Offices etc in the Civil Establishment for 1835, John Archer, n.d., CSO 1/412/9273, T.A.H.O.; Samuel Carr, Deputy Assistant Commissary General, to Afleck Moodie, Assistant Commissary General, 20 April 1835, CSO 1/412/9273, T.A.H.O.

⁶⁶² John Gregory, Treasury, to John Montagu, Colonial Secretary, 15 September 1835, CSO 1/412/9273, T.A.H.O.; *Statistical Returns of Van Diemen's Land, from 1824 to 1839*, 1839, Hobart Town, William Gore Elliston.

Year	Tonnage
1834	60
1835	3,442
1836	5,157
1837	8,865
1838	8,630

Table 8-3: Tonnage raised at the Tasman Peninsula mine, 1834-38

In July 1839, adjustments to the winding gear of one of the shafts (likely the 1838 shaft) resulted in a stoppage in the works, causing a temporary scarcity of coal.⁶⁶³ The previous month the *Colonial Times* had bemoaned the decrease in the amount of coal coming from the mine, with the 1833-39 workings providing an unsatisfactory amount of coal and works diverted to the sinking of a new shaft.⁶⁶⁴ The amount that the contractors could take away had been limited to 100 tons of coal a week, from which both government and public requirements had to be met.⁶⁶⁵ Contractors experienced lengthy delays in loading even this reduced amount.⁶⁶⁶ Despite suggestions to recommence the government shipment of coal, excluding the contractors and allowing coals to be sold at a reduced price to the public, the price of coal from the Tasman Peninsula drastically increased: rising from 15s per ton on June 13, to 25s per ton a week later. Prices peaked at 40s a ton in August. Consequently, there was a corresponding demand for firewood, as the public sought alternative fuel sources, the price rising from between 10s to 13s per ton in May, to 15s per ton in September.⁶⁶⁷ The *Hobart Courier* decried what it saw as a failure on the part of the government to ensure a regular supply:

We are informed, the present coal seam has nearly failed, and that a new shaft is in progress of being sunk, and until that is done, and the new seam set a working, only 100 tons of coals per month will be sold...At this season of the year, in the middle of winter, surely Government will, to the utmost of its power, meet the public demand, and prevent the

⁶⁶³ Charles O'Hara Booth, Commandant, to Matthew Forster, Colonial Secretary, 25 July 1839, CSO 5/201/4910, T.A.H.O.; Charles O'Hara Booth, Commandant, to Matthew Forster, Colonial Secretary, 7 June 1839, CSO 5/199/4778, T.A.H.O.

⁶⁶⁴ *Colonial Times*, 25 June 1839.

⁶⁶⁵ Charles O'Hara Booth, Commandant, to Matthew Forster, Colonial Secretary, n.d. (ca. June 1839), CSO 5/199/4778, T.A.H.O.

⁶⁶⁶ Mr Roberts, Deputy Assistant Commissary General, to W. Mitchell, Deputy Colonial Secretary, 23 July 1839, CSO 5/199/4778, T.A.H.O.

⁶⁶⁷ *The Hobart Courier*; 30 May 1839; *Colonial Times*, 6 August 1839; *The Hobart Courier and Van Diemen's Land Gazette*, 12 September 1839.

avaricious and extortionate demand of 25s. per ton, which the coal sellers now *modestly* demand.⁶⁶⁸

The situation only improved for the coal-buying public in late September, when Commandant Booth was able to report with "an infinity of satisfaction" that the 1833-39 works and the new 1839 shaft was in operation, the whole of the works capable of "supplying coal to any extent that can be required".⁶⁶⁹ There was an almost immediate drop in the price of coal, falling from 30s per ton on 26 September, to 12s per ton the following week, although the *Hobart Courier* reported that demand for coal still far outstripped supply.⁶⁷⁰ The coal's quality was still also complained of, being described as "exceedingly bad", attributed to the erroneous belief that it was not screened prior to loading.⁶⁷¹ As the winter of 1840 approached, the price of coal from the Tasman Peninsula and Newcastle mines increased, the former peaking at 20s per ton in May and as a consequence pushing up the price of firewood.⁶⁷² The contractors continued to complain of the coal's poor quality and the apparent partiality shown to government vessels.⁶⁷³

A greater crisis was experienced the following year. After a dip in prices brought about by the summer months, the price of Tasman Peninsula coal crept up to 14s per ton in March, passed 18s in April and reached 32s in August. Complaints about delays in loading contractors' vessels, as well as the coal's quality, continued.⁶⁷⁴ Of more concern was the decreasing output of the mine, which had fallen to approximately 200 tons per week - far less than the amount required for government and public needs.⁶⁷⁵ This was in part linked to the August 1840 withdrawal of experienced miners from the Tasman Peninsula and their placement at the fledgling works at Recherche Bay. Commandant Booth had foreseen this and made constant appeals for experienced miners.⁶⁷⁶ Assistant Commissary

⁶⁶⁸ *Hobart Courier*, 25 June 1839.

⁶⁶⁹ Charles O'Hara Booth, Commandant, to Matthew Forster, Colonial Secretary, 16 September 1839, CSO 5/199/4778, T.A.H.O.

⁶⁷⁰ *Hobart Courier and Van Diemen's Land Gazette*, 11 October 1839.

⁶⁷¹ Unknown correspondent to George Maclean, Assistant Commissary General, 5 February 1840, CSO 5/229/5849, T.A.H.O.; John Hutchinson, Superintendent Female House of Correction, to William Gunn, Principal Superintendent, 5 February 1840, CSO 5/229/5849, T.A.H.O.

⁶⁷² *The Courier*, 18 December 1840.

⁶⁷³ Petition of contractors to Matthew Forster, Colonial Secretary, 26 August 1840, CSO 5/229/5849, T.A.H.O.

⁶⁷⁴ *Colonial Times*, 20 April 1841.

⁶⁷⁵ George Maclean, Assistant Commissary General, to Matthew Forster, Colonial Secretary, 5 April 1841, CSO 5/229/5849, T.A.H.O.

⁶⁷⁶ Charles O'Hara Booth, Commandant, to John Montagu, Colonial Secretary, 29 April 1840, CSO 5/199/4778, T.A.H.O.; Charles O'Hara Booth, Commandant, to W.J. Mitchell, Assistant Colonial Secretary, 17 February 1841, CSO 5/208/5150,

General George Maclean, later laid the blame for increased coal prices squarely at the feet of the commencement of Recherche Bay.⁶⁷⁷

The chaos caused by the conversion of the Tasman Peninsula mine into a probation station in mid-1841 also drove up the price of coal. The attempt to reorganise labour in line with the new regulations introduced inefficiencies, as experienced miners were reclassified and removed from their skilled trade. Similarly, the introduction of the new supervisory officers and the attempts to remove convicts from these positions, also injected a level of inefficiency that had hitherto not been experienced. Added to this was the situation within the mine works themselves, with water gaining on the 1839 works triggering the requirement to sink additional shafts.⁶⁷⁸ Labour was drawn away from mining activity, lowering production and thereby placing yet more strain on the colonial coal supply.⁶⁷⁹ In April 1841, as coal prices in Hobart hovered at around 18s per ton, the *Colonial Times* lamented:

...the operations of the Port Arthur colliery are so arranged, that the public are always made to suffer. Now (at the commencement of the cold season) the coals are getting scarce, - they are one-third dross, - the measure or weight is almost always short, - the vessels sent there are long delayed for their cargoes, - and fair-play is not always adhered to in the routine of loading. There is something rotten in the department, which demands an immediate cure.⁶⁸⁰

With Superintendent Cook describing the 1839 works as "done" and the shaft still sinking, production at the mine dropped to 500 tons of coal a month, leading to the price of coal increasing to 20s per ton, despite the onset of the summer season.⁶⁸¹ The scarcity of coal meant that the colonial government was required to substitute Newcastle coal, averaging over 40s per ton at the time, to meet the fuel needs of the convict, military and colonial departments.⁶⁸² Assistant Commissary General George

T.A.H.O. (BT); Charles O'Hara Booth, Commandant, to W.J. Mitchell, Assistant Colonial Secretary, 1 April 1841, CSO 5/280/7344, T.A.H.O. (BT).

⁶⁷⁷ George Maclean, Assistant Commissary General, to Matthew Forster, Colonial Secretary, 7 May 1842, CSO 22/59/909, T.A.H.O. (BT).

⁶⁷⁸ James Hurst, Mining Overseer, to Charles O'Hara Booth, Captain Commandant, 14 July 1841, Tasmania Papers 134, CY 3079, Frame 283, M.L. (UB).

⁶⁷⁹ Charles O'Hara Booth, Commandant, to John Montagu, Colonial Secretary, 5 August 1841, CSO 22/4/49 (BT).

⁶⁸⁰ *Hobart Courier*, 6, 13, 20, 26 April 1841; *Colonial Times*, 20 April 1841.

⁶⁸¹ Samuel Cook, Superintendent, to Charles O'Hara Booth, Captain Commandant, 8 December 1841, Tasmania Papers 134, CY 3079, Frame 549, M.L. (UB); George Maclean, Assistant Commissary General, to Matthew Forster, Colonial Secretary, 8 December 1841, CSO 22/59/909, T.A.H.O. (BT).

⁶⁸² George Maclean, Assistant Commissary General, to Matthew Forster, Colonial Secretary, 8 December 1841, CSO 22/59/909, T.A.H.O. (BT).

Maclean reported in December that exportation from the mine equated to a record low of twenty tons per day, compared to previous production figures of double that amount.⁶⁸³

The price of peninsula coal continued its upward trend during 1842, reaching a peak of 40s per ton in April. Supply from the mine was still interrupted, with one contractor's vessel waiting five weeks to take on coal.⁶⁸⁴ As a result, the system of administering coal contracts was once again changed, giving government contractor's precedence in the supply of coals, ensuring that the government departments received their proper fuel allotment before coals were offered to the public at auction.⁶⁸⁵ It was at this time that the Recherche Bay coals began to appear on the market, for sale by public auction. In May 1842, nearly a year after the mine had first began, a cargo of coals was listed for sale at 21s per ton, falling to 18s and then 14s as winter loosened its grip and the coal's doubtful quality became evident. The scarcity of coal arriving from either the Tasman Peninsula or Recherche Bay meant that other means of attaining the required coal had to be reverted to, with imports of coal from Britain and elsewhere (predominantly New South Wales) reaching a hitherto unparalleled high of £3,431 in that year (Table 8-4). The *Colonial Times* likened the coal arriving from Britain and New South Wales to “relief” for the colony, considering it a “reproof to the engineering talents and energy” of the government.⁶⁸⁶

⁶⁸³ George Maclean, Assistant Commissary General, to John Montagu, Colonial Secretary, 8 December 1841, CSO 22/59/909, T.A.H.O.; Charles O'Hara Booth, Commandant, to Matthew Forster, Colonial Secretary, Return of coals shipped from the Coal Mines, Slopem Main, from the 1st November 1838 to 1st May 1840, For Private Service, 29 April 1840, CSO 5/199/4778, T.A.H.O.

⁶⁸⁴ B. Law to Headmaster, Queens Orphan Schools, 31 January 1842, CSO 22/11/417, T.A.H.O. (BT).

⁶⁸⁵ George Maclean, Assistant Commissary General, to Matthew Forster, Colonial Secretary, 8 December 1841, CSO 22/59/909, T.A.H.O. (BT); *The Courier*, 25 February 1842.

⁶⁸⁶ *Colonial Times*, 10 May 1842.

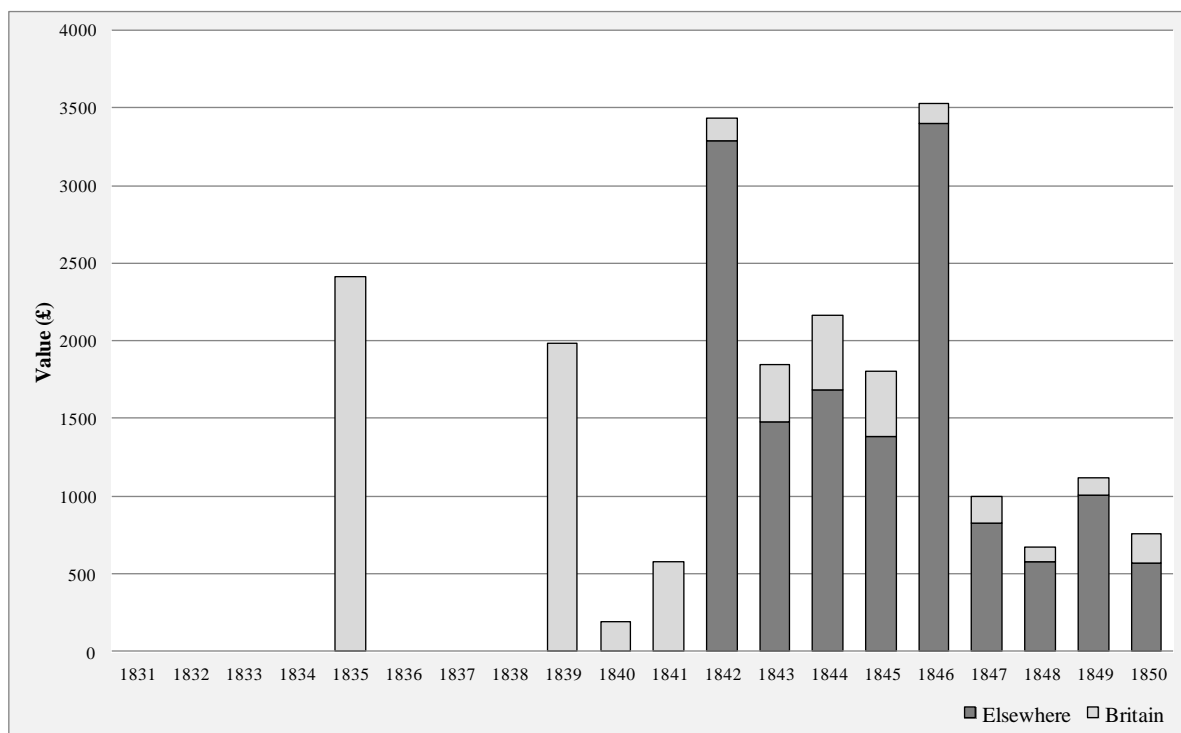


Table 8-4: Value of coal imports to Van Diemen's Land 1831-1850. 'Elsewhere' included the colony of New South Wales

(source: Value of Imports, 1835, 1839-50, CSO 50, T.A.H.O.)

Focus remained on the Tasman Peninsula operation. The decision to expand the number of shafts in March 1842 stemmed from concerns about the mine's poor production, thereby guarding against "the probable failure of the coals within the next twelve to eighteen months".⁶⁸⁷ The sinking of a minor production shaft in 1843 and the continued working of the 1839 shaft led to an increase in production, with the mine averaging 250 tons per week.⁶⁸⁸ Throughout summer the price of peninsula coal dropped from 20s to 16s per ton. As the colder weather set in, the price continued to fall, bucking the volatile trend of the previous four seasons. With the new 1843 shaft entering production, the price dropped to 11s, with Newcastle coal conversely climbing from 25s to 38s. The quality of the coals also improved, the Royal Engineers approving its use in the forges of the Road Department in Hobart and Launceston.⁶⁸⁹

⁶⁸⁷ Matthew Forster, Director Probation Service, to Charles O'Hara Booth, Commandant, 15 March 1842, Tasmania Papers 140, M.L. (BT).

⁶⁸⁸ Charles O'Hara Booth, Commandant, to G.T. Boyes, Colonial Secretary, 1 May 1843, CSO 22/22/880, T.A.H.O. (BT).

⁶⁸⁹ G.T. Boyes, Colonial Secretary, to Deputy Commissary General, 27 September 1843, CSO 8/96/2100, T.A.H.O. (BT).

The fall in the coal price was also due to changes that had taken place in the arrangements for how the coal was sold to the public. Once all the fuel requirements of the government departments had been met, the Commissariat, under instruction from Lieutenant Governor Franklin, was required to sell surplus coal at a fixed rate of 11s per ton. This was done with a view to:

...protect the inhabitants of Hobart, and particularly the poorer classes, against the fluctuation and high prices which prevailed, particularly during the winter months, owing to the measures pursued by the *monopolists* and *retail dealers*.⁶⁹⁰ [original emphasis]

That the mine enjoyed a good rate of production during this period facilitated pursuit of this policy, enabling the satiating of both government and public requirements. By mid-1844 production hovered around 250 tons a month, the coal taken away by the contractor's vessels as fast as it could be produced.⁶⁹¹ Complaints about the deficiency of the supply still existed, with requests made by the commissariat to increase the number of convicts at work in the mines in a bid to increase productivity.⁶⁹² Although the mine's convict population did not increase throughout the remainder of the year, its productivity appeared to improve. In August 1844 it was reported that its works were capable of producing 1200 tons of coal a month, leading to suggestions by the *Colonial Times* that coal could be exported, although records do not indicate that this actually occurred.⁶⁹³

In late 1844 a change once again took place in how coal was supplied to the government departments and sold to the public. A year previous, in August 1843, the British treasury had issued instructions that the coal should not be sold to the public at the subsidised rate of 11s per ton, but rather at whatever rate the market could sustain.⁶⁹⁴ In reflection of the growing fiscal rift between Britain and her colony, coal was to be supplied free of cost to Imperially-supported departments, such as the military, with colonial departments required to make its own arrangements for its fuel supplies. The commissariat was tasked with ensuring that:

⁶⁹⁰ *Convict Discipline and Transportation*, George Maclean, Deputy Commissary General, to John Hampton, Comptroller General, 23 November 1847, (1022) (1121), p. 103.

⁶⁹¹ George Maclean, Assistant Commissary General, to Matthew Forster, Comptroller General, 29 May 1844, Misc 62/6/A1089, T.A.H.O. (UB).

⁶⁹² George Maclean, Assistant Commissary General, to Matthew Forster, Comptroller General, 29 May 1844, Misc 62/6/A1089, T.A.H.O. (UB).

⁶⁹³ *Colonial Times*, 27 August 1844.

⁶⁹⁴ *Convict Discipline and Transportation*, Copy of a Treasury Minute, C.E. Trevelynn, 4 August 1843, (1022) (1121), p. 109.

...every practicable means ought to be adopted to render the labour of the convicts productive, so as to diminish as much as possible the heavy expenditure which this country has to bear on account of the convict department.⁶⁹⁵

Deputy Commissary General Maclean initiated the new contracts system in September 1844.⁶⁹⁶ Coal prices remained steady until the summer of 1845, when they almost halved to the unparalleled low of 6s per ton. With the 1839 shaft and the newer 1845 shaft producing coal, supply of the article matched demand throughout the year, the amount of coal imported to the colony decreasing (Table 8-4). In addition, few complaints were registered in government or public circles regarding the coal's quantity or quality.

At the beginning of 1846 the output of the mine was placed at 50 tons a day.⁶⁹⁷ Within months, however, the supply of coal from the station once again became a source of discontent. In February coal prices began to steadily increase, rising from 8s to 18s per ton within the space of three months. Caused by a decrease in the coal supply, with the mine in April averaging only 40 tons per day, an enquiry was immediately recommended to investigate the efficiency or otherwise of the operation.⁶⁹⁸ With Superintendent Smith threatened with removal if the works did not improve, it was decided that the commissariat would take over responsibility for the tallying and issuing of the coal produced at the mine, leaving matters of station discipline and the actual mining works to the convict department.⁶⁹⁹ The increased involvement of the commissariat caused concern in the colony, which believed that profit from the works would be fed into British coffers, rather than returned to the colony.⁷⁰⁰ Merely an administrative rearrangement designed to improve supply, it did little to improve the mine's efficiency, with complaints about the work continuing until the end of the year.⁷⁰¹ A

⁶⁹⁵ Ibid.

⁶⁹⁶ *Convict Discipline and Transportation*, George Maclean, Deputy Commissary General, to John Hampton, Comptroller General, 23 November 1847, (1022) (1121), p. 103.

⁶⁹⁷ J.D. Motherwell, former surgeon Tasman Peninsula coal mine, to John Hampton, Comptroller General, 10 June 1846, CO 280/202/549, T.A.H.O. (UB).

⁶⁹⁸ George Maclean, Deputy Commissary General, to John Eardley Wilmot, Lieutenant Governor, 17 April 1846, Misc 62/16/A110417, T.A.H.O. (UB).

⁶⁹⁹ William Nairn, Assistant Comptroller General, to Henry Smith, Superintendent, 7 July 1846, CO 280/223/562, T.A.H.O. (UB); Thomas Lempriere, Assistant Commissary General, to George Maclean, Deputy Commissary General, 5 July 1846, Misc 62/16/A1104, T.A.H.O. (UB).

⁷⁰⁰ *Colonial Times*, 25 June 1847; *The Courier*, 26 June 1847.

⁷⁰¹ E. Hill, Visiting Magistrate, to John Hampton, Comptroller General, 28 November 1846, Misc 62/19/A1111, T.A.H.O. (UB).

request for a survey by an experienced miner was refused by the Royal Engineers, with no such person able to be found.⁷⁰²

The closing years of the Tasman Peninsula mine were marked by a slow erosion of its ability to regularly provide cheap coal. The deterioration of the mine's condition in 1846 had led to the highest level of coal imported into the colony at that time, as the public were forced to turn to other avenues of supply (Table 8-4). This was despite the fact that the mine continued to produce coal at a steady rate, with La Trobe recording a weekly production average of 300 tons in December 1846.⁷⁰³ This had again dropped to 35 tons per day by April 1847, the incompetence of Mining Overseer McGregor, who had replaced James Hurst in August 1846, blamed for the production shortfall and the generally poor state of the works.⁷⁰⁴ The *Colonial Times* went further and questioned the competency of all those overseeing the works:

If the mines were properly worked at Port Arthur, without the mischievous dominancy of the Probation department...by the employment of a sufficient number of men, the supply would be abundant, and the price reasonable.⁷⁰⁵

By July supply from the mine was still imperilled by a dearth of knowledgeable overseers, competent labour and rigorous supervision.⁷⁰⁶ What was more, the very infrastructure of the works was deteriorating, leading to the loss of coal in its transport from shaft mouth to vessel.⁷⁰⁷ An accident at the main shaft in late 1847 resulted in a diminution of the coal supply for a number of weeks, leading to a further shortage of coals and renewed calls for the replacement of the station's staff.⁷⁰⁸ The increasingly fitful supply led to increased levels of anxiety within public circles. *The Courier* believed that by auctioning coals valued at 5s per ton at the pit mouth for upwards of 17s a ton, the rampant profiteering on the part of the British government meant that many members of the public could not

⁷⁰² J.C. Victor, Commanding Royal Engineer, to John Hampton, Comptroller General, 10 December 1846, Misc 62/19/A1111, T.A.H.O. (UB).

⁷⁰³ *Convict Discipline and Transportation*, Copy of a despatch from C.J. La Trobe, Esq, Acting Governor of Van Diemen's Land, to Earl Grey, (941), 31 May 1847.

⁷⁰⁴ Henry Smith, Superintendent, to unknown recipient, 10 April 1847, CO 280/227/565, T.A.H.O. (UB); Henry Smith, former Superintendent, to unknown recipient, 16 September 1847, Misc 62/22/A1118, T.A.H.O. (UB).

⁷⁰⁵ *Colonial Times*, 29 June 1847.

⁷⁰⁶ Unknown correspondent, to John Hampton, Comptroller General, 25 July 1847, Misc 62/22/A1117, T.A.H.O. (UB).

⁷⁰⁷ J.W. Smith, Assistant Commissary General, to unknown recipient, 16 August 1847, CO 280/223/562, T.A.H.O. (UB).

⁷⁰⁸ *Colonial Times*, 28 September 1847.

afford to purchase coals.⁷⁰⁹ The newspaper labelled the ability of the contractor to dictate prices due to the limited flow of coals from the works "extortion".⁷¹⁰ Public dissatisfaction eventually led to the submission of petitions in May and June 1847 to the Lieutenant Governor from "The Inhabitants of Hobart". Calling for an end to the contractors' monopolies and a lower price, the petitioners desired an end to the involvement of the commissariat and a fairer distribution of the mine's profits between British and colonial interests.⁷¹¹ As it became clear that the British government intended to recoup its costs through the sale of coal, the newspapers began to field an increasing amount of criticism of the works. "We care not whether the miners are colonially convicted or not" argued the *Colonial Times* "let us have the work done, and the supply furnished, and the public will be satisfied".⁷¹²

Such outward displays of dissatisfaction led to the eventual dismissal of Superintendent Smith and the appointment of James Skene, despite the former's protestations that the works' failures had nothing to do with his superintendence.⁷¹³ James Hurst was also reappointed, filling the position of inspector of mining operations.⁷¹⁴ Both appointments coincided with yet another shortage, the *Colonial Times* complaining of a desperate lack of coal on the market and prices upward of 20s per ton.⁷¹⁵ Despite the reorganisation of the station's management and the amount of convict labour still available for the works, Deputy Commissary General George Maclean warned that for want of "system, proper maintenance and attention" the operation was in continued danger of failing utterly.⁷¹⁶

Toward the end of 1847 Maclean foreshadowed the eventual closure of the mine, citing the interrupted supply caused by previous poor management, as well as the changes to probation and wider transportation then being contemplated.⁷¹⁷ Coal was still sent to Hobart, but at such an uneven

⁷⁰⁹ *The Courier*, 14 April 1847.

⁷¹⁰ *The Courier*, 21 April 1847.

⁷¹¹ *Colonial Times*, 25, 29 June 1847; *The Courier*, 26 June 1847; *Convict Discipline and Transportation*, The Humble Petition of the Free Colonists of Van Diemen's Land in Public Meeting Assembled, n.d. (ca. May 1847), (1022) (1121), p. 68.

⁷¹² *Colonial Times*, 29 June 1847.

⁷¹³ Memorandum by John Hampton, Comptroller General, 7 September 1847, Misc 62/22/A1118, T.A.H.O. (UB); Henry Smith, former Superintendent, to unknown recipient, 16 September 1847, Misc 62/22/A1118, T.A.H.O. (UB).

⁷¹⁴ List of Officers, 1847, CSO 50/1/22, T.A.H.O.

⁷¹⁵ *Colonial Times*, 28 September 1847.

⁷¹⁶ George Maclean, Deputy Commissary General, to John Hampton, Comptroller General, 28 August 1847, CO 280/235/569, T.A.H.O. (UB).

⁷¹⁷ *Convict Discipline and Transportation*, George Maclean, Deputy Commissary General, to John Hampton, Comptroller General, 23 November 1847, (1022) (1121), p. 105.

rate that the *Hobarton Guardian* saw fit to note the arrival of a load in October.⁷¹⁸ The expenses generated by the station continued to outstrip the value of the coal raised. In 1846-7 Tasman Peninsula coal had garnered over £3,200 for the commissariat. Expenses totalled over £6,500, accounting for salaries, rations, tools and clothing.⁷¹⁹ At a time when every Imperial establishment was required to operate a peak of productivity, such a loss-making operation could not be allowed to continue.

Maclean recorded:

Under the present contemplated changes in transportation and the rapid decrease in the number of convicts, it will not be in the power of the convict department to continue the working of these mines much longer; consequently, the supply may be expected to diminish, and to cease entirely at no distant period, so that the inhabitants will have to look to some other quarter for their supply of this essential article of domestic comfort.⁷²⁰

Within months the British and colonial governments had followed the course of Maclean's predictions, with the majority of officers and all sentenced convicts withdrawn from the station by the end of July 1848.⁷²¹ As Maclean had foreseen, the financial burden represented by the mine's ongoing costs, led to the eventual decision to lease the mine to Alexander Clarke. Coupled with this was the steadily-decreasing amount of convict labour in the colony, linked with a growing anxiety about the morality and effectiveness of discipline at the station:

...from the extreme difficulty of maintaining surveillance over the men while at work, the Coal Mines always has been, in this respect, the least satisfactory of all the stations. The nature of the labour also interfered with strict and systematic discipline, and that labour has likewise been very unproductive.⁷²²

In the end, it was decided that neither punitive nor productive goals had been achieved at the station.

⁷¹⁸ *Hobarton Guardian*, 30 October 1847.

⁷¹⁹ *Convict Discipline and Transportation*, Enclosure 9, Statement showing the Receipts and Expenditure at the Coal Mines Station, Tasman's Peninsula, from 1st December 1846, to 30th November 1847, 11 February 1848, (1022) (1121), p. 258.

⁷²⁰ *Convict Discipline and Transportation*, George Maclean, Deputy Commissary General, to John Hampton, Comptroller General, 23 November 1847, (1022) (1121), p. 105.

⁷²¹ *Convict Discipline and Transportation*, Enclosure 1, Report by John Hampton, Comptroller General, 30 May 1848, (1022) (1121), p. 253.

⁷²² *Ibid.*

Conclusion

The coal hewn and carted by the convicts indisputably provided the British and colonial governments a chance to profit from their labour. Whether raised by convicts attached to a penal settlement in the 1820s, or by those working in a dedicated mining camp during the turmoil of the probation period, each ton of coal represented an opportunity to offset transportation's considerable costs. The amount of profit that could be wrung from the coal varied according to the colony's economic situation and the vagaries of supply and demand, at the same time as it was linked to the penological goals governing convict labour management. In addition, the formation and development of these places - especially the Tasman Peninsula - was at times allied to the crests and troughs of the coal market, as the government sought to adjust the output of the mines to the demands of the market. Increased demand for coal placed greater pressures upon the administrators to enhance the supply. This could lead to the enhancement of existing works, or the formation of new ones. All was achieved through the labour of the unfree.

The industrial landscapes of these five case studies varied from the complex Tasman Peninsula works, to the archaeologically-indistinct operations at South Cape Bay and Macquarie Harbour. The remnants of the shafts, kilns, workshops, tramways, roadways and jetties are residue of the industrial process which once ordered these landscapes. They were once compartmentalised into areas where extraction, manufacturing or service activities were carried out, within each of which convicts under the strictures of penal discipline laboured. Each was characterised by the constant interplay within and between this unfree labour and the supervisors, set against the background of penological objectives and the transformative affects of the temporal and spatial setting within which it was carried out.

There is a natural focus on the mining activity carried out at these case studies. Coal mining was their industrial justification for being, without which the places would have reverted to mere penological holding pens. Where archaeological or documentary evidence of mining remains, it is clear that, despite penological aspects, the methodology and technology which these places employed was typical of that used in the nineteenth century mining industry. As illustrated in previous chapters,

many of the mining supervisors and convict miners had experience of working in British mines. That they imported such technical knowledge with them is not surprising.

It is clear that a certain adaptation did need to take place - and not just to the penological conditions under which the work was carried out. Iron rails were imported for use at the Tasman Peninsula mine, though in the end they were never used. More successful was the application of the steam engine.

Although it took three years for the steam engine to be put in working order, the investment in it and the expertise of Alexander Clarke represented confidence in the success and longevity of the works. It also represented a desire to make these works as efficient and thereby as profitable as possible.

Convicts could and had been manning the pumps and winding gear since the mine's inception, the work considered to have a high punishment value. The 1840 purchase of the Scottish high-pressure engine was an indication that the task of "making machines of men" was not keeping up with the efficiency and profitability required of the mine.

In the end it is things like this that suggest that, in many respects, the operation of these case studies was more about "profit" than "punishment". It is an inescapable fact that the labour was unfree, characterised by the requirements of organisation and supervision peculiar to this type of labour. It is also true that, for many convicts, the experience of working in a mine was debilitating, brutish and, at times, horrific. Yet, in particular on the Tasman Peninsula during its first decade of operation, convict labour was efficiently directed toward an end that was to be of benefit to both the colonial and British governments, as well as the coal-buying public of Van Diemen's Land. That it did not always achieve this goal is obvious. However, the consternation within these circles when the coal failed, is evidence enough for the importance that was indirectly given to the unwilling labours of the convicts. These places of coal mining became of great interest and importance to people well beyond their confines and, as such, were directed by considerations that often outweighed those of penology.

CHAPTER 9: CONCLUSION

To punish or to profit? Posited at the beginning, this question formed the progenitor of this research's primary aim: to create an analytical framework through which landscapes of convict labour can be understood. Seemingly a blatant over-simplification of complex penological systems, this question contained at its core an appreciation of the dichotomous powers through which the landscapes of convict labour in the Australian colonies were formed and evolved. Through a focus upon those places where the government retained direct control of convict labour - and therefore where the veneer between intention and actuality was at its thinnest - this thesis has engaged with the key processes which drove the deployment and management of convict labour. At these places, the labour power of the unfree was harnessed to the penological goals of the British and colonial governments: be they punitive, deterrent, reformatory or economic. It was inevitable that the landscapes formed as a process of their labour came to reflect these aims and have become places where archaeological and historical engagement can provide insight into the complexities of convict labour management.

The focus on labour process has firm theoretical precedent, the study of which can foreground interactions between individuals and groups to demonstrate how such interaction shapes and is shaped by the surrounding physical and cognitive environments (Brayshay and Cleary 2002; Silliman 2006; Vaidik 2009). A key element of this - and one to which this research subscribes - is that such places of labour were defined by the interplay of power dynamics. Marked by their complexity (Paynter 1982; Spencer-Wood 2010), such dynamics underpinned the interactions between and within the free and unfree populations, in turn affecting the formation and development of the places and spaces within which they resided (Harris 1991; Delle 1999). This thesis has posited that these power dynamics operated against a backdrop where penological, industrial and colonisation motivations simultaneously acted upon the landscape's human agents. Both unfree and free agents enacted roles of dominance, resistance and collusion as part of their day-to-day interaction and their physical and cognitive environments (Hall 1991; Delle, Leone and Mullins 1999; Shackel 2000).

By pursuing the question of power dynamics within convict labour landscapes, this thesis has considered the nature of convict labour and the treatment of its intricacies by Australian historians and

archaeologists. Despite a thematic breadth in the preceding historiography, with a focus on core themes like labour, health and wellbeing, sexuality and power dynamics, there has been disparity between the way in which the convict past has been approached by archaeologists and historians. Whereas the latter has largely charted a cohesive approach, engagement by the former has been marked by a disconnectedness, seemingly set apart from the historiographic frames of reference already erected. Although this thesis does not seek to provide a definitive solution, it does aim to show that investigations of Australia's convict past are most effective when done from a multi-disciplinary aspect. This is not a revolutionary idea. It is just the simple observation that, through the application of archaeological and historical methodology, a more in-depth understanding of the places of convict labour can be achieved. Access to the documentary record provides insight into systematic intent, with the archaeological evidence opening a way to an understanding of systematic actuality (Lenik 2012: 52, 53).

In the process of answering a seemingly simple question, this thesis has posited an equally simple model for engaging with places of convict labour, based upon an analysis of the settings within which the labour was carried out, as well as the motivators which formed and developed the labour places. The former emulated other classificatory systems (i.e. Karskens 1986; Gibbs 2006) and provided an immediate way of comparing and contrasting the places and residues of Australia's convict past. The latter used a tripartite analytical approach, focussing upon the influences that organisation, supervision and production could have over the formation and development of convict labour places. A focus on organisation encouraged an analysis of the influence that decisions taken at the global, colonial and local scales had on the management of convict labour (i.e. Winter 2013). It also provided an opportunity to engage with James Scott's "public" and "hidden" transcripts (James Scott in Hall 1991: 42), encouraging an analysis of unfree and free labour hierarchies. Neither free nor unfree were passive agents in the landscape. The power dynamics between and within their ranks was marked by the interplay of those who resisted, colluded or acquiesced (i.e. Atkinson 1979; Karskens 1986; Evans and Thorpe 1992; Maxwell-Stewart 1999; Connah 2001; Fredericksen 2001; Casella 2002; Robbins 2003, 2005). Through an analysis of the physical and cognitive supervisory infrastructure, the

interplay of such dynamics and their relationship to penological motivators has been examined. The model also encouraged a focus on the productive elements of these landscapes, in particular the processes by which they were defined and the industrial ecology within which they were set.

The five archaeological case studies used in this thesis have provided an opportunity to examine the application of the analytical model at various scales of archaeological and historical resolution. Only at the Tasman Peninsula mine was the data set intact enough to link features from the archaeological record to historic use and occupation patterns. At the other case studies, smaller, or non-existent, data sets presented a challenge to the analysis of their landscapes. Such disparity is reflective of the variable quantity and quality of the archaeological and historical data sets presented to all researchers of places of convict labour. This variability would suggest that a cohesive approach to these places would be difficult to achieve. Indeed, it is arguable that the disconnect that has been noted in preceding archaeological approaches to the convict past have been due to the absence of such a cohesive framing.

The model developed as part of this research has put forward a suggested analytical framework for countering such disconnect. This model has emphasised the importance of an analysis that constantly shifts its scale of reference. It has encouraged the location of a place within its global and colonial contexts: be they social, political, economic or industrial. It has also emphasised the reciprocal nature of this contextual approach, demonstrating how the place itself influenced factors at the colonial and global contextual level. The model has also encouraged the deconstruction of a place into its various components: incarcerative, supervisory and productive. It has investigated how these operated and interacted, in particular how they affected and were affected by the cognitive and physical environment. It was through such interaction that such questions as "profit or punish?" could be approached.

Although an undeniable link existed between the motivational guiding philosophies and the formation and development of these places, an obvious disconnect was often observable in this relationship. An example of this was the treatment of the convict miners, whereby overriding penological objectives could be made subservient to the productive requirements of these places. Another example was

provided by probation's introduction. This period was when the philosophies of classification, separation and certain punishment became uncoupled from the ability of either the built landscape or the supervisors to enforce them. The archaeological and documentary record of the Tasman Peninsula mine illustrated a continual cycle of "catch-up", as its administrators sought to cope with the population and classificatory demands of the new system. The expanding incarcerative and administrative footprint of the station demonstrated the pressure exerted by probation's introduction: from the requirement to accommodate and maintain the greatly increased prisoner and administrative population, to enhancing classification and separation. In particular, the growing concern with the spatial-sexual dynamic of convict accommodation led to the construction of separate cells and the emplacement of new regulatory mechanisms - such as the erection of battens between beds. Only toward the end of the station's operational life did the incarcerative infrastructure begin to meet the classificatory requirements.

Such disconnect reflects the ever-constant element of ambiguity attached to the analysis of these places. Of particular difficulty was the disentanglement of incarcerative from productive landscapes, particularly for the smaller case study sites. Captured in time at a point between a primary phase of resource testing and a secondary phase of exploitation, the archaeological landscapes of Macquarie Harbour, South Cape Bay, Recherche Bay and Jerusalem were not redolent with the architecture of incarceration, surveillance or supervision. These were work camps, formed and managed with the primary aim of testing the coal resource. These places provide an invaluable record of the earliest stages of a mining operation, providing insight into how such places were formed: the impetus that triggered their creation and the first processes of investigation. Yet there was nothing distinctly "penological" about the depressions and mounds which mark the former locations of shafts, adits and tramways. At Macquarie Harbour and South Cape Bay, the remains of the hutted encampments were situated near very ephemeral work sites. The sandstone foundations set amidst the bush at Recherche Bay and the artefact scatters amidst the ploughed fields of Jerusalem did not immediately announce themselves as places where the unfree lived and laboured. If examined from an archaeological standpoint divorced from the documentary archive, there was no obvious penological overlay at these

places. The archaeology does not speak of enforced enclosure. These were landscapes of industry, where the nodes and linkages can be compartmentalised and examined for insight into the industrial processes represented. Archaeologically indistinguishable from those places where their free counterparts worked, they were spearheads deployed to prove the worth of coal resources for extra exploitation. These were pragmatic operations, work camps with a very definite goal in mind. As such, the landscape reflects this transience, the camps designed to fail or progress to the next stage of resource exploitation.

It was only through the application of documentary research that the ambiguity of these landscapes was able to be challenged and the penological overlay become apparent. Where the physical and documentary records overlapped, the landscape became superimposed by a new framework of understanding. With the penological layer added, they became places where the power dynamics between and within the ranks of the free and unfree could be read in the physicality of the archaeological residue. Buildings of accommodation became nodes of power, readable in their relationship to one another, the industrial physicality and the lie of the terrain. Notions of surveillance and control could be read into these landscapes, the management of the unfree workforce reliant upon methods of control and supervision only apparent through the documentary evidence.

It was arguably only when a place of convict labour progressed to a more pronounced and permanent phase of industrial activity that the penological layer appeared as an unambiguous element in the landscape. The size and longevity of the Tasman Peninsula operation bears this out. Like the other sites, the earliest phase of exploration and testing did not mark it as a particularly penal enterprise. Unlike these places, the success and expansion of the operation saw a penological layer stamped upon the landscape as the physicality of supervision emerged with the construction of prisoners' and military barracks, cells, quarters and buildings of administration. In its evolution from work camp to work station, it occupied an increasingly vital position within the colony's convict labour management system, the labour value of the convicts increasingly imbued with penological objectives.

In closing, the development and application of the analytical model demonstrated the incredible complexity of the penological motivations that governed the formation and development of places of convict labour. Such motivators constantly evolved as a result of the multi-scalar influences and the transformative effect of power dynamics. The landscapes that exist today are representations of the internal and external forces to which they were exposed, generated by free and unfree alike. From a purely archaeological point of view, these landscapes are replete with ambiguity, complicating the disentanglement of their elements. It is this ambiguity that is perhaps most important. That one element might not be discernible from the other hints at a melded landscape where elements such as "profit" and "punishment" were designed to co-exist. To take away the coal mining overlay meant that a pure prison remained. Take away the prison and free industry emerged. For landscapes of convict labour to work, the organisational, supervisory and productive elements were all present to some degree. Only through the bipartite application of historical and archaeological engagement can they be fully discerned.

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The referencing used in this thesis has necessarily relied upon two distinct systems: the note and the author-date system. The former has been used for referencing primary archival documents, its flexibility allowing the recording of a suitable level of provenance information for these sources. The latter system has been used for referencing published (primarily secondary) works. Both systems are acceptable under the terms of the style guide used for this thesis: *The Chicago Manual of Style* (16th Edition).

The following reference section is divided into archival and secondary (non-archival) sources. All of the archival material is properly referenced where it appears in the notes, with the reference section below providing an overview of the resources used and their location.

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One of the main research resources at P.A.H.S.M.A. is the availability of the 'Brand Transcripts'. Compiled in the 1980s by Ian Brand from primary source material held at numerous repositories (including the T.A.H.O.), these transcripts provide an unparalleled number of primary documents in transcribed form. Despite Ian Brand's undertaking, a great number of documents remained untranscribed at the time of his death. In 2006 a copying project instigated by Susan Hood (P.A.H.S.M.A) and Brian Rieusset saw these documents transcribed and made available. P.A.H.S.M.A. also holds transcriptions of documents transcribed by Tony Stagg for the Parks and Wildlife Service, Tasmania.

The sources available at P.A.H.S.M.A. are divided into three sections: the Brand transcripts, the Untranscribed Brand and the Tony Stagg transcripts. Where these are referenced in the textual notes they have been provided with the suffixes BT, UB and ST respectively.

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APPENDIX 1: PUBLISHED PAPER

Tuffin, R. (2013). "Australia's industrious convicts: A reappraisal of archaeological approaches to convict labour." *Australian Archaeology*(76): 1-12.

AUSTRALIA'S INDUSTRIOUS CONVICTS:

A reappraisal of archaeological approaches to convict labour

Richard Tuffin

Abstract

Over the last three decades the convict as worker has become an increasingly studied aspect of the Australian transportation experience. With their insight into the landscapes and material culture of the convict experience, historical archaeologists have had—and continue to have—an important role to play in such research. This paper draws upon previously published studies of the archaeology and history of convict labour, considering the use of such labour in the colonies which received convicts between 1788–1868: primarily Van Diemen's Land, New South Wales and Western Australia. Focusing on the use of convicts by the government, it finds that there is a distinct group of settings within which convict labour was deployed. In addition, the paper discusses the key determinants that resulted in the formation and evolution of the places of convict labour. Whilst not intended as a restrictive model, this synthesis of convict labour settings and their formative factors provides a contextual framework and classificatory system for future research.

Introduction

From the moment that convicts stepped ashore in Australia, their labour was appropriated to the cause of building and sustaining the colonies. Their deployment in the extraction of raw materials, building construction or agricultural development resulted in a complex interaction between the disparate and constantly shifting motivations which governed the Australian convict system. From the beginnings of transportation in 1788, to its cessation in 1868, convicts labouring for the government were directed and motivated by an amalgam of determining factors at a British and colonial level. Their lives and labours were shaped by decisions made by London-based committees, colonial governors and station superintendents, as well as the temporal and spatial settings within which work was carried out. Today's archaeological landscapes are a result of these formative processes, and provide an insight into the motives and outcomes of convict labour in the Australian colonies.

Using previously published research into the archaeology and history of convict labour this paper examines the key motivations and outcomes of convict labour across the Australian transportation experience, with a view to providing a contextual framework for future study. Focusing on government-run establishments, where the delineation between the *intent* governing convict labour management and its *actuality* is more readily apparent, the key settings within which convicts laboured are examined. Leading on from this, the main factors which determined how sites of convict labour would be formed are analysed, with particular

reference to how these moulded the archaeological landscapes visible today.

The Motives of Convict Labour

The transportation of sentenced men and women from Britain and its colonies to the Australian colonies lasted for 80 years (1788–1868), forming part of a much wider movement of unfree people across the globe (Nicholas and Shergold 1988). Some 139,000 men and 26,000 women were transported to Australia during this period (Maxwell-Stewart 2011:17), playing an integral role in the development of New South Wales (NSW) (1788–1840), Van Diemens Land (VDL) (1803–1854) and Western Australia (WA) (1850–1868) (Figure 1). Approaches taken toward convict management throughout this period were significantly diverse, depending upon the period and colony in which they were implemented. For example, assignment, a system of management which evolved in NSW and VDL, saw the majority of convicts assigned to work for free settlers. Its successor, probation, primarily operated in VDL and resulted in the concentration of convicts in government gangs prior to their assignment to settlers as 'passholders'. In WA, the all-male transportees had already served a period of incarceration in Britain prior to their shipment to the colony.

Nevertheless, the management of convict labour in the Australian colonies can in part be understood through an examination of the motives which governed the deployment of this labour. Casella (2007:58) outlined three aims of incarceration—punishment, deterrence and reform—neatly summarising how classic criminological debates have been shaped within a framework formed from these aims. The influential work of prison reformers John Howard (1777) and Jeremy Bentham (1791), or the analyses of Emile Durkheim (1964) and Michel Foucault (1977), can be read within the bounds of these aims. When considering the use of convict labour, however, it is possible to add a fourth aim: *economy*. In his 1791 work, Bentham based his penitentiary model upon 'pecuniary Economy', where the prison would be driven as much by profit as by punishment, deterrence or reform (Bentham 1791:42–75; Ignatieff 1978:110–113). As will be discussed herein, considerations of economy were to pervade the entirety of Australia's transportation experience, colouring the deliberations of British and colonial administrators alike, and even underpinning entire facets of the experience.

In the context of Australian transportation, contemporary discussions within Britain and the colonies about the efficacy or otherwise of the system of convict management constantly referred to the fourfold aims of punishment, deterrence, reform and economy. During the 80 years of Australian transportation, the influence of each varied greatly, depending upon British approaches to prisoner management and colonial reactions to it, though constant reference was made to each whenever existing

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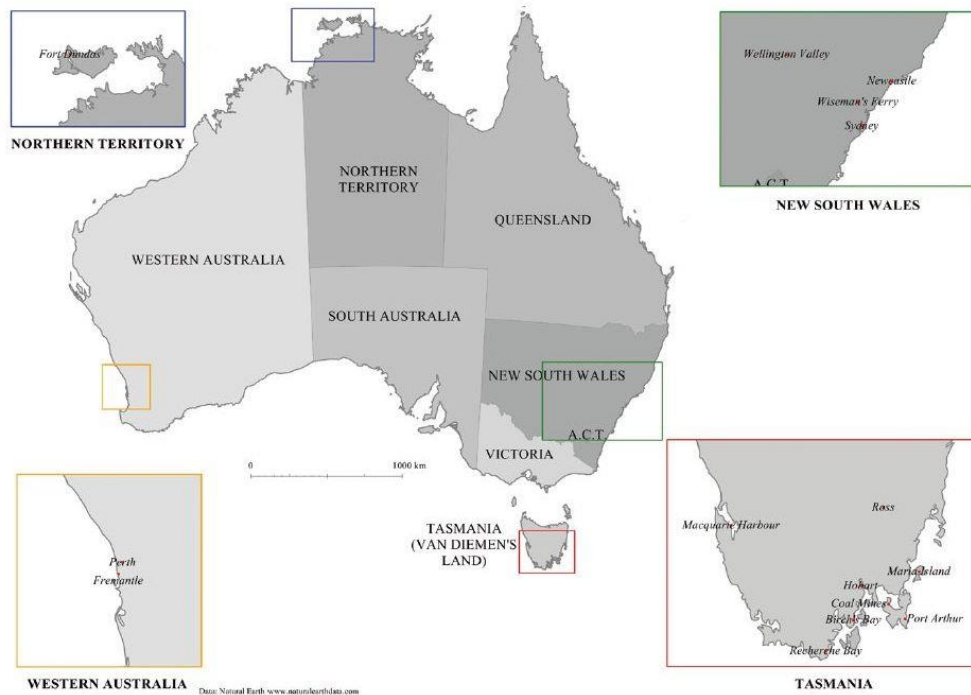


Figure 1 Locations mentioned in the text.

Articles

systems were being refined, or new ones initiated. Although marked more by its diversity of experience than its uniformity, it is possible to chart the course of Australian transportation through reference to the changing emphasis on these aims over time.

From the outset, the act of transporting a prisoner 10,000 miles distant was seen in terms of the immediate punishment it brought the individual, in addition to the deterrence it offered to criminals remaining in Britain. During the early years of settlement in NSW and VDL, deterrence and punishment took precedence over reform or economic motives. Periodic reviews, such as the Select Committee report of 1812 (British Parliamentary Papers 1812) and the 1822 report of Commissioner John Bigge (British Parliamentary Papers 1822), allowed the British government to take stock of transportation's progress and alter its course. Bigge's report, in particular, sought to ensure that transportation remained a 'real terror' to Britain's criminals, tightening the controls over the system of privately assigned convict labour, while at the same time strengthening the hierarchical model of secondary punishments that awaited recalcitrant convicts (British Parliamentary Papers 1823:5). A decade later, an 1832 Select Committee report found the system of transportation still to be inadequate (British Parliamentary Papers 1831–32), causing the Secretary of State, Edward Stanley, to call for the re-introduction of a 'degree of rigour' to secondary punishment (British Parliamentary Papers 1834:19).

Whilst the 1820s and 1830s were characterised by attempts to strengthen the deterrence and punishment values of

transportation, they also saw an increasing concern for its reformatory value (Winter 2013:137). The culmination of this was the publication of the findings from the 1838 Molesworth Report, which ultimately triggered the overhaul of VDL's convict management system and the complete cessation of transportation to NSW (British Parliamentary Papers 1838). Today seen as an 'emotional' picture of the convict system that used 'selected examples, half-truths, even inaccuracies' to damn the assignment system (Townsend 1985:80), the Molesworth Report was nevertheless a contemporary reflection of Whitehall's concerns that the system was an uncertain one, where the four core aims were undermined by placing the fate of convicts in the hands of private masters.

When a new probation system was eventually implemented in VDL from 1840, it was intended to be built upon a foundation of certainty. Placed upon arrival in gangs, convicts could only progress into private service as passholders through outward displays of moral and religious reformation, aided by rigorous classification and superintendence (British Parliamentary Papers 1845:12–16). As Charles LaTrobe's 1847 report was later to point out, probation failed in all these respects, becoming as uncertain a system as its predecessor (British Parliamentary Papers 1847). Hamstrung by a chronic lack of funds or efficient staff, as well as a depressed colonial economy, probation only began to achieve its aims in the late 1840s, shortly before transportation to VDL ceased in 1854.

Throughout the 1840s there had been an increasing focus on economy, as the British and VDL governments sought to

mitigate the spiralling costs of probation (Tuffin 2007:75–76). When transportation was introduced to WA in 1850, economy was very much at the forefront, as the colony sought to capitalise on the benefits that could be accrued through convict labour (Gibbs 2006:72). Transportation to WA formed an integral part of a sentence which had already been partially served in British prisons (Shaw 1966:354). The convicts' presence provided a market for local produce, in addition to providing a source of labour with which many private and public works were completed. In the end, economy also played a role in the cessation of transportation to WA, when the British government decided prison-building in Britain was a cheaper option (Shaw 1966:357).

Previous Studies of Convict Labour

This paper is primarily concerned with how the remnant physical landscape can be used to gain insight into the motives that drove the deployment of convict labour, as well as the outcomes of that labour. Through archaeology's ability to meld documentary and material culture data, it is possible to examine original intent at the same time as engaging with actuality as presented through the physical landscape (Lenik 2012:52, 53). The maps, plans, letters, reports and accounts available to the researcher provide insight into the intentions of the administrators: why a particular station might have been formed, what class of convicts it was meant to hold, or how an establishment was meant to operate. Through the archaeological record, the actuality of this can be measured: the site's relationship to the natural environment, the siting of buildings or the patterns of material culture distribution can be read against the backdrop of intent. These landscapes of convict labour were formed in reflection of penological aims and shaped by the interactions between governors and governed. At the same time, the constructed landscape also acted upon those within it (Anschuetz et al. 2001:185).

The study of convict labour in Australia draws upon a wealth of previous theoretical work. Archaeologists recognise that the process of labour is heavily imbued with meaning and cannot just be read in economic terms:

The labor that occupies the attention of historical archaeologists is the labor that is colonized [sic], enforced, controlled, exploited, indebted, hierarchical, unequally distributed, often rigidly structured, and simultaneously global and local (Silliman 2006:147).

Labour interactions therefore provide the archaeologist with insight into the constant push-and-pull of human relationships. Silliman (2006) found that labour studies in archaeology are pervaded by concerns about identity, race and gender, as well as agency and the lived experience. Through labour, archaeologists can understand the process of colonisation and the way that it can occupy the nexus between two cultures (e.g. Delle et al. 1999; Given 2005; Paterson 2005). Through labour, the form of social hierarchies can be traced, in particular, the powered cultural landscapes that can be created by the operation of domination and resistance dynamics (e.g. Lenik 2012; Orser 1988; Paynter and McGuire 1991; Singleton 2001; Spencer-Wood and Baugher 2010). Despite this, there is no unified approach to engaging with the archaeology of convict labour in the Australian context.

Previous archaeological and historical studies have engaged with the deployment of the convict unfree in the labour process, examining everything from the products and setting of this labour, to the management of the labour source itself. However, as will be discussed, these studies are analytically separated, remaining as examinations of temporally and spatially limited areas.

The well known historical studies of Robson (1965), Shaw (1966), Hirst (1983), Hughes (1988) and Nicholas (1988) provide a cross-section through the Australian convict system, exposing the political, social and economic components that enabled this system to function. From an archaeological perspective, Gojak (2001:73) found that archaeological research into the NSW convict system had three main foci: the convict experience; punishment and penal institutions; and the nature of convict society, although the concentration on each was uneven and lacked a serious engagement with system-wide contextualisation. Ten years later, Gibbs (2012) found that the uneven pace of research had continued, although Winter's (2013) placement of the archaeology of Australian transportation, particularly to WA, within a global context, has provided some systematic contextualisation.

The increasing interest in the convict as worker has resulted in a large corpus of study. Roberts (2011:33) has charted the development of convict labour historiography, examining its progress from a study of the 'criminality and culpability' of the convict, to a study of the convict as worker. Over the course of Australian transportation there were two main ways that convict labour was organised and motivated by the government. It could be employed within a gang environment, the collectivisation of labour increasing levels of superintendence and, theoretically, work output (Nicholas 1988; Robbins 2000, 2004), or it could be targeted at specific, skills-based tasks (Macfie 2002; Nash 2003; Robbins 2000, 2009; Tuffin 2007). This recognition and utilisation of the intrinsic skills of the convict, as well as attempts to ensure the full extraction of a convict's labour potential, were defining features of convict labour management. Some studies (e.g. Hirst 1983; Nicholas 1988) have been criticised for their concentration upon the ameliorated conditions of many convicts, others instead choosing to highlight the more brutal elements that permeated the convict labour experience (Evans and Thorpe 1992; Hughes 1988). Some studies have striven to take a middle ground, recognising the complexity inherent in extracting labour power from an unfree workforce (Maxwell-Stewart 1997). Integral to this have been examinations of the convicts' responses to the appropriation of their labour: from simple acquiescence to the extremes of collaboration or resistance (Atkinson 1979; Casella 2001; Dunning and Maxwell-Stewart 2004; Karskens 1986; Macfie 1988; Maxwell-Stewart 1999; Roberts 2000).

Australian historical archaeologists have been actively engaged in the study of the products and setting of convict labour. Although written from an historical perspective, Kerr's (1984) study of the planned architecture of the convict system linked building design and built form to the development of penological practice in Britain and Australia. Karskens (1986) used a typological analysis of walls along the Great North Road, NSW, to draw wider conclusions about the management and utilisation of convict skills and labour. Thorp's (1987a, 1987b)

study of non-institutional convict places in NSW created a coherent contextual discussion of these places of confinement and labour. Frederickson (2011) sought to use the archaeological fabric of Fort Dundas, Northern Territory (NT), to examine the control and organisation of convicts. Central to Gibbs' (2001, 2006) analysis of WA's convict legacy was a classification of convict places, including the numerous places where convicts laboured. Also concentrating on WA, Trinca (1997:33) analysed what he termed the 'spatial intent' of the convict system's built legacy, seeing it as comprising 'linked elements in a hierarchy of discipline'. In Tasmania, Tuffin (2004b) has sought to analyse convict stations through their utility as quasi-industrial establishments.

Settings of Convict Labour

During 1788–1868, the interaction between government and convict was nowhere more immediate than where the government retained direct control over the processes and products of convict labour. At these places, the interface between administrative aims and operational realities is at its clearest. How the labour was organised and managed was a direct reflection of how British and colonial aims, as well as those of a more immediate kind, came to be implemented. The labours to which the convicts were put, as well as the way in which they were utilised and motivated, provides insight into the constantly evolving convict system. However, convicts labouring directly for colonial governments did so under a confusing array of systems, at a great number of locations and for a wide variety of purposes throughout Australia's transportation period. Nevertheless, it is possible to discern a pattern to the deployment of convict labour, centring upon the settings within which this labour was deployed and the determining factors which led to the formation and evolution of these settings.

Convict labour can be distilled into five settings: day gangs; work camps; work stations; industrial stations; and establishments, each characterised by a series of traits (Table 1). These settings are deliberately expansive, encompassing a variety of place-types and systems. Every place where convicts laboured during the period of Australian transportation can be understood in terms of these categories—some beginning and ending as one setting, others beginning as one and then morphing into another. The categories are designed to be used as a contextual guide, providing a scale of comparison.

Day Gangs

The day gang was perhaps the government's most recognisable form of convict labour management. It focused the labour power of a group of convicts on a particular task, the outcome of which could be the attainment of a resource or the creation of a product. This collectivisation also allowed for economies in superintendence. The gang could comprise unskilled or skilled convicts, or a mixture of both (Nicholas 1988:154, 156). Gangs could be employed as a single unit, or be one of several working toward the same end. Emphasis on coercive measures varied from gang to gang—the type of work, forms of restraint and their desired outcome all affecting the experience of gang life.

The day gang was often attached to a town-based institution. Convicts within day gangs resided at a fixed point, labouring within a localised area during the day. The Hyde Park Barracks (1819), the Hobart Prisoners' Barracks (1821) and the Fremantle Prison (1852) were such nodal points, accommodating many of the convicts in those three centres (Penitentiary Chapel Historic Site 2006; Robbins 2005; Trinca 1997). During working hours convicts would be employed on road projects, harbour works, the creation of public buildings or agricultural pursuits (Nicholas 1988:155), returning at the end of the day to be housed in barracks accommodation, or—particularly in the early years—accommodation they had sourced for themselves. In WA, these gangs often consisted of Ticket-of-Leave holders who had been unsuccessful in their hunt for private employment (Gibbs 2006:73; Trinca 1997:25).

Work Camps

Work camps were one step removed from day gangs, being a detached establishment entailing additional logistics for maintenance, surveillance and administration. Labour at these places was still invariably collectively organised, the gangs assigned to tasks in and around the camp area. The main difference between the camp and the day gang was that, whereas the latter's home establishment housed convicts engaged in a multitude of tasks, the work camp was dedicated to a single purpose, without which it ceased to be. Work camps purposed with road construction, such as those at Wisemans Ferry, NSW (1827–1832), for example, saw convicts housed in a combination of temporary and permanent camps for the duration (Karskens 1984). When the road had been constructed, the camp was discontinued, or relocated elsewhere (Karskens 1984:19, 25).

Setting Type	Characteristics
Day Gangs	<ul style="list-style-type: none"> • Often attached to a larger institution • Localised work area • Single or multiple gangs could be devoted to a single work outcome
Work Camps	<ul style="list-style-type: none"> • Detached establishment • Often dedicated to a single work outcome • Limited self-sufficiency
Work Stations	<ul style="list-style-type: none"> • Detached establishment • Often dedicated to a single work outcome • Higher degree of self-sufficiency
Industrial Stations	<ul style="list-style-type: none"> • Could have detached establishments of its own • Multi-faceted labour focus • Labour dedicated to self-sufficiency
Establishments	<ul style="list-style-type: none"> • Labour confined to establishment or to day gangs • Often involved in manufacturing or service-related tasks

Table 1 The five main settings for government convict labour and key characteristics.

At Birchs Bay, VDL, a dedicated timber-getting camp operated between 1824–1830, cutting, carrying and reducing timber for export to Hobart. It only ceased operation due to the exhaustion of the timber and the consequent establishment of the Port Arthur timber camp (1830–1877) (Macfie 2002).

The dedication of the work camp to a single outcome meant that these establishments were limited in their capacity to be self-sustaining. Very few, if any, of the convicts were involved in labour that would offset the costs of their upkeep. Instead, essential food and material were imported into the camps, which were often located near existing nodes of settlement (Spry 2006:132). Even those work camps located some distance from settled areas relied upon a constant round of supply. During the short-lived life of the coal mining camp at Recherche Bay (1840–ca 1843), VDL, more than 70 convicts were dedicated to the task of proving and winning the coal. Those not involved in the immediate activity of shaft-sinking constructed ancillary structures, such as the horse gin (winding gear), making and mending tools or cutting timber (Tuffin 2008:52). All food and matériel was brought in by sea.

Work Stations

As at the work camps, convict labour at work stations was largely dedicated to one goal. However, unlike a camp, a station was able to direct a proportion of its labour to aid the establishment's level of self-sufficiency. This was often possible because of the station's larger population, its particular focus or because of prevailing systems of convict labour management, which may have demanded such increased independence. In VDL a heightened requirement for station self-sufficiency during the post-1839 probation era led to the creation of many work stations, whose labour forces were engaged in land clearance and agriculture, timber-getting or mining (Brand 1990; Tuffin 2007:73–74).

Like many such stations established after the Bigge Report, Wellington Valley (1823–1832), NSW, was designed to isolate the more disruptive members of convict society in a relatively self-sustaining environment, putting them to work on ground clearance and cultivation. It was a designated agricultural station, the produce of which went some way toward supporting its own isolated existence (Roberts 2000:54–55). The Tasman Peninsula Coal Mines (1833–1848) was another example. Dedicated completely to the extraction of a coal resource, less than half of the labouring convicts were actually engaged in mining, the remainder being employed in ancillary activities designed to support the station's goal (Tuffin 2008:53).

Industrial Stations

The key signifier of an industrial station was its multifaceted labour focus. Whereas camps and stations targeted a single outcome, labour at the convict industrial station ranged from resource production to goods manufacture. This type of establishment is today synonymous with penal stations, where convict labour was leavened with coercive measures. However, even at these places, hard labour punishment details worked alongside gangs of skilled and semi-skilled convicts. Thus, at Port Arthur, some convicts extracted timber from the bush, while others worked on the construction of large sailing vessels, laboured in the extensive gardens or were engaged in shoemaking or other skilled trades (Clark 2009).

Even more than work stations, industrial stations were designed to be self-supporting, in part offsetting their massive financial costs. In NSW, the Newcastle penal settlement (1804–1821) included a series of farming outstations providing goods to the settlement and local commissariat (Roberts and Garland 2010:19–20). Macquarie Harbour (1822–1833), VDL, was similarly supplied from its own gardens (Maxwell-Stewart 2008:32–35, 121). Even more importantly, self-sufficiency at industrial stations could be sought through resource procurement and manufacturing. Coal, timber and lime produced at Newcastle were used in Sydney's many building works (Roberts and Garland 2010:9). At the VDL prison of Point Puer (1834–1849) boys produced shoes, made boats, worked timber and carved stone—this not only taught them trades but also offset the station's running costs (Jackman 2001:7).

Establishments

Some places were designed to confine convicts and put them to work within the limits of their walls. In these 'establishments', convicts would spend their working hours labouring on a service or production-related task and be held within barracks or cell accommodation at night. Women in the NSW and VDL female factories, for example, were put to work on laundry or sewing whilst incarcerated (Casella 2001:49). In some instances there may have been associated day gangs labouring in the immediate area who were also quartered nightly in the establishment, such as when barracks-based convicts were co-housed with those working in the town in the Hobart Prisoners' Barracks (Brand 1990:199). Also counted amongst this were the treadwheels. A prime example of the authorities' adamant desire that no aspect of convict labour should be wasted, the wheels were always linked to secondary machinery; flour used at convict establishments was sometimes ground in this way (Tuffin 2004a:130).

Forming Landscapes of Convict Labour

In addition to the settings, it is also possible to discern a series of factors which determined the formation and evolution of landscapes of convict labour across the Australian transportation experience. Although punishment, deterrence, reformation and economy were the four motives around which transportation revolved, these do not provide a sufficiently rigorous framework for understanding how actual landscapes were created and evolved. Instead, three common factors affecting convict labour and its settings can be defined: organisation, the management and deployment of convict labour; supervision, as enforced by the supervisory staff and enabled by the design of the establishment itself; and production, through the extraction of a resource or the development of goods (Table 2).

Organisation

The management of convict labour necessitated a very different approach to that utilised in the free labour environment. Having forfeited their labour rights to the British government upon their sentence, the usual contract between an employer and employee was missing (Maxwell-Stewart 1997:143). And, although vested with the power to direct convict labour, in practice it was not a simple matter for the State to acquire and deploy this labour. Convicts were not slaves and access to their labour was governed by British and colonial laws (Kercher 2003). How the

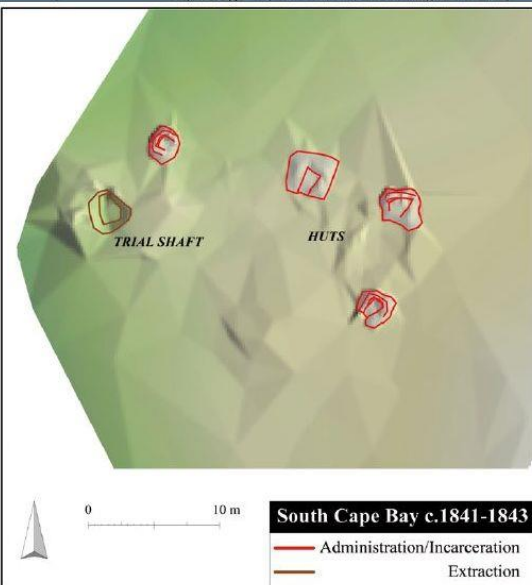
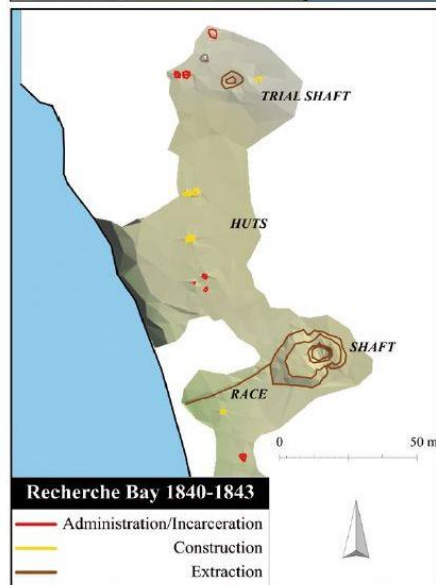
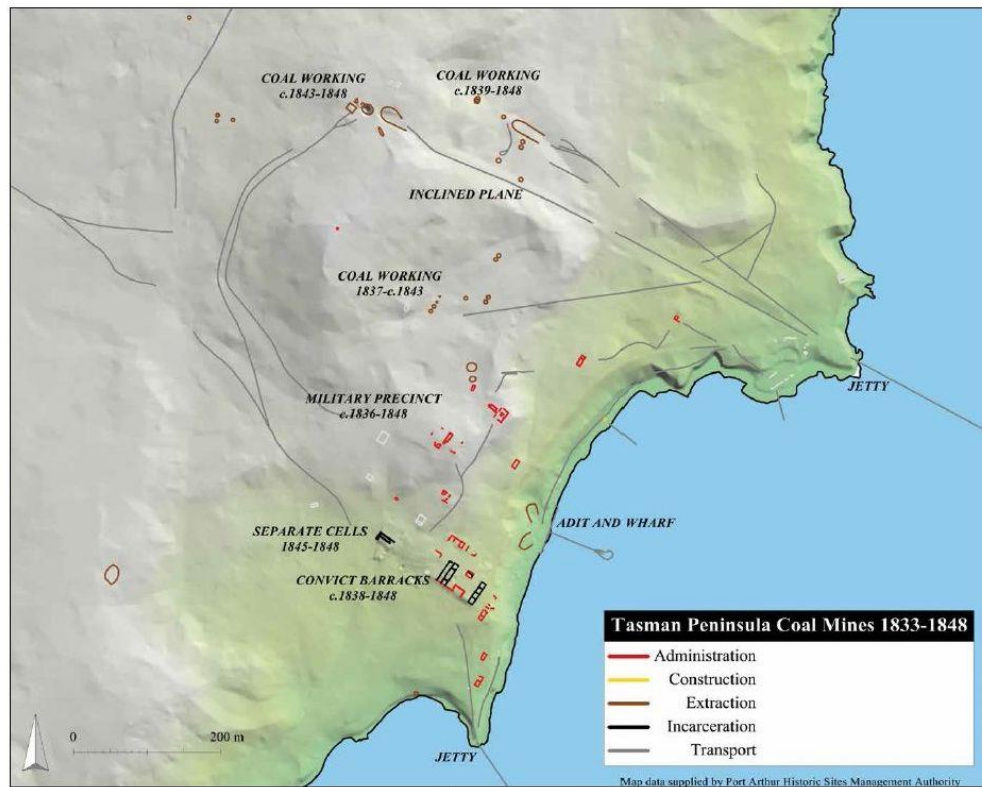


Figure 2 An example of convict labour settings. These surveys of three convict coal mines in VDL show two separate work camps (below) and the much larger work station of the Tasman Peninsula Coal Mines (above). Whilst the latter evolved from a work camp into a work station due to the relative abundance of the coal, the scarce nature of the resource at the other two meant that they never progressed beyond their initial stages.

government sought to identify and co-opt convict skills and labour has already been the subject of much scholarly attention and does not require a full discussion here (e.g. Maxwell-Stewart 1999; Nicholas 1988; Robbins 2000, 2003, 2009; Trinca 2006; Tuffin 2007). Similarly, the reaction that convicts had to the government's assumption of their labour rights has also been well discussed (Atkinson 1979; Casella 2001; Dunning and Maxwell-Stuart 2004; Reid 1997; Robbins 2005; Roberts 2000). Such studies show that the relationship between prisoner and gaoler was incredibly complex, where the efficient extraction of labour power could not be attained through a simple recourse to lash, law or leniency. Those who sought to direct convict labour were required to engage in a series of negotiations that shaped the effectiveness of the labour's end result.

The manner in which convict labour was organised was dependent upon three key elements: the overarching system under which it was carried out; the setting of the labour; and the methods used to extract and quantify the labour. The labour's setting, discussed above, was particularly influenced by the other two elements, since the system in place at the time affected the number and type of establishments in a colony. Decisions taken in London and by the colonial governments had a dramatic effect upon convict labour, governing not only how it was organised and managed, but also its expected outcomes (Winter 2013:139). The cessation of the assignment system in 1839, with the concomitant ending of transportation to NSW and the instigation of the flawed probation system in VDL, is one of the most obvious examples of such organisational change.

Using VDL as an example, there were at least three major shifts in the way that convict labour was managed (Tuffin 2007:71–76). In the earliest phase, 1803–1839, the aims of the British and colonial governments were in harmony. Convicts laboured in gangs, stations and larger establishments, their labour paid for by the British Treasury, benefitting both broader punitive aims and the growth of the fledgling colony. The second phase, following probation's introduction in 1839, saw increasing concerns with transportation costs, resulting in government establishments being split along funding lines—either colonial or British, the latter driven by an increasing need to recoup the costs borne by the home government. In the final phase, 1848–1871, Britain slowly disengaged from the colonial management of convicts, requiring remaining establishments to operate at a high level of efficiency (Tuffin 2007:76). These overall shifts in management approaches were to have a very real effect upon the settings within which convicts laboured.

Understanding overarching systems enables archaeologists to contextualise the sites they are studying. Through this, engagement



Figure 3 An example of two different types of convict labour. In the foreground are two convicts erecting a post-and-rail fence, whilst behind them an unironed gang brings timber to the Port Arthur settlement (Mitchell Library, State Library of NSW, DGA 64/v.1, 'Gentlemen Convicts - The Centipede', Thomas Lempriere, ca 1836).

with the forces that led to the formation and evolution of these places can begin. Just as important is an understanding of how convict labour was managed. Convicts were guided within the system's bounds by a balance of incentives and disincentives; a mix required because an unmitigated and continuous use of coercive methods did not make for a productive workforce (Fredericksen 2001:52; Robbins 2003:365). Incentives came in many and varied forms. At the simplest they appeared as direct performance inducements, such as increased rations of tea, sugar and tobacco (Maxwell-Stewart 1999:103); convicts employed in positions of trust often accrued such bonuses. Incentives could also take the form of shortening a sentence, or elevation to a less arduous position (and the further inducements such an elevation might entail). Convicts could also find themselves provided with improved accommodation, either at some remove from the barracks containing their peers, or in less crowded quarters.

The skilled convict was very often the target of performance inducements. A sought-after commodity in the colonies, every transport that arrived had a leavening of convicts possessing transferable skills, it being one of the government's aims to identify and co-opt these to their requirements (Dyster 1988:137–144; Karskens 1986; Robbins 2000:149). Such skills-targeting was necessitated by an overall lack of control over the composition of convict workforces. In contrast to governing a free workforce, the number, age ranges and physical fitness of convict labourers were often beyond the control of establishment administrators. By

Determinative Factor	Key Elements
Organisation	<ul style="list-style-type: none"> Overarching system of management Setting of the labour Method of labour management
Supervision	<ul style="list-style-type: none"> Military, civil or convict Built landscape
Production	<ul style="list-style-type: none"> Extractive Construction Agrarian Manufacturing Service

Table 2 Factors affecting the formation and evolution of landscapes of convict labour.

matching existing skills to occupation, an establishment's base level of efficiency was increased. Once in place, skilled convicts could find their situation ameliorated by indulgences, although their value to many establishments meant that they could find themselves retained beyond the length of their original sentence (Roberts and Garland 2010:15).

Just as there were many ways to induce the labouring convict to perform, there were just as many ways to force them back onto the regulated pathway if they erred. Extended incarceration, the lash, restricted diet, demotion—all could be brought to bear. The work the convict performed was designed to be punitive, the degree of punishment dependent upon the type of work. Heavy labour, such as carrying timber, quarrying, breaking stone or mining coal, had an in-built punitive value that could be enhanced by the application of performance inhibitors, such as irons or rations restriction, or lessened through improved treatment (Figure 3). The worst-behaved convicts, or those newly-arrived at an establishment, were often directed to this type of work (Maxwell-Stewart 1997:146–147, 1999:104). The changing regulations under which convicts laboured, the men and women who were employed to implement punishments, and the character of the individual convicts and their supervisors, all affected the array of incentives and disincentives.

The manner in which convict labour was organised, in particular the targeted use of skilled convicts, resonates through the archaeological record. Frederickson (2001) and Karskens (1986) found that direct evidence of the skill and organisation of convict labour could be gleaned from the structures and buildings built by their hands. Karskens (1986:21–25), in particular, linked historical evidence of skill appropriation within road gangs to a typological analysis of the walls built along the Great North Road. Evidence of the premium that was placed on convict skill also comes from the arrangement of the places built to house convicts. At the Tasman Peninsula Coal Mines, the most highly-prized labourer—the miner—was afforded a level of indulgence that extended to increased rations supplemented with tea and sugar, as well as accommodation in barracks separate to the rest of the convict population (Maxwell-Stewart 1997:148; Tuffin 2008:54–55).

Understanding overarching organisational management systems is vital to understanding how and why places of convict labour formed and evolved. Buildings and created spaces did not spring unbidden from the ground; their origins required local, colonial or British direction. These outside motivators could result in the formation of a string of road stations, or the instigation of an extensive station-building programme throughout a colony, making the reasons an establishment came into being an important element to trace. Evolution could take place through external and internal stressors, an organic process whereby factors like population, the natural environment, budget, access to materials and administrative competency could all result in deviance from the set path. For the archaeologist, seeking to understand why an establishment was formed can naturally lead to an examination of such deviance. The motivation for a site's formation may be discernible through the historical record, yet it is through the actuality of the landscape and material record that its operation and progress can be understood.

Supervision

One of the more recognisable aspects of convict labour was the manner of its supervision. The term, as applied herein, encompasses not only the roles of those who staffed the establishments, but also the physical structures which facilitated it, defining the daily lived experience of the convicts. The fences and walls which delineated and controlled space, as well as the people charged with controlling the application of convict labour, were an integral part of how convict labour was managed within its setting.

Those charged with the convicts' supervision were a mixture of civil officers, military personnel and convicts. Often just as ensnared by the regulations as the labouring convict, these administrators were the enforcers—either willing or unwilling—of the system. As would be expected, their roles changed markedly according to time and place. The military were perhaps the most recognisable element of supervision, involved not only in convict and asset security (Maxwell-Stewart 1997; Wright 2011:151), but also in the planning and creation of colonial infrastructure (Winter 2013:138). Civil administrators were a mixture of free and emancipated settlers, drafted into the system to take care of the administrative machinery, performing every role from clerk to station superintendent. A discernible trend was the increasing professionalisation of this class, reflecting a similar trend in post-1820s British penal administration (Ignatieff 1978:189; Wright 2011:164–165). This is most evident in 1840s VDL which, at the start of the probation period, found itself bereft of well-trained civil administrators. Badly-run stations were the result, a situation that was not rectified until the latter years of the decade when the less able administrators were weeded out and replaced by an experienced, professional cadre (Tuffin 2007:73, 76).

The last supervisory group was the convicts, placed in a situation theoretically one step removed from their incarcerated peers. Invariably seen fulfilling the role of clerk, overseer or constable, they, more than any other group tasked with supervising the implementation of the regulations, were doubly-bound by these self-same regulations (Maxwell-Stewart 1997:154–155). On the one hand, their role was to enforce the system, on the other their own performance was measured by the same regulations. From the point of view of convict labour they were an integral element, largely made necessary by the paucity of free colonists willing to perform such tasks (Robbins 2004:90). As supervisors, these convicts occupied a key place in the government's strategy for extracting labour and were to be found at every establishment where convicts laboured.

These supervisors presided over built landscapes that sought to reinforce penal objectives. The design and execution of these built elements varied, being a direct reflection of the penological environment within which they formed and evolved. Kerr (1984) charted the evolution of convict building design for the entirety of Australian transportation, showing that, although far from uniform, buildings illustrate how convict labours were physically directed by architecture which served to define, restrict, reform and contain. This could be the fences which surrounded compounds, or the walls which formed cells. Buildings could be arranged upon basic principles of hierarchy and surveillance: buildings of importance removed from the barracks, supervisor's quarters overlooking the convicts' quarters etc. (Kerr 1984:133, 170). Convicts could be accommodated in purpose-built gaols,

locked behind high walls and confined in cells and wards (Trinca 1997:20–21). Alternatively, they might be housed in rough-built work camps, restrained by little more than regulations and a forbidding natural landscape (Karskens 1984). Individual settings or setting types could evolve over time. For example, Thorp (1987a:160–189) has shown that the design of stockades and similar places of convict accommodation in NSW passed through four distinct phases, a thesis supported by the findings of Karskens (1984).

The dynamic between the supervisors and the supervised is often readily apparent in the archaeological landscape. At the Ross Female Factory (1847–1854) the placement of buildings of administration around the periphery of the main compound spoke of efforts to control the populace (Casella 2001:55). Similarly, at the Tasman Peninsula Coal Mines, the buildings of administration were removed from those holding the convicts, with both being overlooked by the buildings of the military (Tuffin 2008:57). Establishments of a smaller size, such as road gangs, could follow a similar design, ringing those buildings requiring supervision, such as the convict barracks and tool store, with the buildings of superintendence (Karskens 1984:20–21). Walls and fences were essential for delimiting boundaries. Stockades in NSW, as their name suggests, could be surrounded by a high staked fence (Kerr 1984:62).

The analysis of built elements provides insight into the workings of a penal landscape not always readily apparent through the historical record. Convicts needed to be confined, constrained and directed, the built landscape having a very real effect on how this occurred. How this built landscape evolved can also be an important indicator of greater changes taking place in approaches to convict management. The manner in which the convicts were supervised was also a direct reflection of penological aims, with every establishment in the colonies having a proportion of military, civilians or convicts acting as supervisors of the system.

Production

The final factor which determined the form of a convict labour setting was production, without which the camp, station or establishment reverted to a mere gaol, a holding pen for convicts. Production can be subdivided into five main groupings, in part mirroring the traditional primary, secondary and tertiary definitions of industry: extraction, including the refinement of a raw material; construction, the employment of convicts in public building works; agrarian production, such as land clearance, agriculture and husbandry of stock; manufacturing, the utilisation of materials for the production of a tertiary good; and service, the ancillary activities carried out to facilitate the operation of establishments.

The extraction and refinement of raw materials by convicts was an activity often associated with places of extreme punishment. Newcastle, the Tasman Peninsula Coal Mines and Macquarie Harbour were all establishments where convicts under secondary sentence were put to hard labour. Labour-intensive tasks were naturally a focus for punishment gangs; however, such tasks also required skilled convicts, since the success of the whole operation turned upon their ability to extract or refine the product. The Tasman Peninsula Coal Mines depended upon the skills of the few convict miners employed at the face (Tuffin

2008:55–56), as did the success of timber-getting establishments upon the abilities of fellers and sawyers (Robbins 2000:148–149).

Extractive industry could take place in many settings: from a day gang working in the Sydney government quarry (Thorp 1987a:154) to one of the felling gangs attached to the large industrial station of Port Arthur (Tuffin 2007:78–79). Places where extractive industry was undertaken were marked by the presence of the raw material source—such as a workable outcrop of sandstone or coal—and the infrastructure associated with its removal, such as tracks, roads, tramways, log slides, inclined planes and jetties. Sometimes, such as with timber or stone, further refinement was required, adding another link in the chain. In other instances, the material went through little refinement, being ready for export almost in its raw form. Coal on the Tasman Peninsula, for example, only needed to be screened prior to export (Bairstow and Davies 1987:20).

Like extractive industries, construction often employed a heavier form of labour. Much construction work was dedicated to road building and the erection of public buildings, where gang-based labour could be employed on breaking stone, carting materials and excavation, all of which required collective muscle power. Construction-related workers were interlaced with skilled convicts, arguably more than were employed in extraction. Carpenters, masons, blacksmiths and bricklayers formed the core of many gangs, and the successful construction of the buildings, bridges and jetties of the colony became their responsibility.

The setting of convict construction-related labour was dependent upon the location of the object they were to construct. Strings of gangs were dedicated to the construction of the Great North Road (Karskens 1984, 1986), whilst another group of convicts were shipped to the northern tip of Australia to form a military and trade outpost at Fort Dundas (Fredericksen 2001). The labour's setting also required access to the materials that went into the product, meaning that very often construction sites would be found in concert with extraction sites. Quarries (Fredericksen 2001:53), lime kilns (Bairstow and Davies 1987:22), claypits, brick kilns (Maxwell-Stewart 2008:29–30) and sawpits could all be found dotting the landscape where convicts were engaged in construction. If materials were required to be imported, or moved from the site of extraction, associated transport nodes and networks would be located near the site of construction.

From the earliest days of settlement, the employment of convicts in agrarian labour served the twin aims of bolstering the supplies of the commissariat and clearing ground for further settlement. At the Newcastle penal station, successful conversion of bush to arable land encouraged free settlement to such a degree that the station lost its 'distant and dismal' seclusion and therefore eventually its reason for being (Roberts and Garland 2010:20). At other places there was a continual battle to provide enough simply to supplement rations (Maxwell-Stewart 2008:32–35) (Figure 4). Convicts cleared and worked the ground with very little recourse to labour-saving aids, although, as increasing attention began to be paid to the economies of transportation, operations were bolstered by beasts of burden (Tuffin 2007:74).

Convicts employed in agrarian labour were often associated with the larger establishments, or the purpose-built agricultural work stations which were a feature of early NSW (Thorp 1987a:56). In some instances small, dedicated establishments

would be formed to clear land (Kerr 1984:61). Vast swathes of ground would be cleared and cultivated, the produce used on site for rations or exported to other stations or towns. There was a concentration upon the staples—wheat, oats, potatoes—although some stations attempted to grow less common fare, such as the hops tried at Maria Island (1825–1832, 1845–1850) (Tasmanian Heritage Council 2008:8). Convicts were also involved in the husbandry of stock, primarily sheep and cattle, including the rearing and supervision of the animals and their use for food, wool and hide (Thompson 2007:76, 130–132; Thorp 1987a).

Convicts working in the manufacturing process often worked with materials sourced from the extractive or agrarian industries: wool and hides from the government farms were converted into footwear and clothing, tools and fittings were forged with coal from the mines, barrels, ships and boats were constructed from timber from the timber-getting stations. These convicts were often at the higher end of the skill scale, working individually or in small teams, rather than larger gangs (Nicholas 1988:156, 157–158). Work could be compartmentalised, the 'factory line' approach increasing levels of efficiency (Robbins 2000:148). Such operations attracted many of the incentives discussed above, the government seeking to extract a high labour return through targeted indulgences.

The presence of manufacturing processes at an establishment and an attendant high proportion of skilled convicts was a clear indicator of a government's desire to achieve some form of economy as part of an operation. Manufacturing was often, but not always, associated with the larger establishments. At these, a proportion of the workforce could be devoted to the production of goods required at the station and by the commissariat. The production of items required at a station—such as clothing or tools—indicated an attempt to achieve at least a small level of self-sufficiency. Many establishments had their own blacksmith, or a team of tailors or shoemakers (Maxwell-Stewart 1997:147–148). At another level were those manufacturing operations which targeted a market beyond the establishment. A key example would be the shipbuilding operations carried out at Macquarie Harbour and Port Arthur, which produced steam boats, barques, schooners and whaleboats for the colonial fleet (Nash

2003). Port Arthur, as well as other convict establishments, had its own flour mill which supplemented the rations of the majority of stations on the Tasman Peninsula (Kerr 1984:54; Maxwell-Stewart 1997:149; Tuffin 2004a).

The final production processes were those related to service. Although not producing goods or materials per se, convict service-related labour enabled such activities to be carried out and to form a source of revenue for the station. The Female Factories, for example, put women to work on laundry and sewing tasks contracted from outside the prison (Casella 2001:49). Every establishment had its complement of wardens and women, scavengers, clerks and water carriers, their labour ensuring an establishment's functionality. Commonly scattered throughout the establishments, convicts engaged in service-related activities were sometimes congregated in the one place, such as the placement of the carters in Carters' Barracks (1819), NSW (Kerr 1984:53).

Understanding the productive end to which the convicts were put is essential to an examination of the landscapes of convict labour. Such landscapes could comprise individual or interlinked industrial sites, their form and interrelation providing insight into the processes undertaken and the value or otherwise of the operation. The processes also influenced the way in which convict labour was organised and supervised—whether collectivised or individual, skilled or unskilled—thereby interlinking with the examinations of organisation and supervision outlined above.

Conclusion

The examination of government-employed convict labour has formed a focus of study for both archaeologists and historians, with the former well placed to offer unique insights into the way in which this labour was managed. By examining the remnant landscapes of convict labour, archaeologists have, and will continue to, shed light upon how British and colonial penological motivations affected the working lives of convicts. So far, a synthesised approach to the question of convict labour has been lacking, with studies restricted to spatially or temporally limited zones. This paper, drawing upon published and unpublished research, has sought to draw together these approaches to produce a workable overview of both the landscape types within which convict labour could be set, and also the factors which determined these landscapes' formation.

There were five main settings within which convicts laboured. Encompassing the deployment of convicts in government-run establishments, camps and stations, these settings are flexible enough to encapsulate the use of convict labour in all Australian colonies and time periods. They are designed to be unrestrictive, presenting researchers with a contextual bracket and classificatory system within which sites can be placed.

Places of convict labour formed and evolved due to a series of specific determining factors. Understanding the way in which labour was organised, from the motives of the British and colonial governments, to the use of skilled convict labour, is vital for understanding the development of particular sites. Likewise, forms of supervision—both of the human and built kind—are integral to charting such development. Finally, the form or forms of production that were involved directly influenced the management of labour, providing further insight into the penological aims of the British and colonial administrators.



Figure 4 Sketch by Thomas Lempriere showing the gardens on Phillips Island, Macquarie Harbour. Though successful, the gardens required the convicts' constant labour (Allport Library and Museum of Fine Arts, Tasmanian Archive and Heritage Office: Thomas Lempriere, 'Phillips [sic] Island from the N.W. extremity to the overseer's hut, Macquarie Harbour', ca 1828)

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APPENDIX 2: NOTES ON THE DOCUMENTARY SOURCE MATERIAL

The historical overview provided in Chapter 3 draws almost exclusively upon primary research undertaken by the author. Although secondary sources were consulted, a paucity of knowledge pertaining to a number of sites, in particular Recherche Bay, Jerusalem and South Cape Bay, meant that it was necessary to carry out an exhaustive program of primary research. There was a large disparity between the extent and depth of the material available for each of the sites. At the one extreme was the Tasman Peninsula, where thousands of pages of official correspondence, a library of images, contemporary narratives and newspaper reports all form part of the documentary record. In comparison, little contemporary or post-occupation evidence was found for Macquarie Harbour's and South Cape Bay's operations. Although more historical resources were found for Recherche Bay and Jerusalem, the resolution of historical data for these places was not as high as for the Tasman Peninsula.

The historical evidence compiled as part of this research comprised a broad spectrum of sources. The holdings of the Tasmanian Archives and Heritage Office (T.A.H.O.) was the main repository of the primary sources consulted, chief amongst which was the voluminous contents of the Colonial Secretary's correspondence files (CSO series), as well as those generated by the Convict Department proper (CON series). A large number of these records, relevant to the operation on the Tasman Peninsula, had previously been copied as part of two earlier projects - the Port Arthur Conservation Development Project (PACDP) in the 1980s and the Transcription Project in 2007-9. These were amongst the holdings of the Port Arthur Historic Sites Management Authority (PAHSMA) Resource Centre and were attained as part of this research.

Colonial-era newspapers were used in conjunction with the archival documents. Available at T.A.H.O. and also online, this resource provided a contemporary source for coal discoveries in the colony, as well as providing a counterpoint to the official correspondence generated within government circles. Such qualitative data was matched by the more quantitative data, with the newspapers publishing coal advertisements, notices of auction and tender, as well as a weekly price of coal, therefore providing essential insight into the colonial coal markets. Other documentary sources

encompassed published and unpublished accounts, diaries and reminiscences. These constituted a small, but important element of the study's historical documentation. The Tasman Peninsula coal mine was over-represented in this category, the station and its operation having been described in some detail by members of its administration (i.e. Lempriere 1839, Heard 1981), by those who visited it (i.e. Burn 1850, Fry 1850) and even those who were sent there as convicts (i.e. Becke 1899, Clark 2009). A more official form of record was forthcoming in the form of the numerous geological reports, spanning both the convict (Strzelecki 1842, i.e. Milligan 1848) and post-convict periods (Twelvetrees 1915, i.e. Hills, Reid et al. 1922). Such sources predominantly formed an objective record of the legacy of convict coal mining, having largely been completed with a view to reporting the nature and value of the coal, with the manner in which the coal had been previously worked of passing interest for the geologist. In addition to the written record, pictorial sources were queried as part of the historical research. Encompassing survey plans (both above and below ground), sketch plans, illustrations and, from the 1860s, photographs, this record largely pertained to the operation on the Tasman Peninsula, although a small number were located relating to those at Recherche Bay and Jerusalem.

Of the case study sites, the operation on the Tasman Peninsula left the largest and most comprehensive corpus of primary resources: from the records generated by the day-to-day management of the industrial convict station, to the unsanctioned narratives of the convicts which worked in its depths. It had the largest pictorial record, including depictions of the station both during and after the convict period, as well as official surveys and plans of the station and its attendant buildings. Sources of a non-official character, such as diaries and reminiscences, relate exclusively to the Tasman Peninsula operation. The documentary and pictorial record for the operations at Macquarie Harbour, Jerusalem, Recherche Bay and South Cape Bay was, at best, arbitrary and, at worst, non-existent. At Macquarie Harbour, a handful of records pointed to the fact that convicts from Sarah Island were put to work extracting coal; but little else. At Jerusalem, the record was more complete, with sources detailing the discovery of coal, establishment of the mining gang, its eventual closure and brief re-opening. There were even a number of survey plans of the workings and an 1842

illustration thought to be of the mine. As with Macquarie Harbour, the operation at South Cape Bay left only a breadcrumb documentary trail for the researcher, with evidence of its operation coming mainly from later geological reports. There were a number of archival records pertaining to the operation at Recherche Bay, some of which provided high resolution glimpses of the activity carried out at the camp.

APPENDIX 3: TASMAN PENINSULA MAPS AND SHORT GAZETTEER

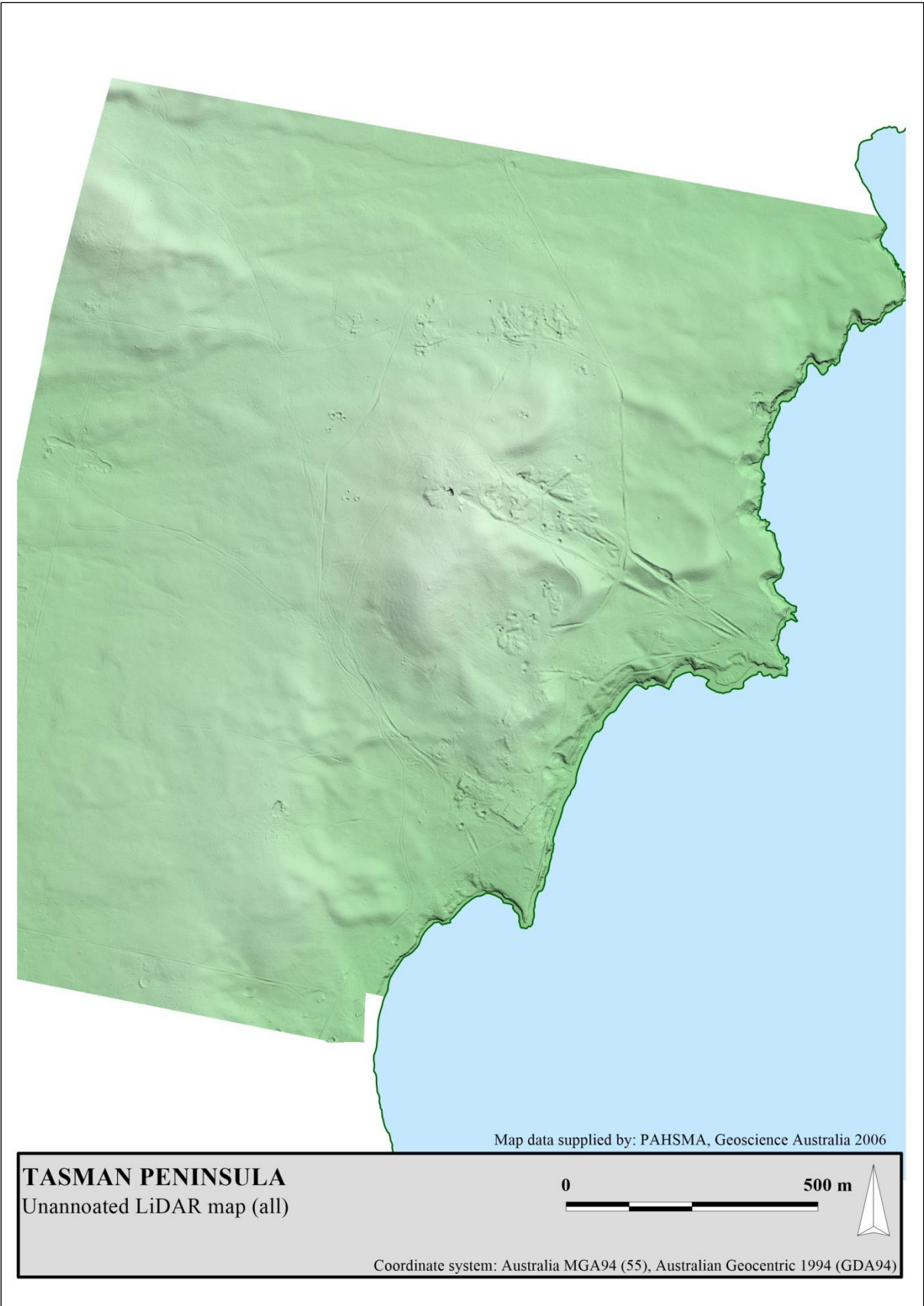


Figure A3-1: Tasman Peninsula, unannotated LiDAR map

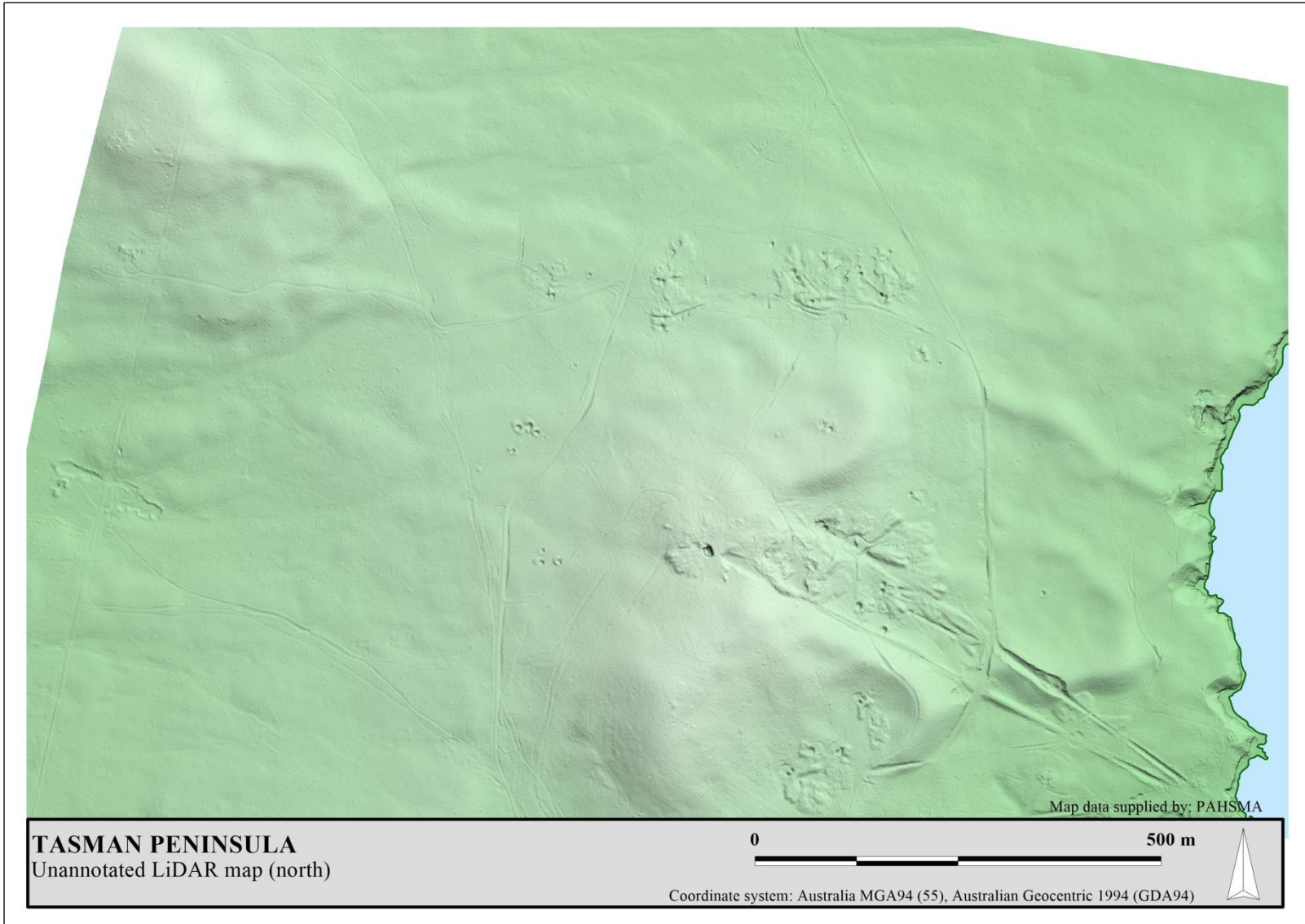


Figure A3-2: Tasman Peninsula, unannotated LiDAR map (north)

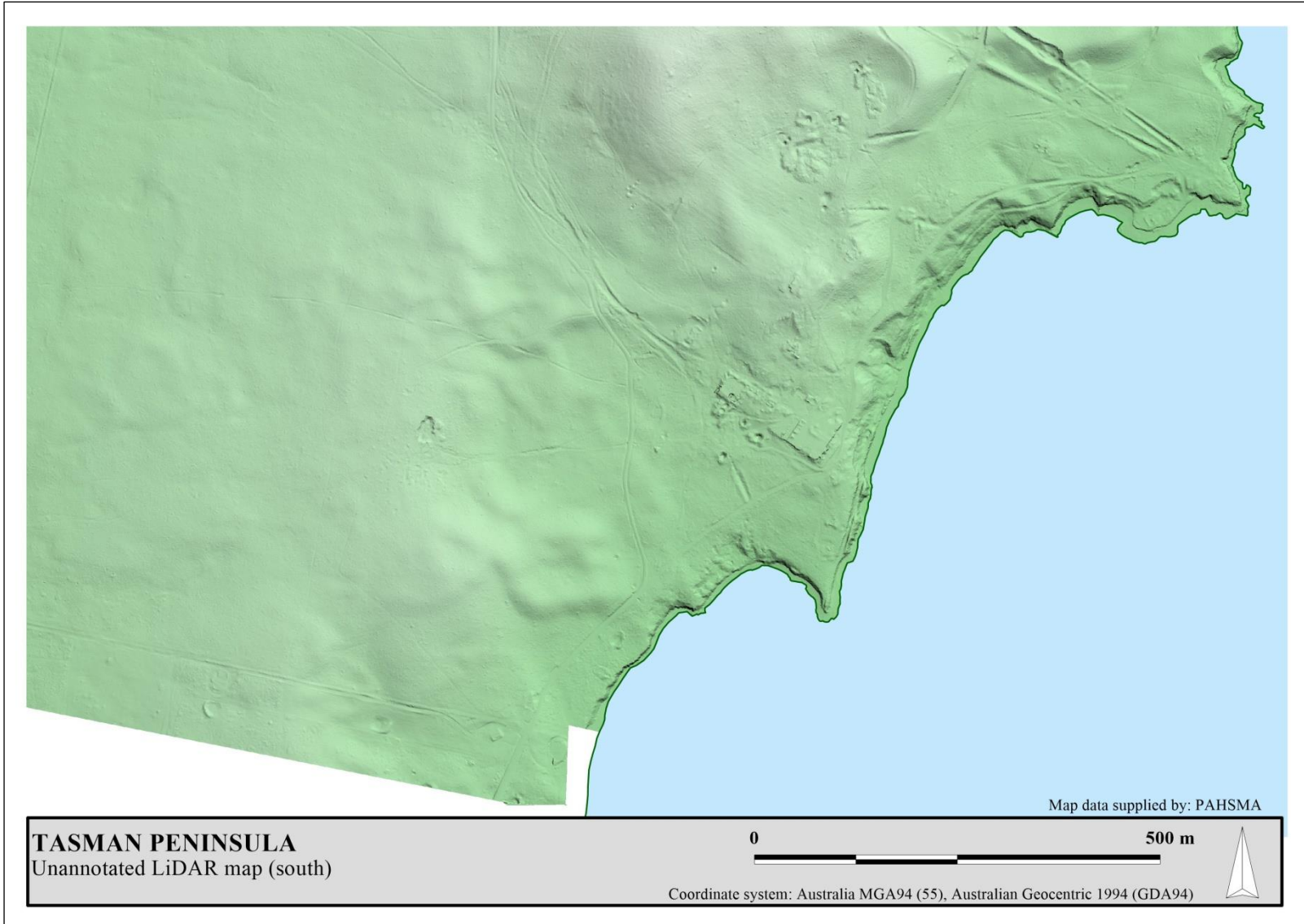


Figure A3-3: Tasman Peninsula, unannotated LiDAR map (south)

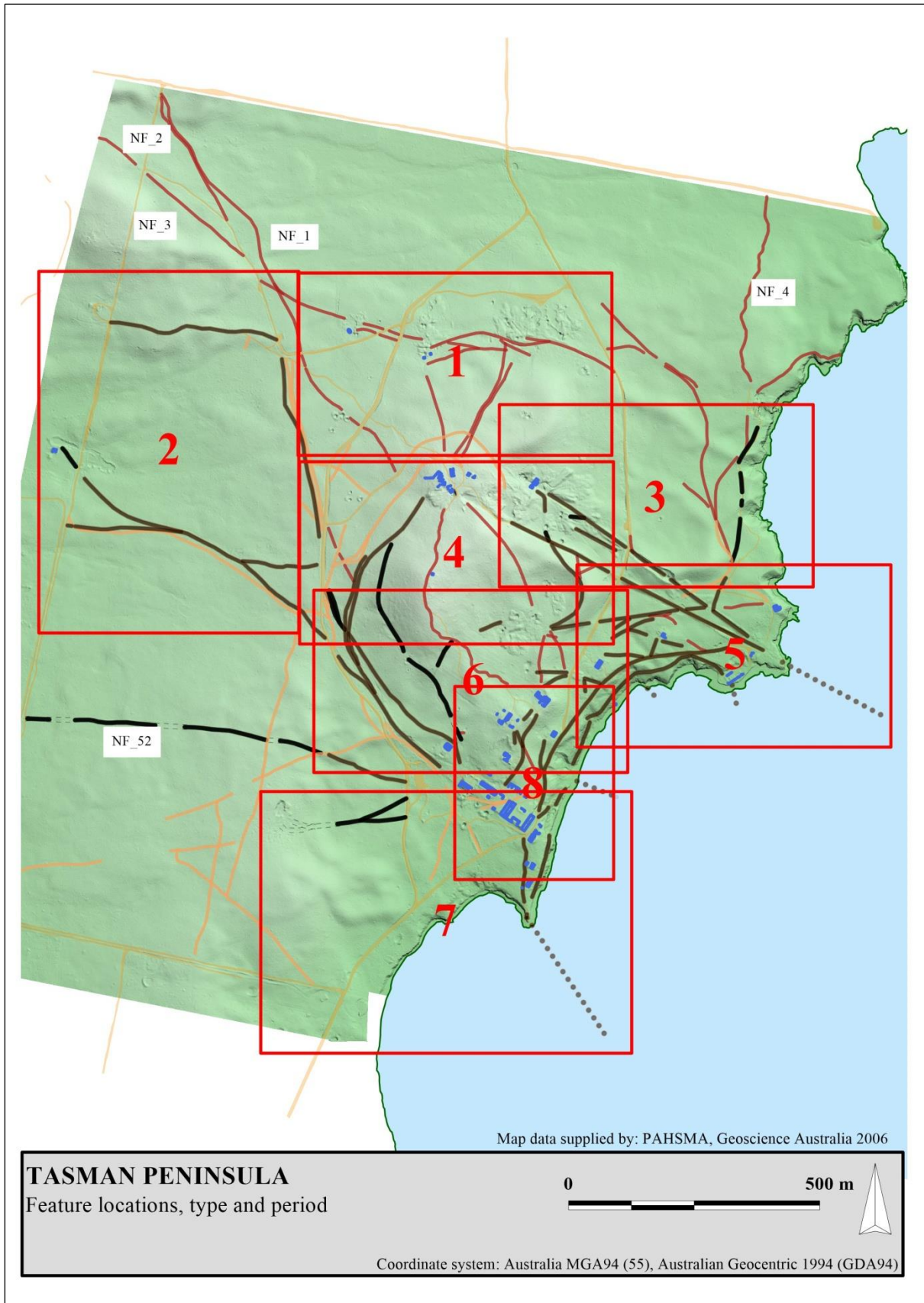


Figure A3-4: Tasman Peninsula, annotated LiDAR map showing map references

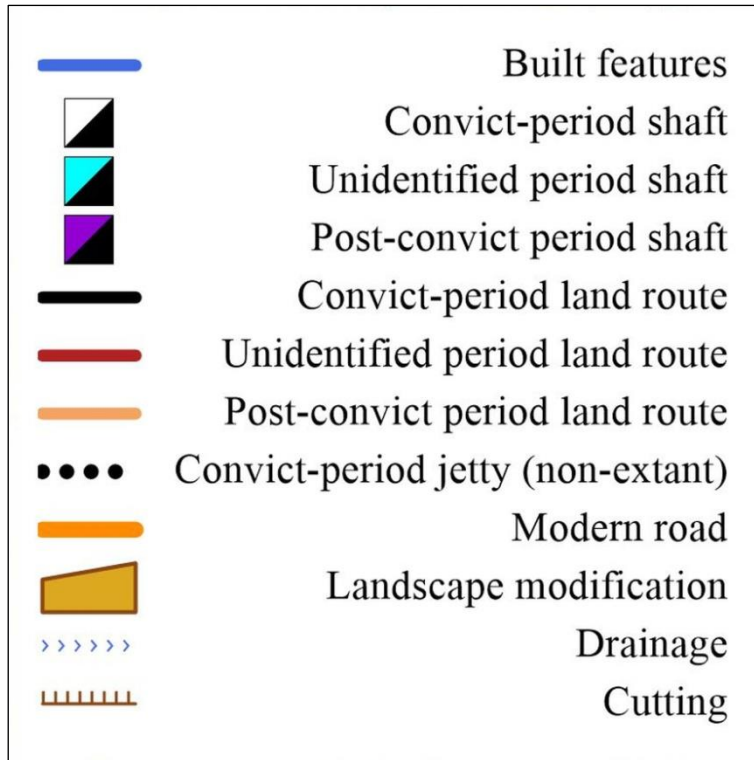


Figure A3-5: Map legend

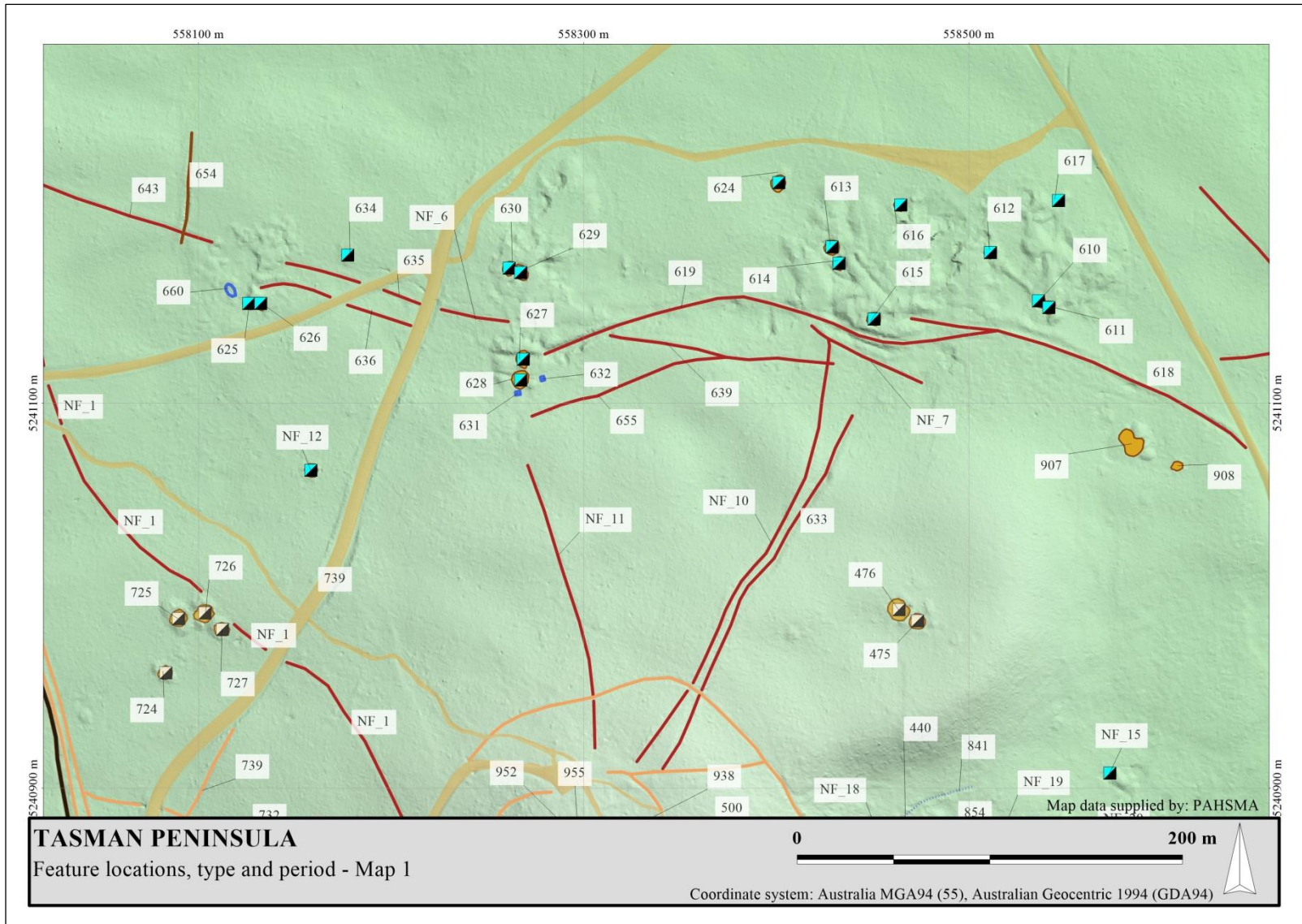


Figure A3-6: Tasman Peninsula, annotated LiDAR map. Feature locations, type and period (Map 1)

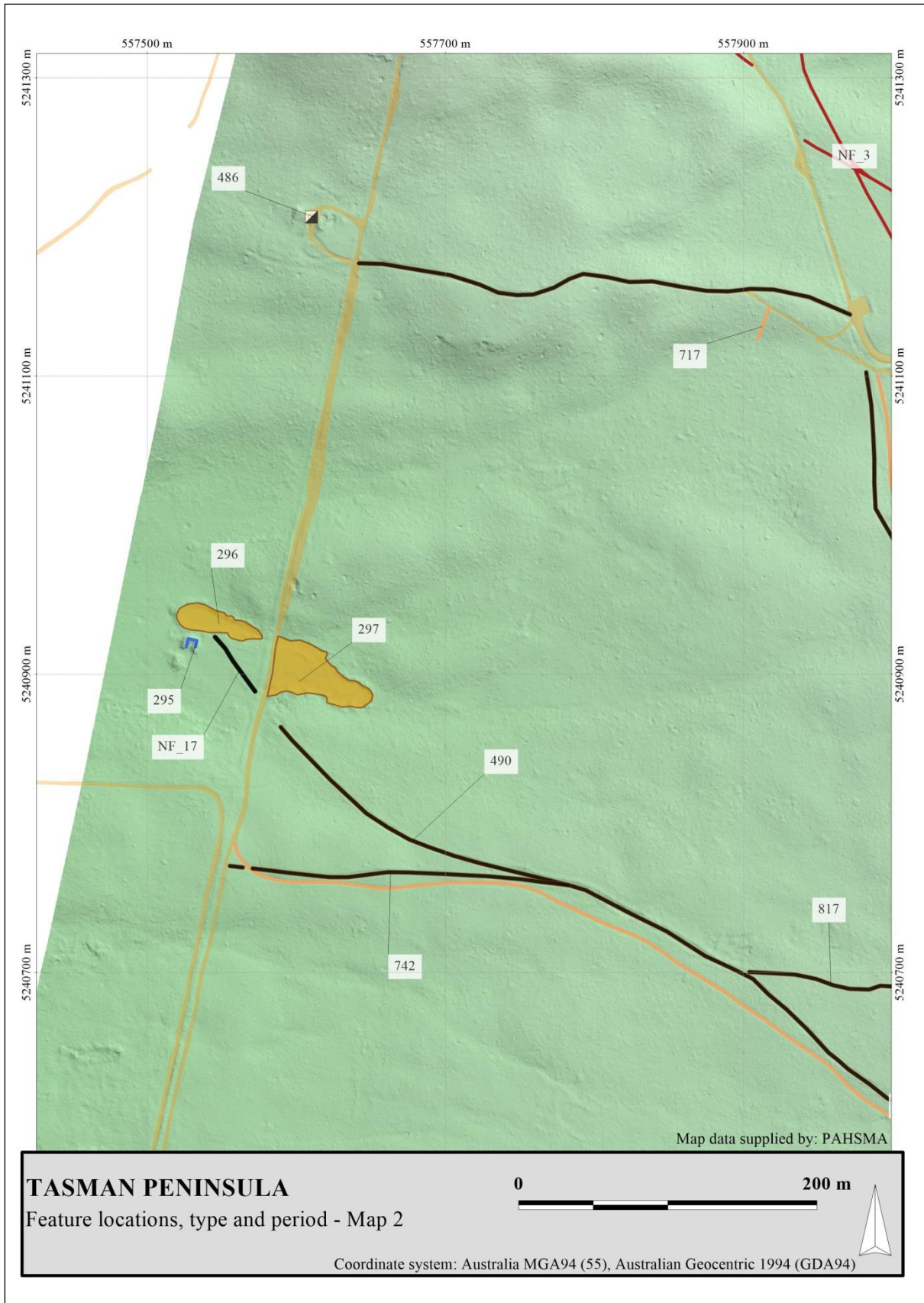


Figure A3-7: Tasman Peninsula, annotated LiDAR map. Feature locations, type and period (Map 2)

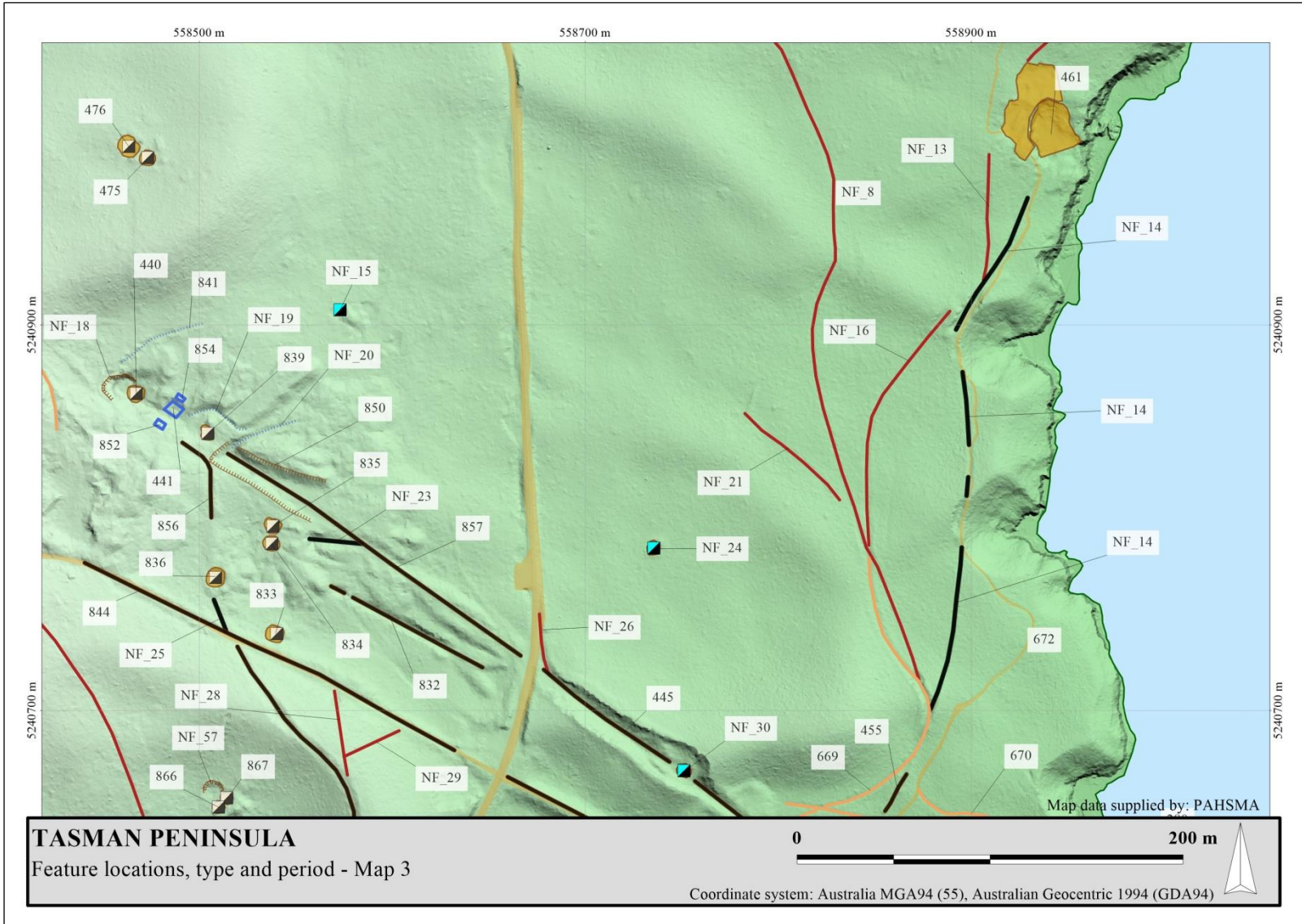


Figure A3-8: Tasman Peninsula, annotated LiDAR map. Feature locations, type and period (Map 3)

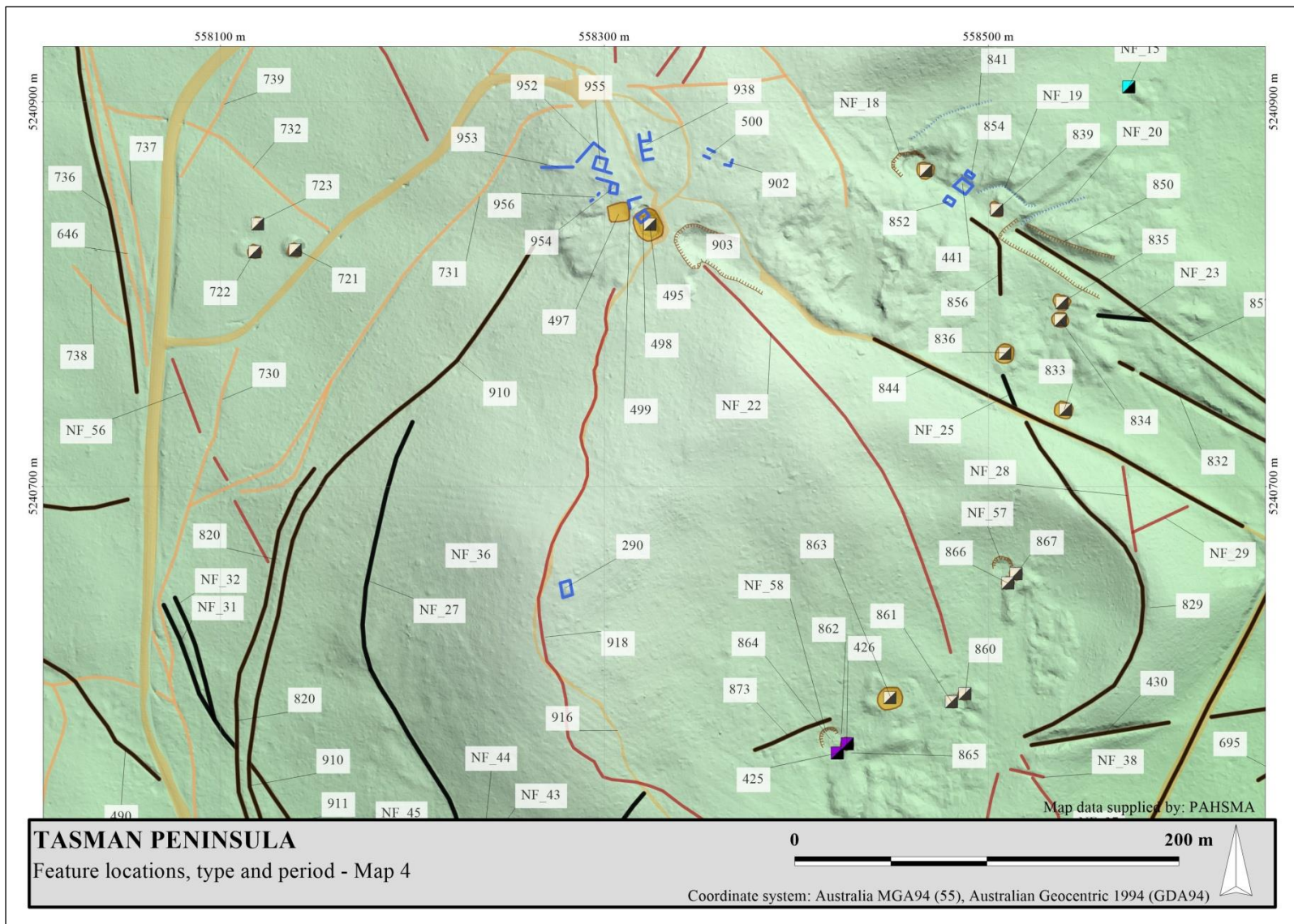


Figure A3-9: Tasman Peninsula, annotated LiDAR map. Feature locations, type and period (Map 4)

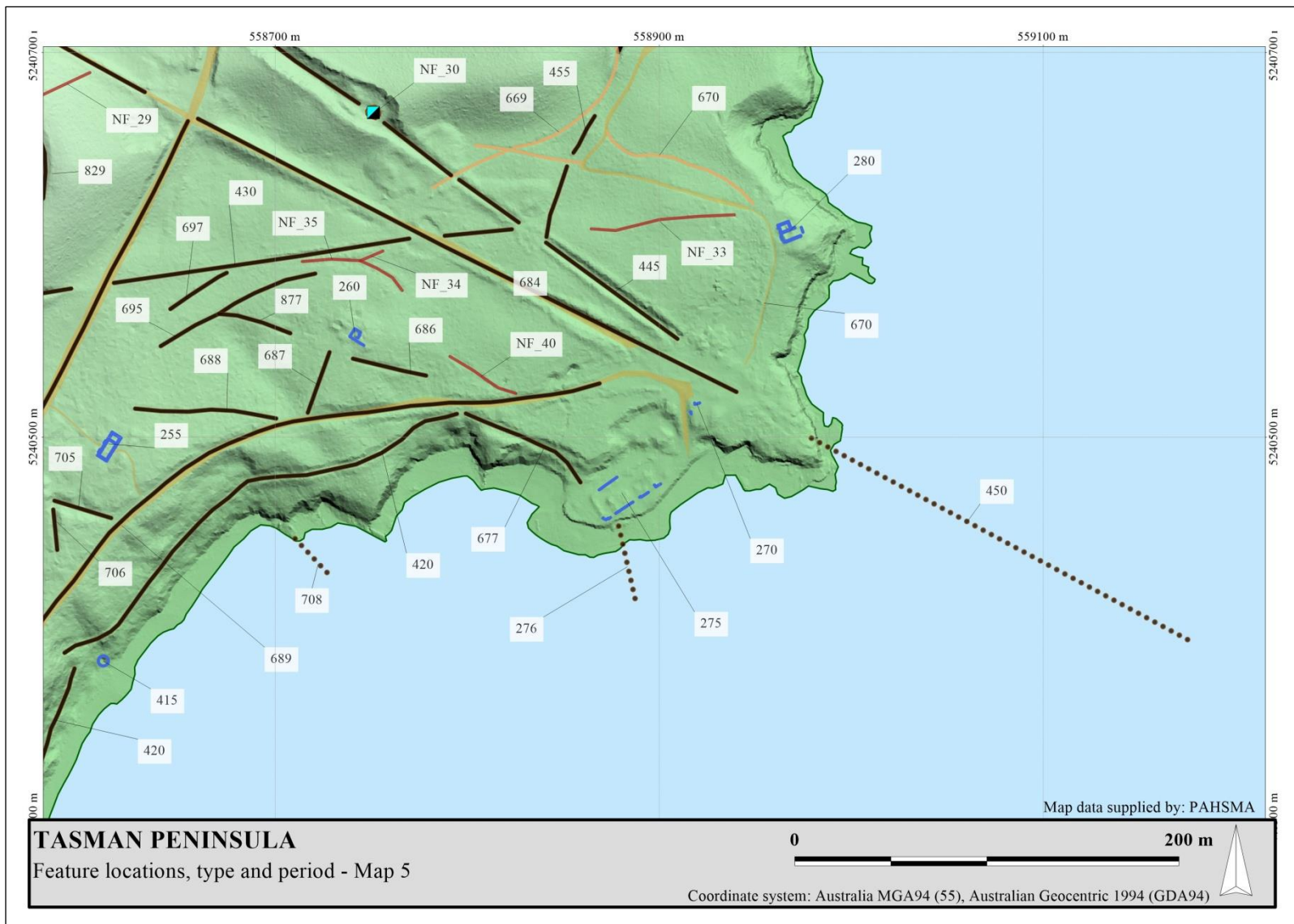


Figure A3-10: Tasman Peninsula, annotated LiDAR map. Feature locations, type and period (Map 5)

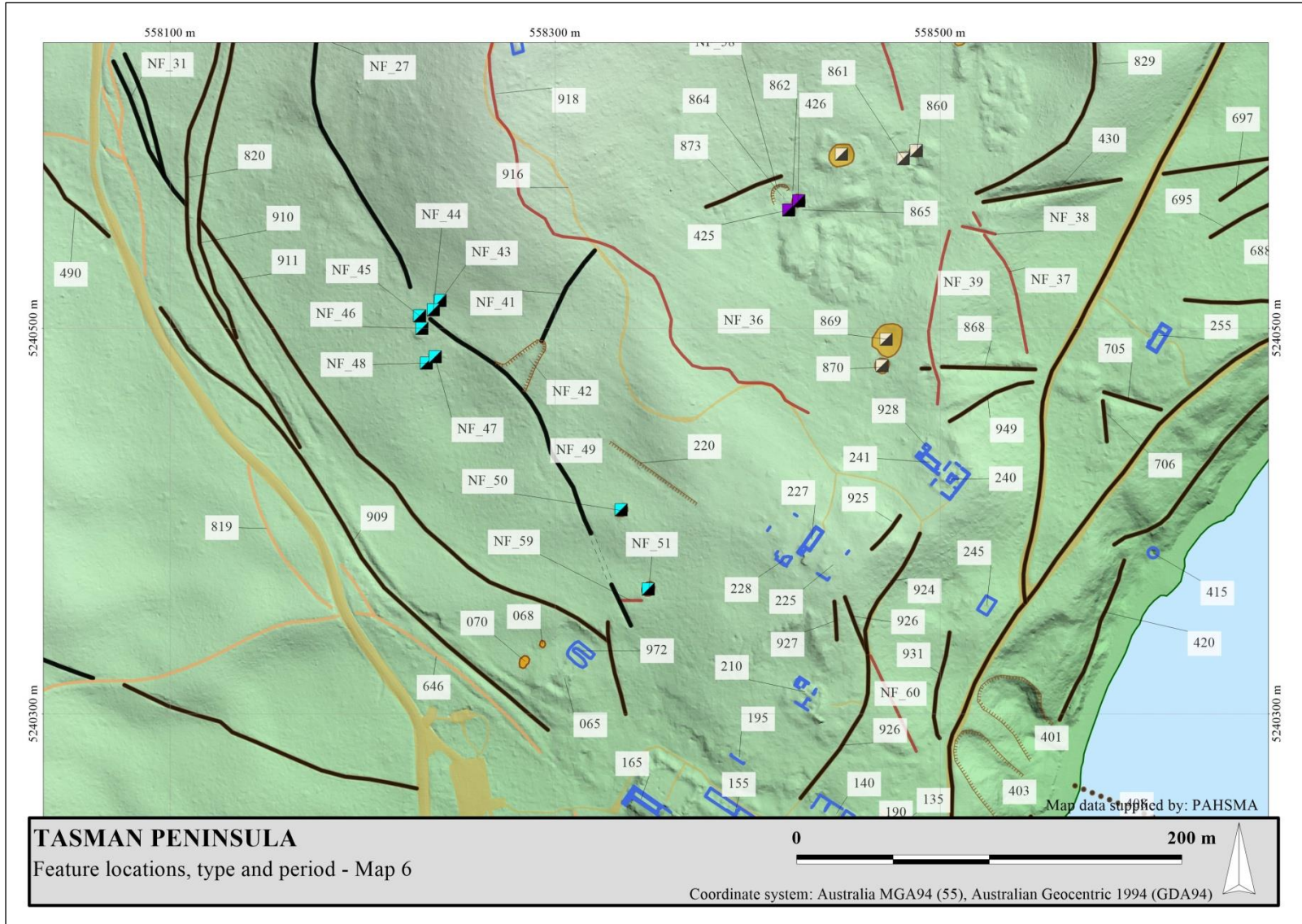


Figure A3-11: Tasman Peninsula, annotated LiDAR map. Feature locations, type and period (Map 6)

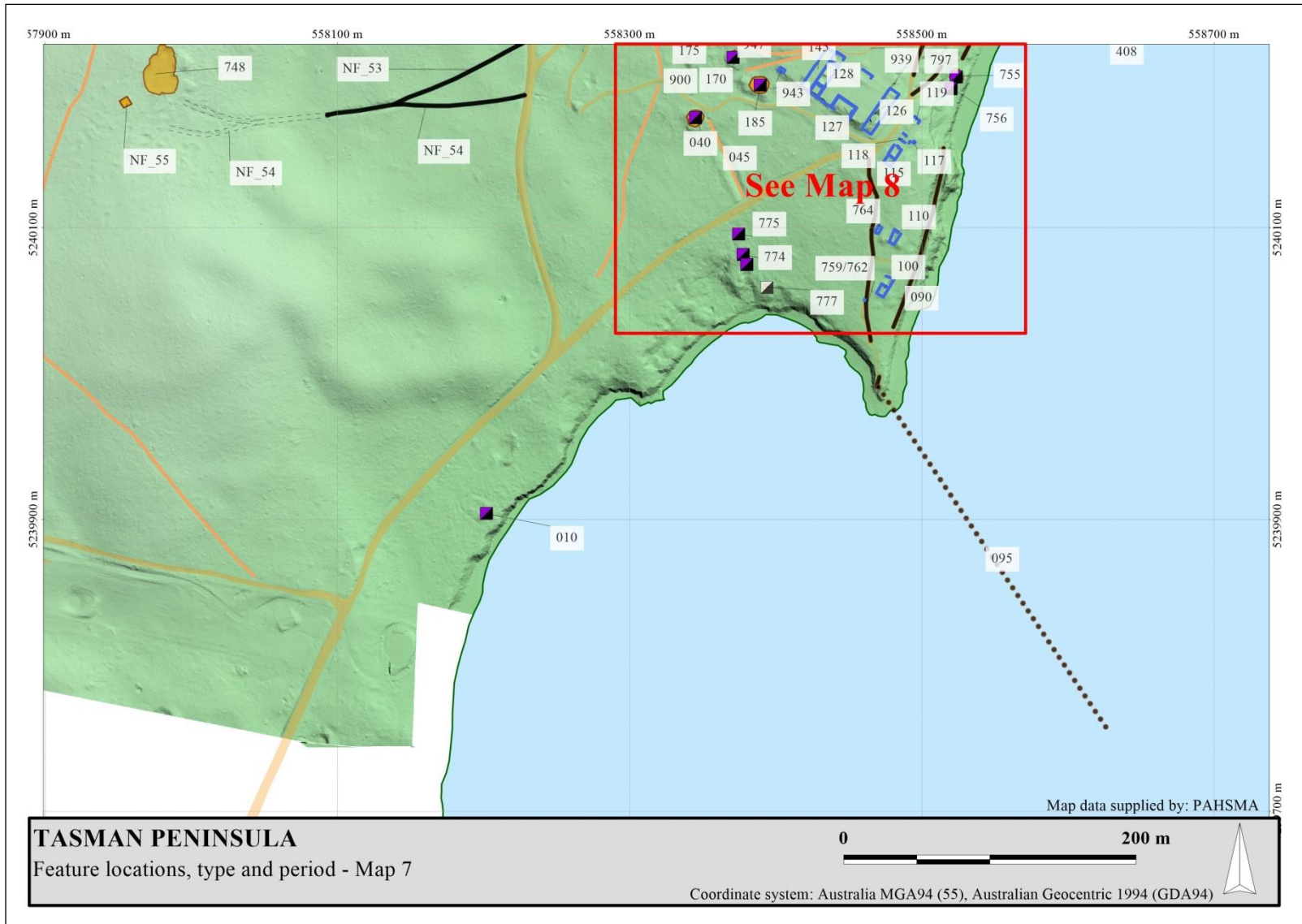


Figure A3-12: Tasman Peninsula, annotated LiDAR map. Feature locations, type and period (Map 7)

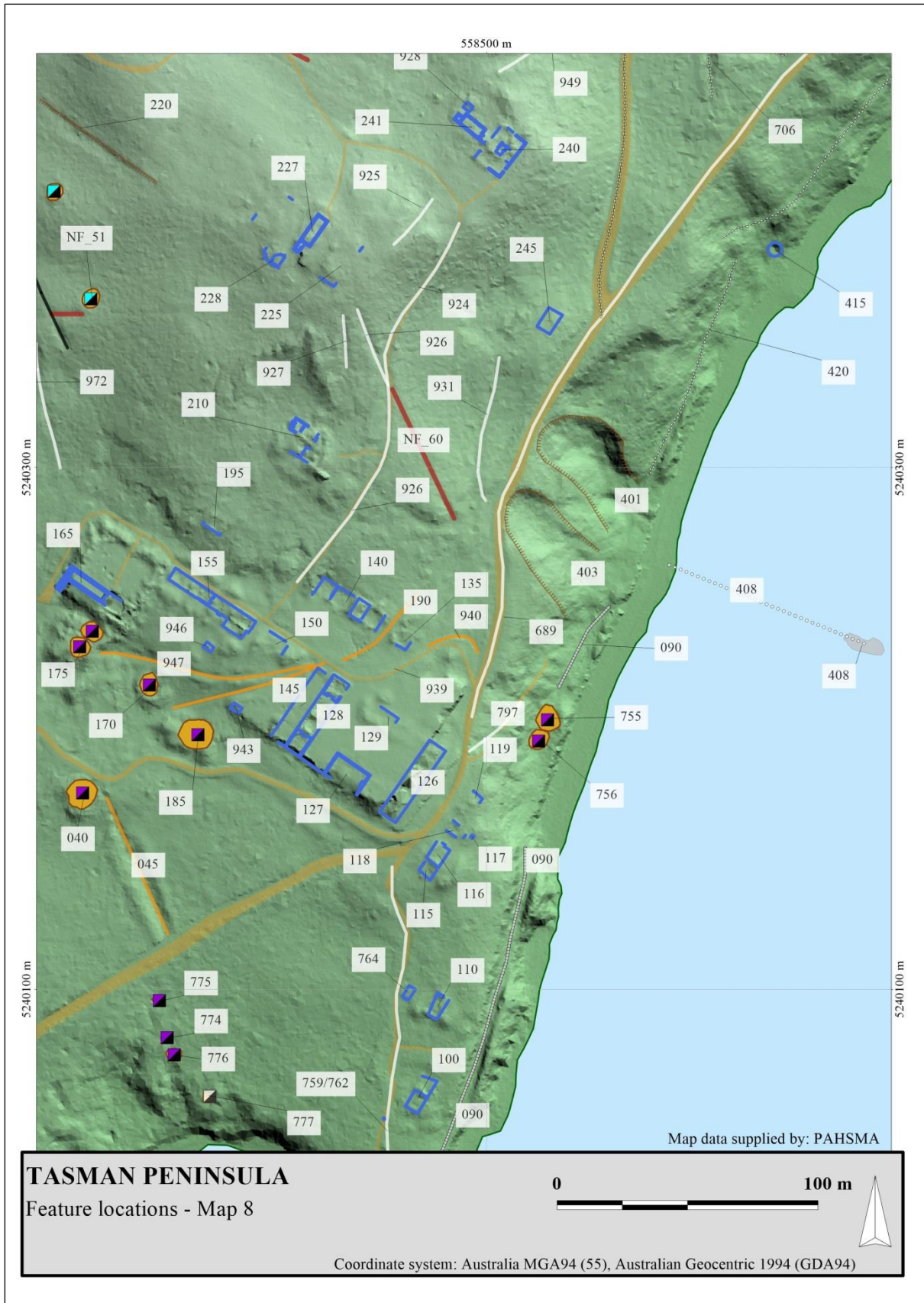


Figure A3-13: Tasman Peninsula, annotated LiDAR map. Feature locations, type and period (Map 8)

Feature tables

The following section provides the feature tables accompanying the maps provided above. These have been divided into three main sections: the main built elements, features associated with production (as defined in this study) and features associated with land and sea transport routes. Each table provides basic descriptive and interpretive information, with distinction made between features described by the 1985 survey and Greg Maiden's 2009 study and those features newly-identified as part of this research. The tables are not designed to provide a full descriptive or pictorial gazetteer and are instead provided to aid the interpretations discussed in the main body of the text.

Built features

The following table lists features associated with the major built features associated with the convict and post-convict periods of occupation. A number of features could not be ascribed to any particular period.

Guide to table headings

<i>1985 survey reference</i>	Reference number from Bairstow and Davies' 1985 survey
<i>Short description</i>	Short descriptor
<i>Interpretation</i>	More detailed descriptor referencing the known historical use of the structure
<i>Other use</i>	Descriptor if the structure is known to have had more than one historical use
<i>Feature description</i>	Short description of the physical site
<i>Date</i>	Minimum suggested date of construction/use
<i>Plotted from survey</i>	Whether the mapping information was sourced from the 1985, 2008 or LiDAR surveys.

BUILT FEATURES - Convict-period								
1985 survey reference	Short description	Interpretation	Other use	Feature description	Date	Plotted from survey:		
						1985	2008	LiDAR
065	Unidentified	Unidentified		Linear cuttings	<1848		x	
100	Building	Surgeon's Quarters	Surgeon and Wharfinger's Quarters (c.1836-c.1840)	In situ sandstone footings Southern half predominantly worked sandstone rubble. Northern half predominantly brick and sandstone rubble	1836-37		x	
110	Building	Clerk's, Overseer's and Coxswain's Quarters	Catechist's Quarters (c1837-c1841)	In situ sandstone footings Predominantly brick rubble	1837-38		x	
115	Building	Assistant Superintendent's/Foreman of Works		In situ sandstone and brick footings Brick rubble	c1841		x	
116	Building	Assistant Superintendent's/Foreman of Works		In situ sandstone and brick footings Brick rubble	c1841		x	
117	Building	Engineers' Stores		In situ brick footings	c1841		x	
118	Building	Overseer's Quarters		In situ sandstone footings	c1838		x	
119	Building	Guard Room/office/cell		In situ sandstone footings Brick rubble	c1838		x	
126	Building	Convict Barracks		Upstanding sandstone	c1838		x	
127	Building	Chapel		Upstanding sandstone	c1838		x	
128	Building	Convict Barracks	Bakehouse and cookhouse (c1838-c1843)	Upstanding sandstone	c1838		x	
129	Building	Guard house		In situ sandstone footings Earthen mound	1842/43		x	
130	Steps	Steps - First Barracks compound (?)		Sandstone steps	1833-37		x	
135	Unidentified - Bakehouse?	Unidentified - Bakehouse?		In situ sandstone footings Brick rubble	c1844		x	
140	Unidentified	Unidentified		In situ brick footings Brick rubble x2 sandstone ovens Sandstone retaining wall	1843/44		x	
145	Building	Convict Barracks/hospital		In situ sandstone footings	1842/43		x	
150	Building	Overseers' Quarters		In situ sandstone footings	1842/43		x	
155	Building	Convict Barracks (?)		In situ sandstone footings Upstanding brick Brick rubble	>1843		x	
165	Building	Separate cells		Brick rubble	1847		x	
165	Building	Solitary cells		Upstanding sandstone and brick Brick and sandstone rubble	1846		x	

195	Unidentified - Hospital	Unidentified - Hospital?		Brick footings	1847-1848		x	
210	Building	Superintendent's Quarters		In situ brick footings Brick rubble	<1843		x	
225	Building	Military Barracks		Brick footings Brick and sandstone rubble	ca.1836		x	
227	Building	Military Barracks outbuildings		Upstanding sandstone	1837		x	
228	Building	Military Barracks outbuildings		Upstanding sandstone	c1846		x	
240	Building	Military Officer's Quarters	Visiting Magistrate's Quarters (>1842)	Upstanding sandstone and brick	ca.1836, 1844		x	
241	Building	Military Officer's Quarter's outbuilding		Upstanding sandstone	ca.1836, c1844		x	
245	Building	Roman Catholic Catechist's Quarters		Sandstone footings	>1846		x	
255	Building	Commissariat Officer's Quarters		Upstanding sandstone	1842		x	
260	Building	Catechist's Quarters		In situ sandstone footings Sandstone cellar Upstanding brick Brick rubble	1841		x	
270	Unidentified	Unidentified		In situ brick footings	<1845		x	
275	Building	Commissariat Store		In situ sandstone footings	1842		x	
290	Building	Semaphore Station		Brick rubble	1836			x
295	Kiln	Brick kiln		Upstanding brick Brick rubble	c1842			x
415	Kiln	Lime Kiln		Upstanding sandstone exterior Brick-built bowl	c1835			x
441	Machinery	Bricks - Engine mount?		In situ brick footings	1842			x
498	Machinery	Boiler footing		In situ sandstone footings	1845			x
499	Machinery	Winding gear footing		In situ sandstone footings	1845			x
764	Building	Coxswain's/Overseer's/Clerk's Quarters - Outbuilding		In situ brick footings	1837-1838			x
852	Unidentified	Bricks - Unidentified		Brick rubble	1842			x
854	Unidentified	Bricks - Unidentified		Brick and sandstone rubble	1842			x
928	Building	Visiting Magistrate's Quarters - Outbuilding		Brick rubble	c1842	x		
938	Unidentified	Unidentified		In situ brick footings	1845			x
943	Building	Guard house		In situ sandstone footings	c1843		x	
944	Retaining wall	Retaining wall - First Barracks (?)		Squared dolerite	1833-37		x	
952	Unidentified	Unidentified		In situ brick footings	1845			x
953	Unidentified	Unidentified		In situ brick footings	c1845			x
954	Unidentified	Unidentified		In situ brick footings	1845			x
955	Unidentified	Unidentified		In situ brick footings	1845			x

956	Unidentified	Unidentified		In situ brick footings	c1845			x
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Table A3-1: Tasman Peninsula, built features (convict period)

Features not identified during 1985 survey

	Building	Temporary separate cells		Timber (not extant)	c1845			
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BUILT FEATURES - Post-convict and unidentified period								
1985 survey reference	Short description	Interpretation	Other use	Feature description	Date	Plotted from survey:		
						1985	2008	LiDAR
280	Unidentified	Unidentified		Upstanding sandstone	Post-convict		x	
500	Unidentified	Unidentified		In situ dolerite footings Brick rubble	Post-convict		x	
631	Unidentified	Unidentified		Brick rubble	Post-convict	x		
632	Unidentified	Unidentified		Brick rubble	Post-convict	x		
660	Unidentified	Unidentified		Brick rubble	Post-convict	x		
862	Machinery	Machinery footing		In situ brick footings	Post-convict	x		
864	Machinery	Machinery footing		In situ brick footings	Post-convict	x		
865	Unidentified	Unidentified		In situ sandstone footings	Post-convict	x		
902	Unidentified	Unidentified		Brick rubble	Post-convict	x		
946	Unidentified	Unidentified		In situ brick footings Brick rubble	Unidentified		x	
972	Unidentified	Unidentified		In situ footings (earthen) Brick and sandstone rubble	Unidentified			x

Table A3-2: Tasman Peninsula, built features (post-convict and unidentified period)

Production features

The following tables list features associated with the production-related (as defined in this study) aspects of the Tasman Peninsula coal mine from the convict and post-convict periods. The tables are divided into three main chronological sections: convict, post-convict and unidentified. Within each of these a table has been provided for those features identified during the 1985 survey and new features which have been identified as part of this study.

Guide to table headings

<i>1985 survey reference</i>	Reference number from Bairstow and Davies' 1985 survey
<i>New survey reference</i>	Where new features were identified they have been provided with a prefix 'NF_' and a unique numeric identifier
<i>Short description</i>	Short descriptor
<i>Interpretation</i>	More detailed descriptor
<i>Type</i>	Suggested classification
<i>Maiden interpretation</i>	Interpretation of feature made in Greg Maiden's 2009 study
<i>Maiden date</i>	Postulated date range from Greg Maiden's 2009 study
<i>Associated features</i>	Whether feature is closely associated with other features (for convict-period only)
<i>Ground-truthed</i>	Pertains to new features only
<i>Date</i>	Minimum suggested date of construction/use

Note: Features shown in **red** are referred to in the following 'Notes on the convict-period mine workings'

PRODUCTION - convict-period							
1985 survey reference	Short description	Interpretation	Type	Maiden interpretation	Maiden date	Associated features	Date
220	Cutting	Cutting	Garden				1833-48
296	Clay pits	Clay pits	Clay pits			Kiln #295	c1842
297	Clay pits	Clay pits	Clay pits			Kiln #295	c1842
401	Adit	Adit entry	Adit	Adit entry	1833-37		1833
403	Adit	Adit entry	Adit	Adit entry	1833-37		1833
440	Shaft	Production shaft	Mining	Production shaft	1839-40		1839
461	Quarry	Quarry	Quarry			Worked stone	c1837
475	Shaft	Exploratory shaft	Mining	Exploratory shaft	1841-42		1841
476	Shaft	Exploratory shaft	Mining	Exploratory shaft	1841-42	Brick rubble	1841
486	Shaft	Production shaft	Mining	Production shaft			1837-38
495	Shaft	Production shaft	Mining	Production shaft	1845-post-1848	Built features #498-99, #952-56 Reservoir #497	1845
497	Reservoir	Reservoir	Reservoir			Shaft #495	1845
721	Shaft	Exploratory shaft	Mining	Exploratory shaft	1842		<1842
722	Shaft	Exploratory shaft	Mining	Exploratory shaft	1842		<1842
723	Shaft	Exploratory shaft	Mining	Exploratory shaft	1842		<1842
724	Shaft	Exploratory shaft	Mining	Exploratory shaft	1842		<1842
725	Shaft	Exploratory shaft	Mining	Exploratory shaft	1842		<1842
726	Shaft	Exploratory shaft	Mining	Exploratory shaft	1842		<1842
727	Shaft	Exploratory shaft	Mining	Exploratory shaft	1842		<1842
748	Quarry	Quarry	Quarry			Hut platform NF_55	1838-48
777	Shaft	Exploratory/production shaft	Mining	Exploration/production shaft	1833-37		1837
833	Shaft	Exploratory shaft	Mining	Exploratory shaft	1840-41		1842-48
834	Shaft	Production shaft	Mining	Production shaft	1841-42	Footings #441	1842-43

						Brick and sandstone #852/854	
835	Shaft	Production shaft	Mining	Production shaft	1841-42		1842-43
836	Shaft	Air shaft	Mining	Air shaft	1840-41		1839-42
839	Shaft	Air shaft	Mining	Production shaft	1845-post-1848	Footings #441 Brick and sandstone #852/854	1839-42
841	Drainage	Drainage	Mining				1839
850	Cutting	Cutting	Mining				1839
850	Cutting	Cutting	Mining				1839
860	Shaft	Air shaft	Mining	Production shaft/Air shaft	1836-39		1838-39
861	Shaft	Air shaft	Mining	Production shaft/Air shaft	1836-39		1838-39
863	Shaft	Production shaft	Mining	Air shaft	1836-39		1838-39
866	Shaft	Production/air shaft	Mining	Production shaft	1841-42		1838-39
867	Shaft	Production/air shaft	Mining	Production shaft	1841-42		1838-39
869	Shaft	Air shaft	Mining	Exploratory shaft/Air shaft	1838-41		1838-39
870	Shaft	Air shaft	Mining	Exploratory shaft/Air shaft	1838-41		1838-39
903	Cutting	Cutting	Mining				1845

Table A 3-3: Tasman Peninsula, production (convict period)

PRODUCTION - convict-period (new features)					
New feature reference	Short description	Interpretation	Type	Ground-truthed	Date
NF_18	Cutting	Cutting	Mining	Yes	1839
NF_19	Drainage	Drainage	Mining	Yes	1839
NF_20	Drainage	Drainage	Mining	Yes	1839
NF_36	Cultivation	Cultivation	Agriculture	Yes	1836-48
NF_42	Cutting	Cutting	Mining	Yes	1838-39
NF_55	Hut platform	Hut platform	Quarrying	Yes	1838-48
NF_57	Cutting	Cutting	Cutting	Yes	1838-39

Table A3-4: Tasman Peninsula, production (convict period - new features)

PRODUCTION - post-convict							
1985 survey reference	Short description	Interpretation	Type	Maiden interpretation	Maiden date	Associated features	Date
10	Shaft	Exploratory shaft	Mining	Exploratory shaft	Post-1848		Post-1848
40	Shaft	Exploratory/air shaft	Mining	Exploratory/air shaft	Post-1848		Post-1848
170	Shaft	Production shaft	Mining	Production shaft	Post-1848		Post-1848
175	Shaft	Production shaft	Mining	Production shaft	Post-1848		Post-1848
175	Shaft	Production shaft	Mining	Production shaft	Post-1848		Post-1848
185	Shaft	Air shaft	Mining	Air shaft	Post-1848		Post-1848
425	Shaft	Production shaft	Mining	Production shaft			Post-1848
426	Shaft	Production shaft	Mining	Production shaft		Sandstone footings embedded on edge	Post-1848
755	Shaft	Exploratory shaft	Mining	Exploratory shaft	Post-1848		Post-1848
756	Shaft	Exploratory shaft	Mining	Exploratory shaft	Post-1848		Post-1848
774	Shaft	Exploratory shaft	Mining	Exploratory shaft	Post-1848		Post-1848
775	Shaft	Exploratory shaft	Mining	Exploratory shaft	Post-1848		Post-1848
776	Shaft	Exploratory shaft	Mining	Exploratory shaft	Post-1848		Post-1848

Table A3-5: Tasman Peninsula, production (post-convict)

PRODUCTION - post-convict period (new features)					
New feature reference	Short description	Interpretation	Type	Ground-truthed	Date
NF_30	Shaft	Production shaft	Mining	Yes	Post-1848
NF_58	Cutting	Cutting	Cutting	Yes	Post-1848

Table A 3-6: Tasman Peninsula, production (post-convict - new features)

PRODUCTION - unidentified period					
1985 survey reference	Short description	Interpretation	Type	Maiden interpretation	Maiden date
068	Depression	Unknown	Unknown		
070	Depression	Unknown	Unknown		
610	Shaft	Production shaft	Mining	Production shaft	Post-1848
611	Shaft	Production shaft	Mining	Production shaft	Post-1848
612	Shaft	Air shaft	Mining	Air shaft	Post-1848
613	Shaft	Production shaft	Mining	Production shaft	Post-1848
614	Shaft	Production shaft	Mining	Production shaft	Post-1848
615	Shaft	Production shaft	Mining	Production shaft	Post-1848
616	Shaft	Air shaft	Mining	Air shaft	Post-1848
617	Shaft	Exploratory shaft	Mining	Exploratory shaft	Post-1848
624	Shaft	Exploratory shaft	Mining	Exploratory shaft	Post-1848
625	Shaft	Production shaft	Mining	Production shaft	Post-1848
626	Shaft	Production shaft	Mining	Production shaft	Post-1848
627	Shaft	Production shaft	Mining	Production shaft	Post-1848
628	Shaft	Production shaft	Mining	Production shaft	Post-1848
629	Shaft	Production shaft	Mining	Production shaft	Post-1848
630	Shaft	Production shaft	Mining	Production shaft	Post-1848
634	Shaft	Air shaft	Mining	Air shaft	Post-1848
654	Costean	Costean	Mining		Post-1848
907	Clay pits	Clay pits	Mining	Unfinished shaft	Post-1848
908	Clay pits	Clay pits	Mining	Unfinished shaft	Post-1848

Table A 3-7: Tasman Peninsula, production (unidentified period)

PRODUCTION - unidentified period (new features)				
New feature reference	Short description	Interpretation	Type	Ground-truthed
NF_12	Shaft	Exploratory shaft	Mining	Yes
NF_15	Shaft	Exploratory shaft	Mining	Yes
NF_24	Shaft	Exploratory shaft	Mining	Yes
NF_43	Shaft	Exploratory shaft	Mining	Yes
NF_44	Shaft	Exploratory shaft	Mining	Yes
NF_45	Shaft	Exploratory shaft	Mining	Yes
NF_46	Shaft	Exploratory shaft	Mining	Yes
NF_47	Shaft	Exploratory shaft	Mining	Yes
NF_48	Shaft	Exploratory shaft	Mining	Yes
NF_50	Shaft	Exploratory shaft	Mining	Yes
NF_51	Shaft	Exploratory shaft	Mining	Yes

Table A 3-8: Tasman Peninsula, production (unidentified period - new features)

Transport route features

The following tables list features associated with the land and sea transport routes from the convict and post-convict periods. They are divided into three main chronological sections: convict, post-convict and unidentified. Within each of these a table has been provided for those features identified during the 1985 survey and new features which have been identified as part of this study.

Guide to table headings

<i>1985 survey reference</i>	Reference number from Bairstow and Davies' 1985 survey
<i>New survey reference</i>	Where new features were identified they have been provided with a prefix 'NF_' and a unique numeric identifier
<i>Short description</i>	Short descriptor
<i>Type</i>	Suggested use of transport route
<i>Ground-truthed</i>	Pertains to new features only
<i>Date</i>	Minimum suggested date of construction/use

TRANSPORT ROUTES - convict period			
1985 survey reference	Short description	Type	Date
90	Tramway	Production - Transport	c1838
95	Jetty	Organisation - Transport & Communication/Production - Transport	c1837
276	Jetty	Organisation - Transport & Communication	1842
408	Wharf	Organisation - Transport & Communication/Production - Transport	1833-1848
420	Road/Tramway	Production - Transport	1837-42
430	Tramway	Production - Transport	1838-39
445	Tramway	Production - Transport	1839
450	Jetty	Organisation - Transport & Communication	1838-41
455	Road/Tramway	Production - Transport	1833-37
490	Road/Tramway	Production - Transport	c1842
677	Road/Tramway	Production - Transport	1837-42
684	Tramway	Production - Transport	1845
686	Road	Organisation - Transport & Communication	1841
687	Road	Organisation - Transport & Communication	1841
688	Road	Organisation - Transport & Communication	1842
689	Road	Organisation - Transport & Communication	1833-37
695	Road	Organisation - Transport & Communication	1841
697	Road	Organisation - Transport & Communication	1838-39
698	Road/Tramway	Production - Transport /Organisation - Transport & Communication	1839
705	Road/Tramway	Production - Transport	1838-39
706	Road/Tramway	Production - Transport	1838-39

708	Jetty	Organisation - Transport & Communication	1842
720	Road	Production - Transport/Organisation - Transport & Communication	1837
736	Road	Production - Transport/Organisation - Transport & Communication	1837
742	Road	Organisation - Transport & Communication	c1842
797	Road	Organisation - Transport & Communication	c1834
817	Road	Organisation - Transport & Communication	1842-48
820	Road	Organisation - Transport & Communication	1845-48
822	Road	Organisation - Transport & Communication	1833-37
829	Road	Organisation - Transport & Communication	1839
832	Tramway	Production - Transport	1842-43
844	Tramway	Production - Transport	1845
856	Tramway	Production - Transport	1839
857	Tramway	Production - Transport	1839
868	Road/Tramway	Production - Transport	1838-39
873	Road/Tramway	Production - Transport	1838-39
877	Road	Organisation - Transport & Communication	1841
909	Road/Tramway	Production - Transport	c1842
910	Road	Organisation - Transport & Communication	1845-48
911	Road	Organisation - Transport & Communication	1833-48
924	Road	Organisation - Transport & Communication	c1836
925	Road	Organisation - Transport & Communication	c1836
926	Road	Organisation - Transport & Communication	c1836
927	Road	Organisation - Transport & Communication	c1836
931	Road	Organisation - Transport & Communication	1846-48
949	Road	Organisation - Transport & Communication	c1836
966	Road	Organisation - Transport & Communication	1833-48
759/762	Road	Organisation - Transport & Communication	1837

Table A3-9: Tasman Peninsula, transport routes (convict period)

TRANSPORT ROUTES - convict-period (new features)				
New survey reference	Short description	Type	Ground-truthed	Date
NF_14	Road/Tramway	Production - Transport	Yes	1833-37
NF_17	Road	Production - Transport	Yes	c1842
NF_23	Tramway	Production - Transport	Yes	1842-43
NF_25	Road	Production - Transport	Yes	1839
NF_27	Road	Organisation - Transport & Communication	No	1842-48
NF_31	Road	Organisation - Transport & Communication	Yes	1833-48
NF_32	Road	Organisation - Transport & Communication	Yes	1833-48
NF_41	Road/Tramway	Production - Transport	Yes	1838-39
NF_49	Road	Production - Transport	Yes	1838-39
NF_52	Road	Organisation - Transport & Communication	Yes	1833-37
NF_53	Road	Production - Transport	No	1838-48
NF_54	Road/Tramway	Production - Transport	Yes	1838-48

Table A3-10: Tasman Peninsula, transport routes (convict period - new features)

TRANSPORT ROUTES - post-convict				
1985 survey reference	Short description	Type	Ground-truthed	Date
45	Road/Tramway	Production - Transport	Yes	Post-1848
190	Road/Tramway	Production - Transport	Yes	Post-1848
646	Fire trail	Vehicle access	No	Post-1848
669	Road	Production - Transport/Organisation - Transport & Communications	No	Post-1848
670	Road	Organisation - Transport & Communication	No	Post-1848
673	Road	Organisation - Transport & Communication	No	Post-1848
717	Vehicle track	Vehicle access	No	Post-1848
730	Visitor access	Vehicle access	No	Post-1848
731	Visitor access	Vehicle access	No	Post-1848
732	Visitor access	Vehicle access	No	Post-1848
737	Road	Unidentified	No	Post-1848
738	Road	Unidentified	No	Post-1848
739	Road	Production - Transport/Organisation - Transport & Communications	No	Post-1848
740	Fire trail	Vehicle access	No	Post-1848
741	Access	Vehicle access	No	Post-1848
811	Fire trail	Vehicle access	No	Post-1848
819	Fire trail	Vehicle access	No	Post-1848
824	Fire trail	Vehicle access	No	Post-1848
847	Access	Vehicle access	No	Post-1848
847	Fire trail	Vehicle access	No	Post-1848
940	Road/Tramway	Production - Transport	Yes	Post-1848
947	Road/Tramway	Production - Transport	Yes	Post-1848
959	Visitor access	Vehicle access	No	Post-1848

Table A3-11: Tasman Peninsula, transport routes (post-convict period)

TRANSPORT ROUTES - unidentified period		
1985 survey reference	Short description	Type
618	Road/Tramway	Production - Transport
619	Road/Tramway	Production - Transport
635	Road/Tramway	Production - Transport
636	Road/Tramway	Production - Transport
639	Road	Production - Transport
643	Road	Production - Transport
655	Road	Production - Transport
912/915	Road	Organisation - Transport & Communication

Table A3-12: Tasman Peninsula, transport routes (unidentified period)

TRANSPORT ROUTES - unidentified period (new features)			
New feature reference	Short description	Type	Ground-truthed
NF_1	Road	Organisation - Transport & Communication	No
NF_2	Road	Organisation - Transport & Communication	Yes
NF_3	Road	Organisation - Transport & Communication	No
NF_4	Road	Organisation - Transport & Communication	No
NF_5	Road	Organisation - Transport & Communication	No
NF_6	Road	Production - Transport/Organisation - Transport & Communications	No
NF_7	Road	Production - Transport/Organisation - Transport & Communications	No
NF_8	Road	Organisation - Transport & Communication	No
NF_9	Road	Organisation - Transport & Communication	No
NF_10	Road	Production - Transport/Organisation - Transport & Communications	No
NF_11	Road	Production - Transport/Organisation - Transport & Communications	No
NF_13	Road	Organisation - Transport & Communication	No
NF_16	Road	Organisation - Transport & Communication	No
NF_21	Road	Organisation - Transport & Communication	No
NF_22	Road	Organisation - Transport & Communication	No
NF_26	Road/Tramway	Production - Transport	Yes
NF_28	Road	Organisation - Transport & Communication	No
NF_29	Road	Organisation - Transport & Communication	No
NF_33	Road	Production - Transport	No
NF_34	Road	Organisation - Transport & Communication	No
NF_35	Road	Organisation - Transport & Communication	No
NF_37	Road	Organisation - Transport & Communication	No
NF_38	Road/Tramway	Production - Transport	No
NF_39	Road	Organisation - Transport & Communication	No
NF_40	Road	Organisation - Transport & Communication	No
NF_56	Road	Organisation - Transport & Communication	No
NF_59	Road	Production - Extraction	Yes
NF_60	Road	Organisation - Transport & Communication	No

Table A3-13: Tasman Peninsula, transport routes (unidentified period)

Accompanying Maps

Refer to annotated LiDAR maps and tables for feature identification

Development of the station

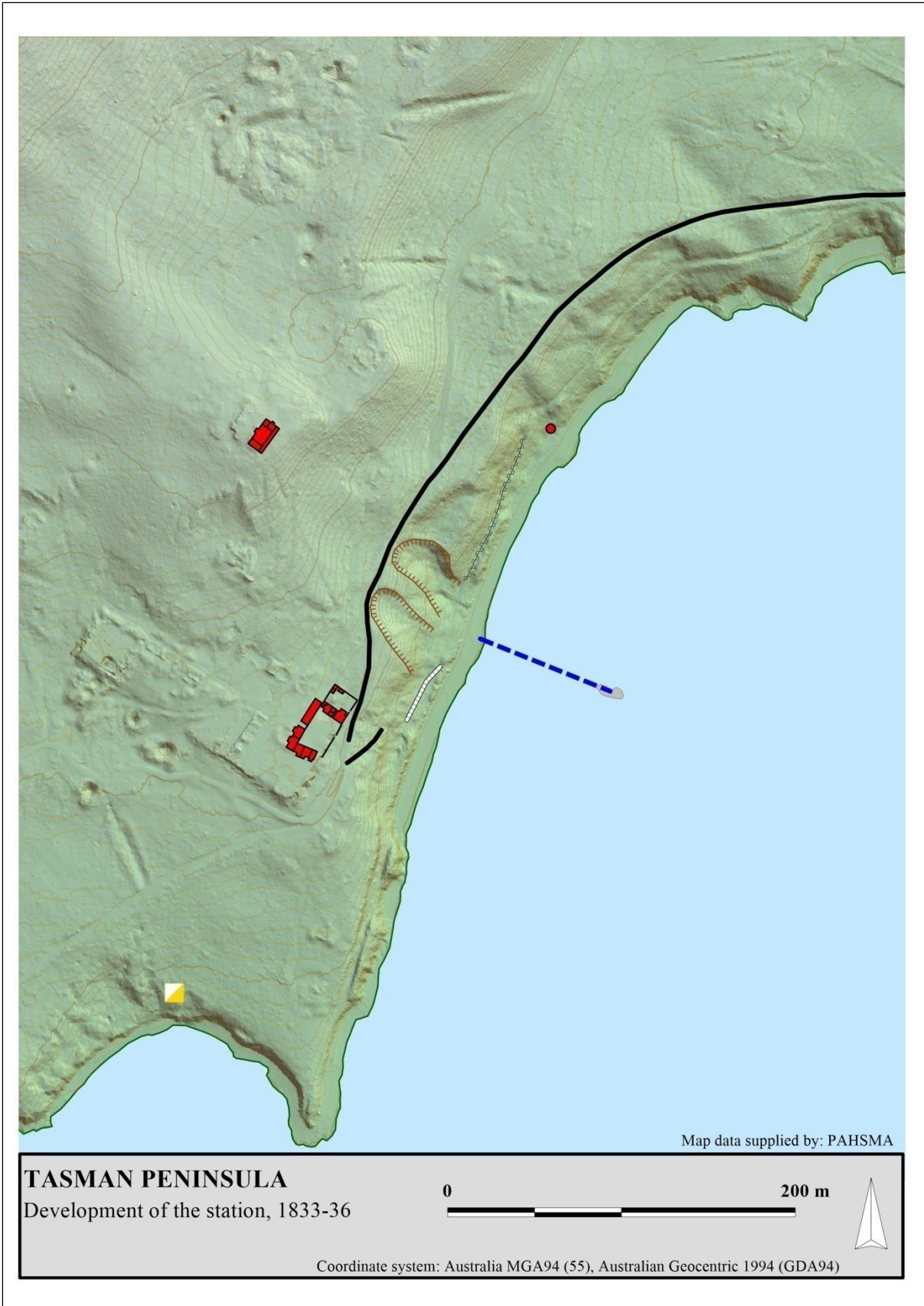


Figure A3-14: Tasman Peninsula, development of the station, 1833-36

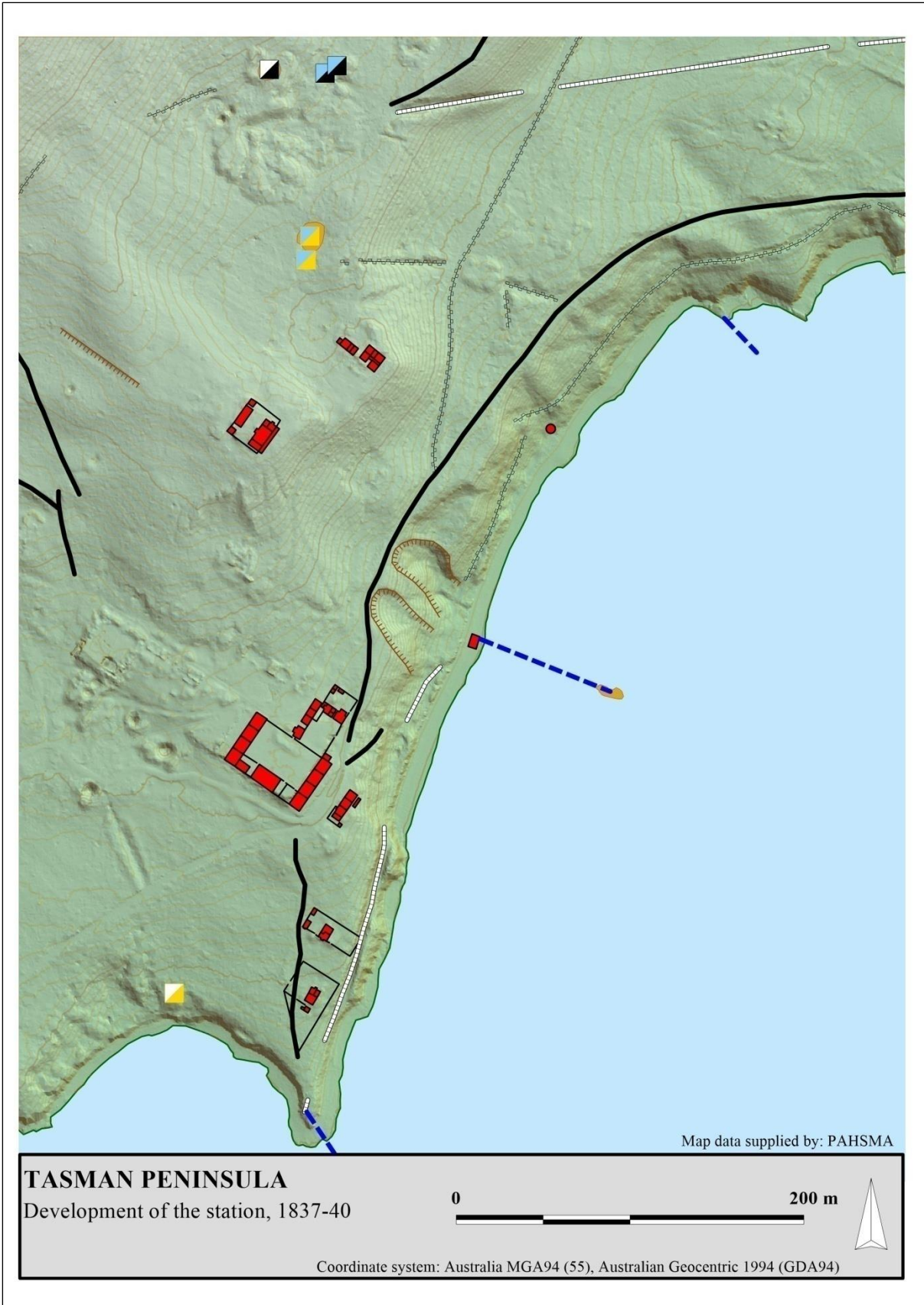


Figure A3-15: Tasman Peninsula, development of the station, 1837-40

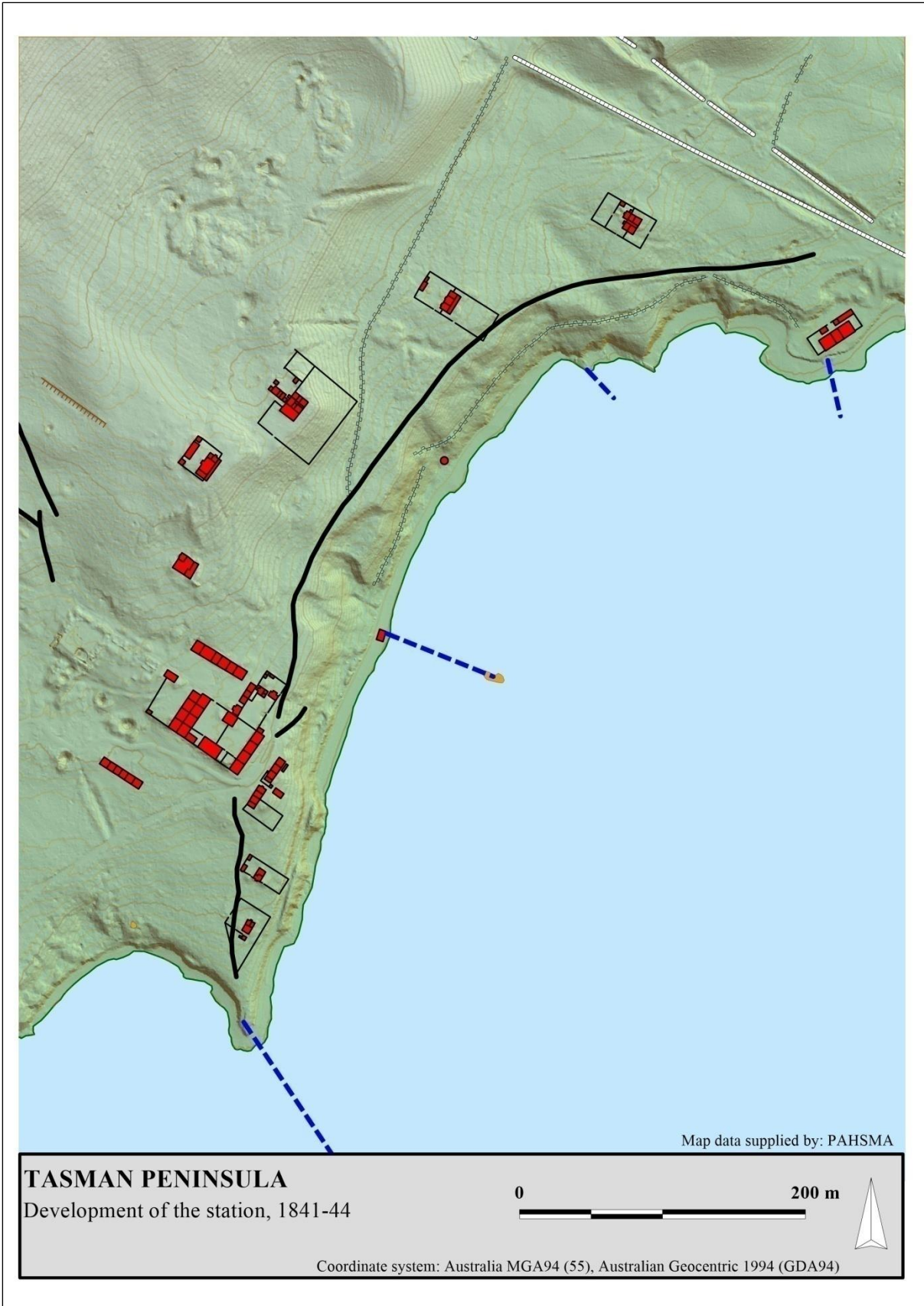


Figure A3-16: Tasman Peninsula, development of the station, 1841-44

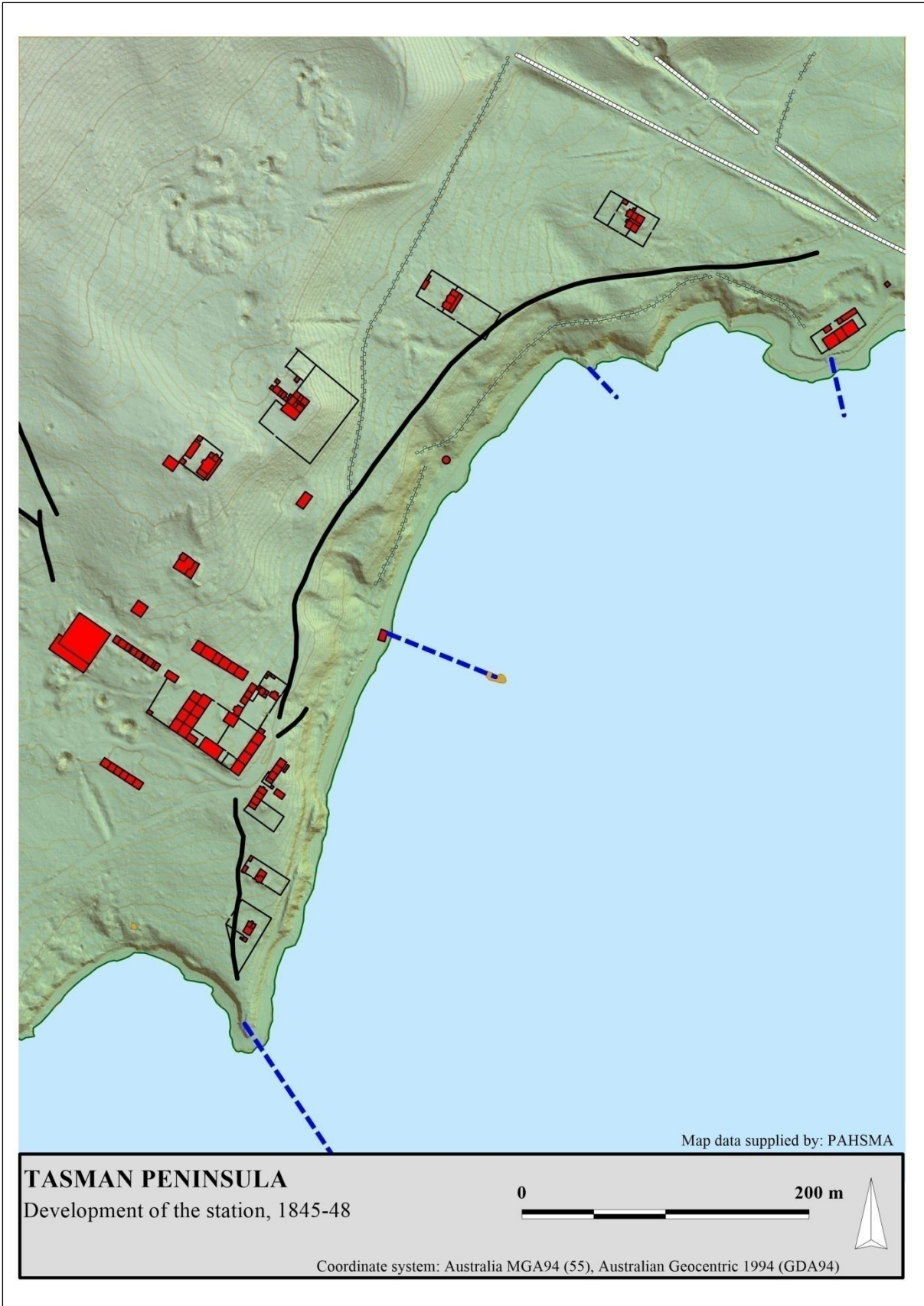


Figure A3-17: Tasman Peninsula, development of the station, 1845-48

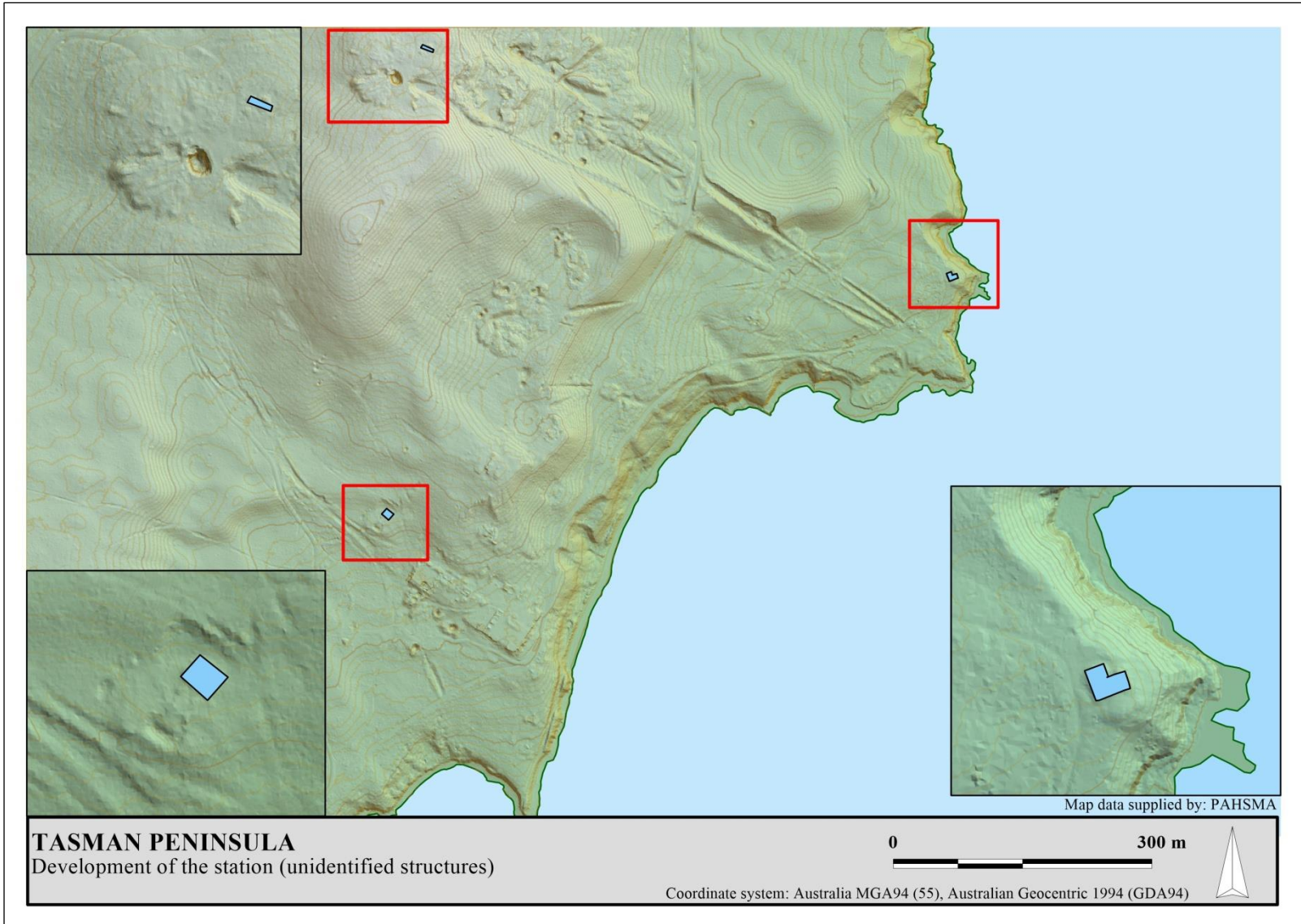


Figure A3-18: Tasman Peninsula, development of the station (unidentified structures)

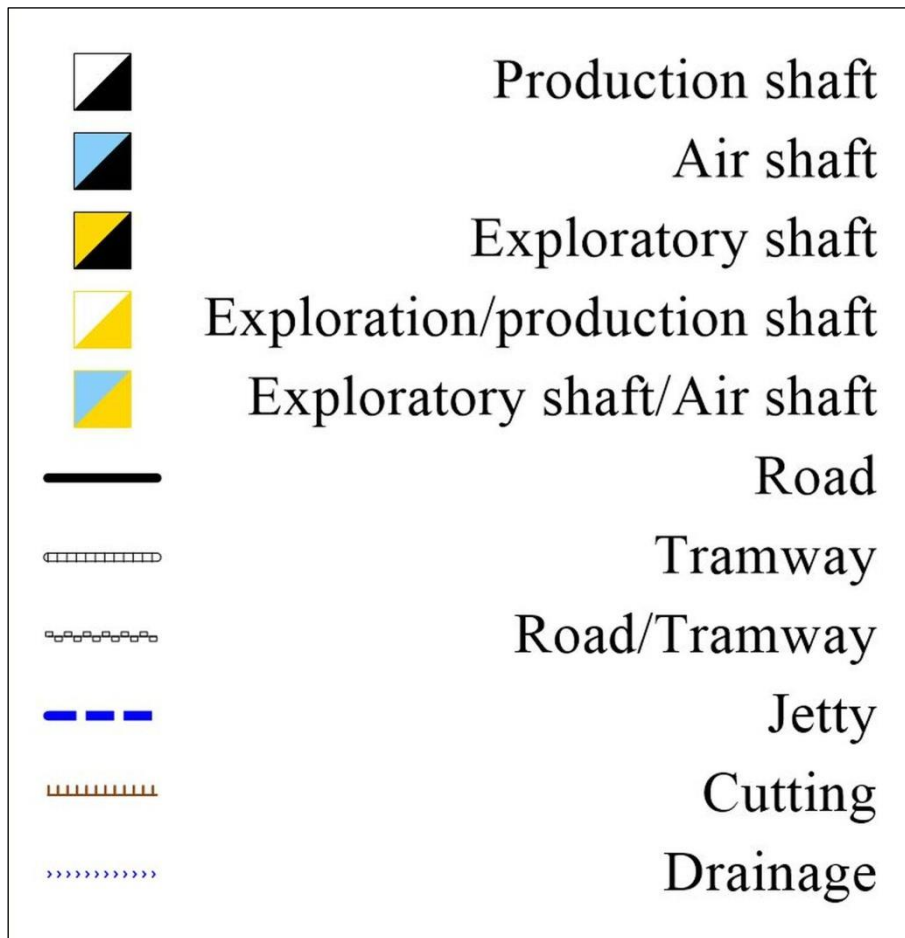


Figure A3-19: Map legend

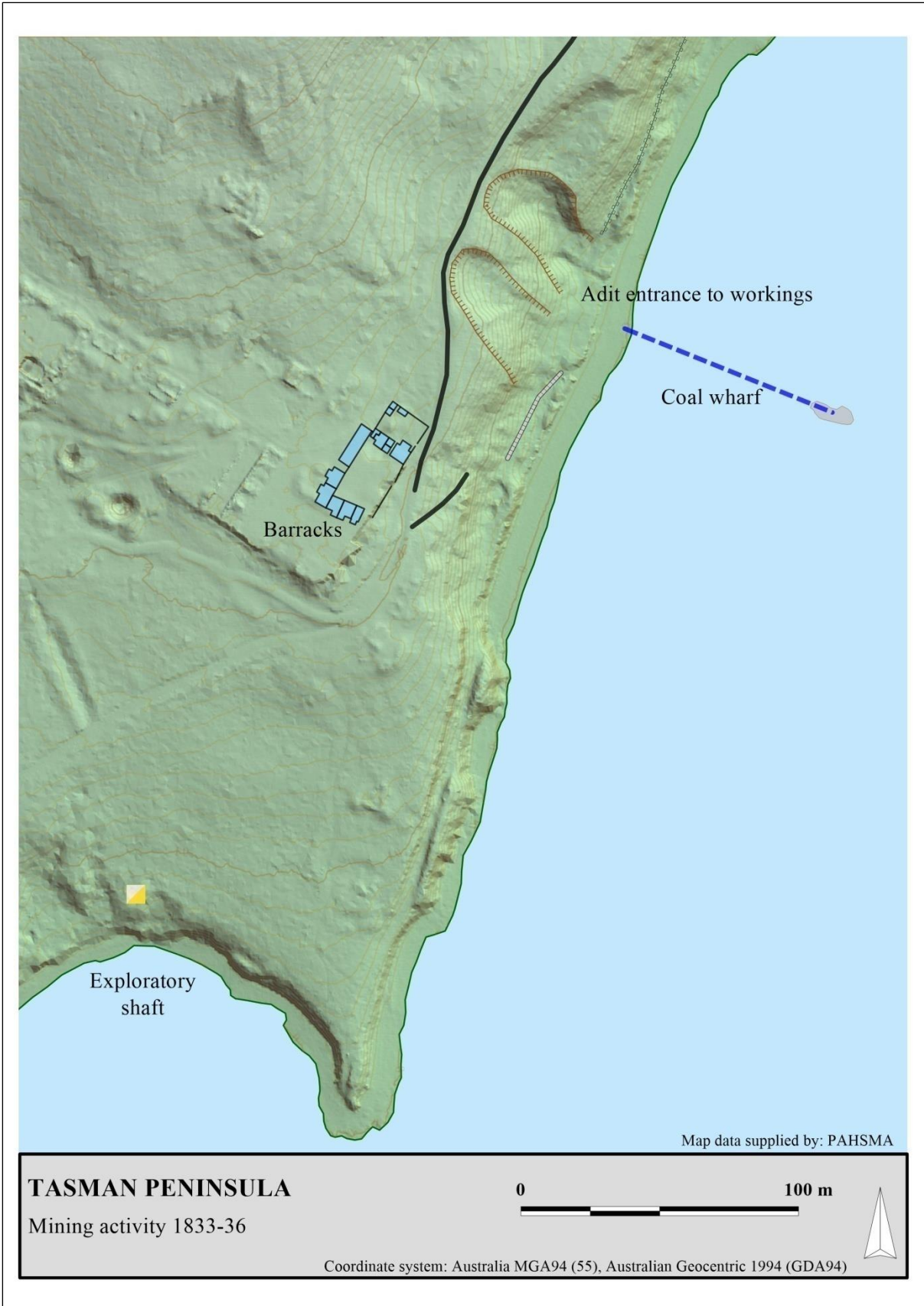


Figure A3-20: Tasman Peninsula, mining activity 1833-36

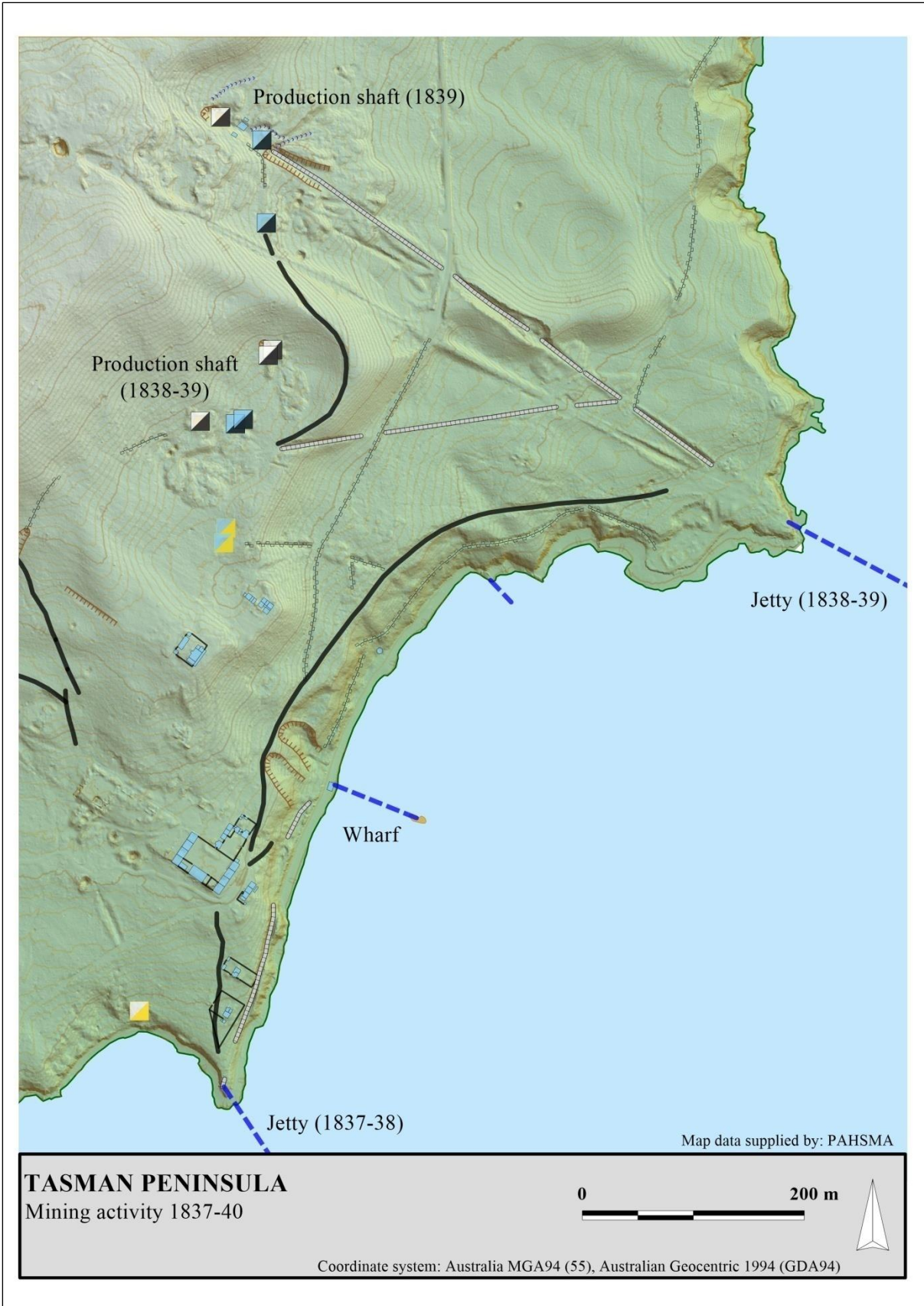


Figure A3-21: Tasman Peninsula. Mining activity 1837-40

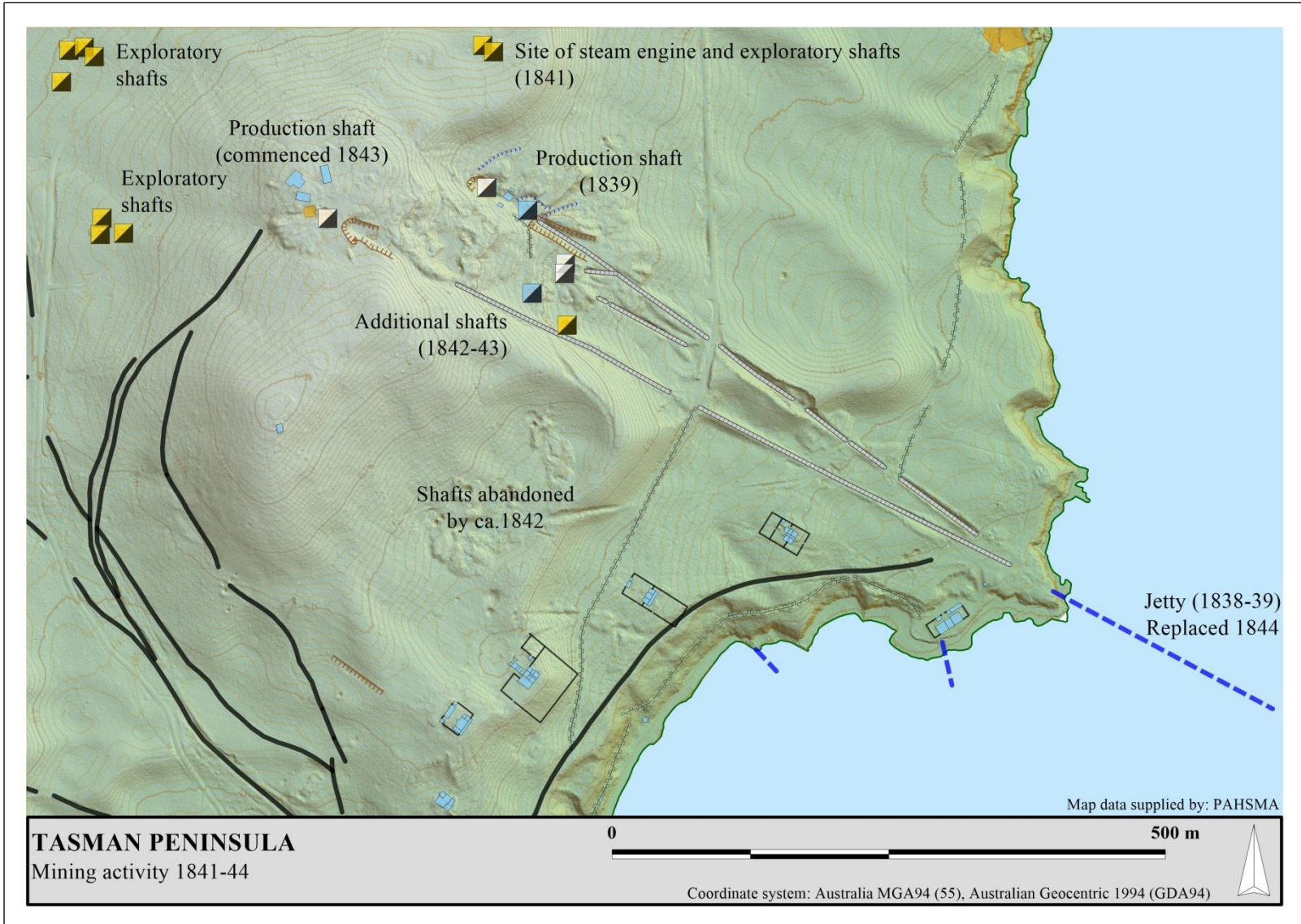


Figure A3-22: Tasman Peninsula, mining activity 1841-44

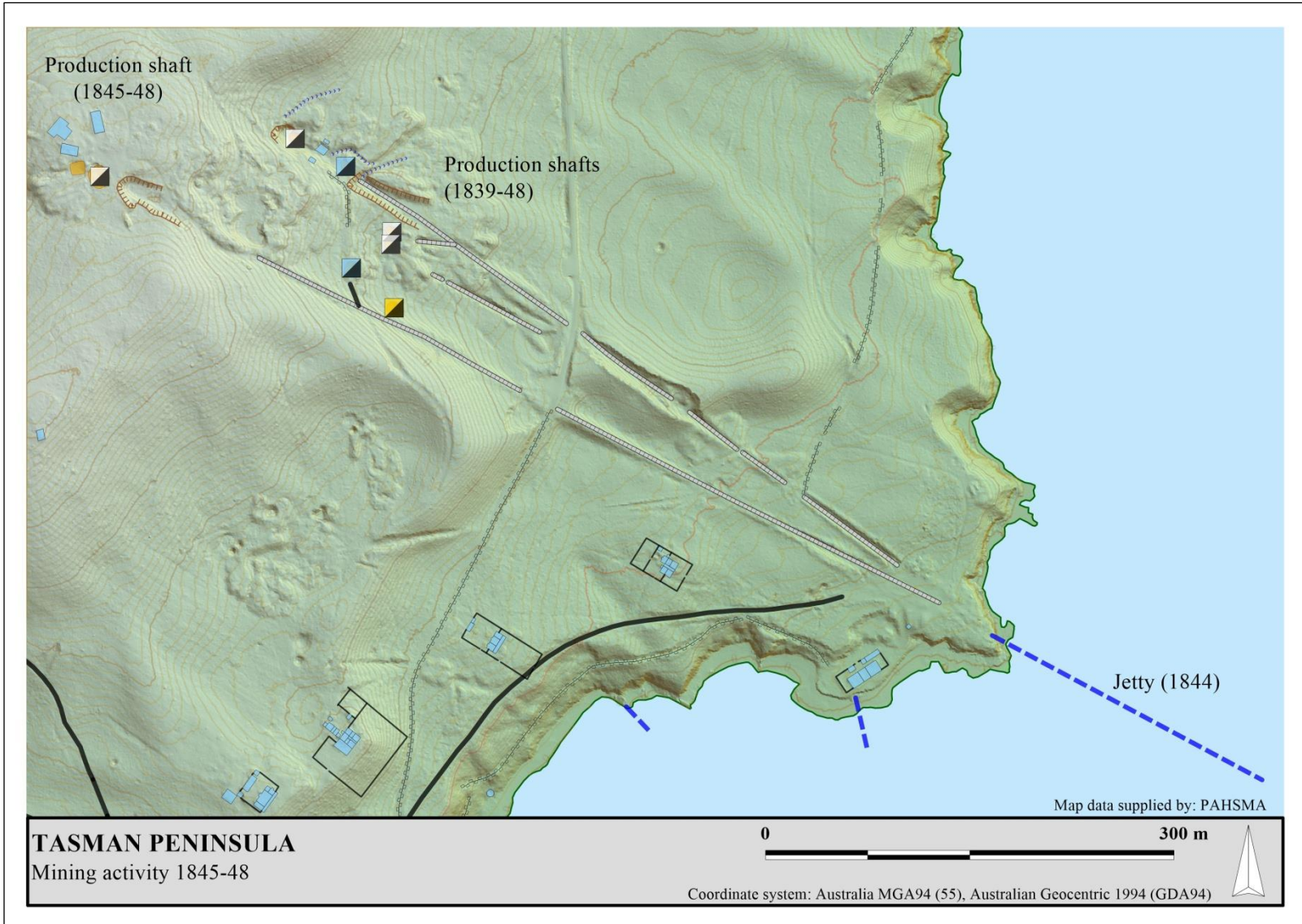


Figure A3-23: Tasman Peninsula, mining activity 1845-48

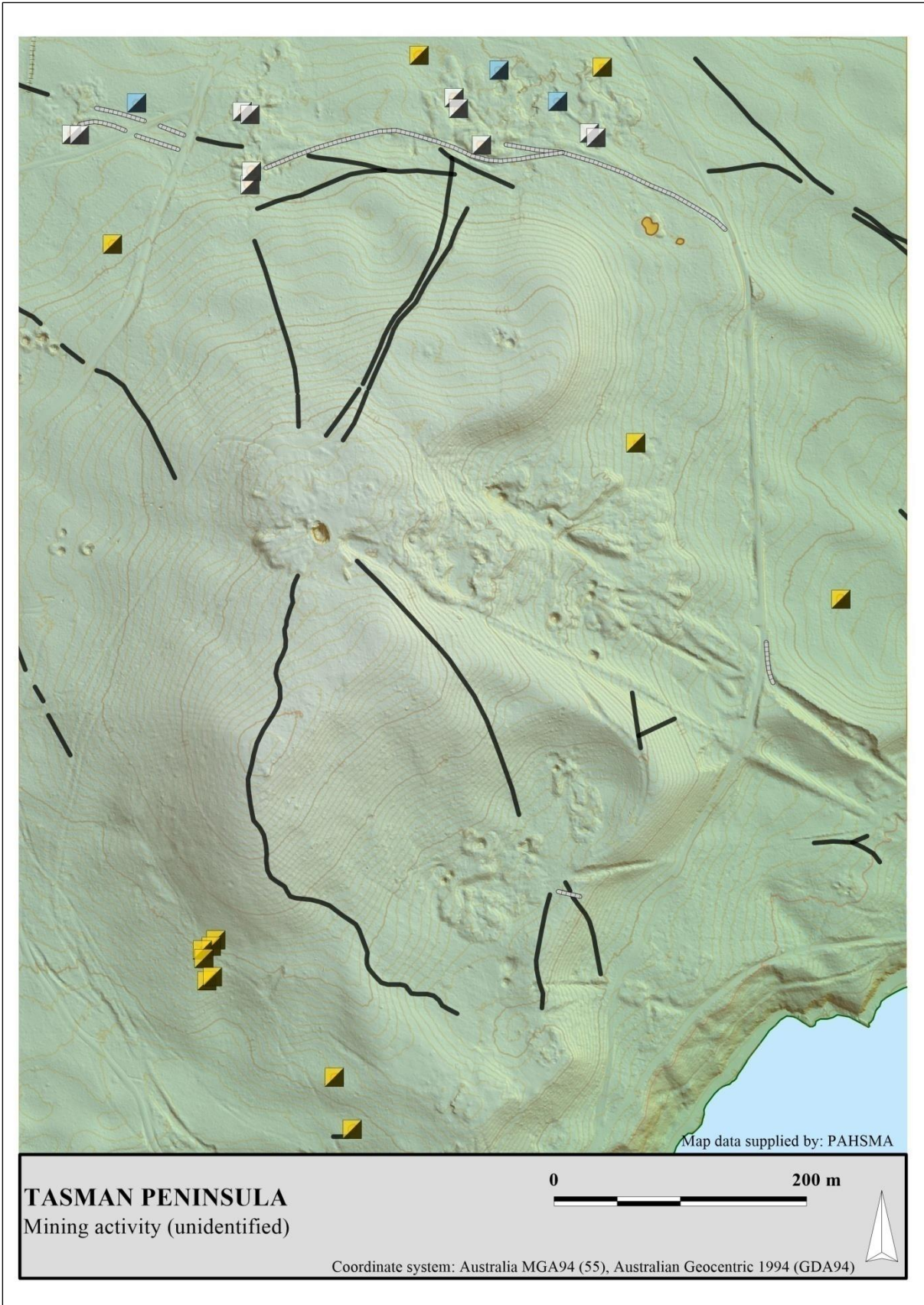


Figure A3-24: Tasman Peninsula, mining activity (unidentified)

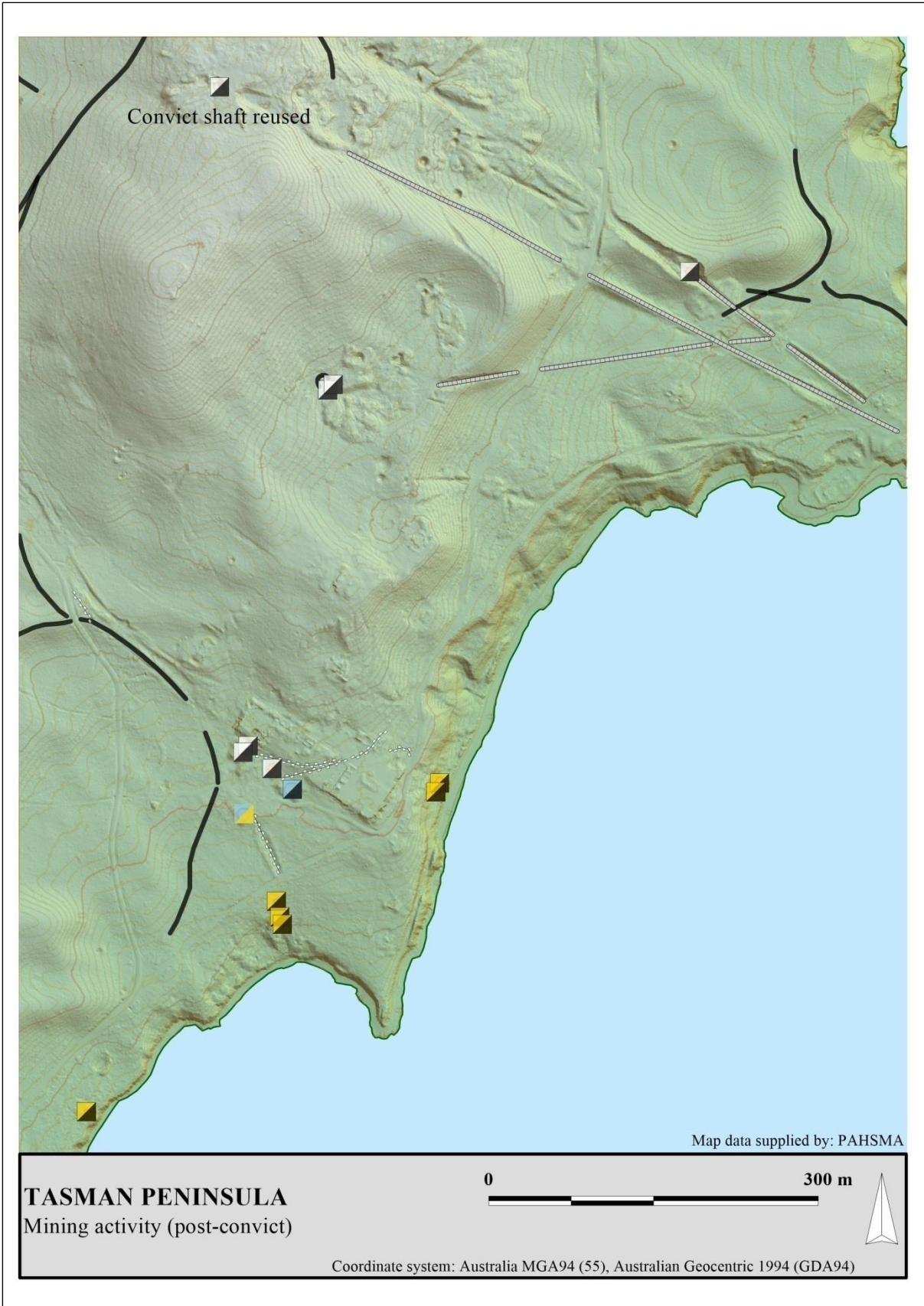


Figure A3-25: Tasman Peninsula, mining activity post-convict

Illustrated notes on the convict period mine workings

The following section is designed to provide further elucidation on the rather opaque and contradictory history of the workings of the Tasman Peninsula coal mine. It is founded upon the work of Bairstow and Davies (1987) and Greg Maiden (2009). As such, it should be read with reference to these works. Where interpretations contradict the conclusions made by Bairstow *et al* and Maiden, it has been noted in the text. Reference should be made to the maps and feature tables provided above.

The dates ascribed to each working refers to the known completion date.

The 1833 shaft

Location: Unknown

Commenced: ca.13 December 1833 (Heard 1981: 165)

Intermediate measurement: 45ft @ 22 January 1834 (1.098ft per day)

Intermediate measurement: 23.5 yds @ 7 April 1834 (0.608ft per day)

Completed: Undocumented

The 1834 shaft

Location: Unknown

Commenced: ca.June 1834 as a water shaft for 1833 shaft⁷²³

Completed: Undocumented

The adits

Location: #401, 403

Commenced: ca.July 1834 (Heard 1981: 179)

Completed: Undocumented (worked out ca.1839)

Depicted in 1837 plans of the station and of the mine workings (Figure A3-26 and Figure A3-27).

⁷²³ Charles O'Hara Booth, Commandant, to Josiah Spode, Chief Police Magistrate, 23 June 1834, Mitchell Library, Tasmanian Papers, 35, T.A.H.O. (BT).

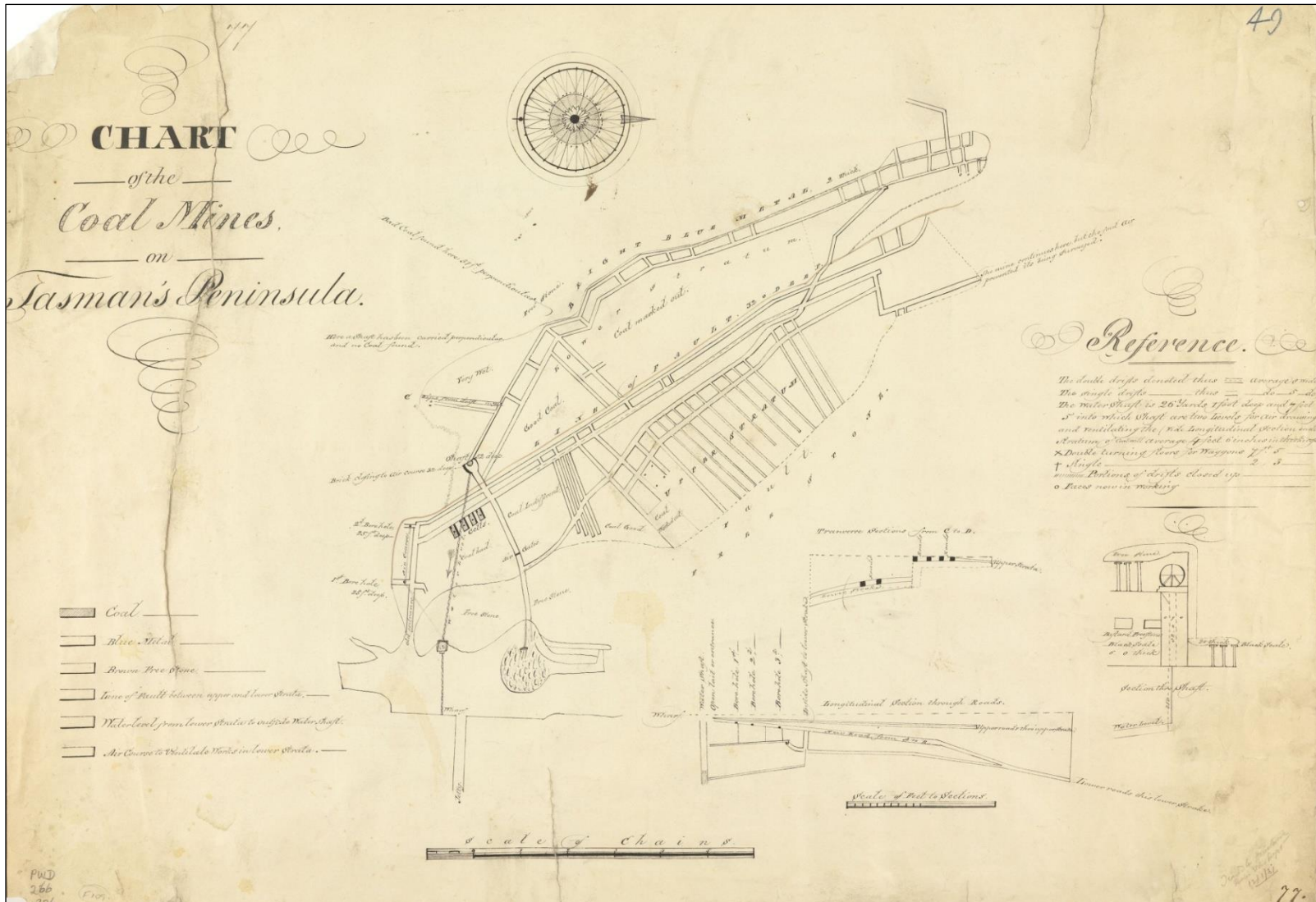


Figure A3-27: Plan of the underground workings, ca.1837
(Unknown artist (Henry Laing?), *Chart of the Coal Mines on Tasman's Peninsula*, ca.1837, PWD 266/1/1837.)

The Half Way Bluff shaft (also known as 5 Mile Beach shaft)

Location: Unknown

Commenced: ca.8 December 1836 (Heard 1981: 204)

Intermediate measurement: 12 fathoms 5ft (77ft) @ ca.May 1837 (0.510ft per day)⁷²⁴

Completed: Undocumented (Lhotsky recommended its abandonment in May 1837)⁷²⁵

The presence of workings near Half Way Bluff are also supported by an 1841 plan, which shows coal as being present at "Coal Bluff" (modern-day Deer Point).

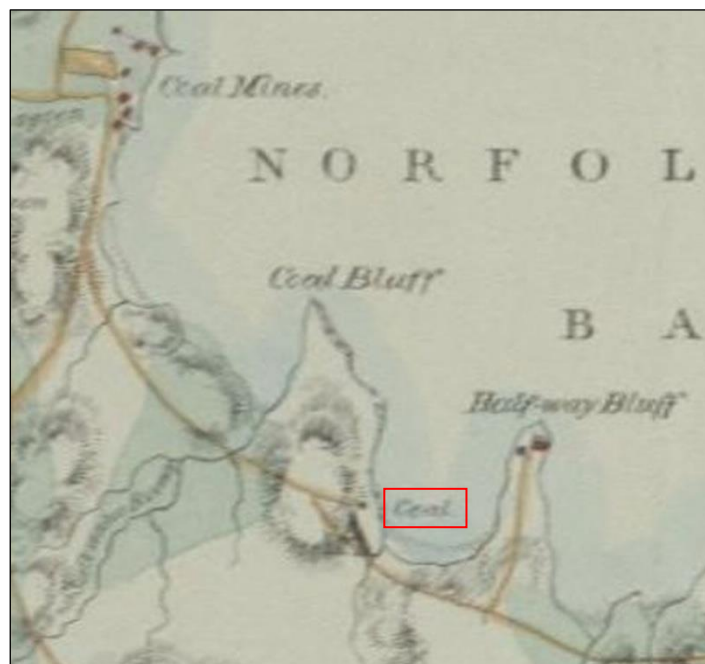


Figure A3-28: Map showing the coal outcrop (highlighted) in relation to the Coal Mine
(*Convict Discipline, Chart of Forestier's and Tasman's Peninsula, ca.1841, (158), p. 28*)

The Half Way Bluff adit (also known as 5 Mile Beach shaft)

Location: Unknown

Commenced: ca.July 1836 (Heard 1981: 226)

Intermediate measurement: 40 yards (120ft) @ 15 Oct 1838 (1.304ft per day)⁷²⁶

Completed: Undocumented

⁷²⁴ John Lhotsky to Charles O'Hara Booth, Commandant, ca.May 1837, CSO 5/72/1584, T.A.H.O.

⁷²⁵ Ibid.

⁷²⁶ Ibid.

The 1838 shaft

Location: Either #486 or #863

Commenced: ca.28 June 1837 (Heard 1981: 212)

Intermediate measurement: 45ft @ 13 September 1837 (0.577ft per day) (Heard 1981: 215)

Intermediate measurement: 107ft @ 18 April 1838 (0.363ft per day) (Heard 1981: 223)

Completed: 150ft ca. 15 October 1838 (0.316ft per day)⁷²⁷

The location of this shaft is unclear. Bairstow and Davies posit that this period of workings are represented by twin shafts #425 and #426 (Bairstow and Davies 1987: 22). Greg Maiden instead asserts that the masonry-lined shaft #486, situated well inland of the works, is probably the shaft excavated at this time (Maiden 2009: 128). Maiden believes that #425 and #426 were excavated during the post-convict period (a position subscribed to by this thesis). Both shafts were shown as being worked in the 1875 survey, with a steam engine and winding gear also installed. Foundations #862 and #864 are present north of the shafts, likely marking the spot of the engine and gear.

A key piece of evidence supporting the 1837-38 sinking of #486 is the planned (but never completed) construction of 1960 yards (1792m) of tramroad to run from shaft to the new (1838) jetty.⁷²⁸ Feature #486 is situated between 1750-1900m from the head of the jetty.⁷²⁹

Maiden suggests that shafts #860-3, #866-7, #869-70 were excavated during 1838-39, after the coal accessible from the adits was worked out (Maiden 2009: 128).

It is likely that the narratives of William Thompson and "William Derricourt" describe accessing the workings from shaft #863. Thompson, who likely arrived at the mine in January 1842, described being lowered into the "Old Shaft", located "on the top of the hill, near the signal station" (Clark 2009: 68). The location of #440 does not match Thompson's description, being situated some 270m north east of the semaphore. In contrast, shaft #863 much better matches Thompson's recollection. In

⁷²⁷ Surgeon Superintendent, *Minerva*, to Sir John Franklin, Lieutenant Governor, 15 October 1838, CSO 5/146/3551, T.A.H.O. (BT).

⁷²⁸ Charles O'Hara Booth, Captain Commandant, to Commanding Royal Engineer, 22 February 1838, CSO 22/103/2329, T.A.H.O. (BT).

⁷²⁹ Overseer, Coal Mines, to Charles O'Hara Booth, Captain Commandant, 29 October 1839, CSO 5/217/5507, T.A.H.O. (BT).

his description, Thompson also describes the works from the orientation of standing with his back to the semaphore, therefore facing south east (Clark 2009: 73). He describes a drive heading directly south east for 40-50 yards (36-46m), with drives also heading off to the left and right. This does not match the March 1842 mine plan, which shows the drive from #440 heading in directly the opposite heading.⁷³⁰ 'Derricourt' also describes having to walk a mile from the shaft to the face of the workings (Becke 1899: 55). This patently does not match the location of #440, which was situated quite near the main area of workings. At this time shaft #863 was situated approximately 500m from the main working faces.

In December 1841 Superintendent Cook recorded that one of the older shafts was "done", with little coal coming from the other.⁷³¹ If #863 was the older shaft referred to, then it does match Thompson's recollection of an "old" shaft - although Thompson records a shaft that was still being worked and had not been abandoned.

Shaft #863 is shown on the July 1842 mine plan (Figure A3-35).

Of the two possible shafts it seems most likely that #863 was excavated during 1838.

The 1839 shaft

Location: #440

Commenced: Undocumented

Intermediate measurement: Reached coal ca. June 1839⁷³²

Completed: ca. September 1839⁷³³

Final depth: 52 yards (156ft)

⁷³⁰ Unknown artist (James Hurst?), *Sketch of the coal workings*, March 1842, CSO 22/1/2336, T.A.H.O.

⁷³¹ Samuel Cook, superintendent, to Charles O'Hara Booth, Commandant, 8 December 1842, Tasmania Papers 134, CY 3079, Frame 549, M.L. (UB).

⁷³² *Colonial Times*, 25 June 1839; Charles O'Hara Booth, Captain Commandant, to Matthew Forster, Colonial Secretary, ca. June 1839, CSO 5/199/4778, T.A.H.O.

⁷³³ *Hobart Town Courier and Van Diemen's Land Gazette*, 20 September 1839; Charles O'Hara Booth, Captain Commandant, to Matthew Forster, Colonial Secretary, 16 September 1839, CSO 5/199/4778, T.A.H.O.

Bairstow and Davies place this shaft in the cluster surrounding #425 and #426 (Bairstow and Davies 1987: 22). Maiden locates this period of working in the area centring upon the main shaft #440 (Maiden 2009: 122-4). Of these, it is likely that Maiden's interpretation is correct. Shaft #440 is shown as the main area of working in the two 1842 mine plans (Figure A3-34 and Figure A3-35).

A key piece of supporting evidence for the 1839 sinking of #440 are the two illustrations completed by Owen Stanley in January 1841, showing the top of the inclined plan and the mouth of the workings (Figure A3-30 and Figure A3-32).⁷³⁴ Both illustrations show works that were well-advanced and therefore likely to relate to those from 1839 - the 1841 workings not commenced until *after* Stanley's visit. Ground-truthing exercises to locate the position of these illustrations found that the only spots which matched Stanley's views were associated with the #440 workings (Figure A3-29). Figure A3-30 likely depicts the deep cutting at the head of tramway #557, the windlass shown in the background situated over air shaft #839. Figure A3-32 potentially shows the start of the inclined plane #557 during its early incarnation, suggestive of workings that have only been active since 1839.

⁷³⁴ These illustrations are known to have been completed in January 1841 as Owen Stanley, commander of the *HMS Britomart*, arrived in Hobart on 16 December 1840 and sailed 29 January 1841. 'HMS Britomart', 16 December 1840, MB 2/39/1/5 p. 248, T.A.H.O.; *Colonial Times*, 2 February 1841.

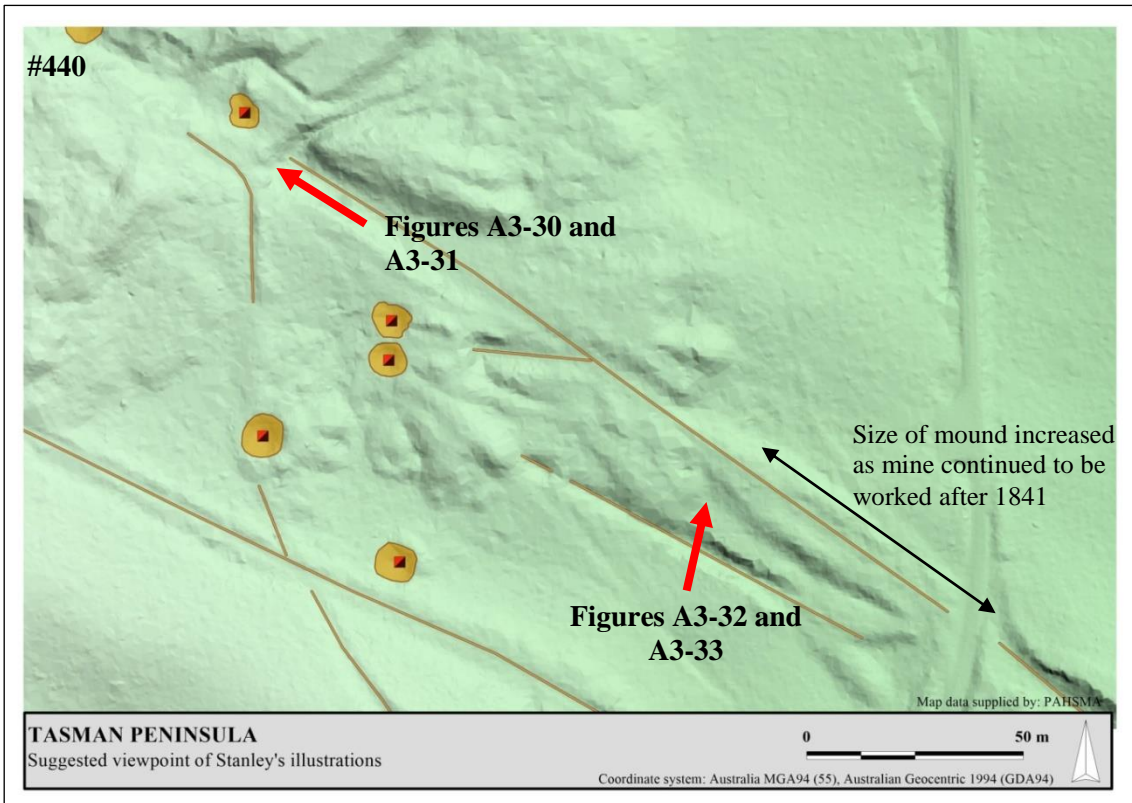


Figure A3-29: Map showing suggested position of Owen Stanley's 1841 illustrations

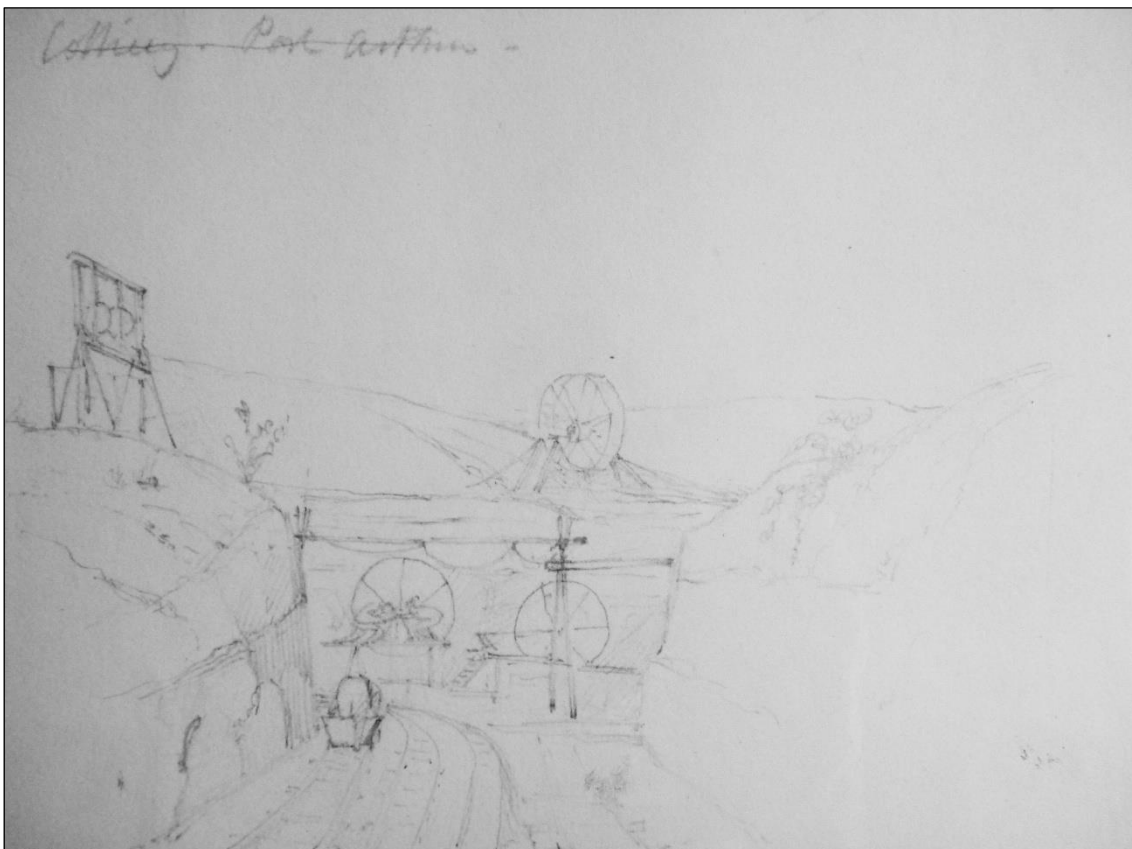


Figure A3-30: Owen Stanley's depiction of the entrance to the mine
 (Owen Stanley, *Mouth of the coal mine, Tasman's Peninsula*, n.d. (January 1841), Tasmanian Museum and Art Gallery)

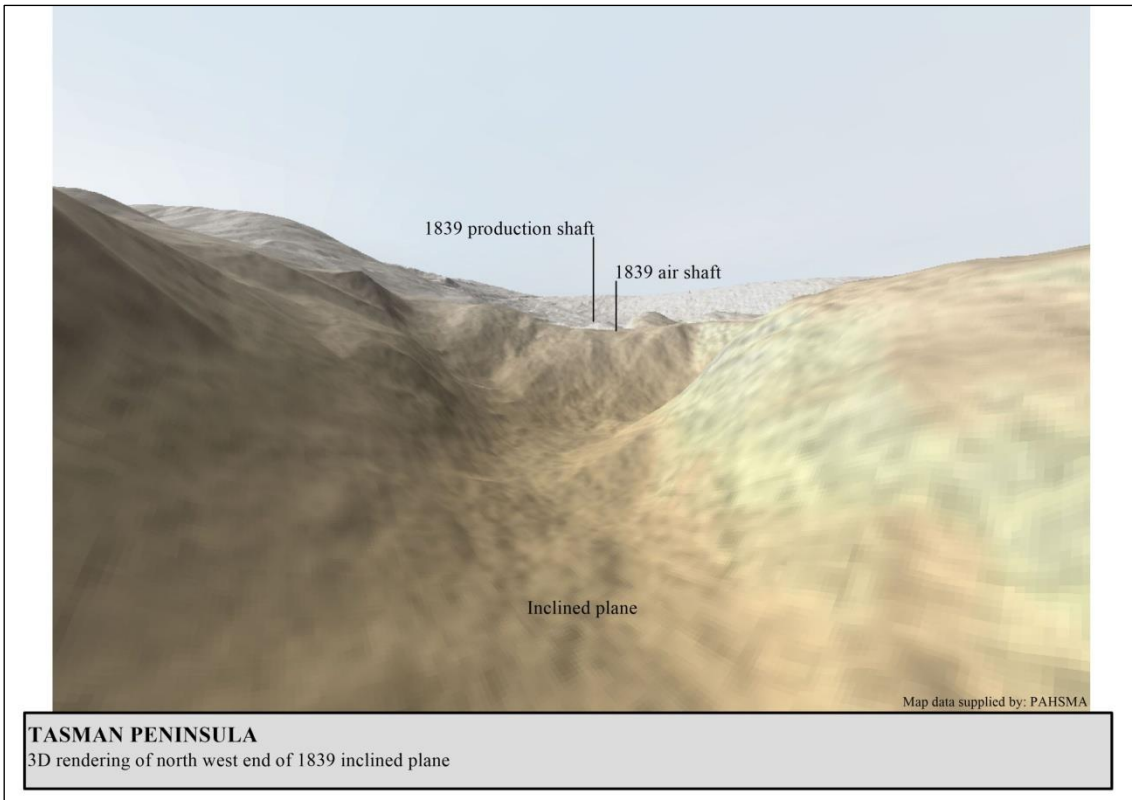


Figure A3-31: Basic 3D model generated from LiDAR data illustrating close match with Stanley's viewpoint



Figure A3-32: Owen Stanley's illustration of the start of the inclined plane
(Owen Stanley, *Penal Settlement 1841. Commencement of the inclined plane*, n.d. (January 1841), Tasmanian Museum and Art Gallery)

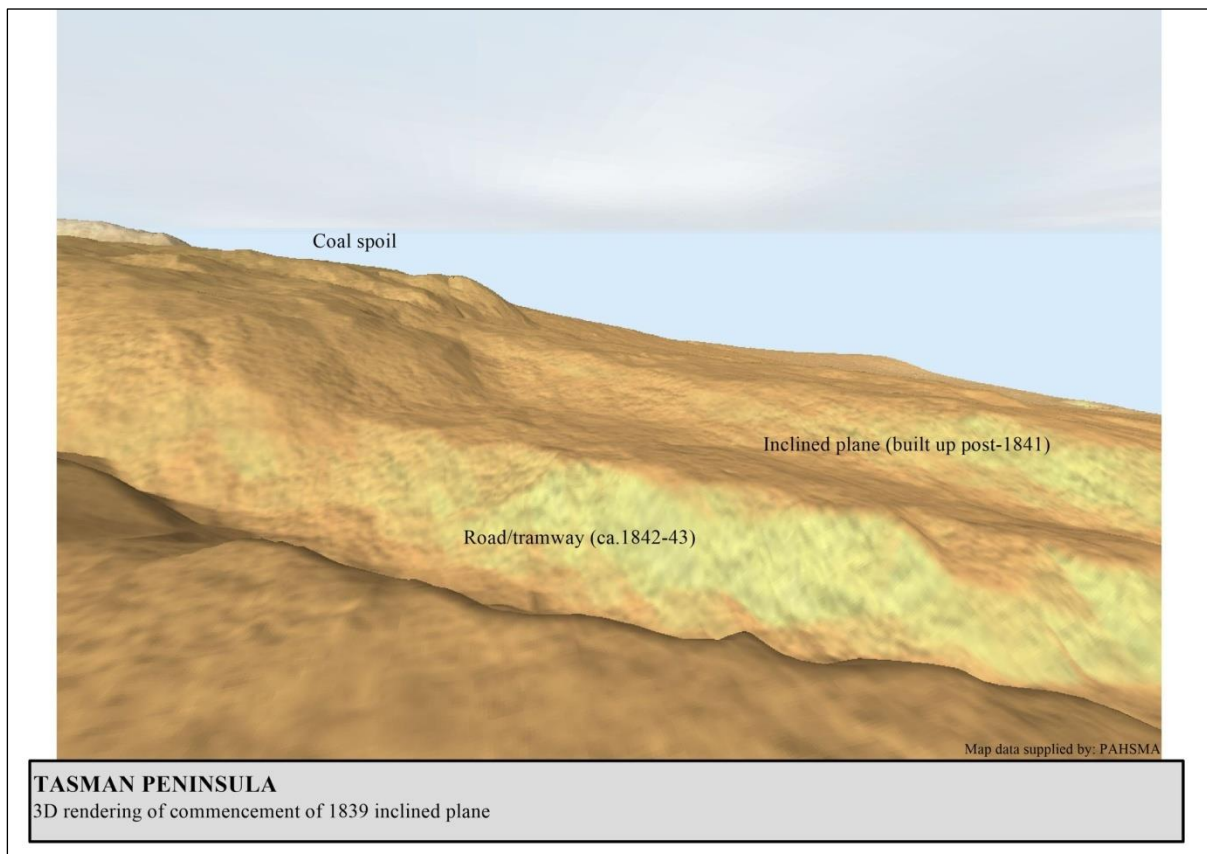


Figure A3-33: Basic 3D model generated from LiDAR data illustrating close match with Stanley's viewpoint in Figure A3-32

David Burn’s account in January 1842 likely pertains to shaft #440, his description recording a shaft of 52 yards and underground workings that were quite advanced (Burn 1850: 43).

The 1841 shaft

Location: #475, #476

Commenced: ca. 14 July 1841⁷³⁵

Completed: Undocumented

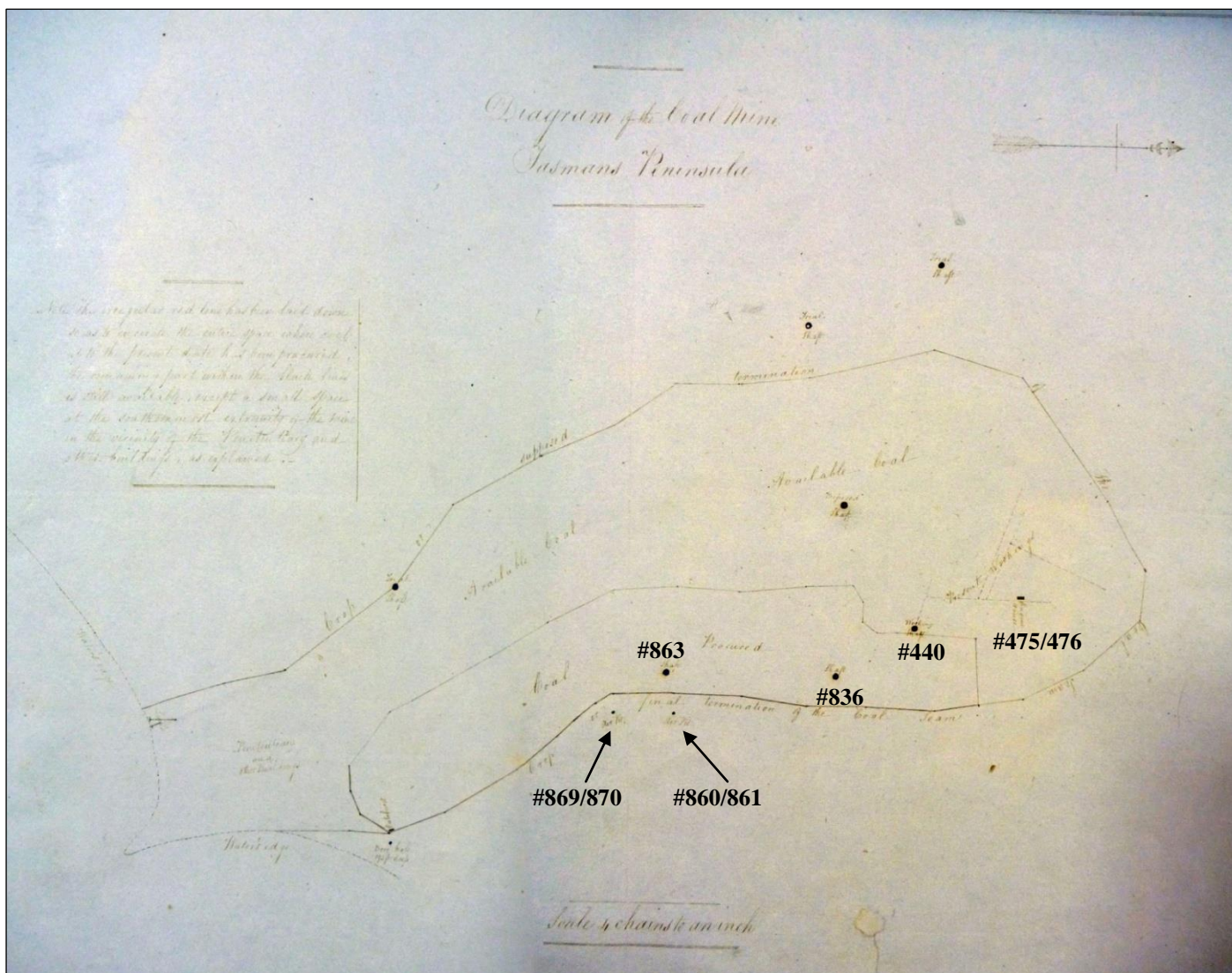
This shaft is likely the exploratory shafts #475 and #476, their position matching Overseer James Hurst's July 1841 description of a “new” shaft “at the top of the hill”.⁷³⁶ The steam engine was

⁷³⁵ James Hurst Mining Overseer, to Charles O'Hara Booth, Commandant, 14 July 1841, Tasmania Papers 134, CY 3079, Frame 285, M.L. (UB).

relocated to this working in August 1841, but does not appear to have been placed in working order.⁷³⁷ The positioning of this engine is supported by the mine plans completed in March and July 1842 (Figure A3-34 and Figure A3-35).

⁷³⁶ James Hurst Mining Overseer, to Charles O'Hara Booth, Commandant, 14 July 1841, Tasmania Papers 134, CY 3079, Frame 285, M.L. (UB).

⁷³⁷ Alexander Clarke to John Montagu, Colonial Secretary, 5 August 1841, CSO 22/4/56, T.A.H.O. (BT).



When he visited in December 1841 Lieutenant Governor Franklin recorded that the “new” shaft (#440) was waterlogged and it had been necessary to excavate another (Brand 1993: 40). At the time of his visit the first coal seam had only just been intersected. The physical evidence of #475 and #476 indicates that they were never excavated to any depth and could not have encountered the coal seam. This suggests that a second shaft may have been commenced in late 1841 - potentially #836.

The 1843 shaft

Location: #834/835 or #866/867

Commenced: ca.21 August 1842⁷³⁸

Completed: By 1 April 1843⁷³⁹

Final depth: Undocumented

Maiden suggests that this is shaft was either #834/835 or #866/867. Historical documentation does not provide any indication of where it was located.

The 1845 shaft

Location: #495

Commenced: ca.10 May 1843⁷⁴⁰

Completed: 31 December 1845⁷⁴¹

Final depth: 101 yards (303ft)

Estimated rate of excavation: 0.313ft per day

⁷³⁸ Charles O'Hara Booth, Commandant, to Colonial Secretary, 21 August 1842, CSO 22/22/880, T.A.H.O. (BT).

⁷³⁹ James Hurst, Mining Overseer, to Charles O'Hara Booth, Commandant, 1 April 1843, CSO 22/22/880, T.A.H.O. (BT).

⁷⁴⁰ Charles O'Hara Booth, Commandant, to Colonial Secretary, 10 May 1843, CSO 22/22/880, T.A.H.O. (BT).

⁷⁴¹ Minutes of the proceedings of the committee of officers, No. 1, 31 December 1845, CON 103/3 T.A.H.O. (UB).

Post-convict period workings

Indications are that a number of areas worked by the convicts were reopened, with some new works potentially undertaken to the north (#610-17, #624-30, #634). Refer to Bairstow and Davies for a full account of this period of operation (Bairstow and Davies 1987: 37-43). Two plans from 1875 and 1894 illustrate that, during the latter period, work was centred upon shafts #425 and #426, work at main shaft #495 having ceased (Figure A3-36 and Figure A3-37). The excavation of a shaft during the post-convict period in the middle of tramway #445 had also closed access to #440 and, potentially, the northern workings. By the 1890s the only active leases were over #440 and #495 and to the south of the main station.



Figure A3-36: Detail of 1875 survey
 (Unknown artist, *Tasman's Peninsula, Port Arthur Coal Mines*, 1875, plan 76, Port Arthur Historic Site collection)



Figure A3-37: Detail of 1894 survey
 (Mines Department, Tasman's Peninsula, Parish of Togane, 1894, Mines Department, Port Arthur Historic Site collection)

Georectified historic plans

Plans of the Tasman Peninsula coal mine which were georectified as part of the research:

Date		Author	Rectified
1985	Coal Mines Historic Site survey	Damaris Bairstow, Martin Davies	Yes
1894	Mining Lease plan	Mineral Resources Tasmania	Yes
c1836	Plan - Officers' Quarters	T.A.H.O.. CON 87/1/75	Yes
c1836	Plan - Officers' Quarters outbuilding	T.A.H.O.. CON 87/1/76	Yes
c1836	Plan - Military Barracks	T.A.H.O.. CON 87/1/77	Yes
c1836	Plan - Signal Hut	T.A.H.O.. CON 87/1/78	Yes
c1836	Plan - Prisoners' Barracks	T.A.H.O.. CON 87/1/79	Yes
c1836	Plan - Proposed Prisoners' Barracks	T.A.H.O.. CON 87/1/82	Yes
1837	Settlement and mine plan	John Lhotsky. T.A.H.O.. CSO 5/72/1584	No
1837	Mine plan	John Lhotsky. T.A.H.O.. PWD 266/1/1837	Yes
1842	Probation plan	Dixson Library, Tasmaniana Vol 156	Part-rectified
1842	Mine plan	William Dawson. T.A.H.O.. CSO 22/1/2337	Yes
1842	Mine plan	Unknown (James Hurst). T.A.H.O.. CSO 22/1/2336	Yes
1843	Samuel Cook sketch plan	Dixson Library. Tasmaniana HB/ADD/564/214	No
1875	Reserve plan	Tasmanian Land Titles Office	Yes
1894	Mining Lease plan	Mineral Resources Tasmania	Yes
1985	Coal Mines Historic Site survey	Damaris Bairstow, Martin Davies	Yes

Table A3-14: Table listing plans georectified as part of the research

Notes on the narrative of "William Derricourt"

Using the convict name index of the Tasmanian Archives and Heritage Office, the entry for "William Derricourt" provides an alias of William Jones (this name is mentioned in his narrative), a ship (*Asia* 5).⁷⁴² At least three William Jones' came out on the *Asia*, with the T.A.H.O. record identifying William Jones (1) as "William Derricourt". This conduct record does not record any time spent at the Tasman Peninsula mine. The record of William Jones (2) does.

It is difficult to attribute solid dating to the Derricourt narrative. Whichever, if any, of the William Jones' Derricourt is, he arrived in Hobart on the 6 August 1840. Having spent time in and out of the Prisoners' Barracks, Hobart, he was sent to Port Arthur. As part of his time there he was ordered to Salt Water River in the clearance party to make ready for the arrival of the first batch of prisoners there. Derricourt witnessed their arrival, which was on 29 March 1841 (Brand 1990: 16).

Within a short amount of time he was sent to the mine when the 'old hands' were replaced by probation men. Derricourt records that he spent three years and nine months working underground, however this contradicts later dateable events. While still working underground, Derricourt recollects the theft of stores from the commissariat via a prison ward. A remarkably similar theft was recorded in June 1842, which may have been the one recorded by Derricourt.⁷⁴³ Shortly after this he recollects being placed on shaft-sinking. He claims to have been present for the appointment of the "humane" Superintendent James Purslowe in October 1843, at which time Derricourt was given work aboveground. He also claims to have been present for Purslowe's removal in February 1844 (Syme 1848: 315). Soon after this Derricourt was removed to Hobart. He was then sent to Lovely Banks probation station, claiming to have been there when it closed in May 1845 (Brand 1990: 142). This does not match his claim later in the narrative, when he is working as a passholder, of having met Lieutenant Governor Eardley-Wilmot soon after his August 1843 appointment to the colony.

⁷⁴² William Jones, CON 27/1/8, T.A.H.O.

⁷⁴³ Assistant Commissary General to Colonial Secretary, 3 June 1842, CSO 22/14/618, T.A.H.O.

From this evidence the Derricourt narrative applies to a period of activity at the mine no earlier than March 1841. He was likely working underground in June 1842, potentially continuing in this employment until late 1843. Although later dating is problematic, evidence suggests that he left the station sometime in early 1844.

APPENDIX 4: RECHERCHE BAY GAZETTEER AND FIELDWORK PHOTOGRAPHS

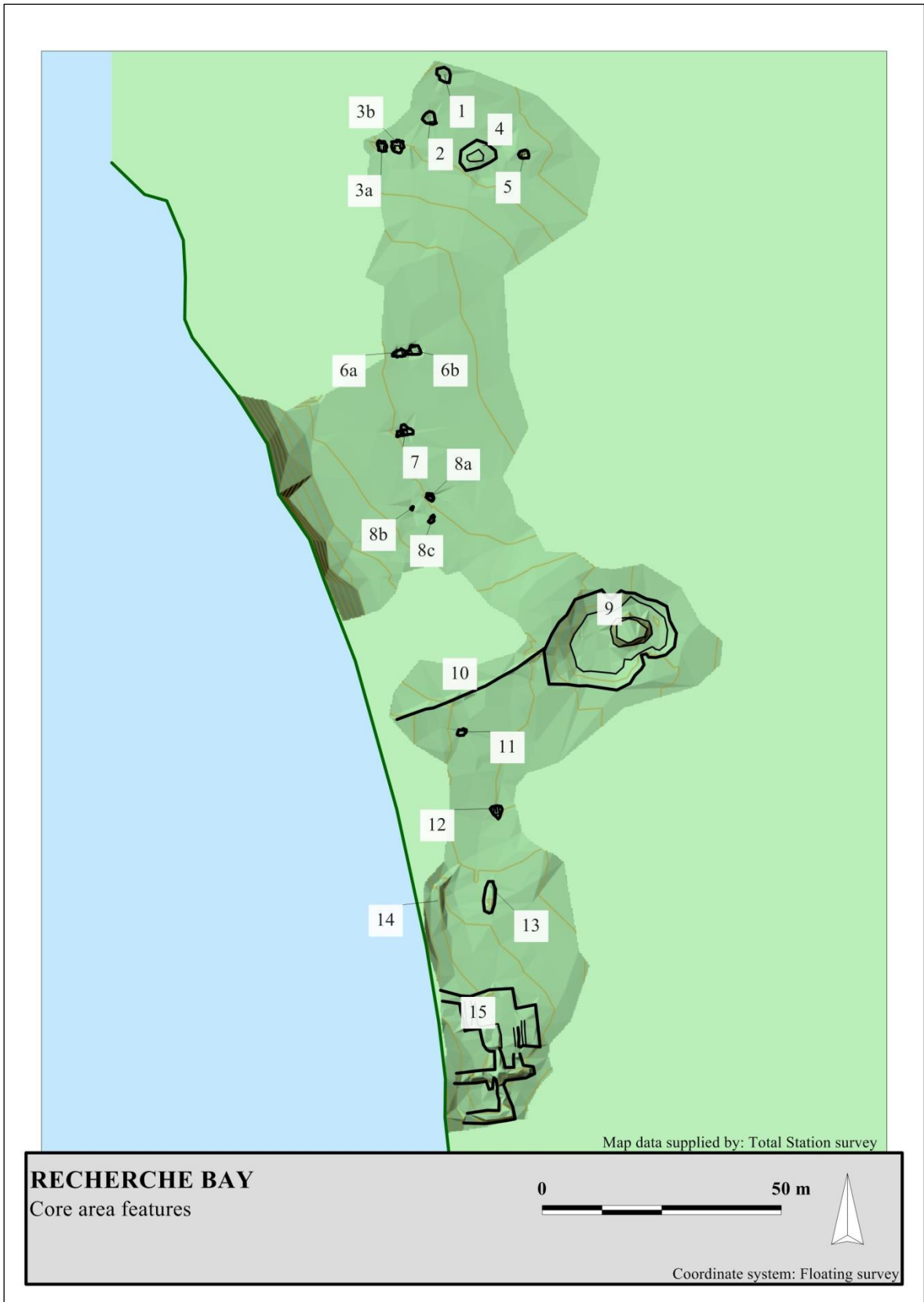


Figure A4-1: Location of core sites, Recherche Bay

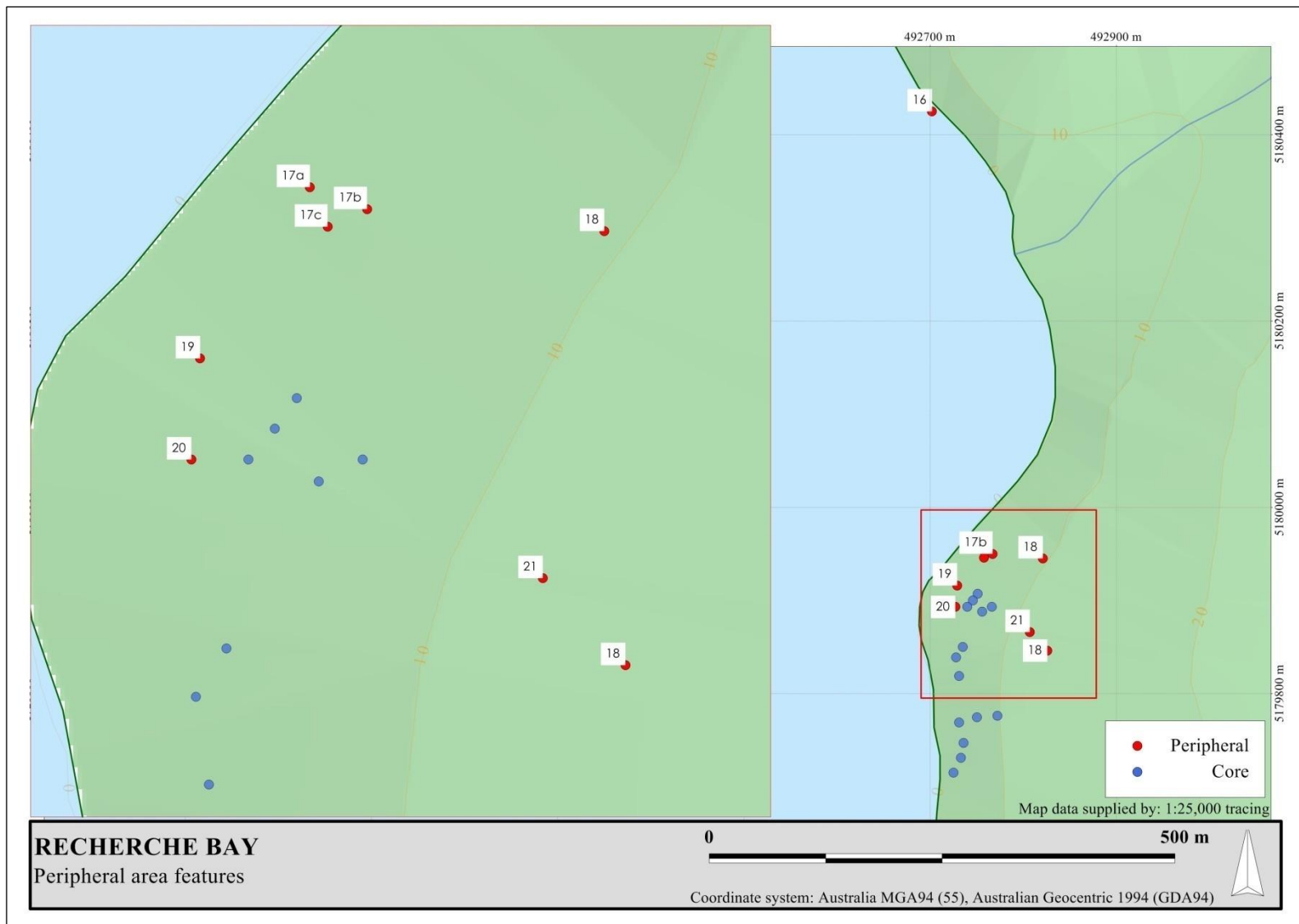


Figure A4-2: Peripheral sites located at Recherche Bay

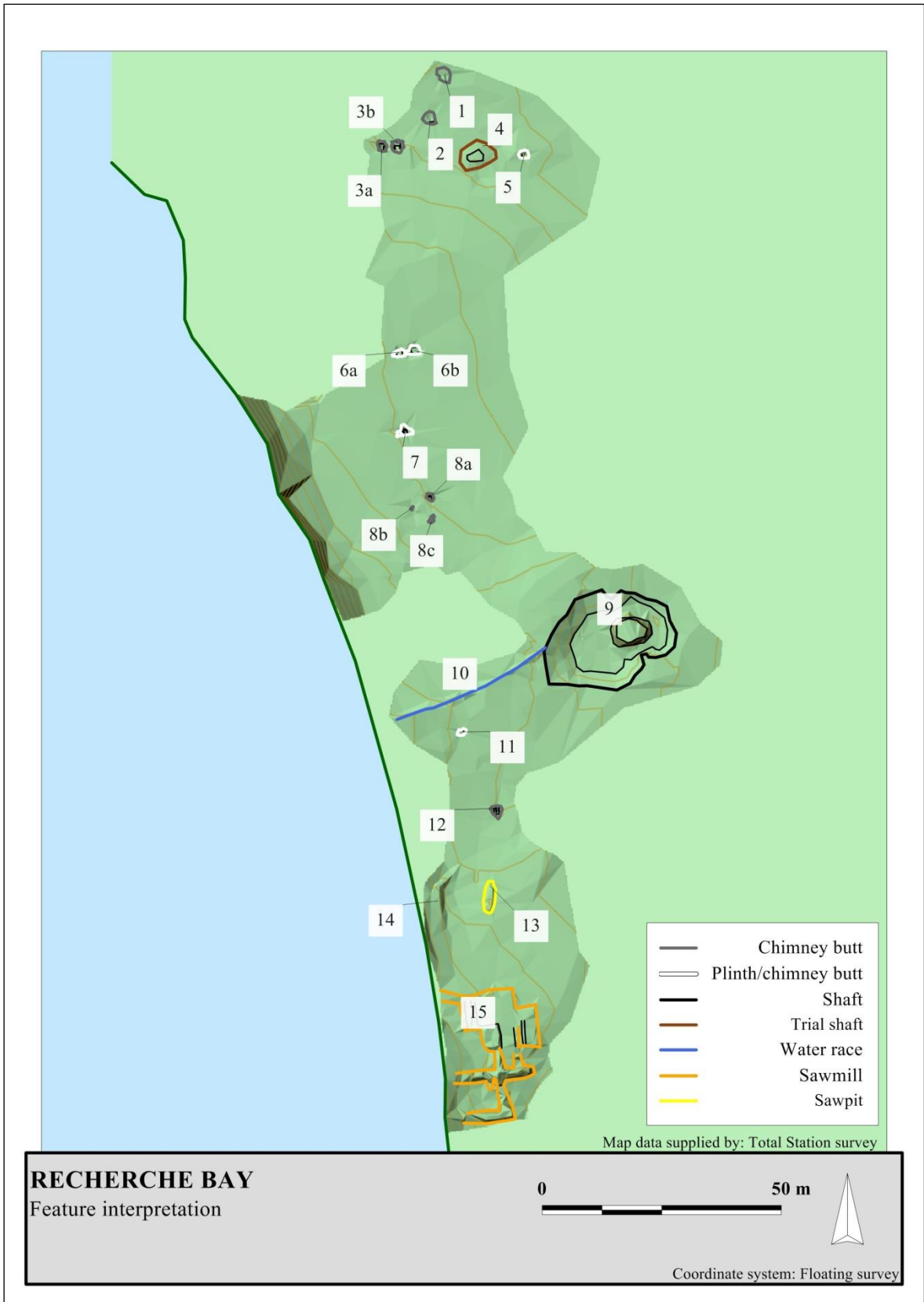


Figure A4-3: Recherche Bay, core area feature interpretation overview (see accompanying table for period)

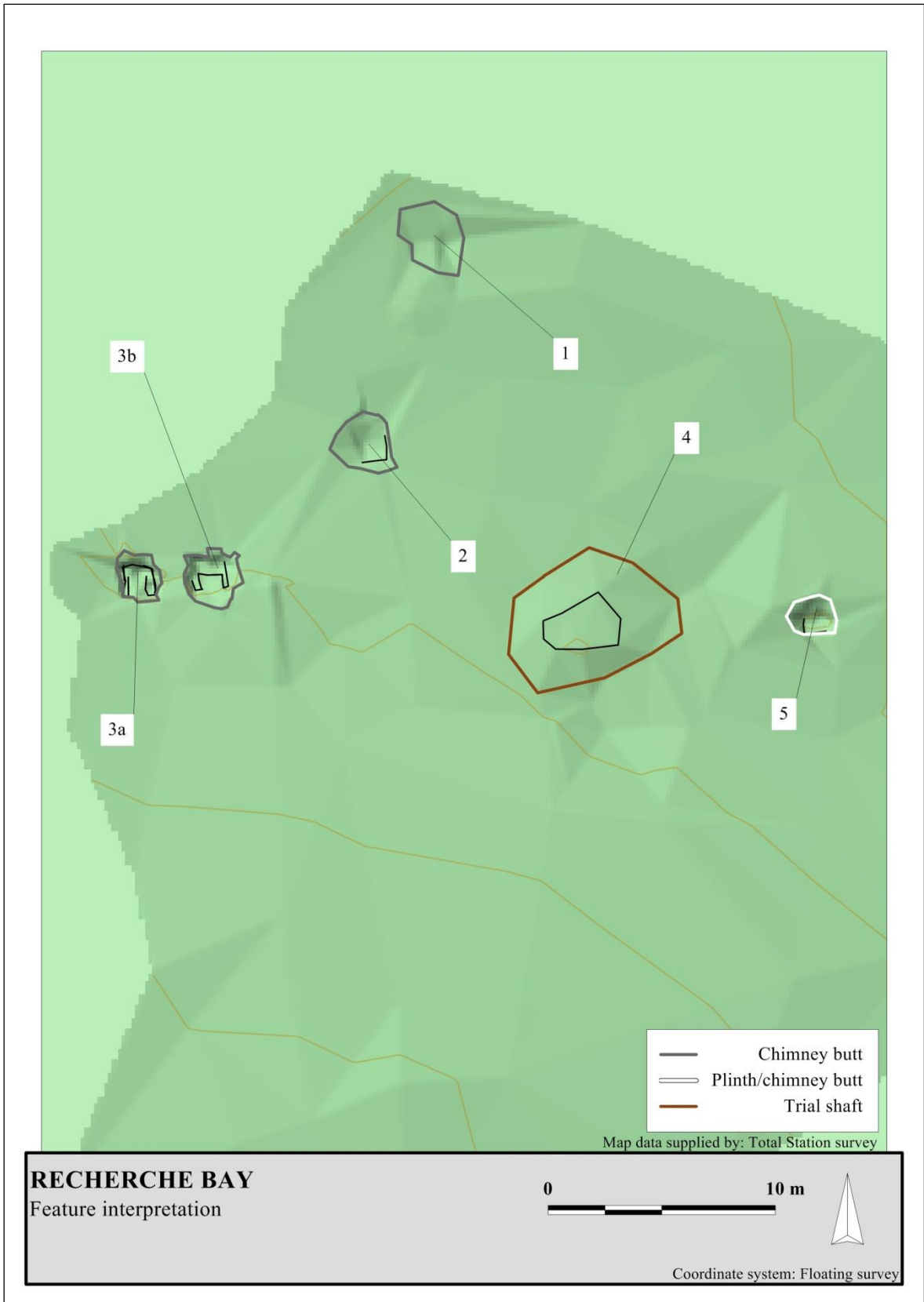


Figure A4-4: Recherche Bay, core area feature interpretation detail (see accompanying table for period)

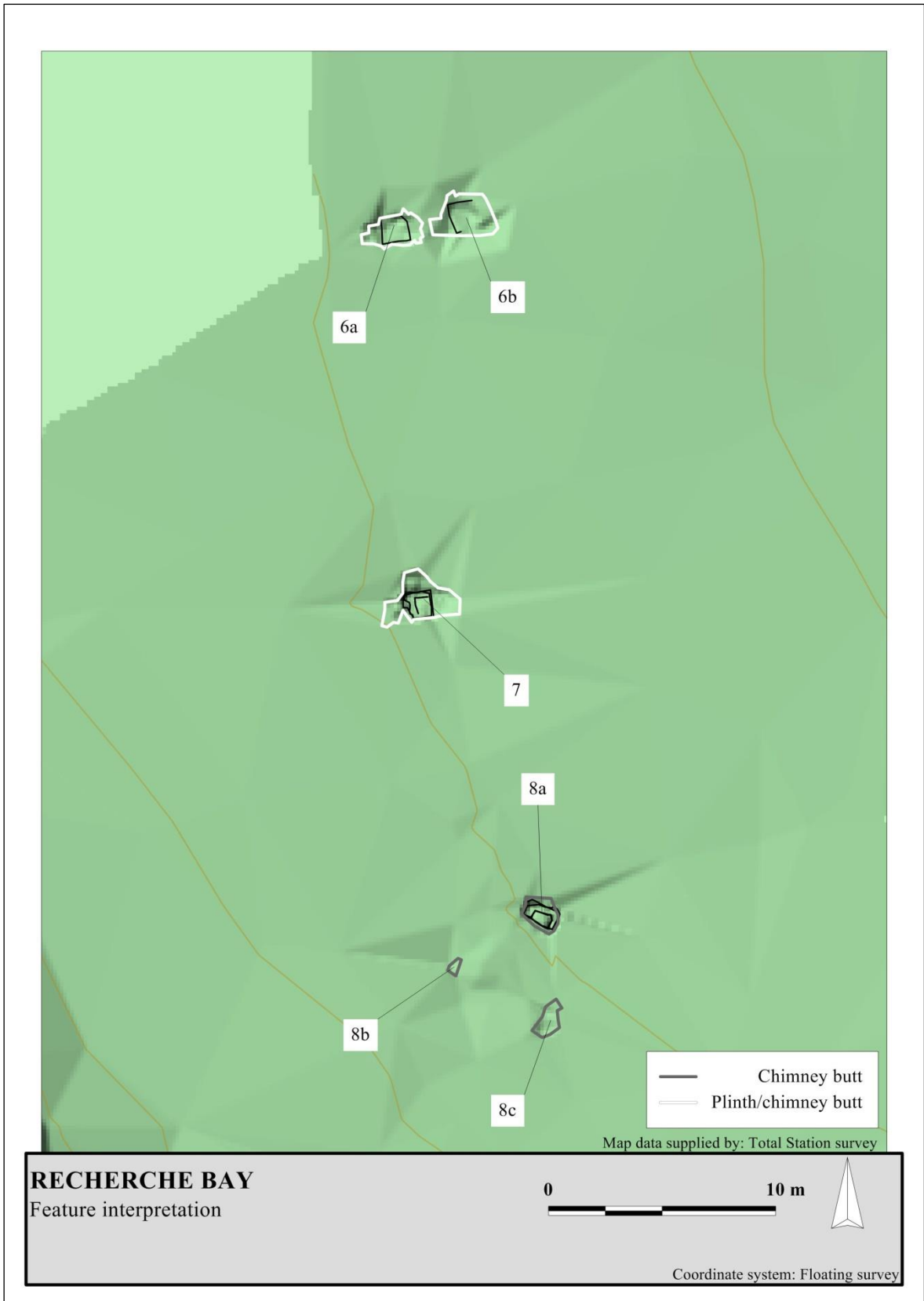


Figure A4-5: Recherche Bay, core area feature interpretation detail (see accompanying table for period)

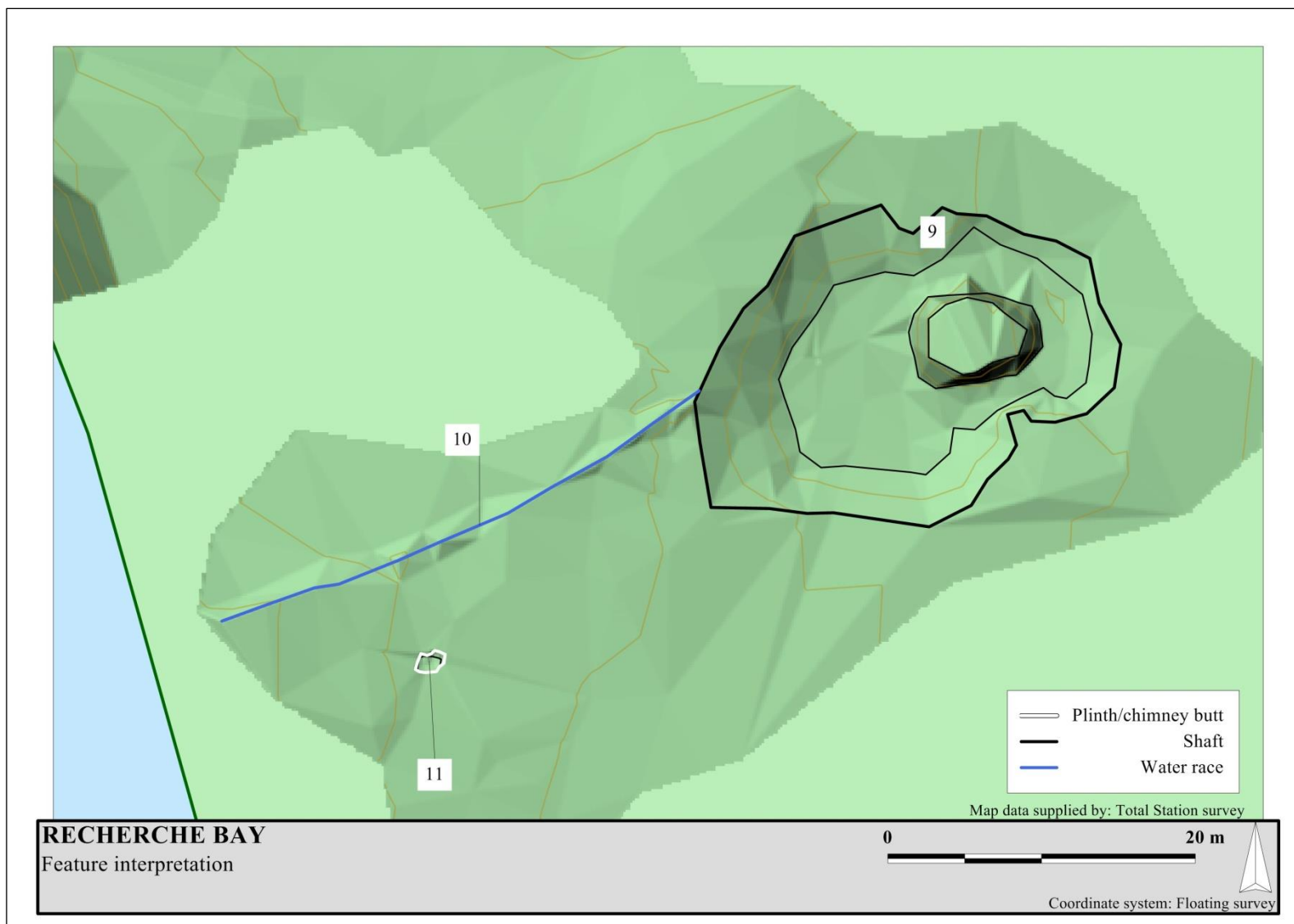


Figure A4-6: Recherche Bay, core area feature interpretation detail (see accompanying table for period)

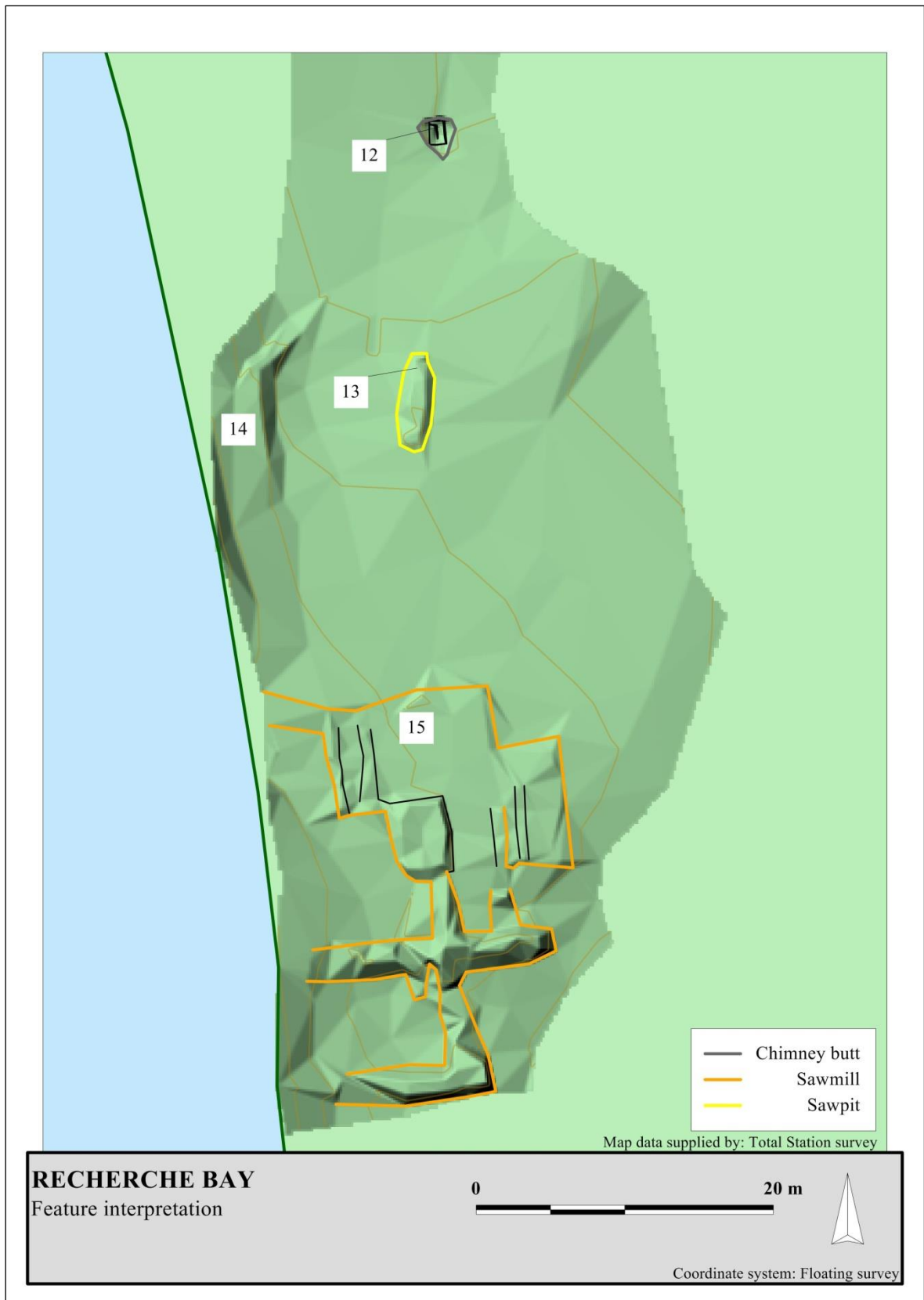


Figure A4-7: Recherche Bay, core area feature interpretation detail (see accompanying table for period)

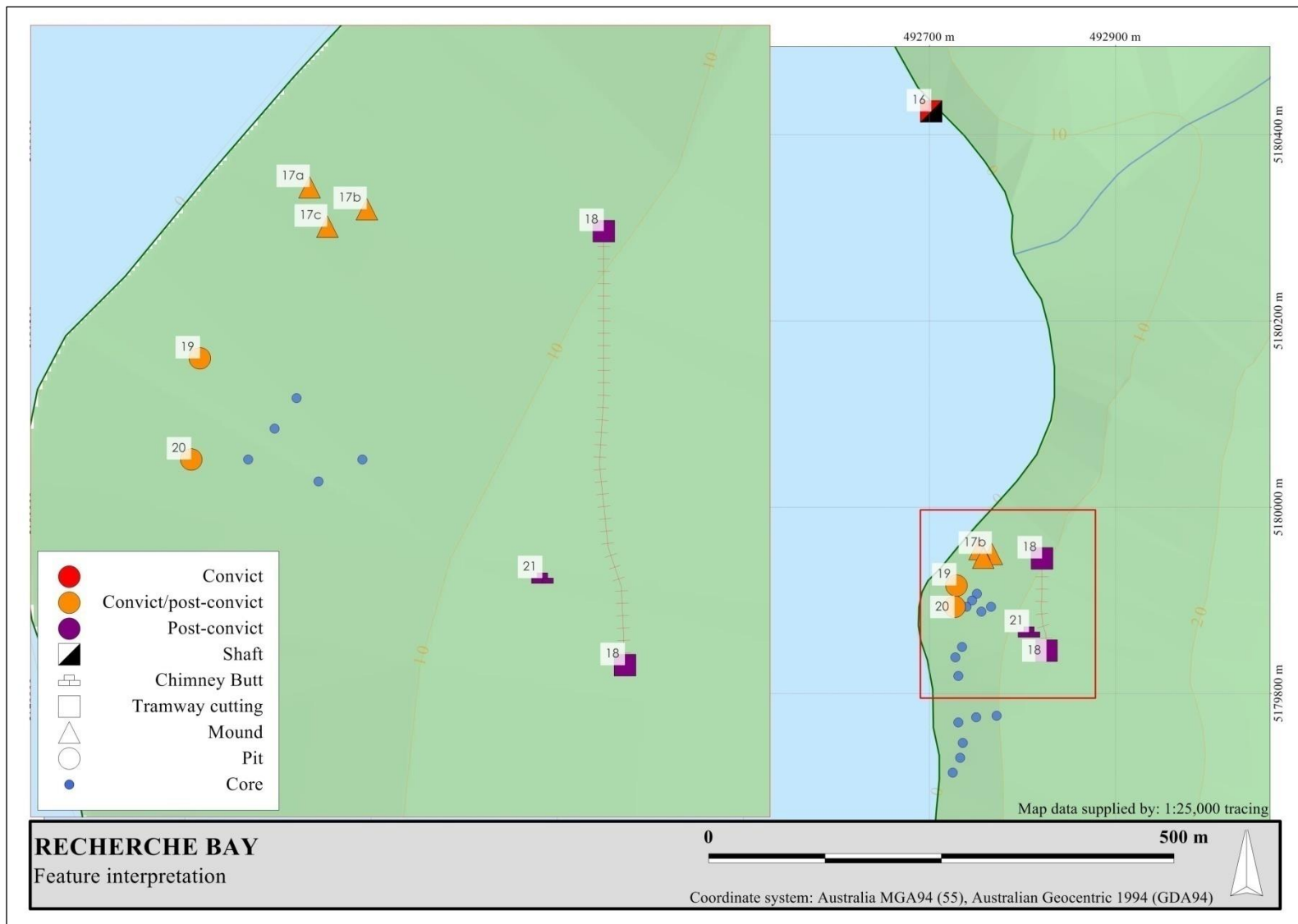


Figure A4-8: Recherche Bay, peripheral area feature interpretation

Gazetteer - Core area features

Feature #	Est. Period	Location	Feature Description	Interpretation
1	Convict	E.492751 N.5179907	Low mound with sandstone visibly scattered throughout. No evidence of coursing or in-situ stones. A linear depression runs to the south, approximately 2.9m (N-S) x 1.6m.	Potentially a chimney butt and associated hut outline
2	Convict	E.492746 N.5179900	Low mound with a mixture of rough-squared and angular sandstone scattered throughout. Some evidence on the southern and eastern sides of the mound of in situ stones, possibly two courses wide, 1.3m (E-W) x 1.1m.	Potentially a hut chimney butt
3a & b	Convict	E.492740 N.5179893	Two stone features located 1.5m apart. The eastern feature is 2.5m (E-W) x 1.9m x 0.4m high and is formed from roughly-shaped, sub-angular greeny-grey sandstone blocks. A number of the stones are evidently in situ, forming a 'C-shaped' feature, the open side facing south. The stones have been bonded by a very friable light brown clay-like silt, containing fragments of charcoal and rock lime. At least 20 bricks are situated within the rubble, of which two are definitely handmade, the remainder being probably machine-made. The western feature is similarly formed from a mixture of rough-squared and angular sandstone blocks, non greater than 0.5m in size. The stones are coursed on the eastern, western and southern sides and are bonded by a similar weak silty mortar. The feature is also 'C-shaped' with the open side to the south. There is a single handmade brick situated within the rubble, as well as a 'dimpled' piece of sandstone, identical to those seen on the seashore. Within a 10m diameter are scattered pieces of glass, ceramic and oyster shell artefacts. Most are non-diagnostic, though one is an AH gin bottle, probably dating to the late 19 th century.	Chimney butts of a single-roomed or rouble-roomed hut
4	Convict	E.492702 N.5180425	Depression located to the east of Features 1-3. Has a raised embankment on the southern and south eastern side of the depression. Artefact ('Eno's Fruit Salt' bottle) located on the south eastern bank.	Trial shaft (?)
5	Convict	E.492766 N.5179893	Feature formed from squared pieces of sandstone. 1.1m (N-S) x 1.25m x 0.5m high. Stone has been laid up to two courses in height, most visible on the southern and western edges. The stone has been bonded by the very weak silty mortar with charcoal and rock lime inclusions.	Plinth/chimney butt
6a & b	Convict	E.492735 N.5179850	Two stone-built features, similar to Feature 3a & b. Features are located 1.9m apart. The eastern feature comprises a 1.3m (N-S) x 1.15m sized mound of roughly-squared and angular sandstone pieces, with no evident coursing or stones in situ. The western is 1.1-1.2m (N-S) x 1.1m in size and comprises more slab-like pieces of roughly-squared sandstone. In situ stones are visible on the north, east and southern sides of the feature, at least two courses in height. The stones are bonded by a weak silty mortar with charcoal and rock lime inclusions. The features are surrounded by a scatter of undiagnostic artefacts (predominantly clear glass). Two handmade bricks are situated near the western feature.	Plinths (forge bases?)/chimney butt
7	Convict	E.492728,	Square feature formed from roughly-squared pieces of sandstone. 1.1m (N-S) x 1.1m x 0.4m high.	Plinth (machine

		N.5179839	Individual stones no larger than 0.5m in size. The stones have been coursed up to two stones in height and are bonded with a weak silty mortar with charcoal and rock lime inclusions. The whole is set upon a pad of mortar situated directly upon the ground.	base?)/chimney butt
8a, b & c	Convict	8a E.492731, N.5179819 8b E.492725, N.5179821 8c E.492730 N.5179816	Three separate features situated within an area 6m x 6m. The northernmost feature (8a) is 0.85m (N-S) x 1.55m x 0.65m high and comprises roughly-squared and rounded pieces of sandstone which have been bonded with a weak silty mortar with charcoal and rock lime inclusions. The feature is 'C-shaped' and is open to the south. It is up to four courses high on the south eastern side. The two adjacent features (8b & 8c) comprise isolated mounds of sandstone rubble	Chimney butt of hut and associated rubble
9	Convict	E.492772 N.5179776	Large earthen mound with a vertical-sided depression in the centre. The base of the mound is approximately 30m (NE-SW) x 20m and is 2m at its highest point (SW). The mound is situated upon ground sloping to the south west, resulting in the mound only being 0.2m high on its north eastern side. It has an uneven, sub-circular shape, likely caused by a staged deposition of spoil (the western extent being placed over the eastern). The top of the mound is flat, with a 9m (NE-SW) x 12m area located on the south western side of the central depression. This depression is roughly circular, measuring 8.5m (NE-SW) x 7.5m. Its edges are steep, with the sides being near vertical. The maximum depth of the depression is 2m, though the presence of water meant that the depth of the feature was likely to go beyond this.	Working coal shaft
10	Convict	N/A	Linear depression leading from the western base of Feature 9 embankment. Leads south west from the embankment toward the edge of the coastal cliff. It can be traced for 35m and is 1-1.5m wide and up to 0.7m deep.	Water race associated with shaft
11	Convict	E.492731 N.5179769	Square feature formed from a single course of roughly-squared sandstone, 1.1m (N-S) x 1.5m x 0.3m high. The stone is unmortared. There is an extended scatter of sandstone rubble to the south.	Plinth (machine base?)/chimney butt
12	Convict	E.492736 N.5179747	Feature formed from roughly-squared and angular pieces of sandstone. Measures 1.7m (N-S) x 1.2m x 1m high (maximum). The stone is bonded with a weak silty mortar, with charcoal and rock lime inclusions. The feature is 'C-shaped', with the open side facing west. The northern and eastern sides are upstanding, at least five courses high. A large amount of angular sandstone rubble is situated around the core and periphery of the area.	Chimney butt
13	Convict / Post-convict	E.492733 N.5179731	Linear depression measuring 6.5m (N-S) x 2.5m. It is steeply-sided, with a maximum depth of 0.6m.	Sawpit
14	Convict / Post-convict	N/A	Benched area situated adjacent to the coast, west of Feature 13. Approximately 10m (N-S) x 2.5m.	Working/stockpile area
15	Post-convict	E.492725 N.5179715	An extended area of disturbance located immediately adjacent to the coast. Comprises a large level area (15m (E-W) x 12m containing series of linear excavations. In the western extent (toward the coast), the linear features are associated with some work timbers, including a series of	Sawmill

			postholes along the immediate coast frontage. To the south are a series of deep excavations extending up to 15m from the levelled area. They are predominantly 2.5m wide and up to 1.5m deep, with vertical sides.	
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Table A4-1: Recherche Bay, gazetteer listing features within the core area

Gazetteer - Peripheral area features

Feature #	Est. Period	Location	Feature Description	Interpretation
16	Convict	E.492702 N.5180425	<p>Circular cut made directly into the coastal sandstone, situated approximately 2-3m east of the high water mark. The cut is 2.8m in diameter and is up to 2.5m deep (with 0.7m water in the base). The northern and north western sides are vertical, the southern, south eastern and south western being undercut.</p> <p>The feature is situated on a prominent bench which has been cut into the coastal slope, approximately 8m (NW-SE) x 3m x 2.5-3m in height. This bench has been cut prior to the excavation of the circular feature, the excavate from the latter having been deposited over the cut for the bench.</p> <p>The feature is situated 10-20m north west of outcropping coal.</p>	Trial coal shaft
17a, b & c	Convict / Post-convict	<p>17a E.492754 N.5179955</p> <p>17b E.492767 N.5179950</p> <p>17c E.492758 N.5179946</p>	Cluster of three mounds. Feature 17a is a mound of clay and loose, angular sandstone, 3.6m (N-S) x 2.6m x 1m high. Feature 17b is an ovoid mound 4.5m (N-S) x 3.5m x 1.1m high. Formed from clay and angular sandstone. Feature 17c is an elongated mound, 3.5m (N-S) x 1.5m x 0.5m high, formed from clay and sandstone rubble. Trees are growing out of all the features.	Unidentified mounds. Potentially tree pull or related to 20 th century forestry activity
18	Post-convict	<p>North E.492821 N.5179945</p> <p>South E.492826 N.5179846</p>	Deep linear depression running N-S, east of Feature 21. The feature is traceable for at least 100m, becoming less defined at its northern and southern extents. It has a maximum depth of 2m, with vertical sides.	Tramway cutting
19	Convict / Post-convict	E.492729 N.5179916	Small depression measuring 2.5m (E-W) x 1.9m x 0.6m deep. Ovoid in plan, with steep sides and sharply-defined edges. Glass fragments (clear, embossed, undiagnostic) are located nearby, although no spoil upthrow from the excavation is present.	Unidentified pit. Potentially water storage?
20	Convict / Post-convict	E.492727 N.5179893	Depression to the south of Feature 19, 3.1m (Nw-Se) x 2.5m x 0.5m deep. Ovoid in plan, with gently-sloping sides and sharp break of slope. No upthrow or artefacts associated with the Feature.	Unidentified pit. Potentially water storage?
21	Post-convict	E.492807 N.5179866	Brick-built feature located to the west of Feature 18. Upstanding feature is 1.65m (N-S) x 1.25m x 0.8m high. Formed from bricks laid in a stretcher bond, bonded by a firm mortar with quartzite and charcoal inclusions. Feature is in a 'C' shape, with the open side to the east. A linear brick scatter runs 4.1m to the east, from the south eastern side of the upstanding feature.	Chimney butt and features associated with hut

Table A4-2: Recherche Bay, gazetteer listing features within the peripheral area

Fieldwork Photographs



Looking north toward Coal Pit Bight



Looking south from Coal Pit Bight



Example of steep terrain between shoreline and inland features



Total Station used during the survey



Coal outcrop on coast



Feature 1, looking NE



Feature 2, looking SE



Feature 3a & b (foreground), looking NW



Feature 3a (foreground) & b, looking NE



Feature 3a & b, detail of handmade brick



Feature 3a & b, detail showing dimpled stone sourced from seashore



Feature 3a & b, detail of gin bottle



Feature 4, looking SW



Feature 5, looking SW



Feature 6a & b, showing eastern mound (6b), looking W



Feature 6a & b, eastern mound, looking E



Feature 6a & b, western mound, looking W



Feature 7, looking NE



Feature 7, looking N



Feature 8a, looking NE



Feature 8c, sandstone scatter, looking SE



Feature 9, showing depression, looking SW



Feature 11, looking SW



Feature 12, looking SE



Feature 12, showing north-facing elevation, looking S



Feature 12, looking NE



Feature 13, looking N



Feature 15, showing levelled area, looking SW



Feature 15, showing timbers, looking N



Feature 15, showing linear depression, looking E



Feature 16, looking S



Feature 16, showing vertical sides, looking NE



Feature 16, showing excavate from feature over cut-and-benched area



One of the mounds at Feature 17, looking N



Feature 18, looking N



Feature 21, looking SE



Feature 21, north facing elevation, looking S

**APPENDIX 5: SOUTH CAPE BAY MAPS, GAZETTEER AND FIELDWORK
PHOTOGRAPHS**

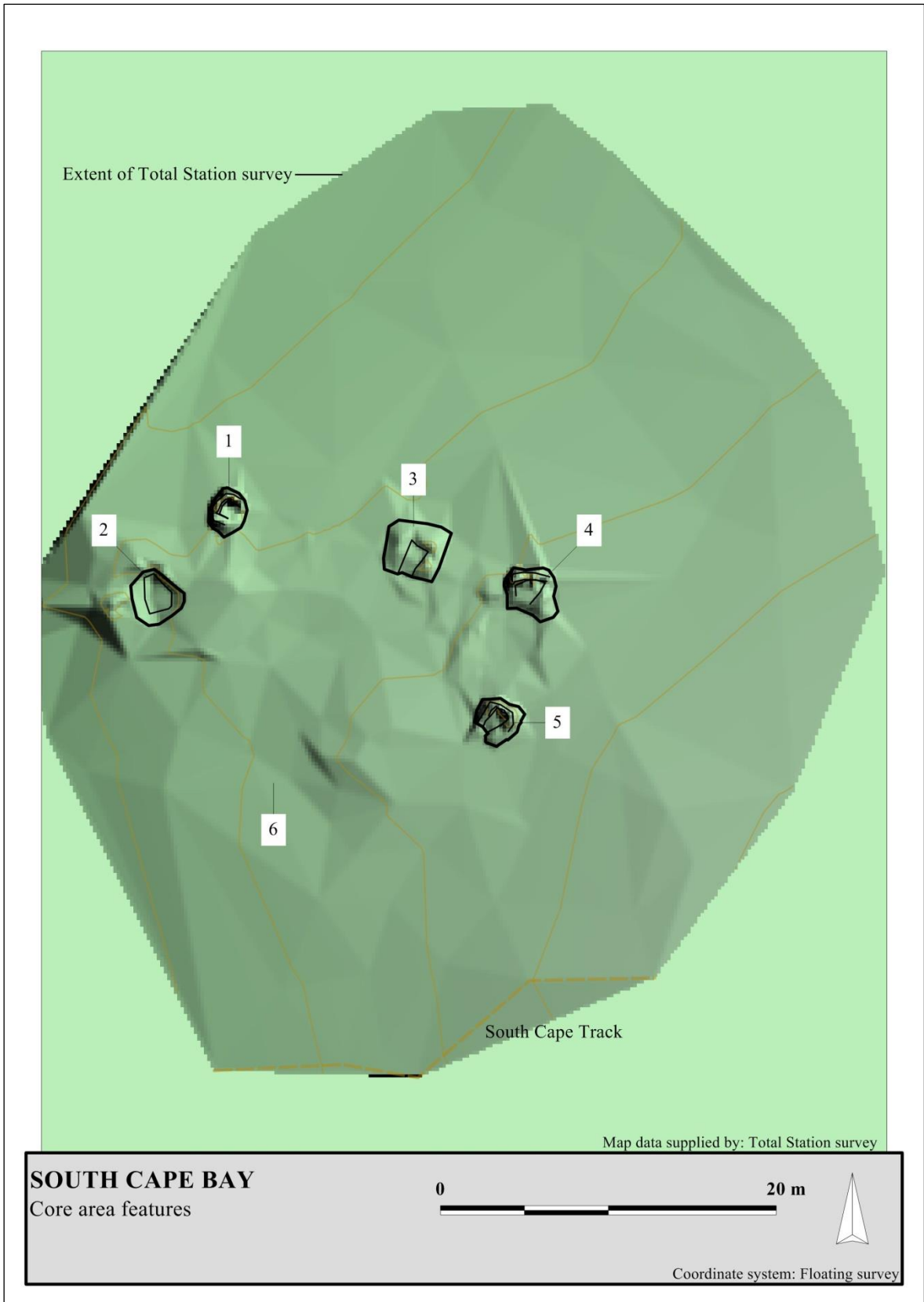


Figure A5-1: South Cape Bay, core area features

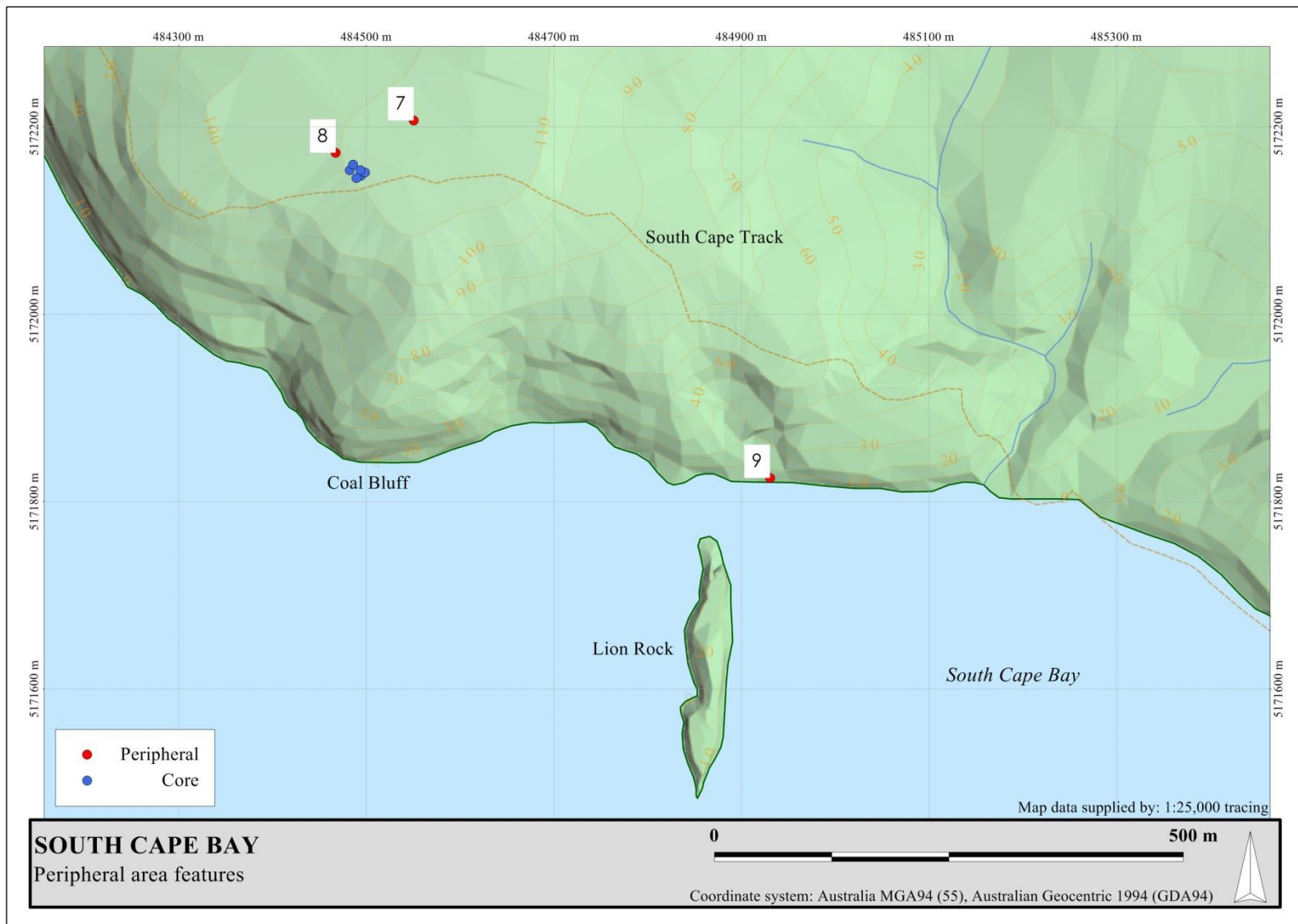


Figure A5-2: South Cape Bay, peripheral area features

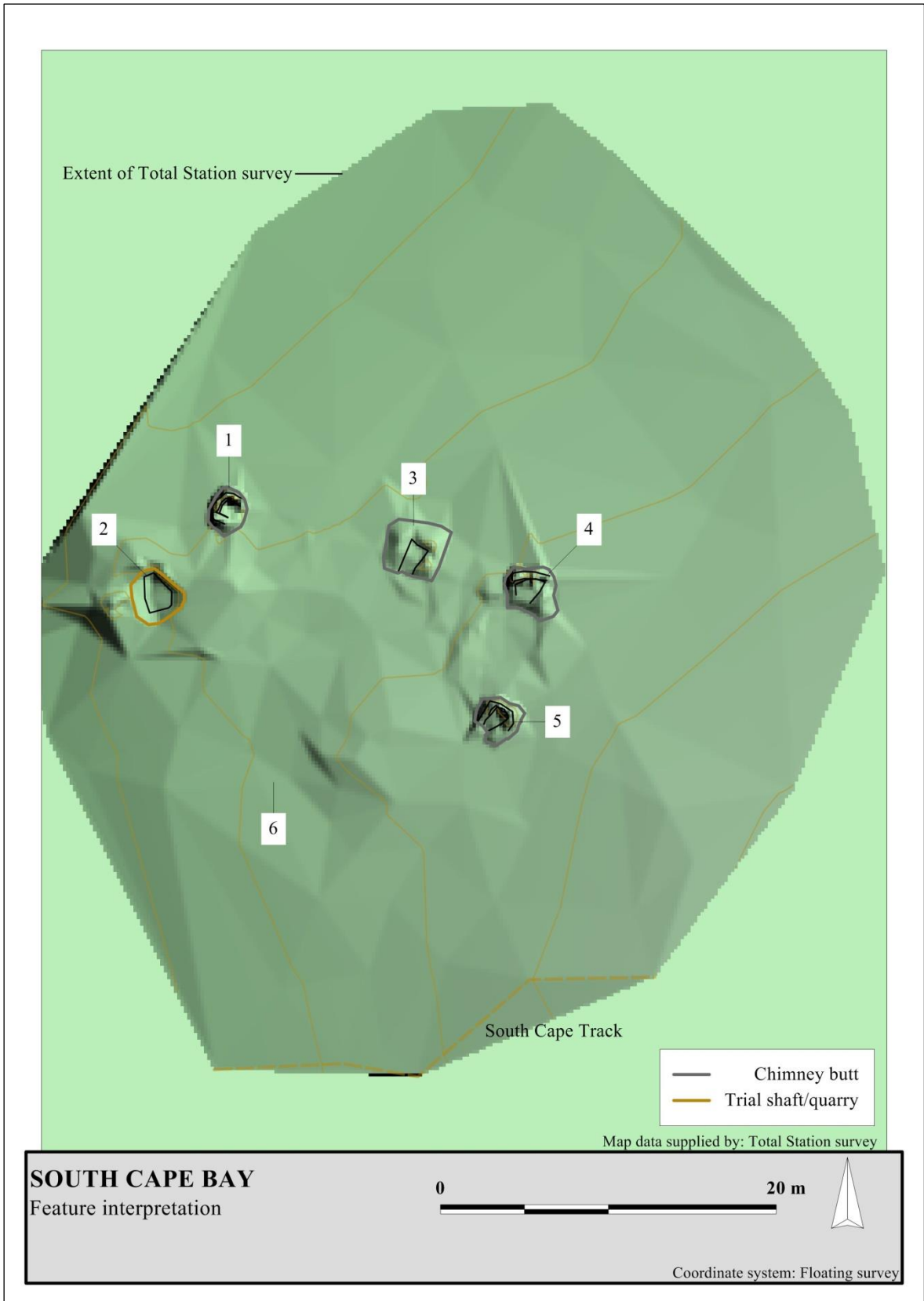


Figure A5-3: South Cape Bay, feature interpretation (all features convict period)

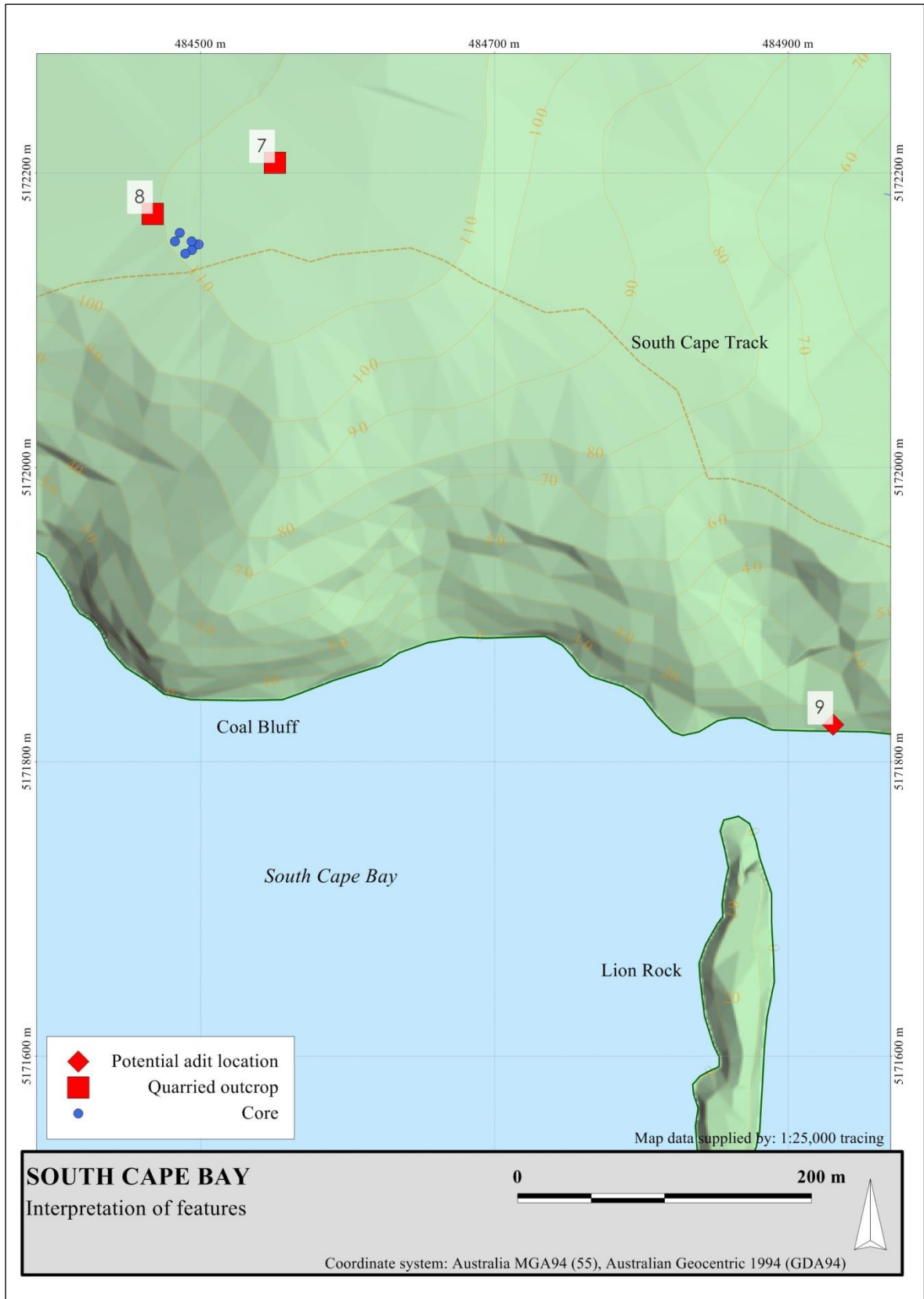


Figure A5-4: South Cape Bay, peripheral area feature interpretation (all features convict period)

Gazetteer - Core area features

Feature #	Est. Period	Location	Feature Description	Interpretation
1	Convict	E.484486 N.5172159	Upstanding stone feature formed from unbonded, roughly-coursed and irregularly-shaped stones. 2.6m (north - south) x 1.7m x 1.8m high (maximum). Forms a 'C' shape, with the open side facing south east. The interior measurement is 1m x 0.95m x 1.4m.	Chimney butt
2	Convict	E.484482 N.5172154	Situated approximately 5m to the south west of Feature 1, this feature comprises an oval depression approximately 2.5m - 4m in diameter and up to 1m deep. The sides of the depression are steeply-sloping. Its circumference, is surrounded by large rocks, eathern spoil having also been deposited on the downhill (south western) side of the depression, as well as to the east.	This feature is likely to represent the attempts by the convict miners to work a shaft
3	Convict	E.484494 N.5172154	Deflated mound of stones situated to the east of Feature 1. Measures 3.3m x 3.3m x 0.5m high (maximum). A number of in situ stones are located in the interior of the structure, forming an interior space of 1.5m (east - west) x 1.4m x 0.3m. The structure has a 'C' shape, with the open side facing to the south. The stones are unbonded and uncoursed, all being of an irregular size.	Chimney butt
4	Convict	E.484499 N.5172152	Feature measuring 2.0m (east - west) x 2.3m x 1.45m high (maximum), formed from unbonded, roughly-coursed and irregularly-sized pieces of stone. The structure has a 'C' shape, with the open side facing south and measuring 1.5m (east - west) x 0.8m high. A mound of loose rubble surrounds the in situ stonework. A slight depression runs to the south of the feature, 5m (north - south) x 3.4m and up to 0.2m deep.	Chimney butt with associated ground modification
5	Convict	E.484494 N.5172148	Feature formed from unbonded, roughly-coursed and irregularly-sized pieces of stone. It measures 2.6m (east - west) x 2.5m x 1.25m high (maximum). It forms a distinct 'C' shape, the interior of which measures 1m (east - west) x 0.75m x 0.75m high. The whole is surrounded by an accumulation of loose stones, particularly in the centre of the structure and to the south.	Chimney butt
6	Convict	E.484489 N.5172145	Potentially cut-and-benched area to the south east of Feature 2. The feature measures c.10m (north west to south east) x 5m and is approximately 0.5m deep.	Working platform?

Table A 5-1: South Cape Bay, gazetteer listing features within the core area

Gazetteer - Peripheral area features

Feature #	Est. Period	Location	Feature Description	Interpretation
7	Convict	E.484551 N.5172207	Area of outcropping stone with broken stone situated throughout the immediate area.	Potential source of quarried stone for construction
8	Convict	E.484467 N.5172172	Area of outcropping stone with broken stone situated throughout the immediate area.	Potential source of quarried stone for construction
9	Convict?	E.484930 N.5171825	Series of outcropping coal seams visible along the foreshore.	Potentially the coastal coal seam which historical sources indicate was worked via a horizontal adit driven from the shore

Table A5-2: South Cape Bay, gazetteer listing features within the peripheral area

Fieldwork photographs



View of South Cape Bay, looking west toward Lion Rock



Looking south west from the beach toward Lion Rock



Coal-bearing cliffs immediately north of Lion Rock (facing west)



Vegetation coverage at the time of the survey



Feature 1 (facing north west)



Feature 1 (facing south east)



Feature 1 (facing south west)



Feature 1 with the location of Feature 2 in the background (facing south west)



Feature 3 (facing north west)



Feature 3 (facing north)



Feature 3 (facing south)



Feature 4 (facing north)



Feature 4 (facing north east)



Feature 4 (facing north west)



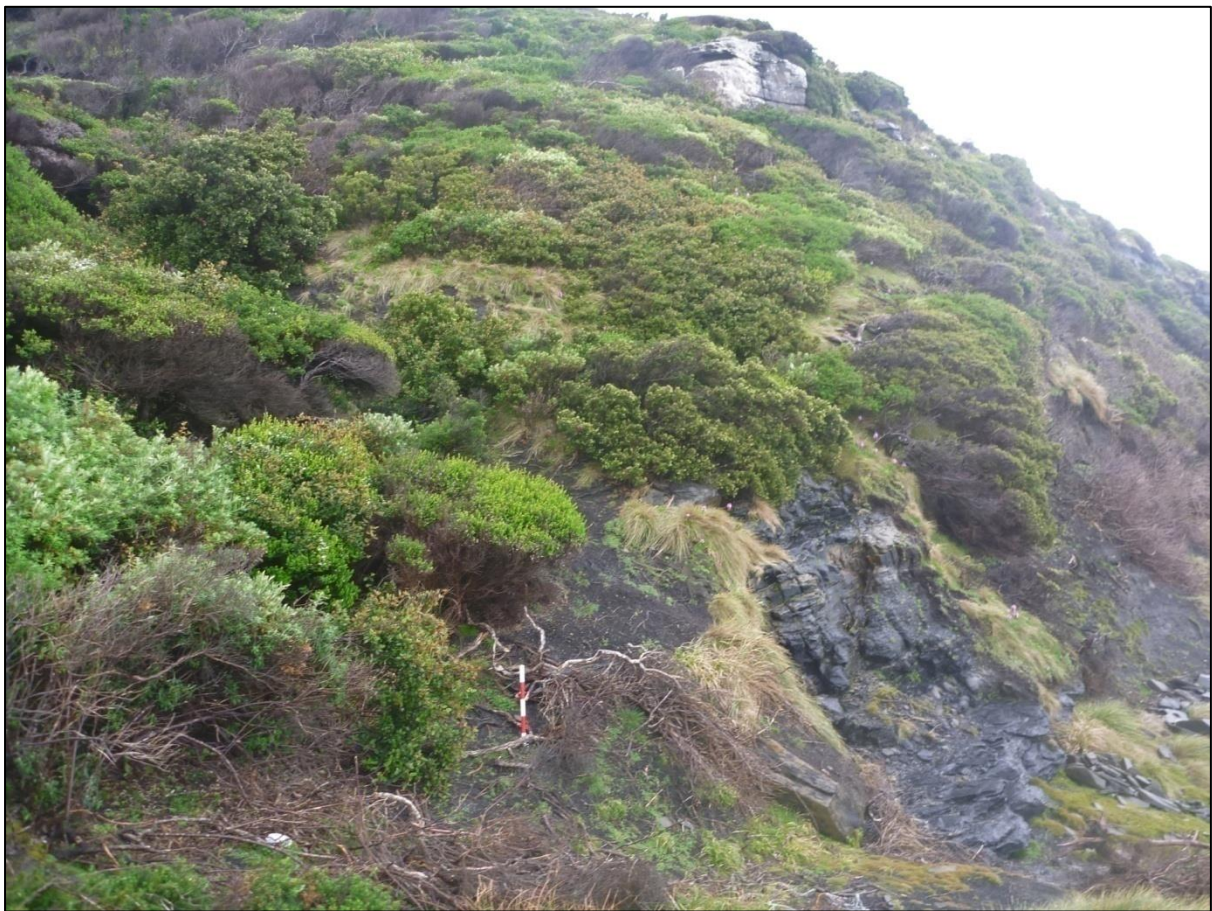
Feature 5 (facing north)



Feature 5 (facing south)



Coal-bearing cliffs north of Lion Rock



Area of landslip marking potential location of collapsed coastal adit (Feature 9)

APPENDIX 6: JERUSALEM MAPS AND GAZETTEER

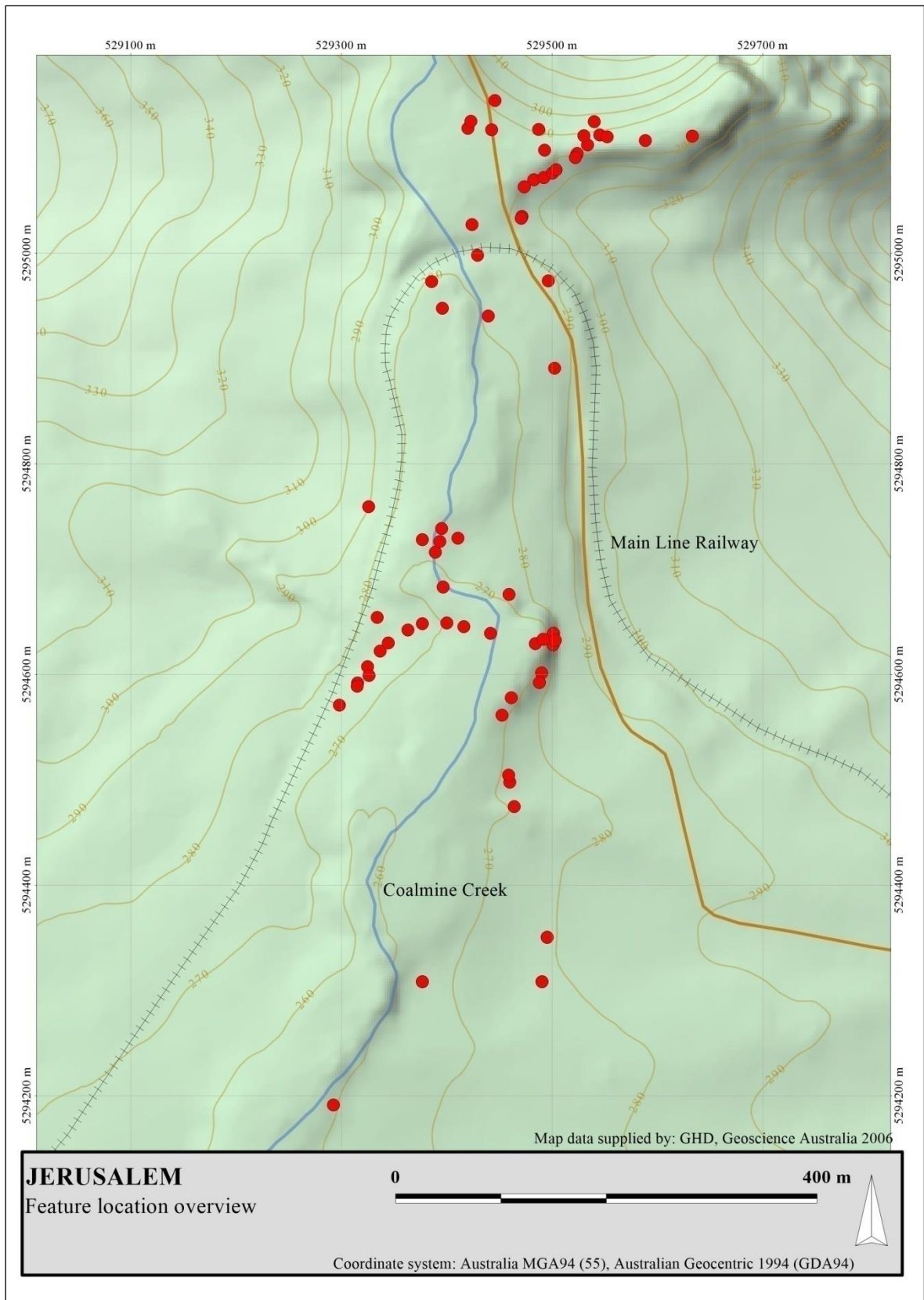


Figure A6-1: Jerusalem, overview, feature locations

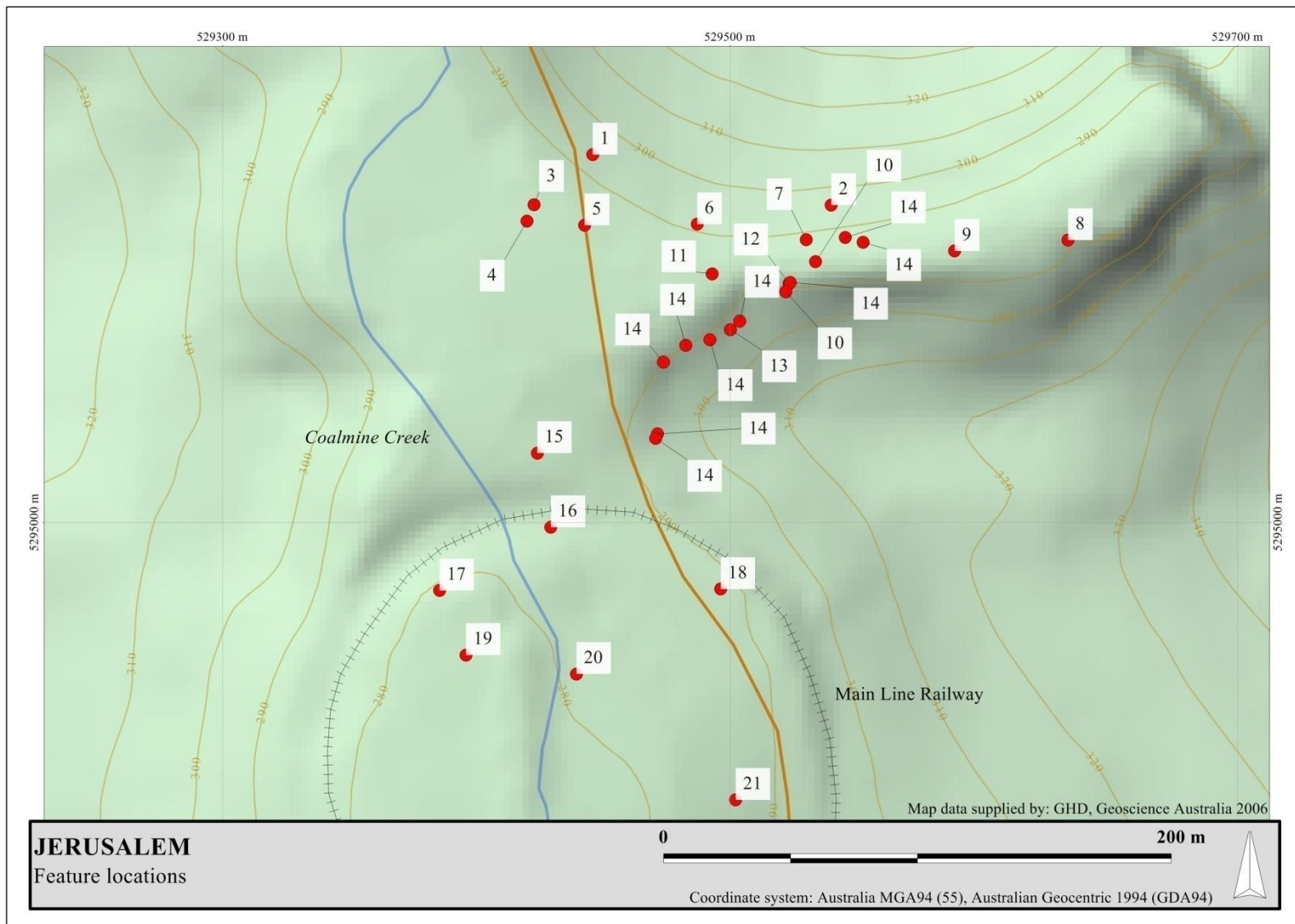


Figure A6-2: Jerusalem, north area, feature locations

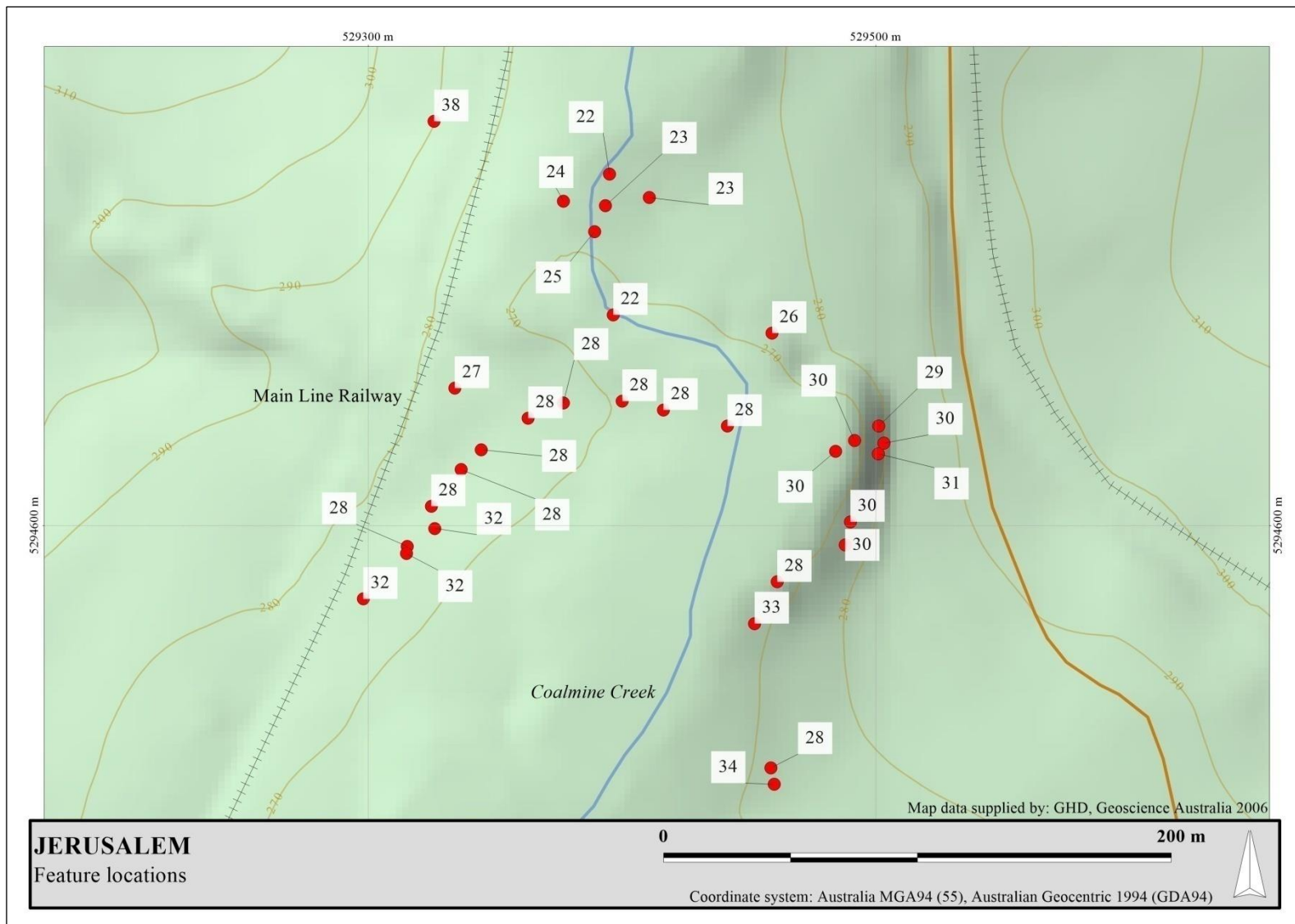


Figure A6-3: Jerusalem, centre area, feature locations

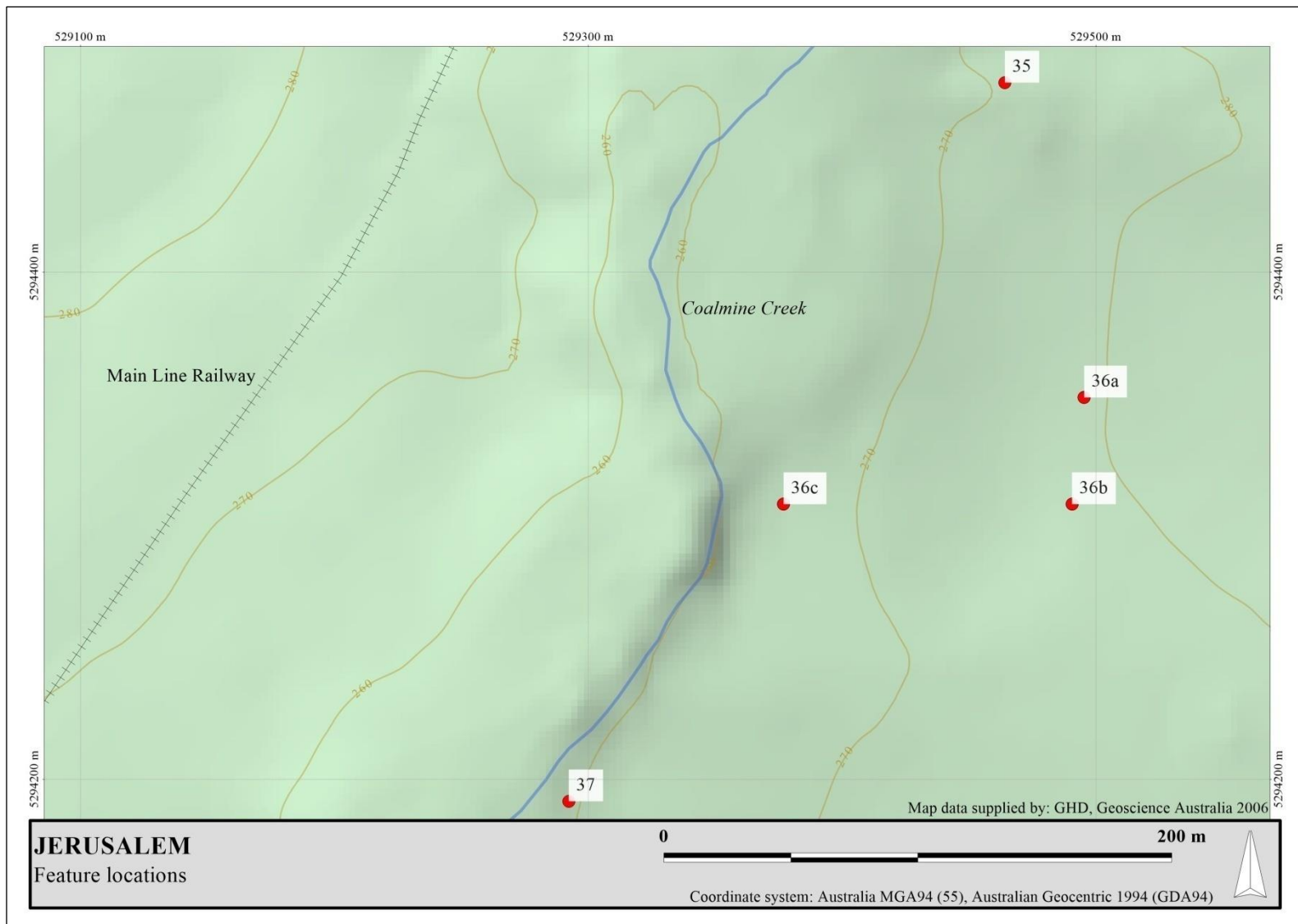


Figure A6-4: Jerusalem, south area, feature locations

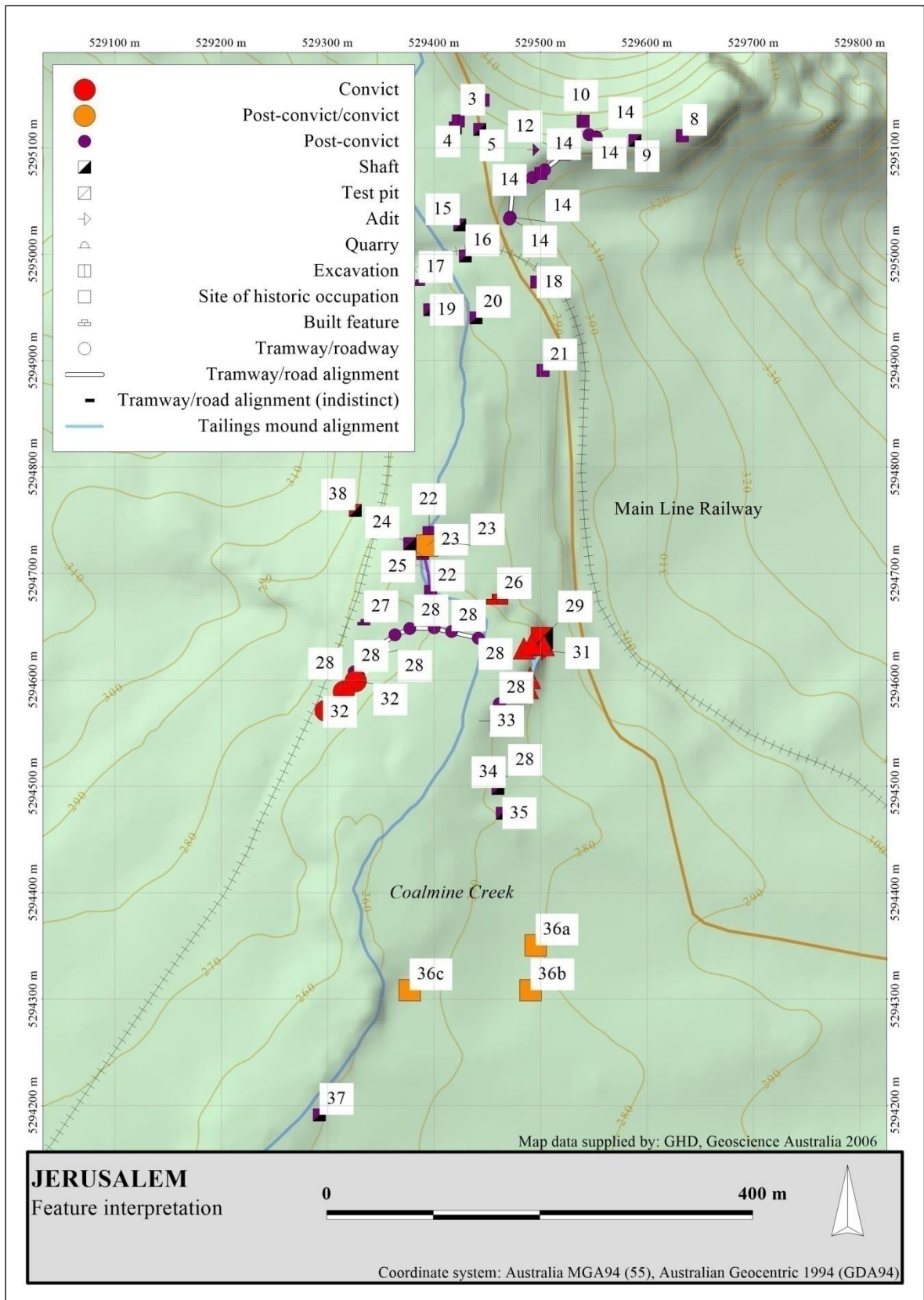


Figure A6-5: Jerusalem, area overview, feature interpretation

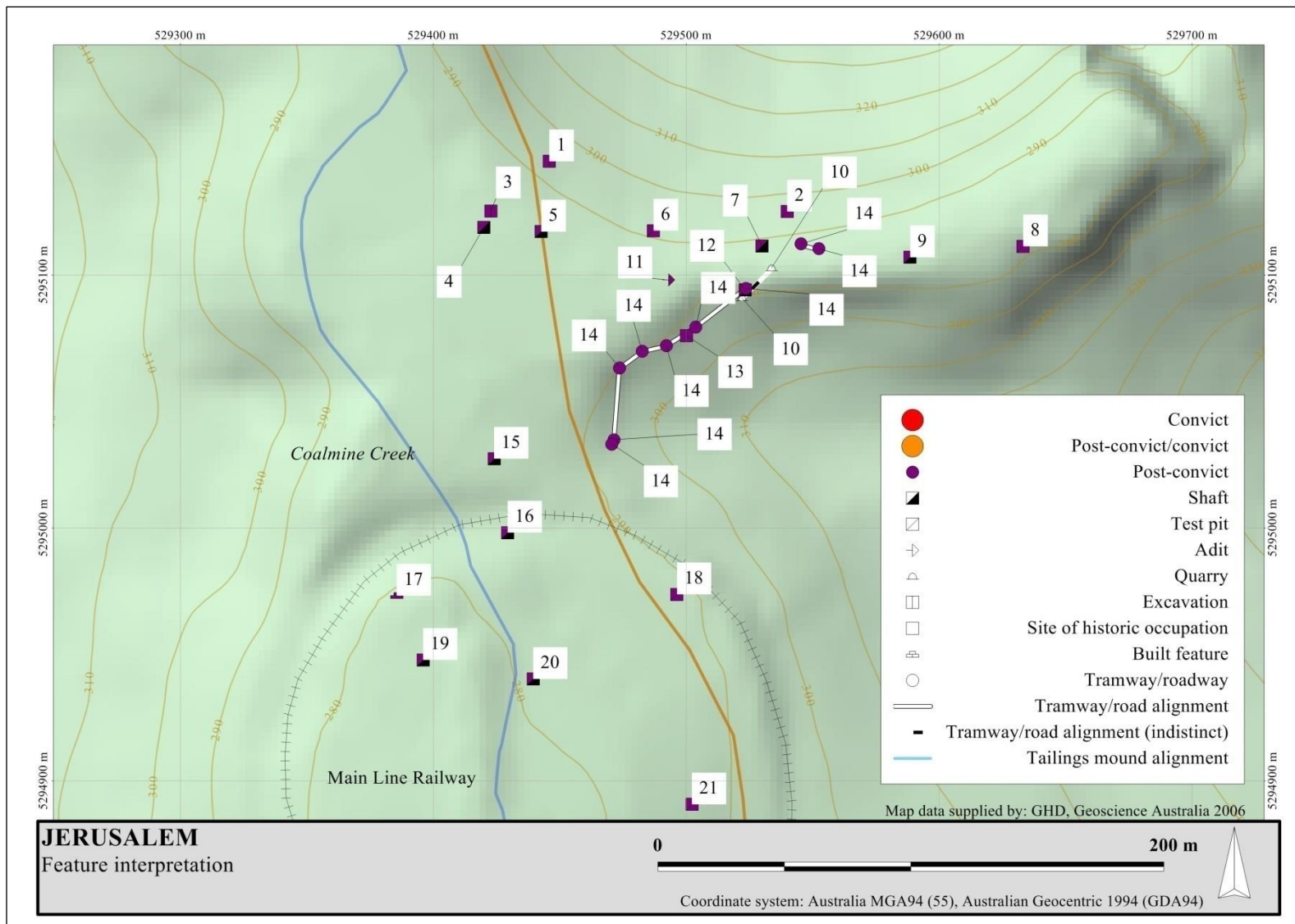


Figure A6-6: Jerusalem, north area, feature interpretation

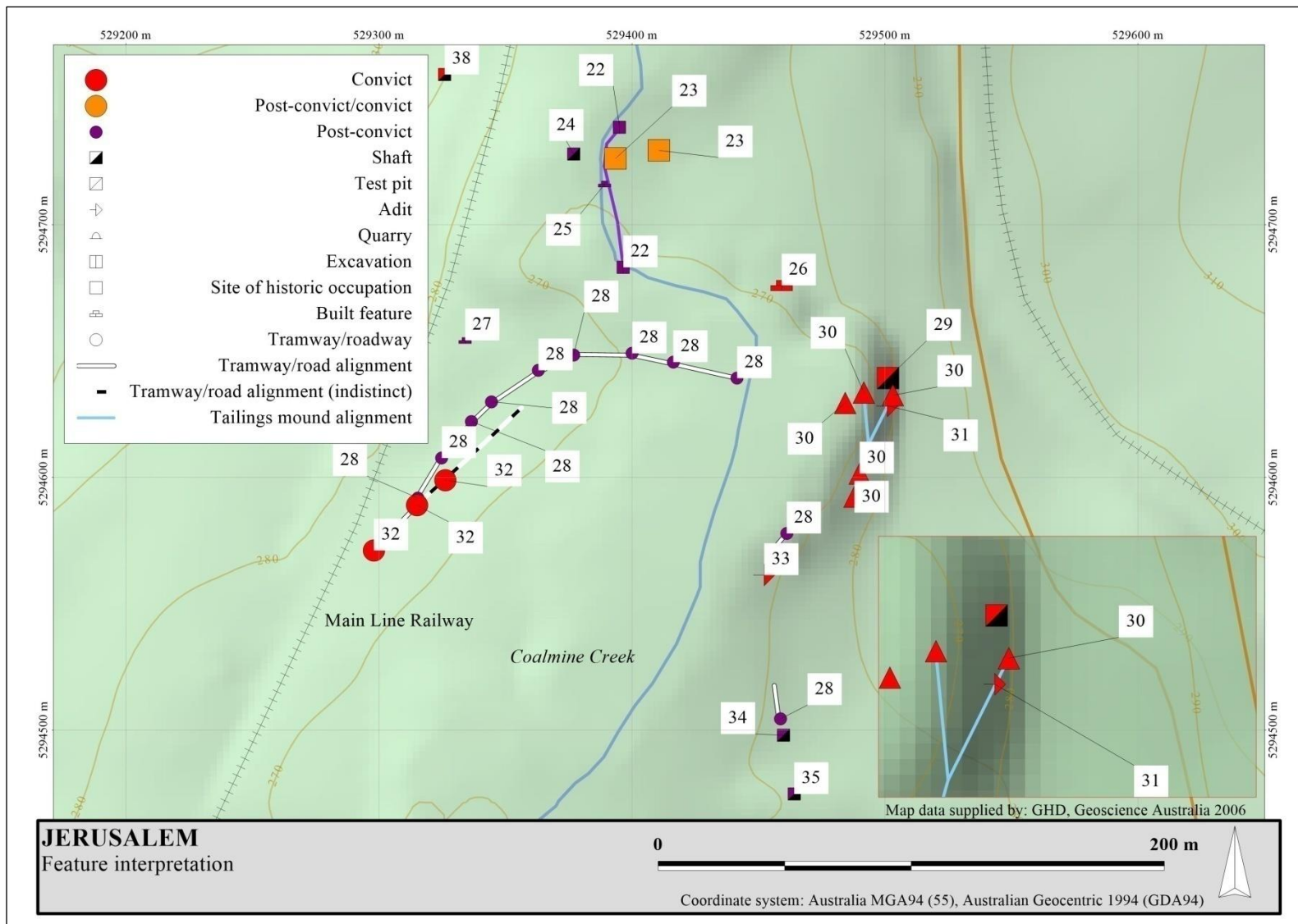


Figure A6-7: Jerusalem, centre area, feature interpretation

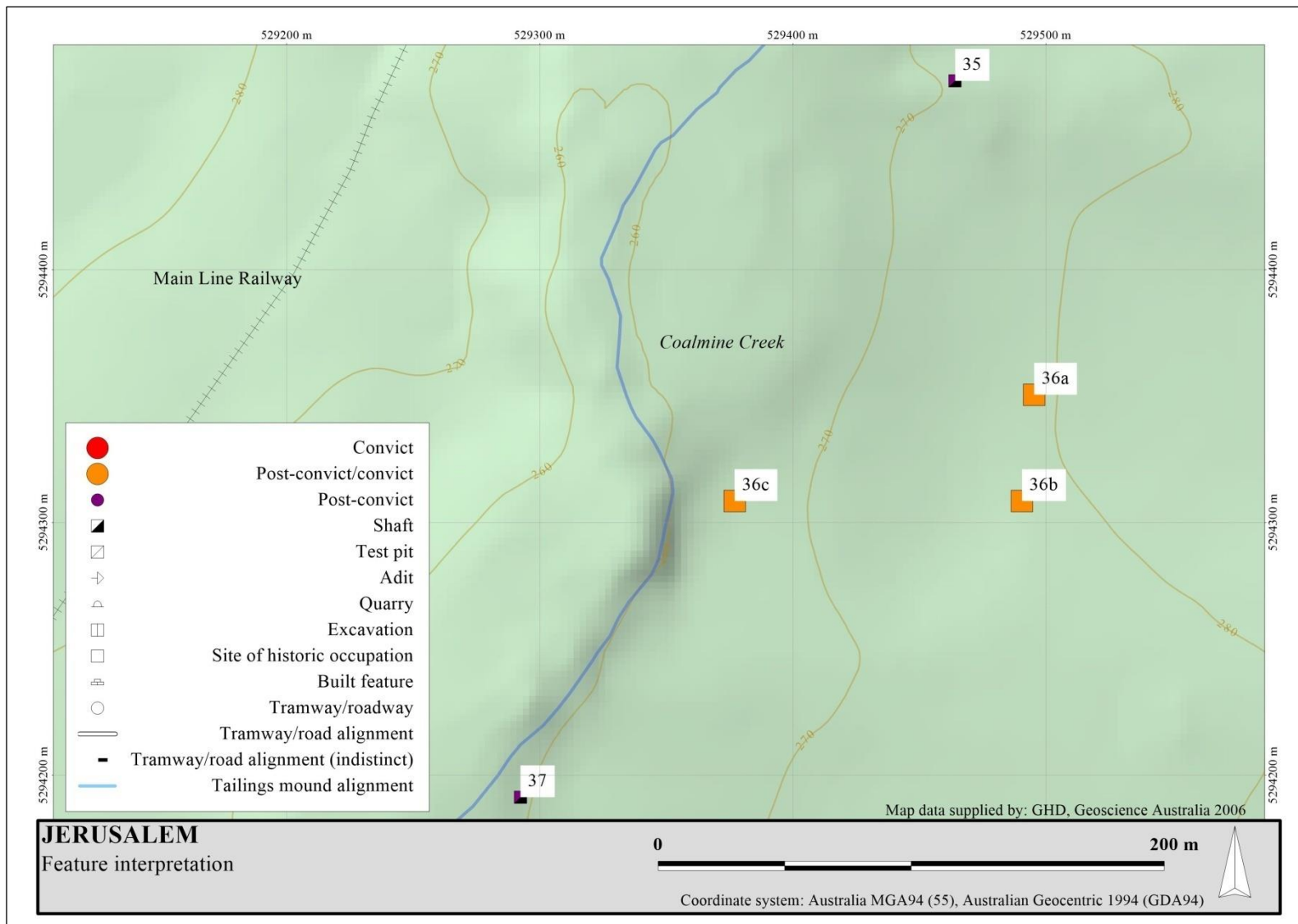


Figure A6-8: Jerusalem, south area, feature interpretation

Gazetteer

Feature #	Est. Period	Location	Feature Description	Interpretation
1	Post-convict (post-1896)	E.0529445 N.5295145	c.4m diameter cutting made into a steep west-facing slope. Located approximately 10m east of the gravelled road leading north from Coal Mine Bend. Site of the cutting covered in loose doleritic broken stone.	Borrow pit (road metal)
2	Post-convict (c.1877- c.1896)	E.0529540 N.5295125	c.2m diameter x 500mm deep pit on the north side of creek.	Test pit
3	Post-convict (c.1877- c.1896)	E.0529423 N.5295125	A 6m (N-S) x 1m depression driven into a south-facing slope. Maximum depth of 2m.	Linear depression (test pit?)
4	Post-convict (c.1877- c.1896)	E.0529420 N.5295119	A 3m diameter shaft depression of indeterminate depth, located at the base of a south-facing hill. A flat mound of tailings from excavation extends 4m to the south and south east of the feature. No coal slack is present in the tailings.	Shaft (exploratory)
5	Post-convict (c.1877- c.1896)	E.0529443 N.5295117	4m (outer) - 2m (inner) diameter shaft depression, 2m deep. The ground to the north of the shaft has been cut-and-benched into the south-facing slope, creating a working area 10m (N-S) x 7m x 1.5m high. To the south of the shaft is a mound of tailings approximately 2m higher than the lip of the shaft and extending 10m (N-S) x 12m. The tailings contain coal slack and are topped by a layer of hard-baked sedimentary stone spoil.	Shaft (production)
6	Post-convict (c.1877- c.1896)	E.529487 N.5295118	A small (c.1.5m diameter) and shallow test pit located on top of a cliff, north of the tributary creek. A adit has been driven into the base of this cliff (Feature #11), the test pit being directly above the location of the adit's mouth.	Test pit
7	Post-convict (c.1877- c.1896)	E.0529530 N.5295111	A 4m diameter x 2m deep shaft depression located north of the tributary creek. The shaft has been cut into the south-facing slope through a series of clays and gravels. There is no visible tailings mound.	Shaft (exploratory)
8	Post-convict (post-1894)	E.0529588 N.5295107	A 2.5m (outer) - 2m (inner) diameter, 2.2m deep shaft depression located on the northern bank of the tributary creek. On the western side of the shaft is a teardrop-shaped mound of tailings, 4m (E-W) x 2m x 1m high. The shaft has been excavated through a series of clays and gravels, but there is no coal present in the tailings. On the shaft's eastern edge are a twin set of footings set 1m apart. These have been formed from dry-laid rubble, 450mm high. A piece of timber (1.9m x 200mm x 80mm) has been laid between the footings, in which has been set a galvanised iron nail. Rotted timber planks are present along the southern side of the shaft. At least four glass bottles and a corrugated iron sheet are also located in the immediate area. A small test pit is located 20m to the east.	Shaft (exploratory)
9	Post-convict (c.1877-	E.0529588 N.5295107	A 4m (outer) - 1.5m (inner) diameter shaft depression, 1.8m deep. A mound of tailings is located on the western edge of the shaft, 6m in diameter and 1.5m high (off ground surface). A high level	Shaft (production)

	c.1896)		of coal slack and carbonaceous mudstone is located in the tailings. On the north eastern edge of the shaft is a cut-and-benched platform, 2.2m (NW-SE) x 4.5m.	
10	Post-convict (c.1874)	E.0529534 N.5295103 (east) E.0529522 N.5295091 (west)	This sandstone quarry is located on the southern side of the tributary creek. It is approximately 20m (E-W) and has been excavated at least 10m into the north-facing slope. The face of the quarry is approximately 7m high. There is evidence of tooling on the face, including at least two wedge holes and a series of pick marks. The quarry is located near a tramway (Feature #14) and a shaft (Feature #12).	Quarry (railway)
11	Post-convict (c.1877- c.1896)	E.0529493 N.5295098	This feature is located north of the tributary creek. The workings have taken place at the base of a c.10m high sandstone escarpment and include a series of mounds (tailings) and a adit. The adit entrance is 1.5m wide and has been driven approximately 5m into the cliff. No tooling is evident in the sandstone, suggesting that the adit was blasted. A mound of tailings is present at the entrance, extending 8m to the south. Coal slack is present throughout the tailings. The area to the east of the entrance, also at the base of the cliff, has also been worked.	Adit (production)
12	Post-convict (c.1877- c.1896)	E.0529523 N.5295094	This feature is located on the southern side of the tributary creek bed. It comprises a square shaft 2.1m ² , cut at least 3m into the natural sandstone. Tooling (picking) is visible on all faces of the shaft. A curved mound of tailings extends to the north, 13m x 3m x 1.5m (high), following the course of the nearby creek. Coal slack is present throughout the tailings. The shaft is immediately adjacent the tramway (Feature #14) and is near the quarry (Feature #10).	Shaft (production)
13	Post-convict (c.1877- c.1896)	E.0529500 N.5295076	A 2.5m diameter shallow pit excavated into the north-facing slope, 8m south of the tramway (Feature #14).	Borrow/test pit
14	Post-convict (c.1874) (c.1877- c.1896)	Elevated section E.0529471 N.5295033, E.0529474 N.5295063 Cut-and- benched E.0529482 N.5295070, E.0529492 N.529493, E.0529504 N.5295079,	Section of tramway running from Coal Mine Bend to the main area of workings in the bed of the tributary creek. Tramway comprises at least three separate sections: an elevated section, a cut-and-benched formation and an elevated section on the north side of the creek. The former elevated section commences approximately 30m north of Coal Mine Bend and extends for 30m, following the contour of the north west facing slope. The formation is 1.5m - 2 wide and 1.5m in height and is edged by a deep ditch on its eastern side and a linear platform on its western. Moving toward the creek, the tramway enters a cut-and-benched formation, running 60m to the site of the workings. This formation is approximately 3m wide and follows the contour of the north-facing slope. At the workings, it passes close to a shaft (Feature #12), where it has been partially truncated. Past the shaft, the edge of the tramway formation is reinforced with placed stones (dolerite). A small section of tramway is also present on the north of the creek, comprising a 3m wide raised formation.	Tramway

		E.0529524 N.5295095 North of Creek E.0529552 N.5295110 (E) E.529545 N.5295112 (W)		
15	Post-convict (c.1877- c.1896)	E.0529424 N.5295027	A 2.5m (outer) diameter shaft, approximately 1m deep, currently filled with rubbish. A low mound of tailings located on western and northern margins of the shaft. No coal slack is present in the tailings.	Shaft (exploratory)
16	Post-convict (c.1890- c.1896)	E.0529429 N.5294998	A 4m (outer) - 1.5m (inner) diameter shaft depression, approximately 2m deep. Located south of Coal Mine Bend. A large linear mound of tailings stretches to the south, 12m (N-S) x 5m x 1m high. Coal slack is located on the surface of the tailings.	Shaft (production)
17	Post-convict (c.1874)	E.0529385 N.5294973	A c.5m high sandstone culvert spanning Coalmine Creek. The eastern outlet has concrete reinforcing from the mi-20th century, while the western inlet remains unmodified.	Culvert (railway)
18	Post-convict (c.1877- c.1896)	E.0529496 N.5294974	A 2.5m diameter, 1m deep test pit located between the road and the railway easement. A small amount of spoil is located on the southern side of the pit.	Test pit
19	Post-convict (c.1890- c.1896)	E.0529395 N.5294947	A 4m diameter shaft currently filled with rubbish. A low mound of tailings is located on the north western side of the shaft, 10m x 10m. No coal is present in the tailings.	Shaft (exploratory)
20	Post-convict (c.1890- c.1896)	E.0529439 N.5294940	The shaft is presently filled with rubbish, making the determination of its characteristics difficult. It is located on the eastern bank of Coalmine Creek, within approximately 2m of the c.3m high escarpment forming the creek's eastern bank. The outer diameter of the shaft is 5m. Tailings have been deposited to the north of the shaft, forming a low (c.300mm) mound approximately 8m (N-S) x 9m. A number of coal fragments are located across the surface of the tailings, as well as pieces of hard-baked sedimentary stone (also located in the tailings mound of Feature #5).	Shaft (production)
21	Post-convict (c.1877- c.1896)	E.0529502 N.5294891	This pit is located on a gentle west-facing slope. Its maximum diameter is 2m, with a depth of 500mm. There is no obvious mound of tailings from the excavation.	Test pit
22	Post-convict (c.1890- c.1896)	E.0529395, N.5294739 (north)	The creek diversion comprises a 60m long artificial creek bed. The channel has been cut into the natural geology (dolerite), the most evident section of which is a 20m length toward the north of the diversion. This section is approximately 3m wide and terminates in a shallow basin at its southern end. To the north the diversion has been infilled by rock and soil.	Creek diversion

		E.0529397, N.5294683 (south)	There is no evidence of hand tooling on the channel's rock faces, although two boreholes (50-55mm diameter) are evident along the bed.	
23	Convict (1841-42, 1844) Post-convict (c.1877- c.1896)	E.0529410, N.5294729 (potential hut site) E.0529393, N.5294726 (artefact scatter)	The site of the huts is located on a raised, flat-topped spur overlooking Coalmine Creek to the west and the area of convict workings to the south. In the west, where the topography has been modified by the cutting of the creek diversion (see Feature #22), the ground appears to have been cut-and-benched to form a west-facing platform measuring 20m (N-S) x 5m. The site of the platform has also been colonised by blackberries, pointing to the disturbed nature of the ground. Approximately 20m to the east of the platform is a scatter of fragmented artefacts. Consisting of bottle glass (clear and dark olive green), potential clear lantern glass and transfer-printed refined earthenware, the scatter was located along the eastern bank of the man-made creek diversion (Feature #22). The artefacts were located in a discrete area containing a concentration of coal debris.	Artefact scatter, cut-and-benched area
24	Post-convict (c.1877- c.1896)	E.0529377, N.5294728	The site of the possible shaft is completely obscured by blackberry. The presence of this declared weed, which colonises disturbed ground, is itself an indicator that the site is likely to contain a shaft.	Shaft (potential)
25	Post-convict (c.1877- c.1896)	E.0529389, N.5294716	The footings are located on the western bank of the creek diversion, approximately 1.5m above the creek bed. The footings are formed from dolerite rubble (either fieldstone or quarried) and occupy an area approximately 3m (SW-NE) x 2.5m. The core of the footing measures 2m (SW-NE). In the south east extent of the core the footings are approximately 800mm in height and display coursed rubble characteristics. The rubble has been bonded by a weak mud mortar.	Footing (unidentified)
26	Convict (1841-42, 1844)	E.0529459 N.5294676	This feature comprises a footing formed from roughly-dressed sandstone blocks, located on the northern bank of Coalmine Creek. The visible footing is 2m (N-S) long x 800mm wide. The footing is possibly associated with works for the creek diversion carried out by James Clare in 1842.	Creek diversion
27	Post-convict (c.1874) (20th century)	E.0529334 N.5294654	This feature is a sandstone culvert which has been modified by the addition of a concrete span.	Culvert (railway)
28	Post-convict (c.1877- c.1896)	East of creek (near Feature #34) E.0529459 N.5294504 East of creek E.0529461 N.5294578	This feature comprises three separate sections of tramway formation located on the eastern and western sides of Coalmine Creek. At its eastern extent, the tramway appears to abut an area of workings (Feature #34 and #35) and is visible as a cut-and-benched formation leading northward toward the area of convict-period workings. The tramway is disturbed for 60m, reappearing in the bed of the diverted creek as an elevated linear mound 2.5m-3m wide, 1m high. Where it passes the convict workings it is disturbed, only reappearing on the western bank of Coalmine Creek. It runs up the slope for approximately 100m, presenting as an indistinct low mound 3.5-4m in width. Within 30m of the rail reserve the tramway is visible as a high mounded embankment running south west for 45m. It is 3m wide at the top, widening to 8m at the base and is 1.5m high.	Tramway

		<p>West of creek E.0529442 N.5294639, E.0529416 N.5294646, E.0529400 N.5294649, E.0529377 N.5294648, E.0529363 N.5294642 E.0529345 N.5294630, E.0529337 N.5294622, E.0529324 N.5294608, E.0529315 N.5294592</p>	<p>The tramway terminates within 5m of the rail reserve, the surface of the formation being commensurate with the level of the railway. The whole formation (approximately 300m) is covered with coal slack and coal pieces.</p>	
29	Convict (1841-42, 1844)	<p>E.0529501 N.5294639</p>	<p>This site encompasses the estimated location of the original 53ft (16m) shaft and 120 yard (110m) adit, located within the original creek bed . The site is covered in blackberry weeds, but the location of the shaft can be estimated from a large depression in the weeds and the presence of a nearby mound of tailings. The position of the adit can be estimated from an indentation in the cliff face, which probably stems from the collapse of the adit's entrance.</p>	Shaft, Adit
30	Convict (1841-42, 1844)	<p>Conical mound E.0529484 N.5294629</p> <p>Linear mound E.0529492 N.5294634, E.0529503 N.5294632, E.0529490 N.5294602,</p>	<p>These features comprise two differentiated mounds of tailings located in the original course of Coalmine Creek. The conical mound is located in the west of the area and is 20m in diameter and 3m high. A smaller linear mound runs north from the mound to the potential site of the 53ft shaft (Feature #29). Abutting the conical mound to the east is a long linear mound. Starting in the south of the area, the mound is 8m wide and 1.5m high. Approximately 20m north the mound forks into two separate mounds, each 3-4m wide, 1m high. Both extend 20m toward the site of the adit and shaft. The whole area is heavily covered in blackberry weeds. The mounds are densely covered in coal and carbonaceous mudstone fragments and pieces.</p>	Tailings

		E.0529488 N.5294592		
31	Convict (1841-42, 1844)	E.0529501 N.5294628	This feature is located in the original course of Coalmine Creek. It comprises a 2.6m wide, 3m long depression in the west-facing cliff. Just to the west of the potential adit entrance is a series of tailings mounds (Feature #30) which may have in part resulted from the adit's excavation.	Adit (potential)
32	Convict (1841-42, 1844)	E.0529315 N.5294589 E.0529298 N.5294571	This feature is located south west of the western termination of the tramway (Feature #28), east of the railway reserve. It comprises a distinct 32m section of road formed from a slightly mounded embankment: 2.5m wide at the top, 6m wide at the base and up to 1.5m high (on the low eastern side). The length of the road is covered with angular broken dolerite (40-80mm) and has a high amount of coal and carbonaceous mudstone fragments scattered across it. The road has been truncated by the railway reserve and evidently overprinted by the tramway. An indistinct section of road is visible running along the eastern margin of the tramway embankment.	Roadway
33	Convict (1841-42, 1844)	E.0529452 N.5294561	This feature is located in the original course of Coalmine Creek. It comprises a 2.5m wide, 2m long depression in the west-facing cliff. Just to the north west of this potential adit entrance is an extant section of tramway (Feature #28).	Adit (potential)
34	Post-convict (c.1877- c.1896)	E.0529460 N.5294498	This feature is located to the east of Coalmine Creek. It is heavily overgrown with ferns and blackberry weeds. It comprises a shaft depression of 7m (outer) - 3m (inner) diameter, at least 2m deep. The shaft has been excavated on a west-facing slope. The large tailings mound is located north, west and south of the shaft and forms a crescent around the depression. At its greatest extent the tailings mound is 20m wide and approximately 10m high. There is a depression in the northern part of the mound, commensurate with the location of a portion of the tramway (Feature #28). A high level of coal slack and pieces is present on the mound.	Shaft (production)
35	Post-convict (c.1877- c.1896)	E.0529464 N.5294475	A 4m diameter shaft of indeterminate depth (water-filled), located 20m south east of Feature #34. The low tailings mound is located to the south of the shaft, measuring 5m (N-S) x 5m. Coal fragments and pieces are present across the mound.	Shaft (production)
36	Convict (1841-42, 1844) Post-convict (c.1877- c.1896)	38a E.0529495 N.5294351 38b E.0529491 N.5294308 38c E.0529377 N.5294308	This feature comprises three separate sites located east of Coalmine Creek. Feature 38a comprises a scatter of unworked sandstone blocks in an area 3m (N-S) x 6m. Few artefacts are located in the area. 50m to the south is a second site (Feature 38b). This comprises a scatter of fragmented orange handmade brick and artefacts (bottle glass and refined earthenware) in an area 25m x 25m. Both Feature 38a and 38b are located on a topographic elevation, overlooking the course of Coalmine Creek. Closer to the creek, 110m west of Feature 38b, is a further small scatter of fragmented artefacts (refined earthenware) and brick within an area 10m x 10m. A number of dolerite stones are present, some of which appear to have a linear form.	Artefact scatter
37	Post-convict (1890-	E.0529292 N.5294191	A 3m (outer) - 1.5m (inner) diameter shaft depression, approximately 1.5m deep. Located 5m to the east of Coalmine Creek. A low mound of tailings, 4m (N-S) x 6m is located to the south west	Shaft (exploratory)

	c.1896)		side of the shaft. There is no coal slack in the tailings.	
38	Post-convict (c.1877- c.1896)	-	<p>The mound measures 13m (E-W) x 27m, with the depression for the shaft being located in its western extent. The internal diameter of the shaft is 4.5m (E-W) x 7m. The depression forms an inverted collapse cone and has a maximum depth of 3m. The height of the mound varies from 3m to 6m (approx) and is covered with small fragments of coal.</p> <p>A platform is situated on the immediate western side of the shaft, its eastern edge corresponding with the western edge of the shaft. The platform is 6m (E-W) x 7.5-10m and has been benched into the east-facing slope, leaving a prominent cutting along the platform's western side.</p> <p>Immediately to the south of the shaft and platform a roadway has been cut and benched into the slope. This formation runs for approximately 25m and varies from 1.8-2.4m in width. It terminates to the south and within 4m of the railway easement. The northern end of the roadway, at the southern base of the tailings mound, shows evidence of further cut-and-benching, although some disturbance appears to have taken place post-mining, which has altered the legibility of the modified landscape at those locations.</p> <p>A small platform is located 7m to the west of the benched road, 12m south of the shaft and platform. It is 1.5m (E-W) x 3m.</p>	Shaft (production)

Table A6-1: Jerusalem, gazetteer of features

Illustrated notes on the mine workings

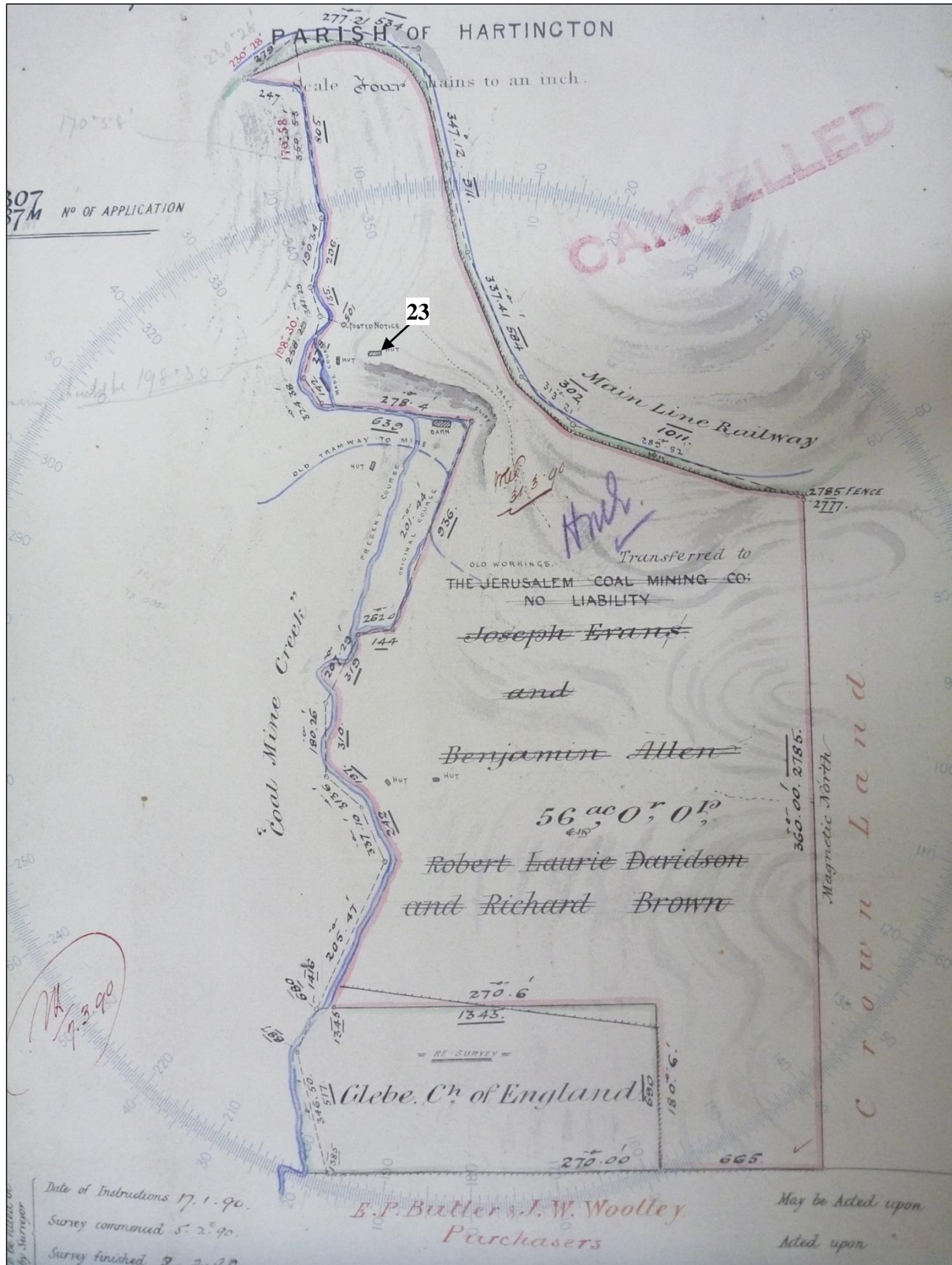


Figure A 6-9: 1890 survey of study area (recognisable features highlighted)
(Mineral Resources Tasmania. Book 251/6, County of Monmouth, Parish of Hartington, 7 February 1890, M.R.T.)

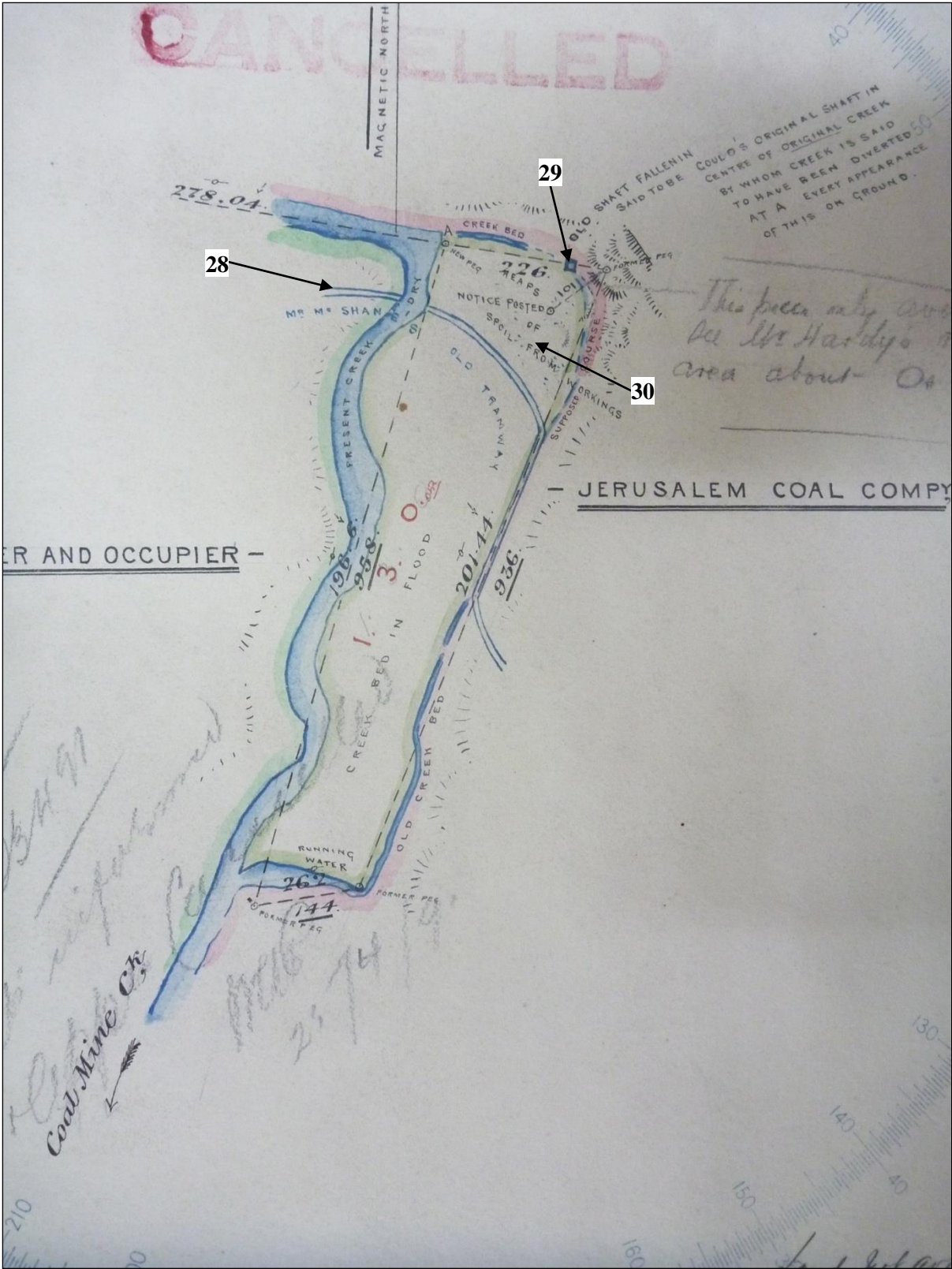


Figure A6-10: 1891 detail of main area of convict-period workings (recognisable features highlighted)
 (Mineral Resources Tasmania. Book 251/8, County of Monmouth, Parish of Hartington, 3 April 1891, M.R.T.)

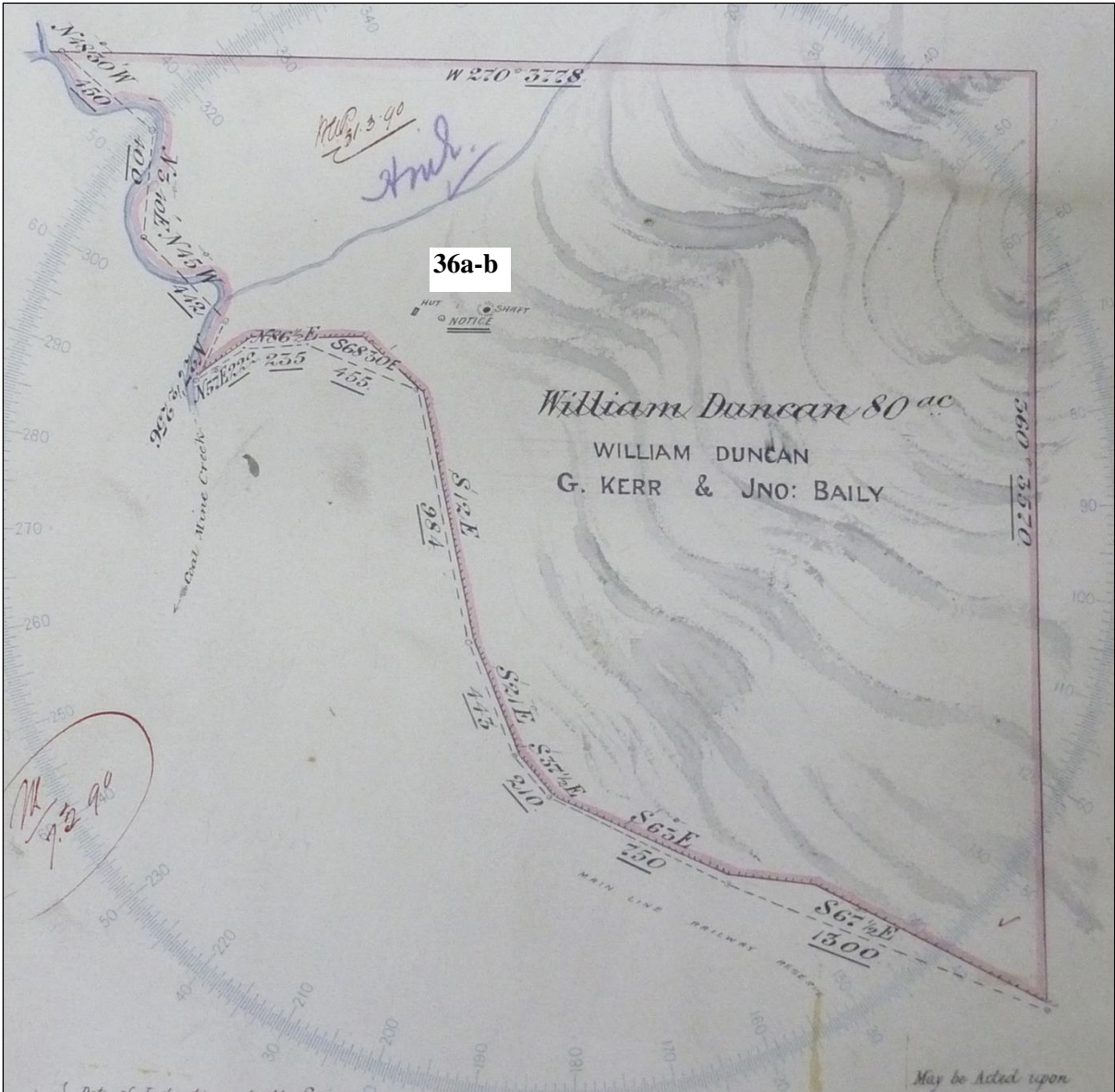


Figure A6-11: 1889 survey of the southern extent of the area (recognisable features highlighted)
 (Mineral Resources Tasmania. Book 251/5, County of Monmouth, Parish of Hartington, 1 November 1889, M.R.T.)

APPENDIX 7: TASMAN PENINSULA, POPULATION

Year	Month	Convicts ⁷⁴⁴			Military ⁷⁴⁵		Ratio guards:convicts	Convict ⁷⁴⁶ Department
		General population	Miners	%	Total	Rank & File		
1834	May	11 ⁷⁴⁷	5	45				
	June	16 ⁷⁴⁸	11	69				
1835	January	42 ⁷⁴⁹						
1836	October	100 ⁷⁵⁰	20					
1837	March	106 ⁷⁵¹	16	15				
	August	122 ⁷⁵²	24	20	14	12	1:10	
1838	-	150 ⁷⁵³	29	19				
	October	203 ⁷⁵⁴			21	19	1:11	
1839	May	170			28	25	1:7	
1840	June	170	20 ⁷⁵⁵	12				
	Dec	253	25 ⁷⁵⁶	11				
1841	January	253						
	July	253	25 ⁷⁵⁷	11	33	30	1:8	
1842	-	253						
1843	September	579						
1844	June	644						
	July	642						
	October	609 ⁷⁵⁸						
	November	503			62	58	1:9	
	December	583						21
1845	June	583						23
	December	548						
1846	June	345						26
	October	407						25
	December	403						
1847	April	412	31	8	52	48	1:9	28
	August	450 ⁷⁵⁹						
	October	450						
1848	April	326						

NB: Numbers in red indicate no figure available

⁷⁴⁴ From British Parliamentary Papers series unless otherwise noted

⁷⁴⁵ All military figures from (McLachlan and Macfie 1995)

⁷⁴⁶ From British Parliamentary Papers series

⁷⁴⁷ Return of Crown Prisoners at Port Arthur shewing [sic] the number of each Trade in the Month of April 1834, 1 May 1834, CSO 1/511/11180, T.A.H.O. (UB).

⁷⁴⁸ Return of Crown Prisoners at Port Arthur shewing [sic] the number of each Trade in the Month of May 1834, 1 June 1834, CSO 1/511/11180, T.A.H.O. (UB).

⁷⁴⁹ Charles O'Hara Booth, Captain Commandant, to William Moriarty, Port Officer, 20 January 1835, CSO 1/412/9273, T.A.H.O.

⁷⁵⁰ Brand, Ian. 1993. *The Port Arthur Coal Mines: 1833-1877*. Launceston: Regal Publications

⁷⁵¹ Ibid, p. 40.

⁷⁵² Mr Carr, Commissariat Officer, to unnamed recipient, 18 August 1837, CSO 5/23/449, T.A.H.O.

⁷⁵³ Lempriere, Thomas. 1839. *The Penal Settlements of Van Diemen's Land, Macquarie Harbour, Maria Island and Tasman's Peninsula*. Tasmania: The Royal Society of Tasmania (Northern Branch). Original edition, 1839. Reprint, 1954.

⁷⁵⁴ Surgeon Superintendent, *Minerva*, to Sir John Franklin, Lieutenant Governor, 15 October 1838, CSO 5/146/3551, T.A.H.O. (BT).

⁷⁵⁵ Charles O'Hara Booth, Commandant, to John Montagu, Colonial Secretary, 10 June 1840, CSO 5/224/5707, T.A.H.O.

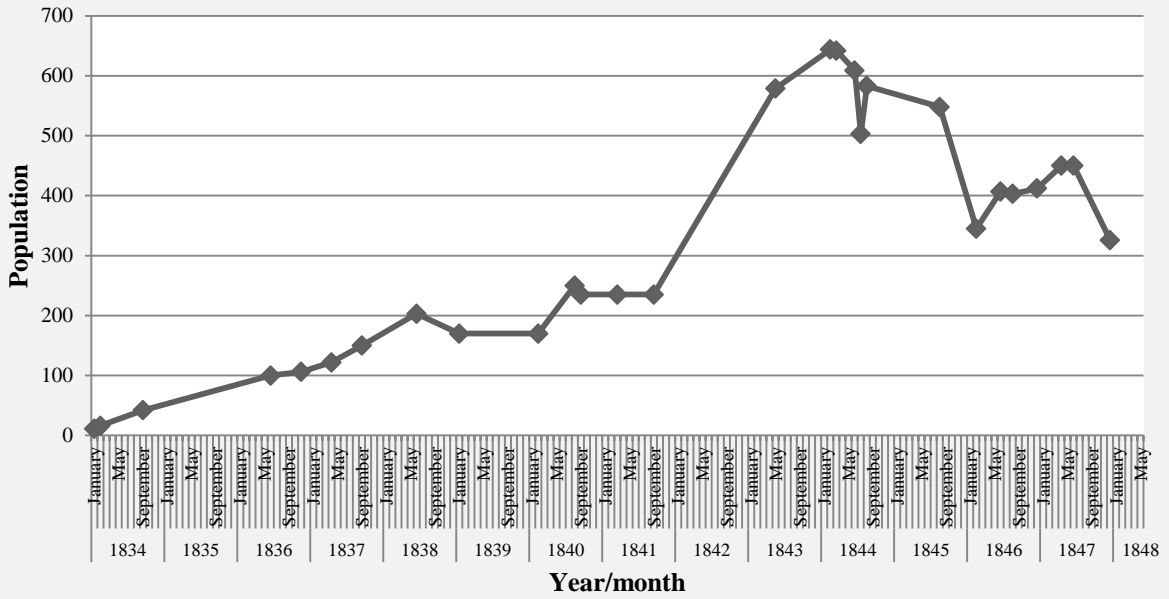
⁷⁵⁶ Miner figures: Henry Rye, overseer, List of Men at the Coal Mines, 10 December 1840, Tasmania Papers 134, CY 3079, Frame 555, M.L. (UB).

⁷⁵⁷ Miner figures: Samuel Cook, Superintendent, Memo of men at Coal Point sent there as Miners shewing [sic] their ability as such or otherwise, 14 July 1841, Tasmania Papers 134, CY 3079, Frame 285, M.L. (ST).

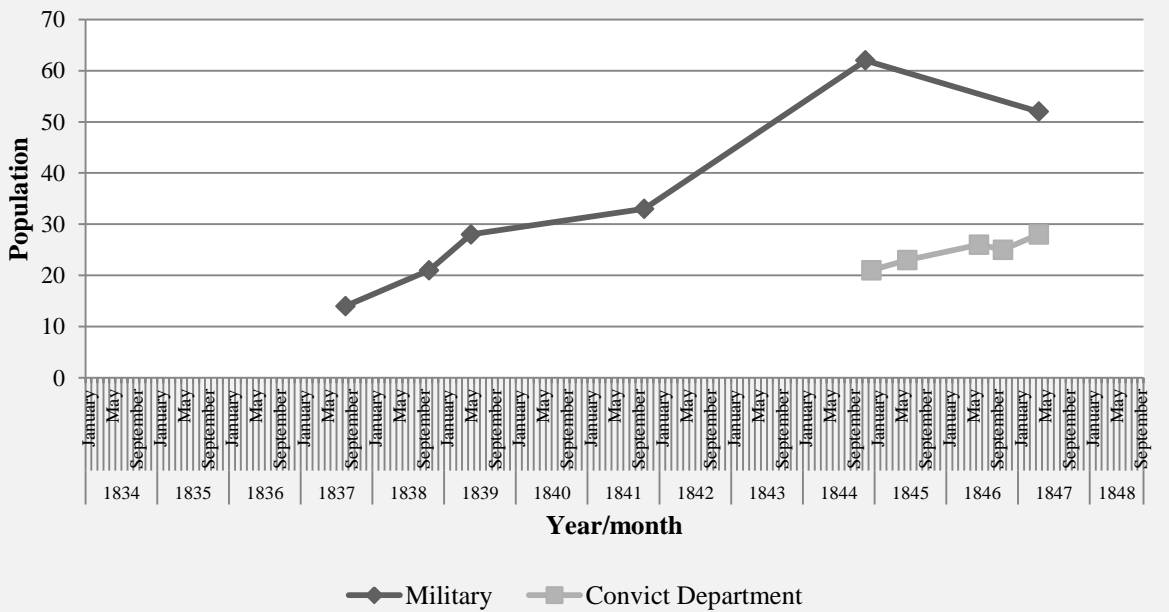
⁷⁵⁸ B. Bayly, Principal Store Keeper, to the Ordnance Store Keeper, 22 October 1844, Misc 62/14 A1100, T.A.H.O. (UB).

⁷⁵⁹ J.W. Smith, Assistant Commissary General, to Commissariat Office, 16 August 1847, CO 280/235/569, TAHO (UB).

Convict population, 1834-48



Military and Convict Department population, 1834-48



APPENDIX 8: TASMAN PENINSULA, LIST OF OFFICERS 1835-49

CSO 50/1/8 - 26, 'Blue Books', 1835-49

Year/Position	Name	Date of appointment	Annual salary		
			£	s.	d.
1833 - no entries					
1834 - no entries					
1835					
Overseer at Mines Writer	Joseph Lacey per diem	23 February 1836	45	12	6
1836					
Superintendent at Coal Mines	John Ramsey Stuart (21st)	1 October 1836	91	5	0
Overseer at Mines Writer	Joseph Lacey per diem	23 February 1836	70	0	0
1837					
Superintendent at Coal Mines	John Ramsey Stuart (21st)	1 October 1836	91	5	0
Overseer at Coal Mines	Joseph Lacey	23 February 1836	45	12	6
1838					
Overseer at Mines	Joseph Lacey	23 February 1836	70	0	0
1839					
Overseer at Coal Mines	Joseph Lacey	22 February 1836	120	0	0
Wharfinger	J Power	19 October 1838	45	12	6
Writer	J Lindsay	11 October 1837	18	5	0
Coxswain	J Rice	11 August 1839	50	0	0
1840					
Officer in charge at Coal Mines	Percy Rice (Captn, 51st Reg)	1 July 1840	91	5	0
Overseer at Coal Mines	Joseph Lacey	1 October 1840	130	0	0
Overseer at Coal Mines	H Miller	1 October 1840	36	10	0
1841					
Assistant Surgeon	Robert Ewing	1 July 1841	136	17	6
Catechist	Alexander Law	12 September 1841	200	0	0
Overseer	Joseph Lacey	25 October 1839	140	0	0
Wharfinger	John Power	24 August 1841	54	15	0
Head Overseer	Henry Miller	1 October 1840	45	12	0
Overseer	James Hurst	13 September 1841	27	7	6
Superintendent	Samuel Cook	1 November 1841	200	0	0
Assistant Superintendent	J Southmeir	1 October 1841	73	0	0
Overseer	T Griffin	1 October 1841	63	17	6
Overseer	H Miller	22 December 1841	63	17	6
Storekeeper	CM Gurve	17 December 1841	60	0	0
Visiting Magistrate (Slopen Is)	E Barclay	24 September 1841	136	17	0
Foreman of Works, TP	R Bernard	20 October 1841	150	0	0

1842			
Visiting Magistrate	C Cumberland		182 10 0
Officer Commanding Troops	C Cumberland, 96th Regt	15 August 1842	182 10 0
Assistant Surgeon	Robert Ewing	1 July 1841	136 17 6
Superintendent	Samuel Cook	1 November 1841	200 0 0
Catechist	AL Low	12 September 1841	200 0 0
Wharfiner	JE Smee	24 August 1841	54 15 0
Assistant Superintendent	J Southmeir	1 October 1841	72 0 0
Assistant Superintendent	JD Miles	1 October 1841	72 0 0
Assistant Superintendent	G Duncan	1 October 1841	72 0 0
Assistant Superintendent	G Duncan	1 October 1841	72 0 0
Assistant Superintendent	WC Mabuley	1 October 1841	72 0 0
Storekeeper	C McGuire	17 December 1841	60 0 0
Overseer	Thomas Griffin	17 December 1841	63 17 6
Overseer	Henry Miller	17 December 1841	63 17 6
Overseer	J Armstead	17 December 1841	63 17 6
Overseer	J Simpson	29 July 1842	45 12 6
Overseer	J Hurst	29 July 1842	
Constables on 1/6 per day			
Royal Engineer Act Foreman TP	Robert Bernard		150 0 0

1843			
Superintendent	J Purslowe	5 October 1843	200 0 0
Assistant Superintendent	H Kerr	10 January 1844	120 0 0
Assistant Superintendent	G Duncan	28 December 1841	73 0 0
Assistant Superintendent	James Fulton	5 October 1843	73 0 0
Assistant Superintendent	Charles Madden	4 February 1844	73 0 0
Medical Officer	JD Motherwell	11 July 1842	131 17 6
Chaplain	F Batchelor	19 October 1843	200 0 0
Overseer	J Hurst	9 December 1842	110 0 0
Overseer	H Miller	24 December 1842	63 17 6
Overseer	W Percy	7 March 1841	63 17 6
Overseer	J Small	21 January 1843	63 17 6
Overseer	J Lennard	5 October 1843	63 17 6
Overseer	J Thomas	27 January 1843	63 17 6
Overseer	James Simmonds	8 July 1843	63 17 6
Storekeeper	C McGuire	17 December 1842	60 0 0
Wharfinger	JE Smee	9 December 1842	64 13 0
Clerk Commissariat Store	R Atkins	13 January 1843	54 15 0
Store Porter	P Hughes	10 March 1842	18 5 0
Visiting Magistrate (Sloven Is)	Frederick Mainwaring, 51st Regt	3 March 1843	182 10 0
Coxswain Mines Launch	J Rice	20 November 1839	50 0 0

1844			
Visiting Magistrate	Frederick Mainwaring, 51st Regt	19 October 1839	182 10 0
Superintendent	Henry Smith	14 February 1844	200 0 0
Chaplain	F Batchelor	19 October 1843	200 0 0
Assistant Superintendent	J Duncan	28 December 1841	73 0 0
Assistant Superintendent	James Fulton	5 October 1843	73 0 0
Assistant Superintendent	J Boyd	28 June 1844	120 0 0
Assistant Superintendent	J Milchale	29 November 1844	73 0 0
Overseer	James Hurst	9 December 1842	110 0 0
Overseer	Henry Miller	24 December 1841	63 17 6
Overseer	J Smell	21 January 1843	63 17 6
Overseer	J Simmonds	8 July 1843	63 17 6
Overseer	William Kerry	7 March 1843	63 17 6
Overseer of Mines	J Thomas	7 March 1843	63 17 6
Overseer Cookshop	JE Thomas	7 March 1843	63 17 6
Overser	J McLeland	27 April 1843	63 17 6
Storekeeper	C Macquire	17 December 1844	60 0 0
Wharfinger	JE Smee	9 December 1842	64 15 0
Coxswain	J Hughes	16 March 1841	42 0 0
Boatman	E Gosney	16 August 1842	30 0 0
Boatman	J Wheatley	16 August 1842	30 0 0
Writer	William Davies	17 October 1844	9 2 6
Colonial Assistant Surgeon	JD Motherwell	11 July 1842	182 10 0

1845			
Colonial Assistant Surgeon	JD Motherwell	11 July 1842	182 10 0
Superintendent	Henry Smith	14 February 1844	200 0 0
Religious Instructor	FB Batchelor	19 October 1843	200 0 0
Assistant Superintendent	J Fulton	5 October 1843	73 0 0
Assistant Superintendent	R Frewin	15 September 1843	73 0 0
Assistant Superintendent	R Jennings	30 July 1843	75 0 0
Assistant Superintendent	W Evans	28 August 1845	73 0 0
Storekeeper	C MacGuire	17 December 1844	70 0 0
Overseer	J Hurst	9 December 1842	110 0 0
Overseer	H Miller	24 December 1841	63 17 6
Overseer	J Simmonds	8 July 1843	63 17 6
Overseer	J Thomas	6 September 1844	63 17 6
Overseer	JC Thomas	6 September 1844	63 17 6
Overseer	J Marshall	5 February 1845	63 17 6
Overseer	CW Sieburg	15 March 1845	63 17 6
Overseer	J Garland	27 February 1845	63 17 6
Overseer	J Rothwell	20 June 1845	63 17 6
Overseer	G Gatehouse	28 October 1845	63 17 6
Wharfinger	JE Smee	6 December 1842	64 15 0
Roman Catholic Religious Instructor	R Boyle	10 September 1845	9 2 6
Writer	W Davies	17 October 1844	75 0 0
Visiting Magistrate	Edward Hill (96th)	10 July 1843	182 10 0

1846			
Visiting Magistrate	Edward Hill (96th)	10 July 1845	182 10 0
Religious Instructor	F Batchelor	19 June 1846	200 0 0
Roman Catholic Religious Instructor	R Boyle	10 September 1845	75 0 0
Superintendent	Henry Smith	14 December 1844	200 0 0
Assistant Superintendent	James Fulton	5 October 1843	73 0 0
Assistant Superintendent	William Evans	28 August 1843	73 0 0
Assistant Superintendent	Benjamin Burman	11 December 1846	73 0 0
Storekeeper	Charles MacGuire	17 December 1844	70 0 0
Overseer		6 September 1844	63 17 6
Overseer		6 September 1844	63 17 6
Overseer		6 September 1844	63 17 6
Overseer		6 September 1844	63 17 6
Overseer		6 September 1844	45 12 6
Overseer		6 September 1844	73 0 0
Overseer		8 December 1846	63 17 6
Constable		8 December 1846	36 10 0
Constable		8 December 1846	36 10 0
Constable		8 December 1846	36 10 0
Wharfinger	J Smee	6 December 1842	64 15 0
Assistant Surgeon	JW Irvine	30 Nov 1846	182 10 0
Writer		17 October 1844	9 2 6
Engineer		23 Febraury 1846	18 6 0
Convict watchman		16 December 1846	9 2 6

1847			
Visiting Magistrate	John James Grant	10 July 1843	182 10 0
Roman Catholic Religious Instructor	Roger Boyle	10 September 1845	75 0 0
Religious Instructor	F Batchelor	19 June 1846	200 0 0
Storekeeper	Charles MacGuire	26 Decembre 1841	70 0 0
Inspector of Mining Operation	James Hurst	14 Sept 1847	150
Assistant Superintendent	J Fulton	7 August 1843	73 0 0
Assistant Superintendent	Joseph Irwin	17 December 1841	120 0 0
Assistant Superintendent	WJ Maden	19 November 1846	82 2 6
Assistant Superintendent	William Evans	16 August 1845	73 0 0
Superintendent	J Skene	20 August 1841	200 0 0
Colonial Assistant Surgeon	GF Huston	20 March 1847	182 10 0
Wharfinger	J Smee	Augt 841	64 15 11
x6 overseers	3/6 each		
x2 Asst overseers			52

1848			
Assistant Overseer	John Rice	27 January 1848	52 0 0
District Constable	James Wilson	21 October 1848	50 0 0
Visiting Magistrate	James Smith		200 0 0

1849			
District Constable	J White	July 1841	50

APPENDIX 9: LIST OF SHIPS CON 27

Arrival Date	Appropriation Date	Ship	Prisoner #	Appropriation #	Note
1834					
14-Jan		Southworth	188		
09-May		Moffatt	391		
30-Jun		Arab	228		
11-Aug		John Barry	318		
04-Sep		William Metcalfe	240		
1835					
22-Jan		Augusta Jessie	207		
13-Feb		Lady Kennaway	280		
03-Mar		Waterloo	224		
12-Apr		George III	81		
01-Aug		Mangles	310		
28-Aug		Norfolk	280		
07-Oct	14-Oct	Aurora	299	296	
10-Dec	16-Dec	Layton (2)	267	269	
1836					
12-Jan	18-Jan	Bardaster	235	250	
21-Feb	26-Feb	Asia (4)	288	290	
24-May	30-May	Elphinstone	238	229	
19-Aug	26-Aug	Lord Lyndoch (2)	325	272	
12-Nov	17-Nov	Lady Nugent	286	289	
15-Nov	21-Nov	Henry Porcher	258	259	
22-Dec	27-Dec	Eden	299	280	
1837					
29-Mar	March	Sarah	245	249	
15-May	May	Frances Charlotte	150		
16-Jul	21-Jul	Blenheim	150	210	
02-Oct	06-Oct	Elphinstone (2)	239	210	
08-Oct	October	Recovery	275	282	
21-Nov	27-Nov	Susan	293	298	
1838					
08-Jan	Jan	Royal Sovereign	150		
18-Jan	26-Jan	Neptune	348	349	
01-Apr	April	Moffatt	397	399	
26-Aug		Lord William Bentinck	318		
28-Sep		Minerva	159		
26-Oct		Coromandel	348		
06-Dec		Augusta Jessie	209		
1839					

24-Jan		Gilmore	278		
24-Mar		Pyramus	170		
23-Jul		Marquis of Hastings	233		
23-Aug		Egyptian	189		
10-Dec	Dec	Layton	256	181	
1840					
12-Jan	14-Jan	Canton	230	240	
Feb	15-Feb	Buffalo			
28-Mar	02-Apr	Runnymede	200		
30-Jun	06-Jul	Mandarin	210	210	
06-Aug	13-Aug	Asia (5)	274	277	
12-Dec	16-Dec	Egyptian (2)	170	168	
1841					
19-Jan	26-Jan	Hindustan	209		
05-Feb	11-Feb	Lord Lyndoch	314	318	
17-Mar	25-Mar	British Sovereign	180	180	
17-Mar	25-Mar	Lady Raffles	327	330	
18-Apr	23-Apr	Duncan	259	263	
21-Aug	August	Asia (6)	258	258	
01-Sep	September	Layton (4)	245	228	
12-Sep	September	Westmoreland	200	202	
12-Sep	September	Waverley	174	159	
04-Oct	October	David Clarke	307	319	
15-Nov	November	Lord Goderich	186	187	
1842					
02-Jan	October	Prince Regent	183	185	
13-Jan	January	Barossa	347	350	
19-Feb	February	Tortoise	394	400	
04-Mar	March	Richard Webb	189	192	
06-Apr		John Brewer	198		
21-May		Isabella	266		
30-May		Somersetshire	218		
05-Jul		Eden	275		
21-Jul		Candahar	249		
24-Jul		Susan	297		
28-Jul		Elphinstone	229		
03-Aug		Isabella Watson	195		
11-Aug		Surrey	253		
23-Oct		Kinnear	172		
08-Nov		Marquis of Hastings	238		
24-Nov		Emily	238		
24-Nov		Cape Packet	79		
28-Nov		Moffatt	387		
19-Dec		Triton	253		
1843					
10-Jan		Navarino	178		
14-Jan		Earl Grey	261		

18-Jan		Duchess of Northumberland	267		
04-Apr		North Briton	178		
11-Apr		John Renwick	161		
20-Aug		Cressy	295		
20-Aug		Gilmore	249		
26-Aug		Constant	201		
23-Sep		Asiatic	186		
12-Oct		Emerald Isle	213		
12-Oct		Forfarshire	239		
15-Oct		Lord Petre	237		
19-Nov	December	Henrietta	190	<i>190</i>	
21-Nov	November	Orator	169	<i>170</i>	
1844					
02-Jan	January	Duke of Richmond	111	<i>111</i>	
04-Feb	February	Anson	499	<i>500</i>	
	March	Maitland		<i>338</i>	
Mar	March	Duke of Richmond (2)		<i>200</i>	
04-Apr	April	Marion	295	<i>300</i>	
02-May	May	Equestrian	288	<i>288</i>	
Jun	June	Lady Franklin		<i>150</i>	
10-Jul	July	London	250	<i>251</i>	
30-Jul	August	Maria Somes	262	<i>264</i>	
Oct	October	Mandarin (2)			
24-Aug		Cadet	164		
06-Sep		Barossa	319		
30-Oct		Emily	205		
15-Nov		Lord Auckland	236		
20-Nov		William Jardine	267		
26-Dec		Sir Robert Peel	253		
1845					
27-Feb		Sir George Seymour	169		
09-Jun		Elizabeth & Henry	169		
17-Jun		Mount Stuart Elphinstone	259		
04-Jul		Theresa	220		
26-Jul	26-Jul	Governor Phillip		<i>63</i>	From Norfolk Island
30-Aug	August	Ratcliffe	215	<i>201</i>	
16-Sep	September	Marion (2)	300	<i>298</i>	
12-Oct	October	Lady Franklin (3)		<i>68</i>	From Norfolk Island
15-Oct	October	Equestrian (2)	298	<i>299</i>	
18-Nov	November	Governor Phillip (2)		<i>60</i>	From Norfolk Island
26-Nov	November	Lady Franklin (4)		<i>37</i>	From Norfolk Island
25-Dec	December	Stratheden	103	<i>104</i>	
30-Dec	December	Pestonjee Bomangee	298	<i>271</i>	
1846					
18-Jan	January	Samuel Boddington	143	<i>141</i>	

March	March	Lady Franklin (5)	56	From Norfolk Island
20-May		Joseph Somes	243	
23-Aug		Palmyra	292	
25-Aug		Lord Auckland	176	
27-Oct		Maitland	6	
1847				
17-Feb		Pestonjee Bomangee	174	
18-Mar		Tory	195	
1848				
07-Jun		Anna Maria	27	
12-Jun		Ratcliffe	248	

APPENDIX 10: APPROPRIATIONS 1835-46

Assignment, 1835-38

	CON 27/2										CON 27/7										
	1835		1836								1837										
	Oct	Dec	Jan	Feb	May	Aug	Nov	Nov	Dec	Mar	May	Jul	Oct	Oct	Nov	Jan	Jan	Feb			
	Aurora	Layton (2)	Bardister	Asia (4)	Elphinstone	Lord Lyndoch (2)	Lady Nugent	Henry Forrester	Eden	Sarah	Frances Charlotte	Blenheim	Elphinstone (2)	Recovery	Susan	Royal Sovereign	Neptune	Moffatt			
Assignable Gang	10	3	6	21		18	3	4		8	No	4	5	28	10	No	31	151			
Assignment	178	156	188	166	123	162	195	189	219	151	app listed	163	155	174	209	app listed	251	315	2,994		
Bond Stores, Launceston	1																		1		
Bridgewater Gang	1																		1		
Chief Justice				1	1									2					4		
Civil Engineer								1					1						2		
Clerk	3	1	1	3	2			4	4	5		2	2	3			2	5	37		
Colonial Engineer													1		2			2	5		
Commissariat	1																		1		
Customs, Launceston	1																		1		
Dispenser, New Norfolk	1																		1		
Female Factory - Blanket Mill												1	1						2		
Female House of Correction																		2	2		
Flinders Island					23														23		
Government Gardens					1	1									1			2	5		
Government House	1	2	1	1										1					6		
Green Point								1	1										2		
Hospital		2					2			3				2	1		1	5	16		
Hospital wardsman		3																	3		
Kings Yard		3	3	6	5		1	2					1	1					22		
Lake River Bridge		1																	1		
Lieutenant Governor's Establishment			1																1		
Light House	1																		1		
Loan Gang			1	11	1	1		4	24	5		4	6	11	7		18	16	109		
Male Orphan School												1		1					2		
Marine Dept	5	9	7	9		4	6		3	9		3	6	2	7		2	11	83		
Medical - Public Works																		1	1		
Medical - Roads																		1	1		
Messenger	1						1	1	2	1				1				1	8		
Ordered to New South Wales								1											1		
Perth Quarry		1																	1		
Point Puer												1						1	2		
Police - Messenger						1	1			1							2	2	7		
Police - Special Constable																	1	1	2		
Prisoners' Barracks	1	1	1																3		
Prisoners' Barracks - Clerk						1													1		
Prisoners' Barracks - Special messenger									1				1						2		
Public Office - Messenger													1	2	1				4		
Public Works	20	28	14	4		17				7			1	1					92		
Public Works - Brickfields			1					2					1						4		
Public Works - Brunii Island		1																	1		
Public Works - Carters Establishment	2			3		2		4											11		
Public Works - Commissariat													1						1		
Public Works - Engineers' Department				1	3		7												11		
Public Works - Fulling Mill				1															1		
Public Works - Launceston								1											1		
Public Works - Military Engineer				1															1		
Public Works - Morvern						1				1									2		
Public Works - New Norfolk						2		1											3		
Public Works - Oatlands						1													1		
Public Works - Perth Bridge				6				1											7		
Public Works - Quarry		1		1															2		
Public Works - Slaughter House	3	1						1				1							6		
Public Works - Treadwheel				1															1		
Refused					3	1													4		
Road Department					1														1		
Roads	9	18	2	4	20	4	12	20	8	18		6	6	18	25		11	7	188		
Roads - Bagdad														1					1		
Roads - Grass Tree Hill				1															1		
Roads - Jerusalem				1	1														2		
Roads - Morvern Tunnel					3		1		2		1								7		
Rodas - Snake Banks														1					1		
Roads - Spring Hill	1			1										1					3		
Royal Engineers					4		2	1	3		2	6	4	4		1	2		29		
Solicitor General				1									1						2		
Tasman Peninsula - Port Arthur								1				1		4					6		
Tasman Peninsula - Coal Mines			2	3			2	1	1			2	4		3		4		22		
Town Surveyor's Gang	5				3		1												9		
Unassignable - Infirm						3	2			4			1	4				3	17		
Vacant	1				1		37	9		10								1	59		
VDL Company	6	5	13			4	5	2		1		4	2	2	2		5	4	55		
Sick	5	2		4	3	7	1	2	6	7		5	5	11	11		2	1	72		
Died				2	2	5		2	2	6					1			1	21		
Died on board	1	2	6							3		6	1	5	6		2	3	35		
Unknown	38	29	3	37	29	37	7	11	5	4		3	1	5	5		11	17	242		
	296	269	250	290	229	272	289	259	280	249	0	210	210	282	298	0	349	399	4,431		

Probation, 1839-46

	CON 27/8												CON 27/9											
	1839		1840								1841								1842					
	Dec	Jan	Feb	Apr	Jul	Aug	Dec	Jan	Feb	Mar	Mar	Apr	Aug	Sept	Sept	Sept	Oct	Oct	Nov	Jan	Feb	Mar		
	Layton	Canton	Buffalo	Rumynede	Mandarin	Asia (5)	Egyptian (2)	Hindostan	Lord Lyndoch	Lady Raffles	British Sovereign	Duncan	Asia (6)	Layton (4)	Waverley	Westmorland	David Clarke	Prince Regent	Lord Goderich	Barossa	Tortoise	Richard Webb		
BR			No	No			18	No	117			2												
Bridgewater			app	app				app	76	15			36	18	9	8	11		2	8	13			
Broadmarsh			listed	listed				listed																
Browns River										1			41	21	15	52	49	41	11	4	5	2		
Buckland																								
Cascades																					29	11		
Clerks Room																								
Cleveland																								
Colonial Govt																								
Lymington/Copper Valley																								
Deloraine																								
Fingal																		24	10	31	27			
Flinders Bay													14	31	14	13			3	20	40	10		
Flinders Island													1											
Gaol	1																							
Glenorchy																								
HMS Anson																								
Hospital					1		1		1	1							10			10	13	1		
Hospital Attendant																								
Jericho															38	34	55		3		47			
Jerusakem									1			179	35	23	19	24	20	23	14	30	25			
Long Marsh																								
Lovely Banks													35	47	30	12	16		20	41	10			
Maria Island																								
Maria Island - Darlington																								
Maria Island - Long Point																								
New Norfolk																	11							
New Town									76			5												
New Town - Farm										79		37												
New Town - Hulk										14		15												
Nicholls Rivulet																								
Oyster Cove																								
Perth																								
Port Cygnet																								
Port Esperance/Dover																								
Prisoners' Barracks																								
Probation	167	237			206						180													
Roads	13																							
Rocky Hills										100		40	45	8	38	21	47		80	55	50			
Royal Engineer						96			51															
Seven Mile Creek																								
Tasman Peninsula																	79							
Tasman Peninsula - Coal Mines																11		5		10	18			
Tasman Peninsula - Impression Bay																	31	1	74	42	25			
Tasman Peninsula - Point Puer									2						23			11	106		10			
Tasman Peninsula - Port Arthur		1				20	3		17	7						1			3					
Tasman Peninsula - Salt Water River												7	12	3	7				16	27	70	32		
Tasman Peninsula - Slopem Island												21	29											
Tasman Peninsula - Wedge Bay																								
Southport												28					45		8		47			
St Mary's Pass																								
St Mary's Vale																								
Victoria Valley																								
Water Works										49														
Westbury																								
Passholder																								
Ticket of Leave																								
Sick																								
Died		2			1	2			7	1						2	2	3		4	5	4		
Died on board										3														
Unknown					2	159	146		21	9		25		2					1		1			
	181	240	0	0	210	277	168	0	318	330	180	263	258	228	159	202	319	185	187	350	400	192		

Probation (cont.)

	CON 27/9																								TOTAL		
	1843		1844										1845													1846	
	Nov	Dec	Jan	Feb	Mar	Mar	Apr	May	Jun	Jul	Aug	Oct	Jul	Aug	Sept	Oct	Oct	Nov	Nov	Dec	Dec	Jan	Mar				
Orator	Hennetta	Duke of Richmond	Anson	Maitland	Duke of Richmond (2)	Murian	Equestrian	Lady Franklin	London	Maria Somes	Mandann (2)	Governor Phillip	Ratcliffe	Murion (2)	Lady Franklin (3)	Equestrian (2)	Governor Phillip (2)	Lady Franklin (4)	Stanheden	Pesongee Bomangee	Samuel Boddington	Lady Franklin (5)					
BR						24						No												54			
Bridgewater						26			2			app												28			
Broadmarsh	8	3		20			23	50		1	1	listed									1			107			
Browns River		5	1	43	64	11	17	13	8	1														163			
Buckland	15	8	1	4				3	3															34			
Cascades	7	3		5				4	26		42	2					6	3			35			160			
Clerks Room					1																			1			
Cleveland											7													7			
Colonial Govt					1	1																		2			
Lymington/Copper Valley													8		3	38	10	11			29			99			
Deloraine	25	29		84			4	11							1									154			
Fingal		10		50			40	6																106			
Flinders Bay																								0			
Flinders Island																								0			
Gaol																								0			
Glenorchy					101	29			2															132			
HMS Anson				2																				2			
Hospital	1	1	1		1	1		1	1															7			
Hospital Attendant						2																		2			
Jericho	5	5	1	52			54	2																119			
Jerusalem	1	5	6	31			16	14				3												76			
Long Marsh			3																					3			
Lovely Banks	5	5																						10			
Maria Island	19	19	29				12			113	84													276			
Maria Island - Darlington													10	3	56		4							73			
Maria Island - Long Point													6		55		41	3			29			134			
New Norfolk																								0			
New Town																								0			
New Town - Farm																								0			
New Town - Hulk																								0			
Nicholls Rivulet													34	24	10	36	2			2				108			
Oyster Cove				10				1		54					7		2	3		1				78			
Perth									5															5			
Port Cymet																											
Port Esperance/Dover													27	6	9	68	2	2			11			125			
Prisoners' Barracks						1							42	27	12	46	4	4		8				143			
Probation																								1			
Roads						2																		0			
Rocky Hills	6	22	36	6			29						1	2		2					43	135		282			
Royal Engineer																								0			
Seven Mile Creek	18	10		69			5	52																154			
Tasman Peninsula																								0			
Tasman Peninsula - Coal Mines				1			13	10							2		9		1		11			47			
Tasman Peninsula - Impression Bay			2	10			17	12		4	38		19	2	12	10	3	7	3					139			
Tasman Peninsula - Point Puer	7		5	2				11		6					12	2	12			34	6			94			
Tasman Peninsula - Port Arthur						7									1								1	9			
Tasman Peninsula - Salt Water River	6	4	1	2			9			8	7		10	65	18	7		5	4		35			181			
Tasman Peninsula - Slopem Island				10			2																	12			
Tasman Peninsula - Wedge Bay	7	2		2			5	6	114				1	5		1	4	10	6		5			168			
Southport	1	11		50			2	51		75	73				30	2	37	5			1			338			
St Mary's Pass																						1		1			
St Mary's Vale	7	11					3																	21			
Victoria Valley	2	5	28	30			33	19																117			
Water Works																								0			
Westbury	26	27		16			4																	73			
Passholder					14	1									48				41	26		2		132			
Ticket of Leave					133	46			8						11				63	1				262			
Sick						1																		1			
Died	1											1												2			
Died on board	1			1	1		5					1					1				1			11			
Unknown	2	2		22	18				3	1			3		1								53	105			
	170	190	111	500	338	200	300	288	150	251	264	0	63	201	298	68	299	60	37	104	271	141	56	4,360			

Total appropriations: 13,438

APPENDIX 11: CONVICT MINERS FROM APPROPRIATION LISTS

Assignment, 1835-38

Convict #	Name	Age	Trade	Where Tried	Sentence	Native Place	How Appropriated	Sent to Mine	Mining confirmed	Ship
1835										
82	Shipperbottom	William	26	Lab & Collier	Lancaster	7 Bolton	Town surveyor			Aurora
1180	Powis	Noah	25	Lab & Collier	Salop	7 Shropshire	Public Works			Layton (2)
1836										
1080	Davies	Charles	22	Lab & Collier	Salop	7 Salop	PW Colliery	Y	Y	Bardaster
954	Leighton	Abraham	28	Collier Lab	Salop	7 Coalbrook Dale	PW Colliery	Y	Y-1837	Bardaster
711	Arnold	Benjamin	26	Labr & Wellsinker	Chester	Maclesfield	PW Quarry Gang			Asia (4)
1998	Cooper	William	60	Lab & Collier	Cumberland	Norwich	PW Colliery	Y		Asia (4)
1151	Grainger	Joseph	19	Lab & Collier		Dudley	PW Colliery	Y	Y	Asia (4)
911	Jones	Samuel	25	Miner & Wellsinker		Dudley	PW Colliery	Y	Y-1837	Asia (4)
965	Thomas	Morgan	28	Miner & Quarryman		Brecon	PW Perth Bridge			Asia (4)
724	Ashwood	John	20	Miner and Collier	Stafford	7 Broseley	Road Dept, Morven Tunnel	Y	Y	Elphinstone
2193	Sherratt	John	35	Well sinker & pump maker	Lancaster	7 Near Manchester	Road Dept, Morven Tunnel			Elphinstone
2085	Clewson	Thomas	20	Labourer and Collier	Salop	14 Shropshire	Slopen Main Colliery	Y	Y-1837	Lady Nugent
1262	Pickering	John	22	Labourer and Miner	Warwick	14 Warwick	Morvern Tunnel	Y	Y-1841	Lady Nugent
994	Townend	Thomas	22	Coal Miner	York	7 Born on the army	Sloping Main Gallery	Y	Y	Lady Nugent
1205	Gurney	George	30	Collier & Laborer	Central Court	Life Whitefriars	Public Works Slopen Main	Y	Y-1837	Henry Porcher
2194	Wines	George	27	Coal Miner & Lime Burner	Somerset	7 Tisbury	Mr JO Dean, Dromedary TL			Henry Porcher
2570	Bettany	Mark	21	Collier	Stafford	7 Lane End	Sloping Main, Public Works	Y	Y-1837	Eden
1837										
1199	Dennis	John	27	Plough reap milk & collier	Derby	14 Micshain Derby	Mr Phill Broadribb			Sarah
1243	Gould	Henry	23	Quarryman & wellsinker, ploughman	Stafford	7 Henden	PW Morvern			Sarah
1024	Taylor	George	31	Quarryman and wellsinker	Northumberland	Life Gatehead	PW Morvern Tunnel			Sarah
515	Edwards	Mark	20	Collier	Chester	14 Duckenfield	PW Colliery	Y	Y	Blenheim
824	Flower	Samuel	21	Miner & wellsinker	Brecon	Life Near Bristol	PW Morvern Tunnel			Blenheim
1267	Gibson	John	40	Ploughman and Collier Milk	Glasgow	14 Glasgow	S.N. Talbott Esw/q			Blenheim
999	Jones	John	28	Collier & wellsinker, plough, reap, mow	Stafford	7 Hundred in Herefordshire	Dr Ross			Blenheim
2267	Wilkinson	Andrew	37	Collier & wellsinker	Durham	7 Hepburn, nr New Castro	PW Slopen Main	Y	Y	Blenheim
2228	Harris	Thomas	19	Brick & tilemaker, collier	Leicester	7 Hipstock	Loan Gang			Elphinstone (2)
1543	Middleton	William	25	Collier	Stafford	7 Bilston	Colliery Slopen Main, Public Works	Y		Elphinstone (2)
1346	Perry	George	18	Collier	Leicester	7 Hipstock	Colliery Slopen Main	Y	Y	Elphinstone (2)
1237	Reece	Thomas	20	Collier & Miner	Cumberland	7 Whitehaven	Public Works, Colliery Slopen Main	Y	Y	Elphinstone (2)
2286	Weer	John	20	Collier	Central Court	7 Cumberland	PW Colliery, Slopen Main	Y		Elphinstone (2)
812	Atack	James	23	Coal Miner	York	7 Swillington	Slopen Main	Y		Susan
2743	Bellamy	Henry	21	Coal Miner	York	7 Sheffield	To be worked on the roads			Susan
1070	Turner	Daniel	23	Coal Miner	Central Court	Life Ridgehill	Colliery, Slopen Main	Y		Susan
2326	Wallis	George	23	Cornish Miner	Cornwall	Life Cornwall	Colliery, Slopen Main	Y		Susan
2762	Brown	Charles	16	Collier 3 years	Worcester	7 Lampeter				Royal Sovereign
1838										
2791	Birks	George	21	Collier	Stafford	14 Lane End	Colliery Slopen Main	Y	Y-1841	Neptune
2336	Harper	John	25	Collier	Salop	7 Shropshire	Colliery Slopen Main, P Works	Y	Y	Neptune
595	Knight	John	28	Miner, wellsinker & quarryman	Devon	7 Knifton	Loan Gang, on loan to Mr Stokell 6 mo			Neptune
603	Kirkham	William	47	Collier & wellsinker	Stafford	Life Handley Green	Colliery, Slopen Main	Y		Neptune
1604	Mayon	Joseph	23	Collier	Stafford	7 Bidwith	Colliery, Slopen Main, P Works	Y	Y	Neptune
834	Almond	John	23	Collier & carter	York	7 Sheffield	Mr James Grant, Break-o-day			Moffatt
1342	Gingell	George	20	Collier & carter	Slorestation	15 Kingswood	Mr W Main Launceston	Y		Moffatt
1075	James	John	32	Collier & carter	Montgomery	7 South Wales	Mr JH Patterson			Moffatt
1131	Lancaster	Joseph	32	Miner & Wellsinker	Upper Canada	14 Cumberlane	Loan Gang			Moffatt
1415	Pearson	Cuthbert	31	Collier & carter	Durham	7 Portabello	Mr P Pitt, Hunting Ground			Moffatt
2512	Stone	Samuel	19	Collier & carter	Gleneston	15 Kingswood	Mr Summers, Glenorchy			Moffatt
2432	Widdowson	Barnet	34	Coal Miner & Wellsinker	York	7 Nr Sheffield	Loan Gang	Y	Y-1841	Moffatt

47 convicts in assignment period

Probation, 1839-45

Convict #	Name	Age	Trade	Where Tried	Sentence	Native Place	Period of probation	How appropriated	Sent to Mine	Mining Confirmed	Ship
1839											
1206	Trewartha	William	Miner & wellsinker		14		8 mo				Layton
2620	Walker	John	Collier		10		6 mo	Port Arthur	Y		Layton
1840											
1260	Lewis	John	Collier		7		17 age				Runnymede
1503	Grove	George	Coal Miner	Somerset	15	Somerset	2 years				Mandarin
2647	Cadman	George	Collier	Salop	15	Shrewsbury	2 years	Port Arthur	Y	Y	Asia (5)
2655	Cullum	Thomas M	Collier	Ago	10	Ago	15 mo	Port Arthur	Y	Y-1841	Asia (5)
1498	Dainty	Shadwick	Collier	Salop	15	Shropshire	2 years	Port Arthur	Y	Y	Asia (5)
2673	Hartley	Thomas	Miner	York		Life Destorough, York	Two years	Port Arthur	Y	Y	Asia (5)
2674	Hackerill	John	Miner	Woolwich	7	Sutton, Birko	One year	Port Arthur	Y		Asia (5)
1199	Jones	John	Miner 2 yrs	Denbigh	15	South Wales	Two years				Asia (5)
1454	Quorish	Martin	Collier	Quemo	7	Tipperary		Twelve BR	Y		Egyptian (2)
1841											
1035	Froggart	George	Farm labourer/collier	Welts		Life Yorkshire	??		Y	Y	Lord Lyndoch
2711	Harris	William	Miner	Gloucester		Life Gloucestershire	2 years	Port Arthur	Y	Y-1841	Lord Lyndoch
2727	Hague	Daniel	Miner	York		Life Yorkshire	BR Two years	BR			Lord Lyndoch
1228	Jackson	Archibald	Miner	Upper Canada	14	Glasgow	PA Eighteen mo	Port Arthur	Y		Lord Lyndoch
1229	Johnson	William	Collier	Upper Canada	14	Glasgow	PA Two years	Port Arthur	Y	Y	Lord Lyndoch
1951	Masters	Aaron	Ploughman, farm labourer and Miner	Cornwall	10	Cornwall	BR fifteen mo	BR			Lord Lyndoch
2775	White	James	Collier	Somerset		Life Somersetshire	2 years				Lord Lyndoch
1546	Donald	Joseph Mc	Collier and sweep	York	10	Broughap in Sheffield	15 mo	Port Arthur	Y	Y	Lady Raffles
2733	Heyes	Robert	Collier	Chester	10	Manchester	15 mo	PA	Y	Y	Lady Raffles
2734	Hough	William	Miner and well sinker	Chester	10	Chawley	15 mo	Water works			Lady Raffles
2749	Hulme	George	Collier 2 years	Stafford		Life Lane End	2 years	PA	Y	Y-1841	Lady Raffles
157	Inskip	John	Collier	Stafford	10	Potteries, Staffordshire	15 mo	PA	Y	Y	Lady Raffles
1319	Lockett	William	Collier	Stafford	15	Lane End	2 years	PA	Y	Y	Lady Raffles
3349	Barnes	Matthew	Collier	York	14	Sheffiled	18 mo	New Town	Y		Duncan
1601	Greenhead	John	Collier	Lincoln	15	Burnley	2 years	New Town Farm	Y		Duncan
1342	Leather	William	Collier	York	7	Flockton	12 mo	New Town Farm	Y		Duncan
2020	Mountford	James	Collier & well-winker	Warwick	15	Exhall	2 years	New Town Farm			Duncan
1657	Pickford	John	Collier 18 mo	Stafford	7	Leongleton	12 mo	New Town Farm			Duncan
2021	Chandler	John	Miner	Glasgow, Court of Justice	7	Whitehaven	15	Slopen Island	Y		Asia (6)
2055	Garland	George	Coal Miner	Bristol Q.S.	10	Bristol	15	Slopen Island	Y		Asia (6)
2105	Lee	John	Miner	Lancashire Assizes	10	Wigan, Lancashire	15	Rocky Hills			Asia (6)
2111	Learoyde	John	Coal Miner	London	14	Wakefield	18	Rocky Hills			Asia (6)
2310	Holt	Robert	Coal Labourer	Liverpool Q.S.	10	Rochdale	18	Jerusalem	Y		Layton (4)
2376	Newham	William	Coal Miner	Paterson St Barracks C. Mil	14	Stafford	18	Slopen Island	Y		Layton (4)
2410	Rushworth	Benjamin	Coal Miner	York W Riding Q.S.	10	Bamsley	18	Rocky Hills	Y		Layton (4)
2444	Thomas	Joseph	Coal Miner	Staffordshire Q.S.	10	Shropshire	15	Jerusalem			Layton (4)
2478	Boothby	Joseph	Collier	Cheshire QS	7	W.Maxfield	18	Coal Mines	Y	Y	Westmorland
2541	Hoskison	Henry	Collier	Derby Ass		Life Newhall	2 years	Coal Mines	Y	Y	Westmorland
2579	Lloyd	John	Miner	Shropshire Ass		Life W Shrewsbury	2 years	Coal Mines	Y	Y	Westmorland
2849	Anderson	Edward	Miner	Hetstone Bart Ass	7	Penzance	1.5 years	Jerusalem			David Clarke
2878	Burrell	Henry	Miner	Somerset Ass	15	Petworth	2 years	Jerusalem			David Clarke
2905	Chedgoy	Thomas	Laborer and miner	Somerset QS	10	Stokes	15 mo	Jericho			David Clarke
2981	Henney	Thomas	Miner	Monmouth QS	15	Bristol	2 years	Tasman Peninsula			David Clarke
3024	Michel	Benjamin	Miner	Cornwall QS	10	Truro	15 mo	Jericho			David Clarke
3062	Place	John	Miner	Leeds Boro QS	7	Middleton	2 yrs	Tasman Peninsula	Y	Y	David Clarke
3141	Williams	William	Collier	Monmouth AS	21	Ponty Pool	2 yrs	Tasman Peninsula	Y	Y	David Clarke
3196	Dixon	Ralph	Miner	Durham As	15	Newcastle	2 yrs	Impression Bay			Lord Goderich
3250	Mills	Samuel	Miner	Lancashire QS	7	Oldham	2 yrs	Browns River			Lord Goderich

Probation (cont.)

3847	Thacker	Eusich	23	Collier	Stafford	7 Lane Dalf	18 mo	Coal Mines	Y		Barossa
3572	Winiwood	James	27	Collier	Shrewsbury	10 Bealey	15 mo	Coal Mines	Y	Y	Barossa
4044	Hope	Henry	23	Collier	Stafford Assz	15 Nr Bolton	2 yrs	Coal Mines	Y	Y	Tortoise
4045	Hemmingsley	Isaac	28	Collier	Stafford Assz	10 Shropshire	18 mo	Coal Mines	Y	Y	Tortoise
4046	Hancock	Edward	23	Collier	Stafford Assz	10 Nr Cougleton	18 mo	Coal Mines	Y	Y	Tortoise
4198	Sadden	Moses	21	Coal Miner	Stafford Assz	15 Lancashire	2 yrs	Coal Mines	Y	Y	Tortoise
4222	Tregoning	John	34	Miner	Cornwall Sess	10 Cornwall	2 yrs	Coal Mines	Y		Tortoise
1843											
10926	Granville	Thomas	41	Miner	Lincoln QS	10 Cornwall	18 mo	Browns River			Henrietta
10967	Lord	John	19	Collier	Lands QS	7 Baycup	18 mo	Long Marsh	Y		Henrietta
10969	Lloyd	Henry	26	Collier	Stafford QS	10 Potteries	18 mo	Long Marsh	Y		Henrietta
1844											
11352	Ashwood	Aaron	20	Collier	Salop QS	10 Brosely	22 mo	Jerusalem	Y		Anson
11358	Baker	Edward	20	Collier	C.C.Cr	15 Bedworth	22 mo	Jerusalem	Y		Anson
11380	Brearley	John	37	Collier	Lands QS	7 Radcliffe	18 mo	Jerusalem			Anson
11545	Humes	Michael	24	Collier	Durham Assz	7 Sunderland	20 mo	Jerusalem	Y		Anson
11546	Hayes	Thomas	24	Collier	Gloucester Assz	15 Wedsbury	24 mo	Jerusalem	Y		Anson
11556	Harris	Job	20	Collier	Stafford QS	15 Wolverhampton	20 mo	Jerusalem	Y		Anson
11616	Liddle	Hugh	22	Collier	Halifax	7 Woodside, Scotland	18 mo	Jerusalem	Y		Anson
11637	Mellor	Henry	16	Collier	Stafford QS	7 Litchfield	18 mo	Jerusalem	Y		Anson
11699	Richardson	James	18	Collier	Durham Assz	15 Gateshead	24 mo	Jerusalem	Y		Anson
11700	Ridler	John	23	Collier	Gloucester Assz	15 Wolverhampton	24 mo	Jerusalem	Y		Anson
11764	Senior	Thomas	26	Miner & wellsinker	York QS	7 Dewsbury	18 mo	Browns River			Anson
11820	Winterbottom	Robert	50	Collier	Lancashire QS	7 Manchester	18 mo	Jerusalem	Y		Anson
12232	Eburne	John	24	Weaver & Coal Miner	Warwick Assz	7 Birmingham		Ticket of Leave	Unknown		Duke of Richmond (2)
12324	Ross	Thomas	35	Miner	Dublin	10 Co Kildare		Probation Pass 3rd	BR		Duke of Richmond (2)
12333	Ramsbottom	John	37	Coal Miner	York QS	10 W Leeds		Probation Pass 3rd	BR		Duke of Richmond (2)
12383	Ashcroft	William	30	Collier	Lanc. Assz.	7 Lancashire	15 mo	Coal Mines	Y		Marian
12425	Brown	William	22	Coal Miner	Stafford QS	7 Bogeley	15 mo	Coal Mines	Y		Marian
12434	Berry	Joseph	30	Coal Miner	York Assz	10 W. Howarth	15 mo	Coal Mines	Y		Marian
12449	Cummings	William	23	Collier	Durham Assz	15 Durham	24 mo	Coal Mines	Y		Marian
12467	Eastwood	Richard	21	Coal Miner	Lancashire QS	10 Sunnyside	18 mo	Coal Mines	Y		Marian
12488	Farndon	John	20	Collier	Warwick Assz	10 Bedworth	15 mo	Coal Mines	Y		Marian
12564	Longbottom	Samuel	22	Miner	York Assz	15 W Leeds	21 mo	Coal Mines	Y		Marian
12578	Marygold	Thomas	19	Collier	Stafford QS	7 Bilston	15 mo	Coal Mines	Y		Marian
12591	Pile	Richard	37	Miner	Northumberland Assz.	7 Benwell	15mo	Coal Mines	Y		Marian
12594	Pumford	John	22	Miner	Salop Assz	10 Wolverhampton	15mo	Coal Mines	Y		Marian
12626	Smith	Joseph	25	Miner & sinker	Lancashire QS	10 Coventry	15 mo	Coal Mines	Y		Marian
12632	Shaw	Thomas	30	Collier	Salop Assz	10 Brosely	15 mo	Coal Mines	Y		Marian
12665	Ward	William	41	Wellsinker & miner	Lancashire QS	7 Chorley	15 mo	Coal Mines	Y		Marian
12687	Aston	Joseph	23	Miner	Stafford QS	7 Stoarbridge	15 mo	Coal Mines	Y		Equestrian
12708	Brereton	John	22	Collier	Stafford Assz	10 Potteries	18 mo	Coal Mines	Y		Equestrian
12741	Clay	Richard	21	Collier	Stafford Assz	10 Kingsley	15 mo	Coal Mines	Y		Equestrian
12762	Dower	Samuel	29	Miner	Warwick QS	10 Nr Truro	15 mo	Coal Mines	Y		Equestrian
12789	Glaves	Peter	34	Farm labourer & miner	Warwick QS	10 Nr Falmouth	15 mo	Victoria Valley			Equestrian
12809	Hodgkiss	Edward	27	Well sinker	Stafford Assz	7 Wolverhampton	12 mo	Browns River			Equestrian
12845	Lakin	Charles	23	Miner	Stafford Assz	15 Nr Nuncaton	24 mo	Coal Mines	Y		Equestrian
12860	Manley	Daniel	30	Well sinker	Southampton	10 Walsall	15 mo	Browns River			Equestrian
12861	Maloney	Richard	20	Collier	Southampton	10 Hanley	18 mo	Coal Mines	Y		Equestrian
12870	Masters	Richard	24	Miner & well sinker	Leeds	7 Cornwall	12 mo	Southport			Equestrian
12918	Stephens	Henry	30	Miner	Warwick QS	10 Cambourne	15 mo	Coal Mines	Y		Equestrian
12938	Upton	Robert	41	Miner	Stafford QS	7 Nr Walsall	12 mo	Coal Mines	Y		Equestrian

Probation (cont.)

Convict #	Name		Age	Trade	Where Tried	Sentence	Native Place	Period of probation	How appropriated	Sent to Mine	Mining Confirmed	Ship
1844 cont.												
12687	Aston	Joseph	23	Miner	Stafford QS		7 Stoarbridge	15 mo	Coal Mines			Equestrian
12708	Brereton	John	22	Collier	Stafford Assz		10 Potteries	18 mo	Coal Mines	Y		Equestrian
12741	Clay	Richard	21	Collier	Stafford Assz		10 Kingsley	15 mo	Coal Mines	Y		Equestrian
12762	Dower	Samuel	29	Miner	Warwick QS		10 Nr Truro	15 mo	Coal Mines	Y		Equestrian
12789	Glaves	Peter	34	Farm labourer & miner	Warwick QS		10 Nr Falmouth	15 mo	Victoria Valley			Equestrian
12809	Hodgkiss	Edward	27	Well sinker	Stafford Assz		7 Wolverhampton	12 mo	Browns River			Equestrian
12845	Lakin	Charles	23	Miner	Stafford Assz		15 Nr Nuncaton	24 mo	Coal Mines	Y		Equestrian
12860	Manley	Daniel	30	Well sinker	Southampton		10 Walsall	15 mo	Browns River			Equestrian
12861	Maloney	Richard	20	Collier	Southampton		10 Hanley	18 mo	Coal Mines	Y		Equestrian
12870	Masters	Richard	24	Miner & well sinker	Leeds		7 Cornwall	12 mo	Southport			Equestrian
12918	Stephens	Henry	30	Miner	Warwick QS		10 Cambourne	15 mo	Coal Mines	Y		Equestrian
12938	Upton	Robert	41	Miner	Stafford QS		7 Nr Walsall	12 mo	Coal Mines	Y		Equestrian
12948	Wouldhave	William	22	Collier	Durham		15 Baumard Castle	21 mo	Coal Mines	Y		Equestrian
12949	Williamson	William	21	Collier	Durham		10 Bishop	15 mo	Coal Mines	Y		Equestrian
13006	Bladen	Thomas	33	Miner	Sydney		14 Wellington	21 mo	Wedge Bay			Lady Franklin
13137	Barry	Joseph	25	Collier	Somerset		10 Nr Frome	18 mo	Southport			London
13161	Charlton	Henry	25	Well sinker	Southampton		7 Winchester	15 mo	Maria Island			London
13335	Townsend	William	24	Well sinker	Bedford QS		10 Nr Notts	18 mo	Southport			London
13391	Bowen	George	20	Collier	Stafford QS		7 Nr Norwich	12 mo	Impression Bay			Maria Somes
13422	Dennis	James Atkins	41	Brickmaker & well sinker	Lincoln		7 ??	15 mo	Salt Water River			Maria Somes
13608	Templeton	William	19	Miner	Glasgow		7 Nr Glasgow	1 yr	Impression Bay	Y		Maria Somes
13609	Templeton	James	22	Miner	Glasgow		7 Nr Glasgow	1 yr	Impression Bay	Y		Maria Somes
13631	Whale	David	30	Well sinker	Wilshire Assz		15 Brinkworth	2 yr	Southport			Maria Somes
1845												
16249	Moore	Joseph	22	Miner	Dublin		14 Nr Nottingham	21 mo	Darlington			Ratcliffe
16275	Ryan	John	20	Copper miner	Tipperary		Life Tipperary	30 mo	SW River			Ratcliffe
16278	Ryan	James	33	Miner & well sinker	Tipperary		15 Limerick	24 mo	Copper Gully			Ratcliffe
16414	Gibson	George	22	Miner	Fredericton QS		7 Barnsley	12 mo	Coal Mines	Y		Marion 2
16440	Howarth	John	19	Collier	Preston QS		7 Nre Blackburn	12 mo	Coal Mines	Y		Marion 2
525	Moff	Charles	23	Collier	??		7 Glawgow	1 yr	Pt Esperance			Lady Franklin (3)
16710	Burtonwood	Samuel	25	Collier	Bolton		7 Wigan	15 mo	Coal Mines	Y		Equestrian (2)
16717	Carswell	William	42	Collier & labourer	Salop QS		7 Steppington	15 mo	Coal Mines	Y		Equestrian (2)
16783	Harries	John	23	Collier & well sinker	Swansea		7 Caermarthen	12 mo	Coal Mines	Y		Equestrian (2)
16813	Johnson	William	20	Collier	Stafford QS		10 Warrington	18 mo	Coal Mines	Y		Equestrian (2)
16898	Roberts	John	28	Miner	Wold QS		7 Flintshire	15 mo	Coal Mines	Y		Equestrian (2)
16901	Robinson	John	35	Collier	Preston QS		7 Nr Wigan	15 mo	Coal Mines	Y		Equestrian (2)
16902	Rodgers	John	30	Miner	Wells QS		10 Nr Wells	15 mo	Coal Mines	Y		Equestrian (2)
16903	Rodgers	Joseph	28	Miner	Wells QS		10 Nr Wells	15 mo	Coal Mines	Y		Equestrian (2)
16904	Rodgers	Richard	51	Miner	Wells QS		10 Nr Wells	15 mo	Coal Mines	Y		Equestrian (2)
?	Weddell	Thomas	16	Collier	Winchester		20 Newcastle	??	Point Puer			Equestrian (2)
17179	Amphlett	John	29	Labourer & collier	Worcester QS		7 Nr Droitrich	15 mo	Coal Mines	Y		Pestongee Bomangee
17207	Brown	Thomas	18	Collier	Lincoln QS		10 Bilston	18 mo	Coal Mines	Y		Pestongee Bomangee
17230	Conway	James	19	Collier	Glasgow		7 Edinburgh	15 mo	Coal Mines	Y		Pestongee Bomangee
17287	Greaves	Ralph	17	Miner	Stafford QS		7 Handley		Point Puer			Pestongee Bomangee
17297	Harford	John	24	Coal Miner	Wells QS		10 North Petherton	18 mo	Coal Mines	Y		Pestongee Bomangee
17303	Harvey	Michael	20	Collier	Glasgow		7 Glasgow	12 mo	Coal Mines	Y		Pestongee Bomangee
17333	Kerr	Daniel	23	Collier	Oyer		7 Oyer	15 mo	Coal Mines	Y		Pestongee Bomangee
17423	Stokes	John	20	Collier	Montgomery QS		10 London	18 mo	Long Point	Y		Pestongee Bomangee

NB: **Red text** indicates uncertain translation

143 convicts in probation period

190 convicts total

Additional miners identified from source material (not included in the appropriation lists)

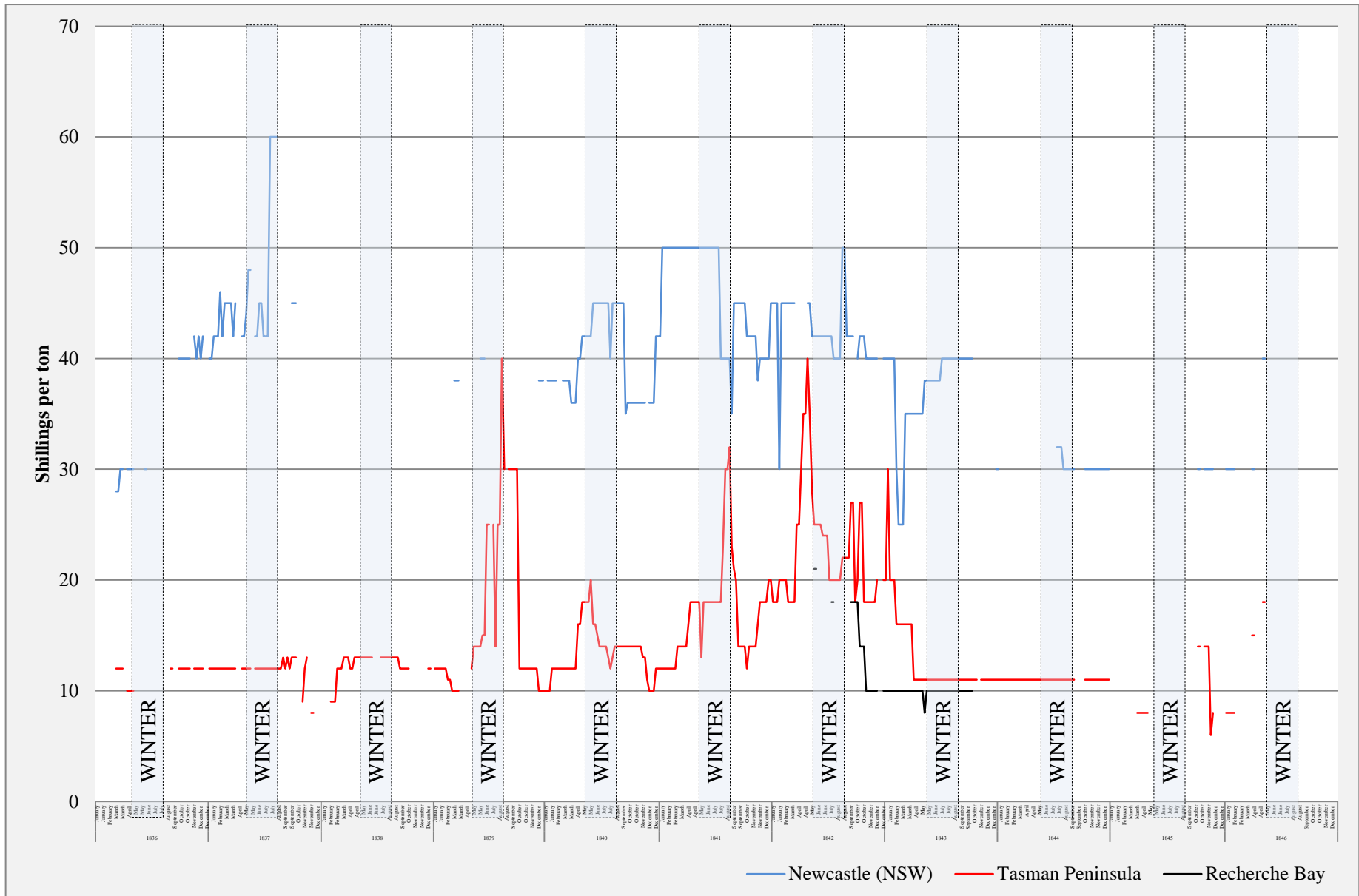
Convict #	Name	Trade	Where Tried	Sentence	Period of probation	Mining Confirmed	Ship	Arrival
750	Perry Joseph	Ploughman & miner	Stafford	7		Y-1841	Larkins	19 October 1831
844	Robbins William	Quarryman & wellsinker	Warwick	14		Y-1837	York (2)	29 December 1832
885	Rothwell John	Miner & quarryman	Lancaster Assz	Life			Lotus	16 May 1833
954	Rogers Thomas	Ploughman & miner	Cornwall	7		Y-1837	Moffatt	9 May 1834
1729	Halls John	Farm labourer & miner	Cornwall	Life		Y	Moffatt	9 May 1834
1824	Sowden Nathan	Ploughman & miner	Cornwall	14		Y	Moffatt	9 May 1834
1908	Stokes John	Collier	Stafford Assz	7		Y-1837	John Barry	11 August 1834
9103	Clish Robert	Collier	Stafford Assz	Life	4 yrs		Lord Renwick	10 April 1843
9215	Turner William	Collier	Stafford Assz	Life	4 yrs		Lord Renwick	10 April 1843
9217	Taylor Francis	Collier	Stafford Assz	Life	4 yrs		Lord Renwick	10 April 1843
9230	Wright Richard	Collier	Stafford Assz	21 yrs	3 yrs		Lord Renwick	10 April 1843

Source:

Samuel Cook, Superintendent, memorandum, 14 July 1841, Tasmania Papers 134, Frame 285, ML (ST)
 Charles O'Hara Booth, Commandant, to Josiah Spode, Principal Superintendent, 18 July 1837, CSO 5/57/1290, TAHO (UB)
 Charles O'Hara Booth, Commandant, to Matthew Forster, Acting Colonial Secretary, 10 February 1840, CSO 5/224/5707, TAHO (UB)
 Charles O'Hara Booth, Commandant, to Josiah Spode, Principal Superintendent, 18 July 1837, CSO 5/57/1290, TAHO (UB)
 Charles O'Hara Booth, Commandant, to Josiah Spode, Principal Superintendent, 18 July 1837, CSO 5/57/1290, TAHO (UB)
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 Charles O'Hara Booth, Commandant, to Josiah Spode, Principal Superintendent, 18 July 1837, CSO 5/57/1290, TAHO (UB)
 R.P. Stuart, Visiting Magistrate, to Comptroller General, 9 April 1846, Misc 62/17/A1106/5667, TAHO (BT)
 R.P. Stuart, Visiting Magistrate, to Comptroller General, 9 April 1846, Misc 62/17/A1106/5667, TAHO (BT)
 R.P. Stuart, Visiting Magistrate, to Comptroller General, 9 April 1846, Misc 62/17/A1106/5667, TAHO (BT)
 R.P. Stuart, Visiting Magistrate, to Comptroller General, 9 April 1846, Misc 62/17/A1106/5667, TAHO (BT)

APPENDIX 12: HUT AND BARRACKS SPATIAL COMPARISONS

APPENDIX 13: COAL PRICES, NEW WHARF (HOBART) 1836-46



Coal Prices, New Wharf, March 1836 - May 1846

Sources: *Hobart Town Courier* (January 1836 - June 1839), *Hobart Town Courier & Van Diemen's Land Gazette* (July 1839 - October 1840), *The Courier* (October 1840 - May 1846)

Prices are shillings per ton

Year	Month	Day	Port Arthur		Newcastle		Recherche
			Min	Max	Min	Max	
	March	4	12		28		
		11	12		28		
		18	12		30		
		25	12		30		
	April	1					
		8	10		30		
		15	10		30		
		21	10		30		
	May	29	10		30		
		6					
		13					
		20	10		30		
	June	27					
		3	10		30	35	
		10			30	35	
		16					
	July	24					
		1					
		8					
		15					
	August	22	10		40	45	
		29					
		4			40	45	
		12					
	September	25					
		1	12				
		8	12				
		16					
	October	23					
		30	12		40	42	
		7	12		40	42	
		12	12		40	43	
	November	20	12		40	42	
		28	12		40	42	
		3	12		40	42	
		11					
	December	17	12		42	45	
		24	12		40		
		1	12		42		
		8	12		40		
	1837	15	12		42		
		23					
		29					
		6	12		40		
	January	12	12		40		
		19	12		42		
		26	12		42		
		2	12		42		
	February	9	12		46		
		16	12		42		
		23	12		45		
		2	12		45		
	March	9	12		45		
		16	12		45		
		23	12		42		
		30	12		45		

	April	6					
		13					
		20	12		42		
		27	12		42		
	May	4	12		44		
		11	12		48		
		18	12		48		
		25					
	June	1	12		42		
		8	12		42		
		15	12		45		
		22	12		45		
		29	12		42		
	July	6	12		42		
		13	12		42		
		20	12		60		
		27	12		60		
	August	3	12		60		
		10	12		60		
		17	12				
		24	12				
		31	13				
	September	7	12				
		14	13				
		21	12				
		28	13		45		
	October	4	13		45		
		12	13		45		
		20					
		26					
	November	2	9	10			
		9	12				
		16	13				
		23					
		30	8	10			
	December	7	8	10			
		14					
		21					
		28					
1838	January	4					
		11					
		18					
		25					
	February	1	9				
		8	9				
		15	9				
		22	12				
	March	1	12				
		8	12				
		15	13				
		22	13				
		29	13				
	April	5	12				
		12	12				
		19	13				
		26	13				
	May	3	13				
		10	13				
		17	13				
		24	13				
		31	13				
	June	7	13				
		14	13				
		21					
		28	13				
	July	5					
		12	13				
		19	13				
		26	13				
	August	2	13				
		9	13				
		16	13				
		23	13				

		30	13			
	September	6	13			
		13	12			
		20	12			
		27	12			
	October	4	12			
		11	12			
		18				
		25				
	November	1				
		8				
		15	12			
		22				
		29				
	December	6				
		13	12			
		20	12			
		27				
1839	January	3	12			
		10	12			
		17	12			
		24	12			
	February	1	12			
		7	12			
		14	11		36	
		21	11			
		28	10	11		
	March	7	10	11	38	
		14	10		38	
		21	10		38	
		28				
	April	4				
		11	10			
		18				
		25				
	May	2	12			
		9	14			
		16	14			
		23	14			
		30	14		40	
	June	6	15		40	
		13	15		40	
		20	25			
		27	25			
	July	5				
		11	25			
		18	14	15		
		25	25			
	August	1	25			
		8	40			
		15	30			
		22				
		29	30			
	September	6	30			
		12	30			
		19	30			
		26	30			
	October	4	12			
		10	12			
		17	12			
		24	12			
		31	12			
	November	7	12			
		14	12			
		21	12			
	December	5	12			
		12	10	12	38	
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		14	14		45		
		21	14		45		
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		20	25		42		21
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	March	4					
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		22				
		29				
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