The surveyors' lot: making landscapes in New South Wales

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This paper discusses one of the hidden processes underpinning the making of the nineteenth-century cultural landscapes in southeastern Australia, that of the operation of the Crown Land laws and the work of licensed surveyors who set out the lots. Drawing on the author's research in the County of Cowley in NSW, examples are given of how the land laws and surveyors acted to create the shape of the landscape by their application of Government policy, law and regulations to the landscape. The lines on the surveyor's maps and their pegs in the ground set out roads, fence lines, farms and so on, thus transforming the landscape from pastoral runs into small farms. These lines or evidence of them persists into the present and forms and important layer of the cultural landscapes of rural Australia.

INTRODUCTION

Nineteenth-century Australian politics was dominated by one particular debate that underpinned the important events of the century from mining to wheat farming. The 'Land Debate' was about the best use of the vast unimproved lands of Australia and how to avoid a particular group of individuals (the squatters) from monopolising the control or ownership of land. This political debate manifested itself in laws passed in all legislatures aimed at 'unlocking the lands' by allowing 'free selection' of unimproved crown land by a class of people typified as the 'yeoman farmer' or the Selector (Powell 1970; Roberts 1966; Stuart 2000). Historians have long reduced this debate into a class conflict between squatter and selector, although historical evidence for a class conflict is limited and primarily drawn from the political rhetoric of the time rather than a careful analysis of historical and physical evidence from a diverse number of regions (e.g. Clarke 1978; Gammage 1986; Kingston 1988). At the local or regional scale of analysis, little attention has been given to the question of how the Land Debate contributed to the 'making' of the nineteenth-century cultural landscape (with the exception of some notable studies such as Coward 1969; Ferry 1995, 1996; Hancock 1972). It is an important question in the contemporary historical debate about the nature and impact of post-contact settlement on the Australian environment.

The ideals of 'free selection' and of the rights of squatters were enshrined in complex legislation regarding the occupation and sale of crown land. But the people who had to make it work were the land surveyors. It was the surveyor's interpretation of the law and regulations, their assessment of the land and the measuring of the lots that literally created a cultural landscape out of an empty parish or county. Often starting with a blank sheet of paper, they defined lots, roads, reserves, stock routes and recorded the nature of the land and improvements; in short, creating a landscape by their measurements and decisions. The work of the surveyor was one of the hidden forces at work creating nineteenth-century pastoral landscapes.

This paper takes a brief look at the process involved in creating the surveyor's lot in New South Wales, although South Australia, Victoria and Tasmania had a similar system. It illustrates how the system for land surveying applied crown land legislation and how the interaction of the law, the land surveyor and the land itself combined to create a landscape of portions, roads and reservations that made up the nineteenth-century landscape and subsequently became a layer of contemporary cultural landscapes.[1]

CROWN LAND LEGISLATION IN NSW

Before discussing the activities of the surveyors in the field, it is important to come to terms with land legislation in NSW. A brief summary is presented below. For more detail, there are summaries in Roberts's *History of Australian land settlement* (1968) and chapters 4 and 5 of 'Squatting landscapes of South Eastern Australia' (Stuart 2000). The actual legislation is also available in many law libraries.

Squatting occupation of much of southeast Australia was sanctioned under *An Act to amend an Act for regulating the sale of Waste Lands belonging to the Crown in the Australian Colonies, and to make further provision for the management thereof* (9 & 10 Vic. c104) of 1846 which was passed in England and brought into operation through the *Orders in Council* of 1847. The *Orders in Council* divided NSW into three districts:

1) Settled Districts, these included the original 19 counties plus the counties of Macquarie and Stanley, three miles inland from the coast, two miles (3.2 km) either side from major rivers (these were the Glenelg, Clarence and Richmond Rivers), areas around major cities, such as 25 miles from Melbourne (40.23 km), 15 miles (24.14 km) from Geelong, and 10 miles (16.09 km) from Alberton and Portland. Annual pastoral licences were issued for squatting runs in the Settled Districts.

2) Intermediate Districts, runs of up to 1600 acres (647.5 ha) could be leased for 8 years with additional fees for large holdings.

3) Unsettled Districts, which comprised most of NSW as it then was (including Victoria, which separated in 1851). Leases for 14 years could be granted for each run of 3200 acres.

The Orders in Council empowered the governor to issue leases for runs to anyone he saw fit to for a duration of up to 14 years. The use of the run was for pastoral purposes but the lessee was able to cultivate land to provide for the family and establishment. During the term of the lease, the land was not open to purchasers other than the lessee, who had the right to make a pre-emptive purchase (the so-called pre-emptive right). It was lawful for land to be sold to the lessee in lots above 160 acres at a minimum price of £1 per acre. Each lot was to be rectangular in form with at least two sides being aligned to the cardinal points of the compass. No lot was to have more than 440 yards (402.3m) of frontage for each 160 acres (64.7 ha) in area. If a lease expired, the governor could

put the run up for sale; the former lessee having a right to purchase at the unimproved value. Otherwise the value of improvement was estimated and added to the value of the upset price of the land. If the land was sold, the former lessee received the value of improvements.

The lessee of a run had considerable power regarding trespass and access to law for damages. For example if one lessee's sheep ate the grass on another's run, the victim could sue for damage to the grass. As runs were quite large, and by the 1840s most of southeastern Australia had been leased, it is not difficult to understand why the land was seen as being 'locked up' by the squatters.

Selection Legislation in NSW

The Crown Land Acts of 1861 were the culmination of a decade of agitation for free selection in NSW. Sir John Robertson, who framed the legislation, had fought two elections on the issue and, by using the tactic of threatening to swamp the Legislative Council with appointees, won passage of the legislation through Parliament (Stuart 2000:105). The legislation, consisting of two bills, was designed to deal with free selection on crown land (either leased or unencumbered) and to regulate leases (i.e. squatters) on crown land.

The operation of the various Crown Lands Acts was the principal means for 'unlocking' the lands that is the process for subdividing and selling crown land (which most of rural Australia was) even if it was leased by squatters. This process was called 'free selection' and relied on government regulation of the administration of crown land and in turn the selector's vote was critical for various parliamentarians careers. There was a deliberate intention behind this legislation to turn much of Australia into a landscape of small farms tended by yeoman farmers and their families.

Under the *Crown Lands Alienation Act (1861) 25 Vic. c1*, the principle of selection before land survey was established in law. Any person (or their agent) could select from 40 to 320 acres[2] of crown land prior to survey anywhere other than town or suburban areas, or areas in a proclaimed gold field or under mining lease, or leased land containing improvements (Section 13). From 1 January 1862 a selector could apply to select crown land (less certain exceptions) by tendering a written application on Land Office day (Thursday) for land between 40 and 320 acres. The selector could only make one conditional purchase of up to 320 acres; this was called by the Lands Department the conditional purchase. A selector could also make additional conditional purchases up to the total of 320 acres (i.e. the conditional purchase plus any additional conditional purchases) if frontage conditions were not exceeded. The land had to be surveyed by the government within one year.

The land was sold on condition that the purchaser resided on the land for one year (beginning within a month of selection) and improvements of not less than £1 per acre were made within a year. At the end of the three years the purchaser or alienee (i.e. someone to whom the selector had sold their interest in the land) could either pay off the balance or pay five per cent interest on the amount owing at the start of each year.[3] The alternative way of purchasing land was through the auction of surveyed blocks or lapsed conditional purchases. The act also allowed land to be reserved from sale for public purposes and therefore it was made unavailable for alienation.

The *Crown Lands Alienation Act (1861) 25 Vic. c1*, repealed the old Orders in Council but under the *Crown Land Occupation Act (1861) 25 Vic. c2*, the squatters retained their runs and as their original leases expired (most expired in 1862) they received new leases conforming to the provisions of the Occupation Act. The Occupation Act allowed leases for pastoral purposes by dividing NSW into three districts: First Class Settled districts (i.e. the old 19 counties plus the additional 3 counties), Second Class Districts and Unsettled Districts. Land within the settled districts could only be leased for one year; land in the other districts was available for five years. Selection was allowed on all these leases and as each piece of land was selected the rent on the run was progressively reduced.

Land was to be measured into lots as follows. Frontage to any river, creek, road or intended road was limited to 60 chains and boundaries aligned to the cardinal points. If a block had no frontage it had to be square. This rule determined the shape of much of the properties in rural NSW and contrasted with the use of natural features to define squatting run boundaries.

After 14 years of operation and two enquiries in the Legislative Assembly on the Reserves (1869) and the operation of the *Land Act* (1872), the original act was amended by the *Lands Acts Amendment Act* (1875, 39 Vic. c13). This raised the maximum area of land able to be selected to 640 acres (up from 320 acres) and also attempted to resolve a few definitional problems which had been used to evade the intent of the Land Acts. Section 13 of the Act is relevant to this study as it specified way land portions were to be measured and therefore the shape of the land on the ground. The form of measurement of portions was as follows:

> ... every conditional purchase if unmeasured and having frontage to any river, creek, road or intended road shall if within the first class settled districts have a depth of not less than twenty chains and otherwise shall have a depth of not less than sixty chains and shall have the boundaries other than the frontage directed to the cardinal points and if having no frontage as aforesaid shall be measured in a rectangular block and with boundaries directed to such cardinal points. Provided that no frontage as aforesaid and no boundary of such rectangular block shall exceed eighty chains in a direct line. Provided that should it appear to the Minister desirable the boundaries of portions having frontages may be made approximately at right angles with the frontage and may be so applied for and may be otherwise modified and the boundaries of portions having no frontages may be modified and necessary roadways and water reserves may be excluded from any measurement. (*Lands Acts Amendment Act 1875, Section 13*)

Between 1875 and 1884 there were a number of minor amendments and a failed attempt to revise the whole system, followed by an independent inquiry in 1883 known as the Morris–Ranken report after its authors (Morris Ranken 1883). These attempts to change the legislation were resisted by Robertson who still dominated the NSW Parliament and regarded his original legislation with great respect.

When the Secretary for Lands in Sir Alexander Stuart's ministry,[4] Mr James Farnell, rose in the Legislative Assembly on 11 October 1883 to introduce a new bill to reform the Lands Act, based on the findings of the Morris–Ranken report, few realised that the process of debating and passing the act would take over a year. Every measure was debated in full by the opposition, led by Sir John Robertson, and the process exhausted the members concerned. Eventually the *Crown Lands Act 1884* (48 Vic. c18) was passed.

The preceding Lands Acts were repealed by the *Crown Lands Act 1884* (48 Vic. c18) and a new system of land administration was introduced while retaining the essential principle of free selection before survey. Firstly, the act divided NSW into three divisions: Eastern, Central and

Western. The three divisions were themselves divided into Land Districts, with Land Agents, Local Land Boards (LLB) and District Surveyors appointed in each district or to cover several districts. The Land Boards acted as a virtual court to arbitrate on matters to do with crown land. This effectively decentralised the administration of the Lands Act from Sydney to local areas, allowing local economic and environmental considerations to be considered.

Squatters' runs (defined as pastoral holdings) were divided into two equal areas: the resumed area and the leasehold area. The leasehold area was to be leased by a squatter, in the Western Division the lease was for 15 years, in the Central for 10 years and in the Eastern for 5 years. The leasehold areas were exempt from conditional purchase (or selection). The resumed area was land considered open for selection although the squatter could lease the resumed area annually under an 'occupation license'. This land could also be selected by the squatter if eligible.

Selection in the Western Division of NSW was effectively ruled out, reflecting the reality that small farms were uneconomic in such a hash environment so far from markets.

Sections 56, 59 and 60 of the act set out how land was to be measured. The greater complexity in the rules than those in the original 1861 legislation and the amending 1875 Act reflected the need for more precise definitions within the legislation and the problems relating to the surveyors' interpretation of the regulations.

56. All land conditionally purchased if unmeasured and having a frontage shall subject to the provisions hereinafter contained have a depth of not less than sixty chains for any area not exceeding one hundred and eighty acres and for any larger area shall have a depth of not less than twice the frontage and shall have the boundaries other than the frontage directed to the cardinal points but if having no frontage shall be measured either as a square or a rectangular block of which the sides including each right angle shall not exceed the proportion of two to one. And no land shall be considered to be measured until the plan of the measurement shall have been approved of by the district surveyor or an officer duly authorized in that behalf of which approval his signature on such plan shall be prima facie evidence.

59. All additional conditional purchases shall in respect of measurement and frontage be subject to the conditions and provisions following viz.

    (i) Every such purchase when the area applied for does not with the original purchase exceed one hundred and eighty acres shall have a depth of not less than sixty chains but where the area applied for as an additional purchase together with the original purchase or with any prior additional conditional purchase amounts to or exceeds one hundred and eighty acres then such additional conditional purchase shall be measured in combination with the original and any prior additional conditional purchase in such a manner as to give a figure having a depth of not less than twice the frontage thereof or as nearly as may be practicable of such dimensions.

    (ii) Where additionally-purchased lands have no frontage each portion so purchased shall be measured so as to form in combination with any prior purchase or purchases either a square or rectangular block as hereinbefore described and all succeeding purchases shall be measured in a like manner.

    (iii) The intervention of any road not being a frontage or intended frontage road between an original conditional purchase and any additional conditional purchase or conditional lease applied for under this Part shall not be an objection to the measurement of the land so applied for and in every such case the additional purchase or purchases or conditional lease shall be measured as herein provided But if such road be a frontage or intended frontage road no additional conditional purchase or conditional lease shall be allowed for land not on the same side as the purchase or purchases by virtue of which such additional conditional purchase or conditional lease is applied for unless all the available land on that side has been exhausted then such additional conditional purchase or purchases or conditional lease maybe measured on the opposite side of such road or intended road and with frontage thereto.

60. Notwithstanding any of the provisions of this Act When it shall appear desirable to the Local Land Board or the Minister, Crown Lands may be measured across any frontage road or intended or designed frontage road and the boundaries of portions having frontages may be made approximately at right angles with the frontage and may be so applied for and may be otherwise modified although such modification may have the effect of altering the frontage or depth of any portion or the direction of any other boundaries thereof as hereinbefore prescribed and the boundaries of portions having no frontages may be modified in like manner and necessary roadways trigonometrical stations and sites for and sources of water supply may be excluded from any measurement.

The *Crown Lands Act 1884* was followed by a series of five amendments to rectify problems that should have been obvious during the passage of the act. Finally, in 1895 the Government introduced a major amendment of the Lands Act, the *Crown Lands Act 1895 (59 Vic. No18)*, to a chorus of dismay by members who remembered the year or more the 1884 Act had taken to pass. The legislation was an attempt to deal more practically with the issues of selection on lands in the Central and Western Districts. By this time the old squattocracy was effectively dead. Many central division squatting runs had been converted to freehold. In the Western Division the relentless drought and rabbit plagues had forced the squatters into debt and ruin. The new legislation attempted to deal with the compelling environmental factors underpinning land settlement (see Roberts 1968:310–311).

The Land Surveying System

The history of land surveying in NSW prior to 1861 and the nature of early surveys have been discussed in a number of publications (i.e. Hallman 1972:1–11). The best way of describing the system established for land surveying in NSW after 1861 is to see it as a type of Geographic Information System (GIS) designed to report on land capability, selections and compliance with the law, so that politicians and the authorities in the Sydney office were assured that the land law was being equitably administered and achieving its aims. To

follow this analogy through, the programers of this GIS were the Parliament of NSW, the law courts (including the Privy Council and, after 1883, the Local Lands Board and Lands Court) and senior members of the Lands Department. They made the law and its regulations and created precedents. The operating system was the system of Government in NSW (i.e. the ministry and departments) and the lands legislation and regulation.

The Instructions and Regulations to Surveyors formed the GIS software. These were issued from time to time to provide guidance on critical matters, such as how to set out a portion, how to provide roads, definitions of frontage and the like. Instructions to surveyors were issued in January 1836, April 1836 and in April 1848. The regulations seem to have been first issued in 1853, revised in 1864, 1872, 1882, 1886 and 1901 (Hallman 1973:31; Marshal 2002).

The hardware of this system was the surveyor, whose job it was to take the descriptions of the selections from the land agent and go out and surveys the land under contract to the Lands Department. There were two types of surveyors employed by the Lands Department: government and licensed surveyors. Government surveyors were employed by the Surveyor-General's Department and, later on by the Lands Department as salaried staff. They undertook surveys for reserves and townships and other infrastructure. From the 1830s the Surveyor-General's Department employed licensed surveyors under contract, initially to survey parishes but with the passing of the first Land Laws licensed surveyors were contracted to survey conditional purchases. They were employed on a fixed sum per survey and worked under the District Surveyor for each land district. The regulations specified how they were to survey the land.

Available unalienated crown land could be selected by anyone over 16 who made the appropriate application to the Lands Agent on lands day, which was every Thursday. The applicant completed a form that included a written description of the land which the applicant wanted to select. If the land had not been previously surveyed prior to making the application it was supposed to have a corner marked by the applicant (as set out in the regulations). The Lands Agent would record particulars of the application and pass it on to the District Surveyor or after 1883 to the Local Lands Board, who would determine whether it had been surveyed or not (using a charting copy of the relevant parish plan) and then tell the District Surveyor to arrange for its survey.

Occasionally, at this point in the process, an application would be considered objectionable in that it would not comply with the regulations or legislation. A ruling would be sought from higher up in the Lands Department (ultimately for difficult decisions the matter was referred to the Minister) and either the selection was modified, left unaltered or rejected.

After receiving the application the District Surveyor would issue a written instruction to the licensed surveyor appointed to a district to survey the land and report. It seems that particular licensed surveyors were given work in particular parishes within a district. The licensed surveyor would also get a copy of the applicant's description of the land so that he would be able to survey the land according to the applicant's wishes.

The licensed surveyor would then pack his theodolite, two steel ribands, a Gunther's chain, field book and other equipment, as specified in the regulations (NSW Surveyor-General's Department 1886:21) and ride off to do the survey. Usually there was a delay of at least 12 months in surveying a selection. Typically the surveyor would meet the selector on the land or visit his residence so as to determine where exactly the selection was. The surveyor was to report generally on the nature of the land, its suitability for agriculture and the nature and ownership of any improvements. For the first conditional purchase the surveyor was to report whether the selector was or had been resident on the portion. Land was to be measured following the legislative requirements set out in the act (see above). This information was to be drawn up on a standard pro forma plan and report which were set out in the regulations. Appropriate boundary markers were to be placed as defined in the regulations.

On the surveyor's return the plan was drawn up and forwarded with an accompanying letter via the District Surveyor to the Lands Department in Sydney. The plans were received by the Charting Branch which checked the plans for internal consistency and marked them on the charting copy of the parish plan held in the Sydney office. They would also check how well the land conformed to the regulations and refer any problems to the Surveyor-General or Secretaries in the Alienation Branch. Inevitably, the district surveyor was also consulted as the person with local knowledge. After 1884 some problems were referred back to the Local Lands Board and later the Lands Court. Ultimate authority for decision making rested with the Minister for Lands or after 1883 the Lands Court. If a matter was disputed or an error made, the licensed surveyor was sent back at his own expense to fix the survey. The licensed surveyor submitted a monthly account for his work and the department reserved the right to deduct the cost of an unsatisfactory survey from the surveyor's accounts. It can be seen that this system, at its best, provided a number of checks on the process of creating lots which ensured compliance with the regulations and limited the scope for individual action without authorisation. A fundamental, on-going problem with selection was a lack of accurate maps. In 1873 the Surveyor-General, Phillip Francis Adams, noted in his evidence to the *Select Committee on the Administration of Land Law* that the whole concept of selection prior to survey precluded there being up-to-date maps of selections (Surveyor-General, Phillip Francis Adams in New South Wales, *Legislative Assembly* 1873–1874). Thus it was possible to select land that had previously been selected or reserved but not surveyed. Land agents attempted to deal with this problem by roughly charting selection applications on parish plans but this was only a temporary expedient.

A typical example of this problem was the selection by William Ferguson Thompson on the pre-emptive right of Cuppacumbalong run.[5] Based on the selection files Thompson clearly did not want to select on this land, the squatter Leopold de Salis claimed Thomson was trespassing on his pre-emptive right and the Lands Department had no idea whether he was or not, as neither the pre-emptive right nor the selection had been surveyed (Stuart 2005:23–24). Thompson was moved on, although curiously the area of his selection was known to the de Salis family thereafter as 'Thompson's' (see Lands Department—Conditional Sales Branch Correspondence Files No 89/9551, SRNSW, 10/17637).

The Lands Department's maps, county, parish and portion plans were also not geo-referenced; that is, they were not tied into points on the ground as there was no system of triangulation in New South Wales at that time. Moreover, allotments were surveyed according to magnetic north, a variable point over time, complicated by obvious problems of compass accuracy in the field. Distances were measured by chaining, again subject to inaccuracies in rough terrain. Michael Fitzpatrick, former Under Secretary for Lands, in his evidence to the *Select Committee on the Administration of Land Law* commented, 'our system of survey is a sort of rule of thumb business, which the Colony has tolerated, but it does not admit of accuracy in maps' (Fitzpatrick, New South Wales, *Legislative Assembly* 1873–1874:6).

CREATING THE COUNTY OF COWLEY

In order to show how the land legislation and regulations, along with the foibles of the individual surveyors, combined to create a cultural landscape, details of surveying practice have been extracted from land files for parcels of land in the Parishes of Baroomoomba, Coolemon, Cuppacumbalong, Gudgenby, Murray, Naas, Orroral Tharwa and Yarra within the County of Cowley.[6] The County of Cowley is located to the west of the Murrumbidgee, southwest of Canberra (Fig. 1). The land records were accessed as part of the author's doctoral research and represent a small sample of surveying practice across New South Wales.

A total of 196 land parcel files were examined of which 37 were identified as requiring some further action by the Lands Department to correct problems. Two of the surveys lapsed in 1864 as they were not carried out within the appropriate time. This was a common problem in this year, as the Surveyor-General's Department had too few surveyors to meet the

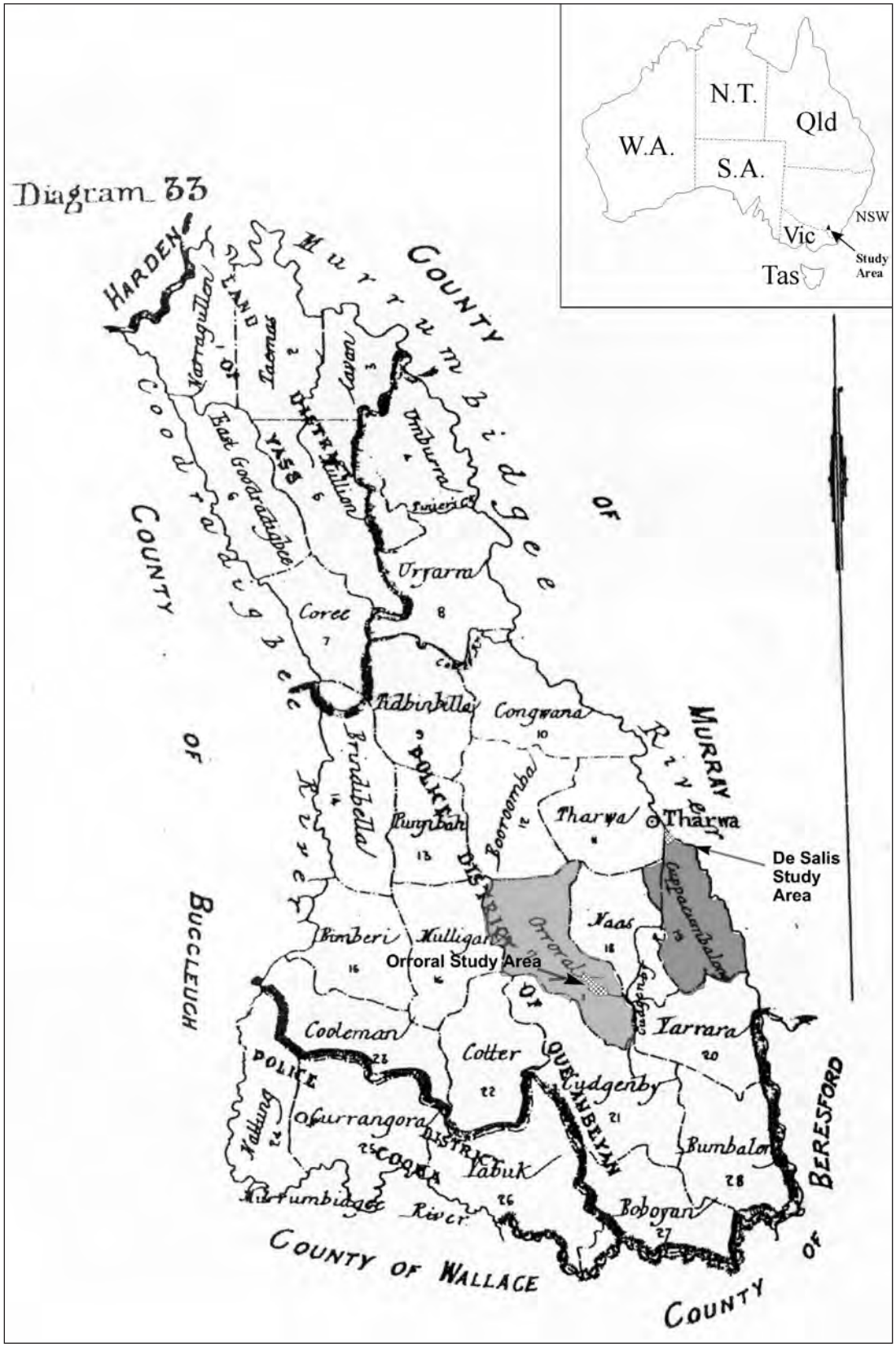

Fig. 1: Plan of the southern part of the County of Cowley showing parishes and study areas.

demand due to selection. The most common issue creating problems was associated with frontage. One of the most problematic examples was the Booroomba to Tharwa Road and the exact status of Paddys River upstream from Gibraltar Creek. The difficulty seemed to be one of making a ruling on one case in sufficient time for it to be applied in surveying other conditional purchases fronting the river and the road. This could take several years, to the general disadvantage and frustration of everyone. To solve the problem, Licensed Surveyor Pennefather ingeniously completed a 'provisional survey' that allowed Paddys River to become frontage for one application and got the selector to approve the modifications (Lands Department—Conditional Sales Branch Correspondence Files No 90/4871 SRNSW 10/20852). However, this flexible approach was only used once. Other problems were associated with the loss of boundary pegs[7] and there were a number of errors of measurement and forgotten bearings on plans.

The survey of Portion 43, Parish of Cuppacumbalong was a good example of the nature of surveyor's errors. Portion 43 was an additional conditional purchase in-filling between a series of existing portions. Licensed Surveyor Thomas McCord surveyed this portion on 1 March 1881. In August 1881 the Charting Branch reported that the survey misclosed and that the length of the northern boundary and location of some corner pegs were different from those on the survey plans of the previously selected portions which shared a common boundary. On the 14 September 1881 McCord replied by claiming that although one peg was missing all the bearings and distances were carefully taken.

The matter was referred to District Surveyor Arthur Betts to sort out; however the memo was sent to the District Surveyor at Goulburn where it sat until March 1883 when the Secretary of Lands asked whether the matter had been resolved. At that point Betts pointed out that he had not received the papers. The papers were retrieved from Goulburn and sent via Sydney to Queanbeyan and the instructions were transferred to Surveyor Glasson in August 1883 and then to Surveyor Wood in September 1883 (Lands Department—Conditional Sales Branch Correspondence Files No 90/447710 SRNSW 10/20855).

Mr Surveyor W. H. O'M. Wood reported on an 'unambiguation' survey of Portion 60 on 19 October 1883. Except for one corner he noted only slight differences to McCord's measurements but thought that it would be difficult to adjust the boundary of the portion given the length of time since the original survey. Wood did not think that they had the power to make such alterations. Betts replied to Wood's memo on 22 October requesting further information and later on 2 November Betts requested the amount of time taken to do the survey. Wood replied that it took him two days. The cost of the work was to be deducted from McCord's next invoice (Lands Department—Conditional Sales Branch Correspondence Files No 90/447710 SRNSW 10/20855).

The most amusing error was when Licensed Surveyor Thomas McCord accidentally wrote Murray instead of Cowley as the county on one of his survey forms. Naturally this threw out all the checks in the Sydney office and resulted in repeated requests for information to the District Surveyor for Murray going unanswered as he, at least, knew that the portion was in Cowley. Unfortunately he simply returned the requests unanswered without informing anyone that the county was incorrect.

A Tale of Two Selections

Two examples of problematic land selections in the County of Cowley show how the process of land selection and the surveyor's role in it worked to create a landscape.

Example—Leopold de Salis's Conditional Purchases, Cuppacumbalong

On 29 August 1872 Leopold de Salis, who was the lessee of Cuppacumbalong run in the Parish of Cuppacumbalong, made five selections: a conditional purchase of 50 acres and four additional conditional purchases. He later made two further additional conditional purchases on 5 June 1873 (Table 1).

Table 1: Leopold de Salis's conditional purchases, Cuppacumbalong. Lands Department — Alienation Branch Correspondence Files No 99/3375, SRNSW Ref. 10/3760.

Ref No	Portion No	Area (acres)	Type	Date
72-5458	13	50	CP	29 August 1872
72-5459	14	40	Add. CP	29 August 1872
72-5460	17	60	Add. CP	29 August 1872
72-5461	18	40	Add. CP	29 August 1872
72-5462	19	40	Add. CP	29 August 1872
73-5627	20	40	Add. CP	5 June 1873
73-5628	21	40	Add. CP	5 June 1873
		310		

These selections took up land in a triangular section formed by the junction between the Murrumbidgee River and the Gudgenby River (Fig. 2). The land was immediately to the south and over the river from the Cuppacumbalong homestead. The land was steeply rising from both edges of the rivers however there was also a small creek and flat in the middle of the area. It seems that de Salis's aim in selecting was to protect this flat ground. The rivers may be considered frontage in theory but due to the steep nature of the terrain and the rocky nature of the Murrumbidgee River, it was not all that suitable for grazing or agriculture. The upland flat, however, was level land, well watered and with abundant grass, which made it desirable for grazing. If the de Salis's held this land they would effectively preclude selection by anyone else in the catchments as they held the best land.

Licensed Surveyor James Thompson undertook the original survey of the conditional purchase on 25 February 1874, some 18 months since the first selection was made. Improvements on Portion 13 were identified as an iron house valued at £55, on portion 21 a yard (£100) and on portion 20 a salt shed and yard (£25). The selection (Portion 13) was not resided on despite there being a house on it. Thompson's survey plan was sent in on 9 June 1875, well over a year later, and received in the Alienation Branch on 11 June. On the 17 June it was referred to a Mr Lewis for comment as to the form of the survey. Mr Lewis minuted to the Surveyor General as follows:

> Mr Licensed Surveyor Thompson has been employed for some years in the field and I do not think he should have measures in such a form lands for either conditional purchase or auction sale to similar to the enclosed without giving a satisfactory reason. (Folio dated 23rd June 1875, Lands Department—Alienation Branch Correspondence Files No 99/3375, SRNSW Ref. 10/3760)

A minute was then prepared to the Under Secretary for Lands for submission to the Minister for Lands that:

> The conditional purchases of L. F. de Salis have not been measured in accordance with the description and are moreover for the most part objectionable as applied for—being described as square blocks instead of with frontage. It is therefore recommended that the survey shewn by the black lines on the accompanying sketch, should not be received and that the CP should be measured as shewn by red lines with frontage to the

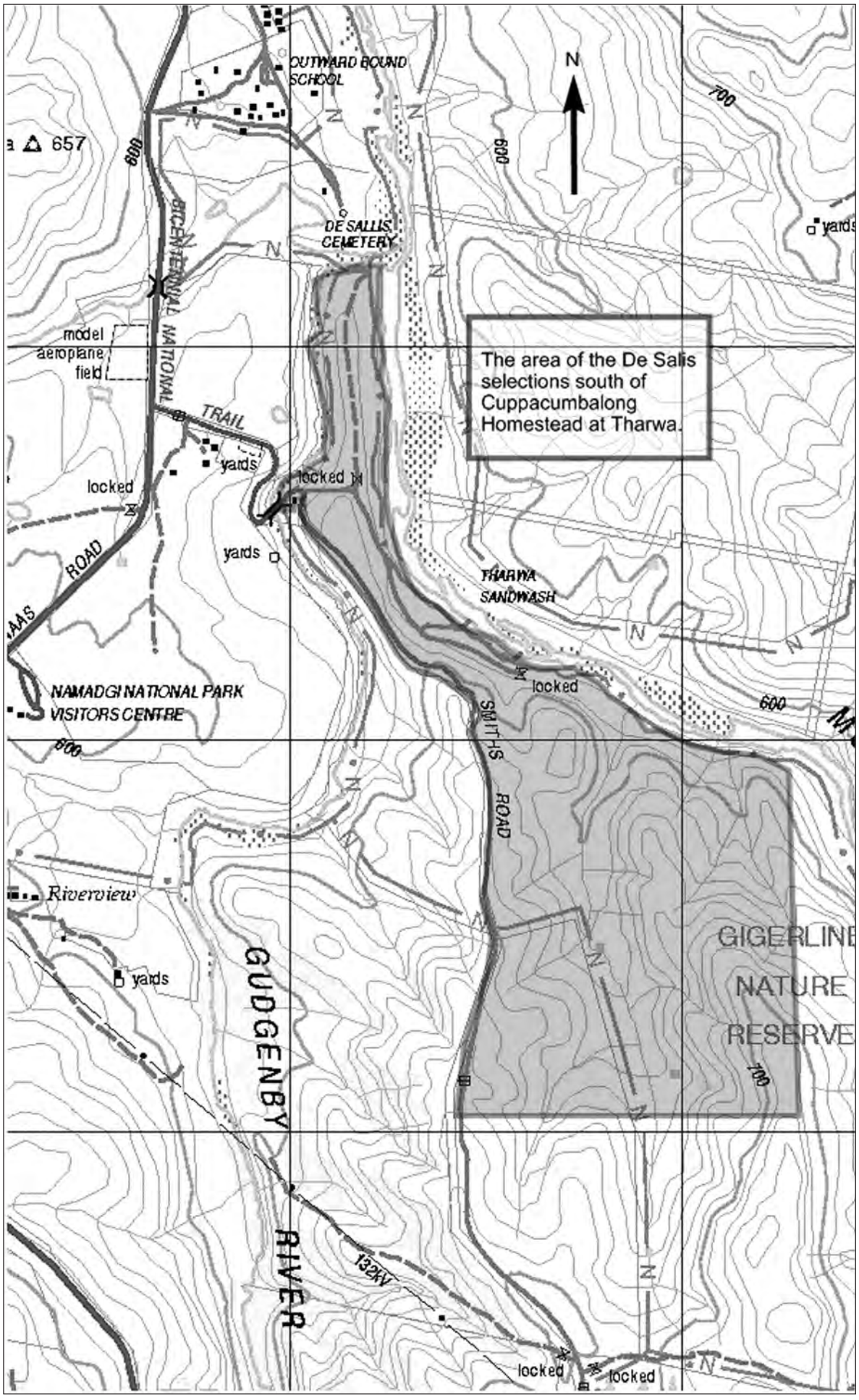

Fig. 2: Cuppacumbalong, the area of the de Salis selections discussed in the paper, base image © Department of Lands, 2006.

road and river. (Folio dated 19 September 1875, Lands Department—Alienation Branch Correspondence Files No 99/3375, SRNSW Ref. 10/3760)

What had happened? Firstly, although the descriptions were a bit vague, the plan of the de Salis's original selections can be seen (Fig. 3). These take in the upper parts of the catchments and effectively surround the flat, thus 'peacocking' (picking the eyes out of the country) the most valuable part of the catchments' land—the flat. This was probably not objectionable under the law, although obviously it was to the disadvantage of other selectors and contrary to the intent of the land laws.

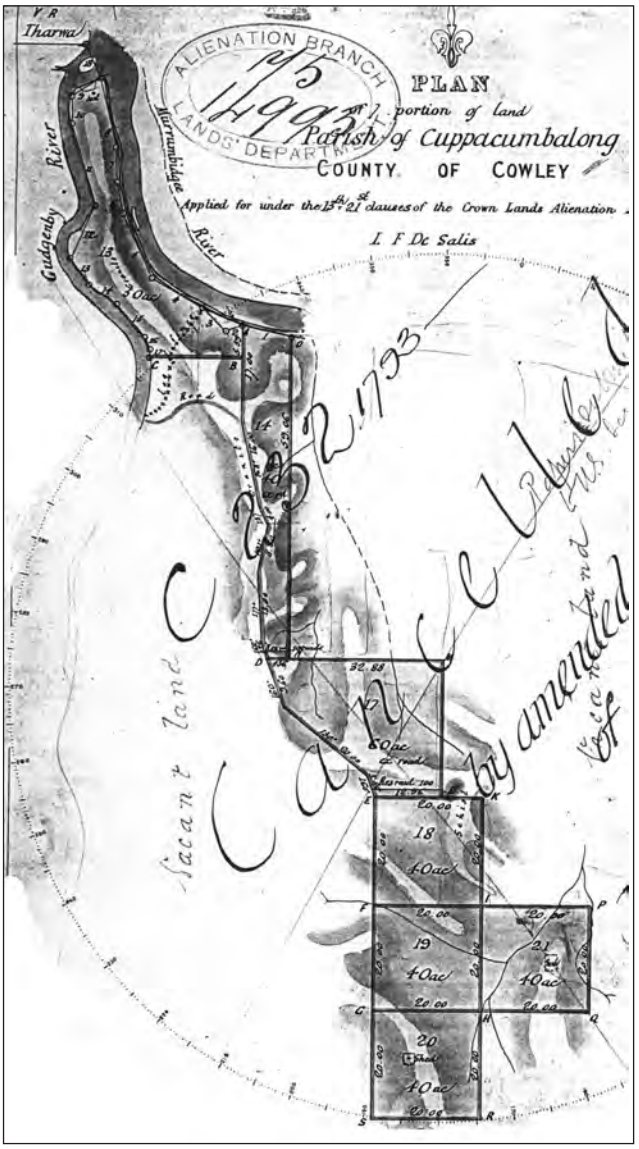

Fig. 3: Leopold de Salis's original conditional purchases. Lands Department—Alienation Branch Correspondence Files No 99/3375, SRNSW Ref. 10/3760.

It is surmised that when Thompson was shown the land on the ground—probably by one of de Salis's sons, he realised that there were not enough improvements on the land to fulfil the requirements and altered the survey to take in the improvements further up the catchment, namely the salt shed and yards. In doing so, however, Thompson missed the best part of the flat. This design fell foul of the regulations against selection along frontage and was redesigned in the Alienation Branch using the road and the river as frontage.

Thompson was instructed to resurvey the lots in September 1875, but he did not do so. He was again reminded in November 1877. There is rather a nice file note dated December 1877 saying 'Mr Licensed Surveyor Thompson MLA is now in Sydney his address is at "Parliament"' (Folio dated December 1977, Lands Department—Alienation Branch Correspondence Files No 99/3375, SRNSW Ref. 10/3760), referring to Thompson's election as member for Queanbeyan on the 28 October 1877. The instruction was then issued to Licensed Surveyor McCord who resurveyed de Salis's lots in their current form on 11 May 1878 (Fig. 4), see Lands Department—Alienation Branch Correspondence Files No 99/3375, SRNSW Ref. 10/3760). In the end the de Salis's got the flat and as a result the current course of Smiths Road became fixed. This is a good case of regulations that were set up to prevent peacocking through controlling access to frontage actually working against this aim, as the nature of the environment (in this case the road and the river) mitigated against the availability of good grazing land.

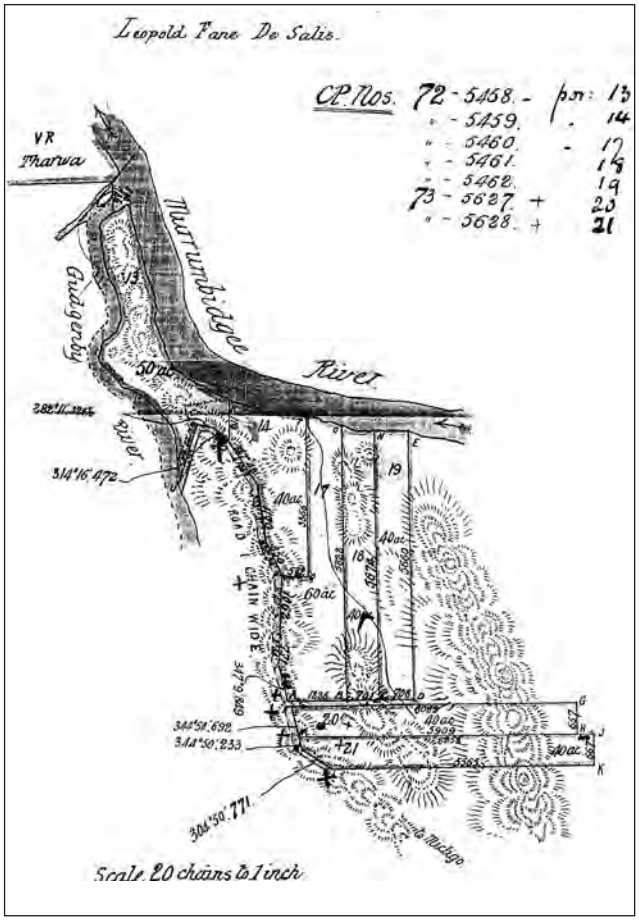

Fig. 4: How the Lands Department revised the original survey. Lands Department—Alienation Branch Correspondence Files No 99/3375, SRNSW Ref. 10/3760.

Example Two—Orroral Valley

A similar issue regarding frontage arose with the survey of the Orroral Valley, NSW (Fig. 5). The Orroral Valley had been a squatting run in the Brindabella Ranges from at least 1848 and from 1860 onwards was leased by the McKeahnie family. For some reason no pre-emptive right was ever claimed for this run, although there was a house and yards in the valley from around the 1830s (which Ian Farrington from ANU has been recording). There was also a bridle track from Naas to the Coolemon run which was a 'snow line' run held by the de

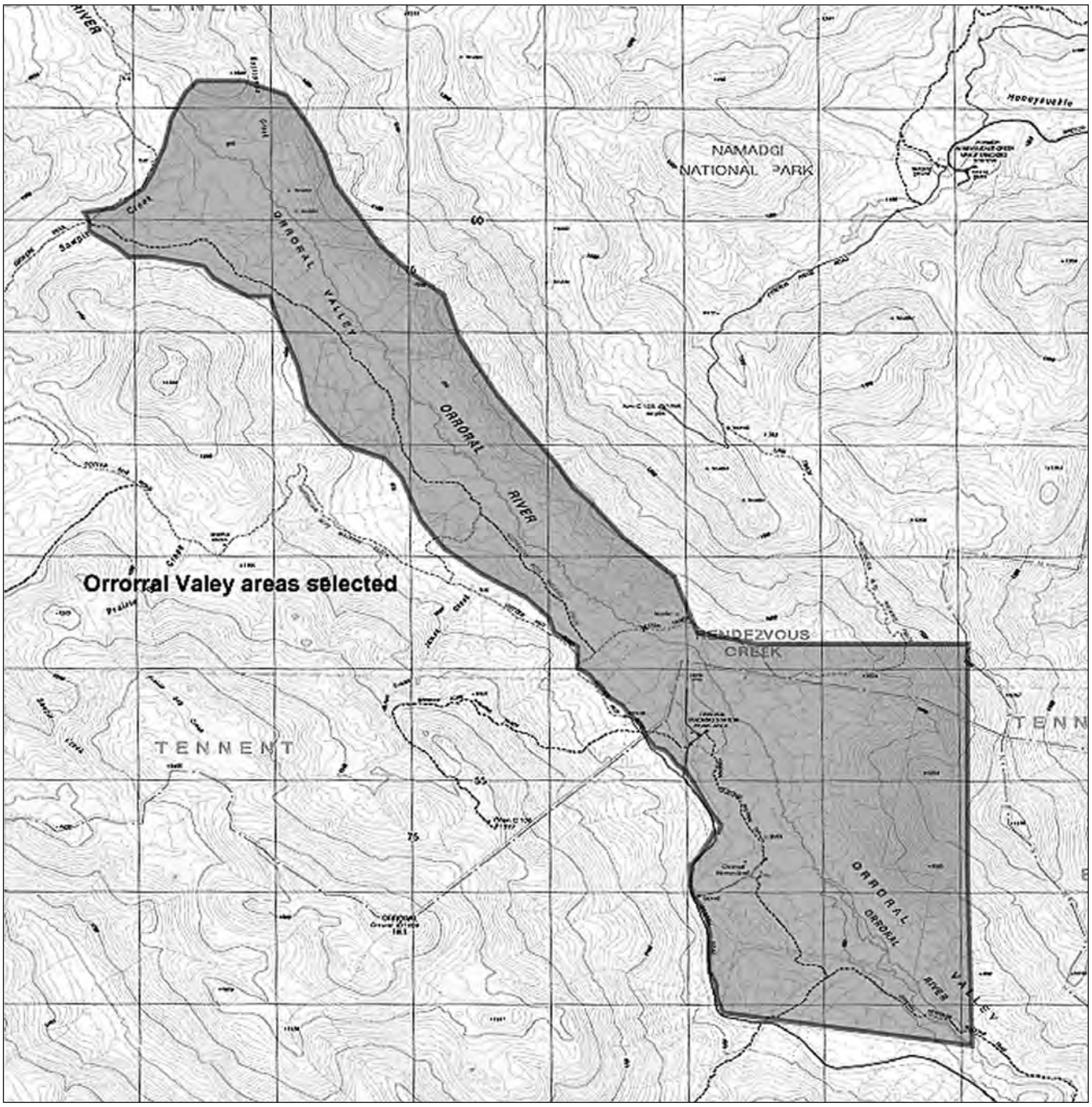

Fig. 5: Orroral Valley areas selected, base image © Department of Lands, 2006.

Salis family. Although the sheep were sent by another route, George de Salis records many trips from Coolemon to Naas via Orroral as this was a quicker route suitable for horses.

The Orroral Valley is about 900 m above sea level and comprises a swampy flat roughly 1 km wide and 7 km long. At the bottom it is a natural grassy flat with scattered trees on the valley sides leading to denser vegetation on the mid to upper slopes. The flat was therefore ideal for sheep grazing, although a bit isolated from the main squatting run held by the McKeahines, Booroomba.

Beginning in October 1882 three conditional purchase series were begun which effectively took up the whole of the Orroral Valley flats. They were started by dummies acting for the McKeahine family selecting conditional purchases. The series were:

Portion 8 Patrick McLaughlin selected 19th October 1882

Portion 4 James McLaughlin selected 29th March 1883

Portion 15 Edward Bell selected 26th April 1883

These were followed by additional conditional purchases taking in most of the valley floor. Dummying was a well established method for securing a run against other selectors by having false selectors (typically employees) take up selections which could then be transferred to the run holder at a later date. As was customary practice descriptions of all three series of conditional purchase and additional conditional purchases were sent to Licensed Surveyor Jas. E. Lester from the Lands Agent at Queanbeyan via the District Surveyor. Lester promptly surveyed the portions on 24 and 25 July 1883 (see Folio 83/8950 Lands Department—Conditional Sales Branch Correspondence Files No 88/23966, SRNSW Ref. 10/17564).

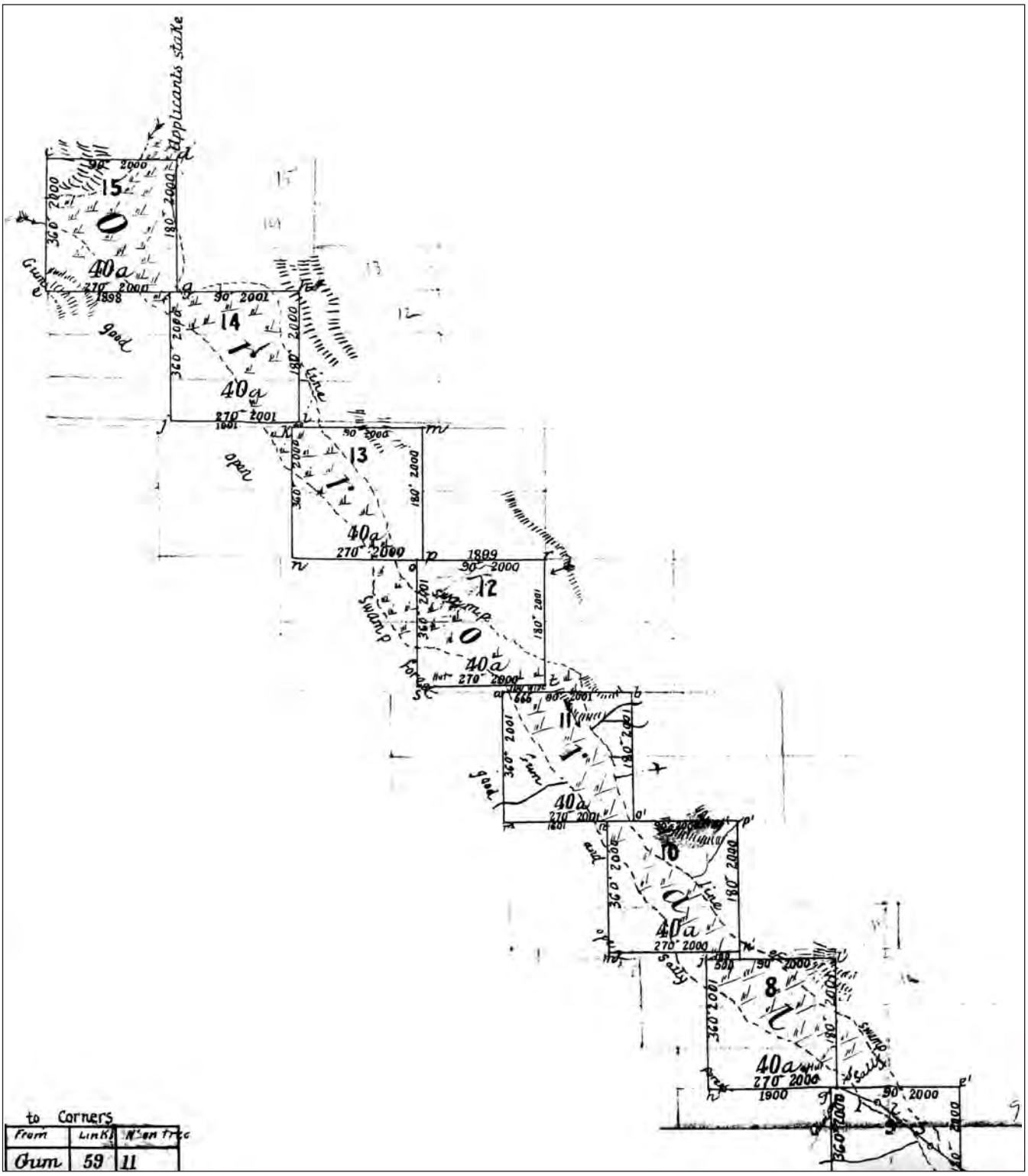

Fig. 6: Part of the plan covering all the selections at Orroral showing Lester's original design. Lands Department—Conditional Sales Branch Correspondence Files No 94/19131 SRNSW Ref. 10/18104.

According to the regulations if there was no frontage then blocks were to be square, so Lester created a series of square portions along the Orroral Valley (Fig. 6). These portions encompassed the main course of the Orroral River or creek/swamp and the track to Cooleman, which seems to have run parallel to the swamp. The form of this survey was not accepted by the District Surveyor Arthur Betts who noted:

> ... the form of measurement although in accordance with the description is objectionable as giving an undue command over adjacent lands.

Ororral Swamp or river is the main channel draining an extensive watershed and contains permanent water.

> It is certainly the most important watercourse in the locality and in my opinion should form frontage and if necessary with sight lines could have been adopted along the margin of the swamp as the frontage boundary.
>
> Independent of the question of frontage it is submitted that the form of survey is very objectionable, as giving

the command of the valley for 2¾ miles to two individuals for the conditional purchase of only 320 acres of land (vide Mr Lester's letter 93/95; see annotation on folio dated 19 September 1884, 83/8950 Lands Department—Conditional Sales Branch Correspondence Files No 88/23966, SRNSW Ref. 10/17564).

District Surveyor Betts was aware of potential problems and had instructed Lester on which course to follow on the certified folio of the application (Fig. 7). A comprehensive file note on the subject was made by Surveyor E. Twynam, on behalf of the Surveyor-General, which reversed aspects of Betts' approach:

1. Judging from the particulars reported of the aspect and character of this watercourse it appears to me that the conditions are those to which the form of measurement prescribed by Par 30 of Regulations is especially applicable.

2. I cannot acquiesce with the design adopted which is adverse to the public interest and is not an economical distribution of the advantages afforded by the water course.

3. If measured with frontage these portions would necessarily be bounded by the watercourses and assuming that the channel cannot be exactly defined then it is considered that the portions should be measured across it.

4. If bounded by sight lines question may arise as to ownership of the Swampy flat watercourse which probably comprises the most valuable part of the land, and I presume the reservation from sale of the watercourse is not advised; in fact in respect of these Con Pur applications it would not be expedient to reserve from sale.

Possibly amendment may be designed utilising part of the present survey and the remaining portions not covered by the applications may be also be amended ... measured for Sale, under directions from the District Surveyor

New plans will be required and when forwarding the same the District Surveyor might be so good as to report further upon this subject.

Send memo of instructions to Mr L.S. Lester in accordance with paragraphs 1, 2 & 3 above, directing amendment of survey as indicated and requesting new plans. These papers to be forwarded to the District Surveyor at Cooma requesting him as to the amendment of survey which should take place as soon as possible. (Folio 83/8952 Lands Department—Conditional Sales Branch Correspondence Files No 94/19131 SRNSW Ref. 10/18104)

On the back of the folio a summary of instructions to Lester (signed by Betts but not in his hand) notes the above and continues:

Cps 83/66, 76, 88, 96 to be measured if possible with the road to Cooleman forming their western boundary. It is almost certain that a road is required along Orroral Valley running parallel with the direction of the watercourse for access north west and south east, and if such is the case the position of the road should be designed as to form, where possible the east or west boundaries of the portions provided that a road can be obtained a sufficient distance from the watercourse for the purpose, and if otherwise the road should be reserved through the portions. Mr Lesters attention is particularly directed to the question of the necessity for access in general in this County the only means of access obtainable is along the valleys. (A.C. Betts 16 December 1883 Folio 83/8952 Lands Department—Conditional Sales Branch Correspondence Files No 94/19131 SRNSW Ref. 10/18104)

Lester later noted that 'the land not embraced by the amended surveys of James McLauchlin's CP's is partly included in the reserve recommend[ed by] my letter 84/15 of 12th March hence no measurement for auction have been made in connection with these CP's awaiting approval of Reserve'. (Folio 83/8952 Lands Department—Conditional Sales Branch Correspondence Files No 94/19131 SRNSW Ref. 10/18104)

Lester resurveyed the land on the 29 February 1884 (Fig. 8). Again, the survey was forwarded to Sydney but the Charting Branch detected an error in measurement and referred the matter back to Lester for action. Lester had written 6387 for 6837 for the length of the northern boundary of Portion 15 but this was readily fixed.

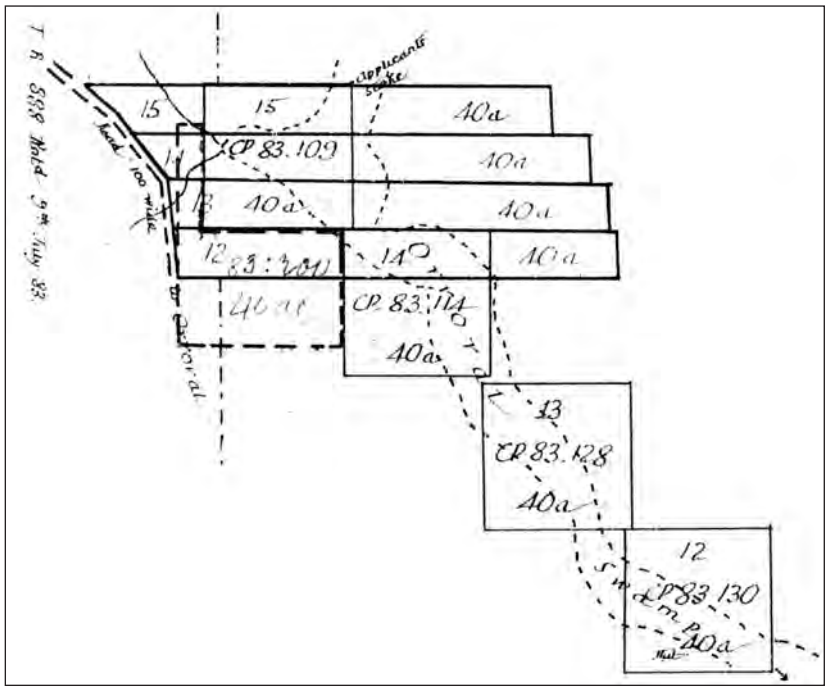

Fig. 7: Tracing of Edward Bell's selections showing how they were modified in relation to the original square lots. Lands Department—Conditional Sales Branch Correspondence Files No 94/19131 SRNSW Ref. 10/18104.

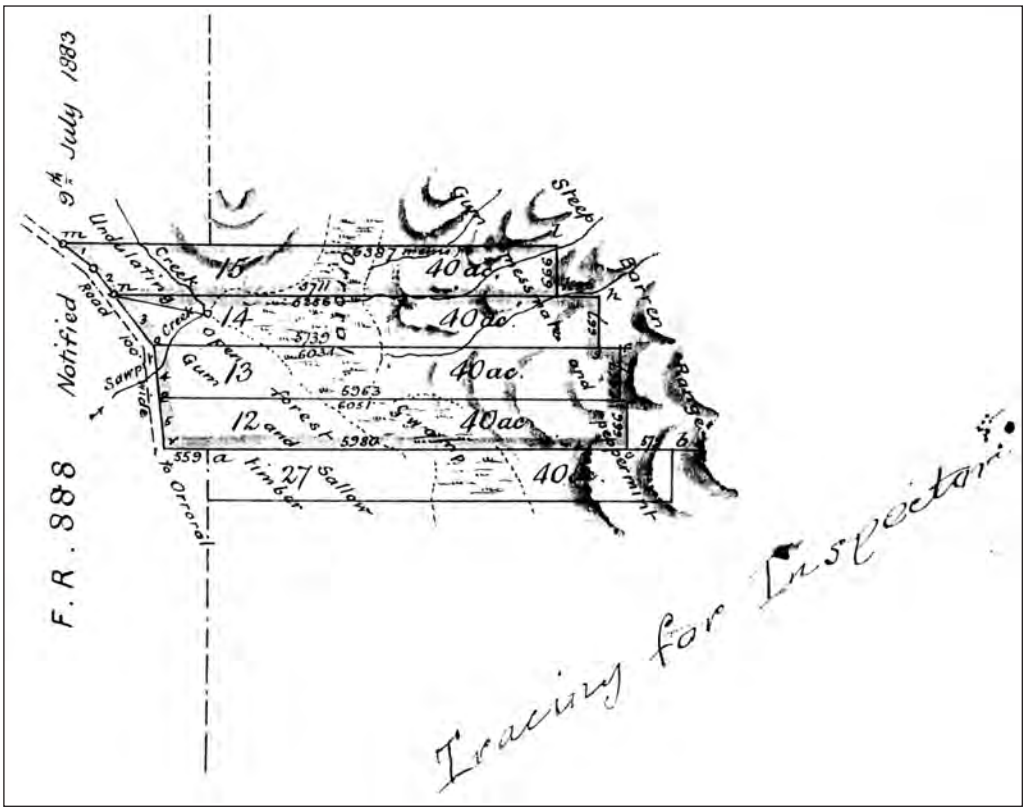

Fig. 8: Tracing of the approved portion plan for Edward Bell's selections. Lands Department—Conditional Sales Branch Correspondence Files No 94/19131 SRNSW Ref. 10/18104.

Lester seems not to have been penalised for having to do this resurvey because he was following his original directions. However, as the descriptions of the land were so altered from the original applications it was recommended that the conditional purchases be declared void and the remeasured portions be declared open for selection (Folio 84/4428 Lands Department—Conditional Sales Branch Correspondence Files No 94/19131, SRNSW 10/18104). Eventually, the land was reselected by the original selectors whose residence and improvements were considered adequate and the conditional purchases were approved. Thereupon they were promptly transferred to C. H. McKeahnie, the lessee of Orroral run in 1888. These selections effectively kept the most valuable part of the Orroral run in the control of the McKeahnie family. The road is now dignified with the name 'Orroral Road' and runs along the western side of the valley. Much later part of the land was used for the Orroral Valley Tracking Station in the mid-1960s.

These two examples show how the system of land subdivision worked, especially in the case of dubious selection practices and the interpretation of the surveying regulations in the ground by surveyors. The system of checks in head office and the local knowledge of the District Surveyor worked to keep the surveys within the scope of the regulations. However much depended on the surveyor's judgement but if he got it wrong or someone in head office directed a resurvey it was at the surveyor's expense.

CONCLUSION

This paper illustrates how much of the actual creation of the cultural landscape—a landscape of surveyor's lots—is a function of the surveyor and his interpretation of the lands laws as applied to the situation in the field. Was Orroral Swamp a frontage? Was the track south from Cuppacumbalong going to be a major road and therefore also a frontage or would it remain a simple track unworthy of the title frontage? These largely hidden decisions are the implementation of the theoretical debates about selection and an analysis of these local decisions explains more about how the landscape was created than an analysis of land politics ever will.

With the increasing interest in the history of how humans have interacted with the environment in Australia there has been a concurrent rise in landscape studies, most claiming to attempt to understand 'the making' of a particular landscape. The decision made be surveyors in creating the first lots of freehold land inevitably lead to the construction on the ground of boundary fences, roads and subsequently use of the land which in the study area was primarily for grazing. All these activities leave remains on or in the land surface which in turn critically influence the decisions of subsequent owners of the land much in the way Derwent Whittlesey envisaged with his concept of sequent occupance. Features like fences and roads are also difficult to completely erase and so even if roads are closed and lots consolidated the archaeological evidence of these features remain in the landscape.

Explanation and interpretation, the task of those who study the past needs to encompass both the high level of political debates about land use policy but also to understand that the speeches and politics have a resultant impact on the way policy is implemented on the ground. Squatters, selectors, the minister, the Surveyor-General, the clerks in the Charting Branch and the District Surveyor; steel ribands, theodolites and docked pay! No wonder the surveyor's lot was not a happy one.

ABBREVIATIONS

SRNSW State Records of New South Wales

ENDNOTES

1 The cultural landscape is held to be created or formed by a number of human induced processes interacting over

time with the environment to create the cultural landscape. This is opposed to the idealised 'natural landscape' (or untouched wilderness) where 'natural' processes act to create a landscape unsullied by human interaction (see Stuart 2000, Chapter 2).

2 In discussing the size of selections runs and frontages it is easier to work in acres and chains so that the size relationships can be easily understood rather than converting everything to hectares, a system alien to the surveyors and selectors of the time. A square mile is 640 acres; there are 80 chains in a mile and 100 links to a chain, each link was 7.92 inches. A useful site for conversion from 'imperial' to metric can be found at http://www.measurement.gov.au/index.cfm?event=conversions .

3 There was no actual time limit on completing the purchase so a selector could simply pay off the interest as a form of rent yet have security of tenure. Some of the portions selected on the Cuppacumbalong run were held in this way, for example portion 28 Parish of Tharwa was selected in 1868 and the title was finally issued on completion of payment in 1920 after a period of 52 years.

4 Sir Alexander Stuart, Premier of NSW 1883–1885 won the 1883 election with reform of the land laws as a platform.

5 Land to be purchased by Leopold De Salis the lessee of Cuppacumbalong run as part of his pre-emptive right under the 1848 Orders in Council.

6 New South Wales was divided into counties and parishes (areas of land of about 25 square miles and not associated with any religious institution). Within the parish there were portions which are defined as land not within cities, towns or villages set aside as a parcel for disposal (Hallman 1973:227–234).

7 As can be imagined wooden pegs degraded or were lost, in one case it seems the land itself was eroded away.

8 A 'snow line' run was one generally covered with snow in the winter and used for summer grazing.

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