



**HERITAGE  
COUNCIL**  
OF WESTERN AUSTRALIA

## **REGISTER OF HERITAGE PLACES – ASSESSMENT DOCUMENTATION**

### **11. ASSESSMENT OF CULTURAL HERITAGE SIGNIFICANCE**

The criteria adopted by the Heritage Council in November 1996 have been used to determine the cultural heritage significance of the place.

#### **PRINCIPAL AUSTRALIAN HISTORIC THEME(S)**

- 3.5.3 Developing agricultural industries
- 3.16 Struggling with remoteness, hardship and failure
- 5.8 Working on the land

#### **HERITAGE COUNCIL OF WESTERN AUSTRALIA THEME(S)**

- 302 Rural industry & market gardening
- 501 World Wars & other wars

#### **11.1 AESTHETIC VALUE\***

The underlying fabric of *Watermark Kilns, Northcliffe* provides physical evidence of the aesthetics of tobacco kiln structures. (Criterion 1.1)

The setting of *Watermark Kilns, Northcliffe*, comprising cleared land, re-growth timber, and remnant vegetation combined with the sculptural shapes of the kilns, make up a picturesque setting. (Criterion 1.3)

#### **11.2. HISTORIC VALUE**

*Watermark Kilns, Northcliffe* typifies the tobacco farm complexes that were developed on the 56 tobacco farms developed under the War Service Land Settlement Scheme which expanded the established industry, and the product of which contributed significantly to local cigarette and tobacco manufacture until the 1960s. (Criterion 2.1)

The site of *Watermark Kilns, Northcliffe* was first developed as part of the Group Settlement Scheme in the inter-war period and provides evidence of Group Settlement land clearing and farming. In the post-World War Two

\* For consistency, all references to architectural style are taken from Apperly, R., Irving, R., Reynolds, P. *A Pictorial Guide to Identifying Australian Architecture. Styles and Terms from 1788 to the Present*, Angus and Robertson, North Ryde, 1989.

For consistency, all references to garden and landscape types and styles are taken from Ramsay, J. *Parks, Gardens and Special Trees: A Classification and Assessment Method for the Register of the National Estate*, Australian Government Publishing Service, Canberra, 1991, with additional reference to Richards, O. *Theoretical Framework for Designed Landscapes in WA*, unpublished report, 1997.

period, it was developed as part of the War Service Land Settlement Scheme, which trained and settled 56 ex-servicemen on tobacco farms. (Criterion 2.2)

*Watermark Kilns, Northcliffe* was developed and worked as a tobacco farm by Roy and Peg Bell, who introduced new varieties of tobacco to Western Australia and whose innovations in tobacco farming practices drew attention from the Agricultural Department, with whom Roy was later employed as a station manager. (Criterion 2.3)

*Watermark Kilns, Northcliffe* is important as a surviving example of the buildings which were part of a typical War Service Land Settlement Scheme tobacco farm. The relative intactness of the drying/grading shed is notable. (Criterion 2.4)

### **11. 3. SCIENTIFIC VALUE**

The place has the capacity to reveal the industrial archaeology of tobacco kiln technology. (Criterion 3.1)

### **11. 4. SOCIAL VALUE**

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## **12. DEGREE OF SIGNIFICANCE**

### **12. 1. RARITY**

*Watermark Kilns, Northcliffe* is a rare surviving group of tobacco farm buildings, of which few examples remain in the early twenty-first century. (Criterion 5.1)

*Watermark Kilns, Northcliffe* demonstrates a distinctive way of life and land-use, that of the tobacco farm developed under the War Service Tobacco Farm Land Settlement Scheme, of which only 56 were developed, and which operated for this purpose only in the 1950s. (Criterion 5.2)

### **12. 2 REPRESENTATIVENESS**

*Watermark Kilns, Northcliffe* provides physical evidence of the processes involved in tobacco farming has a capacity to provide an understanding of tobacco farming, while the drying shed a good intact example of the building type. (Criterion 6.1)

*Watermark Kilns, Northcliffe* retains vestiges of group settlement, substantial evidence of tobacco farming, and of adaptive use of redundant buildings for alternative uses. (Criterion 6.2)

### **12. 3 CONDITION**

*Watermark Kilns, Northcliffe* varies in terms of condition. The landscape retains the open spaces as evidence of farming and has been little affected by the effects of management.

The drying shed has received just sufficient maintenance to ensure that its values are retained and that it is structurally sound.

The residence has been heavily adapted on a number of occasions and its interior reflects little of the values associated with period of use during tobacco farming. The remaining evidence is structurally sound.

The kilns and single men's quarters retain their frame structures and much of the working detail, but have been re-clad and adapted for holiday accommodation. These structures are in good condition.

Overall *Watermark Kilns, Northcliffe* is in fair to good condition.

#### **12.4 INTEGRITY**

*Watermark Kilns, Northcliffe* has not been used for tobacco farming and processing for a considerable time. However, the original intent of the place and its functions are reasonably apparent. The adaptation of the place has reduced its legibility in terms of internal workings. The drying and grading shed remains as built to a significant degree and retains a high degree of integrity. The buildings are sustainable and overall the place retains a moderate degree of integrity.

#### **12.5 AUTHENTICITY**

The drying shed has received minor maintenance, sustained some fabric loss, but remains essentially authentic.

The residence has been heavily adapted on a number of occasions, but the external form has changed little. The place retains a moderate degree of authenticity.

The kilns and single men's quarters retain their frame structures and much of the working detail, but have been re-clad and adapted for holiday accommodation. The elements retain authentic structure and therefore have a moderate degree of authenticity.

Overall *Watermark Kilns, Northcliffe* retains a moderate degree of authenticity.

### 13. SUPPORTING EVIDENCE

The documentary evidence has been compiled by Robin Chinnery, Historian. The physical evidence has been compiled by Philip Griffiths, Architect.

#### 13.1 DOCUMENTARY EVIDENCE

*Watermark Kilns, Northcliffe* is a collection of former tobacco farm buildings in a farmland setting, including a framed and asbestos clad drying shed with an iron roof, framed and custom orb clad single and twin kilns adapted for holiday accommodation with Zinalume custom orb roofs, single men's or worker's quarters (fmr), and a framed and asbestos clad former soldier settler's homestead with an iron roof. These were built to standard plans as part of the development of a tobacco farm for Roy and Peg Bell, under the War Service Land Settlement Scheme in c. 1950-51. In 2000-03, the kilns and workers' quarters have been extensively repaired and converted to farm stay accommodation by Trevor and Jeanette Hulcup.

In the early 1850s, tobacco was first cultivated in the eastern colonies of Australia. In 1854, it was suggested that tobacco be cultivated in Western Australia. In 1860-62, Ralph Mews experimented with tobacco growing, and Bishop Salvado grew a crop at Victoria Plains in the early 1860s, but concluded that the high rate of tax on tobacco precluded a profitable industry. In 1863, James Morgan's efforts at Avon Valley also came to naught. In the 1860s, the Muirs grew tobacco at *Deeside*, in the Warren district, mainly for medicinal purposes. During the American Civil War period, when imported tobacco leaf was in short supply, attempts were made to grow it at Hester, near Bridgetown, and also in New South Wales and Victoria, and it was also being grown in Queensland by 1884.<sup>1</sup>

In 1904, Peter Michelides (arr. 1901), who had prior experience in cigarette manufacture in Egypt, set up a tobacco manufacturing business in Murray Street, Perth, utilising tobacco imported from Turkey and Greece. Experimental plantings of tobacco by two ex-Victorian farmers at Waroona caught his interest, and led the Michelides family to experiment with tobacco crops at Waroona under the direction of an Egyptian grower whom they brought to Australia, but the soil and rainfall proved not to be suitable. In 1912, the government nursery at Hamel successfully grew tobacco. However, it was concluded that production would be uneconomical without the protection of import duties, and there were no further investigations into the viability of commercial production until 1923.<sup>2</sup>

Following World War One, a scheme was instigated to assist the emigration of ex-servicemen and women to various parts of the British Empire. In 1920, as economic conditions deteriorated in Britain, it was decided to widen the assisted migration scheme. James Mitchell, Premier, and later Lieutenant Governor and then Governor, of Western Australia, prepared a

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<sup>1</sup> Evans, H. D. *Southern Sketches: A tale of the development of the Warren and nearby districts* Department of Agriculture, Western Australia, 1993, p. 47; and Maskell, Peter 'Tobacco Growing in Western Australia' no details, photocopy, courtesy Jeanette and Trevor Hulcup, p. 174.

<sup>2</sup> Maskell, Peter *ibid*, pp. 177-179; and Allan, J. M., Officer in Charge, Tobacco Industry 'History and Trends of Development in Tobacco Industry in Western Australia' in Tobacco Statistics, Agriculture Department, SROWA AN 82/1 Acc. 935 Item 975 Vol. 1, 30 June 1950.

comprehensive immigration programme for submission to the other governments, which was implemented after the British Parliament passed the Empire Settlement Act in 1922. In February 1923, it was agreed that 75,000 migrants would be sent to Western Australia.<sup>3</sup>

In the South-West, it was proposed to settle groups of 20 families, with 100 acres allocated to each individual settler, to establish dairy farms. In March 1921, the first such group was organised at Mitchelldean, eight miles west of Manjimup. In 1921-23, further groups began preparing blocks at scattered settlements including in the Manjimup, Pemberton, and Northcliffe districts, the latter being named after Lord Northcliffe. The heavily timbered country proved difficult to clear, much of the land was found to be unsuitable for dairying, few of the settlers had agricultural experience, and the scheme was dogged by administrative problems. By 1924, when many group settlers had left their holdings, the scheme was suspended, and a Royal Commission was held. In 1925, the scheme resumed after a new Agreement between the Commonwealth and State governments, and most new group settlers were sent to Manjimup, Northcliffe and Busselton.<sup>4</sup>

The future site of *Watermark Kilns, Northcliffe* was first cleared and the first house built as part of the Group Settlement Scheme. In 1931, Nelson Location 10251, which would later become Nelson Location 12152, the site of *Watermark Kilns, Northcliffe*, was first registered in the ownership of Stanley Bassett.<sup>5</sup> Details of his use of the land have not been ascertained to date, and by the post-World War Two period, it was no longer in his ownership. The Group Settlement Scheme proved to be 'a social and financial tragedy', and the State eventually bore a loss of more than £6.5 million.<sup>6</sup>

In 1923, the Agriculture Department carried out successful trial plantings of tobacco at Perth. This was followed by trial plantings at Peel Estate, Coolup, Boyanup, Bridgetown and Manjimup in November, but the first two failed, and only poor growth was obtained from the latter. In 1923-24, tobacco was grown and harvested at Manjimup by J. Murphy and J. Turner, but they experienced difficulty in curing the leaf. Samples of this tobacco was sent to tobacco manufacturer Michelides Limited in Perth, and also to Melbourne Group Settler Herbert John 'Jack' Limmer, who was also associated in this venture, and who established a plantation at Dixvale in 1926, where the first tobacco curing kiln in the Victoria was built. In 1928, the first crop of tobacco grown by Macedonians Nick Palasin, Tom Milentis, Vic Milentis, and Louis Mitchell failed, but thereafter they were successful in its cultivation. Macedonians would predominate in tobacco growing in Western Australia throughout its history. In 1928-29, experimentation by the Australian Tobacco

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<sup>3</sup> Crowley, F. K. *Australia's Western Third: A History of Western Australia from the first settlements to modern times* Macmillan & Co. Ltd., London, 1960, pp. 201-202.

<sup>4</sup> *ibid*, pp. 211-214; and Evans, H. D. Evans, H. D. *The Story behind the Manjimup-Northcliffe Railway Line* Times Offset, Manjimup, Western Australia, 198-, p. 26.

<sup>5</sup> Information from DOLA to Jeanette Hulcup, 20 March 1998.

<sup>6</sup> Burvill, G. H. 'The Forward Move 1889-1929' in Burvill, G. H. (Ed.) *Agriculture in Western Australia: 150 Years of Development and Achievement 1829-1979* University of Western Australia Press, Nedlands, 1979, p. 36.

Organisation also established that the soil and climate in the Manjimup district was suitable for tobacco growing.<sup>7</sup>

In 1930, the first commercial crop of 25 acres of tobacco was planted, which proved successful. Consequently, in 1931-32, the acreage planted increased to 348 acres, which yielded 211,230 lbs., the total value of the crop being £18,000. It was in this year that Michelides established his first tobacco plantation. These results encouraged more extensive plantings of 466 acres in 1932-33. Through the 1930s and into the World War Two period, the area under tobacco was centred around Manjimup. The initial costs of clearing the heavily forested land for tobacco planting were heavy. The crop was grown and harvested during the spring and summer months on water retentive soils. Other than Michelides' tobacco manufacturing company's plantations, most operations were on a small scale, with plantings ranging in area from four to 10 acres, 'the majority ... worked by Southern Europeans.'<sup>8</sup> Growing tobacco was labour intensive, and often all family members would be engaged in the various tasks involved.

By the late 1930s, tobacco farming in Western Australia was well established. Most of the practices which had evolved would continue through into the post World War Two period, as did the general requirements with regard to the necessary buildings. In December 1938, in an article on the harvesting and curing of tobacco leaf, the Agriculture Department's tobacco adviser, A. Sharp, described the various buildings which were part of the operation at this period, and which were to remain much the same throughout the period in which tobacco was commercially grown in Western Australia, i.e. through to the early 1960s. The stringing shed was 'usually a more or less temporary erection of hessian stretched over bus poles', which was conveniently located in proximity to 'the curing barns', as the kilns were sometimes known.<sup>9</sup> The size and number of barns was dependent on the extent of the tobacco plantation. Most in this State were small operations, of five to 15 acres, for which 'a number of small barns, each 12 ft. by 12 ft. inside measurement, and carrying four tiers of leaf, will be found most suitable', one barn being sufficient for each four acres of crop, whilst for larger operations, 'barns 16 ft. by 16 ft. with four or five tiers' would suffice for each seven acres.<sup>10</sup>

Sharp advised that it was preferable for the barns to be built 'in a fairly well sheltered position on slightly sloping ground, the furnaces being built on the lower side in order to lessen the amount of excavation necessary.'<sup>11</sup> The framing of each barn should be 4ins. x 2ins. jarrah timber, 'with wall studs set at 2 ft. centres', the building being lined with timber, corrugated iron, asbestos-cement sheets, or re-cycled hessian bags, sewn together and cement washed, which was the cheapest option.<sup>12</sup> The smaller barn would be readily heated by a single brick furnace, whilst two were recommended for a

<sup>7</sup> Maskell, Peter op. cit., pp. 179-180; and Evans, H. D. *Southern Sketches ... op. cit.*, pp. 47-48.

<sup>8</sup> Allan, J. M., 'History and Trends of Development in Tobacco Industry in Western Australia' op. cit.; and *Australian and New Zealand Association for the Advancement of Science Handbook of Western Australia* Government Printer, Perth, 1947, p. 69.

<sup>9</sup> Sharp, A. 'Harvesting and Curing of Tobacco Leaf' in *Journal of Agriculture*, W. A. December 1938, p. 464.

<sup>10</sup> *ibid*, pp. 465-466.

<sup>11</sup> *ibid*, p. 466.

<sup>12</sup> *ibid*.

larger barn, with the flue pipes arranged as indicated in the accompanying ground plans. Drawings show the side section and sectional elevation of a 12 ft. x 12 ft. barn, with an air inlet at ground level and an open ridge ventilator at the apex, controlled from the exterior, for efficient ventilation was essential. The 16 ft. x 16 ft. barn was designed on similar lines, other than arrangement of furnaces and flues.<sup>13</sup>

Curing the tobacco leaf generally took three to five days, by which time the colour had been fixed and the leaf was brittle and dry. In the next stage, known as conditioning, a certain amount of moisture was re-absorbed, the optimum being a moisture content of around 12%, before the leaf was 'bulked down' in the bulk shed, often referred to as the drying shed, which generally included the grading shed under the same roof.<sup>14</sup> This building was 'a well-built shed preferably set on stumps at least two feet off the ground.'<sup>15</sup> Bulking involved making a stack, 3-4 ft. wide, where the leaf was stacked 'with the butts to the outside', and, as each cure was added to the stack, two or three heavy planks would be placed 'on top to consolidate the bulk and exclude air as much as possible.'<sup>16</sup> It was recommended that the bulks be covered with hessian to protect the leaf from sunlight, and 'later on, against excessive absorption of moisture from the air after the Autumn rains have set in.'<sup>17</sup>

In March 1939, Sharp described the grading and marketing of tobacco leaf. The grading shed should be built well off the ground, and lined with either asbestos-cement sheets or other damp proof material to prevent moisture during handling leading to mould. The south wall should be fitted with ample windows for diffused light on the grading bench, which was fitted with compartments for the various grades of leaf. Grading generally took place in May-July. It was important that direct light not fall on the tobacco leaf, as its true colour cannot be judged in direct light.<sup>18</sup>

In 1939-40, 1,019 acres of tobacco were planted in Western Australia. After war-time restrictions limited tobacco imports, the Commonwealth urged for increased home production. The State government advanced growers £10 per acre to assist in the costs of planting and cultivation, and 1,365 acres were planted in 1940-41, of which Michelides grew 650 acres. In 1941-42, after introduction of a quota on the manufacture of tobacco, Michelides planted about 350 acres, and the overall area fell to 1,293 acres in this State.<sup>19</sup>

With a view to the future need for post-war reconstruction programmes and increasing tobacco production, estimates were prepared as to the costs to establish 10 acres of tobacco on a two course rotation system, when the grower would have no initial capital. It was estimated 20 acres of land would be required, the requisite improvements being one curing barn 12 ft. x 12 ft.,

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13      ibid, pp. 466-470.

14      ibid, p. 474.

15      ibid.

16      ibid.

17      ibid.

18      Sharp, A. 'Grading and Marketing of Tobacco Leaf' in *Journal of Agriculture*, W. A. March 1939, p. 50.

19      Correspondence in Tobacco Statistics, Dept. of Agriculture, W. A., SROWA Acc. 935 AN 82/1 Item 975 Vol. 1, 28 January 1941 to 21 January 1942.

one curing barn 16 ft. x 16 ft., and a grading and bulking shed, with two horses, a cart and a plough etc. It was envisaged that an allowance of £130 would provide for the grower and his family for the first year, with a similar amount in wages to one permanent hand, and wages of 25s. each per week for a period of 18 weeks for two girls or boys at harvest time.<sup>20</sup>

In 1942-43, in Western Australia the area planted with tobacco peaked at 1,579 acres, which yielded 1,335,557 lbs., with a total value of £148,000. In 1943-44, 161 tobacco growers planted 1,407 acres, while the yield fell to 846,733 lbs., returning a total of £69,137. In 1944-45, only 888 acres of tobacco were planted by 106 growers as precedence was given to food production for Australian and Allied forces. Growers dissatisfaction with appraisal prices and a poor season contributed to a further decline, and only 25 growers planted a total of 296 acres of tobacco, including Michelides' 142 acres in 1945-46.<sup>21</sup>

Meanwhile, in 1943, the Commonwealth Government appointed the Rural Reconstruction Commission to examine the problems that had been faced by rural industries in the inter-war and World War Two periods. In 1944, the Commission reviewed the post-World War One soldier-settlement schemes and outlined proposals for post-World War Two reconstruction. In 1945, the War Service Land Settlement Agreement Act was passed whereby the Commonwealth would provide funds for the purchase and development of farms in a scheme to be administered by the State. Ex-servicemen were to be carefully selected and trained before taking up farming properties for development in areas and with prospects 'where reasonable prospects of economic success were evident.'<sup>22</sup> The structural improvements were to be purchased by the settlers, who entered into a lease in perpetuity of the land and ground improvements, with an option to purchase the freehold.<sup>23</sup>

In the late 1940s, tobacco production in Western Australia increased with some growers returning to this crop after costs increased in the potato industry and with growing confidence in the stability of the tobacco industry.<sup>24</sup> It was proposed to expand tobacco growing in Western Australia through the War Service Land Settlement Scheme, in the belief that it could be grown successfully beyond the Manjimup-Pemberton area, through 'a belt embracing Busselton, Karridale, Manjimup, Northcliffe, Walpole and Denmark' where 50 War Service tobacco farms were to be established<sup>25</sup>, on Crown land, which had been previously forfeited or purchased or purchased for this purpose.<sup>26</sup> After a 12 month training programme in tobacco growing, the ex-servicemen were to be allocated land to develop as a tobacco farm. In 1949, the first 20 trainees commenced at the training school at Manjimup, of whom 17 moved to farms in 1950. In 1950-52, two further training schools would be held.

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<sup>20</sup> Estimates in *ibid*, 1941.

<sup>21</sup> Correspondence and reports in *ibid*, 1942-45; and Burvill, G. H. 'The Last Fifty Years' in Burvill, G. H. (Ed.) *op. cit.*, p. 53.

<sup>22</sup> Burvill, G. H. *ibid*, pp.57-59.

<sup>23</sup> Fischer, David et al. 'Rural Finance in Western Australia, 1829-1979' in Burvill, G. H. (Ed.) *op. cit.*, p. 342.

<sup>24</sup> Allan, J. M. 'History and Trends of Development in Tobacco Industry in Western Australia' in Tobacco Statistics *op. cit.*, 30 June 1950.

<sup>25</sup> Burvill, G. H. *op. cit.*, p. 54.

<sup>26</sup> Evans, H. D. *Southern Sketches ... op. cit.*, p. 51.



Some of the lots allocated to ex-servicemen, including Nelson Location 12152, had been part of the inter-war Group Settlement Scheme. The soldier-settler was provided with sufficient funding for growing his crop and living costs. After the crop was sold, these costs would be re-couped, along with re-payments on the land and machinery.<sup>27</sup> Once the settler's farm was self-supporting, its administration was to transfer from the Department of Lands and Surveys to the Rural & Industries Bank.<sup>28</sup>

In the South-West, the main variety cultivated in the immediate post-war period was Cross Hickory, and later Virginia Gold was also introduced. The Government Research Station at Manjimup played an important part in the expansion, producing seed for sale to farmers at 5s. per ounce. There were approximately 300,000 seeds to the ounce, which would be sufficient for planting five acres. Seedbeds had to be carefully prepared in readiness for planting the seeds in July, which germinated in around three weeks. Whilst some growers might only grow seedlings for their own use, others might grow additional seedlings for sale at between 30s. and 60s. per 100. When the seedlings reached 4 ins. to 6 ins. in height, they were planted out in rows, with about 5,000 plants per acre. At or immediately after flowering, the crop would begin to ripen, the lower leaves being the first. Care and experience were essential in knowing the best time to pick, when the leaves were showing a little colour, with the leaves being picked successively as they ripened. Seasonal workers and family members were employed in harvesting. The picked leaves would be threaded on stringers, a round piece of timber with fencing wire. These would be placed on the racks in the specially designed kilns, working from the top to the bottom, for curing. Once the kiln was full, the doors were closed and the wood fires furnaces were lit. They required attention through the night and day to fuel the fires and check temperatures, with considerable care to ensure temperature control in the kiln so that the resultant leaf was the desired lemon colour. Next, the leaves were transferred to the grading shed, where grading took place in April or May. These sheds were designed to ensure controlled temperature and light conditions, and hence they were always oriented on a similar axis, with most light entering from the bank of windows at the south.<sup>29</sup>

The practices and the buildings associated with tobacco farming changed little in the post-war period, and the tobacco farm operation that would be developed, in the early 1950s, at Nelson Location 12152 by Roy and Peg Bell followed the established pattern. Ex-serviceman Roy Bell and his wife, Peg, both of whom had previous experience of farming, were living in Fremantle when they decided to take up a soldier-settlement tobacco farm. Roy moved to the training school at Manjimup, whilst Peg remained in Fremantle. At this period, Cross Hickory was the tobacco grown at Manjimup. After Peg Bell read an article about the Smith Brothers growing a new, larger leafed variety, Virginia Gold, at Nathalia in South Australia, Roy Bell wrote to them, and in reply they sent a teaspoon of seed. He would be one of the first farmers in

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<sup>27</sup> *ibid*; and Banyard, A. J. 'A. J. B.'s Boring Life' typescript, 1998, photocopy, courtesy J. & T. Hulcup. Note: Andy Banyard is the son of Manjimup soldier-settler tobacco grower Vic Banyard.

<sup>28</sup> Fischer, David et al op. cit.

<sup>29</sup> 'Tobacco Production in W. A.' photocopy, no details, courtesy J. & T. Hulcup; and F. A. Banyard to Prof. P. Crawford, photocopy courtesy J. & T. Hulcup.

Western Australia to plant this variety, which became widely used. After Roy Bell completed his training course, the family took up occupation of their tobacco farm at Northcliffe, at Nelson Location 12152, which he had selected 'as it had the right soil and was well drained.'<sup>30</sup>

In 1949-50, there were 68 tobacco growers. In 1950-51, including the 17 recently graduated ex-servicemen, there were 99 growers, 20 of whom were ex-servicemen, of whom seven were at Karridale and nine at Northcliffe. The total acreage under tobacco was increased from 670 acres to 930 acres. This was the first year in which tobacco was commercially grown at Northcliffe, and the nine growers harvested a total of 75 acres. In 1951-52, 1,230 acres was planted, the greatest acreage since the early 1940s. At Northcliffe, there was considerable expansion, with 24 growers, including Roy and Peg Bell, planting 199 acres.<sup>31</sup>

Houses provided to the soldier-settlers were timber-framed asbestos clad with an iron or asbestos roof. The Bells' house was built on the site of the original group settler's house, where a rose bush and a few bulbs were all that remained of the earlier garden.<sup>32</sup> In the 1950s, a photograph shows the timber framed seed beds in the foreground, the double kiln and the drying/grading shed near by, and the single kiln and the workers' hut a short distance away. A second photograph shows the Bell's house, the machinery shed and the dairy shed, both of which remained from the earlier Group Settler's farm. There is also a small shed which the Bells had re-located from beside the house to the site shown in the photograph to house Peg's ducks.<sup>33</sup> There was also the small stringing on shed, which was located between the kilns.<sup>34</sup>

Roy Bell 'worked very hard to make a success of tobacco growing.'<sup>35</sup> He constructed the seed beds of timber with rolled calico tops to cover the seedlings at night. In June-July, the seed was sown. Benzol, was placed in small disks, evaporated and these measures prevented mould. At 6 ins. to 8 ins. in height, about mid-October, the seedlings were planted out in the 10 acres which had been prepared, including the application of fertiliser. During the growing period, the fields were weeded, and insecticide applied to the crop until it was ready to harvest in late November, and through December-January. At this stage, many hands were required on the tobacco farm, and the Bells appreciated the assistance of numerous local dairy farmers who came to work there through to 4 p.m., when they had to return to their farms for milking. The picked leaves were placed in bags, then taken to the shed for stringing before being placed in the kilns to be cured. The temperature was raised to 50 degrees as the leaf turned from green to lemon, and 'then fixed at that colour by raising the temperature rather quickly and holding that temperature for anything up to 50 hrs.'<sup>36</sup> Then the fires were extinguished, and the tobacco 'allowed to take up moisture so it could be taken from the kiln

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30 Roy Bell to Jeanette and Trevor Hulcup, 1 August 2002.

31 *West Australian* 13 April 1951 and 6 December 1951.

32 Peg Bell to Jeanette and Trevor Hulcup, 17 July 2002.

33 Peg Bell to Jeanette and Trevor Hulcup, 7 July 2002.

34 Peg Bell to Jeanette and Trevor Hulcup, no details.

35 Peg Bell to Jeanette and Trevor Hulcup, 17 July 2002.

36 Roy Bell to Jeanette and Trevor Hulcup, 1 August 2002.

to the grading shed'.<sup>37</sup> Roy Bell would sleep the night in the stringing-on shed, getting up at intervals to fuel the kiln fire and check the thermometer. At 'picanniny daylight', he would call Peg to come and assist him in shifting the cured tobacco to the grading shed before the atmosphere became too dry.<sup>38</sup>

The cured tobacco was stacked and stored in bulk in the grading shed, which was simply furnished with a long table, 'divided into small slots where each leaf was placed' according to its grade.<sup>39</sup> Four girls were employed for this task, each with her own division. There was also a heater and a press. After grading into six grades, from poorest to best, in February-April, the tobacco continued to be stored in this shed, where it was compressed into bales ready for transport to Perth for sale at auction in May.<sup>40</sup>

Whilst the Bells worked full-time on the farm, assisted by one or two tobacco workers accommodated in the small workers' hut near the single kiln, other workers were mainly seasonal. They lived elsewhere and traveled to the farm when required, either on a daily basis or camping in tents at the farm.<sup>41</sup> Joanne Flanagan recollects working on three tobacco farms in Karri Hill Road, including the Bells'. The farmers 'got together' and the workers would spend a day on each farm, before moving on to the next.<sup>42</sup>

Roy Bell was responsible for several further innovations in tobacco farming subsequent to his introduction of the Virginia Gold variety. He imported Guinea Gold tobacco seed from Queensland, which he grew successfully, and which at sale topped the Western Australian price record. He developed a different method of stringing. Rather than putting the tobacco leaf on sharpened wires before it was placed in the kilns, he tied it to stocks, which were safer and more easily handled. He installed kerosene heaters to the kilns, enabling him to set the temperature 'and relax'.<sup>43</sup> By February 1955, there were eight kerosene fed kilns installed by seven growers in the Manjimup district.<sup>44</sup> The Agricultural Department and notable visitors who included a South African tobacco expert, Tom Harvey, took 'great interest' in the Bells' crops and innovative practices, and the Department gathered seed from the Bells' tobacco farm.<sup>45</sup>

The rainfall in the Northcliffe area proved to be too variable for tobacco growing. The Bells were often concerned about even having sufficient rain water for the house through summer, and there was no irrigation for crops.<sup>46</sup> Whilst Roy Bell's care and expertise enabled the Bells to continue farming tobacco for a longer period, many of the 56 War Service Settlement tobacco farms in the Manjimup district failed by the mid-1950s, and Commonwealth support was withdrawn. Some of the farmers remained on their properties and converted to dairy farming, some transferred to other farming properties,

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37     ibid.

38     Peg Bell to Jeanette and Trevor Hulcup, 17 July 2002.

39     Roy Bell to Jeanette and Trevor Hulcup, 12 November 2003.

40     ibid.

41     Peg Bell to Jeanette and Trevor Hulcup, no details.

42     Joanne and Kevin Flanagan with Trevor Hulcup, 26 October 2001.

43     Roy Bell to Jeanette and Trevor Hulcup, 1 August 2002.

44     *West Australian* 21 February 1955.

45     Peg Bell to Jeanette and Trevor Hulcup, 17 July 2002.

46     ibid.

and a number of the tobacco farms were simply left abandoned. The Scheme demonstrated that tobacco could be grown on the farms, but Thomas P. Field has suggested that due to the refusal of the soldier-settlers “to enlist their families for full-time farm work” they were “unable to provided reasonable economic returns.”<sup>47</sup> Similarly, B. Giles noted that of 200 tobacco growers in 1959, only five were of British origin, and maintained ‘Australian men and their families were not prepared to work hard enough.’<sup>48</sup>

In the post-war period, filter tipped cigarettes grew in popularity. After post-war restrictions were lifted, the multi-national companies made in-roads into the Australian market with their cheaper product, and, along with the advent of flip-top cigarette boxes, reduced the economic viability of Michelides Ltd., which in turn adversely affected the Western Australian tobacco industry. In the late 1950s, tobacco buyers were increasingly critical of Western Australian tobacco leaf whose chloride content resulted in a poor burn. The Department of Agriculture carried out trials of different varieties, fertilisers, and crop rotation, but the problem persisted. In the late 1950s and early 1960s, the downward trend in sales of Western Australian tobacco continued, and less tobacco was planted each year in view of uncertainty whether the crop would be sold or rejected.<sup>49</sup> By 1959, only three of the 56 original soldier-settlers were still growing tobacco.<sup>50</sup> Eventually, the Bells made the decision to leave their farm. On 10 February 1960, the Minister for Lands was granted Nelson Location 12152, 107 acres one rood 17 perches in area, and was registered as the proprietor on 15 February 1960.<sup>51</sup> At this date, there was no electrical power to the place as the electricity grid was not extended to Northcliffe until the 1960s.<sup>52</sup>

In 1961, sales of Western Australian tobacco leaf collapsed. Consequently, most growers were either not in a financial position to plant in 1961-62, or unwilling to take the risk. Only 32 growers planted a total of 170 acres, which did not succeed any better than the preceding crop. The following year, a scheme whereby 28 acres of experimental tobacco crop was planted by six selected growers under the Department of Agriculture to ascertain whether Western Australian tobacco leaf could sell at auction in Victoria, resulted in the sale of only a third of the 182 bales offered. The low price return indicated the product was not well regarded, and its failure to sell resulted in ‘the collapse of tobacco growing’ in Western Australia.<sup>53</sup> As in earlier periods,

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<sup>47</sup> Thomas P. Field *Post-war land settlement in Western Australia* quoted in Evans, H. D. *Southern Sketches ...* op. cit., p. 52.

<sup>48</sup> Cited in Maskell, Peter op. cit., p. 193.

<sup>49</sup> Evans, H. D. *ibid*, p. 53; and Burvill, G. H. op. cit., p. 54.

<sup>50</sup> Maskell, Peter op. cit., p. 193.

<sup>51</sup> Certificate of Title Vol. 1222 Fol. 942. Note: After the failure of tobacco farming, the Bells declined the offer of another War Service Farm to take their daughter to Perth for medical reasons, where she died 10 days later, following an operation. Subsequently, because of his work with tobacco, Roy Bell was offered and accepted a position with the Agriculture Department managing the Vegetable Research Station. Later, after discovering they were still entitled to a War Service Farm on compassionate grounds, they took up a fat lamb farm on the Mount Barker-Denmark Road. (Peg Bell to Jeanette and Trevor Hulcup, 12 November 2003.)

<sup>52</sup> Trevor Hulcup, conversation with Robin Chinnery, site visit, 7 June 2004.

<sup>53</sup> Reports of Department of Agriculture, 1962 and 1963, in *Votes and Proceedings* 1963 and 1964, p. 10, and p. 43 and p.67 respectively.

some growers in the Manjimup district diversified into vegetable and fruit growing, whilst others left the district.<sup>54</sup>

Nelson Location 12152 continued in the ownership of the Minister for Lands to 29 March 1968, when it was transferred to Philip Richard Hazelgrove, mill hand, of Northcliffe. In the same year, a caveat on the place was registered.<sup>55</sup> The place was utilised for various agricultural purposes, with the kilns and grading/drying shed utilised for hay barns, storage etc. The homestead continued to be occupied as a residence by consecutive owners, who made various alterations including laying parquetry timber flooring to some rooms, enclosing verandahs and sleep-outs, re-lining internal walls, installing some timber panelling, fitting a false ceiling, and building a lean-to addition at the rear.<sup>56</sup>

In 1975, a second caveat on the place was registered, which was withdrawn on 18 February 1976. It appears probable that the caveats were associated with an Order of the Commission of Titles on 24 February 1976, by virtue of which the place 'became vested in Lorna Newell Russell', widow, of Hamilton Hill, as Administratrix of the Estate of Joseph Russell Smart, deceased, 'for an estate in fee simple possession', and the withdrawal of the first caveat was lodged on 8 March 1976.<sup>57</sup>

On 24 March 1976, the place was transferred to Marie Longmire, married woman, of Northcliffe, who owned the place for nearly four years. On 26 February 1980, the place was transferred to Phillip Charles Bruce, plant operator, and Judy Ann Bruce, of Manjimup, as joint tenants, who mortgaged the place to the preceding owner, Marie Longmire, now a widow.<sup>58</sup> On 15 December 1983, the place was transferred to Pascoe Holdings Ltd., of Perth.<sup>59</sup>

On 24 June 1997, the place was transferred to Trevor John Hulcup and Jeanette Erica Hulcup, of Swanbourne.<sup>60</sup> Initially, they used it as a holiday home/weekender, utilising the homestead for accommodation. It was re-stumped and a replacement hot water system was installed. They lived there until their new, permanent residence, set at a distance from the group of tobacco farm buildings, was completed in late 2002.<sup>61</sup>

Over a four year period, the Hulcups have undertaken various works to convert the double kiln, single kiln and workers' quarters to farmstay accommodation, under the name *Watermark Kilns, Northcliffe*, at an estimated cost of \$150,000. So far as possible, re-cycled materials have been employed. As the timber corner posts of the kilns had rotted off the floor plates and were sitting on the ground, with only the cladding holding the buildings up, they were jacked up and the studs and floor plates replaced as

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54 Evans, H. D. *Southern Sketches* ... op. cit., pp. 53-54; and Allan Backhouse to Trevor and Jeanette Hulcup, per email, 2 May 2003.

55 Certificate of Title Vol. 1222 Fol. 942.

56 Jeanette and Trevor Hulcup, HCWA Grants Application, 2004, courtesy J. & T. Hulcup; and conversations with Robin Chinnery and Philip Griffiths, site visit, 7 June 2004.

57 Certificate of Title Vol. 1222 Fol. 942.

58 *ibid*; and Certificate of Title Vol. 1556 Fol. 196.

59 Certificate of Title Vol. 1556 Fol. 196.

60 *ibid*.

61 Trevor and Jeanette Hulcup, conversations with Robin Chinnery site visit, 7 June 2004.

required. A new sand pad was put in and a concrete base with new floor plates bolted to it. The kiln buildings have been re-roofed, maintaining the original roof lines and the ventilation structure, with Perspex fitted in place of mesh to either side of this portion of the roof. Roof timbers were retained where possible, and also the twin ventilation slats, whose pulley mechanism was transferred from the exterior to the interior to suit the buildings' change in use. The external corrugated iron cladding of the buildings was replaced with Colorbond of a similar gauge, and windows were fitted to each building. The former workers' quarters was extended at either side and a verandah added to convert it to accommodation suitable for disabled access. The original fireplace was retained. In 2003, termite damage to the soldier-settler's homestead, in particular to replacement karri beams, necessitated demolition of the fireplace and chimney, and interior stud walls and roofing timbers have been exposed for inspection and treatment to ensure removal of affected timber and eradication of the termites.<sup>62</sup>

In 2004, the Hulcups have applied for a grant under the Heritage Grants Program 2004/05 to restore the drying/grading shed, which retains the grading bench and some of the original wall lining. The stumps have been rotting at ground level, causing the floor to slump; the interior lining has deteriorated and sections have been falling; some windows require re-glazing and window frames require replacement or repair. Subsequent to its restoration, they propose utilizing the drying shed for interpretive purposes. At some future date, they would also like to renovate the homestead so that future visitors may see the group of buildings which formed a typical War Service Land Settlement Scheme tobacco farm.

### 13.2 PHYSICAL EVIDENCE

*Watermark Kilns, Northcliffe* is a collection of former tobacco farm buildings in a farmland setting, including a framed and asbestos clad drying shed with an iron roof, framed and custom orb Colorbond clad single and twin kilns adapted for holiday accommodation with Zinalume custom orb roofs, single men's or worker's quarters (fmr), and a framed and asbestos clad former soldier settler's homestead with an iron roof. These were built as part of the development of a tobacco farm for Roy and Peg Bell, to standard plans, under the War Service Land Settlement Scheme in c. 1950-51. In 2000-03, the kilns and workers' quarters have been extensively repaired and converted to farm stay accommodation by Trevor and Jeanette Hulcup.

*Watermark Kilns, Northcliffe* is located approximately 11 kilometres north north-east of Northcliffe, east of the Wheatley Coast Road in an area of remnant and re-growth forest and cleared farms. The land on which *Watermark Kilns, Northcliffe* stands lies to the east of Karri Hill Road, with Hill Brook Road running along the northern boundary, and Tobacco Road to the south. The land slopes away from the west to the east and comprises open farm land, pasture, a trees, mostly at the fringes.

*Watermark Kilns, Northcliffe*, is located close to Karri Hill Road, and there is new residence outside the assessment area with access to it from Tobacco Road in the south. *Watermark Kilns, Northcliffe* is partly screen from the road

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<sup>62</sup> Jeanette and Trevor Hulcup, HCWA Grants Application, 2004

with a line of trees. The buildings are set back from the road some 20 metres, with an entry point on an east-west alignment. The industrial buildings are grouped north of the access point, and the residence to the south. There is pasture to the east of the group of buildings, mixed indigenous trees along the road edge, a permaculture garden east of the former homestead where tobacco seed was once raised, and post and wire fences separating the developed area from the pastures. There are self sown tobacco plants in a number of locations around the property.

The buildings include a framed and asbestos clad drying shed with an iron roof, framed and custom orb Colorbond clad single and twin kilns adapted for holiday accommodation with Zinalume custom orb roofs, single men's quarters (fmr), and a framed and asbestos clad residence with an iron roof. All of the buildings are simply designed and do not reflect a particular style.

### **Drying Shed**

The drying shed is a simple rectangular gabled roof shed, oriented along a north-south axis, with a stumped floor, timber framed walls, corrugated asbestos cement walls, timber stop beads, corrugated iron roof, replacement gutters and barge caps. The west wall has no openings, the south wall has full width casement and fixed light windows covered with protective sheeting, the east wall a pair of ledge, braced and boarded doors, and the north wall has a pair of casements. The window locations are designed to encourage a good air flow through the building. There are improvised steps to the eastern doors, and an inlet to the south of the doors at high level. The purpose of the inlet vent was to let warm air into the shed. The furnace to the east side of the building has been removed.

The interior comprises a 5" boarded timber floor, and wall and ceiling linings of flat asbestos cement sheet, with timber cover battens. Some of the sheeting is lime washed. Many sheets are shattered or cracked. The interior side of the vent noted above passes through the wall as a plain galvanized iron vent flume and there is pattern staining in the vicinity of the vent on the walls and ceiling, indicating warm air movement.

The windows are covered with protective sheeting. Overall the building is in fair condition.

### **Single Kiln (fmr)**

The single kiln is located to the north of the drying shed. It is a 4.6m square plan structure, with a gabled roof oriented on a east-west axis. The roof features a ridge vent, with timber ventilation control louvres. The walls and roof are timber framed and clad with zinalume custom orb sheeting and there are aluminium framed sliding doors and windows to all sides of the building.

The interior is divided into two floors, with a kitchen, dining and living area at ground floor level, together with a bathroom and stair. The first floor level is a bedroom. The staircase are all timber construction.

The ground floor has tiled concrete floors, plasterboard walls, and the ceiling is simply the timber soffit of the first floor. There are modern cabinets and fittings throughout. The first floor has a timber floor, plasterboard walls and a plasterboard ceiling that is fitted around the original timber roof construction. The timber ventilation control louvres can be seen from this level and the

blades are controlled by pull cords, relocated from external to internal operation.

The simple drying shed plan has been adapted for self catering holiday accommodation in a contemporary style. The original structure has been retained and adapted and re-clad externally.

### **Twin Kilns (fmr)**

The single twin kilns are located to the east of the drying shed. It comprises two 4.6m square plan structures, with gabled roofs oriented on a east-west axis, linked by a 9.1 metre long building. The roof features a ridge vent, with timber ventilation control louvres. The walls and roof are timber framed and clad with zincalume custom orb sheeting and there are aluminium framed sliding doors and windows to all sides of the building.

The interior is divided into two floors, with kitchens and bathrooms. Bedrooms and living areas are arranged on ground and first floor.

The ground floor has tiled concrete floors, plasterboard walls, and the ceiling is simply the timber soffit of the first floor. There are modern cabinets and fittings throughout. The first floor has a timber floor, plasterboard walls and a plasterboard ceiling that is fitted around the original timber roof construction. The timber ventilation control louvres can be seen from this level and the blades are controlled by pull cords, relocated from external to internal operation.

The link building is a modern structure, framed up in the manner of the original link building. The interior of the link is designed as a large open upper storey, with elements such as the kitchen being a double volume space. Unlike the remainder of the structure, the link has a flat soffit rendered in a style to reflect the ceilings achieved by lining out the kilns.

The original structure has been retained and adapted and re-clad externally.

### **Single Men's or Worker's Quarters**

The core of the building is the original single men's quarters which comprises a single gable roof room, with a fireplace on the south wall. This building has been extended to form holiday accommodation by adding skillion roofed accommodation to the east and west of the original one-roomed building. The building has been adapted in a similar fashion to the kilns.

The plan now comprises the original room now used as a living room, with a bathroom and bedroom to the east and a kitchen to the west of it. A small verandah has been attached to the northern side of the building.

### **Soldier Settler's Homestead (fmr)**

The residence is single storey framed hipped roof house, with a skillion roof section to the rear. The walls are clad with flat asbestos cement with cover strips, the windows are replacement sliding aluminium though two timber casements have been retained, and the roof covered in corrugated iron in short length sheets.

The interior comprises a series of living and bedroom spaces at the front of the house and kitchen and bathroom with a lobby under the skillion roof to the rear. The front rooms have been altered extensively so that the original plan



is not readily discernible. From the remaining evidence it would appear that the living and dining room were on the south side of the house, with two bedrooms to the north.

The interior has timber floors, overlaid with parquetry, plasterboard and 'Beautyboard' lined walls and plasterboard lined ceilings. Much of the material is damaged or missing. Fireplaces and flues have been removed. The bathroom contains fittings such as a bright pink bath and basin, types that were common in the late 1950s and early 1960s.

The place is in a poor state of repair.

### 13.3 COMPARATIVE INFORMATION

In the late 1920s, the first tobacco curing kiln was built at Dixvale in the Manjimup district, where Group Settler Jack Limmer was growing tobacco experimentally. In the early 1930s, tobacco farming on a commercial scale commenced in the Manjimup-Pemberton district, and continued for 30 years through to the early 1960s, when the industry collapsed. At its peaks, in the mid-1940s, and again in the early 1950s, there were less than 200 growers, mostly operating on a small scale of less than 20 acres, and thus relatively few tobacco farm complexes were developed in this State. The only large scale operation was that of Michelides Limited, which at its peak had eight plantations at Manjimup and Pemberton, and was responsible for up to half the total production. The former Michelides' tobacco farm group at Glauder Road is included in the Shire of Manjimup Municipal Inventory. Its condition and degree of intactness in 2004 is not known.

By the late 1930s, the pattern of buildings required for a successful tobacco farming operation in this State had been established. As described in the Documentary Evidence, the essential buildings included curing barns or kilns and a drying/grading shed, which were timber framed and might be clad with timber, asbestos-cement or hessian, along with a stringing shed, which was generally a more temporary timber framed hessian clad structure located near the kilns. This pattern was continued in the development of 56 tobacco farms established under the War Service Land Settlement Scheme in the early 1950s, including *Watermark Kilns, Northcliffe*. These farms were also provided with a standard plan timber framed asbestos clad house and also workers' quarters, a small timber framed asbestos clad hut. All but three of the farms had ceased to grow tobacco by 1959, and the remainder ceased operation by 1962. The buildings, and those at other tobacco farms, were either turned to other uses or abandoned.

In 1997, the Shire of Manjimup Municipal Inventory included the aforementioned former Michelides' tobacco farm group at Pemberton, along with groups in Graphite Road, Burnside Road and Plunkett Road. By 2004, two of these three appear to be no longer extant, the remaining group in Burnside Road is in a parlous state, and it has yet to be ascertained whether the Graphite Road group survives. There are believed to be a small number of surviving tobacco farm buildings elsewhere in the Shire. They include *Watermark Kilns, Northcliffe* at Karri Hill Road, Northcliffe; at *Glenview* in Ralston Road, Manjimup; a kiln off South-West Highway, about three kms. north of Manjimup; and two other kilns at Northcliffe, which are in a deteriorating condition. Of these places, it appears that *Watermark Kilns,*

*Northcliffe* and *Glenview* present the most intact groups of tobacco farm buildings, as they include two or more kilns, a drying/grading shed, workers' quarters and a settler's house. Despite some alterations, the original layout of the house at *Watermark Kilns, Northcliffe* remains discernible, and the changes are evidence of the continuing adaptive use of the building over more than 50 years. Whilst the kilns and workers' quarters at *Watermark Kilns, Northcliffe* have undergone considerable change to save the buildings and convert them to farm stay accommodation, the drying/grading shed retains most of its original fabric, including the tobacco grading bench. As a group, *Watermark Kilns, Northcliffe* is an uncommon surviving example of a Western Australian tobacco farm, and specifically a War Service Land Settlement Scheme tobacco farm of which there were but 56 developed in total.

#### **13.4 KEY REFERENCES**

No key references.

#### **13.5 FURTHER RESEARCH**

Further research might reveal information about the early development of the property in the period of Group Settlement, and also its uses in the period before the Bells took up occupation and after they departed through to 1997.