

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 precinct.

PRINCIPAL AUSTRALIAN HISTORIC THEME(S)

- 3.4.4 Making forests into a saleable resource
- 4.5 Making settlements to serve rural Australia
- 8.14 Living in country and rural settlements

HERITAGE COUNCIL OF WESTERN AUSTRALIA THEME(S)

- 107 Settlements
- 304 Timber industry

11.1 AESTHETIC VALUE*

Ludlow Forestry Mill and Settlement comprising three groups of timber forestry cottages and a former sawmill set amongst mature remnant Tuarts against a background of plantation pines and with a river running through the centre, has aesthetic value as an evocative picturesque rural settlement associated with the timber industry in the south west of Western Australia. (Criterion 1.1)

Ludlow Forestry Mill and Settlement is located in the significant Ludlow Tuart Forest and although the area immediately surrounding the settlement has been developed as a pine plantation since the early 1900s, the remnant Tuarts together with mature pines provide a significant cultural environment to which the settlement contributes. (Criterion 1.3)

Ludlow Forestry Mill and Settlement in its forest setting, comprising the main Ludlow Road and river bridge, unsealed bush lanes, groups of forestry cottages featuring original timber and woven wire fencing and domestic cottage gardens, together with the former sawmill and workshops site in its fenced compound, is visually pleasing with an overall atmosphere of tranquillity. (Criterion 1.4)

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Canberra, 1991, with additional reference to Richards, O. *Theoretical Framework for Designed Landscapes in WA*, unpublished report, 1997.

11.2. HISTORIC VALUE

Ludlow Forestry Mill and Settlement is significant in the context of the history of the Forests Department and the forestry industry in Western Australia as the site of a pine plantation from the 1910s, of the State's first Forestry School from 1921 to 1927, and as a small forestry settlement from the 1920s until 1950 when the main forestry settlement and sawmill was established. (Criterion 2.1)

Ludlow Forestry Mill and Settlement represents the period in history when employees in the forestry industry lived in settlements adjacent to the saw-mill and forest where they were employed. This pattern of settlement was typical throughout the southwest forests from the early twentieth century to the 1970s and included the construction of housing to standard design 'Types' for workers. (Criterion 2.2)

Established in 1921 by Charles Edward Lane-Poole in his role as Conservator of Forests, *Ludlow Forestry Mill and Settlement* is significant as the location of the first Forestry School in the state, where field staff were taught forest husbandry skills and techniques. (Criterion 2.3)

Ludlow Forestry Mill and Settlement exemplifies internationally renowned forest conservator Charles Edward Lane-Poole's forestry management philosophy. (Criterion 2.3)

11. 3. SCIENTIFIC VALUE

Ludlow Forestry Mill and Settlement has a history of occupation from the early years of the twentieth century, however the extant buildings and site features generally date from the 1950s or later. For this reason the area has the ability to contribute through archaeological investigation to the earlier history of the area. The extent to which new information is likely to emerge however is limited by the extensive documentary evidence already available. (Criterion 3.1)

11. 4. SOCIAL VALUE

Ludlow Forestry Mill and Settlement is valued by the community as it represents the way of life of forestry workers that continued from the early 1900s to the 1970s but is no longer practiced due to changes in the forest management practices and the reduced extent of the industry generally. (Criterion 4.1)

12. DEGREE OF SIGNIFICANCE

12. 1. RARITY

Ludlow Forestry Mill and Settlement is a rare example of a surviving, relatively intact, forestry settlement that has a continuing history of association with the Forests Department, and subsequently CALM, and the forestry industry in Western Australia from the 1910s, although most extant buildings and structures date from the post-1950s period. (Criterion 5.1)

12.2 REPRESENTATIVENESS

Ludlow Forestry Mill and Settlement is a good representative example of a sawmill and workshops with a collection of forestry cottages that contains several standard design types. Such places were common in the period from 1920 to the 1970s, but are no longer built. (Criteria 6.1 and 6.1)

The pine plantation is representative of a number of plantations established in the early 1900s to provide an alternative timber supply to imports and local hardwoods. These plantations became viable for harvesting and timber production in the 1950s, when mills and workers housing were built on site, and made an important contribution to post-World War II construction projects. (Criterion 6.2)

12.3 CONDITION

The cottages at *Ludlow Forestry Mill and Settlement* are generally in fair to good condition as a result of care and maintenance by tenants. At the time of inspection (October 2003) gardens and back yards and houses were well cared for and homes were well presented. There are long term issues of conservation that require addressing with some external timber weatherboards deteriorating as a result of exposure to weather.

The workshops buildings are generally in a deteriorated state due to their lack of use and subsequent maintenance, however they are still capable of restoration.

Buildings such as the District Office and Tuart House are deteriorating through lack of use but are capable of conservation. The river bridge appeared to be in sound condition.

12.4 INTEGRITY

Ludlow Forestry Mill and Settlement has only moderate integrity, as it is no longer required for forestry purposes. The forestry cottages are still used for residential purposes but do not house workers in the timber industry. The sawmill and workshop buildings are not in use other than as storage but are capable of restoration if a viable appropriate alternative use were to be found.

The pine plantation is of high integrity and still in use for commercial purposes under the management of the Forest Products Commission.

12.5 AUTHENTICITY

Ludlow Forestry Mill and Settlement has high authenticity. Although not in use the former sawmill and workshops compound is substantially intact with some original machinery extant. The cottages that remain extant are substantially intact including fencing, domestic gardens, garages and laundries. Alterations and extensions are relatively minor. Approximately seven cottages have been demolished or relocated and some buildings including the original Forestry School and the Education Department school are no longer extant. There has, however, been no development unrelated to the forestry industry in the settlement.

13. SUPPORTING EVIDENCE

The documentation for this place is based on the heritage assessment completed by Jacqui Sherriff, Historian, and Annette Green and Rosemary Rosario, Architectural Heritage Consultants in April 2004, with amendments and/or additions by HCWA staff and the Register Committee.

13.1 DOCUMENTARY EVIDENCE

The Forests Department (then the Woods and Forests Department) started planting the Ludlow area with pines in the early 1910s and accommodation was built for the caretaker and single men clearing and planting the plantation. The State's first Forestry School was established at Ludlow in 1921 and remained in operation until 1927, necessitating the construction of a school building (including accommodation for apprentices) and a house for the instructor, as well as ancillary buildings such as stores. From c. 1938 to c. 1947 when a new house was built, the Forester-in-Charge and his family lived in the old Forestry School building.

The main *Ludlow Forestry Mill and Settlement* was established in the 1950s when a sawmill was constructed to process pine from the Plantation and some Tuart from the nearby forest. The mill operated until the mid-1970s. Since that time, many of the buildings at Ludlow Settlement have been used for research and museum purposes and the houses have either been sold or leased to private individuals.

Following the granting of Responsible Government in 1890, the administration of Western Australia's forests came under the control of the Lands and Surveys Department. The Department did not actively undertake forest management, and by 1894 there was increasing concern about the extent and future potential of the colony's forests. In 1896 the Forests Department (soon renamed the Woods and Forests Department) was created, with James Ednie Brown appointed Conservator of Forests.¹ Despite limited staff and expertise, the Woods and Forests Department established experimental sandalwood farms at Pingelly and Meckering, a pine plantation at Bunbury and a wattle plantation at Gooseberry Hill in its first year of operation. The latter two were to provide locally grown softwoods as an alternative to imports and local hardwoods.²

Charles Richardson, a senior clerk in the Lands Department, was appointed Acting Conservator of Forests following Ednie Brown's death in 1899. Richardson did not share Ednie Brown's passion for forestry and the Woods and Forests Department made little progress under his leadership.³ However, the Premier, Sir Newton Moore, was interested in establishing 'local supplies of softwoods instead of importing the timber from abroad'⁴ and in 1907 directed his Advisory Board to identify an area of land near Capel suitable for establishing a

³ See Annual Reports of the Woods and Forests Department, 1900-1915.

Annual Report of the Lands and Surveys Department, 1891, p. 12 in Votes and Proceedings of the Western Australian Parliament (V&P), 1892-93; Annual Report of the Bureau of Agriculture, 1894/85, p. 1, V&P, 1895; Annual Report of the Department of Lands and Surveys, 1895, p. 5, V&P, 1896. Ednie Brown had previously been Conservator of Forests for South Australia and Director General of Forests in New South Wales and in 1894 had been commissioned to complete a report on Western Australia's forests. See 'Report on the Forests of Western Australia, their Description, Utilisation, and Proposed Future Management', in V&P, 1896.

² Annual Progress Report of the Woods and Forests Department, 1896-97, pp. 10-13, V&P, 1897.

⁴ Annual Report of the Woods and Forests Department, 1906/07, p. 4, V&P, 1907.

pine plantation. After considering several areas, a tract of land near the Ludlow River was eventually selected.⁵

Clearing and grubbing commenced at Ludlow (Reserve 2615) in 1908. The following year, 68,000 pines (*Pinus insignis*) were planted.⁶ Clearing and planting continued in the ensuing years and as there was initially no nursery at Ludlow, trees raised at Hamel were trucked to Ludlow by rail. A nursery site was selected and planted in 1916. By 1919, the nursery at Ludlow was experimenting with other pine varieties to determine the best suited to the location. These included the Monterey Pine and the Cluster Pine.⁷

A house was built for the caretaker soon after planting commenced. The asbestos and timber house with an iron roof was commonly known as 'The Cottage' or 'Plantation House' and faced west. It had a verandah at the front and back, with a small room at the back used as the Forestry Office. About 100 metres to the east of the house were a machinery shed and single men's quarters to accommodate two men.⁸ Other works at the Plantation at this time included the construction of a chaff shed (possibly also known as a stable) for the horses working the clearing equipment and the sinking of wells for water.⁹

In 1914, the Woods and Forests Department transferred from the Lands and Surveys Department to the Mines Department. Charles Edward Lane-Poole replaced Richardson as Inspector General of Forests in 1916 and brought much needed professionalism to the Department.¹⁰ Lane-Poole had trained at L'Ecole Nationale des Eaux et Forets at Nancy in France where he obtained the degree of Civil Engineer in Forestry. He then went to the Cape Colony and afterwards to the Transvaal, then to West Africa.¹¹ He 'was a dedicated forester and man of vision' and had one of the strongest voices against the indiscriminate logging of native forest.¹²

One of Lane-Poole's initial frustrations was the lack of trained forestry workers. Assistant Forest Rangers were appointed as funding allowed and six Forest Apprentices were appointed in 1918.¹³

⁵ Forests Department, Ludlow Pine Plantation, An 80/1, Acc 934, Item 83/1916, folio 66, SRO.

Annual Report of the Woods and Forests Department, 1908, p. 4, V&P, 1909; Annual Report of the Woods and Forests Department, 1909, p. 4, V&P, 1909. *Pinus insignis* came from California and was deemed to be the most suitable for Western Australian conditions at the time and gave the quickest results in timber yields.

Forests Department, State Forest #12, Ludlow Pine Plantation, AN 80/1, Acc 934, Item 1243; Forests Department, Ludlow Pine Plantation, AN 80/1, Acc 934, Item 83/1916, folios 68. 129. 140, SRO; Annual Report of the Woods and Forests Department, 1919, p. 5, V&P, 1919. Plantings increased steadily until 1942, when there was an interruption during the war until 1945 when plantings continued until 1973. See Hub Dawson, oral history typescript, p. 2, Busselton Library.

⁸ 'Ludlow – The Early Settlement', typescript, p. 3, Busselton Library. A Pandanas Palm, Cypress Pine, Moreton Bay Fig and Lemon Scented Gum are in what was the front yard of the single men's quarters.

⁹ Forests Department, State Forest #12, Ludlow Pine Plantation, AN 80/1, Acc 934, Item 1243; Forests Department, Ludlow Pine Plantation, AN 80/1, Acc 934, Item 83/1916, folio 57, SRO.

¹⁰ Report by Acting Inspector General of Forests, Woods and Forests Department, 1915, p. 179, in Annual Report of the Mines Department, 1915, V&P, 1916-17.

¹¹ Australian Broadcasting Corporation website

http://abc.net.au/blackfriday/royalcommission/extracts_officers_lane-poole.htm

¹² Michal Bosworth and Wendy Brady, 'The South-West Forest Region of Western Australia: A Thematic History', prepared for the Environment Forest Taskforce and the Western Australian Department of Conservation and Land Management', March 1997, p. 26.

¹³ Annual Report of the Woods and Forests Department, 1917, p. 5, V&P, 1919. The issue of training forestry workers has been discussed at the 1915 annual Interstate Forest Conference where it was resolved that training was required for all persons engaged in the Forest Service. At the time, the only forestry school in Australia was in Adelaide. See Annual by Acting Inspector General of Forests, Woods and Forests Department, 1915, pp. 4-5, in Annual Report of the Mines Department, 1915, V&P, 1916-17.

According to anecdotal evidence, the first two houses at Ludlow were constructed in 1919 'just across the bridge over the Ludlow River (east)'. These were most likely constructed for workers on the plantation.¹⁴

In 1920/21, Lane-Poole organised 3 million acres in the South-West into six districts 'for the proper control of the area'. Each district was further divided into ten 50,000 acre blocks to be placed under the control of a 'professional district forest officer', with each block forming the range of a resident forester. The Conservator of Forests believed that decentralisation and the control of work within each division by professional officers would result in greater efficiency and more economical administration.¹⁵

The success of Lane-Poole's reorganisation of the Department depended on the availability of trained staff. In order to ensure 'an adequate and sufficiently trained field staff', a Forestry School was established at Ludlow 'where the boys (could) obtain the necessary theoretical and practical training in forestry'. The site for the school and a 'building for married couple' was selected on Location 19 in the Jarrahwood District in early 1921.¹⁶

The school commenced in June 1921, before the buildings were completed. Amongst the first intake of nine students were Apprentice Boucher from Greenbushes and Apprentice Mander from Wooroloo, who were advised that

Arrangements have been made for you and other apprentices to carry out work in the vicinity of Ludlow, under the control of the Instructor in Forestry. Tents will be provided and a cook will be in attendance at the camp.¹⁷

The position of Forest Instructor was filled by a graduate from Adelaide who undertook postgraduate studies at Oxford Forestry School in 1919.¹⁸

The Forestry School (Building 38; not extant) was completed by contractors in August¹⁹ and had a large dining room and two big bedrooms for the students, as well as rooms used as a bedroom and office by the lecturer.²⁰ It could accommodate 24 apprentices, who were to spend six months in the first year and two months each year for the next three years at the school, with the rest of their time spent in practical experience in the forests, where silvicultural operations were in progress. After four years, the apprentices graduated to become Forest Guards and after a further two years and exams, could progress to the position of Assistant Forester.²¹

According to Hub Dawson, also one of the first intake, the site was chosen so that trainees could interact with the local community. However, the isolation of the school was not conducive to this and the apprentices felt very isolated. They

¹⁴ Hub Dawson, oral history typescript, p. 2, Busselton Library. The details of these houses have not been ascertained, but they may have been Buildings 43 and 44 (not extant). However, the number identifiers of these buildings would suggest they were constructed after 1921.

¹⁵ Annual Report of the Forests Department, 1920/21, p. 16, V&P, 1921-22. See John B Sclater, *Lost Your Block? The origins of Western Australia's forest block names*, John B Sclater, Safety Bay, 2001, for further information on the location and naming of forest blocks.

¹⁶ Annual Report of the Forests Department, 1920/21, p. 25, V&P, 1921-22; Forests Department, Re establishment of Forestry School at Ludlow, folios 7, 9, 11, AN 80, Acc 934, Item 503, SRO.

¹⁷ Forests Department, Re establishment of Forestry School at Ludlow, memo from Conservator of Forests, folio 82, AN 80, Acc 934, Item 503, SRO.

¹⁸ Annual Report of the Woods and Forests Department, 1919, p. 4, V&P, 1919.

¹⁹ Forests Department, Re establishment of Forestry School at Ludlow, telegram dated 20 August 1921, folio 138, AN 80, Acc 934, Item 503, SRO.

²⁰ Hub Dawson, oral history typescript, p. 2, Busselton Library.

Annual Report of the Forests Department, 1920/21, p. 25, V&P, 1921-22.

usually went to the tavern once a week and spent other evenings studying by the light of kerosene lamps.²²

In 1925, Lane-Poole was commissioned by the Commonwealth Government to report on the forests of Papua and New Guinea. That year he was appointed Forestry Adviser to Commonwealth Government and held this position until 1927 when he became Inspector-General of Forests at the Commonwealth Forestry Bureau. From 1927- 1944 he was Acting Principal, Australian Forestry School. And in 1945 he was commissioned by the Union Government to report on the Eucalypt plantations of South Africa^{.23}

Lane-Poole was the Vice-President of the Third Empire Forestry Conference (1928) and represented the Commonwealth Government at Fourth Empire Forestry Conference, South Africa (1936). He was a foundation member of the Royal Society of Australia and a member of the National Research Council.²⁴

The Forestry School closed in 1927 as alternative methods of training forestry staff were identified and implemented. During the six years that the school operated, 22 apprentices were trained to become Forests Department field staff.²⁵

Meanwhile, a state school operated at Ludlow to cater for the children of local farmers and forestry workers. Originally known as Ludlow Bridge School, Ludlow School was established in 1866. As a minimum of nine children was needed to keep the school open, the school alternated with Newtown and Wonnerup when numbers at Ludlow were low.²⁶ In 1923, the school building was demolished and replaced with a school building relocated from East Kirup (Building 681, not extant). This building was constructed of rough sawn 6" horizontal boards, with sash windows along the eastern wall and a verandah on the western elevation parallel to the river. The school house (Building 680, extant) was built sometime after 1925 and the school closed in 1948.²⁷

A timber tramline ran from the adjacent Tuart forest to the mill at Wonnerup. A timber bridge, located about 400 metres north of the school, was built to carry the tramline over the Ludlow River c. 1924.²⁸

Planting of the pine plantation continued through the 1920s and 1930s. The first thinnings from the plantation were harvested in 1936/37, along with thinnings at Mundaring Weir and Harvey Weir.²⁹

Some time during the 1920s, a General Storeroom (Building 40; not extant), District Office (Building 42; extant) were built at Ludlow.³⁰

Hub Dawson, oral history typescript, p. 1, Busselton Library.

²³ National Archives of Australia website - http://naa12.naa.gov.au/scripts/PersonDetail

²⁴ ibid. http://naa12.naa.gov.au/scripts/PersonDetail

²⁵ Judith Johnson, 'The History of the Tuart Forest', in B K de Garis (ed), *Portraits of the South West: Aborigines, Women and the Environment*, UWA Press for the Charles & Joy Staples South West Region Publications Fund, Nedlands, 1993, p. 144.

²⁶ 'Ludlow Bridge School 1923-1931', Mary Tucker (nee Forrest), typescript, p. 1, 1984, Busselton Library. Ludlow School was closed from 1881 to 1900, from 1906 to 1911 and again from 1912 to 1923

²⁷ Les Warner, oral history transcript, p. 1, Busselton Library; Hub Dawson, oral history transcript, p. 3, Busselton Library. Hub Dawson, oral history transcript, p. 3, Busselton Library; Notes on Ludlow State School, Busselton Library.

²⁸ Forests Department, Tramline Bridge recently constructed over the Ludlow River, FD Plan No 415, 1924, WAS 2786, Cons 6928, SRO; 'Ludlow – The Early Settlement', typescript, p. 1, Busselton Library.

Annual Report of the Forests Department, 1936/37, p. 15, V&P, 1937.

³⁰ No documentary evidence has been located for these buildings. The date of construction is based on the building number identifiers.

Circa 1938, the old Forestry School was converted to a residence for the Senior Forester and his family, and was occupied until c. 1947.³¹ The house constructed in 1947 (Type 8; Building 584, not extant) may have been built for the Senior Forester.³² By the late 1940s, a fire equipment store and vehicle shed (Building 260; not extant) and a three-roomed hut (Building 261; extant) had been relocated to Ludlow from Wonnerup. A portable hut (Building 555; extant) was also constructed about this time.³³

By the late 1940s, there was considerable interest in obtaining pine logs and the Department reported that it was unfortunate that its 'plantations (were) not old enough to take advantage of this war-time demand which provides an exceptional opportunity to dispose of small dimension logs'. However, by the early 1940s trees from Ludlow were large enough to harvest and be sent to case mills for processing. At this time, timber for the manufacture of cases and crates for packing fresh and dried fruits and processed foods was in great demand due to the impact of war demands.³⁴

Following World War II, the demand for pine peeler logs for plywood production increased as Australia experienced a housing boom. Plywood production in Western Australia expanded accordingly, and in order to meet demand for the 'production of this high-priced product', 'New Australians' were put to work pruning, clearing and planting in the plantations. Small pine mills were established in the Ludlow, Mundaring, Gnangara and Grimwade (East Kirup) plantations in 1950.³⁵

Construction at Ludlow Plantation between 1950 and 1954 included the Mill Shed (also referred to as the Sawmill, Building 655; extant), Planing Mill (Building 939; extant), Garage and Workshop (Building 654; later referred to as Carpenters' Workshop and Store, extant), Timber Storage Shed (Building 940; extant), as well as ten houses for staff (Types 8, 8D and 6C; seven extant).³⁶ The joinery, rough sawn timber and floor boards were supplied by the Adelaide Timber Company.³⁷ As with all Forests Department construction at this time, the buildings were constructed to standard plans and it is likely that the Forests Department commissioned and supervised the construction contracts.³⁸

The Garage comprised an area for storing vehicles that was partitioned off from a workshop area containing a power hacksaw, drill press, lathe and grinder. Ancillary rooms were the air compressor room, storeroom and fuel injection room.

³¹ Hub Dawson, oral history typescript, p. 1, Busselton Library. Hub Dawson was the Senior Forester.

³² Department of Conservation and Land Management, Accommodation and Services, Dept Buildings, Ludlow Forest HQ, Volume 1: File 006289F1802, Folio 133.

³³ Department of Conservation and Land Management, Accommodation and Services, Dept Buildings, Ludlow Forest HQ, Volume 1, File 006289F1802, folio 133.

Annual Report of the Forests Department, 1939.40, p. 3, V&P, 1940; Annual Report of the Forests Department, 1943/44, p. 5, V&P, 1944; Annual Report of the Forests Department, 1945/46, p. 6, V&P, 1947.

³⁵ Annual Report of the Forests Department, 1949/50, p. 10, V&P, 1950. In 1950/51, Ludlow was one of nine Departmental plantations under production for sawmilling. The others were Collier, Grimwade, Gnangara, Keenan, Mundaring, Scadden and Somerville. See Annual Report of the Forests Department, 1950/51, p. 12, V&P, 1951.

³⁶ Department of Conservation and Land Management, Accommodation and Services, Dept Buildings, Ludlow Forest HQ, Volume 1, File 006289F1802.

³⁷ Chief Timber Inspector to Conservator of Forests, 9 September 1953, Department of Conservation and Land Management, Accommodation and Services, Dept Buildings, Ludlow Forest HQ, Volume 1, File 00628F1802, folio 90. After September 1953, the Department supplied the flooring.

³⁸ For further information see Heritage and Conservation Professionals, 'Thematic History of Forestry Cottages', prepared for the Department of Housing and Works on behalf of the Government Employees Housing Authority and the Department of Conservation and Land Management, 2003 (draft).

The mill shed contained No 1 and No 2 sawbenches, a salvage sawbench, cleating machine and docker saw, as well as a twin saw.³⁹ The mill housed a 2'6" (75cm) circular saw, which was used to mill pine logs, while the big twin saw was used to process Tuart (used mainly for railway rolling stock). The log was rough sawn after being squared off. It then went through the planer and came out 'dressed' ready for use as flooring etc, and was stacked for drying.⁴⁰

In 1953, the Department acquired the Ludlow School building (Building 681; not extant) and the teacher's quarters (Building 680; extant).⁴¹

In order to enlarge some cottages from two to three bedrooms, several requests for an additional room in the rear verandahs of new cottages were approved in the early 1950s.⁴²

In 1954, the Forests Department reported that 134 loads of processed pine mouldings had been sold from the Department's processing plant at Ludlow.⁴³

Two Type 5 houses were built at Ludlow Settlement in 1956 (Buildings 1109 and 1110; extant)⁴⁴ and in line with Forest Department policy, garages were constructed at all the houses in the 1950s and1960s.⁴⁵ Other work during the 1960s included the construction of toilet blocks (Buildings 1697 and 1866; extant), School Bus Shelter (Building 1776; extant), Pump Shed (Building 1775; extant), three bay gantry (Building 1777; extant), Shade House (Building 1778; extant), a workshop (Type UK4-1; Building 1919; extant) and four houses. These were Type UK7-3 (Building 1901; extant) and Type UK7-2A (Buildings 1902 extant, 1903 and 1904 not extant) houses.⁴⁶

In 1956, one of the new houses was tested with a 'new' weatherboard treatment consisting of a 'mixture of raw and boiled oil and terebine in place of Dulux'. Initial appraisal deemed the experiment a success.⁴⁷

The District Office (Building 42; extant) was extended c. 1957 to accommodate an office and drafting area.⁴⁸

³⁹ Forests Department, Ludlow: Sawmill, Garage & Planing Mill, Electrical Installations, n.d., WAS 2786, Cons 6928, Item FD 0112/1, SRO.

⁴⁰ Hub Dawson, oral history transcript, p. 2, Busselton Library.

⁴¹ Department of Conservation and Land Management, Accommodation and Services, Dept Buildings, Ludlow Forest HQ, Volume 1, File 006289F1802, folios 53-55, 69.

⁴² Department of Conservation and Land Management, Accommodation and Services, Dept Buildings, Ludlow Forest HQ, Volume 1: File No 006289F1802. See for example folios 61 (13 February 1952), 92 (16 October 1953 – in this case it was advised that the occupant had 5 children) and 117 (30 April 1954).

⁴³ Annual Report of the Forests Department, 1953/54, p. 14, V&P, 1954.

⁴⁴ Department of Conservation and Land Management, Accommodation and Services, Dept Buildings, Ludlow Forest HQ, Volume 1, File 006289F1802, folio 133.

⁴⁵ Annual Report of the Forests Department, 1957/58, p. 16, V&P, 1958; Department of Conservation and Land Management, Accommodation and Services, Dept Buildings, Ludlow Forest HQ, Volume 1, File 006289F1802, folio 133.

⁴⁶ Memo on file, 1 August 1967, Department of Conservation and Land Management, Accommodation and Services, Dept Buildings, Ludlow Forest HQ, Volume 2, File 006290F1802, folio 1; Forests Department, Contract Register No 2, WAS 94, Cons 3506, SRO; DWR Stewart, 'Forest Administration in Western Australia, 1929-1969', Forests Department of Western Australia, c. 1970, p. 88.

⁴⁷ Correspondence dated 20 June 1956, Department of Conservation and Land Management, Accommodation and Services, Dept Buildings, Ludlow Forest HQ, Volume 1, File 00628F1802, folio 94. It is not know which house was treated in this way. The mixture comprised 2 gallons of raw oil to 1 gallon of boiled oil and half a pint of terebine. (Terebine comprises a combination of metallic driers dispersed in a solvent that aids the drying of oils or oil based paints.)

⁴⁸ Department of Conservation and Land Management, Accommodation and Services, Dept Buildings, Ludlow Forest HQ, Volume 1: File No 006289F1802, plan dated 14 May 1957 attached to Folio 103). The office had previously been extended c. 1942. See folio 23.

The replacement workshop (Building 1919; extant) was built by Lance Avery in the late 1960s.⁴⁹

Ludlow School (Building 681; not extant) was dismantled in 1969.⁵⁰ By this time, the building was in very poor condition and was only being used twice yearly for the auction sale of grazing rights in the forest and as a polling place. It was agreed that the Ludlow Office could be used for these events in the future.⁵¹

The main mill closed in the early 1970s, while the planer mill remained in operation for a few more years before being closed to private interests.⁵² Following the closure of the mill operations, Ludlow continued to operate as a workshop for the area's forest machinery. Research was also undertaken there.

In 1974/75 two houses from the Ludlow Settlement were relocated to residential blocks in the Busselton townsite.⁵³ These were probably Buildings 1903 and 1904.

Between c. 1947 and 1966, the old Forestry School (Building 38; not extant) was used only occasionally for forestry school type activities. In 1966, the building was renovated to once again provide accommodation for forestry staff.⁵⁴ The following year, the old school was damaged by a large peppermint tree blown down by strong winds.⁵⁵ In 1974, the Busselton Junior Football Club took out a lease on the old Forestry School building and playing field. The building was destroyed by fire in 1979.⁵⁶

The Ludlow-Wonnerup Area was entered on the Register of the National Estate in 1978. While the focus of the registration is on the natural stands of Tuart, the entry also identified Ludlow Settlement as having special significance for the history of Western Australia's forestry and silvicultural activities, as the site of the first forestry school in the State.

By 1982, the operations at Ludlow Pine Plantation were limited to 'farming' pine trees (planting, thinning and high and low pruning).⁵⁷

On 22 March 1985, the Forests Department, National Parks Authority and the Wildlife Section of the Department of Fisheries and Wildlife combined to form the Department of Conservation and Land Management (CALM).⁵⁸ In line with CALM

⁴⁹ 'Ludlow – The Early Settlement', typescript, p. 2, Busselton Library.

⁵⁰ 'Ludlow – The Early Settlement', typescript, p. 2, Busselton Library.

⁵¹ Forester Styles to Conservator of Forests, 8 January 1968 & Conservator of Forests to Ludlow Forester, 10 December 1968, Department of Conservation and Land Management, Accommodation and Services, Dept Buildings, Ludlow Forest HQ, Volume 2, File 006290F1802, folios 13, 30.

⁵² Hub Dawson, oral history transcript, p. 2, Busselton Library.

⁵³ Annual Report of the Forests Department, 1974/75, p. 12, V&P, 1975.

⁵⁴ Correspondence from D S Stewart, Chief of Division, 9 March 1966, Department of Conservation and Land Management, Accommodation and Services, Dept Buildings, Ludlow Forest HQ, Volume 1, File 00628F1802, folio 140.

⁵⁵ Forester Styles to Conservator of Forests, 2 February 1967, Department of Conservation and Land Management, Accommodation and Services, Dept Buildings, Ludlow Forest HQ, Volume 1, File 00628F1802, folio 146.

⁵⁶ Judith Johnson, 'The History of the Tuart Forest', in B K de Garis (ed), *Portraits of the South West: Aborigines, Women and the Environment*, UWA Press for the Charles & Joy Staples South West Region Publications Fund, Nedlands, 1993, p. 149.

⁵⁷ Hub Dawson, oral history transcript, p. 2, Busselton Library.

⁵⁸ Annual Report of the Department and Conservation and Land Management, 22 March 1985 to 30 June 1985, pp. 3-4, V&P, 1986. The main functions of CALM were to manage land vested as State Forest and timber reserves, National Parks, Nature Reserves, Marine Parks and Marine nature Reserves (ie lands vested with the Lands and Forest Commission or the National Parks and Nature Conservation Authority).

policy⁵⁹, the houses at Ludlow Settlement were transferred to the Government Employees Housing Authority (GEHA) in 1988, with GEHA becoming responsible for the tenancy and maintenance of the houses.⁶⁰

In 1989, the Friends of the Tuart Forest wrote to CALM expressing concern about the loss of houses at Ludlow Settlement. CALM responded that the settlement was to continue as one of CALM's operation centres and that there were no plans to remove more houses.⁶¹ The future of Ludlow was seriously considered by the Corporate Executive of CALM in 1992. At this time, there were only three employees based at Ludlow and it was felt that the workshops could be rationalised together with facilities at Margaret River. A report compiled in 1993 asserted that only one house (Building 1109; extant), Vehicle Bays (Building 986; extant), workshop, store and chemical store were considered to be 'essential for District operations'. The Research Store and Neutron Probe Shed were the only elements 'essential for Research operations'. The majority of the houses were recorded as being in 'fair' condition and as useful (but not essential) for District and Research operations (apart from Building 854; not extant; which had been condemned). After considering options for the future of the settlement, it was decided that the Ludlow workshop would be closed.⁶²

By 1998, only four of the 13 houses at Ludlow Settlement were occupied by CALM workers. Of the remaining nine houses, seven were privately tenanted, one had been sold (Building 639; not extant) and one had been condemned (Building 854; not extant). At this time, CALM wanted the houses returned so that it could pursue the development of an eco-tourism venture at Ludlow Settlement. All houses had been returned to CALM by July 1999.⁶³

The houses and single men's quarters were entered in the Shire of Capel's municipal heritage inventory in 1999. The management category recommends that they should be recognised and given protection through the processes of the town planning scheme.⁶⁴

In 2004, the majority of the individual houses are privately tenanted under the management of Fraser Real Estate Busselton office on behalf of CALM. The sawmill is not operational, the District Office and Tuart House are unoccupied. At the time of inspection a number of tenants expressed concern about the future of the settlement and noted that they enjoyed living there.⁶⁵

⁵⁹ GEHA File F94052Y88A, folio 2, held at the Department of Housing and Works.

⁶⁰ Correspondence from CALM to GEHA, 8 November 1994, Department of Conservation and Land Management, Accommodation and Services, Dept Buildings, Ludlow Forest HQ, Volume 3, File 030855F1802, folio 1.

⁶¹ Correspondence from Friends of the Tuart Forest to District Manager, CALM, 27 April 1989, Department of Conservation and Land Management, Accommodation and Services, Dept Buildings, Ludlow Forest HQ, Volume 2, File 030855F1802, folio 281; Correspondence from Minister for Conservation and Land Management to Friends of the Tuart Forest, folio 284.

⁶² Report of District Officer, 1993, folio 295; Corporate Executive Item, 10 February 1992, folio 288; Resolution of Meeting of Corporate Executive, 17 February 1992, folio 290; Corporate Executive Summary Sheet, 15 February 1992, folio 302, Department of Conservation and Land Management, Accommodation and Services, Dept Buildings, Ludlow Forest HQ, Volume 2, File 006290F1802.

⁶³ Correspondence from CALM to GEHA, 21 July 1998, folio 114; File Note, June 1998, Department of Conservation and Land Management, Accommodation and Services, Dept Buildings, Ludlow Forest HQ, Volume 3, File 030855F1802, folio 138.

⁶⁴ Laura Gray, 'Shire of Capel Municipal Inventory of Heritage Places', prepared for the Shire of Capel, September 1999, place records 36 and 37.

⁶⁵ Site visit, Ludlow Forestry Settlement, Annette Green and Rosemary Rosario, 14 October 2003.

13.2 PHYSICAL EVIDENCE

Ludlow Forestry Mill and Settlement, comprises an area of approximately 180 hectares and contains a former sawmill and associated workshop buildings and a residential settlement comprising eleven former forestry cottages with associated outbuildings, one former forestry hut (Building 261), a former Education Department house (Building 680), a former school (Building 2357), former District Office (Building 42) and various other buildings and structures. Although Ludlow was first settled in 1921, the majority of extant buildings were constructed between 1950 and 1956, when the sawmill was established, with additional development occurring in the 1960s.

Ludlow Forestry Mill and Settlement is located approximately fifteen kilometres north east of Busselton, and ten kilometres south west of Capel, on Tuart Drive that runs through the Tuart Forest National Park, parallel to the Bussell Highway. Ludlow Forestry Mill and Settlement is located between the Bussell Highway and the coast. The settlement is located on State Forest No. 2. The houses grouped south of the Ludlow River are on Crown Reserve No 868.

The landscape around *Ludlow Forestry Mill and Settlement* features mature Tuart forest with areas of pine plantation in the area immediately surrounding the settlement. There are a number of mature Tuarts throughout the settlement area together with a variety of pines and other specimen and avenue plantings of introduced trees.

From Tuart Drive, the *Ludlow Forestry Mill and Settlement* is accessed by Ludlow Road, a sealed road that runs off Tuart Drive to the north east. The road runs through the centre of the settlement with minor roads, or tracks, leading off on either side. The first building to come into view on entering the settlement is the District Office (Building 42), located in line with the entrance to the settlement, but on an angle to the road. The road continues through the settlement and across a bridge over the Ludlow River approximately mid way through the settlement. The planning of the settlement is irregular with no formal planning grid either for the layout of roads or the orientation of the buildings. Where cottages address a road or track however they are placed in ordered rows with equal setbacks, consistent front fencing styles and front gardens featuring garden plants typical of the interwar and immediate post World War II period. All have fenced rear yards with outbuildings including garages, wcs laundries and water tanks. All cottages have rear access from back lanes.

Ludlow Road runs in an approximately north easterly direction through the settlement. On the western side, before the road crosses the river is a fenced compound enclosing the former sawmill and associated workshop buildings. Access to the compound is from a gravel road located to the north of the District Office (Building 42). The road to the sawmill forks before the access gate and continues beyond the fenced compound to the site of the former school building, now the site of Tuart House (Building 2357). On the eastern side of the road, opposite the entrance to the sawmill, is the first of three groups of forestry cottages. The group comprises three forestry cottages (Buildings 1902, 1901 and 711) and a building identified as the former Education Department house (Building 680).

The road continues past the sawmill enclosure and past an area of degraded bushland on the eastern side, where a water tank stand is located, and across the

bridge over the Ludlow River. The bridge is a timber structure supported on three timber trestles each comprising four rough sawn timber posts. On each side the embankment is lined with timber. The road over the bridge is sealed and there is a steel handrail that probably replaces an earlier timber one.

Opposite the sawmill on the north eastern bank of the river is a pump shed and a small weatherboard clad hut (Building 261). The two main groups of forestry cottages are also located north east of the river bridge. On the south eastern side of the road an unsealed road or track leads to a group of four forestry cottages located on the northern side with a vacant site of a former cottage mid way along. Further north a track leads off the western side of Ludlow Road. This track then branches off to the north east to run parallel to Ludlow Road. There is a group of four forestry cottages on the western side of this track. To the south of the extant cottages is an area of degraded bush with remnants of fencing indicating that the area previously contained three cottages. Between the cottages and the road is an area of long grass and trees with a children's playground at the southern end containing a steel framed slide and swings of the type commonly erected in playgrounds in the 1960s.

The layout of *Ludlow Forestry Mill and Settlement* can be divided into four distinct areas for the purposes of description. These are three groups of forestry cottages, one located to the east of the road and south of the river, one to the north east of the river and one to the west of Ludlow Road. The fourth area located west of the road and south west of the river comprises most of the non-residential buildings including the former District Office, sawmill and workshops are located.

South East Cottage Group

There are three forestry cottages and a building that formerly belonged to the Education Department on the eastern side of Ludlow Road and a track leading off to the east located close to the intersection with Tuart Drive. Remnant fencing and garden plants indicate the sites of a further three cottages that are no longer extant. There is a gravel track further to the northeast that accesses backyards and garages.

The cottages have front gardens enclosed by timber framed fences. Fencing to Ludlow Road is recent timber framed painted white. Fencing along the adjacent track is original timber with woven wire infill. All cottages have original timber framed and clad outbuildings including garages, laundries and wcs. There is a cleared area of grass at the eastern end of the row of cottages where two cottages were formerly located.

There is a timber framed and weatherboard clad School Bus Shelter (Building 1776, 1965) located adjacent to the corner of the intersection at the entrance to *Ludlow Forestry Mill and Settlement.*

This area contains the following extant buildings:

Former Education Department House (Building 680; c1925)

One Cottage Type 6c (Building 711; c1950)

One Cottage Type UK7-3 (Building 1901; 1960s)

One Cottage Type UK7-2A (Building 1902; 1960s)

Former Education Department House (Building 680; c1925)

The building is timber framed and clad with stained, square sawn weatherboards, and has a corrugated iron gabled roof. The roof is continuous over the verandah

and features a cross gable with simple half timbered panelling over the projecting front room. There is corbelled brick chimney of a type typically found on buildings constructed circa 1920. The front verandah has a timber floor, simple square posts and a small infill panel of vertical tongued and grooved panelling to the gable end of the roof.

The windows include a triple casement with two horizontal glazing bars to the projecting front room, paired double hung windows under the verandah, one double hung and one aluminium framed window to the south-east side, and aluminium windows with external timber frames to the north-east side. Framed awnings protect the casement window to the front and the main south-west window.

The original rear verandah has been enclosed and a round post and corrugated iron verandah has been added. An old weatherboard washhouse with an attached toilet remains in the rear yard (covered with ivy) and a garage remains at the front of the block, to the north-east of the house.

One Cottage Type 6c (Building 711; c1950)

This is a standard Type 6c cottage with detached washhouse and timber framed and clad garage.

The cottage is timber framed and weatherboard clad with chamfered edged painted boards (unlike the stained, square sawn boards to most of the 1950s houses). The roof is clad with grey concrete tiles. The main roof is gabled, with a cross gable over the projecting front room and a hipped roof over the entrance hall. The gable ends were finished with flat panels and the eaves lined with battens. The chimney is simply detailed with a soldier course detail at the top.

The front verandah is supported on square posts and the gable end of the verandah roof is finished with vertical tongued and grooved panelling.

Windows are triple casement with two horizontal glazing bars for all of the main rooms. There is a framed awning to the front window.

In plan the cottage includes a small, square entrance hall, living room (with open fire), three bedrooms, kitchen (with wood stove), and a bathroom off the rear verandah. Internally the cottage lining comprises plasterboard walls and ceilings with cornices. Unlike the other houses, there is no evidence of a timber dado. Floors are timber T&G boards. The living room has a face-brick fireplace in the corner with a flat arch and an attached timber mantle.

Both the external and internal detail are largely intact, although kitchen and bathroom fittings have been upgraded over time.

One Cottage Type UK7-3 (Building 1901; 1960s)

This is a substantially intact standard Type UK7-3 cottage with timber framed and clad garage.

The cottage is a timber framed building clad with painted, moulded pine boards. The gabled roof is clad with red concrete tiles and has flat soffits to the front overhang and open timber slats to the side overhangs. A large rectangular chimney is expressed full height on the south-western side of the building.

The front porch and rear verandah are set under the main roof, the front porch featuring red concrete steps and floor, and the rear having a concrete slab floor.

The front door has full height glazing in obscure glass. The windows have hoppers either side of a fixed glazed panel, typically with one division vertically, but with two divisions to the living room.

The cottage has very similar detailing to Building 1902, although to a different floor plan.

One Cottage Type UK7-2A (Building 1902; 1960s)

This is a substantially intact standard Type UK7-2A cottage with timber framed and clad garage. Building 1902 has very similar detailing to Building 1901, although to a different floor plan.

The cottage is timber framed, with timber cladding and a blue concrete tiled gabled roof. The roof has flat soffits to the front overhang and open timber battens to the side overhangs. A large rectangular chimney is expressed full height on the south-western side of the building.

The floor plan comprises a simple rectangle with a living room, three bedrooms, kitchen, bathroom, laundry and toilet all under the main roof. The front porch extends forward from the main part of the house, is supported by simple square sawn posts, and has a raised concrete floor.

Internally the house is plasterboard lined to walls and ceilings. Floors are 75mm Jarrah T & G boards. Internal doors are flush panel, while the front door has a single, full height obscure glass panel. There is a built-in linen cupboard in the central passage.

The fireplace in the living room is painted brick with a projecting brick hearth and plain timber mantle. Above the mantle, the chimney is also expressed in face brick (also painted). A feature of the living room is the built-in entrance hall screen, which features a softwood frame forming shelves on the living room side, with obscure, vertically patterned glass panels.

North East Cottage Group

There are four forestry cottages on the northern side of a curved track that leads off Ludlow Road immediately north of the bridge over the Ludlow River. The area was formerly occupied by eleven forestry cottage and two huts, but a number buildings have been removed. On the southern side of the track is an area of degraded bush on the banks of the river. There is a second track further north that accesses garages located behind the cottages. This track skirts the edge of the adjacent pine plantation.

On the western end of the row of cottages are two sites of former cottages (Buildings 44 and 45) identifiable by the remnants of garden trees and flowers (bulbs). Similarly, part way along the row is a vacant site of a former forestry cottage (Building 854). The approximately 1m high timber and woven wire front fences remain, together with shrubs and trees from the former gardens. Some original tubular metal framed woven wire gates are extant.

All cottages have front gardens enclosed by timber framed woven wire fences. Side boundary fencing is variously recent pine posts with wire and super-six asbestos sheet fencing. All cottages have original timber framed and clad outbuildings including garages, laundries and wcs. Most also have former water tanks in their backyards, generally no longer in use.

This area contains the following extant buildings:

Two Forestry Cottages Type 8d (Buildings 853 and 855; c1950)

Two Forestry Cottages Type 5 (Buildings 1109 and 1110; 1956)

Two Forestry Cottages Type 8d (Buildings 853 and 855; c1950)

Both cottages are standard Type 8d with detached washhouses and timber framed and clad garages. Both cottages are generally intact, although with some modifications through the enclosure of the rear verandah, the replacement of the windows with aluminium framed glazing.

The cottages are timber framed, with square sawn Jarrah weatherboard cladding and corrugated iron hipped and gabled roofs. The living rooms project forward, and feature simple half timbered gables and triple, three-pane casement windows. The main roofs extend over the verandahs and are finished with vertical tongued and grooved panelling to the verandah ends. The verandahs have timber floors and are supported by simple square posts with timber handrails. The front bedroom windows facing onto the verandahs comprise paired, three-pane casement windows, as do the side-facing windows to the rear bedrooms and kitchens. Each cottage has a single chimney, simply detailed in face-brick with a soldier course detail at the top.

In plan the cottages include living rooms (with open fires), two bedrooms, kitchens (with wood stove), and bathrooms off the rear verandah. An additional bedroom is constructed on the rear verandah of each cottage.

The interiors are lined with plasterboard walls with timber battens to the top of the dado and to the vertical panel joints. The main rooms have stained Jarrah dados and the living rooms have picture rails. Plasterboard ceilings have simple moulded or coved cornices. Floors are 75mm jarrah T&G boards. The doors feature a single upper panel over three vertical panels. The living room fireplaces are face-brick with simple timber mantles. The kitchen fireplaces have higher segmental arched openings and simple timber mantles over.

Building 855 has a steel flue replacing the brick chimney and kitchen and bathroom fittings have been upgraded over time. An open bush pole and corrugated iron verandah has been added at the back of the house, the front of the washhouse has been partially enclosed, and additional sheds/carports have been erected around the original garage.

Two Forestry Cottages Type 5 (Buildings 1109 and 1110; 1956)

Both cottages are standard Type 5 with detached washhouses and timber framed and clad garages.

The cottages are timber framed, with a corrugated iron hipped roof and timber cladding. Building 1109 has pine weatherboards which have been painted, while Building 1110 has stained, square sawn weatherboards with a chamfered edge.

Both cottages have a single chimney is plain face-brick with a soldier course detail at the top. The front of the building has a bedroom projecting in front of the other rooms and a skillion roof projecting further forward over the central verandah. The verandah had a timber floor and is supported by simple square posts. Building 1110 has a vertical timber panel balustrade.

The front living room and bedroom windows are triple casements with two horizontal glazing bars. The front kitchen window and the side windows are similar, paired casements. Some of the windows have framed awnings and others are unprotected.

In plan the cottages include a living room (with open fire), two bedrooms, kitchen (with wood stove), and a bathroom off the rear verandah.

The cottages are lined with plasterboard walls with dados and painted picture rails. Internal doors are flush panel, stained to blend with the dado and architraves. The front doors are divided horizontally into four panels, the upper three fitted with obscure glass. Plasterboard ceilings have moulded cornices. Floors are 75mm T&G boards. The living room fireplaces have face-brick with a flat arch and simple timber mantle.

Both cottages are generally intact, although rear verandah has been enclosed and aluminium windows have replaced some of the original casements. Kitchen and bathroom fittings have been upgraded over time.

The original front fence is intact, but the gate of Building 1109 is missing and the gate of Building 1110 is intact.

North West Cottage Group

There are four forestry cottages addressing a track located parallel to and to the west of Ludlow Road on the northern side of *Ludlow Forestry Mill and Settlement*. There is a second track further west that accesses garages located behind the cottages. There is an area of degraded bush featuring a number of mature Tuart trees between the back lane and the adjacent pine plantation. On the eastern side an area of grass and trees separates the track from Ludlow Road. This area features a children's playground.

On the southern end of the row of cottages are three sites of former cottages (Buildings 639, 760 and 584). The sites are identifiable by remnant fence posts and shrubs and trees from former gardens.

Cottages generally have front gardens enclosed by timber framed woven wire fences. Some tubular steel framed woven wire gates remain extant. Side boundary fencing is variously recent pine posts with wire and super-six asbestos sheet fencing or non-existant. All cottages have original timber framed and clad outbuildings including garages, laundries and wcs. Most also have former water tanks in their backyards, generally no longer in use.

There is an area of cleared ground adjacent to the sites of the former cottages, previously the site of a tennis court.

The area also includes several other minor buildings including a timber framed weatherboard clad hut with a corrugated iron gabled roof, aluminium framed windows, and two metal chimney flues (Building 261, undated). There is also a pump house (Building 1775, 1965) on the northern bank of the river above the bridge. A pipe from the pump house crosses the river just west of the bridge.

This area contains the following extant buildings:

Two Forestry Cottages Type 8 (Buildings 624 and 625; c1950)

Two Forestry Cottages Type 8d (Buildings 638 and 852; c1950)

Two Forestry Cottages Type 8 (Buildings 624 and 625; c1950)

Both cottages are both standard Type 8 with detached washhouses and timber framed and clad garages. Both cottages are generally intact, although with some minor modifications including the enclosure of the rear verandah.

The cottages are timber framed, with weatherboard cladding and corrugated iron gabled roofs. The roofs extend over the front and rear verandahs, and the footprint of the cottages is contained within a simple rectangle. The gable ends are finished with weatherboards and the eaves are battened. Each cottage has a single brick chimney, simply detailed with a soldier course at the top. The

verandahs have timber floors and are supported by simple square posts with timber handrails. The gable ends are tongued and grooved panelling.

Paired casement windows (variously with two or three horizontal glazing bars) are used for all of the main rooms. Most of the windows have narrow, flat metal weather shields over, but Building 624 also has framed awnings over the north windows.

In plan the cottages include a living room (with open fire), two bedrooms, kitchen (with wood stove), and bathrooms off the rear verandahs. There are bedroom additions to the rear verandahs. Internally the cottages are lined with plasterboard to walls with timber battens to the top of the dado and to the vertical panel joints. The main rooms have stained Jarrah dados and the living rooms have picture rails (variously continuous or broken). Plasterboard ceilings have simple moulded or coved cornices and are divided into long narrow panels by timber battens. Floors were 75mm jarrah T&G boards. Internal doors are flush panel, stained to match the dado and architraves.

The living room fireplaces are face-brick with a semi-circular arch and simple timber mantle. The kitchen fireplace has a higher segmental arch, also with a simple timber mantle over.

The external detail of Building 624 has been modified by the addition of a second window to the living room (on the southern side). Internally, some of the ceilings appear to have been replaced, the doors have been replaced, the plaster has been removed from the living room fireplace and a new mantle installed above. Kitchen and bathroom fittings have been upgraded over time (although the wood stove has been retained in the kitchen).

The external detail of Building 625 is largely intact. Internally, some of the ceilings appear to have been replaced and the plaster has been removed from the living room fireplace. Kitchen and bathroom fittings have been upgraded over time.

Two Forestry Cottages Type 8d (Buildings 638 and 852; c1950)

Both cottages are both standard Type 8d with detached washhouses and timber framed and clad garages. Both cottages are generally intact, although with some minor modifications including the enclosure of the rear verandah. The cottages are generally as described previously for Buildings 853 and 855, also Type 8d.

The external detail of both cottages is largely intact with some modifications including the enclosure of the rear verandahs. Internally kitchen and bathroom fittings have been upgraded over time.

Internally in Building 638 the ceilings appear to have been replaced and the Jarrah dado has been painted.

Internally in Building 852 the walls in the front rooms appear to have been replastered (including the removal of the timber dado), but otherwise the internal detailing is largely intact.

Sawmill, Workshops and District Office Group

The non-residential group of buildings is located on the north western side of the main access road into the *Ludlow Forestry Mill and Settlement* and on the south western side of the Ludlow River. The group includes the site of the original Forestry School, the District Office (Building 42), together with the buildings associated with the development of the sawmill and workshops from 1950

onwards. Of these, the District Office and the majority of the workshop buildings are still extant.

The former District Office (Building 42) is located on the axis of the entrance to the site. The building is set within an open landscaped area that includes some modern, dilapidated hard landscaping to the south (front), an open square post and rail boundary fence of recent origin and a mixed collection of mature trees and shrubs including both indigenous and introduced species. A track on the northern side (behind) the building accesses a parking area and continues west past the fenced sawmill enclosure to Tuart House (Building 2357). There is a timber framed and clad toilet block (Building 1866) to the west of the District Office (Building 42). There is a second similar toilet block (Building 1697) located on the northern side of the fenced sawmill enclosure on the southern banks of the Ludlow River.

Tuart House (Building 2357) is located on the site of the former Forestry School (Building 38, not extant). The site retains physical evidence of the former building including some remnants of a former entrance path and specimen tree planting in the immediate area. An avenue of peppermint trees flanks a former track, linking this site to the fenced sawmill and workshops area. There is a contemporary toilet block adjacent together with small picnic area, with seats, tables and barbeque. A mature tuart, formerly used as a fire look-out tree, is also located in this area.

The sawmill and associated workshops occupy an area of approximately 30 hectares on a site enclosed by a cyclone mesh fence approximately 2m high with barbed wire to the top. Entrance to the compound is by way of a steel framed gate located at the southern corner. The site is unsealed and the ground is mainly gravel and compacted earth with some areas of long grass, shrubs and trees around the periphery. The site contains a number of timber framed weatherboard and asbestos sheet clad industrial buildings in various stages of disrepair. Some structures contain items of machinery. On the eastern side adjacent to Ludlow Road are two timber framed tank stands. The compound contains the sites of several buildings that are no longer extant. These include Building 260 the Fire Equipment Store and Vehicle Shed which has been replaced by a metal clad shed identified as the Chemical Store, and Building 40, the General Storeroom and Oil Store formerly located on the site of Building 2278.

This area contains the following extant buildings:

Tuart House (Building 2357; undated)

District Office (Building 42; c1920s and c1957)

Workshop-Garage (Building 654; c1950)

Sawmill Building (Building 655; c1950)

Planer Mill Building (939; c1950)

Timber Storage Shed (940; c1950)

Vehicle Shed and Storeroom (Building 986; undated)

Gantry (Building 1777; 1960s)

Workshop (Building 1919; 1960s)

Shade House (Building 2259; 1960s)

Stores (Buildings 2278 and 2279; undated)

Tuart House (Building 2357; undated)

Physical evidence suggests that Tuart House (Building 2357) was a former school building that has been moved to this site. It is timber-framed, with pine weatherboards to windowsill height and fibrous sheeting over. The hipped, corrugated Colorbond roof extends over a partially enclosed verandah on two sides and a storeroom on the third. Windows are double hung sash with variously single pane and six-pane glazing. The door is located off the western verandah and is panelled a glazed upper panel.

District Office (Building 42; c1920s and c1957)

The District Office is also referred to as the Tuart Forest Visitors' Centre and is currently vacant. It is a 4 roomed, timber framed building, clad with stained, square sawn weatherboards with a green Colorbond roof. The front and rear verandahs are located within the simple rectangular outline of the building, while the face-brick fireplace and chimney is expressed externally to the northeast elevation.

The external finishes, including the double hung sash windows, doors, verandah and gable details, are the same to both the original portion of the building and the c.1957 extension, suggesting that it was largely refurbished at the latter date. The external details are simple with little decorative treatment other than the recessed front verandah, which is finished with a horizontal moulded pine dado with vertical moulded panels over. The doors to the office areas at either end of the verandah have a single pane of obscure glass over three, narrow, vertical recessed panels (similar to those found in some of the 1950s houses). The external doors to the rear are simple ledge and brace.

Internally there are a variety of finishes to the main rooms. The former general office has wide Jarrah floorboards, plasterboard ceiling, and plasterboard walls with a timber dado that changes from Jarrah in the back part of the office to more recent softwood panelling in the area visible to the public. A safe is built into the public counter, which appears to have been refurbished with new timber panelling in the 1960s period. A painted brick fireplace with corbelled brick mantle is located at the centre of the north-eastern wall. The former records room in the centre of the building has wide jarrah floorboards and painted timber boards to the walls and ceiling. Built-in pigeonholes and storage cupboards line the north-western and south-western walls. The c.1957 addition has clear-finished pine floorboards, dado and decorative ceiling. A softwood panelled partition separates the space into two rooms. The former radio room, off the rear verandah, was locked at the time of inspection.

Workshop-Garage (Building 654; c1950)

The Workshop-Garage is also referred to as the Carpenters' Workshop and Store. It is a large rectangular timber framed and weatherboard clad building with a gabled corrugated iron roof. The front (south-eastern elevation) includes four sets of full height, double, ledge and brace garage doors. At the rear there a number of attached outbuildings/extensions and another set of full height, double, ledge and brace garage doors. Windows are variously single casement or louvre, and have narrow, flat metal weather shields. Access doors are simple vertical panelled ledge and brace.

The interior is generally unlined, with a concrete floor. Timber partitions separate the different work areas.

Sawmill Building (Building 655; c1950)

This building comprises a collection of largely open-sided structures in three attached units, with lean-tos. The building is framed by bush poles (some roughly squared) and has a gabled roof, variously clad with corrugated asbestos and corrugated iron. Where partly enclosed, the walls are clad with square sawn weatherboards. The floors are primarily earth, with small sections of concrete or timber.

Within the former sawmill there are some remnants of machinery, including chutes, hoists and saw-benches.

Planer Mill Building (939; c1950) and Timber Storage Shed (940; c1950)

While constructed as separate buildings, the Planer Mill Building (Building 239) and Timber Storage Shed (Building 940) are linked together in an 'L' shaped group by an open sided link structure.

The Planer Mill Building is a timber-framed structure supported on squared bush poles clad with weatherboards and has a part corrugated iron and part asbestos skillion roof. This rectangular building is orientated east-west and is linked to the Timber Store by an open-sided, undercover area.

The Timber Storage Shed is orientated north-south. It has an enclosed timber framed building at the northern end, which is signed as the Fertilizer Store. This is clad with weatherboards and has a corrugated iron gabled roof. The main part of the Timber Storage Shed is open sided with a corrugated iron saw-tooth roof. It is framed with bush poles (some roughly squared) and has a dirt floor.

Vehicle Shed and Storeroom (Building 986; undated)

The Vehicle Shed is also referred to as the Tractor Shed. It is framed with bush poles (some roughly squared). It is a long rectangular building which is open across most of the front (eastern) elevation and to the south end. Where enclosed, the building is clad with stained, square sawn weatherboards. The skillion roof is clad with corrugated galvanised iron. An enclosed store (labelled "Sign Store") is located at the northern end. This has double ledge and brace doors to the front and double hung windows to the northern side.

Internally the vehicle shed is unlined with a dirt floor retaining some evidence of a concrete screed. No access was available to the Sign Store at the time of inspection.

Gantry (Building 1777; 1960s)

The three bay Gantry is an open sided structure with a corrugated iron roof. On the southern side of the structure a set of three, A-frame bush poles support the roof and two sets of hoist equipment. On the northern side the structure is supported by square sawn posts. The place has an earth floor.

Workshop (Building 1919; 1960s)

This is a large rectangular, timber framed building with a curved timber bow trussed roof clad with and corrugated iron. The walls are clad with stained, square sawn weatherboards and include large, full height sliding doors to the front (south-east) and rear elevations. There are weatherboard lean-tos with skillion corrugated iron roofs on the south-western and north-western sides.

Internally the building is unlined and has a concrete floor. Timber partitions, of painted, moulded pine boards, create separate rooms at either end.

At the rear of the building there is a separate earth ramp and timber platform forming vehicle maintenance 'pit'. A structure that was probably a small generator room is located nearby.

Shade House (Building 2259; 1960s)

The Shade House has a face brick base supporting a glazed metal frame structure to the upper walls and gable roof. A separate, outer metal frame supports green shade cloth. A second shade house adjacent comprises a dilapidated timber frame, supporting remnants of shade-cloth and woven wire infill.

Stores (Buildings 2278 and 2279; undated)

Store (Building 2278) is a rectangular timber-framed building, clad with treated pine boards and a corrugated iron, gabled roof. At the southern end, the building has hopper windows and a timber ledge and brace door. At the northern end there is a metal roller door.

Store (Building 2279) is a small corrugated iron shed on an elevated face-brick base. It has a small, timber, loading platform at the front, with access to the building through a metal roller door.

13.3 COMPARATIVE INFORMATION

Comparative information is extracted from "Thematic History of Forestry Cottages", prepared for the Department of Housing and Works on behalf of GEHA and CALM, February 2004 by Heritage and Conservation Professionals with historian Jacqui Sherriff.

There are no other known places that are directly comparable to *Ludlow Forestry Mill and Settlement*. Such places would be settlements directly related to the development of the softwood industry in the 1950s that were established on sites with a previous history associated with the forestry industry in Western Australia.

Forestry settlements that have been recognized for their heritage values include the Dryandra Woodland Settlement established in 1935. Dryandra, located approximately 160 km south-east of Perth off the Wandering Narrogin Road, contains a number of forestry buildings constructed in the period from 1936 to the 1950s. The majority of the cottages are Types 8 and 6. The site also contains a hall, a dam and a group of sheds and outbuildings on a 26 hectare site.⁶⁶ Dryandra has not been included on the Heritage Council's Register of Heritage Places.

Pemberton Timber Mill Workers' Cottages Precinct was included on the Register of Heritage Places with permanent status on 28/11/2003.⁶⁷ Pemberton by contrast to Ludlow, comprises a mill town developed in the context of the establishment of the State Saw Mills in the period circa World War I. The town planned on town planning principles and containing extensive community facilities such as a hospital, shops, hotel and churches. By contrast Ludlow is a collection of cottages for workers in a rural bushland setting. There are other mill towns in the southwest that would provide similar comparisons including Donnelly River and Deanmill. Deanmill has not to date been assessed for heritage values, while Donnelly River Mill and Townsite Precinct (P8198) is currently being

^{66 &#}x27;Dryandra Woodland Settlement Conservation Plan', Kelly Aris, Erickson & Taylor and Gaye Nayton, prepared for Department of Contract and Management Services; 1998.

⁶⁷ Pemberton Timber Mill Workers' Cottages Precinct, Assessment Documentation for Register of Heritage Places, 28.11.03.

assessed. Neither are not directly comparable to Ludlow Forestry Mill and Settlement.

Throughout the history of forestry in Western Australia settlements similar to Ludlow have been established and disbanded in response to changes in the forestry industry. A characteristic of these settlements has been the relocation of cottages on an as needs basis. Other extant settlements that have not been assessed for their heritage values are located at Myalup, Lewana and Wellington Mills. The settlement at Lewana is privately owned.⁶⁸

The industrial and the residential buildings constructed at Ludlow are typical examples of buildings erected by the Forests Department. The industrial buildings are all standard types constructed by the Forests Department in the period 1950 to 1954 or in the 1960s. No comparative information is available for these or for the machinery they contain. There is no evidence to suggest that they are unique however.

The cottages extant at Ludlow comprise two Type 8, four Type 8d, one Type 6c, two type 5, and one each of Types UK7-2A and UK7-3. Cottage Types 8, 8d and 6c were standard designs built by the Forests Department and erected in numerous areas from the 1920s. Types 5, by contrast were only built in the period from 1946 to 1969. Types UK7-2A and UK 7-3 are examples of a range of houses designed as transportable homes, capable of being trucked to the site for erection on stumps and of easy relocation to new sites. An extensive comparative survey has not been carried out, however a preliminary survey of cottages owned by GEHA and CALM indicates numerous examples of Types 8, 8d and 6 in existence. The survey identified approximately 12 cottages believed to be Type 8, thirty one believed to be Type 8d and nine believed to be Type 6. Type 5 is less common with seven examples identified. Approximately eight of the UK7 range of transportable cottages were identified. ⁶⁹

While Ludlow the cottages extant at *Ludlow Forestry Mill and Settlement* are not individually rare and are of quite recent origin, the precinct does provide a highly intact collection of cottages representing the history of forestry cottage housing from the 1950s in a location that has a previous history associated with the industry dating from the early 1900s.

13.4 KEY REFERENCES

Heritage and Conservation Professionals, "Thematic History of Forestry Cottages", prepared for the Department of Housing and Works on behalf of GEHA and CALM, February 2004.

13.5 FURTHER RESEARCH

Further research is required to situate the precinct in a wider social and economic context of softwood production in Western Australia. No relevant sources were located during the course of this project.

No files were located at either the State Records Office of Western Australia or CALM documenting the construction and operation of the mill buildings.

⁶⁸ Heritage and Conservation Professionals, "Thematic History of Forestry Cottages", prepared for the Department of Housing and Works on behalf of GEHA and CALM, February 2004.

⁶⁹ Ibid. p63-65, Survey of Forestry Cottages owned by GEHA and CALM.