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)

- 3.8.1. Shipping to and from Australian ports
- 3.16.1 Dealing with hazards and disasters
- 5.1 Working in harsh environments

HERITAGE COUNCIL OF WESTERN AUSTRALIA THEME(S)

- 201 River and sea transport
- 507 Water, power, major transport routes

11. 1 AESTHETIC VALUE*

Cape Naturaliste Lighthouse and Quarters is a significant feature in the natural landscape. The bulky fence lines and the squat presence of the cottages, contrasts sharply with the natural, scrubby vegetation. Rising above all this is the pristine whiteness of the lighthouse tower, which appears almost isolated from the other features. In combination with the topography of the Cape, the place is a prominent visual landmark, especially from the ocean. (Criterion 1.3)

11. 2. HISTORIC VALUE

Cape Naturaliste Lighthouse and Quarters was an important link in the development of coastal lights which eventually circled mainland Australia, following an inter-colonial conference held in 1873 that recognised the need for additional lights along the Australian coastline. (Criterion 2.2)

The slower development of coastal lights in Western Australia than in other States was directly related to less shipping on the west coast and a lack of government funds. The discovery of gold in Western Australian in the 1890s permitted Western Australia to begin an active government building programme, which included the construction of lighthouses. *Cape Naturaliste Lighthouse and Quarters* represents a later part of this increased building program. (Criterion 2.2)

The erection of adequate navigational aides was important to the local industries which depended on coastal shipping to either transport their

* For consistency, all references to architectural style are taken from Apperly, Richard; Irving, Robert and Reynolds, Peter *A Pictorial Guide to Identifying Australian Architecture: Styles and Terms from 1788 to the Present* , Angus & Robertson, North Ryde, 1989.

produce or supply them with goods. The construction of *Cape Naturaliste Lighthouse and Quarters* was important to the development of safe shipping around Western Australia's coastal ports, and the place continues to function as a lighthouse. (Criterion 2.2)

11. 3. SCIENTIFIC VALUE

The Chance Brothers lens and optical equipment is still in operation in the lighthouse and is a piece of precision engineering equipment which has continued in perfect working order since 1903. (Criterion 3.3)

Cape Naturaliste Lighthouse and Quarters was occupied by keepers for nearly 100 years. The archaeological information retained beneath the floorboards of the cottages and in the refuse dumps, could give invaluable information about the lives and habits of these isolated families. (Criterion 3.2)

11. 4. SOCIAL VALUE

Cape Naturaliste Lighthouse and Quarters is highly valued by the local community as it has become an important tourist destination for visitors. This importance is reflected in the recent document released by CALM requesting public comment on the conservation of the site, and on the development of the site as a tourist destination. (Criterion 4.2)

The importance of *Cape Naturaliste Lighthouse and Quarters* has been recognised by the Heritage Council of Western Australia, the Australian Heritage Commission and also by the people of Augusta-Margaret River who have placed the buildings on their local Municipal Inventory. The lighthouse still plays an on-going role in the local maritime community. (Criterion 4.2)

12. DEGREE OF SIGNIFICANCE

12. 1. RARITY

Cape Naturaliste Lighthouse and Quarters represents a way of life that is no longer practised today. Keepers were required to maintain the lamp through the night and they also played a vital role in maintaining weather and shipping records. However, the arrival of modern technology, and the automation of most of Australia's coastal lights, has made the occupation of the lighthouse keeper redundant. The cottages where the keepers once lived are the only reminder of a once labour intensive job and the number of people required to keep the lights operational. (Criterion 5.2)

12. 2 REPRESENTATIVENESS

The lighthouse is an excellent example of a stone tower that was regularly used by many states and countries as the form most suitable to house the lens and light source which make up a lighthouse. Chance Brothers lenses were used in most of Western Australia's lighthouses. The style of the tower is practically identical to the second light constructed at Breaksea (1901) and that built at Point Cloates in 1906. (Criterion 6.1)

The keepers' quarters are representative examples of residences designed for public servants by the Public Works Department. In particular, the internal layout can be found in the Beverley Police Station quarters and is similar to keepers' quarters built at Cape Leeuwin and elsewhere in Western Australia. (Criterion 6.1)

The service buildings on the site are representative examples of the types of utilitarian buildings constructed during the 1940s and 1970s. (Criterion 6.1)

12. 3 CONDITION

The lighthouse is generally in good repair, although there is minor wear to some elements such as the stair treads, and evidence of rust, seepage and mildew. The building has been well maintained and a regular maintenance programme is carried out. The building is in good condition.

The lighthouse quarters, laundries and toilets are in good condition.

The remaining buildings on the site, which include the store, shed, garage and new power house and store have been well maintained and are in good condition.

12. 4 INTEGRITY

The interior layout of the lighthouse remains unaltered and the building is still used for its original purpose, although the light has been automated. The lighthouse has a high degree of integrity.

The lighthouse quarters, laundries and toilets have all undergone minor interior alterations to fixtures and some interior spaces. Alterations have been made to Residence 1 (building no. 2) on the eastern side of the building to create a new kitchen. Residence 2 (building no. 3) is now used as the Tourist Office and houses a small museum. Although no additions have been made, some of the internal walls have been modified. Residence 3 (building no. 4) is the most intact residence and is currently unoccupied. As none of the buildings are now used for their original use, as a residence for a lighthouse keeper, the buildings have only a moderate degree of integrity.

The remaining buildings on the site, the store (building no. 5), the shed (building no. 6), the garage (building no. 7), and the new power house and store (building no. 8) have not had their original form altered and are currently used for their original purpose (with the exception of building no. 6 which was originally designed as a power house). Buildings 5, 6 and 9 have a high degree of integrity while building 7 has a moderate degree of integrity.

12. 5 AUTHENTICITY

All of the buildings on the site have undergone minimal alterations to their fabric. Although there have been some minor alterations, such as the replacement of the casement windows on the lighthouse, and additions to building no 2, the place has retained a high degree of authenticity.

13. SUPPORTING EVIDENCE

The documentary and physical evidence has been compiled by Fiona Bush.

13. 1 DOCUMENTARY EVIDENCE

Cape Naturaliste Lighthouse and Quarters comprises the stone lighthouse tower (1904) and three stone cottages with detached stone laundries and toilets (1904), which were constructed for the State of Western Australia. There are also three, timber framed buildings clad with asbestos cement: a store (1940s), shed (1940s) and garage (1948), and a brick power house and store (1973). These four buildings were constructed for the Commonwealth Government.

The first lighthouse erected in Western Australia was on Rottnest Island. Henry Trigg, the Superintendent of Public Works, started work on that lighthouse in 1842 and the optical equipment was finally installed in 1851.[1] The colony's second light was constructed on Breaksea Island, near Albany, in 1858.[2] Western Australia had a very slow start in lighthouse construction, in comparison to the eastern colonies. However, the construction of lighthouses was directly linked to the amount of shipping reaching the colonies and more ships proceeded east rather than stopping on the west coast. In 1878, a third light was constructed in Geraldton, at Point Moore, a direct result of the mining activity that was taking place at the Northampton mineral field.[3]

At an inter-colonial conference held in 1873 in Melbourne to discuss the management and maintenance of coastal lights, it was agreed that twenty-four new lights were required Australia - wide. Two new lights were suggested for the Western Australian coast; one at Cape Naturaliste and the other at Cape Hamelin (near Cape Leeuwin).[4] The delegates agreed that the maintenance and construction of lighthouses would remain the responsibility of the colony in which the lighthouse was situated, unless the light was specifically sited for the benefit of another colony. In those instances, the cost of erecting such a light would be borne by the other colony (or colonies) affected.'[5]

The early settlement of Busselton could be said to have followed three phases. The first phase (1830s) was represented by those settlers who chose to select land close to the Bussell family (at Cattle Chosen), the first Europeans to explore the area. As the Resident Magistrate lived close to the Bussells, a detachment of soldiers was also stationed near by and afforded some protection for the early settlers. The second phase (1840s) was represented by the selection of land that was a little more removed from the protection of the soldiers, such as around the Vasse Inlet and at Wonnerup. European settlers were still close to the original settlement, but had begun to expand their presence in the area. The third move (1850s onwards), involved settlers choosing land much farther afield, such as that around Cape Naturaliste. This third shift saw the district expand considerably and represents the commencement of the economic development of the area, as many new settlers were attracted to the area.[6]

From the early years of Busselton's settlement, the colonists were actively involved in trading (or bartering) with the American whaling ships that visited the southern and western coastline of Western Australia. This trade continued into the 1840s and 1850s, with the local settlers also establishing a Whaling Station at Castle Rock.[7] During the 1870s, the number of trading vessels visiting the area began to increase and a letter to the *Inquirer* in May 1879 complained about the lack of lights and pilots at both Bunbury and Busselton. As many of these ships were waiting to load timber at both Koombanah and Geographe Bays, the absence of adequate lights and pilots

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1 Le Page, J.S.H., *Building a State: the story of the public works department of Western Australia 1829 - 1985*, Water Authority of Western Australia, 1986, pp 44 -45.

2 Wolfe & Associates, 'The Breaksea Island Lighthouse; site particulars and history', Nov. 1994

3 *The Inquirer & Commercial News*, 21 April 1879.

4 Reid, G., *From Dusk till Dawn: a history of Australian lighthouses*, MacMillian, South Melbourne, 1988, p.116.

5 Reid, p.116.

6 Jennings, R., *Busselton: "...outstation on the Vasse"*, Shire of Busselton, Busselton, 1983.

7 Gibbs, M. 'The historical archaeology of shore based whaling in Western Australia, 1836 - 1879', unpublished manuscript, PhD Thesis, Anthropology Dept., UWA, 1995.

suggested a lack of regard for the burgeoning timber trade.[8] The writer went on to refer to the inter-colonial conference held in Melbourne and re-affirmed the need for a light at Capes Hamelin, Leeuwin and Naturaliste.[9]

The move towards a Federation of Australian colonies saw the preparation of a draft constitution in 1891. In this document, it was noted that the Federal Government would be responsible for ocean lights and buoys. This responsibility was reiterated in the 1897 Adelaide constitutional convention. However, on the eve of Federation in 1901, the new Commonwealth government's coffers were hardly over-flowing and if the states thought that they would no longer have the financial responsibility of erecting coastal navigational aides, then they were sorely mistaken. It was not until 1916 that the Federal Government finally took over the responsibility for State lighthouses.[10]

The Western Australian gold rushes at the end of the nineteenth century, enabled the State to embark on a building programme which had been long overdue. The first lighthouse completed during this building phase was the Cape Leeuwin light, completed in 1896. As this cape represented the south-western most point of Western Australia, and had treacherous shoals and rocks nearby, it was considered to have the highest priority.[11] In 1902, tenders were called for the construction of a lighthouse and keepers' quarters on Cape Naturaliste. The successful contractor was Mr Anderson with a quote of £4,800. Work started on the 11 February 1903. The limestone for both the lighthouse and the quarters was quarried from nearby and carted by bullock wagons to the site. Other material came overland from nearby Eagle Bay. Due to the high elevation of the site, only a comparatively short tower of 20 metres was required. The lantern room was designed by W.T. Douglass, an English maritime engineer who also designed the lantern room for Cape Leeuwin.[12]

The optical apparatus was designed by the lighthouse specialists, Chance Brothers and Co Ltd of Birmingham.[13] They supplied a first order dioptric lens with a double burning lamp that used vaporised kerosene. This apparatus produced a light of 755,000 candelas that was visible for 29 nautical miles in clear weather. The light's characteristic was a group flash 2 every 10 seconds. The apparatus cost £5,425.[14] The light was also connected to the telegraphic system and operated as a Lloyd's signal station.[15] The opening ceremony was held on Friday 21 April 1904 with the Governor, Admiral Sir Frederick Bedford, officiating. At the opening, the Colonial Secretary, Mr Kingsmill, acting as the government's representative, stated that the lighthouse

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8 *Inquirer*, 21 May 1879.

9 *Inquirer* 21 May 1879.

10 Reid, G., pp. 130 - 131.

11 HCWA Assessment Cape Leeuwin Lighthouse and Quarters Data No. 0104.

12 Danvers, Architects,' Conservation Plan of Cape Naturaliste Lightstation', Western Australia, November 1992, p. 8.

13 By the first quarter of the nineteenth century, this firm had supplied optical apparatus for most of Western Australia's lighthouses and also many of the lights in the other Australian colonies. See Brewis.

14 Reid, G., p. 124.

15 Cumming, D.A, Glasson, M. & McCarthy, M., 'Lighthouses of the Western Australian coast and off-shore islands, Working File #1: Lighthouses and lightstations A to Z', Dept. Maritme Archaeology, West Australian Maritime Museum, No. 100., 1995, Cape Naturaliste.

> would complete a chain of lights on the South-West coast and would be of immense benefit to mariners. The light would bear favourable comparison with most of the lights on the Australian coast.....It would to a great extent minimise one of the principal dangers on this coast, namely, the Nauraliste reef.[16]

When the Cape Naturaliste light came on line, illumination was provided by an Argand lamp which operated on a system of concentric wicks which burnt kerosene or mineral oil. The higher the number of wicks used, the greater the illumination.[17] The power of the smokeless lamp was further enhanced by the use of a system of concentric prisms around a central light. The prisms reflected and refracted the light, greatly enhancing its natural power.[18] Lights could be made to 'flash' by revolving both the light and the prisms. The revolving mechanism utilised a heavy weight on a chain (like a grandfather clock), which fell down the centre of the tower.[19] The mechanism was periodically wound through the night to keep the light revolving. The capability of lights to 'flash' more than once in one revolution was solved by adding additional prisms.[20] The incandescent mantle replaced the wick system, permitting kerosene to be burned under pressure, which produced a stronger light. In the Chance lights, the kerosene was preheated to produce a slight vapour, which then burnt under slight pressure and ignited a textile mantle. Lights fitted with this new system also had to be fitted with a pressurised fuel tank that would force the fuel into the lamp. Pressure was maintained by occasional pumping.[21]

Keepers were required to wind the clock-work mechanism and to keep the pressure supplied to the pressurised kerosene lamp. As Cape Naturaliste was listed as a Lloyds' signal station, the keepers noted in a log the ships which passed them and telegraphed the information to the main office in Western Australia. They also kept extensive weather records and maintained all of the buildings on the site.[22]

Prior to the hand-over of all coastal lights to the Commonwealth in 1916, Commander Brewis carried out an extensive survey in 1912 of all the existing coastal lights. In his report on the Cape Naturaliste light, he noted that the tower was a grey stone colour (ie unpainted) and that both the tower and optical apparatus were in good condition. Three keepers were present and the lighthouse was connected by phone to both Cape Leeuwin and Busselton. He had no recommendations to make.[23] In 1916, at the time of hand-over, the lighthouse was valued at £1,900, the quarters £4,658 and the other ancillary buildings (cart-shed and store) at £165.[24]

In 1917, general repairs were made to the buildings. The interiors of the quarters were cleaned and painted and the verandahs enclosed. The work cost £145.16.5.[25] In 1924, the light's intensity was upgraded to 1.2 million candelas and at a later date converted to electric illumination.[26] Further, more

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16 *South Western Times*, 22 April 1904.

17 G. Reid, p. xiv.

18 G. Reid, pp 189 - 194.

19 G. Reid, p. xv.

20 G. Reid, p. 194.

21 G. Reid, p. 195.

22 Reid, G.

23 Brewis, C.R.W., *Lighting of the west coast of Australia. King George Sound to Cambridge Gulf,* Dept. of Trade and Customs, Victoria, 1912, p. 16.

24 Danvers, p. 8.

25 Australian Archives, WA PP359/1; 16/2.

26 Reid, G., p. 124.

extensive repairs were made to the precinct in 1948 and were carried out by R. Falkingham and Sons of Busselton. The work involved the construction of a new garage / workshop, renovations to all bathrooms in the cottages, new woodsheds, new concrete floors to the laundries and the removal of the old cart shed and stables. The existing oil store was given a new asbestos roof. The work cost £1,300 and was completed by the 10 June 1948.[27]

In 1973, a new powerhouse and store were constructed near the lighthouse itself to house an emergency generator. The road and pathways around the precinct were sealed with bitumen. By 1979, only one keeper was required to maintain the light. One cottage was leased to CALM and the other to the Busselton Tourist Bureau.[28] The Busselton Tourist Bureau utilised the cottage as an office and museum display.

In 1988, illumination was produced by a 1000 watt, tungsten-halogen lamp which operated off mains power, with stand-by power provided by a diesel generator.[29] Cape Naturaliste lighthouse was one of the last lighthouses to retain a keeper; it was finally automated in 1995.[30]

In 1996 the place was entered into the Shire of Busselton's Municipal Inventory of Heritage Places, and given Management Category Two (High Level of Protection).

Cape Naturaliste Lighthouse and Quarters was transferred from the Australian Maritime Safety Authority (or the Commonwealth) to CALM in 2000.[31] AMSA retains responsibility for the lighthouse tower and CALM for the remainder of the precinct. The place is now vested as part of the Leeuwin-Naturaliste National Park. Since this vesting, CALM has finalised the concept planning process for the precinct. It is currently in the process of selecting proponents to manage the ongoing commercial operations t the lighthouse precinct. The Heritage Council of WA is a primary stakeholder in this process and it is anticipated that the selection process should be finalised by late 2002. Inherent in the planning process was the provision for an opportunity to establish a new visitor centre there. While the on-site management regime may change, the conservation of the landscape, natural and heritage values are ensured in this process.[32] The site is currently a popular tourist destination for intra-state, inter-state and overseas visitors.

13. 2 PHYSICAL EVIDENCE

Cape Naturaliste Lighthouse and Quarters comprises the 20 metre stone lighthouse tower (1904) and three stone cottages with detached stone laundries and toilets for the cottages (1904), three timber framed buildings clad with asbestos cement: a store (1940s), shed (1940s) and garage (1948), and a brick power house and store (1973).

Cape Naturaliste Lighthouse and Quarters is located on the western side of Cape Naturaliste which lies about 13 kilometres to the south of Dunsborough. Cape Naturaliste is a high point of land sitting 100 metres above sea level, overlooking Geographe Bay. The place is situated in a 8 hectare reserve

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27 Australian Archives, WA PP 65 / 1; 47 / 48 - 78, Job 1786.

28 Danvers, p. 9.

29 Reid, G., p.124.

30 Cumming, D.A, Glasson, M. & McCarthy, M., Cape Naturliste.

31 CALM, 'Leeuwin-Naturaliste National Park: Cape Naturaliste Lighthouse Concept Plan',
15 October 2001, p.1.

32 Letter to HCWA from Minister for Environment & Heritage dated 10 June 2002.

which is part of the Leeuwin - Naturaliste National Park. The headland is covered with fairly stunted native vegetation. Small native trees have been planted around the car park which gives access to the lighthouse. The site is accessed from Dunsborough by a sealed, bitumen road.

The site is divided into two distinct sections: the lighthouse precinct and the residential precinct. Sealed, bitumen paths link the precincts. The lighthouse precinct is located on the highest point of the bluff, and includes the lighthouse, the new power house and weather recording equipment. A cyclone mesh fence fully encloses the lighthouse precinct. The residential precinct, lies approximately 170 metres to the south of the lighthouse, it includes the three cottages, laundries, toilets and associated buildings. A corrugated fibro cement fence runs around the western side of the precinct, with a cyclone mesh fence enclosing the remaining sides of the precinct. A fibro cement fence divides each of the cottages from one another.

Lighthouse (1904)

The 20 metre tall, circular tower is constructed from locally quarried limestone. The walls are coursed, quarry faced stonework with dressed margins to the stones around the plinth and openings. The balcony platform is moulded concrete that has been rendered. An iron balustrade runs around the outer edge of the balcony. An aluminium mesh has been placed around the balustrade. The lantern house is cast iron with diamond shaped window panes. The whole of the exterior has been painted white.

The arch headed door has dressed margin details to the keystones and the windows have similar details to their flat arches. One original casement window with timber frame remains, the other windows are fitted with metal frames and fixed panes.

A six panel timber door leads into the ground floor entry foyer which features a teak staircase, with a polished brass handrail, leading to the upper floor. A cast iron circular housing runs down the centre of the tower. It holds the clockwork mechanism which once kept the lens rotating. Three pedestals around the floor mark the positions formerly occupied by oil storage tanks. The staircase leads to the upper floor which is cast iron, with a cast iron door opening out onto the balcony. The original Chance Brothers' lens, consisting of a 920mm focal radius revolving lens, now driven by an electric motor, is still insitu in the lantern room. The optical apparatus and the turntable float on 210 kg of mercury which is contained within the pedestal (see enclosed picture).

The tower is in good condition with some wear evident to the timber stair treads. Original fabric and fittings remain largely intact, although the light source is now a 120 volt, 1,000 watt tungsten halogen lamp which operates off mains electrical power. The lighthouse retains its original function.

Lightkeepers Quarters (1904)

The three stone quarters (Buildings 2, 3 and 4) are identical in layout, with the exception of Residence 1 (Building 2), which has been altered by enclosing the eastern verandah to provide space for a kitchen. All of the buildings are constructed from random coursed limestone (which has been painted). The hipped roofs are covered with corrugated asbestos sheeting. The verandahs have been enclosed with asbestos cement sheeting on a timer frame. The chimneys are rendered. Much of the original timber joinery (including doors and windows), has been retained as have the lathe and plaster ceilings and original wall finishes. The front door lies on the southern side. The layout of

the buildings is essentially two front rooms either side of a central corridor. The south-north corridor leads into a larger room at the back (north) with a slightly smaller room opening off it on the western side. Additional rooms lie under a skillion roof on the northern side. (see plans).

The Residences are separated from each other by corrugated fibros cement fences. The detached laundries and toilets are located at the rear of the buildings (northern side). Water tanks are located on the north eastern corners of each of the Residences and near the laundry blocks.

The buildings are in good condition and have undergone some minor alterations which include the enclosure of the verandahs, the removal of the corrugated galvanised iron on the roofs and minor alterations to Residence 1 (Building 2). Residence 3 (Building 4) is vacant, while Residence 2 (Building 3) currently serves as the Tourist Centre and museum.

Laundries and Toilets (1904)

The three structures (Buildings 2a, 3a and 4a) are constructed from painted, random coursed stonework, with asbestos cement sheeting on the southern sides. The skillion roofs are clad with corrugated asbestos cement. The layout is one large room (the laundry) on the southern side, with a smaller room (the toilet) on the northern side. The floors are concrete. The structures are generally in good condition and have undergone only minor alterations to finishes and openings. The original corrugated galvanised iron roofs have been replaced.

Store (1940s)

This structure (Building 5), together with Buildings 6, 7 and 8, forms part of a new group of service buildings. The building is timber framed and clad with asbestos cement sheeting. The gable roof is covered with corrugated asbestos cement sheets. The building is in good condition and is generally unaltered. The building was originally built as a storeroom with attached workroom.

Shed (1940s)

Building 6 is a timber-framed structure clad with asbestos cement sheets. The gable roof is covered with corrugated asbestos cement sheets. The building is in good condition and is generally unaltered. The building was originally used as a powerhouse but is now used as a 'sleep out'.

Garage (1948)

Building 7 is a timber-framed structure clad with asbestos cement sheeting. The hipped roof is covered with corrugated asbestos cement sheets. The building is in good condition and is generally unaltered although the southern elevation has been modified to accommodate roller doors. The building was constructed to house vehicles and equipment.

Powerhouse and Store (1973)

Building 8 is a brick structure with a skillion roof clad with corrugated galvanised iron. The structure has two rooms, one for the emergency generator and a storeroom. The building is in good condition and has been unaltered in form and materials.

13. 3 COMPARATIVE INFORMATION

Cape Naturaliste lighthouse was the eighth lighthouse constructed in Western Australia by the colonial government. The second light constructed at Breaksea (Albany) in 1901 (the first light on this site was constructed in 1858),

and the lighthouse built on Point Cloates in 1906 both bear a strong resemblance to the Cape Naturaliste tower. The three lighthouses have comparatively short towers, Breaksea 10.3 metres, Cape Naturaliste 20 metres, with Point Cloates the tallest at 22 metres. All three lighthouses are fitted with Chance Brothers lenses and all three are now automated.[33]

The keepers' quarters are similar in design to those provided at other lighthouses, including Cape Leeuwin, and Wadjemup and Bathurst on Rottnest Island.

13. 4 KEY REFERENCES

Danvers, Architects, 'Conservation Plan of Cape Naturaliste Lightstation, Western Australia', November 1992

Australian Heritage Commission Data sheet (Appendix 1)

13. 5 FURTHER RESEARCH

Information concerning the later occupancy of the three keepers cottages needs to be investigated. The available secondary documentary evidence is unclear as to exactly who was occupying which cottage after 1995 when the light was automated. Additionally, the documents consulted do not give a precise date for when the kerosene light was replaced with an electrical version. It is not known when public tours first took place (either for the payment of a fee or gratis).

[33] Cummings, Glasson, & McCarthy, Reid and Le Page.

APPENDIX ONE - AUSTRALIAN HERITAGE COMMISSION DATA FORM

Cape Naturaliste Lighthouse and Reserve, Dunsborough WA

Class: Historic
Legal Status: Registered (18/04/1989)

Database Number: 016693
File Number: 5/02/046/0040

Statement of Significance : The Cape Naturaliste Lightstation, built in 1903, is important in illustrating the development of coastal navigation in Australia and the evolution of lighthouse design after Federation but before the Commonwealth takeover in 1915. In this respect the lighthouse is also associated with the final phase of colonial/state government involvement with lighthouses following Federation in 1901, when the Commonwealth was given responsibility for lighthouses, but before the Commonwealth actually took control of such matters in 1915. The upgrading of the lighthouse in 1924 under the Commonwealth illustrates the increasing importance of coastal shipping in Australia. (Criterion A.4) (Principal Historic Themes: 3.8
Moving goods and people, 7.4 Federating Australia)

Cape Naturaliste Lightstation is exceptionally important as a relatively intact example of a lightstation which illustrates the principal characteristics of lighthouse complexes erected in the late nineteenth and early twentieth centuries including the lighthouse, three keepers cottages and laundry and toilet buildings. (Criterion D.2)

The lighthouse is significant for retaining its original lens array and rotation mechanism and internal details. (Criterion B.2) The lighthouse complex is important for its landmark values in the natural setting of the Leeuwin-Naturaliste National Park. (Criterion E.1)

The area has known Indigenous heritage values. These have not yet been assessed by the Commission for their national estate significance.

Description : HISTORY

IN 1879 a report in the Enquirer outlined the difficulties faced by an increasing number of ships in Australian waters, in particular in the southwest of Western Australia. Cape Naturaliste was suggested as an excellent site for a light. Chance Brothers, Lighthouse Engineers of Birmingham, submitted detailed drawings of a design to the Western Australian Government in 1891. The refusal of the eastern colonies to contribute funds had delayed the construction of the Cape Leeuwin Lighthouse until 1895 when, through the persistence of the Premier, Sir

John Forrest, the WA colonial government agreed to build the light using its own resources. Cape Leeuwin, completed in 1896, reinforced the need for lighthouses in this important coastal area of Western Australia. The Adelaide constitutional conference of 1897 confirmed the previously debated arrangements of 1891 that Federal legislation was to deal with the construction, maintenance and management of lighthouses and associated navigational aids for shipping throughout the Commonwealth and its adjacent seas. Lack of finance prevented the Commonwealth taking action for some years after Federation and the states were unwilling to commit funds for stations which would be taken over by the Commonwealth. However in 1902 it was reported that a site had been reserved for a lighthouse at Cape Naturaliste in WA and in 1903 a lighthouse was also erected at Norah Head in New South Wales.

The West Australian Engineer-in Chief, C S R Palmer, was responsible for the design of the stone lighthouse tower and residences at Cape Naturaliste. Palmer was also responsible, as Engineer-in-Chief, for the Department of Harbours and Rivers and as such would have been involved in the design and construction of other West Australian lighthouses and harbour facilities.

The tower and three lightkeepers cottages were constructed over a ten month period by contractor Anderson during 1903 and 1904 at an estimated cost of 4,800 pounds. The tower was officially opened for the benefit of world shipping by the Governor of the State, Admiral Sir Frederick Bedford. The tower was constructed from locally quarried limestone and measures 20m high from base to vane. Its 14ft diameter lantern was manufactured by Chance Brothers of Birmingham, England to a similar design to Cape Leeuwin Lighthouse. The lantern room was designed by W T Douglass a marine engineer from England. Although the first Australian Parliament sat in 1901 it was 15 years before the Commonwealth assumed responsibility for Lighthouses. Lighthouse administration was low on the scale of national priorities after defence and communications. In 1906 the Federal Treasurer announced that the government was in the process of preparing a lighthouses bill. However the bill was not passed until 1911. In 1909 the new Deakin government introduced such a bill providing for the formation of a lighthouse service and sought the opinion of navigators and State authorities as to what new lights were required. In principle the States were anxious that the Commonwealth take over the lights and hoped that additional lights would be built. On 1 July 1915 Cape Leeuwin and Cape Naturaliste lighthouses were taken over by the Commonwealth. The Cape Naturaliste complex is associated therefore with the final phase of colonial/state government involvement with lighthouses following Federation but before Commonwealth involvement.

The increasing numbers of deep draught coastal vessels resulted in more construction and modification of existing lights between 1913 and 1920 despite the limitations imposed by the First World War 1914-1918. The

increasing importance of coastal navigation and transport resulted in the upgrading of the lighthouse in 1924 under the Commonwealth by changes in the power of the lamps. Originally 755,000 candela, the light was upgraded in 1924 to 1.2 million candelas.

The Cape Naturaliste Lighthouse was the eighth lighthouse built in Western Australia and the third landfall light in that State. The light was converted to automatic operation in July 1978. Since September of that year only one keeper has been retained to perform regular maintenance duties. In 1996 the lighthouse lost its resident keeper. This lighthouse is now open for tourists. The central residence is now used as a museum and Tourist Bureau Office (1992). The most southerly house is leased to the Department of Conservation and Land Management.

PHYSICAL DESCRIPTION

The Lightstation is a mainland station and is located at Cape Naturaliste on the south-west coast of Western Australia. A landmark, the lighthouse complex is located on a 100m high bluff overlooking Geographe Bay on a 8ha reserve. Access to the station is by sealed road from Dunsborough 13km away. Both the Cape and Bay were named by the early nineteenth century French explorer Nicholas Baudin after his ships Le Naturaliste and Le Geographe.

The lightstation falls within the Leeuwin/Naturaliste National Park. The surrounding vegetation consists of low lying scrub and coastal vegetation on low, rolling hills. More substantial vegetation exists in the vicinity of the houses. The Cape Naturaliste Lightstation comprises two distinct groups of buildings, the keepers residences and the lighthouse set out in characteristic manner. A group of three stone residences and three fibro-cement clad buildings are separated from the lighthouse and its associated store and power house by about 140m. The lighthouse precinct is located at the northern end of the lighthouse reserve and contains the lighthouse, power house and store and weather recording equipment. The precinct is contained within a chain mesh security fence.

The 32 foot lighthouse tower has a circular base with detailed stonework to plinth and opening surrounds. The relative height of the headland meant that the tower did not have to be as high as Cape Leeuwin. The walls are coursed rough faced stonework with tooled margins and quoins to openings. This is characteristic of a small number of lighthouses in Western Australia. The balcony platform is moulded concrete and rendered. The lantern house is constructed of cast iron. The original optical apparatus, a first order revolving dioptric lens and 85mm incandescent vaporised kerosene lamp produced a flashing white light of 755, 000 candelas. The present optical apparatus consists of the original 920mm focal radius revolving lens driven by an electric motor. The light source is a 120 volt 1,000 watt tungsten halogen lamp. The apparatus gives a character of Group Flashing 2 every 10 seconds with an intensity

of 1 million candelas resulting in a nominal visible range of 26 nautical miles. The turntable was originally driven by a clockwork mechanism operated by a weight of 190kg giving one revolution every 10 seconds. The weight had to be rewound every 50-60 minutes through the night. The lens and turntable, which weighs some 5 tonnes, floats on 210 kg of mercury contained in the pedestal. Three pedestals in the base of the lighthouse were originally for kerosene tanks used to fuel the light.

The lighthouse is now converted to automatic operation. The residential precinct is located to the south of the lighthouse. The precinct contains three residences and a number of service buildings in fibre-cement associated with both the residences and the lighthouse The houses are built in a row, all equally spaced apart. Each house is identical to the other in terms of basic floor plan, building materials, colour and roof line, although there have been various alterations to each building. The houses are built in the Victorian Georgian style with encircling verandahs below the main roof hipped roof with two symmetrically placed brick chimneys. In places sections of the verandahs have been infilled. The corrugated iron roof margin is supported on bracketed timber posts.

Each residence is separated by corrugated asbestos fencing which also runs along the west boundary of the precinct. To the rear of the houses, are the laundries and toilets. These are constructed of random coursed stone, similar to the houses and corrugated asbestos sheeting with skillion roofs. Each rear yard also contains several concrete and galvanised iron water tanks and overhead tank, all painted bright green. The service buildings are of more recent construction than the residences and are located in a close group some 30m to the east of the houses. These structures vary in size, form and materials, but all have simple detailing reflecting their utilitarian functions. The shed is clad with fibre cement sheeting with gabled roof. The store and garage are constructed of corrugated asbestos sheeting, the store having a gabled roof and the garage a hipped roof. These buildings are surrounded by bitumen paving which extends from the service road and by landscaped areas to the east.

Condition and Integrity : Integrity:
The fabric of the lightstation is relatively intact, with all the original stone structures remaining The areas around the houses have undergone some change in terms of construction of tanks and new fencing and the general vegetation of the site appears to have increased in size and density over time. The condition of the lighthouse is high in terms of the basic structure of the building No major architectural elements have been added to or removed from the building, externally or internally. Changes made to the structure over time include the replacement of original casement windows with fixed glass, the removal of the original oil tanks on the ground floor and the aluminium mesh fencing placed around the balcony railing. Apart from the changes to the lamps with improvements in technology and the electrification of the rotation mechanism, the lens and associated apparatus are all as originally installed in the building. Internal fittings and fixtures are generally intact. Internally and externally the basic floor plan and finishes remaining relatively unaltered. One of the cottages was extended in 1987 for continued use. There has been some removal of internal fittings such as a window, doors and fireplaces and internal paint schemes and floor coverings have been replaced. Most external detail elements such as chimneys, verandah posts and joinery remains intact on all the residences.(1992)

Condition:
Good (1992)

Location : About 8ha, Cape Naturaliste Road, Cape Naturaliste, 10km north-west of Dunsborough.

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The Register of the National Estate has been compiled since 1976. The Commission is in the process of developing and/or upgrading official statements of significance for places listed prior to 1991.

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